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Mitigating Risks for Foreign Investments in Least Developed Countries

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Foreword

This study is part of the Development Financing 2000 project which was initiated by the Swedish Ministry for Foreign Affairs with the purpose of increasing awareness, knowledge and international commitment to a strong, effective and well-funded multilateral system for development. Previous studies within the project have focused on the roles and financing needs of the Multilateral Development Banks and the UN development agencies, as well as the provision and financing of global and regional public goods.

The focus of this study is one of the most important sources for financing development, that of foreign direct investments. Both the Monterrey Conference on Financing for Development and the Johannesburg World Summit on Sustainable Development resulted in amplified commitments to new partnerships between the private and public sector in pursuit of poverty eradication.

The purpose of the study is to look at ways of increasing sustainable foreign investments in the least developed countries through the provision of public financing for risk coverage in private sector investments. Innovative thinking and new initiatives are needed in this area in order to enable the benefits of globalisation to reach also the poorest countries.

We hope this independent research study will be a valuable contribution to the international policy discussion on how to increase sustainable investments in the least developed countries and how public-private interactions can serve as a catalytic tool towards this end.

Annika Söder
State Secretary for International Development Cooperation

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Acronyms and Abbreviations

ABB	Asea Brown Boveri (a Swedish-Swiss TNC)
ACP	African, Caribbean and Pacific Countries
AES	American Energy Systems Corporation (of the US)
AfDB	African Development Bank
AIG	American International Group (a major US insurance company)
ASEAN	Association of South East Asian Nations
AsDB	Asian Development Bank
Bcf	Billion cubic feet (of gas)
Bcm	Billion cubic metres (of water)
BITs	Bilateral Investment Treaty
BOO	Build-Own-Operate
BOOT	Build-Own-Operate-Transfer
Catex	The Catastrophic Risk Exchange
CCF	Currency Convertibility Fund
CDC	Commonwealth Development Corporation
CDM	Clean Development Mechanism
CEND	Confiscation, Expropriation, Nationalisation & Deprivation (political risks)
CERES	Coalition for Environmentally Responsible Economies
CODEM	Coordination de l'Opposition Democratique (Guinea)
CPI	Corruption Perceptions Index
CSR	Corporate Social Responsibility
CUP	Cooperative Underwriting Program (of MIGA)
DANIDA	Danish International Development Agency
DFID	Department for International Development (a UK Ministry)
DNH	Direction Nationale de l'Hydraulique (in MRNE, Guinea).
DTT	Double Taxation Treaty
EBC	Enhanced Breach (of Contract) Coverage
EBITDA	Earnings before interest, tax, depreciation and amortisation
EBRD	European Bank for Reconstruction & Development
ECAs	Export Credit Agencies
EHS	Environment, Health & Safety
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EKN	Swedish Export Credit and Risk Insurance Agency
ERP	Economic Recovery Programme (in Tanzania and Uganda)
ERR	Economic Rate of Return
ESAP	Economic & Social Action Programme (in Tanzania)
ESMP	Environment & Social Management Plan (for SSGPP)
ESS	Environmental & Social Sustainability
EU	European Union

EUR	Euro unit of currency
EWURA	Energy & Water Utilities Regulatory Authority (of Tanzania)
Exim	Export-Import Banks, e.g. of Japan (Jexim) and the US.
FIAS	Foreign Investment Advisory Service (jointly run by WB and IFC)
FDI	Foreign Direct Investment
FPI	Foreign Portfolio Investment
GATT	General Agreement on Tariffs & Trade (predecessor to WTO)
GAVI	Global Vaccines Initiative
GCC	Global Corporate Citizenship
GDP	Gross Domestic Product
GDCF	Gross Domestic Capital Formation
GE	General Electric Corporation (US)
GEF	Global Environmental Facility
GNF	Guinea Francs
GNI	Gross National Income
GNP	Gross National Product
GoT	Government of Tanzania
GoU	Government of Uganda
GRI	Global Reporting Initiative
HDI	Human Development Index (published in the HDR)
HDR	Human Development Report (published annually by UNDP)
HIPCs	Highly Indebted Poor Countries
IADB	Inter-American Development Bank
IBRD	International Bank for Reconstruction & Development
ICC	International Chamber of Commerce
ICFD	International Conference on Financing for Development (Monterrey)
ICSID	International Center for the Settlement of Investment Disputes
IDA	International Development Association (World Bank Soft Window)
ISO	International Standards Organisation
IFC	International Finance Corporation
IFIs	International Financial Institutions (i.e. IMF and World Bank)
IMF	International Monetary Fund
IPA	Investment Promotion Agency
IPP	Independent Power Project
IRR	Internal Rate of Return
IT	Information Technology
JPY	Japanese Yen
Kwh	Kilowatt Hour
LDCs	Least Developed Countries
LIBOR	London Inter-Bank Offer Rate (a key benchmark rate in Eurodollar markets)

M&A	Mergers & Acquisitions
MAI	Multilateral Agreement on Investment
Mcf	Million cubic feet (of gas)
MDBs	Multilateral Development Banks
MEM	Ministry of Energy & Minerals (GoT)
MIGA	Multilateral Investment Guarantee Agency
MNCs	Multinational Corporations (synonymous with TNCs)
MRNE	Ministry of Natural Resources and Energy (Guinea)
MTN	Mobile Telephones Network Corporation (of South Africa)
MTNU	MTN Uganda
MW	Megawatt
NAFTA	North American Free Trade Area (covering Canada, Mexico and the US)
NCR	Non-Commercial Risk
NCRI	Non-Commercial Risk Insurance
NEMA	National Environmental Management Authority (of Uganda)
NGOs	Non-Governmental Organizations (often embraced by the term 'civil society')
NPV	Net Present Value
OBIs	Official Bilateral Insurers (for political and non-commercial risk)
OCF	Official Capital Flows (Non-Concessional Funds plus ODA)
ODA	Official Development Assistance ('aid')
OECD	Organisation for Economic Cooperation & Development
O&M	Operations and Maintenance (contracts or agreements)
OPIC	Overseas Private Investment Corporation (the bilateral investment and risk insurance agency of the US)
PAT	Pan-African Energy Tanzania
PBG	Policy-Based Guarantee
PCF	Private Capital Flows
PCG	Partial Credit Guarantee
Pcm	Per cubic metre
PDG	Parti Democratique de Guinée
PPAs	Power Purchase Agreements
PPIs	Public Private Interactions
PPPs	Public Private Partnerships
PRG	Partial Risk Guarantee
PR	Political Risk
PRI	Political Risk Insurance
PSAs	Production-sharing Agreements
PSMP	Power System Master Plan (for Tanzania)
PUP	Parti de l'Unite et du Progres (Guinea)
RDB	Regional Development Bank
RoA	Return on Assets

RoE	Return on Equity
RPG	Rassemblement Populaire de Guinée
SEEG	Société d'Exploitation des Eaux de Guinée
SEK	Swedish Kronor
SIA	Social Impact Assessment
Sida	Swedish International Development Agency
SILIC	Severely Indebted Low-Income Countries (synonymous with HIPCs)
SME	Small and Medium Scale Enterprise
SNAPE	Service Nationale d'Aménagement des Points d'Eau (Ministry of Agriculture, Guinea)
SOE	State-Owned Enterprise (also referred to as parastatals)
SONEG	Société Nationale des Eaux de Guinée
SSGPP	Songo-Songo Gas & Power Project (Tanzania)
TA	Technical Assistance
Tanesco	Tanzania Electricity Supply Company
TDFL	Tanzania Development Finance Limited
TNCs	Transnational Corporations (synonymous with MNCs)
TPDC	Tanzanian Petroleum Development Corporation
TZS	Tanzania Shilling
UCC	Uganda Communications Commission
UDI	Unilateral Declaration of Independence
UGS	Uganda Shilling
UK	United Kingdom (Great Britain and Northern Ireland)
UN	United Nations
UNCED	United Nations Conference on Environment & Development
UNCTAD	United Nations Conference on Trade & Development
UNDP	United Nations Development Programme
UNDFPs	United Nations Development Funds & Programmes
UNEP	United Nations Environment Programme
UNGC	United Nations Global Compact
UNICEF	United Nations International Children's Fund
UNIDO	United Nations Industrial Development Organisation
UPP	Ubungo Power Plant (Tanzania)
UPTC	Uganda Posts and Telecommunications Corporation
US	United States of America
USD	US Dollar
UTL	Uganda Telecom Ltd.
WB	World Bank
WBG	World Bank Group (i.e. IBRD+IDA+IFC+MIGA+ICSID)
WHO	World Health Organisation
WTO	World Trade Organisation
WVEP	Wayleave Village Electrification Programme (for SSGPP in Tanzania)

1 Introduction

1.1 Background to the Study

This study is the fifth in a series commissioned by the Swedish Ministry for Foreign Affairs under the Development Financing 2000 project. Previous studies have looked at: the roles, financial needs and funding modalities for the United Nations' development funds and programmes (UNDFPs); the future role and funding of multilateral development banks (MDBs); and the financing of global and regional public goods, with case studies for particular public goods (viz. trans-border water resources, climate change, biodiversity, financial stability, peace/security and HIV/AIDS research) being carried out.

The study looks into how the risks confronting foreign direct investment (FDI) in least developed countries (LDCs) can be mitigated through public finance interventions so that FDI flows to LDCs can be increased. Post-2000, such interventions are frequently referred to, in a broader context, as 'public-private partnerships' – a phrase that has become pervasive in governmental and intergovernmental circles. There is now a rapidly growing universe of ostensible PPPs because the word 'partnership' has such positive connotations. But such usage of the term PPP is indiscriminate and misleading. As discussed later, the term *public-private partnership (PPP) denotes tightly negotiated contractual arrangements between specific public and private entities under which the private sector is contracted to deliver services that the public sector is obliged (or mandated) to provide*. Using 'PPP' to refer to other activities in a broader context, though perhaps arguably correct in a literal sense, can be misleading. For that reason, this study distinguishes between PPPs and broader forms of joint involvement by the public and private sectors to achieve certain objectives (like global vaccination) by referring to the latter as public-private interactions or public-private co-operation, and not as public-private partnerships.

The study is driven by a compelling logic. With flows of official development assistance (ODA) declining and then stagnating (in relative and absolute terms) between 1990–2001, private capital flows (PCF) have become the predominant source of external financing for developing countries.

Even the least developed countries (LDCs) have seen ODA flows decline significantly in real terms over the last decade.[1] The International Conference on Financing for Development (ICFD) held in Monterrey, Mexico in March 2002 may mark a turning point in that desultory trend. In Monterrey, the US and EU member countries pledged

[1] Throughout this Study, the term 'LDCs' refers to the 49 countries identified by the UN as being least developed (Annex 1). The World Bank uses the terms 'poor countries' or 'poorest countries' to refer to 67 countries that include 48 of the 49 LDCs (but exclude Equatorial Guinea) as well as 19 other countries not so classified. Both lists are contentious. They include countries that should not be on either list if objective criteria are applied while excluding countries that should be on these lists but are not. This Study does not pursue that point because it involves too many complexities concerning criteria and definitions that divert attention from the issues at hand.

to increase both the amount of aid and their aid effort (i.e. ODA/GNP ratios) over the next five to seven years. But when those pledges are converted into disbursements, the resulting increases are unlikely to restore the importance of ODA in financing for development.

In contrast to declines in official finance, inflows of private capital, particularly FDI, to developing countries have increased dramatically. Private capital has become the principal external financial engine driving investment and growth in quantitative terms, as well as for qualitative reasons (Chapter 2). It is incumbent on policy-makers in donor and developing countries to consider what might be done to increase the quantity of private capital flows, improve their quality (in terms of development impact as well as sustainability) and stabilise their inward and outward surges. Of the various components of PCF (viz. FDI plus flows from global banks and capital markets by way of portfolio investment in emerging equity and bond markets) FDI is the most stable and durable (i.e. long-term) in nature. Foreign portfolio investment (FPI), though significant and growing, is volatile and concentrated in middle-income and industrialised low-income (e.g. India) countries with capital markets that can absorb and accommodate such flows.

LDCs do not receive FPI flows to any significant extent. They do not yet have domestic capital markets that are sufficiently developed to attract them. Nor are LDCs eligible for large-scale commercial bank lending other than for normal trade finance. Most are heavily over-indebted and generally uncreditworthy. But LDCs do receive FDI in nearly the same proportion as other developing countries relative to the size of their economies. **In that sense, FDI is not as concentrated as it is often claimed.**[2]

But the amount of FDI that LDCs receive is still insufficient to drive investment and growth in these countries to the extent necessary if reasonable rates of positive per capita income growth are to be achieved and the Millennium Development Goals adopted by the international community are to be met. In a rapidly globalising world, the unfortunate fact is that LDCs continue to be marginalized relentlessly. Their links with the global economy remain tenuous. Their external trade is still commodity-dependent. They are generally over-indebted and their domestic economic, social and political circumstances are still inhospitable to mobile FDI of the kind that supports and fosters balanced development.

FDI in LDCs remains concentrated in resource extraction, raising issues of sustainability. It has not diversified sufficiently or rapidly enough into manufacturing, infrastructure and services. It is not the kind of FDI that induces growth through output and export diversification via technology/knowledge diffusion and domestic linkages, while reducing dependency on primary exports and the vulnerability that such dependency creates. Thus LDCs are trapped in a 'low-development, low-quality-FDI' warp. Be-

[2] Mistry (2001:1), UNCTAD (1999); and the World Bank (2002).

cause they are *least developed* they have neither the attributes nor the local entrepreneurial base that can attract or gain much from 'competitive' FDI; i.e. of the kind that weaves developing countries into integrated intra-firm (TNC) and intra-industry production structures which now account for the bulk of global output and trade and that generate durable, diversified, continually evolving export earnings from manufacturing and services.

Without attracting that kind of FDI, the prospects of LDCs exiting 'least developed' status are dim. They have neither the domestic private capacity (i.e. local entrepreneurial base) nor the public capacity to work their way up the ladder of economic success by relying on their own (or on aid-funded) human or financial capital. To develop they must attract more FDI of a different kind. But that kind of FDI is not attracted to LDCs because the circumstances for entry and effectiveness do not exist. Resolving that conundrum remains one of the more perplexing development challenges that the international community confronts.

In the 1990s, LDC governments were led to believe by their international interlocutors that economic reforms and structural adjustment would result in more and better investment – especially FDI in manufacturing, infrastructure and services – leading to faster growth and development. Crossing the threshold into the 21st century, these governments are frustrated and disappointed with the outcomes and results of reform efforts and the value of the advice received. Since 1990 they have taken major steps toward reforming policies and liberalising (opening) their economies and their trade and investment regimes. Yet FDI has failed to materialise to the extent necessary for them to overcome debilitating constraints on growth and development. Moreover, with symmetric trade liberalisation, LDCs have *increased* their dependency on primary exports. They have deindustrialised and increased their vulnerability to indebtedness and financial shocks.

That FDI has failed to flow to LDCs to the extent envisaged is not simply because of a lag effect requiring foreign investors to take time to appreciate the changes that have occurred in LDC policy regimes before responding. Policy reform and structural adjustment are *necessary* preconditions for FDI flows. But, by themselves, they are not *sufficient*. The importance of that distinction is not fully appreciated by LDC governments and societies (nor by IFIs and donors). Non-resource-oriented FDI is unlikely to flow *at all* under unfavourable, unworkable economic policy regimes. Neither will FDI surge inward simply because policy regimes have changed. The uncomfortable fact is that beyond repeating incessantly and tediously the mantra of policy change, IFIs and donors have yet to provide a proper answer to the key questions that LDC governments ask, for example: *"What strategies and tactics do LDCs deploy for moving away from commodity dependence toward output and export diversification and effective participation in the emerging global economy?"*

How do they make the transition from primary commodity economies toward industrialisation, modernisation and development? What must they do to attract FDI in areas other than natural resource extraction and to benefit from such FDI?

The experience of the 1990s suggests that changing policy regimes is like opening a gate. For foreign investors to walk through there has to be 'something' on the other side that makes it worth crossing over for. In all too many LDCs, foreign investors perceive that 'something' to be missing when the gate is opened. The challenge for the development community is: (a) to make foreign investors see that 'something' is actually there in LDCs that makes investing worthwhile; and (b) to alleviate – for an interim period – in an effective rather than counterproductive fashion the costs and risks that foreign investors invariably and inevitably incur when they enter such environments.

There are a number of ways in which FDI flows to the LDCs might be increased. They include: (a) better communication and flows of information between LDC governments and the global private sector; (b) better governance with greater efficiency and less corruption; (c) targeted investment promotion; (d) wider, more successful global and regional efforts at conflict resolution; (e) improved health and education leading to better trained and adaptable labour forces; (f) structural change and improved institutional capacity; and (g) an improvement in business and investment climates. All these aspects are important in their own right in contributing to increasing FDI inflows to LDCs. But this study does not attempt to address them. That has been done at length elsewhere.[3]

Instead, this study focuses on the contribution that improved risk mitigation can make toward increasing FDI flows to LDCs by lowering perceptions of risk on the part of foreign investors, as well as offering mechanisms and instruments to reduce risks to levels that are manageable. It looks at risk mitigation in a generic as well as project-specific context.

The rationale for focusing the study in this manner is simple. By definition, LDCs pose the highest risks as far as foreign investors are concerned. These risks create conceptual barriers that deter foreign investors from considering investment in these countries other than to extract natural resources, to exploit domestic markets for technology or services in which the investor may have a virtual global monopoly, or to exploit other special circumstances. In particular, the study looks at risk mitigation mechanisms that involve public-private interaction (PPI).

1.2 Evolution of Financial Flows to Developing Countries: 1990–2001

Table 1.1 shows how external financial flows to developing countries have evolved since 1970. Taking a long view of the history of resource flows, cross-border *private* capital flows (PCF) have been the immutable in financing development investment. There were brief interregnums when this was not the case: i.e. in 1950–70 (the Bretton Woods era) and 1983–89. In contrast, official capital flows (OCF, i.e. government-to-government financial transfers involving conditionalities) are a post-1945 phenomenon

[3] World Investment Reports (1999, 2000 and 2001), UNCTAD.

in development financing. Between 1950–70, with many developing countries achieving independence, official flows increased substantially.

Official finance lost its relative stature when PCF revived in the 1970s as oil surpluses were recycled by the global banking system. That resulted in the debt debacle of 1982 with PCF consequently collapsing between 1983–89. Concomitantly, OCF (especially ODA) increased through the 1980s. But it financed mainly debt service not development. The Brady Initiative of 1989 reduced unsustainable debt obligations and paved the way for PCF to recover. 1990 marked a sharp turning point in resource flows with PCF displacing OCF more abruptly than anticipated. As Table 1.1 shows, PCF surged between 1991–97 with a brief hiatus in 1998–99, before recovering in 2000 only to fall back again in 2001.

The uncertainties created by the events of September 11th 2001 heightened risk perceptions, while making cover more expensive and less accessible. That has adversely affected private flows to developing countries. So has the slowing of the world economy triggered by the bursting of the technology bubble that had built up before then. September 11 exacerbated the impact of the global downturn in the last quarter of 2001. The world economy has since been attempting to revive with aggressive easing of monetary policy by central banks to stave off the risks of recession and deflation. Yet, prospects for global recovery remained elusive in 2002.

As can be seen in Table 1.1, ***reverse*** **gross resource flows from developing to industrial countries now exceed $400 billion annually.** Although attention is invariably focused on net flows of resources, what is important to developing countries is the *net transfer* of finance that takes place; i.e. after interest has been paid and profits and dividends have been repatriated. These net transfers are much less impressive than the resource flow numbers suggest (the last three rows in Table 1.1). The reasons are not difficult to find.

While PCF has been waxing in the developed world, OCF has been waning. ODA has now become much less significant for the developing world than it was in the 1980s although it remains a crucial source of external finance for LDCs.[4] Even in the LDCs the primacy of PCF over OCF has now become a permanent feature of financing for development. The pledges made by donors in Monterrey in March 2002 are unlikely

[4] Official finance has become less important in relative and absolute terms. In the 1990s, ODA stagnated at $50–55 billion in nominal dollars thus falling considerably in real terms throughout the decade. Only about $40 billion went to developing countries by way of financial flow. Less than 40% of that amount (i.e. $14 billion) financed physical investment. The remainder was absorbed by administration, technical assistance (expenditure on which is mainly in donor countries), humanitarian assistance and food aid. ODA is unlikely to be as significant a factor in financing *investment* as PCF, although it remains crucial for low-income countries, especially HIPCs. It is unimportant to most middle-income countries (except a few small island economies) and industrialized low-income countries with market access (e.g. India). Still, too large a proportion of ODA goes to countries that do not need it. Most of the ODA provided in the 1980s was used to finance external debt service to *private* creditors (mainly banks in the developed world) and aimed at stabilization, not investment. For that reason, ODA came to be associated with *increasing* poverty and dispossession in the 1980s, a link that contributed to perceptions of aid failure.

Table 1.1: Net Resource Flows and Transfers to All Developing Countries 1970–2000 (amounts in US dollars)

	1970	1980	1991	1995	1996	1997	1998	1999	2000	2001
Total Net Resource Flows	**11.3**	**82.8**	**119.7**	**231.7**	**274.3**	**334.6**	**327.9**	**250.7**	**280.9**	**196.5**
of which										
Official Flows	5.6	34.9	60.9	55.1	31.9	42.8	54.6	45.3	47.1	36.5
Private Flows	5.7	47.9	58.8	176.6	242.4	291.8	273.3	205.4	233.8	160.0
Of which FDI	**2.2**	**4.4**	**35.7**	**107.0**	**131.5**	**172.6**	**176.8**	**185.4**	**178.0**	**168.2**
FPI+ Bank Loans	3.5	43.5	23.3	71.0	112.3	119.2	96.5	20.3	66.9	-8.2
of which										
Equity	0.0	0.1	4.6	8.0	13.7	22.4	8.6	21.1	34.8	18.5
Bonds	0.2	1.1	10.9	30.8	62.5	49.0	40.9	25.4	31.1	9.5
Bank Loans	3.3	42.3	5.0	30.5	33.7	45.1	50.0	-24.6	0.7	-32.2
Other	0.0	0.0	2.8	1.7	2.4	2.7	-3.0	-1.6	0.3	-4.0
Service Outflows										
Principal Repayments	-6.1	-42.5	-92.6	-128.4	-163.7	-190.2	-185.7	-239.4	-251.1	-242.1
Interest Payments	-4.1	-48.9	-72.3	-98.6	-104.5	-109.1	-122.6	-135.3	-153.1	-122.2
Remittances on FDI	-6.5	-23.7	-18.3	-26.5	-30.4	-31.4	-35.2	-41.6	-48.5	-55.3
Net Transfers	**0.7**	**10.2**	**29.1**	**106.6**	**139.4**	**194.1**	**170.1**	**73.8**	**79.3**	**19.0**
Official	4.7	28.8	41.1	22.8	1.2	10.3	19.2	-10.2	-24.0	-29.4
Private	-4.0	-18.6	-12.0	83.8	138.2	183.8	150.9	84.0	103.3	48.4

Source: Global Development Finance (GDF) 2001, The World Bank, Washington DC. (for figures from 1970-2000)

Global Development Finance (GDF) 2002, The World Bank, Washington DC. (for estimates for 2001)

to change that. Therefore, ways need to be found of getting PCF to more developing countries through all its various channels, i.e. foreign direct investment (FDI), bank lending and foreign portfolio investment (FPI) of equity and debt instruments through capital markets.

Although FDI is clearly beneficial to developing countries, it has a financial cost in terms of repatriated profits and dividends. **For the developing world the cost of attracting FDI has risen from under $7 bn in 1970 to over $55 bn in 2001.** As the stock of FDI in the developing world keeps growing, that cost will keep increasing. If developing countries are to have access to official and private capital, they need to pay interest and dividends and permit profit repatriation. But while they are still developing, it is important that inward resource flows (i.e. on the capital account) are large enough to compensate for reverse flows (on the capital and interest accounts).

Thanks to the flow of private capital, the annual average level of net transfers to the developing world increased from $15 bn in the 1980s to $80 bn between 1990–94. Net transfers increased further to an average of $150 bn between 1995–98 before falling back to $75 bn in 1999–2000 and collapsing to $19 bn in 2001. Most disconcertingly, net transfers on the *official* account have fallen sharply from their peak in 1991 to negative levels at the close of the decade. That anomaly needs to be reversed.

Table 1.1 tells the story of what is happening in aggregate terms but obscures the details. What it does not highlight is that PCF plays a key role mainly in countries

where capacity (i.e. by way of physical, social and institutional infrastructure, markets and governance) and opportunities exist to absorb it productively. **On a per capita (rather than per country) basis, PCF is much better distributed across the developing world than is generally realised**. Although it is true that 70–90% of PCF goes to 10–25 developing countries, it is also true that these countries account for 60–75% of the developing world's population, 60–70% of its output, 65–80% of its trade and 60–80% of its international reserves. Thus, **to a large extent, the distribution of PCF reflects the distribution of the developing world's market capacity**. Taking this into account, what is surprising is how evenly FDI is distributed across the developing world. Even LDCs receive FDI in amounts that are proportionally commensurate with the size of their economies in comparison with other developing countries, including middle-income countries.

Economic theory suggests that PCF (especially FDI) to the developing world should be increased because:

- Global gains are derived when capital flows from high-income (capital surplus) countries to low-income (capital deficient) countries where investment productivity is supposedly higher. The overall impact on global welfare may be moderated when low-income countries are characterised by low productivity of investment. That can, however, be raised by the entry of FDI which brings with it inputs of technology, improves labour productivity and introduces better management of firms and resources.
- Unrestricted global PCF permits better risk reduction through portfolio diversification on a global scale. In practice, however, overall portfolio risk may increase when investment portfolios embrace emerging markets in their early stages of development, with risk reduction occurring only as such markets develop and mature.
- Global integration of capital markets leads to diffusion of best practices in public as well as corporate governance and regulation.
- Global capital mobility restrains governments from pursuing poor economic and financial policies. Again, however, experience suggests that this happens only when governments have been weaned from reliance on official sources of finance that prevent governments from suffering the full consequences of erroneous policies.

But the arguments in favour of foreign investment are not all one-sided. FDI in an industry can deter investment by domestic firms in the same industry so that an increase in FDI may not result in increasing the level of gross or net domestic investment. FDI can increase imports and dampen domestic output and investment. Surges of FPI in fragile financial systems can threaten stability and complicate macroeconomic management. With variable exchange rates influencing real returns, there is a tendency for FDI and FPI to be exchange and interest rate sensitive and to deploy risk management instruments to protect value. Such practices can often exacerbate rather than ameliorate financial crises.[5]

[5] Persaud, A. (2000:1 and 2).

1.3 The Impact of Private Capital Flows and FDI on Development

The role of FDI, particularly in the least developed countries, is discussed in greater detail in Chapter 2. To set the intellectual foundations for the rest of this study, a brief vignette is provided in this introductory chapter to summarise what has been uncovered by extensive economic research into the role of private capital flows in advancing development.

When the colonial era ended, most policy-makers in newly independent countries were influenced by what they perceived as the damaging social consequences of private capital – especially FDI – and the infringement of sovereignty by TNCs. Between 1950–90, most developing countries (and international agencies, especially the UN) viewed PCF and FDI with suspicion. They discouraged, directed and controlled PCF by imposing a host of onerous barriers and conditions. Developing countries (including successful ones like Korea) barred open entry to private capital and FDI for four decades. After 1990 the situation has been reversed with a sea change in attitudes. Governments in developing countries are now going overboard in competing to attract FDI in response to euphoric assertions being made about its value for development, particularly by IFIs and countries such as the US and UK. PCF and FDI are now portrayed as a panacea to cure all the ills that developing countries have. In reality, both extremes are wrong; the truth about FDI – as about anything portrayed in black and white – lies in the middle.

The Impact of PCF in Theory: Economic theory suggests that global welfare (efficiency) gains can be derived when capital flows from high-income (capital surplus) countries to low-income (capital deficient) countries where the marginal productivity of investment should theoretically be higher.[6] Market theory favours unrestricted capital flows for three other reasons: (i) unrestricted global movements of capital permit risk reduction by permitting better portfolio diversification; (ii) integration of capital markets leads to global diffusion of best practices in corporate governance and regulation; and (iii) global capital mobility restrains governments from pursuing poor economic and financial policies.[7]

The theory of the firm however suggests that the impact of PCF on domestic investment might be more ambiguous.[8] FDI by multinationals may induce domestic firms to reduce investment in the same industry. In a world of complete capital mobility, an increase in FDI may have no impact on domestic investment; i.e. PCF would finance existing demand for investment by firms rather than increasing that level of demand. PCF can increase imports and dampen domestic output and investment. FPI (especially if induced by global competition among financial firms, or by tax avoidance, evasion or reduction motives) may trigger sudden large outflows when policy risks materialise.

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[6] Summers (2000).
[7] Feldstein (2000).
[8] Feldstein (1994).

The Empirical Evidence: Experience between 1980–2000 has resulted in much learning about the implications of PCF and FDI for development and their effect on growth. Recent studies reach five main conclusions:[9]

- *First*, private capital flows do have a positive impact on domestic investment but not necessarily on growth.[10] That finding applies across developing regions and over time. The impact on investment is strongest in low-income countries (e.g. in Africa) where FDI in natural resource exploitation is the predominant component of PCF.
- *Second*, the impact of FDI on investment and growth depends on a country's capacity to absorb and utilise it effectively. Absorptive capacity is multifaceted. It embraces: the quality and stability of a country's macroeconomic and political regimes; governance; the level of development; the efficiency of its financial system; its endowments of human, social and institutional capital; the quality and extent of physical infrastructure; the capability of its public services; and, conversely, the level and pervasiveness of corruption. Differences in absorptive capacity explain why FDI has a development impact in some countries but not in others. But the relationships are not always obvious or linear between FDI flows and particular factors (e.g. corruption).
- *Third*, to the extent that poor investment climates (i.e. low absorptive capacity) are associated with low incomes, FDI contributes to divergence in economic performance across developing countries. Low-income countries (except India) and LDCs grew more slowly in the 1990s than middle-income countries. Faster growth, higher levels of investment and greater absorptive capacity attracted more FDI to middle-income countries thus reinforcing a "high resource flow – high growth" dynamic that has eluded low-income countries. HIPCs (i.e. mainly the LDCs) have been saddled by debt burdens that have restrained their growth.
- *Fourth*, as closer integration occurs between a developing country's financial system and global capital markets, the impact of FDI on domestic investment weakens although PCF still has a positive impact on productivity.[11] The link between PCF and domestic investment is weakened because countries use PCF to finance current account deficits, accrue reserves or finance domestic capital flight.
- *Fifth*, FDI may not induce growth, even when it finances additional investment, if it does not have a positive influence on increasing total factor productivity.[12]

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[9] *Global Development Finance – 2001; Volume 1 – Building Coalitions for Effective Development Finance: Analysis & Summary Tables*; World Bank, Washington DC (Chapter 3, "International Capital Flows and Economic Growth", pp. 59–83).

[10] Empirical evidence on the link between PCF and growth is confusing. Average growth across the developing world was stable and low in the 1990s when PCF mushroomed. Middle-income countries that received the largest proportion of PCF did grow faster than those that did not. But so did countries like India, which received less PCF than the size of its economy might have suggested, yet it managed to be among the 10 fastest growing developing countries. Attempts to link: (a) capital account liberalisation and growth (e.g. Rodrik, D. 1998; and Grilli, V. & Milesi-Ferretti, G-M. 1995) and (b) FDI and growth (e.g. Carkovic, M. & Levine, R. 2000) did not uncover a strong link in either case. The World Bank offers two reasons (GDF-2001, Box 3.1, pp. 67): (i) the high volatility of PCF may negate its impact, and (ii) poor absorptive capacity may vitiate the effectiveness of FDI. On this issue see also Mishra D., Mody A. and Murshid A.P., 2001.

[11] For example when FDI finances mergers and acquisitions (e.g. in East Asia and Latin America, 1998–2000).

[12] *GDF-2001* World Bank op. cit., pp. 70–76; and Mishra D., Mody A. and Murshid A.P. op. cit.

For developing countries, FDI has benefits in contributing to increasing the level and quality of investment, productivity and the associated know-how transfer of hard and soft (i.e. management) technology.[13] In low-income countries, FDI augments local savings and identifies/realises a wider range of investment opportunities more effectively than domestic firms. **Across regions, the strongest correlation between FDI and investment is in Africa.** However, although its virtues are extolled, FDI is not costless. It creates long-term liabilities when dividends are remitted, interest is repaid to parent companies and when invested capital or borrowings from parent companies are repatriated. These future charges on income are affordable if FDI creates wealth, generates income and averts debt service burdens. The liabilities FDI creates become onerous only when the assets financed fail to generate the returns anticipated at the time of investment.

In the 1990s, FDI moved from traditional areas (viz. mining, hydrocarbons, manufacturing and transport services) to areas that did not attract FDI before. These include: *infrastructure* (especially the electricity, telecommunications and water sectors as well as transport infrastructure such as toll roads, tunnels and bridges as opposed to transport services such as shipping companies, haulage companies and airlines), *information technology services* and *public services* such as healthcare and education as well as basic urban municipal services (e.g. water, sanitation, waste disposal, neighbourhood security, fire and emergency services, etc.). In these new areas, FDI has been driven by privatisation, often preceded by public-private partnerships (PPPs) of various types.

Between 1990–2001, FDI in non-traditional areas was concentrated in middle-income and a few low-income countries (e.g. India). Smaller flows of FDI in non-traditional areas have also occurred in some LDCs. By region, FDI in the new areas has been largely confined to Latin America, East Asia and Central/Eastern Europe. Privatisation in non-traditional areas has been the principal magnet for attracting FDI flows to these regions over the last decade. In contrast, regions like Africa, the Caribbean, South Asia, Central Asia and the Pacific (where most LDCs are located) have been excluded from such flows. They have failed to make as much progress as middle-income countries in putting together broadly-based domestic coalitions that support privatisation and foreign investment in these areas. That asymmetry points to: (a) the potential that exists for increasing FDI in LDCs in non-traditional areas in the coming decades; and (b) the difficulty of attracting FDI in these areas in LDCs because of structural and regime constraints.

[13] *Global Development Finance 2001*, op. cit. Chapter 2 reviews a number of studies that attempt to ascertain the impact of foreign capital flows on domestic investment. Two recent studies find a strong impact (particularly FDI) on domestic investment although part of the FDI inflow is offset by outflows and accretion of reserves (Borensztein, E. De Gregorio J. and Lee J-W., 1998; and Bosworth B. & Collins S., 1999). Foreign capital inflows appear to be associated with broadly-based stimulation of domestic demand (Loungani P. & Razin A., 2001).

1.4 Public-Private Partnerships (PPPs): Definitions and Examples

In Chapter 2, the study expands on prospects for increasing FDI in non-traditional areas in LDCs. Such prospects depend to some extent on possibilities for creating PPPs in LDCs as vehicles to attract FDI because PPPs are often a necessary prelude to privatisation. But before dealing with PPPs in detail – either in the context of their suitability as vehicles for attracting FDI into LDCs, or in the context of risk mitigation at the national, regional or international levels – the semantic confusion created by that term makes it necessary to digress in clarifying definitions of PPPs in this introductory chapter. There are at present three ways in which the term PPP is used in the vernacular:

- ***Definition 1:*** The loosest meaning of PPP refers to any arrangement in which public and private sectors co-operate as partners in some way or other to produce and deliver goods and services of whatever kind. This embraces anything involving an element of public and private participation as a PPP. While semantically correct, such a definition of PPP is too all-embracing, imprecise and diffuse to be of practical value.
- ***Definition 2:*** PPP is also sometimes used to imply private corporations or philanthropic foundations providing public facilities or services of their own volition or the opposite, i.e. governments/parastatals going private.
- ***Definition 3:*** The most specific, generally recognised usage of the term PPP refers, in a more limited context, to specifically constructed and carefully negotiated business partnerships for the provision and production of a particular infrastructure service (e.g. telecommunications, transport or electricity) or a particular public good or service (e.g. a municipal service such as water and sanitation, or waste collection). Under this definition, PPPs are specifically tailored arrangements that spell out explicitly in detail the respective mutual responsibilities and obligations of public and private partners in providing key inputs, achieving outputs, targets and results, financing services in whole or in part and overseeing and monitoring performance. Such PPPs are usually enshrined in binding contracts under which the public party is generally the 'provider' and the private party is generally the 'producer' of a 'public' service.

The first definition embraces as PPPs institutions like MDBs and UNDFPs (e.g. UNICEF) that attract private funding or the more recent global vaccines initiative (GAVI). That is simply because they combine government (or public) capital and guarantees with private resources (e.g. bond issues in private capital markets in the case of MDBs or private donations in the case of UNICEF and GAVI) in a loosely structured fashion in order to provide a variety of services (e.g. loans, credits, grants, surveys, studies or technical assistance in the case of the MDBs or specific inputs in the case of UNICEF and GAVI) to individuals, corporations, countries or regions. In political and official circles these examples are now being referred to with increasing frequency as PPPs. But that usage of the term creates semantic problems when it collides with more specific, meaningful definitions.

The second definition creates more problems than it resolves. It employs the term PPP to describe the activities of private corporations, wealthy philanthropists and private not-for-profit organisations and foundations voluntarily going beyond their roles in the marketplace and becoming involved with providing or augmenting public services

at their own cost without any public finance or participation. There is no *partnership* involved. It is simply the private provision of a public service without public involvement. This might include, for example, companies or foundations and NGOs running local schools and/or education programmes for urban slum children, building libraries and museums, providing generic types of job training to unemployed jobseekers outside their own employee base, becoming involved in urban redevelopment and the revitalisation of slum areas in cities or undeveloped regions, supporting civic actions for better governance, etc.

Such measures are taken by private entities to compensate for government failure in providing public services on a universal basis financed by public resources (i.e. taxes). It is not unusual in many developing countries (and some developed ones as well) for private companies (e.g. mining companies operating in remote areas) to create and run townships and municipalities (i.e. the typical "one-company town") in their own interest.

But this second definition can also embrace the opposite phenomenon with the public takeover of what is legitimately private activity, i.e. when governments (whether national/federal, provincial/state or local/municipal) become more than tax collectors and providers of public goods and services and instead choose to become property developers, manufacturers, oil refiners, airline operators, shipping agents, plantation managers, miners, bankers, etc. In principle, this tendency for governments and their instrumentalities to become principal actors in free-market activity has been justified by the argument that the assets involved in these various enterprises are owned collectively by the population at large. There is, therefore, nothing wrong with these assets being managed (or mismanaged) by governments that represent the public at large as 'owners' on their behalf. The developed and developing worlds have innumerable examples of voluntary or involuntary private intrusions in what should be the public domain as well as overly enthusiastic (if not predatory) public intrusions in what is clearly the private domain. Such anomalous cross-boundary incursions may invoke the "public-private" aphorism in a literal sense. But, they cannot usefully be defined as PPPs for any practical purpose.

The third definition depicts what technocrats and professionals define as PPPs. Under this definition, PPPs combine private resources (capital, management and know-how) with public capital and/or 'public provision mandates' to improve the quality, quantity and efficiency of infrastructure and public services or the management of public sector assets. By focusing on improving public service outputs, they offer more sophisticated, cost-effective approaches to the management of risk by the public sector than can usually be achieved by traditional government departments or agencies. That is because in providing essential public services, government departments and agencies have traditionally focused on the management of inputs and their least-cost procurement through government channels. They have been less concerned with: quality of service standards, needs of the users of public services; consumer satisfaction; quality control; overall cost-effectiveness of inputs relative to outputs and service standards; or the quantity of output.

This definition implies that all PPPs are risk-mitigating devices. They permit a public partner to transfer 'performance risks' and 'operating risks' to private contractors. For the private partner they permit 'revenue risks', 'financial risks' and 'non-commercial risks' to be carried by the public agency involved in the partnership. A properly constructed PPP permits the risks involved in public service provision to be deconstructed, unbundled and allocated to the party most suited for and capable of bearing those risks. An illustrative map of different types of PPPs and PPIs is provided in Annex 3.

Using the third definition, PPPs can take a variety of institutional forms ranging from *contracting out* specific activities to private contractors through competitive bidding; awarding *franchises* to private operators that meet predetermined qualifications; supplying *vouchers* to users of services to pay for services from a variety of sources; providing *targeted subsidies* to private contractors to enable them to provide below-cost services to underprivileged groups without impairing profitability; or *leasing* public assets and equipment for private use in the delivery of public services. Such PPPs are invariably confined to specific agreements for providing infrastructure services and/or public goods. PPPs aimed at improving the delivery and quality of infrastructure and public services are usually confined to the national, provincial (or state), and local, district, or municipal levels and to the principal infrastructure sectors.[14] In the developed world, most such PPPs are at the provincial or local (and not the national) levels of government.

The discipline of PPP contracts between public entities mandated to *provide* services (by wholly or partly financing the service) and private contractors who *produce* the service has two benefits. It obliges the public agency to articulate precisely and quantitatively its long-term service needs, standards and objectives in fulfilling its mandate. Second, it ensures that the private sector will not risk capital in delivering services unless it is convinced that the PPPs entered into are financially sustainable over the long-term and that performance commitments under such PPPs can be met profitably.

This study adopts the third definition of PPPs shown above because that definition is substantive, precise and operationally meaningful. To keep semantics clear, it refers to all other forms of public-private engagement in joint activity as public-private interaction or public-private cooperation. Using that definition, the institutional forms of PPPs range along the continuum shown in Box 1.1. It also shows the distinction between PPPs and privatisation (which is not the focus of this study).

Using that definition of PPPs, and taking account of what was said earlier about the growing importance of FDI in non-traditional areas of investment, the study considers the following sectors and sub-sectors as candidates for FDI that might be attracted into LDCs by some type of PPP (as shown in Box 1.1) or by outright privatisation.

[14] Savas, 2000 and Gerrard, 2001.

Box 1.1 Various Institutional Forms of Public-Private Partnerships (PPPs)

FULLY PUBLIC SERVICE PROVIDER	Government Department Independent Public Authority or Agency
PPPs with Public Provider & Private Producer	Service Contract with Private Operator Operations/Maintenance or Management Contracts Public-Private Co-operative/Franchise Private Entity: Leases-Builds-Operates Builds-Transfers-Operates Builds-Owns-Operates-Transfers Wraps-around Additions Buys-Builds-Operates-Transfers
FULLY PRIVATE [i.e. Privatisation]	Private Entity Takes Over and Builds-Owns-Operates Indefinitely

Most PPPs in developing countries are concentrated in *electricity and telecommunications*. So are privatisations that go beyond PPPs in converting infrastructure services in these areas from public to private services that are provided competitively and regulated. These sectors accounted for the largest inflows of FDI to developing countries in 1990–2001, especially in East Asia, Latin America and Eastern & Central Europe. By the same token, the two least developed regions (i.e. sub-Saharan Africa and South Asia) have attracted the least amount of FDI. They have also been the slowest to enter into PPPs for public goods and services or to achieve significant progress in privatising these two sectors.

Transport is a third sector in which PPPs and privatisation have occurred. But the *water and waste* sectors have attracted relatively insignificant numbers of PPPs or amounts of FDI. One reason for that asymmetry across different infrastructure sectors is that PPPs and privatisations in electricity and telecommunications have been comparatively easy to negotiate. In these sectors agreements have been reached with governments at *national* level. Similar arrangements in transport (especially in larger developing countries) and in the water and waste sectors have had to be made at *sub-sovereign* levels of government, i.e. primarily at the provincial or local and municipal levels. Such arrangements have proven more difficult to negotiate. That is partly due

Box 1.2 Sectors & Sub-Sectors For PPPs and Non-Traditional FDI

SECTOR	SUB-SECTOR
TRANSPORT	Roads, Railways, Ports, Airports, Shipping, Airlines
ELECTRICITY	Generation, Transmission, Urban Distribution; Rural Electrification; Renewables
TELECOMS	Terrestrial, Cellular, Rural Telephony, Cable Operations, Broadband, ISPs
WATER	Treatment & Supply; Distribution; Sanitation; Sewerage; Recycling
WASTE	Collection, Treatment, Disposal, Recycling, Landfills

to unclear, often conflicting political relationships between sovereign and sub-sovereign levels of government. Partly it is because of variations in knowledge and administrative competence at these levels, especially in LDCs. Not least, it is because relationships between aid donors (who have been instrumental in pushing for PPPs and privatisation under the rubric of structural adjustment and institutional reform) and recipient governments have been confined to, and are most effective at, the sovereign (i.e. central/national) level. Such relationships rarely percolate effectively to provincial or local levels. When they do, they create confusion and conflict between donors and different levels of government. In general, government-to-government aid has not been productive at sub-sovereign levels of government. NGOs have had more success in working directly with local communities.

Being required to reach agreement on PPPs at the national level of government in LDCs in certain sectors, but at a sub-sovereign level in others, is an important but unrecognised complication that inhibits wider resort to PPPs by developing countries, especially LDCs. It imposes additional risks of a different order of magnitude which many domestic private investors and most foreign investors are unwilling to take (Chapter 5).

In addition to infrastructure, other areas of activity are also amenable to PPPs, including:

- *Government Services* such as revenue collection, currency printing, the issuance of passports and drivers' licenses, prison operations, the provision of military housing, etc. at the national level, as well as a host of provincial services (such as irrigation and water supply as well as intra-state roads etc.) and urban municipal services such as street lighting and maintenance, public transport, firefighting, etc.
- *Educational* and *Healthcare* services of various kinds
- Joint public-private activities in the *industrial sector* such as the provision of dedicated industrial estates, export processing zones and bonded warehouses, as well as packaged services for small businesses (these, for example, include the provision of space, central office services as well as on-site access to banking services, business support services and technical assistance)
- Joint activities in the *mining sector*, which in most LDCs is government-owned but operated by private contractors
- Joint activities in the *financial sector*, such as national or provincial development finance institutions, securities exchanges and financial services regulation
- In *distribution services* such as the provision of public wholesale and retail markets as well as farmers' markets for livestock and grain in rural and urban areas

All of these areas are worth exploring to determine their potential and the opportunities they present for attracting FDI into LDCs. But the study is limited by time and budget, compelling it to focus on core infrastructure sectors in which PPPs have been attempted.

Applicability of PPPs in LDCs: On the face of it, LDCs should be a natural, fertile habitat for PPPs. These countries are endemically short of public finance and public capacity. It should be evident therefore that engaging the resources (financial, human,

technological, management and know-how) of the *private* sector (foreign and domestic) alongside those of the *public* sector in extending the provision of infrastructure (and other public) services would be beneficial. But, in practice, things are not so simple. Experience in developed and developing countries with PPPs indicates that a high level of sophistication is required on the part of both partners for PPPs to work successfully. Broadly, an environment is required in which the factors that make PPPs successful are seen to exist, e.g.:

- Public sector agencies involved in a PPP arrangement (at whatever level of government) should be able to determine, articulate and quantify unambiguously their service provision objectives, outputs, targets and the results they want to achieve.
- Sufficient domestic private sector capacity should exist in the economy to compete in making bids for various types of infrastructure and public service provision. If insufficient domestic capacity exists then the foreign private enterprises invited to bid should have sufficient knowledge of local demand and market conditions in order to commit capital and meet performance targets. For many PPP arrangements, particularly at sub-sovereign levels of government (and especially at local and municipal levels), the absence of competent domestic private sector capacity in LDCs is a binding constraint. It cannot be overcome simply by bringing in foreign investors. They will not have the detailed local knowledge that is necessary. Nor will they know how to operate within a system of local politics that may defy rational comprehension. In such circumstances a domestic-foreign private partnership may need to be forged before a viable PPP can be arranged.
- There should be sophisticated performance monitoring ability on the part of public sector agencies that are the service providers to continually monitor and ensure adequate performance on the part of the private service producers.
- Equally, there should be sufficient recourse on the part of private producers of public services to ensure that the provision obligations (especially funding and other inputs) of public sector providers are met on time.
- There should be adequate and competent, real-time, independent regulation of private sector service producers (especially when the situation involves a monopoly or oligopoly in service provision) to ensure that their contractual obligations are being met and that any monopoly powers they may have are not being abused in terms of poor service standards or in terms of the costs and tariffs charged for the services produced.
- In the event of non-performance on the part of either the public or private partner in a PPP, there should be swift opportunities for redress through a judicial or extra-judicial process that accommodates the immediate resolution of conflicts or disputes between public sector agencies mandated to provide public services and private sector entities that have been contracted under PPP arrangements to deliver them.
- The interests of consumers should be met as widely, swiftly and equitably as possible with progressive improvements in service quality and delivery standards employing the best available technology at cost levels that reflect economic efficiency and effectiveness. Levels of consumer satisfaction with services provided through PPPs need to be monitored continuously to ensure that performance objectives are being met.

These conditions, among many others that are essential to assure the success of PPPs, are not readily found in LDCs. Their absence compromises PPP outcomes. Augmenting deficient local capacity with aid-funded technical assistance may not be the right solution. Sometimes it creates more problems than it solves. Moreover, there is the fear

on the part of LDC governments of being taken advantage of by foreign partners in PPPs because of the knowledge and capacity asymmetries that characterise the two. Augmenting government's capacity to cope with and monitor a number of PPPs in different sectors with aid-funded consultants may not resolve that problem; it may add to it.

In exploring non-traditional opportunities for FDI in LDCs the study finds that PPPs do not hold the same promise in attracting FDI as outright privatisations. Foreign investors will not invest equity in upgrading, renewing or expanding assets they do not own or that they do not have commercial freedom to operate in accordance with market norms (e.g. setting tariffs). Privatisation opportunities in LDCs in these sectors are not always commercially viable for global investors, especially in smaller, more remote LDCs.

Evidence suggests that resort to PPPs by LDCs in infrastructure sectors such as electricity, telecommunications, transport and water would result only in small amounts of FDI. Prospects for FDI might be heightened if entry through PPPs provided foreign operators with an opportunity to invest when privatisation occurs. But in some LDCs (especially small states) the operations of domestic electricity, telecommunications, transport and water companies are too small to be of interest to global investors in these sectors.

It is easier to attract FDI in connection with PPPs and privatisations at the national level. In small LDCs this is not an issue since sovereign and sub-sovereign levels of government are fused. But, in larger LDCs with provincial governments it is difficult to see PPPs that need to be arranged between private partners and public agencies at the sub-sovereign level attracting much FDI at the present time. Whereas sovereign risk can be covered by various agencies and sources, sub-sovereign risk cannot be covered quite as readily.

1.5 Barriers to FDI in LDCs: Costs vs. Risks

The arguments for encouraging greater flows of FDI to LDCs are compelling. But it is essential to recognise that, at present, FDI in the developing world has to surmount several obstacles. These fall into six categories: (a) administrative; (b) information asymmetries; (c) policy regimes; (d) infrastructure constraints; (e) human, social and institutional capital constraints; and (f) relative competitiveness constraints.

Since 1990, middle-income countries have made considerable progress in lowering these barriers and relieving the constraints they impose. LDCs have made some progress in improving policy regimes over the last decade although much still remains to be done. But the nature of their economies and their structural deficiencies has not enabled them to make as much progress in lowering the other five barriers as swiftly as other countries. Nor is there any quick fix for addressing these constraints. Given their endowments, such barriers in LDCs can only be lowered over the medium and long term. In the short term, they impose significantly higher incremental costs and risks for globally mobile

FDI considering entry into LDCs in comparison with other locations, whether in the more industrialised developing countries or in the developed world.

The costs and risks that each category of barrier imposes are often regarded as being part of the same continuum. That may be true in theory and concept. But, in practice, investors make a clear distinction between incremental costs and the higher risks posed by each. The additional costs that confront FDI in LDCs (e.g. because of excessive bureaucracy, inadequate infrastructure, lack of supporting institutions, corruption, etc.) are known up front. The risks are unknown. Higher costs can be estimated and factored into investment decision-making, especially when a foreign investor is making comparative cost-benefit analyses of investment opportunities in one location vis-à-vis another. Knowing that their circumstances impose higher costs on foreign investors, many developing country governments attempt to offset them with incentives. But experience with these has not proven to be salutary. Also, the higher operating costs resulting from their constraints might be offset by the lower capital costs in LDCs of production factors (e.g. land and labour).

Chapter 3 deals with the cost implications of barriers to FDI in LDCs although these are not the primary focus of this study. Nevertheless it would be sanguine to downplay the impact of these costs as they may preclude FDI entry into a particular LDC (or even LDCs as a category) well before the issue of risks even arises. For that reason the study highlights such costs as major impediments to attracting FDI flows in greater volumes to LDCs. In contrast to incremental costs, the risks associated with the same barriers to investment are qualitatively identifiable but quantitatively unknown when an investment decision is being made. Risks can be covered partially through mitigating mechanisms and instruments that are the focus of the study and dealt with in Chapter 5. But, as indicated above, the question of risks and risk mitigation becomes important only after potential foreign investors have decided that they can cope with the higher costs.

1.6 The Environmental and Social Sustainability of FDI

The inward surge of PCF and FDI through the developing world that has occurred since 1990 has led to concern about its environmental and social sustainability (ESS). Concern has been expressed by: global environmental (and other) NGOs, donor governments, and labour unions in OECD countries. Like pressures for structural adjustment, ESS concerns have not originated or emanated primarily from within developing countries themselves.

But, though externally driven, several recent incidents have elicited local concern as well. For example, the social and environmental impact on the local community of an explosion at the Union Carbide chemical plant in Bhopal (India) have triggered internal resonance – mainly on the part of civil society, rather than in governments and the domestic business community – within developing countries. These echoes call for business at large to subscribe to higher environmental and social standards as part of a movement toward greater corporate responsibility and better corporate regulation and governance in their countries.

Unfortunately, overt pressures applied by OECD countries on developing countries to adopt higher environmental, labour and human rights standards in trade negotiations have resulted in a backlash. Developing country governments and their domestic business constituencies now fiercely resist the acceptance of externally imposed ESS standards. The movement toward greater corporate responsibility has become entangled and confused with other issues in the context of trade (as well as other global) negotiations often played out by negotiating parties as a zero-sum rather than a positive-sum game.

Unfortunately, the perception that ESS is simply a form of back-door protectionism has gained currency from the outcomes of Uruguay Round negotiations. In most developing countries, calls for higher ESS standards are seen as a subterranean conspiracy – involving NGOs, the UN, OECD governments, businesses and trade unions (especially in the EU) – to obstruct the competitiveness of the developing world.[15] This background is essential to understanding the context in which ESS issues are being played out, and the implications and consequences of attaching ESS conditionalities to mechanisms and instruments (e.g. aimed at risk mitigation) designed to encourage greater flows of FDI to LDCs.

Despite that, the case for FDI (and domestic investment) to be ESS-compatible remains fundamentally uncontestable. It would be better if pressure on domestic and foreign investors to subscribe to ESS came from developing countries themselves. But developing country governments are reluctant to apply such pressures through entry conditions for FDI because they fear that they might lose out in competing with other countries to attract it. These governments see a clear contradiction between attempts to encourage greater FDI flows and concomitant attempts to impose ESS conditionalities associated with risk-mitigation instruments that (in their view) may discourage such flows.

The study considers ways in which FDI in LDCs can be made ESS-compatible through risk mitigation mechanisms (Chapter 4). In that connection, a Policy Dialogue was held by the Stockholm Environment Institute (supported by the Swedish Ministry of the Environment) in March 2001 called "Engaging the Private Sector in Sustainable Development". Recommendations emanating from that forum are summarised (paraphrased) below because of their tangential bearing on some of the concerns examined in this study.[16]

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[15] See Mistry, 2001:2.

[16] The Dialogue was part of preparations undertaken for the Swedish Presidency of the EU and for the World Summit on Sustainable Development (WSSD) to be held in September 2002 (Johannesburg). The list of participants at that forum was heavy on representation from environmental NGOs, the Swedish government and multilaterals (which have a common cause) and light on representation from the business community (in developed and developing countries) and from governments in the developing world. The recommendations emanating from the Policy Dialogue (or more appropriately 'monologue' given the representation) reflect the asymmetry inevitable from such participation. If ideas are to be sound, applied in practice, be expected to work and be accepted by those on whom they are meant to be imposed, then it would be wise to involve participation of business and government from the developing world and from the TNC community in such dialogue at the outset.

1 A new approach to capacity building for sustainable development is needed, especially with regard to the ability of developing countries to attract, regulate and manage FDI and to make the transition to sustainability.

2 The new approach should recognise North-South tensions on ESS and support new partnerships between public and private institutions to enhance capacity building.

3 New forms of social and technical innovation and entrepreneurship are needed to create new market opportunities for ESS initiatives in developing countries.

4 New market mechanisms (e.g. green taxes, emissions trading, incentives for full cost accounting) are needed to provide a basis for generating new opportunities for businesses to embrace sustainable development practices.

5 Sustainability needs to be identified as a 'top-line' benefit in corporate accounts with ESS driving for enhancing corporate performance, competitiveness and efficiency.

6 Approaches, best practices and mechanisms that have succeeded in getting businesses to embrace sustainable development need to be 'showcased'. Positive incentives rather than punitive measures are needed to induce businesses to shift course, although stronger regulation to guide business behaviour is essential.

7 Rule-making processes for FDI need to be reviewed to ensure greater stakeholder participation as well as closer cooperation between government and industry. New regulatory frameworks for FDI must provide clear goals for sustainability. They must be stable, long-term and market-oriented in nature.

8 Policy frameworks for FDI must ensure a systematic approach within and between each sector of investment. Sector-specific frameworks will necessarily vary depending on the sector in question, the sustainability challenges to be addressed in that sector, the actors engaged and the regions involved.

9 Policy coherence for FDI is dependent on broad societal acceptance and a clear understanding of the risks and uncertainties that investors face. Stakeholder coherence should be centred on the need to create a common set of societal goals.

10 Rule-making processes for FDI need to be consultative and participatory. Command and control processes dominated by governments reduce important opportunities for business and discourage private investment.

11 New approaches are needed to promote and ensure enhanced accountability in and across public and private sectors and civil society. Concrete, harmonised standards for accountability are urgently needed. Such accountability needs to be proactive and linked directly to financial and environmental performance indices and benchmarks.

12 Enhanced transparency is essential for creating an effective framework of accountability and particularly for tracking private capital and ODA flows. Undertakings like the Global Reporting Initiative need to be replicated in order to increase disclosure and transparency in sustainability reporting. Such initiatives should be supported by the Swedish Government to ensure the development of effective global methodology employing new criteria for measuring and reporting on the private sector's efforts to promote sustainable development.

13 New forms of risk sharing between private and public sectors are needed so that governments can motivate the private sector to engage in sustainable development. Such risk-sharing should focus on areas where the private sector may be able to undertake sustainable development in an economically viable manner but is hesitant to do so because of some perceived or real risk that is significant enough to impede innovation, but not so great as to undermine the business case for the endeavour.

14 The use of environmental risk guarantees must be accelerated to stimulate investment in private sector ventures/initiatives consistent with sustainable development goals.

15 Project-related environmental risk guarantees should be provided (by governments and MDBs) to private companies in order to mitigate the potential risks involved; especially when the ESS dimensions of specific projects can be clearly demonstrated.

16 The use of risk-reducing and risk-sharing instruments (e.g. risk insurance) should be expedited to encourage the private sector to 'internalise the external environment' and account for the social costs of potentially risky business enterprises.

17 Governments should provide financial support to companies that are required to post performance bonds or provide 'end-of-project funds' to mitigate their environmental impact through rehabilitation, restoration or clean up of mining sites, oil wells, etc. This would ensure that when private companies (e.g. mining and oil companies) exhaust the extraction of a particular resource at a particular site, they will take all necessary steps to ensure that extractive life is extended in a sustainable manner.

18 Industry assessments are being carried out in the cement, mining and hydroelectricity industries to analyse their ESS dimensions in a holistic manner under an over-arching framework. It needs to be determined if such assessments provide a practical basis for pilot demonstration projects involving multi-stakeholders with clear indications of their respective roles and responsibilities. Governments should support such assessments financially. Public support should include inputs into the development of new approaches that are responsive to sustainable development goals and principles.

19 Existing statistics on PCF and FDI are unreliable, outdated and inapplicable in determining underlying trends driving these flows. Efforts need to be made to review and improve these statistics. More and better information is needed in tracking the country and sectoral destinations of PCF and FDI, and to understand the proportion of FDI that is compatible with the aims of sustainable development. A new generation of statistics is needed, disaggregated by sector and complemented with concrete case studies. Statistics on capital flows need to be related to various international development goals and targets in order to ensure that the latter are highlighted and implemented.

20 The Swedish Government should support refinement and strengthening of multi-stakeholder processes to provide inputs into FDI decision-making processes. Such processes should engage the full range of state and non-state actors to promote corporate responsibility and ensure that FDI supports sustainable development goals. The development of concrete criteria and indicators for tracking PCF is critical.

21 To allow the private sector to capitalise on the development of sustainable enterprises, the Swedish Government should work with the private sector to identify existing constraints and to articulate new strategies for overcoming them in creating a new enabling environment for sustainable development enterprises to emerge.

22 The Swedish Government should take the lead in supporting multi-stakeholder processes to enhance corporate environmental reporting so that the economic benefits of ESS business practices can be better understood and disseminated. New indicators for measuring and evaluating the environmental and social performance of the private sector need to be created with the full involvement of developing countries to ensure that performance standards are regionally and culturally relevant.

23 The Swedish Government should take the lead within the EU in pressing for reform of the Global Environment Facility (GEF) to improve its flexibility and capacity to partner with the private sector in supporting projects with global environmental benefits. The

problems that need to be addressed are GEF's increasingly complex and inefficient bureaucracy that has deterred partnerships with the private sector, its ineffectual role in supporting environmentally sound technology transfer, its reticence to engage in risky projects, and its slowness to reform.

24 The mistakes, failures and shortcomings of the GEF should not be repeated in the development of the new Clean Development Mechanism (CDM). The Swedish Government should catalyse innovative efforts to ensure that the CDM is more effective than GEF at: transferring environmentally sound technologies; reducing transaction costs; and ensuring more efficient project preparation.

25 The Swedish Government and the EU should promote better use and coordination of ODA and export credit financing to leverage FDI and direct it to sustainable development initiatives, especially in transferring environmentally sound technologies to promote transport, food production, food security and energy production in LDCs.

26 ODA's influence can be increased by using it to pave the way for PCF and FDI through financing pre-investment feasibility studies, strengthening local capacity and appropriate use of guarantees that have been piloted over the last few years. ODA should be used to reduce risks in sectors and technologies important to sustainable development but perceived as too risky for the private sector to undertake directly without some ODA-financed risk-reduction interventions (especially via partial risk and political risk guarantees).

27 National bilateral investment agencies in EU member countries should also leverage increased PCF and FDI. They should catalyse the enhanced transfer of environmentally sound technology and support the creation of environmentally and socially sustainable markets in emerging economies.

This is a long and rich (indigestible) list of recommendations for bilateral, multilateral and private agencies to adopt in the cause of involving the private sector in promoting sustainable development. It is for readers to judge its substantive merits and practicality. It is a mixed bag containing many useful suggestions along with several that are impractical. Suffice it to observe that if there had been more balanced representation (i.e. participation by experienced TNC investors and from business and government communities in developing countries and from LDCs) the dialogue might have emerged with a different wish list. This particular list appears to have been crafted by participants pursuing an *idée fixee*, limited by their perceptions of how the world ought to work, but without sufficient understanding of the private sector and its motivations or about the conditions that foreign investors confront in LDCs. Although counterfactuals are by definition impossible to prove, an alternative list emerging from a genuine dialogue with the private sector (TNCs and business representatives from developing countries) and with LDC governments might have been one that was more practical and more capable of being translated into operationally meaningful actions.

More to the point, and of concern to the study, is that the wish list produced by the Policy Dialogue is likely to intimidate and antagonise the private sector instead of attracting it to subscribe to sustainable development. Many TNCs and private corporations (including some in the developing world) are more attuned to ESS concerns and are working on how to mainstream them in their operations than these recommendations give them credit for. For that reason, each of these recommendations needs

to be subjected to some obvious tests concerning their validity, 'do-ability', viability, priority and value. It is not for this study to separate the wheat from the chaff. But it is worth raising a note of caution about these recommendations being accepted too blithely.

1.7 Contents of the Study

Following this introductory Chapter, the role of FDI in developing and least developed countries is explored in Chapter 2 in detail. Chapter 3 deals with barriers to FDI in LDCs while Chapter 4 focuses on how FDI might be made more ESS conscious. Chapter 5 deals with the core issues of risks confronting FDI in LDCs. Chapter 6 considers how these might be mitigated. Chapter 7 focuses on the types of actions that a donor country like Sweden can take to mitigate risks and increase FDI flows to LDCs. The annexes 5–7 each cover a specific case study aimed at illustrating innovative approaches to risk coverage aimed at making FDI possible in LDCs, especially in non-traditional areas of investment and those arousing particular ESS concerns and issues.

2 Foreign Direct Investments in Developing and Least Developed Countries

Beginning with a review of post-1990 experience with FDI flows to developing countries, this chapter evaluates their benefits and costs. It examines the distribution of FDI in LDCs, looking in particular at FDI in traditional and non-traditional sectors. In the latter, the chapter considers the role of PPPs in expanding the possibilities for FDI in LDCs by unbundling and sharing risks between public and private sectors. It considers PPPs as vehicles for FDI in themselves as well as *ad interim* transitional arrangements preceding full privatisation. Finally, the chapter looks at linkages between FDI and the domestic private sector in LDCs, examining the spillover effects and benefits of FDI. In the context of such linkages, the chapter examines the implications of applying the 'equal treatment principle' for both domestic and foreign investors in developing countries and LDCs.

2.1 What Drives FDI to Developing Countries (and LDCs)?

Table 1.1 in the previous chapter highlighted increases in FDI flows to the developing world since 1990. But why does FDI flow across borders? In particular, why does it flow to (risky) developing and (even riskier) least developed countries? The answer to those questions is not intuitively obvious. What motivates cross-border FDI is rarely properly understood in official circles, if only because each investment is driven by a combination of factors and motives whose rationale is not always what it seems to be on the surface.

For that reason, many public (policy and finance) interventions (e.g. investment promotion, pre-investment cost subsidisation and risk mitigation) have not yielded the results expected. To the contrary, past experience is littered with misconceived interventions that attempted to increase FDI flows to developing countries but failed. That may seem a strange assertion to make when the growth that has occurred in FDI flows over the last decade would have been inconceivable in the late 1980s. But such growth has occurred for reasons that have little to do with supportive public interventions. It is attributable much more to changed fundamentals and attitudes to FDI in source and host countries.

FDI was regarded with considerable suspicion by developing countries and some of their multilateral interlocutors prior to 1990. Nonetheless, efforts were made – by governments of host and source countries and by multilateral institutions – to direct FDI to developing countries and provide some risk cover for it. The creation of IFC in the 1950s, the expansion of the role of bilateral export credit agencies (ECAs) into providing non-commercial risk cover for private investors from source countries, the creation of private sector investment capacity in the regional development banks (RDBs) in the 1980s, UNCTAD's focus on providing information to encourage FDI flows, and the creation of MIGA in 1988 are all testimony to that inclination.

But such efforts are often aimed at attracting specific investments to fill perceived 'gaps' in the industrial structures of developing countries while discouraging other

types of FDI. Many developing countries were intent on reserving the 'commanding heights' of their economies (e.g. the utilities and the heavy industrial capital and intermediate goods sectors) for their state-owned enterprises (SOEs) to dominate. That was done in the belief that recipient governments and their international interlocutors knew better than private investors and markets what inward investments were needed and where they should be located.

After 1990, investment regimes in the developing world have become more open. Now investors and markets (not bureaucrats) decide where FDI should flow. Bureaucrats focus less on attracting or blocking particular types of FDI and more on levelling the playing field so as to remove the impediments that deter FDI from entering developing economies or particular sectors. Many investment promotion agencies (IPAs) in LDCs still target specific TNCs to make inward investments. But the general trend is to welcome FDI of any type, other than that which is immoral or socially repugnant.

Yet, although the climate has changed, many developing country governments and donor aid agencies understand what drives FDI flows imperfectly in assuming that maximising profits is the only motive that investors have. That is not the case. Firms undertake FDI for a host of reasons and are usually prepared to accept satisfactory, rather than maximum, returns above a minimum rate-of-return threshold.

A crude taxonomy of what drives FDI is shown in Figure 2.1. The figure is illustrative. It shows that FDI flows are driven by interplay across three sets of factors applying in any country that is a potential destination: (a) *economic factors and endowments*; (b) *policies*; and (c) *motives* of foreign investors. The first is relatively immutable. The other two are not. They are subject to change and interaction. No change in the picture for FDI has been as dramatic as the change caused by globalisation, regardless of controversies concerning its desirability, impact and pervasiveness. As the figure shows, each of these three broad factors has three or four major dimensions. Each of the dimensions in turn has a number of specific characteristics that combine to define that dimension and determine its overall influence in attracting or repelling FDI into the country concerned.

With globalisation driving FDI flows across borders, attention has focused increasingly on competitiveness, government policies (that influence competitiveness), and perceptions of risk as being the key determinants of FDI. Exit strategies and options are important considerations for foreign investors if only because the development of global capital markets requires TNCs to derive enhanced value from their equity investments in subsidiaries and affiliates and to have such value reflected in their balance sheets as quickly as possible.

The availability of natural resources (minerals and energy) still attracts a significant, if decreasing, proportion of FDI. Such investment is more important for Africa, Central Asia and the Middle East than for other developing regions. It is particularly high in LDCs. FDI in resource exploitation is generally undertaken by global TNCs. But in riskier LDCs it is not unusual to find smaller companies (wildcatters) taking the initial risks of exploration and selling their stakes out to global TNCs when commercial reserves have been proven.

Figure 2.1 What Determines FDI flows to Developing Countries?

Economic Factors	**Markets**	Market Size; Purchasing Power; Income Levels; Income Distribution; Aggregate Demand; Markets for Products and Services; Growth Prospects; Stability; Access to Regional Markets; Social and Cultural Factors influencing tastes and consumption; Distribution Channels and Ease of Access to Customers; Brand Awareness; Media Options for Advertising and influencing demand.
	Resources	Natural Resource Availability; Location; Accessibility.
	Competiveness	Labour Availability; Wage Rates; Productivity Adjusted Wages; Social Overhead Costs; Trainability and Mobility of Manpower; Availability of Managerial and Technical Skills; Rigidity of Labour Markets; Trade Union Power; Timely Access to Other Inputs (Raw Materials, Intermediates, Consumables); Quality of Physical Infrastructure; Social and Institutional Capital; Supplier Base; Efficiency of Local Distribution; Intra-Industry linkages; Inter-Industry linkages; Support for Applied R&D for adapting products and services to local conditions; Local Banking and Capital Markets; Access to Local Capital; Real Effective Cost of Local Capital; Availability of Business Support Services; Transport Costs; Local Brand Equity.
Government Policies	**Macroeconomic Policies**	Fiscal, Monetary, Exchange Rate Policies; Budget Deficit Size/Sustainability; Size of External and Internal Debt; Management of Debt; Stability of Tax Regimes/ Structures; Interest Rate policies; Inflation; Credit policies; Controls on access to Forex, Currency convertibility and outward remittances.
	Private Sector Policies	Promotion of private ownership; Respect for property rights; Non-punitive taxation of private assets and income; Clear and stable policies; Encouragement of entrepreneurship; Ease of entry and exit from business; Crowding in or out of private sector access to local bank credit and capital markets; Direction of investments into particular areas; Encouragement of private business associations; Support for private sector in international negotiations.
	Trade/Industry Policies	National Trade Strategy for coping with globalisation; Regional Market Access Arrangements; Quota access to EU or NAFTA; Controls on foreign and domestic ownership of firms; Policies on trade-related investment; Policies on intellectual property rights; Competition and anti-monopoly policies; Regulatory policies and institutional capacity to ensure market competition in all sectors; Technology policies.
	FDI Policies	Approval requirements, ease of entry and restrictions on ownership of firms; Incentives for FDI; Political and Judicial treatment of foreign firms; Accession to BITS, DTTs and International Agreements on FDI; Foreign firms' access to privatisations; Access to local inputs; Access to local finance; Transparency and stability of policies dealing with foreign investors; Rule-based regimes rather than case-by-case approvals; Requirements for corporate responsibility.
Foreign Investor Motives	**Primary Motive**	Protection/Expansion of Global Market Share; Technology Leadership; Entry into promising future consumer markets; Secured access to stable supply of scarce natural resources; Intra-industry supplier or customer linkage; Inter-industry linkage; Service linkage with major TNC customers; Political or Ethnic linkage.; Profit Maximisation.
	Risk Perception	Country Political Risk; Commercial Risks; Financial Risks; Environmental Risks Vulnerability to Exogenous Shocks and Natural Disasters.
	Global Strategy	Global Industry Leadership; Production Cost Optimisation; Maximising Market Access; Global Presence; Organic Growth vs. Acquisition-led growth; Risk Diversification.
	Exit Strategy	Local IPO, Regional IPO, Global IPO, Sale to Larger Competitor; No Exit.

Source: Lall, S. Attracting Foreign Investment, (EP No.71) Commonwealth Secretariat, London (UK)

Prior to 1990, the bulk of non-resource-based FDI (i.e. in manufacturing and services) was driven either by a desire to establish a presence in closed markets protected by tariff walls or non-tariff barriers, or to take advantage of cheap labour. When it entered a developing country, such FDI focused either on protected production for the domestic market, or on lowering the labour cost of production for particular products that it exported to world markets with the domestic market being a virtual irrelevance. After 1990 the scene changed. Today, FDI is unwilling to enter developing countries to take advantage only of protected markets or cheap labour. International trade is now governed by progressive, continual lowering of trade barriers under WTO, a regime to which most countries now subscribe (in contrast to GATT, the WTO's predecessor, which was mainly a rich countries' club). The comfort of protection in any market is therefore likely to be short-lived.

Where FDI in manufacturing is concerned, production is being standardised and updated to take advantage of changes in technologies in almost every industry driven by advances in IT. It is no longer being modified to avail of cheap labour costs. Production is becoming global within *intra-firm* organisational structures and *intra-industry* networks. The significance of labour costs for competitiveness is diminishing while the significance of 'knowledge-cost' and 'service-cost' components is rising, as is the importance of global brands and brand equity. As the value of labour cost differentials diminishes, so do the opportunities available to TNCs for arbitraging different environmental, social, health and safety standards across countries. Instead they are under pressure to exercise global corporate responsibility and universalise these standards.

Firms undertaking FDI in traditional areas of investment are becoming more attuned to market entry in countries where local production can be made to conform to global norms and standards of quality and cost. Increasingly, manufacturing or service (e.g. banking) TNCs will now consider investing in developing countries only when entry permits the production cost of their product/service mix to be optimised globally. Advances in technology are compelling firms to produce specific products or services in countries that offer the lowest overall (not just labour) production cost advantages (usually associated with the highest levels of multifactor productivity) at any given moment in time.

Over 25% of world trade is now 'intra-firm' trade. Another 35% is 'intra-industry' trade.[17] The configuration of global production patterns requires countries to permit sufficient internal flexibility to firms to change their product and service mixes, as well as their factor input and technology mixes, rapidly. Such flexibility is imperative for firms to respond swiftly to changes in exchange rates, wage rates, energy costs, communication costs, transport costs, etc. across countries in which the firm has a production and market presence. Failure to adjust to changing circumstances and relative cost-cum-productivity changes in real time can mean the difference between success and survival.

[17] UNCTAD, World Investment Report, 2002.

These factors have changed the FDI landscape for developing countries in a way that opens up new opportunities but also accentuates structural disadvantages. They make it particularly difficult for LDCs to attract globally mobile FDI. Offering potential investors compensatory offsets to lower costs and reduce risks is no longer a sufficient incentive. That is not the case for FDI in non-traditional areas (e.g. infrastructure) where the output is generally non-tradable on a global scale although it may be on a regional scale.

All these considerations need to be taken into account in examining how, in the coming decades, FDI in LDCs can be increased through better risk mitigation. The post-1990 FDI paradigm has changed sufficiently for costs/risks to be looked at differently than in the past. Most importantly, it needs to be stressed that – regardless of what is done to offset costs and lower risks of FDI in LDCs to levels acceptable to investors – the instruments designed to achieve these objectives need to be dynamically responsive to continual changes in the relative cost/risk profiles of foreign investments. It cannot be assumed that the costs or risks anticipated (and covered) when an investment was first made will remain the same in absolute or relative terms through its life.

2.2 FDI Flows to Developing Countries

Table 1.1 indicated that net FDI flows to developing countries had grown from $2.2 bn in 1970 to nearly twenty times that amount in 1990 and further to a peak of $185 bn in 1999, before dropping to under $170 bn in 2001.[18] Table 2.1 provides detailed breakdowns of: (a) global FDI; (b) inward and outward flows to/from developing countries; and (c) FDI inflows to LDCs. However, it must be interpreted with care. In theory, total global FDI inflows should equal outflows – as with world trade where world imports must theoretically equal world exports. But, accounting and recording anomalies mean that, in practice, total recorded inflows and outflows never reconcile. The global FDI column in Table 2.1 shows recorded inflows as larger than recorded outflows by a small margin. The table also shows that FDI *outflows* from developing countries increased steadily through the 1990s from less than $15 bn in 1990 to nearly $100 bn in 2000. There were reversals in outflows in 1998 after the Asian financial crisis and again in 2001 with the bursting of the technology bubble, the slowing down of the world economy and the impact of September 11th. But like inflows, FDI outflows from developing countries are expected to rise, albeit at a slower rate than in the 1990s.

Overall FDI outflows from developing countries are now large in absolute dollar terms and relative to FDI inflows. They now amount to 25–35% of inflows. That reflects three phenomena of importance in considering ways of increasing FDI flows to LDCs.

[18] Table 2.1 shows FDI inflows, outflows and net flows received. But caution is necessary in interpreting the data. For example, an investment made by a Korean auto firm in its Indian subsidiary will show up as an FDI outflow from Korea and an FDI inflow to India. But the net FDI flow will be zero in the aggregate for developing countries, even though an investment has been made. Such quirks need to be appreciated when these numbers are analysed.

First, many developing countries (e.g. Korea, India, Malaysia, South Africa) are now significant sources of FDI for neighbouring countries in their regions as well as outside. Second, as the stock of FDI in the developing world grows and matures, some repatriation of originally invested capital is taking place on the capital account, along with remittance of profits and dividends on the current account. Such outflows are likely to keep growing over the coming years.

Third, a significant amount of FDI recorded as flowing to developing countries represents 'round-tripping' e.g. as the pattern of FDI flows between China and Hong Kong suggests.[19] The same is true of FDI attributed to non-resident nationals in South Asian and transition economies. Domestic capital that is non-preferentially treated exits these economies (but not on the recorded outflow account) to tax havens (Cyprus, Dubai, Hong Kong, Mauritius, Cayman Islands, Virgin Islands and Vanuatu) only to return as FDI that is then preferentially treated.

Table 2.1 FDI Flows to Developing Countries and LDCs, 1970–2001 (Figures for FDI in billions of US Dollars; for shares of FDI in per cent)[20]

	Global FDI flows (all countries)	Global FDI flows (all countries)			FDI flows to LDCs		Developing country share of global FDI (%)	LDC share of inflows DC-FDI (%)
	Global FDI flows (all countries)	In	Out	Net	In	Out	Developing country share of global FDI (%)	LDC share of inflows DC-FDI (%)
Years								
1970	60.0	2.3	0.4	1.9	0.23	0.01	2.9%	10.0%
1980	93.0	4.7	0.3	4.4	0.21	0.02	4.3%	4.5%
1990	127.0	38.6	14.5	24.3	0.60	0.05	19.0%	1.5%
1991	160.0	52.2	16.5	35.7	2.10	0.08	22.3%	4.0%
1992	172.0	67.8	20.7	47.1	1.46	0.11	27.4%	2.2%
1993	226.0	101.5	34.9	66.6	1.75	0.08	29.5%	1.7%
1994	256.0	132.5	42.5	90.0	1.20	0.09	35.2%	0.9%
1995	331.0	156.0	49.0	107.0	2.02	0.00	32.3%	1.3%
1996	377.0	189.1	57.6	131.5	2.45	0.33	34.9%	1.3%
1997	473.0	238.3	65.7	172.6	2.98	1.07	36.5%	1.3%
1998	683.0	214.6	37.8	176.8	3.68	0.36	25.9%	1.7%
1999	982.0	243.4	58.0	185.4	5.17	0.17	18.9%	1.6%
2000	1271.0	277.5	99.5	178.0	4.41	0.17	14.0%	1.6%
2001	760.0	239.4	71.2	168.2	3.95	0.20	22.1%	2.6%

Sources: *Global Development Finance (2001 and 2002) World Bank, Washington DC; and World Investment Report*

[19] See Box 2.3 in *Global Development Finance*, 2002 (p. 41) which indicates that exchange restrictions and preferences accorded to inflows of foreign capital over domestic capital encouraged Chinese firms to move money offshore and then repatriate it to China disguised as FDI. Research on the issue estimates that such round-tripping (through Hong Kong and the Virgin Islands) may account for between 25–35% of recorded FDI flows to China.

[20] Note: The figures shown above for FDI inflows to LDCs differ somewhat from those shown in FDI in "Least Developed Countries at a Glance" (UNCTAD 2001), which is the best single source of such information on LDCs. The figures in the table above are from the detailed appendices contained in the World Investment Reports for 1998 and 2001 (also UNCTAD) and used for the sake of uniformity and consistency with the GDF data series.

The data are still imperfect and it is difficult to identify from available statistics how much of the FDI outflow is attributable to each of these factors. **The recording of FDI outflows from developing countries is particularly unreliable**. Many still have restricted or closed capital accounts, barriers to outward investments by domestic firms, exchange controls and high taxes on investment income. Combined with weak accounting rules and loose reporting/recording protocols, these influences discourage transparent reporting of FDI outflows in most developing countries and exacerbate the problem of underreporting. Nevertheless, it is clear (using other sources of information and the IMF's balance-of-payments series for individual countries) that, **from 1995 onwards, developing countries themselves have become a major source of FDI flows to other developing countries.**

In 1999 for example, gross FDI inflows to developing countries amounted to over $243 bn while net FDI flows were over $185 bn. But only $72 bn was recorded as coming from OECD source countries. Another $40 bn could be identified as coming from non-OECD high-income source countries. If these latter figures are reliable, that would imply that **$73 bn in net FDI flows to developing countries originated in other developing countries, making them a larger source of FDI in 1999 than the OECD countries.** Compared with the size of that residual in 1999, the FDI outflows reported by developing countries in 1998 (the last year for which such data are available) were only $12 bn.[21] The size of the difference between the imputed residual and the recorded outflow just a year earlier shows how large the data-recording problem is where FDI is concerned.

The increasing South-South nature of FDI flows may account for the surprising robustness and resilience of FDI flows to developing countries since 1997 in the face of the Asian financial crisis (1997–98), the Russian and Brazilian financial crises in 1998–99 and the multiple financial crises between 1999–2002 in Argentina, Ecuador, Pakistan, Turkey, the Ukraine, Venezuela and Zimbabwe. **Clearly, risk perceptions of OECD investors concerning FDI in the South are different from those of investors from other developing countries.** FDI flows across developing countries appear to have been increasing in parallel with increases in South-South trade, implying that production and ownership structures of firms in developing countries are also becoming more integrated through FDI not only within intra-firm structures of TNCs from OECD countries but also within structures of TNCs from developing countries. That is becoming noticeable on a regional basis in East Asia, Latin America and, through South African investment, in Africa as well.

While FDI outflows from developing countries as a group are sizeable and growing, Table 2.1 shows that outflows *from LDCs* are negligible, except in 1997, when FDI outflows exceeded $1 bn. That was due to the withdrawal of FDI from Liberia – where

[21] See *Global Development Finance*, 2002 (p. 40–43).

it is related to investments made by shipping companies using Liberia's flag–of-convenience facility. But, when total capital outflows (not just of FDI) from LDCs are taken into account, they are hardly negligible. **LDCs still experience leakage of too much capital driven by the expatriation of proceeds from corruption and the remittance of undeclared and untaxed profits by domestic and foreign firms through parallel markets**.

What Table 2.1 obscures is the unreliability of FDI statistics discussed above. That shortcoming is widely recognised by analysts although it is not given much prominence in the literature on FDI flows. These statistics record cross-border *equity* flows but do not capture other aspects of FDI such as for example: (a) the reinvestment of profits by TNCs in developing countries which substitute for cross-border flows of equity; (b) reinvestment of dividends received by parent TNCs from their subsidiaries and affiliates; (c) the treatment of local equity in joint ventures involving TNCs and the reinvestment of profits by joint ventures attributable to local and foreign parties; (d) the valuation treatment of 'in-kind' investment by TNCs in subsidiaries and by foreign partners in joint ventures resulting from equity provided by way of equipment, technology, intellectual property rights, designs, market rights, or royalties foregone; (e) distinguishing between genuine arms-length FDI inflows versus round-tripping of domestic flight capital returning as privileged, protected FDI. While acknowledging that these information inadequacies are real and large, this study is obliged to use the standard series of statistics available (i.e. those published by the World Bank and UNCTAD) for lack of a viable alternative.

Net FDI flows to developing countries have grown dramatically through the 1990s in absolute terms and in their relative share of global FDI. FDI in developing countries accounted for 3% of global FDI in 1970 and 4% in 1980. In 1990 it accounted for 19% of global FDI, peaking at 36.5% before the Asian crisis in 1997. That share has dropped since[22] although it did recover again slightly in 2001 when global flows fell sharply.

The developing world's share of global FDI flows needs to be judged against its share of 23% of world output at nominal exchange rates and 45% at purchasing power parity rates that are more relevant in measuring real (physical rather than dollar value) output. Given a presumed differential of 4–5% in sustainable long-term growth po-

[22] The decline in the share of FDI absorbed by developing countries since 1997, and the corresponding increase in the share of the industrial countries (which rose from 64% in 1994 to 84% in 2000), is explained in part by the rapid growth rate of the US through the 1990s. That growth rate, averaging nearly 5% (higher than that of most developing countries and of the developing country average for that decade), attracted FDI from Europe, Japan as well as developing countries like Korea, Taiwan (China) and India (especially in the IT sector). It resulted in increasing the US' share of global FDI from 18% in 1995 to 26% in 2000. That shift may reflect a 'one-time' reallocation of global investment capital resulting from the significant increase in knowledge as a key production input and higher rates of return from globally linked investments in the IT and communications industries (Feldstein 2000). But with the bursting of the technology stock bubble that situation is now changing. Over the coming decades developing countries (like India, China, etc.) can attract greater flows of technology-related FDI as these technologies mature and the overall cost advantages of these countries in these sectors is reasserted.

tential between the developed and developing worlds over the next 20–25 years, the share of global FDI in developing countries should, other things being equal, be a normative 40% of global FDI over that period. But since 1998 that share has averaged only 20%, signifying underutilisation of investment potential by foreign investors and insufficient efforts on the part of developing countries to increase their absorptive capacity for FDI and their attractiveness to globally mobile foreign investors.

In 2002 the World Bank forecasts that FDI flows to developing countries will amount to $160 bn. That is lower than the estimated $168 bn in 2001 but consistent with slower growth in world output and trade. Between 2002–04, FDI flows to developing countries are forecast to rise by 4% annually, or less than half the growth rate through the 1990s.[23] The Bank anticipates that the same forces that drove FDI in the 1990s will drive them for the remainder of this decade, i.e. (a) globalisation of production accelerated by continuing technological innovation and the further application of proven next generation IT and communications technologies; and (b) improved policy regimes in developing countries.

The reasons for the moderation of FDI growth are that: (i) FDI stocks in developing countries are now much larger than they were in 1990, so that growth is being measured from a larger base and the large FDI stock is generating its own outflows due to repatriation, thus reducing the rate of growth of net flows; and (ii) developing country exports and trade, which drive trade-related FDI flows, are expected to grow at 3% annually for the rest of this decade compared to 6% through the 1990s. Also, the consolidation and rationalisation of firms in many industries (e.g. autos, telecoms, IT, banking, airlines, insurance, etc.) on a global scale through mergers and acquisitions was an important driver of FDI flows between 1996–2001. Such activity has peaked and may decline in the next few years. For all these reasons FDI is unlikely to grow as rapidly as it did in the 1990s although in 2004 (and probably for the remainder of this decade) FDI flows are likely to remain the single largest source of external finance for developing countries.

The concentration of FDI flows to the 'Top-10' recipient developing countries – *China, Brazil, Mexico, Argentina, Poland, Chile, Malaysia, Korea, Thailand and Venezuela*, in order of the size of flows received – has been a matter of consternation for some time (Chapter 1). The Top-10 absorb nearly two-thirds of net FDI flows to the developing world. Market size is a major explanation for concentration, but it is not the only factor attracting FDI. The average FDI/GDP ratio is 1% higher for the Top-10 than for all developing countries taken together. Of the Top-10, seven are the largest developing country exporters. UNCTAD's new Inward FDI Index – which measures FDI inflows relative to an unweighted average of a country's share in world GDP, employment and exports – suggests that the concentration of FDI flows is more apparent than real. The extent of concentration is actually quite mild.[24]

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[23] *Global Development Finance*, 2002 (p. 48).
[24] *World Investment Report*, 2001 (pp. 39–43).

The World Bank believes that FDI to the Top-10 has been boosted by good policies. But policy changes that attract FDI cease being influential when FDI stocks in a particular country reach 'saturation'. FDI flows have been pulled in by liberalisation of investment regimes and, to a significant extent, by successful privatisations. All these forces – i.e. changes in policy regimes, investment liberalisation and privatisation – have large initial effects that moderate with the passage of time. Once the 'big effect' on attracting FDI caused by these changes is over, continued flows of FDI can only be sustained by improved competitiveness and by progressive integration with emerging regional and global production and trade structures.

Finally, the evidence suggests that FDI flows are more concentrated *within* countries than *across* countries. For example, nearly 90% of China's FDI stock is concentrated in its coastal provinces. Almost all FDI in Mexico is concentrated in the central states and along the US border. In India, 75% of FDI is concentrated in just five out of 22 states and 4 union territories. Thus policies toward FDI of particular sub-sovereign provinces and states may be as, or more, important than the policies of the sovereign state itself.[25]

Table 2.2 shows the FDI flows to developing countries across different income groups and regions and relates FDI flows to their respective GDPs. It highlights the minuscule proportion of FDI flowing to LDCs. But relative to their economic weight in the developing world and their domestic absorptive capacities (measured crudely by the FDI/GDP ratio) it is not evident that LDCs are getting less FDI in proportionate terms than they normatively should. In proportionate terms LDCs are receiving more FDI inflows than low-income countries as a group and not much less than middle-income countries whose economic and absorptive capacities for FDI are higher. Moreover, the sub-Saharan region (which contains the largest number of LDCs) has a FDI/GDP ratio that has compared favourably with other regions since 1997. Its average annual FDI/GDP ratio for 1997–2001 is lower only than East Asia and Latin America's but higher than for all other regions. Thus the view that LDCs are being deprived of FDI needs to be revisited.

Table 2.3 reflects the regional distribution of FDI flows across the developing world. It shows clearly that the two regions with the largest number of LDCs and the largest numbers of the poorest people in the world (i.e. sub-Saharan Africa and South Asia) are attracting the least amount of FDI in absolute dollar terms (but not relative to their GDP except in the case of South Asian LDCs). That reflects three unfortunate realities.

The *first* is that (with exceptions like India or South Africa) countries in these two regions are unattractive to FDI compared with other developing regions. The *second* is that the pace of liberalisation of investment policy regimes and reduction of administrative barriers to investment have not progressed as rapidly in these two regions as in

[25] See *Global Development Finance*, 2002 (p. 39).

Table 2.2 FDI flows to Middle-Income, Low-Income and Least Developed Countries (%)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
FDI Inflows as share of Total Dev. Country FDI											
Mid-Income Countries	87.3	89.3	89.1	90.0	87.0	86.5	88.8	92.4	94.7	93.2	94.0
Low-Income Countries	12.7	10.7	10.9	10.0	13.0	13.5	11.2	7.6	5.3	6.8	6.0
Least Developed	4.0	2.2	1.7	0.9	1.3	1.3	1.3	1.7	1.6	1.6	2.6
FDI-to-GDP Ratios											
Mid-Income Countries	0.9	1.1	1.5	1.9	1.9	2.1	2.7	3.1	3.2	2.8	3.0
Low-Income Countries	0.5	0.6	0.9	1.0	1.4	1.7	1.8	1.4	0.9	1.1	0.6
Least Developed	1.4	1.3	1.5	0.8	1.6	1.8	1.7	2.4	3.3	2.8	3.2
All Developing	0.8	1.0	1.4	1.7	1.8	2.1	2.6	2.9	2.9	2.6	2.6
FDI/GDP by Region											
East Asia & Pacific	1.4	2.0	3.3	3.2	3.0	3.1	3.3	3.8	3.0	2.9	2.4
E. Europe &Central Asia	0.3	0.5	0.7	0.8	1.8	1.5	2.1	2.5	2.5	2.8	2.9
Latin America/Caribbean	0.7	0.8	1.0	1.8	1.8	2.4	3.4	3.7	4.6	3.6	3.9
M. East & N. Africa	0.4	0.5	0.8	0.7	-0.1	0.4	0.9	1.1	0.2	0.7	0.4
South Asia	0.1	0.2	0.3	0.4	0.6	0.7	0.9	0.6	0.5	0.5	0.6
Sub-Saharan Africa	0.3	0.6	0.7	1.3	1.5	1.7	2.5	2.1	2.6	2.4	4.6

Source: Global Development Finance (World Bank) 2001; World Investment Report (UNCTAD) 2001

the rest of the developing world. The *third* reason (partly related to the second) is that their success in building up broad-based domestic coalitions of interests favouring the rapid privatisation of their state-owned enterprises (SOEs or parastatals) – especially in the infrastructure and other service sectors – has lagged behind other developing countries. That has resulted in their not benefiting – to the same extent as the middle-income countries of East Asia, Latin America and Eastern Europe have – from new opportunities for FDI entry into non-traditional investment.

It is these new areas that have catalysed FDI inflows into other regions through the 1990s. They offer the same potential for increasing FDI flows to LDCs in the next decade, especially with the introduction of arrangements such as public-private partnerships (PPPs) to get privatisation rolling.

As Table 2.3 shows, between 75–80% of FDI flows to developing countries in the 1990s have gone to two regions: ***East Asia*** and ***Latin America***. The Pacific and Caribbean islands have not, however, benefited as much as their continental neighbours. That feature is obscured when these sub-regions – comprising small island economies (some of which fall into the LDC category in the Pacific, as does Haiti in the Caribbean) – are aggregated into two continental regions with which they have little in common, except geographical proximity although they are separated from their continents by expanses of ocean.

Prior to 1970 the bulk of FDI flows to developing countries originated in the US and went to Latin America. Some post-colonial investment in Africa and South Asia occurred along with investment in hydrocarbon resources in the Middle East and North

Table 2.3 Regional Distribution of FDI Flows Across the Developing World

		1970	1980	1990	1995	1996	1997	1998	1999	2000	2001
All Developing Countries	**$Bn**	**1.9**	**4.4**	**24.1**	**107**	**131.5**	**172.6**	**176.8**	**165.4**	**178.0**	**166.2**
East Asia & Pacific	$Bn	0.3	1.3	11.1	53.1	61.0	65.6	63.3	56.0	58.0	48.5
	Per cent	15.8	29.5	46.0	49.6	46.4	38.0	35.8	30.2	32.6	26.8
E. Europe & Central Asia	$Bn	0.0	0.0	1.1	16.9	16.1	23.5	25.0	26.5	28.8	26.5
	Per cent	0.0	0.0	4.6	15.8	12.2	13.6	14.1	14.3	16.2	16.9
Latin America & Carib	$Bn	1.1	6.1	8.2	29.8	43.3	65.1	72.0	90.3	76.2	70.8
	Per cent	57.9	138.6	34.0	27.9	32.9	37.7	40.7	48.7	42.8	42.1
M. East & N. Africa	$Bn	0.3	-3.3	2.5	-0.4	2.3	5.1	6.6	1.5	4.5	2.6
	Per cent	15.8	-75.0	10.4	-0.4	1.7	3.0	3.7	0.8	2.5	1.5
South Asia	$Bn	0.1	0.2	0.5	2.9	3.5	4.9	3.5	3.1	3.2	4.2
	Per cent	5.2	4.5	2.1	2.7	2.7	2.8	2.0	1.7	1.8	2.5
Sub-Saharan Africa	$Bn	0.1	0.1	0.9	4.6	5.2	8.3	6.3	7.9	7.3	13.6
	Per cent	5.2	2.3	3.7	4.3	4.0	4.8	3.6	4.3	4.1	8.1

Source: Global Development Finance, 2001 and 2002 (Vols. I and II)

Africa. That changed in the mid-1970s with the emergence of East Asia as a major exporting region. It changed dramatically between 1990–96 when East Asia displaced Latin America as the largest (developing) recipient of FDI flows. Between 1990–96, East Asia absorbed nearly half of all FDI flows to the developing world – although that conclusion needs to be tempered with the belated realisation that a large part of FDI to China is round-tripped through Hong Kong rather than being arms-length investment. After the financial crisis that debilitated the region in 1997, East Asia's share has fallen sharply from nearly a half to less than a third. It has not yet recovered, while Latin America's share since 1997 has risen again. In any event, the combined share of East Asia and Latin America has been a remarkably stable 75–80% of total FDI flows throughout the 1990s.

Another distinguishing feature of the post-1990 period is the emergence of ***Eastern Europe and Central Asia*** as a major recipient of FDI since the end of the Cold War. From attracting no FDI prior to 1990, the region's share of FDI has averaged a relatively stable 15% since 1995. Significant FDI flows to this region have been driven by investments in energy, particularly in Russia and the countries around the Caspian Sea. But large FDI flows from the EU (especially Germany) have also gone into manufacturing and services in the transition economies that have contiguous boundaries with the EU (e.g. Poland, the Czech Republic, Hungary, Slovenia). These countries are early candidates for accession to the EU under its current plans for expansion of its membership.

The share of FDI of the Islamic ***Middle East and North Africa*** (Maghreb) region has fluctuated considerably. At its peak, it accounted for less than 4% of total FDI to

developing countries. The reasons are three. *First*, the region attracts FDI mainly in oil and gas. These investments are lumpy and discontinuous. Most of the investment required for capacity expansion in proven fields, as well as a part of the risk capital needed for exploration is now financed by the region itself with revenues derived from earlier investments. *Second*, the region has many high-income countries that have surplus capital. They are source countries for global portfolio capital as well as FDI in oil and gas. Even so, many of these high-income countries (e.g. the UAE) are aggressively seeking FDI outside oil and gas as they attempt to diversify their economies, create high-level employment and new sources of revenue. *Third*, a wider array of FDI in the manufacturing and service sectors across the region has been impeded because it is blighted by one of the two most intractable political conflicts afflicting the world; a conflict that has had spillover global effects with the consequence of exported terrorism. Political and security risk in the region is especially high, particularly at the present time. Under a different scenario in which a political settlement on Palestine was reached and a modicum of regional integration achieved, the region would be more attractive to FDI flows and absorb a higher share.

Paradoxically, ***South Asia*** attracted a lower share of FDI in the 1990s (averaging 2.1% of total FDI) than it did in 1970 when it absorbed over 5%. *Per capita* the region attracts the lowest amount of FDI in the developing world (Table 2.4). Again the reasons are not difficult to discern. South Asia comprises the developing world's second largest market in terms of population size; yet it has a relatively low nominal income that diminishes its consumption of globally traded goods and services.

The region's prospects are heavily dependent on India. It accounts for over 70% of South Asia's economy and population. Arguably, India should be among the most attractive countries for global FDI. But despite policy liberalisation and administrative loosening, its investment regime remains too tightly controlled. Its rate of privatisation is slow. Performance lags far behind intent. Its physical, social and institutional infrastructure is deteriorating while its legal system is on the verge of a breakdown. The bureaucratic nightmare that it poses to foreign investors results in India numbering 14th among developing country recipients of FDI. With a population of over a billion and an economy that is now the world's fourth largest (in real terms), India gets less FDI than Chile or Malaysia. It gets less than 10% of FDI in China. If India got its act together, it would be a magnet for FDI and provide a better option for foreign investors than LDCs. That point is made to highlight the fact that **efforts to increase FDI to LDCs could easily be compromised if the investment regime in India were opened more aggressively and the country were to become a more successful competitor for FDI.**

Like the Middle East, South Asia continues to be the victim of the world's second most intractable political conflict, seemingly incapable of amicable resolution. That conflict makes regional integration (an additional incentive for FDI to flow to the region) virtually impossible. That, in turn, compromises the prospects of not just the two antagonists but their neighbours as well. Resolution of the conflict would change the

picture dramatically, resulting in an exponential leap in investments by Indian TNCs in neighbouring countries, some reverse investments by these countries in India, and an even larger increase in inward FDI flows to India from extra-regional sources.

Finally, how has ***sub-Saharan Africa*** fared with FDI? Unlike South Asia, the developing world's other poverty-stricken region, Africa's share of FDI flows to developing countries is roughly commensurate with its share of global GNI. Like South Asia, its share of FDI was larger in 1970. But since 1990 its share has averaged just over 4.2% while its share of the developing world's output and income has been about 4.5%. **As a proportion of total investment and gross fixed capital formation, the role that FDI plays in Africa is larger than most other developing regions.** But FDI in Africa is unevenly dispersed even though the impact of that distribution on LDCs is not significant. By and large, African LDCs receive flows of FDI proportionate to their output and absorptive capacities, even taking into account the large share of Angola in the African LDC total.

Outside of the resource-based sectors – where FDI from oil and gas TNCs aggressively pursues scarce mineral and hydrocarbon resources irrespective of policy or institutional difficulties confronted – sub-Saharan countries have had difficulty attracting other types of FDI.[26] Mineral resource-related FDI accounted for 55–60% of total FDI flows to Africa between 1990–2000.[27] Unlike their South Asian counterparts (except Bhutan), many African countries, especially LDCs, have small unviable national markets of insufficient size. More effective regional integration throughout the continent is a *sine qua non* for them to attract FDI in the non-resource-based sectors and grow at a pace that can sustain their populations. Like South Asia, most African countries suffer from poor physical, social and institutional infrastructure, significant fratricidal conflict and political instability, poor governance, poor health and education, corruption and restrictive (if not incompetent) policy regimes, especially when it comes to regulating FDI.

But the situation is neither static nor hopeless. Since 1997 some African countries have improved their policy and investment regimes and attracted more FDI. For example, LDCs like Lesotho, Mozambique, Tanzania and Uganda have seen FDI inflows between 1995-2000 that are 5 to 25 times greater than the annual flows of FDI they received between 1990–94, with increases of similar magnitude in their FDI/GDP ratios.[28] The post-1995 increase in FDI to these African countries is attributable in part to investment by South African firms.[29] That does not necessarily increase the region's FDI inflows as a whole from the outside world; unless, of course, FDI from the rest of the world flows into South Africa to make up for some of the South African outflow into the rest of Africa.

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[26] Bhinda *et al* 1999 (pp. 49–68).
[27] *Global Development Finance*, 2001 (pp. 39–40 and Figure 2.4).
[28] See *Global Development Finance*, 2001 (p. 40 , Table 2.5).
[29] See *World Investment Report*, 2001 (pp. 19–23).

Table 2.4 Per Capita Net FDI Flows to Developing Regions in 2000

	Foreign direct investment		Population		FDI per capita
Developing Region	Amount ($Bn)	Share (%)	No. (Mn)	Share (%)	(in US$)
East Asia & Pacific	58.0	32.6	1,855	36.0	31.26
Europe & Central Asia	28.8	16.2	474	9.2	60.76
Latin America & Caribbean	76.2	42.8	516	10.0	147.67
Middle East & North Africa	4.5	2.5	295	5.7	15.25
South Asia	3.2	1.8	1,355	26.3	2.36
Sub-Saharan Africa	7.3	4.1	659	12.8	11.07
Middle-Income Countries	165.9	93.2	2,695	52.3	61.56
Low-Income Countries	12.1	6.8	2,460	47.7	4.92
Least Developed Countries	**4.2**	**2.4**	**661**	**12.8**	**6.35**
All Developing Countries	178.0	100.0	5,155	100.0	34.52

The evidence for 1995–2000 does not indicate that this is occurring. More research is needed to confirm or contradict the possibility of 'backfill'. If it is confirmed, that may provide a useful pointer to how FDI in the African LDCs might be increased in the coming years. To put matters in perspective, between 1995–2000, South Africa had total FDI inflows of $8.8 bn (or an annual average of $1.47 bn) and total FDI outflows of $10.2 bn (or an annual average of $1.7 bn), less than a third of which went to the rest of Africa.[30]

More interestingly, preliminary FDI figures for 2001 (World Bank) suggest a surge in FDI to sub-Saharan Africa with a doubling of the dollar amount and share over the previous year (and over the 1990–2000 average).[31] Whether these figures are valid is still subject to confirmation. Every year's preliminary figures are subject to substantial revision in the following year when more detailed information becomes available. But despite that it is clear that something unusual happened in 2001 when, in the face of a global economic slowdown, heightened global risk and reduced risk-taking appetite since September 11th, the region perceived to be the riskiest for FDI had the largest surge in inflows.

The increase in FDI to Africa in 2001 is more surprising in the context of events unfolding in Zimbabwe, a country that previously attracted a significant amount of FDI. But that trend has reversed with a vengeance. FDI inflows to Zimbabwe collapsed from over $400 mn in 1998 to under $30 mn in 2000 while outflows were recorded to have increased from $9 mn in 1998 to $15 mn in 2000; although those

[30] See *World Investment Report*, 2001 (Annex table B.1 p. 291 and Annex table B.2 p. 296).
[31] See *Global Development Finance*, 2002 (p. 234).

figures are likely to be under-stated because of the bias toward under-recording discussed earlier.[32]

2.3 FDI Flows to the Least Developed Countries

The distribution of FDI flows by developing region indicates the paucity and pattern of FDI flows to LDCs. As Table 2.5 shows, 34 of the 49 LDCs are located in Africa. Five are in South Asia, five in the South Pacific, three in East Asia and one each in the Caribbean and the Middle East. East Asia apart, the other regions receive the least FDI. It should come as no surprise therefore that the 49 LDCs, taken as a whole, receive minuscule amounts of FDI in dollar terms and relative to the size of their populations.

Table 2.5 shows FDI flows to each LDC segregated by region for the years 1989–2000.[33]

LDCs contain 12.5% of the developing world's population. But they accounted for 1.5% of gross FDI inflows and 2.4% of net flows received by the developing world between 1995–2000. The asymmetry in population terms aside, the amount of FDI that LDCs receive is commensurate with their GNI and investment. In per capita terms, LDCs do better than all low-income countries together in attracting FDI. Some LDCs (e.g. Angola and Lesotho) receive FDI in amounts that are grossly disproportional relative to the size of their economies and domestic investment levels. As Table 2.6 indicates, FDI in Angola and Lesotho distorts the LDC totals. Excluding them provides a somewhat different picture (discussed below) although even after that adjustment is made, the remaining LDCs still get more FDI (relative to GDP and GDCF) than all low-income countries as a group, but they get less than middle-income countries.

Several stylised observations emerge from scrutiny of FDI flows to LDCs since 1989. Apart from the tables shown below, these observations draw on (and update) UNCTAD's analysis in its recent (2001) report on *FDI in Least Developed Countries at a Glance*.

- The dollar amounts of FDI received by the 49 LDCs as a group increased substantially over the last decade. From an average of less than $1.5 bn between 1989–94, LDCs received an average of nearly $3.5 bn between 1995–2000.
- The annual level of FDI to LDCs rose steadily between 1995 and 1999, peaking at nearly $5.2 bn in that year before dropping again in the following two years to an average of just over $4.2 bn. These declines in 2000 and 2001 mirror the decline in global FDI flows and in FDI to developing countries.

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[32] See *World Investment Report*, 2001 (Annex table B.1 p. 292 and Annex table B.2 p. 297).

[33] Data for 2000 is sourced from *World Investment Report*, 2001 (UNCTAD). It shows substantially different country data on FDI inflows for the year 1999 from another UNCTAD report viz. *FDI in Least Developed Countries at a Glance* (UNCTAD, 2001), whose figures were based on an earlier WIR (i.e. for 2000). For this Study, WIR-2001 is used as the more authoritative and detailed base and Tables 2.5–2.7 are derived accordingly. For that reason, they are different from similar tables on LDCs contained in the latter report.

Table 2.5: FDI Inflows to LDCs between 1989–2000 (in millions of US dollars)

Region/Country	1989-94 (Average)	1995-00 (Average)	1995	1996	1997	1998	1999	2000
Africa:								
Angola	215	1,075	472	181	412	1,114	2,471	1,800
Benin	56	34	13	36	27	38	61	30
Burkina Faso	7	13	10	17	13	10	13	12
Burundi	--	3	2	--	--	2	--	12
Cape Verde	1	20	26	29	12	9	15	30
C.A. Republic	3	7	3	5	6	5	13	8
Chad	13	21	13	18	15	16	15	50
Comoros	--	2	--	2	2	2	1	2
Congo D.R.	- 2	1	1	2	1	1	1	1
Djibouti	--	5	3	5	5	6	5	5
Eq. Guinea	16	120	127	376	20	24	120	55
Eritrea	--	0	--	--	--	- 2	1	--
Ethiopia	7	122	14	22	288	261	68	80
Gambia	9	13	8	12	13	14	14	14
Guinea	15	26	--	24	17	18	63	33
Guinea-Bissau	2	3	--	1	10	--	3	5
Lesotho	169	242	275	286	269	262	136	223
Liberia	154	16	21	17	15	16	10	14
Madagascar	15	23	10	10	14	16	58	29
Malawi	12	45	25	44	22	70	60	51
Mali	2	65	123	47	74	36	51	56
Mauritania	6	3	7	5	3	--	2	2
Mozambique	21	153	45	73	64	213	382	139
Niger	17	14	16	20	25	9	--	11
Rwanda	7	4	2	2	3	7	2	4
Sao Tome/Principe	--	--	--	--	--	--	--	--
Senegal	19	87	35	5	177	60	136	107
Sierra Leone	8	3	- 2	5	4	5	1	3
Somalia	- 5	14	1	--	--	--	61	20
Sudan	--	205	--	--	98	371	371	392
Tanzania U.R.	15	168	150	149	158	172	183	193
Togo	6	43	38	27	23	42	70	60
Uganda	23	184	121	121	175	210	222	254
Zambia	90	164	97	117	207	198	163	200
East Asia:								
Cambodia	52	176	151	294	204	121	135	153
Lao PDR	19	91	95	160	91	46	79	72
Myanmar	135	297	277	310	387	314	253	240
Pacific:								
Kiribati	--	0	--	--	1	--	1	--
Samoa	5	6	3	1	20	3	2	8
Solomon Isles	13	13	2	6	34	9	10	18
Tuvalu	--	--	--	--	--	--	--	--
Vanuatu	22	26	31	33	30	20	20	20
South Asia:								
Afghanistan	--	1	--	--	- 1	--	6	2
Bangladesh	6	116	2	14	141	190	179	170
Bhutan	1	0	--	1	--	--	--	--
Maldives	6	11	7	9	11	12	12	12
Nepal	4	13	8	19	23	12	4	13
Caribbean:								
Haiti	4	10	- 2	4	4	11	30	13
Mid-East:								
Yemen Rep.	300	- 202	- 218	-60	-139	-266	-329	- 201
Total 49 Ldcs.	**1,468**	**3,487**	**2,230**	**2,449**	**2,978**	**3,677**	**5,174**	**4,415**

Source: *World Investment Report, 2001 (UNCTAD, Geneva)*

- But the overall LDC picture is distorted by FDI flows to *Angola* and *Lesotho* where they account for extraordinarily high proportions of gross national income (GNI) and GDCF. Between 1995–2000 Angola's annual average FDI inflow was equivalent to 50% of GNI and 75% of GDCF. Similarly, Lesotho's average FDI inflow over the same period was equivalent to 25% of GNI and 50% of GDCF. While these are extreme cases, FDI flows to Mozambique since 1998 have also become disproportionate relative to GNI and GDCF.
- Excluding Angola and Lesotho, the FDI aggregates for the other 47 LDCs look different. FDI flows to these LDCs doubled, from an average of $1.1 bn in 1989–94 to $2.2 bn between 1995–2000. For these 47 LDCs, annual FDI flows between 1996–2000 stagnated in real terms growing from $2 bn in 1996 to a peak of $2.6 bn in 1999 before declining to $2.4 bn in 2000.
- Despite the increase in FDI to LDCs that occurred through the 1990s, the amounts are low. At their 1999 peak, FDI inflows to LDCs were roughly the same as received by the Czech Republic. It represented a mere 1.6% of gross FDI inflows to all developing countries ($243 bn), 2.7% of net flows ($185 bn) and 0.53% of global FDI flows ($1.27 trillion).
- Though small in dollar terms, the FDI received by LDCs is important to their economies. Between 1997–99 FDI accounted for an average 3% of GNI in LDCs (vs. 3.8% for all developing countries) and 8% of gross domestic capital formation (GDCF) compared to 12% for all developing countries.
- That average obscures more than it reveals. In *fifteen* LDCs that received the bulk of FDI flows to the LDC universe between 1995–2000, the amount of annual FDI was greater than 12% of GDCF; for *ten* it was in excess of 20%, showing an unusual degree of dependency on FDI to sustain domestic investment. But in the *thirteen* LDCs at the bottom of the list, it was less than 5% of GDCF.
- Over 30% of FDI flows to LDCs are directed to a few countries that are oil and gas exporters. Another 12% represents FDI to countries rich in other mineral resources.
- Between 1995–2000, *eleven* LDCs received average annual FDI inflows of more than $100 million. At the opposite end, *sixteen* LDCs received $10 mn or less. The remaining 20 LDCs received amounts in between, averaging about $20 mn.
- In 2000, only five LDCs (Angola, Myanmar, Liberia, Lesotho and Zambia) had an FDI stock of over $2 billion. *Angola*'s FDI stock ($8.9 bn) was concentrated exclusively in the petroleum sector. In *Liberia* ($2.1 bn) it was due entirely to "flag-of-convenience" facilities for global shipping lines. In Lesotho, the FDI stock relates to a single project – the Lesotho Highlands Water Project.
- Sources of FDI to LDCs are *regionally* concentrated. Often they reflect former colonial ties. For African LDCs, most FDI comes from France, South Africa and the UK. For East and South Asian LDCs, the main source is neighbours.
- For that reason, any risk-mitigation partnerships (involving bilateral, private and multilateral parties) devised to encourage FDI flows to LDCs should be focused at the regional level – i.e. through regional development banks – than at the global multilateral level which, for most LDCs, is too remote.
- Japan only features as a source country for FDI to LDCs because of book investments made by its shipping companies in Liberia for flag-of-convenience reasons. The US is not a significant source country for FDI flows to LDCs except in Haiti.
- Information on the sectoral breakdown of FDI in LDCs is limited. What evidence there is suggests that investment opportunities in the LDC universe are spread across a number of sectors. But, in individual LDCs, FDI tends to be concentrated in only one or two sectors (e.g. petroleum in Angola, fisheries in small island states, hotels in Ethiopia, telecommunications in Uganda and so on).

Table 2.6: FDI Flows to LDCs in 1999 relative to their Income and Population

Region/Country	GNI- $mn. (1999)	Pop. (000s) (1999)	GNI per Capita (1999) $ Nom	$ PPP	FDI- $mn. (1999)	FDI/GNI (%)
Africa:						
Angola	3,276	12,357	270	1,100	2,471	75.5%
Benin	2,320	6,114	380	920	61	2.6%
Burkina Faso	2,602	10,996	240	960	13	0.5%
Burundi	823	6,678	120	570	--	---
Cape Verde	569	428	1,330	4,550	15	2.6%
C.A. Republic	1,035	3,540	290	1,150	13	1.3%
Chad	1,555	7,486	210	840	15	1.0%
Comoros	189	544	350	1,430	1	0.5%
Congo D.R.	7,752	49,776	150	600	1	--,--
Djibouti	511	648	790	2,050	5	1.0%
Eq. Guinea	516	443	1,170	3,910	120	23.3%
Eritrea	779	3,991	200	1,040	1	---
Ethiopia	6,524	62,782	100	620	68	1.0%
Gambia	415	1,251	330	1,550	14	3.4%
Guinea	3,556	7,251	490	1,870	63	1.8%
Guinea-Bissau	194	1,185	160	630	3	1.5%
Lesotho	1,158	2,105	550	2,350	136	11.7%
Liberia	311*	3,044	105	400	10	3.2%
Madagascar	3,712	15,051	250	790	58	1.6%
Malawi	1,961	10,788	180	570	60	3.1%
Mali	2,577	10,584	240	740	51	2.0%
Mauritania	1,001	2,598	390	1,550	2	0.2%
Mozambique	3,804	17,299	220	810	382	10.0%
Niger	1,974	10,496	190	740	--	--,--
Rwanda	2,041	8,310	250	880	2	0.1%
Sao Tome/Principe	40	145	270	1,000	--	--,--
Senegal	4,685	9,285	500	1,400	136	2.9%
Sierra Leone	653	4,949	130	440	1	0.2%
Somalia	1,299*	9,388	135	620	61	4.7%
Sudan	9,435	28,993	330	750	371	3.9%
Tanzania U.R.	8,515	32,923	260	500	183	2.1%
Togo	1,398	4,567	310	1,380	70	5.0%
Uganda	6,794	21,479	320	1,160	222	3.3%
Zambia	3,222	9,881	330	720	163	5.1%
East Asia:						
Cambodia	3,023	11,757	260	1,350	135	4.5%
Kiribati	81	86	910	1,800	1	1.2%
Lao PDR	1,476	5,097	290	1,430	79	5.4%
Myanmar	17,890*	45,029	400	1,000	253	1.4%
Samoa	181	169	1,070	4,070	2	1.1%
Solomon Is.	320	429	750	2,050	10	3.1%
Tuvalu	10*	11	910	2,500	--	--,--
Vanuatu	227	193	1,180	2,880	20	8.8%
South Asia:						
Afghanistan	1,718*	25,869	66	300	6	0.3%
Bangladesh	47,071	127,669	370	1,530	179	0.4%
Bhutan	399	782	510	1,260	--	---
Maldives	322	269	1,200	3,450	12	3.7%
Nepal	5,173	23,384	220	1,280	4	0.1%
Caribbean:						
Haiti	3,584	7,803	460	1,470	30	0.8%
Mid-East:				?		
Yemen Rep.	6,088	17,048	360	30	-329	-5.4%
Total 49 Ldcs.	**174,759**	**642,952**	**275**	**1,150**	**5,174**	**3.0%**
Total for Developing World	**6,432,286**	**5,321,021**	**1,230**	**3,890**	**243,417**	**3.8%**

Sources: World Development Atlas 2001, World Development Indicators, 2000, 2002; World Investment Report, 2001

- Foreign investors in LDCs include the world's largest TNCs. By 1999, *forty-four* out of the *Fortune 500* largest corporations in the world had invested in 31 LDCs.
- FDI in LDCs is determined more by the merits of specific projects rather than the attraction of the LDC concerned as a destination for FDI. Nonetheless, improvements in the regulatory frameworks for FDI, and greater opening up to FDI by LDCs through the 1990s (including liberalisation of exchange control regimes) appear to be having a positive impact on inward flows of FDI although (as the rate of growth of such flows suggests) the impact is very small in quantitative terms.
- In a few LDCs, FDI was being driven and sustained by ambitious on-going programmes of privatisation in a number of sectors. *Mozambique*, *Uganda* and *Zambia* were the best LDC examples in this respect although other LDCs engaged in privatisation also included *Mauritania, Nepal* and *Tanzania* (Note: The available evidence does not make clear whether these privatisations were preceded by PPPs in the corporatisation phase).

A recurrent issue of importance to their political economies (i.e. in LDCs resorting to privatisation to attract FDI) is how to secure adequate indigenous participation in the ownership of privatised assets. In most LDCs, the domestic private sector has a very thin and limited base of capital and entrepreneurial capability to participate effectively in privatisations, or to compete with foreign investors in bidding to take over these assets. (Note: This may be a limiting factor in expanding the scope of PPPs as well.)

Ranking LDCs by the amount of FDI they receive annually would result in a different rank each year. For a more stable perspective, Table 2.7 ranks LDCs by the annual average FDI received between 1995–2000. It shows that the Top-5 recipients (i.e. 10% of the LDC universe) accounted for over 57% of total FDI received over those six years. The Top-10 (or 20% of the LDC universe) accounted for nearly 80% while the Top-20 LDCs accounted for over 98.5%, implying that the remaining 29 LDCs (60% of the universe) obtained less than 1.5% of total FDI flows to LDCs. Those statistics could be interpreted as yet another demonstration of the concentration of FDI. But that would be misleading. Apart from the anomalies represented by Angola and Lesotho, FDI flows to LDCs broadly (though not exactly) reflect their distribution of population, output, national income and investment across LDCs. But the extreme case of 29 LDCs receiving only 1.5% of total FDI flows to all LDCs reflects unusual characteristics of the LDC universe that need to be taken into account in coming up with suggestions for innovative risk-mitigating PPPs to encourage more FDI to flow to LDCs.

It needs to be accepted at the outset that regardless of whatever generic innovations are suggested, a number of LDCs will be excluded because they are too small, too remote or too unattractive (Table 2.8). Risk-mitigating PPPs may encourage more FDI to flow to more LDCs that are already among its larger recipients. They are unlikely to enhance FDI flows to LDCs that are so small and so remote that any investment poses issues and risks that have to be dealt with as unique.

This is illustrated in Table 2.8. It categorises LDCs by their size (taken as a combination of their populations and their markets measured in national income). Risk-mitigating PPPs or other mechanisms aimed at increasing FDI flows are likely to work to

Table 2.7 Ranking of LDCs by Average FDI Gross Inflows between 1995–2000

Rank	Country	FDI inflow (2000) $mn.	Average FDI inflow (2000) $mn.	% of Total FDI inflows to LDCs
1	Angola	1,600	1,075	30.82%
2	Myanmar	240	297	8.51%
3	Lesotho	223	242	6.93%
4	Sudan	392	205	5.88%
5	Uganda	254	184	5.27%
Top 5		**2,909**	**2,003**	**57.41%**
6	Cambodia	153	176	5.06%
7	Tanzania	193	168	4.80%
8	Zambia	200	164	4.69%
9	Mozambique	139	153	4.38%
10	Ethiopia	80	122	3.50%
Subtotal		*765*	*783*	*22.43%*
Top 10		**3,674**	**2,786**	**79.84%**
11	Equatorial Guinea	55	120	3.45%
12	Bangladesh	170	116	3.32%
13	Lao PDR	72	91	2.59%
14	Senegal	107	87	2.49%
15	Mali	56	65	1.85%
Subtotal		*460*	*479*	*13.70%*
Top 15		**4,134**	**3,265**	**93.54%**
16	Malawi	51	45	1.30%
17	Togo	60	43	1.24%
18	Benin	30	34	0.98%
19	Guinea	33	26	0.75%
20	Vanuatu	20	26	0.74%
Subtotal		*194*	*174*	*5.01%*
Top 20		**4,328**	**3,439**	**98.55%**
Remaining LDCs 29		**846**	**48**	**1.45%**
Total for 49 LDCs		*5,174*	*3,487*	*100.00%*

the advantage of the 15 largest LDCs. They may work in the case of some of the 19 LDCs in the 'intermediate' grouping. But they are unlikely to increase FDI significantly in the case of the 15 LDCs classified as 'small'. The latter have mono-economies that are too microscopic, and inherently too risky, to attract significant amounts of FDI on a sustainable basis simply through the expedient of risk mitigation unless it is arranged on a highly project-specific basis.

That is not to imply that the situation is hopeless for small LDCs. The examples of Equatorial Guinea, Lesotho, the Maldives and Vanuatu suggest it is not. But unusual, if not unique circumstances have driven FDI to these destinations. In Equatorial Guinea, FDI was driven by oil and gas exploration in 1996–97. It has dried up since. In Lesotho, the Highlands Water Project transformed the economy. The Maldives exploited high-value marine eco-tourism. Vanuatu has built up an offshore financial centre whose future is threatened by pressures from OECD to curtail such centres.

Table 2.8: Classification of LDCs by Size and their Attractiveness to FDI Inflows

Region	Large LDCs	Intermediate LDCs	Small LDCs
Africa			
	Angola CongoD.R. Ethiopia Madagascar Mozambique Senegal Sudan Tanzania Uganda	Benin BurkinaFaso Burundi CentralAfricanRepublic Chad Eritrea Guinea Liberia Malawi Mali Mauritania Niger Rwanda SierraLeone Somalia Togo Zambia	CapeVerde Comoros Djibouti EquatorialGuinea Gambia GuineaBissau Lesotho SaoTome/Principe
East Asia & Pacific			
	Cambodia Myanmar	LaoPDR	Kiribati Samoa SolomonIslands Tuvalu Vanuatu
South Asia			
	Afghanistan Bangladesh Nepal		Bhutan Maldives
Caribbean			
		Haiti	
Middle East			
	Yemen		

In considering ways of reducing risk to improve the prospects of LDCs as destinations for FDI, it would be remiss not to highlight the role of conflict and recurrent disasters in deterring inward investment, encouraging capital outflows and increasing the political risk profile of these countries to levels that are beyond the threshold of acceptability for any private investor. Of the 49 LDCs, 18 have been involved in internal or cross-border conflicts of varying intensity since the late 1980s. Some, like Mozambique (and now Angola as well), put conflict behind them in the mid-1990s and focused on the twin tasks of reconstruction and development. But many others have not yet done so decisively.

Still others (e.g. Nepal) appear to be on the verge of a new round of political instability caused by the accession of regimes that lack a broad popular mandate and are threatened by insurrection and insurgency. Apart from conflict, African LDCs remain vulnerable to recurrent natural disasters, especially droughts and famines. Until these countries overcome their vulnerabilities by improving food security and water management, their

Table 2.9 Cumulative Capital Outflows between 1980–99: Comparisons between Poor and Other Developing Countries

	Poor Countries	Other Developing
Cumulative Outflows	$62.0 billion	$1,182.0 billion
Outflows as Share of 1999 GDP	17.0%	20.0%
Outflows as Share of Cumulative Savings	11.5%	6.5%
As Share of Cumulative GDCF	8.1%	6.6%
As Share of Cumulative Official Inflows	19.0%	278.0%
As Share of 1999 Net International Reserves	242.0%	175.0%

Source: *Global Development Finance, 2002 (Table 3.6, p.70)*

inability to cope with natural disasters puts them at a disadvantage in attracting FDI. With environments that are difficult enough to operate in at the best of times, the existence of conflict in LDCs deters FDI or any other type of investment. Although private investors may sometimes look to political risk insurance for comfort and cover in such instances, many of these situations are so extreme that political risk cannot be reasonably priced nor economically underwritten, even by intergovernmental institutions such as MIGA.

Finally, in endeavouring to increase FDI flows to LDCs it would be remiss to ignore the paradox of attracting foreign investment into these countries when relatively large amounts of domestic capital are exiting, either as outward investment or as capital flight. Controls have had minimal effect. Large outflows continue to take place from all LDCs. Most of their financial systems are, in effect, open even with capital controls in place. Capital outflows from LDCs (and other developing countries) are rarely recorded as such in their balance-of-payments. They are estimated as unexplained residuals from the gaps that exist between recorded capital inflows on the credit side, and the sum of the current account deficit and increases in international reserves on the debit side.[34] Measurements of residuals are always tricky. But imprecision in recording does not obscure the reality of capital outflows that are quite large relative to inflows and to the size of LDC economies.

According to the World Bank, poor countries have experienced substantial outflows of capital for over two decades.[35] These were estimated at $62 bn between 1980–99; equivalent to 17% of the aggregate 1999 GDP of these countries, 12% of their cumulated

[34] A shortcoming of this way of measuring residuals is that it treats all errors and omissions in the b-o-p as capital outflows, although such errors may reflect recording imperfections in current account transactions as well. Also, balance-of-payments accounts do not capture capital outflows that result from misinvoiced imports and exports.

[35] *Global Development Finance*, 2001 (Box 2.1 p. 35); *Global Development Finance*, 2002 (pp. 69–78). In its discussion, the Bank refers to 'poor countries' and not LDCs. As explained in the introductory chapter, this group of 67 countries includes all LDCs except Equatorial Guinea but includes 19 other low-income countries (viz. Albania, Armenia, Bolivia, Cameroon, Georgia, Ghana, Guyana, Honduras, Kenya, Kyrgyztan, Moldova, Mongolia, Nicaragua, Nigeria, Pakistan, Sri Lanka, Tajikistan, Tonga and Vietnam). This difference in composition notwithstanding, the Bank's analysis and observations apply with equal validity to LDCs although its aggregates are obviously influenced by two large countries (Nigeria and Pakistan) in the 'poor country' category.

domestic savings, 20% of cumulated official flows and 250% of their international reserves. Relative to domestic savings and reserves, capital outflows from poor countries were larger than from other developing countries. Such outflows are volatile. They respond swiftly to adverse economic and political circumstances, as well as circumstances in the external sectors of these countries (mostly primary commodity exporters) and vice versa. They have fluctuated annually from 3% of GDP to situations of capital repatriation (i.e. an inflow). The estimated capital outflow situation is encapsulated in Table 2.9.

The factors that deter FDI inflows also impel capital outflows: i.e. war and civil conflict, corruption, macroeconomic instability, weak protection of private property rights, punitive income and capital gains or wealth taxes, poor governance, repression of the financial system, administrative rigidities and bureaucratic over-regulation of private sector activity. These factors reduce the scope for viable private investment in the economy and increase the risk of confiscation, devaluation and capital losses. Research indicates that inflation, large and unsustainable budget deficits, and low (or negative) real interest rates encourage capital flight, as do the efforts of public officials and organised crime to protect proceeds derived from corruption and other illegitimate activity. High inflation results in loss of real value, unsustainable budget deficits raise the risk of future taxation, while low real returns on bank deposits encourage higher return-seeking elsewhere.

A finding of concern is that capital outflows from highly indebted poor countries (HIPCs) with higher-than-average debt/GDP ratios in 1980–99 averaged 39% of 1999 GDP while those of countries with lower-than-average ratios averaged just 5%. Preferential treatment of foreign vs. domestic capital through incentives, preferred administrative treatment, easier repatriation of profits and dividends, etc. (measures resorted to by most developing countries and encouraged by international interlocutors) have inadvertently encouraged capital outflows being 'round-tripped' as FDI. Globalisation of banking services may be encouraging that trend as domestic investors expatriate their funds, deposit them with an international bank that has local branches and raising their local currency debt needs for project finance through the same bank using their offshore deposits as collateral.

The scope for capital outflows from LDCs has increased with trade liberalisation. Outflows (1980–99) from poor countries with higher-than-average trade/GDP ratios were 41% of 1999 GDP compared to 8% for countries whose ratios were lower-than-average. As domestic producers, importers and traders become integrated with international markets, their incentive increases for holding forex reserves as a risk-hedging device. So does their incentive for under-invoicing exports and over-invoicing imports in collusion with foreign partners. The difference between false and real values is settled and banked abroad.

Income inequalities (which characterise LDCs) also have an impact on capital outflows. Poor countries with high inequality of incomes (measured by the Gini coefficient) had cumulative outflows between 1980–99 amounting to 50% of their 1999 GDP while those with low inequality of incomes had outflows amounting to only 7%.

Table 2.10 Impact of Various Factors on Cumulative Capital Outflows as a Share of 1999 GDP from Poor Countries (1980–99)

	Higher than Average	Lower than Average
Capital Outflows and Debt/GDP Ratios	39% of GDP	Vs. 5% of GDP
Capital Outflows and Trade/GDP Ratios	41% of GDP	Vs. 8% of GDP
Capital Outflows and Gini Coefficient	50% of GDP	Vs. 7% of GDP

Source: *Global Development Finance, 2002*

High concentrations of wealth in LDCs result in a few families having large financial portfolios. To protect values, they diversify them in terms of country, currency and other risks. Poor countries with high income-inequality run higher socio-political risks that induce capital outflows. Outflows are higher from countries dependent on mineral exports, with outflows from Angola and the Democratic Republic of the Congo being particularly high.

To an extent, outflows are unavoidable regardless of capital controls. Outflows do not always reflect poor policy conditions or underdevelopment. In middle-income countries and all developed ones, capital outflows are as much part and parcel of the business of daily economic life as inflows. They reflect financial globalisation. Investors exercise free choice in investing where they wish. They manage portfolio risk unfettered by national boundaries. There is an asymmetry in regarding the same behaviour on the part of a firm or an individual in one country as legitimate, prudent and consonant with the wider public good, and in another as illegitimate, harmful, anti-national and antisocial.

LDCs need to attract and retain capital of all types, foreign and domestic. That is perhaps best achieved through policies, processes and institutions, and by mitigating risks in ways that 'incentivise' *all* investors to maximise voluntarily the amount of capital (irrespective of whether it is foreign or domestic) available for productive investment. It is an exercise in futility to focus attention on attracting and mitigating risks for FDI while ignoring the circumstances and risks that induce domestic capital to exit and seek safer, more productive homes elsewhere. When it comes to risk mitigation it may, therefore, be as worthwhile to consider also the risks that domestic investors confront and find ways of mitigating or offsetting them.

2.3.1 The Need for FDI in Developing Countries: Benefits and Costs

When globalisation accentuates the importance of linkages to the international economy for developing countries, FDI becomes the most dynamic and valuable type of external resource flow to them.[36] FDI transmits not just finance but other tangible and intangible assets that developing countries (especially the LDCs) cannot do without to

[36] UNCTAD's *World Investment Report* (1999): *Foreign Direct Investment and the Challenge of Development*. This section draws heavily from Chapter V of that report.

accelerate their rates of investment, growth and development. Most FDI is associated with TNCs. They have become more powerful players in the global economy than governments of many developed and most developing countries. But, despite its many positive attributes and its importance to developing and least developed countries, FDI cannot, on its own, prevent or counteract the marginalisation of developing countries (especially of LDCs) in the global economy. For that to happen FDI has to interact with domestic resources, domestic capacity, and domestic governance in a synergistic manner.

Experience with FDI around the world suggests that the global supply of FDI is elastic but not infinite. In its growth and direction, FDI responds to changes in: patterns of regional and global trade and production; changes in relative returns from investments depending on changes in exchange rates, productivity and stability; economic liberalisation; trends in income growth and consumption capacity; trends in technology and innovation; changes in product life-cycles; the development and progressive integration of capital markets; corporate strategies of TNCs and industry rationalisation; the progress of globalisation and regionalisation; and improvements in the quality of governance.

It is not clear what the limits to FDI growth are. Exponential growth between 1990-2000 is unlikely to be sustained between 2001–20. FDI may grow more slowly as it consolidates and is digested before the next round of trade and economic liberalisation occurs. Sources of FDI, especially for LDCs, are changing rapidly although that change has not been highlighted until now. Global FDI flows will increase and originate from a wider variety of countries including developing countries themselves. That is not in dispute.

Worldwide, FDI accounts for 8% of GDCF. For developing countries it accounts for 10% of GDCF although in individual countries that proportion varies between 0 to 90%. There is considerable room for the expansion of global FDI flows and for developing countries to capture an increasing proportion of them. But it is difficult to say whether the saturation point is 15% or 20% of GDCF or a higher or lower proportion. No one knows. The boundary may shift with time and circumstances. As FDI grows and accounts for a higher proportion of GDCF, its distribution across developing countries and regions will continue to be uneven. Unlike ODA, humanitarian assistance or emergency assistance, FDI will not flow to countries that *need* it. It will flow to countries that *attract* it in a fundamental sense; not those that are artificially attractive at moments in time because of expedient, episodic interventions and incentives. As long as countries offer fundamentally sound environments for markets to operate, as long as they provide a range of opportunities for profitable private investment and as long as they are competitive, FDI will flow in. When they lose their competitive edge, FDI inflows will diminish and outflows will increase.

Strong and steadily increasing FDI inflows usually (not always) suggest that recipient countries are pursuing the right policies and are being well governed. But FDI outflows may still occur if, despite good policies and good governance, countries lose their

competitive edge relative to other countries. Many developed countries with high social overhead costs are finding that out. For that reason developing countries run dangers in becoming too dependent on FDI to sustain domestic investment, as in becoming too dependent on aid.

In the developing world, the ultimate aim of policy-makers and the raison d'etre for FDI must be to build up and strengthen the overall capability, independence and investment capacity of private domestic firms. A secondary objective must be to make foreign firms behave like domestic firms (and vice versa) in terms of their commitment to tenure. For FDI (and TNCs) to contribute most to development, FDI must therefore complement and nurture, not displace or weaken, domestic investment capacity and entrepreneurship. FDI can facilitate development and growth prospects by helping to:

- Improve the quality and diversity of a developing country's production structure and technological base not just through investment but also through diffusion
- Boost the export competitiveness of host economies and increase the degree of their trade integration with a rapidly evolving global economy
- Effect continual transfers of hard and soft knowledge[37], skills and technology, thus enhancing the overall knowledge base of a host country
- Mobilise additional external resources from TNCs as well as official sources and banking and capital markets on the strength of their corporate identities and creditworthiness, thus transcending the limits imposed by a country's own creditworthiness
- Generate efficient incremental employment at all skill levels, while increasing the overall skills base as well as health, safety and labour standards of a host country
- Introduce environmentally sensitive production and effluent management technologies and practices that contribute to sustainability
- Exercise corporate responsibility, resulting in TNCs' importing not only technologies and knowledge, but also higher operating/management standards that contribute to economic development *and* to community, social, political and human development

[37] The creation and diffusion of knowledge have become central to growth and development. Knowledge, in this context, includes not just technical knowledge (i.e. research, development, design, process engineering) but also knowledge of organisation, management, business process configuration, as well as inter-firm, intra-industry and inter-industry linkages (e.g. with suppliers, sub-contractors, information providers, advertisers, market researchers, etc.) and international relationships (e.g. with governments, auditors, accountants, lawyers, insurers, banks, etc.). Much of this knowledge is tacit. Some of it is intra-firm and intra-industry-specific. Today, the resources devoted to the acquisition, development and refining of such knowledge by the more dynamic global TNCs exceed their investment in tangible assets (i.e. plants, building, equipment, machinery, vehicles etc.). The costs of generating new knowledge (scientific, technological and market-related) to remain competitive are rising constantly. Moreover there is a risk attached to such knowledge in that it is usually invested in people who are mobile. Building up internal institutional memory is a potent defence but it is not a preventative panacea; nor can such knowledge be protected entirely through the enforcement of intellectual property rights. The proportion of the knowledge cost component of production now exceeds the share of other cost components, e.g. fixed capital, land and labour. The importance of knowledge is not limited just to the modern sector or high-technology industries. It pervades all sectors and industries, including traditional activities in the primary commodities-producing sectors, manufacturing, mining and services. Competitiveness compels firms and countries to be on a continuous, steeply upward sloping learning curve in the acquisition, absorption, diffusion and use of knowledge and in the prevention of its untoward leakage to competitors (*WIR*, 1999).

Belated acknowledgement in 1990 that FDI had become more crucial for development than acknowledged in the past was based on three interconnected phenomena that the process of globalisation highlighted: (a) the nature and pace of change of technological knowledge that was influencing every aspect of economic, political and social activity and the importance for development of keeping abreast of such change; (b) the relentless shrinking of economic space caused by technical progress in transport, communications and information, resulting in a world where national borders were becoming irrelevant for economic activity, with all countries confronting more intense and immediate competition – in their own and in global markets – than before; and (c) an epochal shift in attitudes towards the role of markets in development, and consequently of policy regimes in developing countries in the aftermath of an era of 'adjustment-by-fire' in the developing world following the debt crises of the 1980s.[38] These phenomena have changed the mindsets of governments in seeing FDI and TNCs as part of the solution for developing countries rather than as part of their problem, i.e. of being disconnected and dispossessed.

These three phenomena have changed the FDI context not just for developing and least developed countries. They have changed the global FDI map for TNCs. The 'pull effect' of developing country demand for FDI has been accompanied and complemented by a 'push effect' from TNCs anxious to achieve and retain market share in their core areas of business in the face of increasingly intense competition from other TNCs. Arguably, competition among TNCs can be as potent a driving force for pushing FDI into developing countries as competition among countries is for pulling it. The opening of developing country markets creates new space for TNCs to expand globally, using their advantages, assets and resources through a variety of arrangements ranging from wholly-owned subsidiaries to joint ventures, franchises, licensing and sub-contracting.

While eager to be present in all markets, TNCs are not necessarily anxious to produce in all countries. Instead, the creation of carefully designed global networks of efficient production units, set up in different country locations to serve various regional markets, is becoming a key strategic and competitive tool for TNCs. An optimal portfolio of such production units is one that allows TNCs to maximise their profitability from combined use of their mobile assets (money, knowledge, technology, brands and people) and their relatively immobile assets (production plants, sources of raw material, markets, etc.).

That theoretical view has been borne out in practice. Traditional TNCs have grown through such a strategy from 1980 onwards. Since 1990 with liberalisation, privatisation and the deregulation of many industries around the globe (e.g. electricity, gas supply and distribution, telecommunications, water, airlines, steel, etc.), many companies that previously had a purely domestic focus have become TNCs using the same approach. Between 1969 and 1998, the number of TNCs in fifteen of the most im-

[38] For a detailed discussion of each of these factors, refer to *World Investment Report*, 1999 (pp.150–152).

portant developed (home) countries increased from 7,000 to over 40,000, as might be expected when global FDI increased from $56 bn to $683 bn in those years.

Through the 1990s many powerful TNCs have emerged from the developing world as the increasing importance of South-South FDI flows suggests. The global expansion of FDI continues to be driven mainly by the now more than 65,000 TNCs (their number having increased by 20,000 in just two years) with over 850,000 foreign affiliates abroad.[39]

In assessing the benefits that developing countries can capture from FDI, it is essential to realise that their interests may coincide only temporally. The objectives of developing country governments and TNCs – the key actors at each end of the FDI link – are different, if not necessarily opposed. Disregarding for a moment the private agenda of public officials seeking to gain monetarily from the entry of FDI, governments of developing countries ostensibly attract FDI in order to accelerate *national* development. TNCs on the other hand make investments abroad, and especially in developing countries, in order to enhance *global* competitiveness, presence and market share. That fundamental difference in interests makes it sanguine to assume that all FDI is automatically and intrinsically beneficial for receiving (host) countries. It also makes it unwise to assume that all FDI inherently inimical to developing country interests for that reason alone.

Comity of TNC and developing country interests in other areas suggests that other objectives may not necessarily conflict; they can overlap. For example, both would benefit from investor-friendly policy regimes and administrative processes. Equally, both benefit from bureaucratic efficiency, respect for property rights, rule of law, and good governance. Taking differences as well as overlaps of these interests into account, it is the task of host country governments to extract maximum benefits from FDI while minimising its cost. It is inefficient to do this investment-by-investment and have the regulation of each project financed by FDI; except in smaller LDCs where only one or two investments might be made each year. It is more efficient, transparent and equitable to establish rule-based investment, competition and regulatory frameworks that encourage foreign investors to act in ways that contribute to host country development while enhancing their own global competitiveness. When these two conditions are not met, FDI becomes counterproductive and, in the long run, unsustainable.

Like any economic instrument or policy, FDI is double-edged: i.e. in addition to benefits, it also has costs that need to be recognised by host governments and minimised through appropriate policies and effective, efficient regulation. These costs include:

- ***Future financial liabilities*** in terms of negative balance-of-payments (bop) effects caused by profit repatriation and dividend payments on the current account and eventual recouping of the original investment through transfers on the capital account. Negative bop effects may also be caused by intra-corporate loans, royalties, payments for intellectual property

[39] UNCTAD, WIR, 2002.

rights, management fees, transfer pricing and misinvoicing of intra-firm trade.[40] Prior to 1990, negative bop effects were seen by developing countries as a serious drawback of FDI. At the time, foreign exchange was perceived to be intrinsically scarce rather than being artificially short because of exchange rates that did not clear the forex market. Globalisation has made that concern disappear. Now it is quite widely accepted that bop effects can be managed with sound macroeconomic policies and floating exchange rates that respond to changing external circumstances.

Table 2.11 shows the effect of profit remittances in LDCs between 1990–99. Relative to FDI inflows (Table 2.6) they seem quite large. Profit remittances from LDCs increased from $700 mn in 1990 to $900 mn in 1999. They were estimated at over $1 bn in 2001. As a proportion of net FDI such remittances dropped from 35% in 1990 to 17.4% in 1999, with the average for the period being 24%. But officially recorded remittances do not reflect the totality of profits derived by foreign investors. If they did, the recorded stock of FDI would be generating returns of less than 2%. If that were the case, no FDI would still be flowing to LDCs. Officially recorded remittances from developing countries are just the tip of the profits iceberg. A large part of the profits derived are retained and reinvested in the host economy if overall economic and political conditions have not deteriorated, or even if they have when FDI is related to mining or hydrocarbon investments. In countries with exchange controls, profits are remitted through transfer pricing, managed intra-firm invoicing of transactions, or through parallel exchange markets.

Nearly half the profit remittances from LDCs were attributable to Angola (Table 2.11). Twenty-four LDCs recorded no remittances at all. By comparison, developing countries as a whole saw repatriation of $55.3 bn in profits from FDI in 2001. The ratio of repatriated earnings to FDI inflows through the 1990s was 35% for developing countries. The ratio for Africa was nearly 75%. For East Asia and the Pacific it was 33%, for Latin America and the Caribbean – 30%, and for Central and Eastern Europe – 6%.[41]

- ***Profit remittances*** are distinct from the repatriation of capital, which is an FDI outflow. Of course, recorded FDI outflows also include investments by domestic firms in other countries (Table 2.6). Remittance and repatriation outflows on current and capital accounts were nearly $126.3 bn from all developing countries in 2001 compared to a gross FDI inflow of $239.4 bn. Thus the direct cost of FDI can be substantial, especially as the stock of FDI matures. As with any instrument for accelerating development that is to be expected. It has to be taken into account in the formulation of fiscal and monetary strategies in countries seeking to attract FDI. The advantage of FDI over foreign borrowing is that

[40] In theory, the net present value (NPV) of any profitable foreign investment should be negative in terms of b-o-p effects assuming that all profits are repatriated and the original investment is eventually recouped. If, over its life, a foreign investment does not generate a net revenue stream (discounted at the real opportunity rate of interest) that is larger than the original investment, then in efficiency terms that investment is a failure. It represents a welfare cost to the economy in which it is made. In that theoretical sense any project financed by FDI will have a negative b-o-p impact that it would escape if it had been financed by a domestic firm. The b-o-p effect depends on the financial structure and financial engineering of the project and the equity exposure of the foreign investor. In practice, however, it is unrealistic to assume that such projects would or could be undertaken either at all, or with the same degree of effectiveness and efficiency by a domestic investor. It is more likely (especially in LDCs) that many FDI projects would not materialise if they were not conceived and undertaken by foreign investors. The reality is that most domestic firms in developing countries do not as yet have the knowledge base or the intangible assets and the global market linkages that global TNCs have in conceptualising, constructing and operating such projects.

[41] See *WIR*, 1999 (Table VI.4, p. 165).

FDI-induced outflows occur when investments generate positive returns whereas external debt has to be serviced (contractually) regardless of returns.

- ***Displacement of domestic firms and domestic capacity***: FDI can crowd out local firms through competition rather than crowd them in through domestic linkages. Crowding out (or in) can occur in financial, product and labour markets. In financial markets foreign affiliates of TNCs often outcompete (crowd out) local firms in securing finance (domestic or foreign) on better terms. In product markets crowding out occurs when the entry of a foreign firm in a particular industry dissuades a less efficient (formerly protected) domestic firm from undertaking investment that may not be profitable in the face of competition. In labour markets it occurs when foreign firms offer better terms and working conditions, as well as higher compensation packages than domestic firms that do not have the same resources or global market reach. But generalisations about crowding out are difficult because FDI generates secondary dynamic effects that cannot be anticipated beforehand. For example, FDI often forces local firms to become more efficient and competitive and to diversify, thus increasing their scope for greater investment, profitability and productivity.[42]
- ***Dualisation of standards and markets***: A side effect of crowding out is the dualisation of labour and product markets and of health, safety, packaging and environmental standards in host countries. With pressures on TNCs in home markets to be responsible in their global behaviour, FDI entering developing countries results in foreign firms applying higher standards in many areas of activity (and in competing for markets and resources). TNCs offer a wider range of career opportunities and career progression paths involving international assignments than purely domestic firms can. The result is often that foreign firms inevitably garner the best managers, technical personnel, general labour and professional services available in the domestic economy. They also get finance from the domestic financial system on preferred terms because of their better credit quality. Affordability constraints on domestic companies confine them to accepting less qualified people, higher cost finance and lower operating standards (i.e. working conditions, health, safety and environmental standards). Often, foreign firms expand sub-contracting to domestic firms in order to exploit lower costs of sub-contractors while avoiding accusations of corporate irresponsibility by adopting lower standards themselves. That linkage can be beneficial to domestic firms but can open the foreign firm to criticism in home countries.
- ***Perceived subversion of sovereignty***: Prior to 1980 there were many notorious instances (in Central and South America and Africa) of TNCs engaging in behaviour that could be construed either as subversive or politically destabilising.[43] These TNCs clearly put their pecuniary corporate interests above the social, political and economic interests of the countries and societies in which they were operating. Those instances have, thankfully, receded into the farther recesses of memory. With regulatory scrutiny and other pressures (from international and local civil society groups) that now operate on TNCs, few would contemplate, leave alone attempt, a repetition of such behaviour post-1990. Although developing country governments now welcome FDI and compete to attract it, there remains an element of discomfort on their part (and trade unions that support them) that they have less control and influence over foreign affiliates than they do over domestic firms. In some instances unease is simply a reflection of the difficulty that host governments have in

[42] For an in-depth discussion of crowding in and out, see WIR, 1999 (pp. 171–173).

[43] These cases included the United Fruit & Food Company in Honduras and Nicaragua, the International Telephone and Telegraph Company (ITT) in Chile, and Lonrho in several African countries where it had mining interests.

Table 2.11: Profit Remittances on FDI from LDCs (1990–1999; Amounts in US$Mn)

Region/Country	1990	1995	1996	1997	1998	1999
Africa:						
Angola	314	450	400	425	450	495
Benin	0	0	0	0	0	0
Burkina Faso	0	0	0	0	0	0
Burundi	3	3	2	1	1	0
Cape Verde	0	0	0	0	0	0
C.A. Republic	2	1	1	1	1	0
Chad	0	0	0	0	1	0
Comoros	1	0	0	0	0	0
Congo D.R.	8	50	40	38	35	36
Djibouti	0	3	3	3	4	6
Eq. Guinea	0	0	0	0	0	0
Eritrea	—	0	0	0	0	0
Ethiopia	0	0	0	0	0	0
Gambia	0	0	0	0	0	0
Guinea	61	10	15	16	13	18
Guinea-Bissau	0	0	0	0	0	0
Lesotho	13	15	14	15	16	16
Liberia	0	0	0	0	0	0
Madagascar	1	2	3	4	5	7
Malawi	0	0	0	0	0	0
Mali	24	15	13	12	13	14
Mauritania	1	3	4	3	2	3
Mozambique	0	0	3	2	4	15
Niger	0	0	0	0	0	0
Rwanda	6	0	0	0	0	0
Sao Tome/Principe	0	0	0	0	0	0
Senegal	33	40	39	38	37	40
Sierra Leone	51	2	3	2	3	5
Somalia	0	0	0	0	0	0
Sudan	0	0	0	0	0	0
Tanzania U.R.	25	37	35	48	50	60
Togo	12	5	7	6	4	2
Uganda	0	12	14	20	22	33
Zambia	115	50	45	53	50	58
East Asia/Pacific:						
Cambodia	0	2	0	0	0	0
Kiribati	—	--	--	--	--	--
Lao PDR	0	0	0	0	0	0
Myanmar	0	0	0	0	0	0
Samoa	0	0	0	0	0	0
Solomon Is.	2	5	7	8	9	9
Tuvalu	--	--	--	--	--	--
Vanuatu	15	34	32	35	36	34
South Asia:						
Afghanistan	--	--	--	--	--	--
Bangladesh	0	0	12	25	30	35
Bhutan	0	0	0	0	0	0
Maldives	14	18	16	17	20	18
Nepal	0	0	0	0	0	0
Caribbean:						
Haiti	8	6	5	4	5	6
Mid-East:						
Yemen Rep.	0	0	0	0	0	0
Total 49 Ldcs.	**708**	**763**	**713**	**776**	**811**	**901**
Total for Developping World	**17,622**	**26,539**	**30,025**	**31,767**	**35,230**	**40,030**

Source: Global Development Finance, 2001 Vol. 2. (Country Tables)

Table 2.12: Differences in the Sectoral Distribution of Net FDI Flows to Developing Countries between 1988 and 1997 (Values in millions of US dollars and shares in per cent)

Industry/ Sector	Africa		Asia		Latin America		Total	
	Value	Share	Value	Share	Value	Share	Value	Share
All Industries								
1988	639	100.0	18,457	100.0	7,572	100.0	26,668	100.0
1997	581	100.0	118,799	100.0	42,515	100.0	161,895	100.0
Primary Sectors: Agriculture, Forestry & Fishing								
1988	7	1.0	483	2.6	79	1.0	569	2.1
1997	35	6.0	1,342	1.1	418	1.0	1,795	1.1
Mining, Hydrocarbons, Quarrying								
1988	58	9.1	561	3.0	599	7.9	1,219	4.6
1997	54	9.2	2,037	1.7	3,580	8.4	5,671	3.5
Manufacturing								
1988	183	28.7	14,140	76.6	3,479	45.9	17,802	66.8
1997	187	32.1	70,696	59.5	10,307	24.2	81,189	50.1
Infrastructure: Electricity, Gas & Water								
1988	--	--	--	--	--	--	---	--
1997	--	--	3,958	3.3	7,270	17.1	11,227	6.9
Transport & Communications								
1988	31	4.8	226	1.2	292	3.9	549	2.1
1997	22	3.8	9,743	8.2	2,303	5.4	12,068	7.5
Construction Services								
1988	20	3.1	616	3.3	26	0.3	662	2.5
1997	16	2.7	3,384	2.8	254	0.6	3,653	2.3
Services: Banking & Financial Services								
1988	58	9.1	253	1.4	546	7.2	857	3.2
1997	129	22.2	1,873	1.6	5,253	12.4	7,255	4.5
Hospitality & Tourism								
1988	53	8.4	432	2.3	--	--	486	1.8
1997	2	0.3	3,677	3.1	271	0.6	3,949	2.4
Health & Social Services								
1988	--	--	5	--	--	--	5	--
1997	--	--	2,183	1.8	--	--	2,183	1.3
Education Services								
1988	--	--	--	--	--	--	--	--
1997	1	0.1	--	--	--	--	1	--
Trading, Other Services, and Unspecified FDI								
1988	229	35.9	1,746	9.5	2,552	33.7	4,527	17.0
1997	135	23.2	17,654	14.9	8,725	20.5	26,514	16.4

Source: *World Investment Report, 1999 (Annex Tables A.I.16 and A.I.17 pp. 418-421)*

intimidating foreign affiliates or influencing their behaviour (e.g. succumbing to demands for extraordinary payments, hiring relatives of political leaders, etc.) in the way that domestic firms can be influenced through application of political or union pressure. Foreign affiliates are less susceptible to non-market pressures than domestic firms are because they have recourse that domestic firms do not have and can exit an unfavourable environment much more easily than a domestic firm can.

The foregoing points typify the costs of FDI that host governments and domestic firms perceive. Such perceptions can materialise if the regulatory and policy frameworks within which FDI enters and operates within a developing country are not sufficiently carefully designed to anticipate the possibility of such costs and avert them from materialising.

2.3.2 Traditional vs. Non-traditional FDI in Developing Countries

Since 1990, large amounts of FDI have flowed into areas of investment that foreign investors had not ventured into previously. Prior to 1990, most (first generation) FDI was in areas such as agriculture, forestry, mining, oil and gas, manufacturing and services such as banking, insurance, and air and sea transport. But after 1990, infrastructure (utilities) has become a major interest of (second generation) FDI in the developing world, especially in electricity and telecommunications, but also in sectors such as water supply and sanitation, toll roads, bridges and tunnels, air and sea ports as well as limited FDI in railways. After 1997, third-generation FDI has been penetrating into healthcare and education services, urban municipal services and government agency functions.

Accurate figures on the sectoral and industry breakdown of FDI inflows, outflows and net flows to/from developing countries are not easily available. Recording and reporting errors abound in classifying FDI flows into particular industrial categories especially when FDI is attributable to TNCs with several core areas of business. These reporting difficulties are serious in developing countries and nowhere more so than in Africa.

Table 2.12 has been derived from the limited disaggregated information that is available from UNCTAD sources. The latest figures are for 1997 although preliminary estimates for 1999 to 2001 suggest that an even greater proportion of FDI in developing countries has shifted from traditional to non-traditional areas of investment.[44] For example, the amount of FDI flows absorbed by the manufacturing sector was estimated to have fallen further (from 67% in 1988 and 50% in 1997 to 45% in 1999) while the share of infrastructure had risen by an equivalent amount. Although accurate disaggregated data are not available (for breakdowns between North and sub-Saharan Africa, between South and East Asia and for the Middle East and Eastern Europe), Table 2.12 illustrates the point being made: i.e. between 1988 and 1997 a discernible, structural shift took place in the sectoral distribution of FDI away from traditional areas into non-traditional areas.

The key features of shifts in patterns of FDI flows highlighted by Table 2.12 are that:

- FDI flows to Africa have been concentrated in traditional sectors with no significant shift to non-traditional areas over the 1988-97 period. Africa has the largest FDI data problem with a large proportion of total flows being unattributable to any particular category. The only noticeable shift of FDI has been in banking and financial services. But the picture is

[44] For example, Annex Table A.II.4 in *WIR*, 2001 does not update FDI flow figures by UNCTAD's somewhat outdated categories but it does show that the inward stock of FDI in the manufacturing sector has fallen further between 1997 and 1999, from 60% to 54%, while the inward stock of FDI in the infrastructure and services sectors has increased. It would take a very substantial shift in the sectoral distribution of FDI flows at the margin to change the sectoral distribution of FDI stock, whose value changes more slowly over time.

clouded by the absence of disaggregated data for North and sub-Saharan Africa although FDI flows have different patterns of sectoral distribution in these two distinct regions.

- South Asia shows many of the same characteristics as Africa in the sectoral distribution of FDI flows and stocks. Unfortunately, that is obscured in Table 2.12 with disaggregated data for South Asia and East Asia not being available, although Table 2.13 below sheds some light on this issue.
- East Asia and Latin America have experienced the largest structural shifts in FDI from traditional to non-traditional areas of investment. These two regions point the way for the lagging regions as far as changes in the sectoral distribution of FDI flows in the coming decade are concerned. But there are distinctions between these two regions. In both, the shares of FDI in the electricity and telecommunications sectors have increased with Latin America showing a greater shift to electricity and East Asia to telecommunications.
- Latin America has attracted a greater relative shift in FDI in the banking/financial services sector than East Asia, which has attracted more FDI in the tourism and hospitality sectors than Latin America.
- The beginning of third generation FDI flows to sectors such as healthcare are discernible in East Asia though not yet in any other region. Too large a proportion of FDI flows to Latin America are attributed to 'unspecified' and 'other services' categories to get a proper picture. Anecdotal indications are that the unspecified FDI flows are actually going into non-traditional areas of investment though not being recorded as such.

Confirmation of the shift in FDI from traditional to non-traditional areas of investment can be found in the World Bank's data on proceeds that developing countries have received from privatisation. These have been derived from foreign and domestic *direct* investors as well as portfolio investors. The FDI component of these proceeds has varied annually. But it is estimated at 45-60% of the total with a higher share of FDI in infrastructure. In 1999, foreign investors (direct and portfolio) contributed 76% of total privatisation proceeds, generating $32.3 billion in foreign exchange. FDI accounted for 86% of that total with FPI contributing 14%. Table 2.13 shows receipts from privatisation between 1990–1999 broken down by sector and region. The shift in sectoral distribution of FDI flows from 1990 onwards has, to a large extent, been induced by privatisation, particularly of SOEs in the infrastructure sectors and in financial services.

In keeping with the observation made about the shift of FDI from traditional to non-traditional sectors, Table 2.13 shows that:

- Half the proceeds of privatisation (and accompanying FDI) have been from infrastructure sectors while traditional FDI investment (i.e. in primary sectors and manufacturing) have accounted for about a third.
- Investment in financial services has become a major new area for FDI via privatisation; more privatisation of the financial sector has taken place in Latin America than in any other region.
- The opportunities created by privatisation are time-bound. By definition, it cannot continue indefinitely. Table 2.13 shows that as the electricity and telecommunications industries in the three middle-income regions (East Asia, Latin America and Eastern Europe) have been privatised in the mid-1990s, proceeds have tapered off.
- Opportunities remain for attracting greater amounts of FDI from more aggressive

Table 2.13 Sectoral and Regional Breakdowns of Developing Country Privatisation Proceeds, 1990–99 (In millions of US dollars)

Sector	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Infrastructure	**9,704**	**6,863**	**9,715**	**5,360**	**9,399**	**9,240**	**15,063**	**37,370**	**39,964**	**11,669**	**154,347**
Telecommunications	7,643	5,981	3,007	1,083	6,069	3,691	3,814	12,863	26,619	5,340	76,110
Electricity	59	359	4,892	1,741	2,180	4,523	6,156	17,979	9,994	5,545	53,427
Other Infrastructure	2,002	523	1,816	2,536	1,150	1,026	5,093	6,528	3,351	784	24,810
Manufacturing	**1,402**	**5,558**	**7,188**	**7,491**	**6,091**	**5,787**	**3,546**	**7,795**	**2,167**	**3,127**	**50,152**
Primary Sectors	**1,367**	**3,608**	**3,394**	**6,215**	**4,068**	**4,336**	**2,787**	**12,932**	**3,125**	**18,085**	**59,917**
Hydrocarbons	568	2,085	2,760	5,162	2,115	2,781	1,687	7,956	1,975	17,985	45,074
Mining	485	235	382	187	1,220	618	468	4,418	971	17	9,001
Other Primary	314	1,288	252	866	733	937	632	558	179	83	5,842
Financial Services	**47**	**7,793**	**5,263**	**3,411**	**1,065**	**1,933**	**2,895**	**3,445**	**3,149**	**9,007**	**38,008**
Other	**138**	**420**	**621**	**1,184**	**1,088**	**606**	**1,108**	**5,031**	**905**	**2,188**	**13,289**
Total Proceeds	**12,658**	**24,242**	**26,181**	**23,661**	**21,712**	**21,901**	**25,399**	**66,573**	**49,309**	**44,076**	**315,712**
By Region:											
East Asia/Pacific	376	834	5,161	7,155	5,508	5,410	2,680	10,385	1,091	5,500	44,100
Latin America/ Car.	10,915	18,723	15,560	10,488	8,199	4,616	14,142	33,897	37,685	23,614	177,839
E. Europe/ C. Asia	1,262	2,551	3,626	3,968	3,957	9,742	5,466	16,537	8,002	10,335	65,466
M. East/N. Africa	2	17	69	417	782	746	1,478	1,612	1,000	2,074	8,196
South Asia	29	996	1,557	974	2,666	916	889	1,794	174	1,859	11,854
Sub-Saharan Africa	74	1,121	207	641	605	473	745	2,348	1,356	694	8,265

Source: Global Development Finance, 2001 (World Bank) Tables A4.1 to A4.7 (Appendix 4; pp. 183-191)

privatisation of SOEs in both non-traditional and traditional sectors in China, India and other countries in South Asia, Africa and the Middle East. That scope is amplified with the potential offered by the privatisation of banks and other financial institutions.

- What Table 2.13 does not show are the new flows of FDI (and domestic investment) that have been attracted into these sectors after privatisation and deregulation.
- The tapering off of proceeds in the telecommunications sector reflects the bursting of the valuation bubble built up in the technology and communications sectors worldwide and the collapse in the share prices of global TNCs in these sectors. The latter trend has influenced adversely their ability to participate as aggressively in developing country privatisations of telecommunications companies as they did between 1993–98.
- This may affect the success of the privatisation of telecommunications companies in low-income countries and LDCs that have been slow to privatise and fallen to the back of the queue. It will affect the amount they realise as global telecommunications companies are now unwilling to pay more than rock-bottom prices for the assets they acquire compared to the prices they were willing to pay when their own stocks were trading at stratospheric (and, in retrospect, unrealistic and unsustainable) price/earnings multiples.
- Similarly, the diminution of privatisation proceeds in the electric power sector shows the impact of regulatory and policy risk materialising in many countries where power companies

have been privatised but governments have not followed through on their commitments to raise tariffs to cost-recovery levels.[45]

- Vast differences are evident in the progress of privatisation across regions. Privatisation opportunities have been exploited extensively in the middle-income regions that account for over 90% of the privatisation proceeds generated in the developing world between 1990–99. These opportunities are now approaching exhaustion with few public sector assets left to privatise in second-generation, non-traditional areas of FDI.
- But, in these regions, opportunity remains in privatisation focused on public assets that are utilised for the provision of public services (e.g. railways, healthcare, education, government agency functions and urban/rural municipal services). Privatisation in these areas is more fraught and more controversial in both developed and developing worlds. These are also areas in which the scope for more productive PPPs has yet to be fully explored.
- Poorer developing regions with the largest number of LDCs have yet to exploit privatisation opportunities in second-generation, non-traditional areas (i.e. infrastructure and financial services) and provide considerable scope for attracting larger amounts of FDI by opening up these areas for privatisation between 2002–2010.
- LDCs aiming to attract more FDI for sustainable development may be dependent almost entirely on pursuing such a privatisation strategy in the medium term rather than continuing to rely on attracting FDI in first-generation, traditional areas of investment such as mining and manufacturing.

2.4 The Role of PPPs in Non-Traditional Areas of FDI

FDI in non-traditional areas of investment that have opened up since 1990 – in response to overburdened exchequers, economic liberalisation, market deregulation and privatisation – has involved a variety of partnerships between public and private entities. PPPs have been transient as well as permanent arrangements depending on sector/country circumstances. Some type of PPP has been resorted to in the earlier stages of privatisation of electricity, telecommunications and water companies as well as airlines and financial institutions. They have been less characteristic of privatisations in traditional areas of investment such as oil/gas, manufacturing and mining.[46] In these instances, privatisation has proceeded rapidly without requiring an interim corporatisation phase requiring PPPs.

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[45] With the Enron debacle, the collapse in the share prices of major companies like ABB Alsthom, GE, etc. and the failure of many global TNCs in the power sector to make headway with pending projects in countries like India, the appetite of global power companies to participate in developing country privatisations of their electricity generation, transmission and distribution networks has diminished considerably. That appetite may remain suppressed for the time being until new breakthroughs occur. Offsetting the disinclination of the major global TNCs in this sector, however, is growing the interest on the part of recently privatised power companies in the developing world to acquire counterparts in neighbouring countries to rationalise generation, transmission and distribution costs and achieve greater economies of scale as well as greater security of supply through diversification.

[46] In the case of diamond mining in Southern Africa, innovative corporate partnerships have been constructed between De Beers and the governments of Botswana (Debswana) and Namibia (Namdeb) that involve many elements of genuine PPPs although they are wrapped within formal corporate structures.

With second-generation, non-traditional FDI entry in developing countries (electricity, telecommunications, water, airlines and banks), PPPs of various types have been resorted to in the 'corporatisation' phase.[47] In this interim arrangement, foreign operating partners (selected through a process of competitive bidding) have provided management, marketing and financial control services, as well as technological inputs, without immediately taking over the full risk of equity ownership until policy/tariff liberalisation commitments made by governments were tested and the viability of the enterprise established. Corporatisation became an essential transitional step before privatisation when SOEs had to be converted from departments in ministries (or parastatals under ministerial control) funded through the fiscus, into separate corporate entities with their own independent financial structures and boards. A new *modus operandi* had to be established subject to regulatory control independent of ministerial influence. Profitability had to be proven before SOEs could be privatised through direct sale to the foreign partner concerned or through an initial public offering on the local or global capital market.

Typically such PPPs lasted between 1–4 years before full privatisation occurred. They rarely attracted significant equity investment (i.e. FDI) by the foreign partner at the time of corporatisation, except perhaps for a small minority shareholding to show goodwill and give the foreign partner a stake in the enterprise. In such instances foreign partners have usually insisted on pre-negotiated call options at a pre-agreed price on increasing that stake by eventually buying out a larger part of the government's shareholding just before or at the time of privatisation. Nevertheless the creation of a PPP has been a precondition for attracting other foreign finance (from official and private sources and from portfolio investors and infrastructure funds) to fund the investment and rationalisation needed by the entity being privatised to turn it around.

In these sectors, it has been the case in some countries that even after privatisation, the government has remained a significant minority shareholder for a considerable period of time. Occasionally, governments have insisted on retaining a so-called 'golden share' that gives them veto rights over certain types of transformations being undertaken too soon and running the risk of triggering a political backlash against privatisation. To that extent the 'partnership' between the public and private sectors has been prolonged within a formal, private corporate shareholding structure, although operating under that structure is precisely what deprives a PPP of its quintessential character.

In the late 1990s, signs have emerged that FDI is interested in entering third-generation, non-traditional areas of investment in the more advanced developing countries as well as some LDCs. These include: railways, toll roads, bridges, tunnels, and public services such as community low-cost housing, healthcare, education, government agency services, and municipal services such as water supply distribution, sewerage and sani-

[47] In some countries, especially LDCs like Bangladesh and Uganda, corporate arrangements for mobile telephony are more like PPPs operating under a corporate framework than like full-fledged corporations. In Bangladesh, the local 'public' partner is not the government but an NGO (the Grameen Bank).

tation, firefighting services, street-lighting and maintenance, urban public transport, solid waste collection and disposal, etc. In these areas, it is more likely under the present confluence of events and probabilities, that PPPs might become more permanent arrangements rather than way stations *en route* to privatisation. That is because there remains some controversy as to whether the goods/services being provided will – for the foreseeable future – be seen as being anything other than 'public goods or services'; i.e. those the public sector is mandated to provide even if, for reasons of efficiency, effectiveness and risk-sharing, the public sector opts for private entities to compete in actually producing and delivering them.

The basic idea is that even if these goods/services are seen by the population as the responsibility of the public sector to provide, they need not necessarily be produced by public monopolies with their inherent deficiencies, risks and vulnerabilities (e.g. to public sector labour unions). Experience in a number of instances across many countries suggests that greater cost efficiencies, better value-for-money and better service quality can be achieved in producing and delivering such goods and services if market principles and disciplines are used by private agents competing with one another, though not in the same locality. It is the validity of the distinction between *public provision* and *private production* of such goods and services that will determine the longevity of a PPP arrangement (rather than its conversion into a private corporate entity) as the most appropriate institutional form for delivering such goods and services.

Until recently, services such as electricity supply, telecommunications, water supply and road transport were all seen (except in the US) as *public* services. They were assumed to be 'natural monopolies'. But changes in technologies, products, consumer preferences, service expectations and markets have enabled the natural monopoly notion to be contradicted, resulting in these services being privately (competitively) delivered and consumed. Safeguards against abuse are applied through new forms of regulation to protect the public interest, encourage competition to the maximum extent feasible and avoid the prospect of private monopolies, or oligopolistic collusion among private producers, to emerge.

In most of the world, electricity and telecommunications are now seen as private goods and services. But societies and governments in many low-income countries and LDCs choose not to see them that way as yet. Conversion of goods/services from public to private could happen to other goods/services that are presently perceived as 'public' in nature as well. The variety of PPP arrangements that can be devised lend themselves to greater flexibility – institutionally, contractually and temporally – than a typically private corporate arrangement in dealing with the provision and production of such goods and services and in accommodating (automatically) their future transformation. In focusing on third-generation, non-traditional FDI in developing countries – and on the role of PPPs in such FDI – it should be recognised that production of goods/services involved in these areas has been privately arranged long before privatisation or PPPs became fashionable terms.

In France, 75% of water supply has been privately provided for some time as well as

85% of provincial urban transport. That is why French water companies have had such a comparative advantage and a natural competitive head start in water privatisations that have occurred all over the world (developed and developing) in the 1980s and 1990s, particularly in neighbouring countries like the UK. In Germany, private not-for-profit agencies have provided healthcare, education and welfare services on a community basis for a considerable period of time. In the US, UK and Sweden, average cost savings of over 30% were realised when public goods and services were contracted out and produced by private entities under PPP arrangements. In Cambodia (an LDC), contracted out healthcare delivery with partial cost recovery has enabled scarce government funds (equivalent to less than $2 per capita) to be stretched out in extending healthcare to a much larger proportion of the population than would have been possible if healthcare provision had been confined to a public healthcare monopoly. Those circumstances apply in every other LDC and low-income country where mixed public-private healthcare with partial cost-recovery (a higher proportion of cost-recovery being dependent on higher incomes) is the only feasible solution for extending healthcare; it is the norm rather than the exception.

The main constraints on FDI – and on raising capital in general for PPPs in third-generation areas – opening up for private investment are country risk, credit risk, currency risk and revenue risk; exacerbated by policy, regulatory and tariff risk. The 'risk package' confronted by potential investors in these areas is that host governments (sovereign and sub-sovereign), in the face of political pressures, will not respect and honour commitments on tariff liberalisation and cost-recovery; and that local currencies will be devalued and profit or capital remittances blocked by fiat. In these areas, for PPPs to succeed and FDI to flow freely, it is crucial that tariff regulation works automatically and through the market rather than on a discretionary basis. When tariffs have to be set by independent regulators rather than by market competition, they need to apply formulae that are fair to investors and consumers and are transparent, objective and protected against capricious or arbitrary change. These constraints and means for relieving them are taken up later in Chapter 5.

2.5 FDI and the Domestic Private Sector in LDCs: Linkages & Complementarity[48]

FDI does not contribute as much to the development of host countries when it operates in isolation through enclave projects, useful though these may be. It contributes most when it complements and builds up firms in the *domestic* private sector through commercial and non-commercial linkages. These linkages must serve not only to enhance and expand business opportunities for domestic firms as a result of FDI entry but also to improve their technology, efficiency, effectiveness and capacity to diversify, grow and compete – initially in the local market and eventually in regional and global markets as well.

[48] This section draws on *WIR*, 2001 (UNCTAD) whose special theme is the development of linkages (pp. 129–215).

For that reason, LDCs pose a particularly difficult conundrum for policy-makers, foreign investors and the international community. For FDI to have a significant developmental effect, it needs a receptive host environment endowed with sufficient domestic capability to absorb knowledge and ensure its successful diffusion through a variety of vertical and lateral linkages. The growth and geographical spread of TNCs as the driving force behind FDI make local conditions in host countries more rather than less important in location decisions. When it comes to manufacturing and sophisticated services, mobile factors of production (in a global production system that is integrating inexorably with technological change) gravitate to locations where other complementary, but less mobile, factors exist. That is less important for FDI in natural resource exploitation and in some second-generation, non-traditional areas of investment such as infrastructure services.

For FDI in manufacturing, LDCs lack the kind of host environment needed either to attract a large amount of diverse FDI (except when it seeks to exploit natural resources or a heavily protected but large domestic market) or to derive maximum benefit from it. As trade barriers are lowered through progressive trade liberalisation (negotiated under the aegis of WTO) and regionalisation occurs, the significance of access to national markets and low labour costs as determinants of FDI flows diminishes. **The developmental impact of FDI on host LDC economies is therefore likely to be lower and slower than in more advanced low-income and more developed middle-income countries.** Yet, FDI is still crucial for stepping up the tempo of development in these economies simply because the domestic impetus for doing so is, by definition, weak.

Also, FDI in the 21st century is being driven by globalisation and influences different from those before 1990. Increasing proportions of global FDI (and FDI in developing countries) are being generated in sophisticated 'knowledge-intensive' industrial and services sectors. Such FDI often gravitates to highly concentrated industry-specific centres. It is focused on research and development in particular industries, and usually connected to a world-class university or centre of technical excellence (e.g. automobiles, electronics, biotechnology, information technology, financial services, etc.).

More and more FDI is being attracted more by 'industrial, service and research clusters'[49] – in which domestic and foreign competitors, as well as a host of supporting firms are concentrated and linked – than the attractions of the host country. Some clusters (which effectively represent extremely dense linkages) have become brands in

[49] *WIR*, 2001: Clusters (like Silicon Valley, the City of London, Wireless Valley in Stockholm and similar industrial parks and IT corridors in a number of countries and Infotech parks in several cities in India for the software services exporters) are spatial concentrations of a number of competing domestic and foreign firms in one or a few industries in a single location. Geographic proximity creates synergies in a dense network of competitors, suppliers, buyers, sophisticated human resources and service-supporters (banks, accounting and legal firms, courier and business services, etc.). Increasingly, FDI in financial services, media services, information technology, semiconductor technology, electronics manufacturing, biotechnology, etc. is being attracted by the presence, infrastructure and dynamism of such specific clusters rather than by the general attractions of a host country. Where 'economies of agglomeration' are significant in a particular industry, the rest of the country becomes of little significance to a foreign investor in these industries.

their own right, e.g. Silicon Valley, the City of London or Bangalore for the software industry in India. Growth of such clusters around the world is driving an increasing proportion of FDI. **In that situation, LDCs risk becoming even more marginal to the dynamics of international production because they cannot meet basic requirements for attracting high quality FDI.** Liberalising economies, improving policies and making investment regimes more open and investor-friendly is a necessary but no longer sufficient response.

Linkages between FDI and domestic firms are crucial for the competitiveness of both, with spillover benefits for the host country. For affiliates of foreign TNCs, supply chain management is critical aspect of competitiveness. Linkages that maximise local procurement of inputs from the host economy can lower production costs, reduce delivery times and inventory holdings, allow greater specialisation and flexibility, and encourage better adaptation of technologies, products and services to local conditions. Diffusion of new technology, higher operating and quality control standards and world-class delivery protocols among domestic suppliers of foreign firms can contribute much to increasing the local skills and knowledge base.

That type of linkage benefits not only domestic suppliers. It expands the resource base from which foreign firms can draw, creating a virtuous circle of adaptation and innovation with suppliers and foreign affiliates working together to reduce costs and improve product design, quality and productivity. For domestic firms, the creation and strengthening of supply links with foreign firms operating locally enables them to access new technology, new sources of finance and corporate credit, new standards (of quality), new sources of revenue, increased output and employment and an entrée to international markets.

Links between domestic and foreign firms start out with a single order, but develop quickly into a dense weave of interconnections that serve to improve overall efficiency, productivity, managerial capability and financial sophistication in the economy at large. Although it is usual to perceive such linkages as being confined to suppliers of direct production inputs for TNCs, they actually extend much beyond that. The entry of FDI affects linkages with less closely connected suppliers of services as well, in particular: financial services (banks, brokerages, insurance companies); information technology and software support services; other business support and consulting services; construction services; local plant and building maintenance services; accounting and auditing services; legal services; market research, advertising and media services; courier services; local transport and haulage services, etc. The list is a long one.

For such links to deliver spillover developmental benefits, the overall regime in a host country needs to provide the right incentives for foreign and domestic firms. In closed economies, where foreign firms enter to gain access to a protected domestic market, they have little incentive to upgrade the technological base of their suppliers to meet international standards. Similarly, in environments that lack stable macroeconomic policies and where tax structures, monetary policies and exchange rates are subject to frequent change, thus heightening uncertainty, foreign firms are likely to reconfigure

their supply patterns and production mixes so as to pass such costs and risks of uncertainty to domestic suppliers and customers to the extent possible in order to minimise their own exposure to risk.

In LDCs, the absence of a sufficient base of technologically competent domestic suppliers (for direct production inputs and business services) is a deterrent to FDI and an obstacle to the creation of effective local linkages. Often, when TNCs cannot rely on domestic suppliers, they get their international suppliers (banks and insurance companies as well) to accompany them in establishing a local presence. In their efforts to attract FDI, policy-makers in LDCs need to target TNCs that have established reputations for active supplier development programmes in host countries (e.g. Toyota, GM, Ford, Tetra-Laval, Nestle, etc. have a good track record in the developing countries where they have invested). These programmes are particularly prominent in the globally integrated and globally branded automobile, electronics, domestic appliances, footwear, garments and clothing, food processing, beverage and fast-moving consumer goods industries.

Under such programmes, TNCs, with the help of local industry associations, identify domestic firms that have the potential to become competent, reliable suppliers, adopt them and provide an assistance package combining equity investment, technology transfer, access to the latest research and development information on materials, equipment and processes, staff and management training, instruction in up-to-date quality control techniques, supplier quality audits, timely delivery scheduling routines, business-related information on markets, products and processes, inter-corporate credit or assistance with obtaining local bank credit supported by buyers' guarantees, and assistance with direct access to international markets. When domestic firms with the requisite capabilities and potential do not exist, these TNCs usually succeed in persuading their international suppliers from other countries to set up domestic supply units.

The performance conditionalities that developing country governments used to apply to incoming FDI prior to 1990 – in order to achieve the benefits of linkages by mandating minimum thresholds for local value-addition – belong to another era. These are no longer effective nor are they permissible under new WTO rules. To attract TNCs that proactively engage in forming linkages through local supplier development, the governments of LDCs need to be aware of, and compensate for, information asymmetries on the part of foreign firms as buyers, and domestic firms as suppliers, about linkage opportunities and potential and about the gaps that exist in extant domestic firm capability in terms of technology, management, human resource skills and financial capacity. Carefully designed policy and financial interventions to overcome both the information and capability gaps can help to reduce the costs and risks of establishing linkages or widening and deepening them.

Some of the more advanced developing countries, with a large base of FDI spread over a number of industries, and an extensive base of capable domestic firms, have set up linkage promotion programmes between foreign and domestic firms in particular industries and sectors. LDCs can learn from these. These programmes (e.g. in China,

Costa Rica, the Czech Republic, Hungary, India, Malaysia, Mexico, Singapore and Thailand in the developing world and Ireland, the US and UK in the developed world) have three objectives: (a) increasing domestic sourcing by foreign affiliates without sacrificing cost, quality or efficiency; (b) deepening and upgrading existing linkages to enhance the capacity of domestic and foreign firms operating in the host economy to become more dynamic, efficient and competitive and to move up the value chain in their industries; and (c) enhancing the export capacity of both foreign and domestic firms operating in the economy.

Such programmes usually have some or all of the following components: (1) provision of up-to-date market and business information to foreign and domestic firms making each aware of the other's interests and potentials; (2) disseminating information on actual case studies and ground-level experience with successful and unsuccessful linkages and on best practices; (3) government agencies arranging 'marriages' between foreign and domestic firms with complementary capabilities that generate immediate synergies through linkages; (4) targeted training sessions for buyers from foreign firms and for marketing managers from domestic firms aimed at informing each about the other; (5) management and technical assistance; (6) financial assistance for pilot schemes that potential partners might wish to try out but are unwilling to risk their own capital for; (7) encouraging continuous dialogue in a practical context among foreign affiliates, domestic firms, industry associations, chambers of commerce, banks, business support service providers, trade unions, investment promotion agencies and ministries of commerce and industry; and (8) limited, time-bound tax incentives for foreign as well as domestic firms to encourage 'bonding'.

Linkages between foreign affiliates and domestic firms are driven by the self-interest of each. Yet, they are a powerful instrument in strengthening the capabilities and competitiveness of domestic firms (and even of the foreign affiliates operating in the host country). They enable domestic firms to establish a foothold in global intra-firm and intra-industry production structures and to gain direct access to regional and global markets. Conversely, they result in foreign affiliates becoming firmly embedded in domestic economies, in some instances coming to be recognised as national assets.

2.6 The Equal (National) Treatment Principle as applied to Foreign Affiliates vs. Domestic Firms

This final section on FDI in developing and least developed countries highlights an issue that has featured prominently in bilateral investment treaties, in the aborted attempt to negotiate a multilateral agreement on investment (MAI), and in negotiations between foreign firms and host (developing) country governments regarding the treatment of foreign affiliates vis-à-vis domestic firms. Such treatment concerns a variety of dimensions such as: judicial, discriminatory policy, property rights, performance conditionalities, access to local inputs and finance, the provision of fiscal incentives and provision of risk coverage. **The issue concerns applying the 'equal (or**

national) treatment principle' when it comes to host (developing country) governments dealing with foreign companies.

Its general thrust is to suggest that governments and judiciaries should not treat foreign affiliates differently (at least no less favourably) from equivalent domestic firms[50] in ways that put them at an operating, financial, competitive or juridical disadvantage. It is intended to put foreign and domestic firms on a level playing field as far as treatment by the government is concerned. The question of applying such a principle arose when foreign firms were required to operate under a distinct and separate regime from that applying to domestic firms. In that era (and even now in many developing countries) foreign affiliates in developing countries were often constrained through a host of artificial administrative injunctions circumscribing their operating and financial behaviour.

Prior to 1990, foreign affiliates in host countries were often (on the advice of international interlocutors) required to meet certain performance criteria in terms of local content and value-addition, forced technology transfer, mandated local sourcing and procurement, proportion of output to be exported, differential pricing between output intended for domestic and export markets, etc. They were required to adopt different terms and conditions for employing and compensating local nationals. Quotas were imposed on them for the employment of local vs. foreign nationals in sensitive or senior management positions, with innumerable accompanying restrictions on the entry, mobility, movement and tenure of foreign personnel in the host country concerned. Often foreign affiliates were denied access to local banking facilities and credit from domestic financial institutions but were required to keep large deposit balances with local (usually public) banks and to take out insurance with local (again public) insurance agencies. They could not use local capital markets to float equity or to raise bond or negotiable note financing.

Foreign affiliates were denied access to certain areas and could not buy land freehold for their plant and buildings; they could only lease it on negotiated rather than market terms. Onerous (often unnecessary) reporting requirements were imposed on them concerning their inputs, outputs, personnel, liquidity position, exports, imports, invoices to check on the possibility of transfer pricing and their external accounts. They were invariably subject to enforcement of much higher health, safety, environmental

[50] The adjective 'equivalent' is used deliberately to acknowledge the fact that in virtually every country there are regimes that treat domestic small and medium enterprises (SMEs) and micro-enterprises differently from the average, run-of-the-mill large domestic firm. Definitions of what constitute SMEs vary considerably (e.g. a medium scale enterprise in the UK or US might be the equivalent of a very large domestic firm in a developing country). This discussion avoids that distinction and does not attempt to argue that these exemptions and preferences for SMEs should be removed, or that they should be applied to foreign affiliates in the interest of 'equal treatment'. There are, however, many reputable industrial economists who argue that the exemptions and preferences extended to SMEs and micro-enterprises in developed and developing economies are politically rather than economically motivated, unnecessary, distortionary and counterproductive. That separate argument is one this Study avoids.

and labour standards than were domestic firms. Even when laws pertaining to these aspects were the same for foreign and domestic firms, the difference was that in the case of foreign firms these laws were enforced (or the threat of enforcement was ever present) whereas in the case of domestic firms they were largely ignored.

These types of restrictive and administratively costly conditions were rarely, if ever, imposed on equivalent domestic firms (unless they were owned by political opponents of a particular regime). But, on the other hand, foreign firms were given preferential tax incentives and exemptions from exchange controls that domestic firms rarely had.

Post-1990, the onerous performance conditions that TNCs had to meet in developing countries have, by and large, disappeared with investment regime liberalisation. Most developing countries, and many LDCs, have investment regimes that are now more liberal than those of most OECD countries. Access to local finance and ownership of land has been liberalised, though not as universally as might be desirable. Standards of non-discrimination and equal (national), as well as fair and equitable treatment of FDI following its entry into host countries have, since 1990, been incorporated into domestic laws and international agreements that developing countries have acceded to. Increasingly, the shoe seems to be on the other foot. FDI and foreign affiliates now have a preferred, privileged status over domestic investment and investors.

Foreign investors are given protection and have recourse to remedies from bilateral insurers, export credit agencies and aid agencies in their home countries, risk cover guarantees from host countries as well as from regional plurilateral (in the case of the EU) and multilateral agencies. They now have access to cover for non-commercial risk from a variety of sources that domestic firms have no access or recourse to. Taking the argument further, developing countries trying to attract FDI in second-generation areas of investment (e.g. electricity and telecommunications) are offering foreign companies privileges, exemptions, policy and tariff commitments, and incentives that are not provided to domestic firms. That is putting domestic firms that could compete in these areas at a major disadvantage vis-à-vis foreign investors in countries like India.

In these different circumstances, the desire of TNCs to continue pressing the case for the equal (or national) treatment principle as an indispensable clause in bilateral and multilateral investment agreements – unobjectionable as it appears in theory and principle – raises different issues and questions. The main issue now concerns that principle being symmetrically applied so as to put domestic firms on a level playing field with foreign investors and affiliates of TNCs in host countries.

Of particular relevance is whether risk mitigating instruments and facilities (whether made available through PPPs or by some other means) offered to foreign investors in order to attract FDI into LDCs should not also be offered, with appropriate modifications, to domestic investors. The rationale for raising this possibility under the rubric of 'equal or national treatment' is to prevent capital flight or to prevent domestic capital from being exported and round-tripped back to the host economy as FDI simply to avail of the favoured treatment that is applied. This important question is taken up again in Chapter 5.

5 The Risks faced by Foreign Investors in LDCs: How they are Covered

5.1 Investment Risks in Developed vs. Developing Countries

Foreign investors in any country face commercial and non-commercial risks. Their nature depends on: the type of investment, the sector/industry in which it is being made, the structure of competition in that sector, market and technical knowledge, management capability, the country in which the investment is being made and unforeseeable events in the economic, market, technological, political, or security environment that may affect a particular project or the viability of the investing firm. The nature and severity of risks borne by foreign direct investors, portfolio investors, or creditors are different. Even in the most favourable circumstances no investment in a free market economy is risk free. It is intrinsic to the nature of business that commercial risks are taken. Enterprises undertaking them may succeed or fail. That is how free markets work. But firms in free markets also strive to reduce their uncertainty and *non-commercial* risk.

In a globalising world with increasingly unfettered movement of trade and investment across borders it is axiomatic that investments in *developed* countries are less risky than in *developing* countries. But that should not obscure the fact that FDI in the developed world has its failures. Risks undertaken by investors/creditors in financing OECD companies and investments materialise frequently. Many of these failures are large and cause serious dislocations. But, almost all of them are due to the materialisation of commercial rather than non-commercial risks. Firms undertaking these investments either misread the market, or did not: know enough about the technology, value properly the acquisitions they made, have the right management and human resource capabilities or have sufficiently robust and resilient financial structures in place to ride out the risks and stay in business. Risks with FDI in developed countries usually do not materialise because they are politically unstable, or because their institutions are dysfunctional, their legal systems do not work, or their currencies are inconvertible and fluctuate beyond parameters that can be reasonably protected against. They do sometimes materialise because governments do not keep their word on making timely policy changes or investing in collateral infrastructure investments that are crucial for ensuring viability.

The *developing* world poses a different set of issues, especially where non-commercial risks are concerned. Those circumstances affect all investors whether domestic or foreign. Generally, however, domestic investors are assumed (often wrongly) to have better knowledge and capacity to cope with non-commercial risks in their own countries. In practice, most domestic investors (especially SMEs) are less able to cope with non-commercial and political risks in LDCs than foreign investors. The latter are often covered or protected through various types of risk insurance obtained from either official or private sources. Also, foreign investors invariably have more resources and more recourse options in dealing with developing country governments than domestic investors.

In developing countries, especially LDCs, domestic investors often do not have a location choice in making their investments, but foreign investors do. The element of choice encourages developing countries and their international interlocutors to find ways of mitigating risks to attract mobile foreign investment. Domestic investors are seen as having no choice but to stay and invest at home. Too much emphasis is therefore put on attracting foreign investment and not enough on retaining domestic capital.

Mitigating risks only for foreign investment may encourage domestic capital to exit and be repatriated back as protected foreign investment or remain abroad as portfolio investment. This point is often missed in official circles, although it is obvious. Assumptions are made about the non-commercial risk-bearing capacity of domestic firms in developing countries that are neither conceptually valid nor empirically substantiated. Emerging evidence suggests that an imbalance in emphasis on risk coverage (and incentives) for foreign investors may be encouraging domestic capital flight (especially from LDCs), some of which is round-tripped back as privileged foreign investment (direct and portfolio).

Should the risk mitigation efforts of donors attempt to embrace domestic investors as well, especially those with technological, managerial, and market capabilities equivalent to those of some foreign investors? It is often imagined that while domestic firms with such capabilities may exist in low-income but industrially quite advanced countries like India, Indonesia, Nigeria and Pakistan, they are unlikely to exist in LDCs. That is not the case for domestic but non-indigenous (ethnically different) investors in LDCs in Eastern and Southern Africa and in the Pacific.

Be that as it may, all the extant risk mitigation agencies see the possibility of covering the non-commercial risks of domestic investors as being unmanageable, undesirable and as opening Pandora's box. There are a number of arguments for and against taking such a step. But they need to be considered more carefully and systematically than they have been in official circles before knee-jerk resistance is enshrined in perpetuity. That issue is relevant but is left open for future consideration with no attempt being made to analyse it further or come to closure on this occasion.

Unsurprisingly, the level of non-commercial risk as well as the degree of commercial risk that investors take in developing countries is usually (but not always and not in direct proportion) related to their level of development. For that reason, LDCs are perceived to have environments that pose the highest levels of non-commercial risk. Attributes and characteristics that result in a country being classified as *least developed* are the reasons why such risks exist. They include: fragile political systems and structures; vulnerability to civil or cross border conflict; weak governance; poor administration; weak institutional capabilities; dysfunctional legal systems; undeveloped financial and business support systems; weak regulatory regimes; unfair competition; inadequate physical infrastructure and poor infrastructure services; relatively undeveloped markets and low levels of human and social capital. All these factors increase non-commercial risk, but they also impinge on commercial risk by increasing operating and capital costs.

In looking to improve the array of risk mitigating mechanisms and instruments that have been designed to facilitate and increase FDI inflows, it needs to be emphasised that in LDCs the distinction between non-commercial and commercial risk is blurred in practice. When financial systems are weak (usually prime factors that create non-commercial risk) they affect commercial risk simply by holding up (i.e. not clearing) or losing payments in their internal systems and affecting cash flow sufficiently seriously to impair or disrupt a firm's functioning. When governments buy services (e.g. electricity or water) that they also regulate, their *commercial* behaviour – as distinct from their *political* behaviour – can result in situations that make it difficult to distinguish whether a non-commercial or a commercial risk has materialised. This has become an increasingly troublesome concern for foreign investors (and risk insurers) in the electricity, water and telecommunications sectors. It is an area where innovation is needed if FDI is to be attracted into these sectors in LDCs; especially those which do not offer as competitive an environment for FDI in manufacturing or high-value tradable services (such as financial services).

A final point that needs to be emphasised is that there is as yet no agreed taxonomy of risks that is generally accepted with the terms used having the same meaning. Different analysts describe the same risks using different terminology, resulting in confusion. The sub-sets of risks shown in Figure 5.1 below are generally recognised. But when disaggregated the sub-risks associated with each of these risks can materialise for a variety of reasons. The interactions between them are not always easy to understand or trace. This becomes more obvious when the types of risks typically confronted by a foreign investor in a developing country are mapped in cascading order

5.1.1 The Range and Classification of Risks faced by Foreign Investors in LDCs

Figure 5.1 is an indicative, illustrative portrayal of the risks that a foreign investor might confront in a LDC rather than a comprehensive and exhaustive one. It attempts to capture most of the risks that typical businesses face. For obvious reasons it cannot depict every detailed risk that a particular firm, in a particular industry, located in a particular country, might confront. The sub-risks shown are not always mutually exclusive. Some occur in tandem, others materialise independently. But Figure 5.1 broadly encapsulates the risks that foreign investors in LDCs have to take and manage.

All these risks are not of equal importance, i.e. they cannot be evenly weighted in the overall risk assessment matrix or equation that any investor or the creditors involved may choose to apply. The relative importance of each risk vis-à-vis other risks will be situation, country, project and firm specific. Every business will not be exposed to all these risks. Nor can all these risks be borne by a single party. Many can be avoided, others can be fully or partially covered through normal availability of business insurance (although one of the weaknesses of operating in LDCs is the absence of a sophisticated local insurance industry) or through special cover provided either by private insurers or by official (multilateral and bilateral) risk insurance and export credit agencies.

Figure 5.1 A Map of Possible Risks faced by Foreign Investors in LDCs

Commercial Risks						Non-Commercial Risks	
Financial Risks		Operational Risks		Business Risks		Country & Event Risks	
Risk	Sub-Risk	Risk	Sub-Risk	Risk	Sub-Risk	Risk	Sub-Risk
Balance Sheet	D/E Structure Asset Liability Provisions Write-downs Derivatives	**Business Strategy & Market**	Marketing Mkt.Demand Product Price Resources Technology Support	**Legal**	Laws Documen-tation Judiciary Enforcement Litigation Liability	**Political**	Confiscation Expropriation Nationalisation Deprivation Breach of Contract Sub-Sovereign
Income Statement	Structure Profitability R-o-Assets Debt Service Revenue Risk Capital Cost Ops. Cost Derivatives	**Mgt, Systems & Operations**	Production Human Financial IT Training Control Int. Audit Security	**Policy Change**	Taxation Inflation Exch. Rate Ind. /Sector Labour Social Regulatory Tariff	**Credit-worthiness**	Sovereign Provincial Local Municipal
Capital Adequacy	Equity Quasi-equity Debt Burden Off-B/Sheet	**Technology**	New Proven Equipment Sequence Training	**Financial System**	Payments Services Credit Soundness Access	**War & Conflict**	Civil Border Regional Terrorism
Credit	Borrower Sub-borrower Guarantor Supplier Customer Agent	**Fraud & Corruption**	Shareholder Employee Supplier Customer 3rd Party Government	**Business Support**	Accounting Auditing IT Support Recruitment Consulting	**Natural Event**	Earthquake Coastal Calamity Mudslides Drought Flood Famine
Liquidity	Cash Cash-flow Curr. Assets Curr.Liability Intrst Cover	**Business Disruption**	Int. Factors Ext. Factors Acts of God Infrstructure Accidents	**Infra-structure Service Failure**	Transport Power Water Drainage Telecoms	**Policy Failure Event**	Banking crisis Financial crisis Cap. Mkt. crisis Fiscal crisis Labour crisis
Interest Rate	Domestic Foreign Long-Term Short-Term			**Environ-mental Factors**	Air Pollution Water Polluti Soil Erosion Land Rehab. Acid Rain Oil spills Gas leaks Radiation Mine leakage	**Global Event Impact**	War elsewhere September 11th Oil Price Shock Global Cap. Mkt. Dollar Crisis
Currency	Volatility Convertibility Remittance 3rd Currency			**Compe-tition**	Foreign Domestic New entrant Dropout	**Civil Society Pressures**	Boycotts Sanctions Threats to Property Threats to People

For run-of-the-mill FDI in the type of manufacturing that LDCs are likely to attract, or for tourism investments such as hotels, risks are assessed by the investor against established investment regimes and local country laws, standards and conditions before a decision is made on whether to proceed. Any negotiations with governments are usually focused on terms of entry and the availability of incentives. For more complex projects (e.g. mining or hydrocarbons and even more so for FDI in privatisations and for private FDI in infrastructure) the extent of exposure to each risk is determined by detailed negotiations that foreign investors have to hold with governments case-by-case.

Recent experience suggests that infrastructure projects raise the most complexities in risk identification, risk assessment, risk-sharing negotiations and arrangements, and in risk exposure management. These projects also pose the most significant challenges for official and private risk insurers, particularly those specialising in covering non-commercial risk.

5.2 Commercial Risks and their Coverage

Commercial risks are the core of every business proposition. Managing and profiting from taking such risks is the key skill that firms/sponsors bring to an investment. Commercial risks include financial, operating and business risks (Figure 5.1). In theory, the precept is that commercial risks should be borne entirely by investing firms in a typical free market environment. Covering commercial risks raises the spectre of moral hazard; i.e. the possibility that a firm will not exert due diligence and best efforts in performing as well as it can simply because its risks are covered, thus perverting or diluting its incentive to succeed. Countries attempting to attract FDI, and international interlocutors helping them to do so, should therefore leave the foreign investor to accept the burden of as much of the commercial risk involved in a project as possible. In practice, however, especially when it comes to FDI in LDCs, the reality can be different.

The country and business environment in LDCs compromises the ability of investors to manage commercial risks as they normally might in a typical developed country environment. The costs of managing these risks day-to-day are seen by foreign investors to be higher than in their home countries, because of: inadequate administrative systems; market supporting institutions; human and social capital constraints; and deficiencies in physical infrastructure. Foreign firms in LDCs might be expected to cover risks (and sub-risks) classified as *financial* and *operational*. But they may not be willing to cover *business* risks (or, more accurately, 'business environment' risks). Most such risks would not normally arise in developed countries, or in more industrially advanced developing countries, except for policy risks, regulatory risks and environmental risks that arise with investments in natural resources and infrastructure.

Risk Assessment & Allocation: The severity of each risk shown in Figure 5.1 needs to be carefully assessed in each situation. Perspectives will differ depending on which party

is assessing the risk involved. Project sponsors investing in LDCs may be concerned mainly about business and non-commercial risks. Portfolio investors, creditors, guarantors and governments may be more concerned about operational and financial risks being taken by the project sponsor (the direct investor) relative to its financial and management capability and operational track record. Sponsors and governments may be concerned about the financial risk bearing capacity of creditors and their ability to stay the course should the project run into difficulties during construction.

For the same project, the risks taken by direct investors, portfolio investors, long-term creditors, contractors and suppliers are different, especially under project financing (rather than corporate financing) arrangements. Risks cannot always be objectively assessed and quantified. Some risks have a subjective quality. What represents unacceptable risk to one investor may not be seen as a significant risk by another depending on the specialisation, experience and knowledge of each. The first step to be taken in attempting to mitigate risks is to identify which party involved in a project is best placed to take on a particular type of risk. Alternatively, risks may be assigned to parties whose actions influence the probability of a particular risk materialising; e.g. the project sponsor when it comes to commercial risk, or the government when it comes to policy or regulatory risk.

Normally, project sponsors would be expected to take on the full burden of commercial risks. Governments (backstopped by bilateral and multilateral agencies) should assume partially or fully the risks that are influenced by themselves, i.e. policy, regulatory and country risks. Risks concerning events that neither governments nor project sponsors can control need to be covered by insurance from private or official agencies depending on the premium for such coverage relative to the project's vulnerability to such events. Once the overall pattern of risk sharing can be identified and agreed upon, each risk should be allocated, priced and mitigated under contractually binding arrangements. In an optimal financial structure for a project or a firm, risks are not extinguished; they are priced and assigned to the parties best able to manage them. Risks that cannot be allocated, or laid off for an appropriate premium in insurance markets, might still be managed through the selection of tailored credit enhancement and careful project management and monitoring.

Risk Variation during the Investment Cycle: Commercial risk exposure can be different in magnitude and nature during different phases in the project investment cycle. Risks in the project development (development risk) and project construction phases (construction risk) are higher than, and different from, risks in the project operations phases.

Project Development Risks are usually exceptionally high. In this phase, the sponsor is involved with assessing the project's scope and obtaining the necessary regulatory and concession approvals from the government before attempting to secure a financing package. In LDCs, project development risks can be exacerbated by unclear, arbitrary government procedures causing long delays. Many sound projects in LDCs have been abandoned at this stage because project sponsors were unwilling to wait indefinitely or

to make solicited side-payments to move the project ahead. At the development stage only sponsors' equity capital is used to propel the project forward as it is unknown whether it will actually proceed. In some LDCs it is not unusual for governments, supported by aid donors, to participate with capable international firms in sharing the development risk of projects considered to be of national importance, usually in the mining or hydrocarbon sectors.

Project Construction Risks are lower than project development risks (Figure 5.2) but they are still high and weighted toward financial risks, business risks and risks of disruption. Risks during construction can vary depending on the type of project. For medium-sized manufacturing projects in LDCs, plant construction periods vary between 9-18 months. Concerns are ever present in the minds of foreign investors whether, during the project construction stage, other (non-financial) risks may also materialise (e.g. policy risks and country or event risks) that might change the outlook for the project. Construction risks assume a different order of magnitude in the case of mining or infrastructure projects that are long gestating, i.e. that take several years to construct before they can be put into operation. Projects in LDCs fail to reach completion for a number of reasons ranging from: delays in securing land for the site, clearing it and servicing it with the essential utilities; technical flaws in construction and plant design; poor project management; delays in securing financing to cover cost overruns; changes in government policies; or the sudden appearance of a new technology.

Large volumes of finance are absorbed during project construction, typically a mixture of equity, quasi-equity (either preferred equity or convertible debt), senior debt, subordinated debt and guarantees. Construction delays increase the capital costs of projects. Incomplete projects do not generate the cash flows needed to support debt service obligations. With interest accruals being capitalised during the construction period, delays in project completion are expensive for capital-intensive projects. They may change the future financial parameters and prospects for the project if the additional investment cost incurred cannot be recovered over time by an escalation of tariffs and revenues or by a reduction in operating costs. The capital cost overrun risk inevitably cascades into and influences the other risks enumerated under the 'financial risks' category in Figure 5.1.

Construction Risk Coverage: Project construction risks are covered by performance clauses and performance bonds posted by contractors under turnkey fixed-price, certain-date construction contracts with built in provisions for penalties for late completion (in the form of liquidated damages) and bonuses for better than expected performance. Project sponsors (and their contractors) take out business start-up and other kinds of standard insurance from commercial sources to cover themselves during the construction phase. These include a construction contingency in the total cost of the project with an allowance for excess capacity to cover the risk of equipment underperformance that may prevent the project from reaching the planned capacity.

Project sponsors and contractors may also take out non-commercial risk insurance at this time if the country they are working in is considered to be high-risk, especially by

Figure 5.2 Risks during Project Development, Construction and Completion

Phase	Type of Risk	Risk Mitigation Measure
Project Development		
	- Feasibility Study demonstrates unviability - Unsuccessful Bid for Project - Planning Consents Denied - EIA shows high environmental risk - Environmental Consent Denied - Legislative Complications	- Public Financing of Full or Partial Cost - Public Financing to Defray Bid Costs - Possible Insurance Cover for this Risk - Public Environment Risk Cover (from home and or host country) - Partial Defraying of EIA Expenses - Partial Defraying of Investor Costs
Project Construction		
	- Contractor Default Construction Delays and Construction Cost Overruns - Force Majeure Delays or Overruns - Uninsured Casualty Losses - Non-Completion of Associated Infrastructure or Facilities by Host Govt. - Changed Environmental Regulations - Dramatic Shift in Market Conditions - Interest Rate Risk - Currency Risk - Policy Risk - Regulatory Risk	- Fixed Price Construction Contracts & Contractor Performance Bonds - Private Insurance for Event Risks - Liquidated Damages from Contractor - Liquidated Damages from Host Govt. - Standby Credits & Loan Guarantees - Environmental Risk Cover - Host Govt. - Long-Term Sales/Supply Contracts - Derivatives; Standbys; Guarantees - Derivatives; Host Govt. Guarantees - Partial Risk or Partial Credit Guarantees - Appeal and Arbitration
Physical/Financial Completion		
	- Equipment Delivery Delays - Design and Equipment Defects - Inexperienced or Untrained Staff - Inferior Production Inputs - Technology Risk - Market Preference Change - Market Price Change	- Liquidated Damages from Supplier - Performance Guarantees, Warranties - Performance Testing & Training - Liquidated Damages from Input Suppliers - Liquidated Damages - Technology Provider - Adapt production to meet market need - Adapt Costs to Meet New Price Parameters

equity investors and creditors. That is usually the case where LDCs are concerned. Because creditors cannot control the construction process, they do not assume project completion risk (physical or financial). That is usually the responsibility of the project company, its sponsors, contractors, equipment suppliers and commercial insurers. Carefully designed project management arrangements, including budget contingencies and escalations that anticipate cost overruns, are crucial in avoiding serious delays.

Physical & Financial Completion: Projects must reach *physical* and *financial completion* before commercial start-up. Physical completion is reached when the project has been certified as technically complete (i.e. it meets all the agreed technical design specifications) and can sustain production at a pre-specified capacity for a specified period of time (usually one to three months). Financial completion is reached when the completed plant has proven its ability to: (a) produce below a specified unit cost for a pre-specified period of time, usually six months; (b) maintain an adequate level of working capital through internal cash generation and normal bank credit lines; (c) achieve a satisfactory current ratio, i.e. the ratio of current assets to current liabilities; and (d) achieve minimum targeted debt service coverage and debt-to-equity ratios for a period of an operating year. To ensure that construction cost overruns do not jeopardise physical completion, most creditors and minority (portfolio) investors insist on *standby financing commitments* from sponsors (direct investors) as part of the financial package negotiated for the project. 'Project completion agreements' for this purpose incorporate standby facilities to cover cost overruns in the form of subordinated loans or additional equity put in by the project sponsor and other involved financiers.

Projects may reach physical completion but elude financial completion because of unforeseen operating problems such as technical equipment failures on production lines, supplier defaults, disruption of inventory flows, sudden imposition of import restrictions on essential inputs, or much weaker market demand than anticipated. When financial completion is delayed, profitability is adversely affected and debt-service difficulties ensue. It is usual for 'financial completion agreements' to be included in project financing packages on the insistence of creditors. These specify, contractually, the minimum financial performance expectations against which creditors and minority investors would invest or release their funds to finance operations. Under such agreements, project sponsors must provide subordinated loans or additional equity to fund the project's operation until financial completion is achieved. These agreements enable creditors to reduce the default risk on their loans.

In many projects in LDCs, financial completion has not been achieved until several years after physical completion, during which time the sponsors have either borne the additional financing burden or abandoned the project. Financial completion agreements reduce risks for creditors but impose heavy contingent financial burdens on project sponsors. That may tilt the decision of sponsors not to proceed with projects in difficult environments, e.g. LDCs. The risks perceived by sponsors and creditors, and their bargaining positions vis-à-vis each other, eventually determine how stringent the financial performance criteria are for completion to be achieved. Financial completion agreements were invariably resorted to before the early 1990s. Creditors were more

relaxed about imposing such conditions in the boom years of 1993–1997 when creditor competition to get involved in financing projects in emerging markets was intense. But after the Asian financial crisis (1997–98) and subsequent financial crises in a number of other developing countries, as well as the precarious debt situation of most LDCs, such agreements have become *de rigeur* again.

In the post-completion operating stage the level of commercial risk is generally lower with the outlook for the project being less uncertain. At that point more secure and lower cost financial structures can be put in place with senior bank debt being replaced by bonds or notes issued in the local capital market. This option used to be ruled out in LDCs until an innovative step taken by Sida for a mobile telecommunications project (MTN) in Uganda suggested a way in which this constraint might be overcome. The paragraphs below deal briefly with the main categories of commercial risk.

5.2.1 Financial Risks involved with FDI in LDCs

The principal financial risks that foreign investors in LDCs confront are largely within their control unless they are involved in joint ventures with local private partners or SOEs, or in privatisations. In some instances, local partners are not in a position to fund their share of equity and maintain a sound balance sheet structure. In those instances the foreign firm has the choice of increasing its own equity exposure or bringing in a third party to bridge the difference. Often, the more expedient route is taken of increasing the debt/equity ratio in the balance sheet and passing on a greater share of the risk to creditors. When that happens the restructuring of previous debt into a consolidated new debt structure, involving an extension of maturities and proper sequencing of principal repayments can relieve undue pressures on cash flow and reduce debt service risks. The ability of investors to take this route depends on the willingness of their creditors to increase their own risk exposure on a covered or uncovered basis. The main financial risks that arise with project investments can broadly be classified as: (a) Balance Sheet/Debt Structure Risks; (b) Income Statement Risks; (c) Capital Adequacy Risks; (d) Credit Risks; (e) Liquidity Risks; (f) Interest Rate Risks; and (g) Currency and Exchange Rate Risks.

Balance Sheet Risks reflect the soundness of the capital structure of the firm undertaking an investment. They are reflected in the following types of indicators: debt/equity ratios; liquidity ratios; asset-liability matches or mismatches in quality, duration, currency and maturity; and the ratio of unencumbered to total capital. Balance sheet risks arise when the build-up of provisions and reserves is inadequate to meet contingencies (provisions and reserves are particularly crucial for FDI in the financial sector) or when eventual write-downs in asset values become necessary. Although this is less the case for FDI in LDCs, balance sheet risks may arise with the off-balance sheet exposure that firms might take in traded derivatives markets to (partially or fully) hedge the interest, currency and credit risks that their balance sheet might be exposed to.

Income-Statement Risks arise because of uncertainties associated with particular revenue streams and with particular cost obligations. *Revenue risks* arise when projected

levels of market or sales revenues based on demand and price expectations do not materialise. Manufacturing or tourism projects can be exposed to revenue risks arising from market demand and price risks; especially when there is a change in consumer preferences caused by customer dissatisfaction with the product, or with after-sales service, or with the appearance of new products, services or technologies in the market. These risks can be heightened when imports are liberalised or competing firms enter domestic/export markets to which the project is selling. The ability of firms to respond to competitive challenges determines how well such risks can be absorbed. In LDCs, firms face a disadvantage (because of the various impediments discussed) in the flexibility with which they can respond to such challenges by changing their staffing levels and mix, production technologies, product mixes and rationalising costs. Natural resource projects are particularly exposed to commodity price risk that can be hedged on international commodity markets through derivatives (futures, options and swaps). But with infrastructure investments, revenue risks are usually associated more with regulatory and policy risk based on whether governments keep their commitments on tariff liberalisation or on covering any revenue shortfalls arising from their failure to do so with compensating payments and subsidies.

Firms are also vulnerable to sudden changes in costs (or the availability) of raw material inputs, intermediate goods, spare parts, replacement costs of machinery, labour, social overheads and indirect cost variations caused by changes in indirect taxation. Some of these costs can be hedged through inventories and forward purchase contracts for inputs. But many *cost risks* cannot be hedged and there are market limits to how far they can be passed on to ultimate consumers. In most instances cost risks have to be absorbed by the firm through greater production efficiencies and increased productivity.

A major income statement risk is that of not maintaining adequate debt service cover in terms of the extent to which regular revenues cover regular interest obligations. Also, when firms indulge in off-balance sheet derivative transactions to hedge their risk (or sometimes to over-hedge and take speculative risk) the movement in price on outstanding long or short positions on the contract may need to be adjusted against that month's or quarter's income thus introducing another element of risk.

Creditors may require income statement risk to be managed by project sponsors or project firms through return-on-asset or return-on-equity requirements that may be contractually binding. In infrastructure projects whose revenue streams can be affected by government actions, project sponsors invariably require governments to bind themselves contractually to guaranteeing enough revenue (either through tariff liberalisation or through direct payments) to ensure that pre-specified minimum rate-of-return targets can be met.

Capital Adequacy Risk usually reflects the risks involved with maintaining sound, debt-to-equity structures and allowing for sufficient debt service cover. When creditors take long-term risk exposure in project or firms, they require binding commitments from project sponsors that – in the event of an increase in debt levels to finance

unforeseen cost overruns, expansions or acquisitions – sufficient equity will be made available to maintain a pre-agreed debt/equity ratio. A capital adequacy risk may arise even when additional debt is not assumed but a write-down has to be made in assets, reserves or equity because of accumulated losses, or because of a sudden decline in the valuation of assets (e.g. land, ore reserves, property assets or machinery) caused either by price effects or because assets have been destroyed as a result of accidents or of conflict. Capital adequacy risk can be high during the project development and project construction phases. It moderates when projects come into operation. It can increase again when firms decide to expand capacity or to acquire other firms until those additional costs have been absorbed and accommodated through increased revenues.

Credit Risks are incurred because the income of a firm depends on the creditworthiness of its customers. These risks arise because few businesses (especially those involving FDI) function on a cash basis. All firms extend credit to one another through advance payments or credit to/from suppliers, customers, service providers, government agencies at various levels, or when they hold deposits or cash balances in financial institutions. In LDCs, credit risks can be high in each such instance, i.e. whether suppliers, customers, governments or service providers are involved. In such countries the finances of all these parties may be in a precarious position, not least those of the government. Also, credit risks arise in derivative contracts involving counter-parties that must deliver against their obligations on such contracts either in physical form or settle the difference in financial terms.

To the extent possible, project and firms that are non-financial in nature tend to pass credit risks on to parties that are best equipped to take them, i.e. local or foreign banks and non-bank financial institutions. They do this through facilities such as invoice or bill discounting, forfaiting, securitisation and advance discounted sales of future cash flows. But in LDCs, such options are either unavailable – because local banks do not offer such facilities – or because such facilities are overpriced and too costly to avail of. For FDI in the financial services sectors of LDCs, credit risk assumes paramount importance as the most critical risk that foreign investors take.

Even when credit risk is hedged with non-financial collateral (e.g. land, property, inventories, raw material stocks, etc.), experience in LDCs suggests that collateral recovery in the event of default is a long, drawn out, painful and expensive process. The costs of litigation to recover collateral may be greater than the amount at stake. That is when credit risk is compounded by legal or systemic risk. Also, when foreign firms hold large cash balances with local financial institutions in LDCs (because a foreign alternative is not available or is unable to hold large balances against its capital structure) they are taking a substantial credit risk that can rarely be hedged. Inability to cover credit risk sufficiently is one of the major structural weaknesses that foreign investors face in LDCs. It is a risk that is not sufficiently addressed by extant risk mitigation instruments and mechanisms.

Liquidity or Cash-flow Risk is a particular composite risk that combines elements of credit risk, income-statement risk and balance-sheet risk. It is influenced by cash flow

as well as by holdings of current assets over current liabilities and the quality and reliability of each. The current assets held by firms in LDCs (usually receivables from customers and governments) can suddenly erode if customers go bankrupt and are put in liquidation without warning. Receivables from government agencies (especially from sub-sovereign levels of government) in LDCs can become worthless or become non-current (i.e. not receivable within a year) when such agencies and sub-sovereign levels of government (especially in over-indebted HIPCs) have exceeded their cash budget limits resulting in their cheques being bounced by the central bank or the treasury. Sometimes receivables from a sovereign government can be delayed indefinitely if that government is undertaking an adjustment programme and an external interlocutor (e.g. the IMF or the World Bank) imposes an immediate constraint that results in a slowdown or stoppage of certain payments. In LDCs exposure to such risks needs to be measured and controlled on a daily basis.

Interest Rate Risk arises when projects (or firms) avail of long-term credit at variable (floating) interest rates in a rising rate regime, or conversely at high fixed interest rates in a declining rate regime. In the latter case, the firm is incurring an opportunity cost risk (i.e. the firm is paying more interest than it needs to thus putting it at a competitive disadvantage) rather than a cash flow risk. Typically, long-term facilities provided by commercial and official lenders to foreign investors for financing projects in developing countries are usually denominated in one of the three global currencies (USD, EUR or JPY with over two-thirds being in USD) and have a maturity of 5–10 years. Long and short-term interest rates for each of these currencies can vary widely in that period of time. When interest risk is not adequately hedged against the possibility of interest payments (for a firm or project) increasing substantially (and sometimes quite suddenly) beyond those assumed at the time that financial projections were made to establish project viability, a firm's prospects can be severely affected with cash flow being squeezed even when the firm is over-performing in generating sales revenues. For that reason, most foreign investors now take recourse to a variety of measures to mitigate interest rate risk. These include:

- *Negotiating Fixed Rate Loans*: Fixing the rate of a loan removes a significant element of uncertainty in financing costs. Commercial banks are generally unwilling to lend long-term at fixed interest rates except when convinced that the currency they are lending is at the top of its interest rate cycle. Borrowers prefer to avoid fixing their rates at that time. But, fixing the rate removes a large amount of risk leaving open the possibility that the loan can be later refinanced at a lower rate provided the cost of doing so is not prohibitive.
- *Interest Rate Conversions*: At the top of interest rate cycles, a borrowing firm's preference would be to borrow at a floating rate to benefit from future declines in rates. Many long-term creditors offer their borrowers a rate conversion option in such instances. This enables them to convert floating rates into fixed rates at a time when interest rates are at or near the bottom of the cycle. Usually this is done through an interest rate swap with the borrower's new fixed rate being equal to the market's swap rate (i.e. the fixed rate equivalent of LIBOR) plus the credit risk spread and a small conversion fee.
- *Interest Rate Swaps, Futures and Options*: A conversion option usually permits a one-time conversion in the life of a loan. Swaps permit borrowers greater flexibility in swapping

from floating-to-fixed and vice versa more frequently in the life of a loan to maximise interest cost savings, constrained only by the additional swap transaction costs involved. Interest rate swaps have become a standard risk management instrument used by firms on a regular basis in developed countries and financial markets. So have interest rate futures and options that permit borrowers and lenders to hedge against rate movements in directions that affect their net cash flows adversely. But most projects being undertaken in developing countries, and especially in LDCs, do not have the requisite credit standing to be accepted as a creditworthy counter-party in international swap markets. Nor are interest rate futures and options traded in these markets. In such instances the intermediation of multilateral or bilateral official agencies with a strong credit rating acceptable to markets (e.g. the World Bank, IFC, a regional bank, or a bilateral export credit or investment agency) can help to bridge the divide between a foreign firm in an LDC and the international swap market by becoming the substitute counter-party for a fee.

Currency Risks: These risks arise whenever foreign currency funds are used to finance the equity or debt components of projects. Typically they involve three distinct risks: value, convertibility and transfer (repatriation risk). Although currency risks arise when foreign funds are used to finance projects that earn revenues in local or other currencies, they are particularly high in developing countries, especially in LDCs where currencies have proven to be exceptionally volatile over the last two decades. Whereas in the developing world as a whole, local currency values on average have declined by between 20–40% against the US dollar since 1985, most LDC currencies (especially in Africa) have lost up to 99.99% of their original values measured the same way.

Currency value risk in LDCs reflects their precarious financial and economic circumstances, with large, fluctuating imbalances in their internal and external accounts. Such risks are heightened by the over-indebtedness, aid dependency and vulnerability to commodity price fluctuations that characterise most LDCs. Economic decision-making in these countries is rarely in the hands of their governments. It is determined more by their international interlocutors whose judgements and actions (especially in the recent Asian crisis) have not inspired universal confidence. IFIs have often exacerbated currency risk rather than ameliorating it. These factors have created a perception that the currency risk for foreign investors in LDCs is unmanageably high if projects are generating revenues in local currency. That is the case with most infrastructure projects, but not with mining or tourism projects. The risk would be dampened if a greater proportion of project investment could be financed by local currency. But that would defeat the raison d'etre for FDI. Nor is the local currency financing option always a feasible one. However, as the case study on the MTN telecommunications project in Uganda suggests, with imaginative credit enhancements, it may be more feasible than is frequently assumed.

Generally, however, the shortage of long-term local currency funds intermediated by weak capital and banking markets leaves projects in LDCs with no recourse but to be financed by foreign currency funds, guaranteed by assurances of some maintenance-of-value (in infrastructure projects through tariff escalation) and convertibility. Like interest rate risk, currency risk can be mitigated by:

- *Maximising Local Currency Content in Project Financing Packages*: All projects involve some local costs. Currency value risk can be reduced if local currency can cover local costs and foreign currency is reserved for imports. That option is feasible in middle-income developing countries and some low-income countries (like India) with sophisticated capital markets and a large pool of domestic savings that can be intermediated relatively efficiently. It is not always feasible in LDCs although this may be more possible than earlier thought with appropriate credit enhancement.
- *Linking Project Output Prices with Exchange Rates*: In the 1990s, indexing output prices to the exchange rate (between the local currency and the US dollar) became a common option to reduce currency value risk. But it does not reduce convertibility or repatriation risk. Price indexing is most frequently used for infrastructure projects where revenues are derived in local currencies while a significant proportion of costs are in foreign currency, and project gestation and life cycles extend to 5–7 and 30–40 years, respectively. But such arrangements are vulnerable to being dishonoured when sudden, large exchange rate devaluations occur in a financial crisis. In such cases, governments are reluctant to take the political risks of passing large immediate local cost increases on to consumers of utility services in one go especially when other belt-tightening measures are being taken.
- *Currency Derivatives*: In developed and some developing country markets currency risk (like interest rate risk) is managed through the use of market-traded currency derivatives (options, futures, swaps and forward contracts). But that option is not available in LDCs where market traded derivative instruments do not exist. Tailored swaps with specific counter-parties (e.g. commercial banks or central banks) can still be arranged although such arrangements are rare. Occasionally project sponsors may try to reduce currency risk marginally by employing a swap with a third currency that is obtainable at a stable or declining exchange rate relative to the risk currency. In some projects financed by multilateral agencies (such as IFC), special B-loans have been arranged to help manage interest rate risk and partial currency risk by arranging for contractors to be paid in their home currencies (e.g. JPY or EUR) even though the project is being financed in USD. These facilities can assist project sponsors to manage interest and currency risk between the USD and the JPY or EUR thus reducing risk exposure between the local currency and the USD.
- *Contingency Support*: In many developing countries (especially LDCs) the availability of foreign exchange at a future date (e.g. for the repatriation of capital, profits or dividends) may not be assured. Foreign investors or joint-venture partners in some projects may be in a position (especially if they are off-taking a part of the project's output) to provide a contingency support guarantee to make foreign currency available to the project. There have been instances where such undertakings have been provided by foreign investors in order to ensure that loans to foreign creditors are to be serviced.
- *Escrow Accounts*: When projects financed in developing countries earn hard currencies from exported output (e.g. mining, oil and gas companies, etc.), part of the export earnings can be set aside and deposited in an escrow account offshore. Escrow accounts have often been set up under project financing arrangements to ensure that sufficient funds are built up periodically (every quarter or semester) to meet the project's foreign currency obligations for meeting debt service payments and settling supplier invoices. Mining, oil, gas and tourism projects in LDCs have used this device most frequently. Such arrangements enable firms to bill their customers in foreign currency and deposit the receipts in an escrow account to ensure both maintenance of value and to avoid repatriation difficulties.
- *Government Guarantees for Forex Availability*: On rare occasions, governments have

guaranteed foreign exchange availability for FDI projects to cover currency risks. Such guarantees are frowned upon by the IMF and World Bank and violate the terms of the agreements (under various types of structural and sectoral adjustment loans and standby facilities) that such governments have with these institutions. The problem with such guarantees is that, *in extremis*, when a country is in a financial crisis and its external accounts are being monitored by an IFI, there is a high risk of governments not being able to meet their obligations. Resorting to litigation to collect damages on such default can be time-consuming and involve more expense than it is worth.

Currency risk is a major stumbling block to FDI in LDCs. It impedes the rate at which FDI – especially in infrastructure projects – will grow in these countries. Donors cannot afford to provide foreign investors with cover for such risks on a project-by-project basis. The cumulative contingent liability would be unmanageable. **The long-term solution (particularly for LDCs in Africa) is to extend Euro-support arrangements such as those underpinning local currency issue in the CFA franc zone. Under the Cotonou framework, similar support might be provided for currency areas like the Rand zone in Southern Africa and the resurrection of a common monetary area in East Africa.** It would go a long way toward reducing currency risk and permitting larger and more efficient regional financial markets to develop in derivative instruments that could be used to manage such risks more effectively than contrived, project-specific palliatives.

Fundamental structural arrangements that underpin and stabilise monetary systems in groups of contiguous LDCs, and help to regionalise presently fragmented national financial markets, could be funded by pooling a proportion (about 20–25%) of EU donor aid budgets and allocating them annually for this purpose. That might do more to achieve meaningful development in terms of reviving investment and growth in these countries than current patterns of aid deployment. These reflect more the preferences/priorities of donors, rather than addressing genuine long-term developmental needs of recipients. Currency stabilisation arrangements would prove to be more effective in inducing larger amounts of FDI into LDCs – despite all the barriers that exist – than expedient patchwork arrangements that attempt to mitigate particular risks on a project-by-project basis.

The more important by-product of extending monetary arrangements across African LDCs would be to achieve a measure of monetary stability that would retain domestic savings by reducing capital flight and make larger pools of local currency available for intermediation into project financing. That would change the FDI outlook for these LDCs dramatically. Similarly, LDCs in South Asia and East Asia might reduce currency risk for foreign investors considerably by entering into aid-supported common monetary arrangements with their larger neighbours (e.g. India in South Asia, Thailand in the case of Myanmar and Indo-China, and Australia in the case of LDCs in the Pacific).

Although that is a radical long-term proposal for risk mitigation to encourage FDI in LDCs, the necessity for such an initiative makes it imperative to propose it nonetheless, and put a marker down for its development as an idea that should be explored immediately and implemented by no later than 2007.

5.2.2 Operational Risks confronting FDI in LDCs

Most projects involving FDI in LDCs are long-term enterprises with a life span of at least ten years, usually more. Most enterprises set up by FDI in any country are intended to be as permanent as circumstances permit, allowing for evolution to accommodate circumstantial changes in the host country and global environments. Over that time significant changes in all operating parameters (and in the associated risks) are likely to occur. Changes will take place in the availability, sourcing and cost of inputs, in the technology as well as the technical performance and management of the project, and in the market for the project's output – which may undergo substantial changes several times.

Where large mining or infrastructure projects are concerned, sponsors attempt to minimise long-term operating risks by pre-arranging long-term supply or sale contracts at negotiated long-term prices for key production inputs to limit the impact of price volatility on their production costs. Equipment suppliers may be asked for technical performance guarantees and extended maintenance contracts. Input suppliers will be asked to assure quality and consistency of the inputs provided in accordance with the specifications agreed. The project's operation and maintenance may be sub-contracted to a specialist management company (under a management contract) that has the expertise with that type of plant or with operating in difficult country environments. Penalty payments for sub-standard performance and bonuses for extraordinary performance may be built into such contracts.

When projects have been completed and commercial operations have been launched, foreign investors face operational risks and sub-risks of the kind depicted in Figure 5.1. They are the types of risk that can only be handled by the project sponsor (direct investor). Comprehensive business insurance cover is usually available to protect assets from theft or damage and to cover firms for accidents and third party liabilities as well as for fraud.

The main operational risks for foreign investors in LDCs are: (a) Business Strategy and Market Risks; (b) Management & Operating Systems Risk; (c) Technology Risk; (d) Fraud & Corruption Risks; and (e) Business Disruption Risk.

Business Strategy & Market Risks: Business strategy risk devolves entirely on to the project sponsor. Essentially it highlights whether the sponsor has been astute, diligent and correct in assessing:

- The *Market* (in terms of domestic and export demand and in determining the price at which a product or service will be taken up) for the project's output and the market share that the project's output will command
- The combination of *Resources* – human, technical, knowledge, financial – needed to ensure project completion, viability and business success
- The *Technology* to be used in producing the product or service and the flexibility that technology choice allows for: upgrading the technology periodically in keeping with competitive developments, changing the product and service mix rapidly in response to changes in market demand, improving quality continuously, changing the staffing mix as necessary in order to respond to cost pressures and to keep improving productivity

- The *External Support* that the project requires in the home and host country in order to maximise prospects for success, i.e. in terms of supplier support, financial services support, information technology and communications support, consulting services support, auditing and accounting support, and legal services support

Though these risks are qualitatively identifiable they are difficult to measure quantitatively or to cover, other than through best efforts and due diligence. In managing these risks much depends on the experience of the project sponsor, knowledge of local circumstances in the host country, the ability to attract the best management and staff (expatriate and local) to ensure project success, and the ability to put together the kind of financing package that is sufficiently robust and resilient to weather any foreseeable difficulties. How well such risks are managed is eventually reflected in outcomes that indicate whether the choices made in all the key areas of operational management (production, marketing, finance, human resources, IT, general administration and legal) have been the right ones.

The most significant operating risk that FDI in LDCs faces, because it is largely outside the control of the firm, is *market price risk*. Changes in demand for project output, leading to significant variations from projected sales and revenues, are probably the leading cause of revenue, profitability and debt-service problems faced by FDI projects in LDCs. The quality of market analysis (especially of price, revenue and operating margin forecasts) when a project's feasibility/viability is being assessed is crucial in influencing the eventual profitability of projects in LDCs. Such analysis is easier when project output is for export markets in which the sponsor has experience and expertise. It is more difficult for output aimed at domestic or regional markets. Experience across a wide range of projects in developing countries and LDCs indicates clearly that appraisals of market demand in project feasibility studies are invariably overoptimistic. They overestimate demand for high quality output at a high price usually finding out later on that LDC markets are acutely price sensitive and not particularly quality conscious.

Market risk is difficult to hedge unless the project is producing for a single buyer or for a small group of buyers (in which a different set of risks arises in terms of undiversified sources of revenue and concentration risk). In such instances, the market risk (especially price risk) can be reduced by negotiating firm and binding long-term sales agreements (or purchase agreements in the case of suppliers where inputs are concerned) with creditworthy and reputable buyers – with prices, quality specifications, volumes and delivery expectations clearly specified.

In electricity and water infrastructure projects in LDCs, the buyer is often the government or a government agency with which purchase contracts have to be negotiated and agreed, not only to remove price risk but also to guarantee a minimum rate of return by permitting price escalation for number of reasons. In contrast, telecommunications projects now produce services that are more like consumer goods sold to a wide variety of customers although their price is subject to tighter regulatory control because of a supplier monopoly or oligopoly industry structure.

Mining projects, on the other hand, usually produce a single commodity product whose price varies widely. They are particularly vulnerable to demand and price risk which they need to hedge. That is true in reverse as well; projects that are heavily dependent on one major raw material input (e.g. crude oil) need to hedge against input price risk. The usual ways of mitigating market price risk include:

- *Off-take Agreements*: These oblige the purchaser or 'off-taker' to purchase all or part of the project's output. In some projects the off-taker may be the project sponsor as is usually the case with mining and petroleum projects. For utility services it may be the government. In others it may be an independent third party anxious to secure a reliable source of supply. Where exported off-take is concerned, agreements with reliable, creditworthy parties have the advantage of assuring access to foreign exchange. Off-take agreements vary considerably depending on the strategy of the project and the buyer. Some projects enter into off-take agreements at fixed price (to reduce price risk) or market price (to ensure market access) for only a sufficient proportion of output to ensure that debt-service obligations will always be met (reduce debt service risk). Others are tailored to reduce currency risk exposure or to reduce revenue risk.
- *Power Purchase Agreements (PPAs)*: For FDI in electricity generating projects it is usual to have an off-take agreement in the form of a PPA where the buyer is usually a government or a government agency. The PPA usually specifies the cost-plus formula for arriving at the power purchase price per kwh without necessarily specifying the price. These agreements focus on highlighting and removing the price risk for the producer on all the key variables affecting the power price. They assure the generator with an operating margin that is sufficient to meet a guaranteed return-on-equity target. Such agreements cover a variety of risks simultaneously and not just the price risk.
- *Tailored Call and Put Options for Output*: provide a way of managing, not avoiding, price risk. They are commonly used by mining and other commodity-producing firms. A put option gives a project company the option to sell its output at a fixed price to the option-writer on a pre-specified future date. This arrangement protects the cash flow of the project during the period covered by the put. A call option does the reverse; it permits a project company to buy its price-sensitive input at a fixed price on a fixed future date. Option agreements, however, can only be entered into by projects that have already reached a stable, steady-state level of output. Also, option expiry periods in product markets rarely exceed two years and are not applicable for longer-term hedging for price or market risk. Thus options are usually an additional tactical means of managing risk at the margin rather than offering a strategic long-term, risk-mitigating alternative.
- *Forward Sales and Purchase Contracts*: These provide yet another way of hedging price risk. Textile projects, for example, often enter into rolling forward purchase contracts for cotton to remove the price risk on their key raw material although the downside of such arrangements is the lost opportunity gain that arises when input prices fall. Similarly, projects that enter into fixed price forward sales contracts for their output remove the price risk but, at the same time, eliminate the prospect of windfall gains accruing if prices for their product rise dramatically during the duration of the contract.

Management Systems and Operations Control Risks: Project companies in commercial operations confront daily risks resulting from the prospect of breakdowns in their systems of management control over operations. Such systems include: human resource recruitment, management and training systems; financial control and internal

audit systems; information technology systems which have become a growing source of risk since the 1990s as firms of all kinds become more IT-intensive and IT-dependent; and, in many developing countries (especially those prone to civil or cross-border conflict) physical security systems for the protection of their physical and their human assets. In many LDCs the kidnapping of key expatriate executives has become a major business risk that has become increasingly expensive to insure against.

Apart from resorting to normal or specially tailored insurance arrangements with private insurance companies and reinsurance markets arranged by highly specialised brokers and agents, the main risk-mitigating options for covering such risks are investments in the best available people. Where IT systems are concerned, risk-mitigation requires firms to invest in fail-safe back-up systems on-site, off-site and on the worldwide web, as well as having comprehensive systems maintenance contracts with specialist firms covering maintenance of hardware and software. Some of these contracts now include penalties and damages for systems downtime caused by systems maintenance failure or by supplier default.

A particular disadvantage of operating in LDCs in the information age is the vulnerability of firms to IT systems failure caused not only by software deterioration and viruses but also by unreliable power and telecommunications systems with voltage, frequency and pulse fluctuations that damage hardware. The absence of a sufficient number of qualified local IT firms with the ability to service the systems maintenance needs of foreign and large domestic firms is becoming another major constraint to attracting FDI in LDCs. Where projects are large, foreign investors usually cover IT-systems risk with back-up contracts with their own home country technology suppliers. But such contracts become prohibitively costly when they include the costs of flying IT hardware and software specialists out from home or third country locations to LDCs in which FDI often involves projects that are new to the country with few local, qualified technical or managerial personnel available to run them. Project sponsors do not always have a sufficient number of in-house personnel. Nor are their own personnel willing to relocate and live in an LDC for even a limited period of time. In such circumstances management risk is covered by management agreements with specialist agency firms located in home countries or third countries experienced in operating such plants in LDC environments.

Technology & Plant Maintenance Risks: One feature of global investment since the 1990s has been the impact of increasingly rapid changes in a variety of technologies, resulting from continuous advances in electronic control systems and embedded chip technology. These changes are transforming manufacturing as well as many large-scale process and service technologies as well, resulting in continuous cost reduction and rapidly changing dynamics affecting the competitiveness of firms and countries. They are reducing product, plant and equipment life cycles rapidly, creating obsolescence much faster than before. They are forcing more rapid changes in production processes, production sequencing, combinations of labour and capital in manufacturing and assembly operations, and in product mixes. Accommodating and adapting to these

changes swiftly requires considerably greater flexibility on the part of firms and their supporting environment. Unfortunately, LDCs do not provide such environments and are therefore becoming less and less attractive as destinations for FDI in an increasing number of areas.

Rapid technological change is heightening technology risk in FDI projects, especially in LDCs. Although it is preferable in LDC environments to rely on robust, simple and proven technologies that are not too sophisticated for basic industrial environments, that choice is not always open to investors. Obsolete (second-hand) technologies can initially be less costly and perhaps even more suitable for LDC environments especially when production is intended for the domestic market. But the initial savings on capital costs are usually offset by higher operating and maintenance costs in the long run, especially if local technical capability does not exist to adapt, modify and maintain such plants.

Using second-hand technologies makes it difficult to deploy risk-management options such as technical performance agreements and operations and maintenance (O&M) contracts with original equipment suppliers. That leaves project sponsors to bear technology risk. To cover such risk, the application of new technologies in LDCs has to be accompanied by tight 'technology performance agreements' with equipment suppliers and plant constructors to ensure that the plant performs in accordance to specifications and reaches its planned capacity. These agreements can incorporate provisions for updating and upgrading plants to incorporate new technological developments as they emerge. It is usual to cover technology risks with: (a) performance bonds and guarantees from equipment suppliers linking operating performance to payment and (b) all-inclusive operations and maintenance (O&M) contracts with equipment suppliers. Project profitability and performance is frequently impaired – especially in LDCs where remedial options cannot be as easily resorted to as elsewhere, leaving plants vulnerable to long periods of downtime by non-performing equipment and by frequent breakdowns of critical machines or parts.

Properly constructed long-term O&M contracts with equipment suppliers are an essential form of risk cover because maintenance expenditures account for a significant proportion of total operating cost in capital-intensive projects using sophisticated equipment. Model O&M contracts not only aim at reducing the uncertainty surrounding future maintenance costs, they provide in-built incentives for equipment suppliers to improve the efficiency and reliability of the plant, which can improve profitability. Experience with a variety of investments in LDCs suggests that in instances where technology and maintenance risks have not been covered adequately and/or where imminent changes in technology have not been accurately anticipated, failure to provide for such eventualities has resulted in financial unviability and the eventual failure and shutdown of many foreign firms.

Fraud & Corruption: Due to the nature of LDC environments, investments in these countries have a higher than usual risk of being subject to petty fraud and corruption on a day-to-day basis. Insurance can be obtained to cover the risks of major fraud but

not those of corruption. Fraud occurs in dealings with local suppliers, distributors and agents, and in the processing of financial transactions through local (often government owned) financial institutions. It can take the form of petty theft of input inventories or of finished goods by employees. Such risks are usually managed through tight administrative controls and management oversight, real-time monitoring of inventory control systems, constant vigilance and improvement of internal plant security. In LDCs it is often the case that local agencies providing security (usually connected with local police forces, militias and paramilitary groups) are complicit in the breach of security and perpetration of fraud.

Corruption acts as an unpredictable capricious tax levied on the operations of foreign firms that cannot be transparently accounted for. It creates uncertainties in processes of obtaining essential clearances, certifications and approvals and increases a foreign firm's vulnerability to host country local pressures in ways that cannot be legally dealt with. Corruption imposes excessive costs in doing business that FDI tries to avoid.[86] It decreases the effective protection of a foreign investor's intangible assets and reduces the prospect of disputes between foreign and domestic partners, or between foreign firms and their domestic suppliers or customers being adjudicated in a fair, transparent and impartial manner. That reduces the attractiveness to many foreign firms of having a local partner or of extending linkages in local supply chains. The importance to a foreign firm of having its intangible assets protected increases with the degree of managerial and technological sophistication involved in a project and when projects involve particularly sensitive market linkages with either one very large buyer or a small group of buyers for the firm's output.

The costs/risks of corruption can be much higher than those implied by side-payments to facilitate administrative action. Foreign companies can lose large commercial opportunities in host countries if they fail to make the necessary payments. But, revelations that a prominent foreign company has paid bribes can subsequently undermine a foreign firm's reputation and position. Regrettably the costs/risks of corruption in LDCs have increased, not decreased, through the 1990s despite efforts at publicising the problem and making it an international issue to be tackled through treaties criminalizing the payment of bribes and policies being adopted by multilateral organisations penalising companies for corrupt practices. Corruption has also distorted privatisation programmes and patterns of FDI. It is unlikely that corruption can be eradicated until standards of living and compensation packages for public officials in developing countries approach those of the private sector. That is unlikely with structural adjustment programmes cutting public budgets and putting pressure on LDC governments to rationalise their civil services with fewer but better compensated officials. But LDC governments are finding it politically impossible to rationalise their civil services while being faced with tighter budget constraints.

At the end of the day there are no foolproof remedies, or risk-mitigation options, to

[86] Drabek and Payne, 1999.

reduce this area of risk and vulnerability once foreign firms have entered a LDC host environment. Foreign firms, contrary to all their instincts and notwithstanding the prospect of public embarrassment, eventually end up making unaccounted for side-payments to local political, military or organised crime leaders to ensure security for physical and human assets. But these arrangements are risky and can often be inverted to the detriment of such firms. In the long run the only remedy is 'good governance' but that commitment, though piously made, is still honoured more in the breach than in the keeping when it comes to ensuring local level security in LDCs.

Business Disruption Risk: Foreign investors in developing countries face particular risks of disruption of their operations. They are soft targets for disgruntled local elements with a grudge or political agenda of their own. Disruption risk may be associated with broader political risk. More often it is a function of: breakdowns in local labour and union relations; perceptions that foreign firms (or their expatriate personnel) have behaved in ways that denigrate or violate local culture, customs and religious or social strictures and norms; deliberate agitations by opportunistic opposition politicians to embarrass the government in power; the breakout of civil strife when foreign firms become a visible target; or of social tensions arising from austerity and adjustment programmes that are perceived to be imposed by external agencies, leading to large and sudden cost increases in the price of basic goods and utilities. There are few options available that mitigate such risks apart from good management and acute sensitivity to local influences. As with the side-payments that are made to assure security, foreign firms often find themselves obliged to make side-payments to avert the prospect of disruption. In such instances disruption risk becomes indistinguishable from security risk.

5.2.3 Business Risks faced by FDI in LDCs

The categorisation of business risks faced by foreign investors in LDCs represents a grey area between commercial and non-commercial risks. In developed and many developing countries these risks would be seen and absorbed as commercial risks by most firms. But, given the particularly difficult operating environment in LDCs, some of these risks assume non-commercial characteristics. This point is crucial. Private insurance companies and official risk insurance agencies make a clear distinction between 'commercial' and 'non-commercial' in providing risk coverage. In the case of foreign firms interested in investing in LDCs these business risks are actually 'business environment' risks. The fact that they cannot be covered through available risk insurance is a distinct deterrent to FDI. It is this grey area that perhaps provides the largest space for further innovation in the design of risk-mitigating products employing public finance interventions for risk coverage, and in the design of public-private delivery mechanisms.

The six principal categories of business risk confronted by foreign firms in LDCs include: (a) Legal & Legal System Risks; (b) Policy & Regulatory Risks; (c) Local Financial System Risks; (d) Local Business Support Risk; (e) Local Infrastructure Risk; and (f) Local Environmental Risk.

Legal and Legal System Risk: Dysfunctional laws and legal systems in LDCs are a major deterrent to FDI, although FDI in the extraction of natural resources has developed a body of experience and internal capability in dealing with that risk. Attempting to seek redress through litigation is an option that foreign firms must avoid in developing countries and especially in LDCs. These risks arise because of inadequate legislation that is internally inconsistent and contradictory. In many LDCs, the framework for company and commercial law (and for FDI) was established in colonial times and amended several times since, often with ill-considered presidential decrees and extra-parliamentary amendments. As part of structural adjustment programmes, commercial laws underwent sweeping overhaul in many LDCs during the 1980s and early 1990s. New legislation was hurriedly superimposed over earlier laws that were never properly amended. Moreover, parliamentary drafting in LDCs leaves much to be desired, raising questions about the meaning and interpretation of many laws that have been passed.

The legal problems created by command-and-control economies making the transition to imperfect market economies have not been adequately handled as legislation formerly amended to accommodate the dominance of parastatals in all sectors of the economy has been re-amended to accommodate the entry of competing private firms. Property rights and patent protection in these legal systems are not well defined nor are contracts enforceable within conscionable time frames. In such environments foreign firms that agree to license arrangements take large risks of licence conditions being violated. LDCs also suffer from fatigue in coping with the burden of legislative amendments they have to cope with following the Uruguay Round and successor agreements. In many countries the legislative framework has simply not been able to cope with the workload imposed.

Adding to the problem of inadequate laws is the institutional weakness, lack of independence (from government and political influence) and probity of the legal and judicial systems in many LDCs. In many of these countries legal systems and judiciaries are run as full employment agencies for poorly trained, unprofessional, inexperienced lawyers and judges (without sufficient commercial knowledge or training), rather than as institutional systems aimed at administering justice in a swift, impartial manner. Litigation takes interminably long because of inefficient court procedures with endless delays and appeals being permitted on questionable grounds. Even when judgements are delivered they are often unsound, prone to challenge and (if unchallenged) difficult to enforce. Thus when foreign firms resort to litigation and win their cases they still find it difficult to recover either the costs involved or the damages awarded. Collateral is virtually impossible to recover. In LDCs the period of time it takes to settle civil cases can vary from 10–25 years.

Policy and Regulatory Risk: Of all the risks faced by foreign firms in developing and least developed countries, policy and regulatory risks have attracted the most attention in the 1990s, especially with explosive growth in FDI propelled by infrastructure privatisation and the opening of these sectors to foreign investment. FDI in infrastructure has been highest in middle-income developing countries with LDCs lagging far

behind. But the next wave of FDI in LDCs is likely to be focused in these sectors making it essential for these risks to be understood and dealt with. The terms 'policy risk' and 'regulatory risk' are often used interchangeably although they mean different things. Policy risk refers to the risk that investors in developing countries run because of frequent (and often externally forced) changes in macroeconomic policies that affect the viability and profitability of all firms. These include changes in: tax policies; inflation, interest rate and domestic credit policies; trade and exchange rate policies; industrial policies in general or policies related to specific industries in particular; labour policies and social policies. Changes in any of these can have significant positive or negative implications for business firms.

The main concern raised by policy changes in developing (host) as opposed to developed (home) countries raise is the extent to which they increase uncertainties in planning and forecasting the performance of firms, especially of foreign firms that can locate in environments where such uncertainties are lower. The 1980s were a period in which foreign firms in developing countries (other than East Asia) faced a difficult time adjusting to sudden and sharp reversals in all the major macroeconomic policies simultaneously although these changes were for the long-run good. In the short run however, firms that had entered domestic markets to take advantage of the protection offered found that their rationale for investing in LDCs in the first place had been removed in one stroke.

Regulatory risk refers to a more specific risk that FDI in infrastructure is exposed to. It arises because the nature of infrastructure industries makes it necessary to limit the competitive entry of firms as producers and suppliers of these services. At the same time, given the public interest in assuring access to affordable public utilities, governments have to ensure that the firms privileged enough to be selected as service providers do not abuse their monopoly or oligopoly positions to indulge in anti-competitive practices and charge excess tariffs in order to support very large margins of operating profit. In these situations, governments invariably provide undertakings on regulatory and tariff covenants, and also enter into off-take contract agreements in order to satisfy foreign investors that their investment in these sectors will have an assured buyer and will be viable and earn assured returns. But in the face of strong political or social resistance to the increases in tariffs for public utility services that were previously heavily subsidised, governments often renege or back-pedal on keeping these commitments thus putting foreign investors in an untenable position and making their investments unprofitable and unviable.

Regulatory risks are a consequence of 'obsolescing bargains'[87] and 'imperfect contracts' arising from asymmetries and shifts in relative bargaining power between foreign investors and host countries before and after investments are made. Prior to a project investment being made the risks and uncertainties are perceived as being particularly

[87] Moran, 1998 op cit (pp. 10, 28).

high. Before making the investment, foreign firms have the bargaining power to demand terms that incorporate a high premium return in order to justify (to shareholders and creditors) taking those risks. Their demands result in a 'risk-return paradox' also evident in the behaviour of creditors. The higher the risk, the higher the premium (or spread) demanded, which only serves to increase the risk of the premium later being reversed.

To attract foreign investment, host governments agree to pay a high premium through assured rates of return, higher tariffs for outputs, etc. After the investment is made (a sunk cost in fixed assets that the foreign investor cannot remove without a substantial cost) and is operating successfully, bargaining power shifts to the host government. Confronted with domestic lobbies that perceive the foreign enterprise as making excess profits and 'exploiting the country', host governments develop a different perception of risks because they have not materialised. Governments come under political pressure to discontinue paying the agreed premium and exercise their bargaining power to do so.

This shift in bargaining power before and after investment makes the investor/host government relationship unstable with the possibility of swings in contractual outcomes. FDI in projects with certain characteristics are especially vulnerable to obsolescing bargains. Highly capital-intensive projects involving large sunk costs are natural hostages. Nor do projects using stable technology have the option of withholding upgrades to reinforce their post-investment bargaining position and prevent host governments from reversing themselves on agreed terms. Mining and petroleum projects producing undifferentiated commodities cannot use control over brand equity as a bargaining chip.

What the obsolescing bargain paradigm reveals is that a reversal in the post-investment position is not simply a matter of dishonesty, unfairness or disingenuous behaviour on the part of host governments in developing countries. There is a quasi-rational, game-theoretic dynamic that propels changes in perceptions of risk and the terms of investment before and after investments are made. The terms of obsolescing bargains are likely to be altered when governments in host countries change, especially if the incoming government is formed by a different political party that was previously in opposition and had made an issue of the overgenerous terms for FDI agreed to by the former government. Political as well as economic impulses therefore compromise the ability of signatories to a previous agreement to make credible long-term commitments resulting in 'imperfect contracts'.

They reflect inability on the part of host governments, no matter how sincere they may be when agreeing to the terms of a particular investment, to make promises that can be relied on beyond their term in office. This makes investors in natural resource and infrastructure projects 'structurally vulnerable' with regulatory risk not being simply a transient phenomenon reflecting underdevelopment. Between 1992-2002 policy and regulatory risks have materialised so frequently in so many developing countries that FDI is now deterred from continuing to invest in infrastructure sectors (especially

electricity and water) unless it can be covered for policy and regulatory risk in better ways than extant coverage has been able to provide.

Financial System Risk: The earlier discussion on credit risk alluded to foreign firms in LDCs being exposed to the risks (indirect and direct) of working with weak, inefficient local financial systems. These risks are of two types: (a) *systemic risk,* which can result in weaknesses in domestic financial systems triggering a broader domestic financial crisis that foreign firms are affected by; and (b) *performance risk* which arises because local financial systems have weak capabilities in intermediating local funds, processing payment transactions efficiently, handling foreign payment transactions and providing the range of financial services that firms would expect as a matter of course in their home countries.

Weak management and poor internal controls make local banks vulnerable to fraud. That requires foreign firms to incur the extra costs of monitoring daily their account balances and transaction flows. Holding liquid balances in unsound domestic financial institutions, with high proportions of non-performing assets to total assets, creates risks for foreign firms that they are not accustomed to coping with. There is no cover available for the risks that exposure to dealing with the local financial system in LDCs entails when local deposit insurance facilities are not available. The only way to mitigate such risks is through sound internal controls. Over time, these risks are diminishing as foreign banks are allowed entry into the domestic banking markets of LDCs and domestic financial systems are being strengthened. One possibility for the future is the creation of deposit insurance facilities specifically to encourage foreign firms to hold local currency account balances with domestic banks without being concerned about the risk involved in doing so.

Business Support Risks: Just as weak financial systems in LDCs are a deterrent to attracting FDI so are weak business support systems. Foreign firms locating in LDCs usually find that they have to rely on home country connections for: accounting and auditing services (although most global audit firms are represented locally through affiliations with local accountants and auditors); IT systems support; insurance services; and business consulting and advertising/media support. This requires them to incur higher costs but reduces their risks from inadequate local support leading to service breakdown or disruption. When it comes to accounting and auditing, foreign firms with foreign debt servicing or guarantee obligations have to take particular care about the accuracy and timeliness of their financial statements and the quality of their financial controls. Post-Enron, these areas of risk are attracting greater public as well as regulatory and investor scrutiny in home and host countries. In their home countries, business service providers (such as accounting firms) can usually take out insurance indemnities and risk cover to protect themselves from the effects of litigation and the possibility of malpractice suits being brought and negligence awards being made against them. In LDCs such recourse does not exist. If it does, it exists only in name and not in enforceable fact. Foreign firms providing essential business support services do not therefore have the ability to protect themselves against professional service malpractice in local LDC jurisdictions.

Infrastructure Service Failure Risk: While much is made about the *absence* of local infrastructure in LDCs being a deterrent to the entry of FDI (which it undoubtedly is) not enough attention is focused on the *unreliability* of infrastructure services that are provided and the risks that voltage and frequency fluctuations, as well as insufficient or poor quality water and drainage, pose to the operation of plant and machinery. Plants in LDCs need to have their own standby power generators and water treatment plants thus adding to capital costs. But the functioning of these also depends on the adequacy of diesel fuel supply and water storage facilities. Whereas most foreign firms can obtain insurance cover for accidental damage caused to plant and machinery, insurance cover clauses in LDCs often specifically exclude damage caused by failures of domestic infrastructure service.

Environmental Risk: In earlier days, environmental risk used to be classified by insurers as extraordinary event risk. But, as awareness has grown, environmental considerations have become integral aspects of business operations. Such risk is now classified as a business risk. Since the mid-1970s sponsors, financiers and insurers have become familiar with environmental impact assessments and the contingent liabilities and risks that may arise as a consequence of environmental damage whether incurred accidentally or through negligence. Project sponsors and their parent companies have become more aware of the diminished collateral value of contaminated land and liability for cleanup. Foreign investors, as well as creditors (such as multilateral and commercial banks) now factor in basic environmental considerations – such as legal compliance, contamination effects, outstanding and potential compensation claims – into their due diligence analysis in appraising projects and in making investment and lending decisions.

Environmental activism is also taking hold in developing countries and LDCs. As a result, environmental issues have become major concerns, and sources of risk, to foreign firms operating in LDCs. Foreign firms are more vulnerable because of the activism and political power of environmentalists in their home countries. Dealing with these issues in a haphazard or add-on fashion, as a response to external pressures rather than internal motivations, can have a negative impact on operating cash flow, divert management attention and create an adversarial relationship with employees, civil society, local communities, regulatory agencies, national governments and official multilateral and bilateral lenders.

Environmental due diligence has become an essential feature of project planning and design with environmental considerations being incorporated into the project construction phase as well as in day-to-day plant operations to ensure that project profitability is not compromised by unforeseen environmental risks materialising. But standards in different countries vary and generally tend to be the lowest in LDCs. The quality of environmental regulation, compliance monitoring and enforcement of regulatory standards also varies considerably with practices again being the weakest in LDCs.

Increasingly, the involvement of official aid and financing agencies (e.g. WB, MIGA, IFC, regional banks as well as bilateral agencies such as Sida, DFID etc.) imposes *ex*

ante environmental conditionalities on project sponsors that avail of their assistance. These are aimed at ensuring that foreign investors undertake full consultation with local communities and other parties affected by the project and reach agreement on the protection of natural habitats, resettlement, water treatment and land rehabilitation. They go beyond statutory compliance requirements in most LDCs and often extend beyond the land boundaries of the project site. But such conditionalities, though they impose extra up-front costs, also reduce the future risk of projects being overtaken by changes in environmental regulatory regimes or changes in the attitudes of local communities.

With project sponsors and their financiers having powerful incentives driving them to assess environmental risks carefully and find ways of minimising their exposure to such risks while improving project design, their EIAs are focused on assessing the environmental impact of project construction and operation against local standards and requirements as well as against 'best practice' standards and requirements. The World Bank's guidelines provide a template for measuring environmental performance reflecting international benchmarks for standards of environmental performance.[88] IFC has modified these guidelines to bring them more in line with private sector practices and to provide clearer guidance to private investors. Its approach attempts to factor into the initial financial analysis for the project, the capital costs associated with sound environmental management in those specific circumstances and to minimise the higher costs of 'retrofits' having to be made later in the project's operating life. These guidelines also induce foreign investors to employ eco-efficient equipment and production process at the outset.

After environmental risks have been identified they need to be allocated to the parties best equipped to cope with them. With FDI projects in the mining and hydrocarbon or tourism sectors (often the case in LDCs) their environmental impact can spill over a project's own boundaries and affect a wider domain involving other interests. In these circumstances, risk allocation can become a complex undertaking especially when other involved parties such as local communities as well as local and national governments are not parties to contractual relationships with the project sponsor or between the project sponsor and creditors. Occasionally special efforts are made to bring these parties together to work out a satisfactory approach to risk allocation and management with the costs being borne by the project sponsor or shared by the government.

As far as project companies are concerned, obtaining ISO 14000 and 14001 certification provides risk insurers and creditors with assurance that environmental risks – and the associated financial risks – will be effectively managed at all phases in the project's life. But even with EIAs, safeguards, agreements and certification, environmental risk can never be insulated from unforeseeable events although it can be reduced. For that reason, project sponsors attempt to obtain additional insurance cover from private insurance markets to mitigate the future cost of unanticipated large events such as oil

[88] The World Bank's *Pollution Prevention and Abatement Handbook*.

spills, gas leaks, river or lake water contamination as a result of pollution control equipment breakdown, etc. However, securing such insurance depends on whether the premium that prices the risk does not materially impair the financial viability of the project.

5.3 Non-Commercial Risks and their Coverage

Acknowledging that the *business risk* subset of commercial risk is a grey area for FDI in LDCs – in which risk mitigation options through insurance cover and other means is unformed and inadequate – most attention in official and private circles aimed at encouraging FDI flows to developing countries has focused on covering *non-commercial* risk, i.e. risk that is regarded to be beyond the control of investors and creditors and that has to be mitigated in order for FDI not to be deterred from flowing outside the OECD triad i.e. North America, Western Europe and Japan.

Non-commercial risk is often referred to loosely in vernacular shorthand as 'political risk' or 'country risk' but as Figure 5.1 indicates, 'political risk' is only one aspect of non-commercial risk. Non-commercial risks generally include:

Figure 5.3 Non-Commercial Risks

The first three are covered in the following section on country risk while the last four are dealt with in a succeeding section on event risks.

5.3.1 Country Risk: Political, Sovereign and Conflict Risk

In the general way in which the term is frequently used, 'political risk' is any threat to a project investment's security, revenues and profitability that results from influences and factors external to the firm or industry and involves some sort of governmental action or inaction.[89] It is distinguishable from commercial uncertainties dealt with in

[89] This definition is adapted from one offered by Professor Louis T. Wells Jr. at the Harvard Business School and quoted in Moran, 1998 op cit (p. 7).

the previous section. It is also distinguishable from Acts of God or acts of nature. Those are generally classified as 'event risks' although a particular type of event risk also includes 'acts or failures of government' that result in crises arising from political or economic policy defaults. For our purposes, what is loosely embraced by the term 'political risk' is broken down into three distinct types of country risk.

The first is risk that is actually *political* in nature, i.e. created by: (a) political ideology or compulsions that lead to expropriation, or to disruptive interference by host countries in the operations of foreign firms and investments that falls short of outright expropriation but impairs operations and compromises the equity interests and managerial rights of these firms; (b) a constitutional crisis or a political leadership crisis that destabilises a country; (c) sub-sovereign (i.e. provincial, local or municipal) political problems confronting a foreign firm which the national government cannot resolve or ameliorate; or (d) a legislative crisis that impairs political stability and heightens country risk.

The second is *creditworthiness* risk, sometimes referred to as 'sovereign risk'. It concerns specifically the risks that FDI may be exposed to as a consequence of the extant, or deteriorating future, external creditworthiness of the country in which a foreign investment is being made. After the debt crises that swept across Latin America and Africa in the 1980s and several other developing regions in the 1990s (Eastern & Central Europe and East Asia), sovereign risk for almost every country (developing and developed) is now regularly measured independently by global banks, multilateral banks, central banks and global credit rating agencies. Such measurements are used by central banks and regulatory authorities in applying prudential risk matrices to determine the asset quality of their banking system's loan exposure to these countries and the specific loan loss provisions that their commercial banks and non-bank institutions must make in order to manage such exposure and avoid systemic, spill-over or contagion effects. Worsening sovereign risk can trigger other political and event risks such as a financial crisis or a fiscal crisis. For some countries, their sovereign credit risk can be traded in derivative markets as a means of hedging. But that mechanism is not available to most developing countries or LDCs. This is a potential area in which prospects for public-private interaction in widening the traded market for country credit risk needs to be explored.

The third type of country risk is the risk of *war and conflict*. That, of course, is another type of political risk. But it is usually separately provided for in insurance contracts. In the first half of the 20th century that was a serious risk in what is now the developed world. In the second half of the 20th century and the first decade of the 21st, it has almost disappeared in the developed world. But it has become a serious risk confronting FDI in developing countries and LDCs in particular. Over the last two decades, half the countries classified as LDCs have been engaged in civil or cross-border conflict severe enough to deter all types of investment, not just foreign. Paradoxically, an LDC that has suffered from intense and prolonged conflict – Angola – has had the largest amount of FDI inflow of any LDC! But that has been confined to its petroleum sector and supply/service operations linked to the petroleum sector. It operates off-

shore and is insulated from conflict impinging adversely on the foreign investors involved. There has been virtually no other kind of FDI in Angola though the country is rich in a number of mineral resources (including diamonds) and offers a significant consumer market in its own right.

Natural resource firms, though affected by war and conflict risk, have developed an unusual capacity to ride such risks out. But that is not the case for other types of FDI – especially in infrastructure – which is often the main casualty of such risks materialising.

5.3.2 Event Risks: Natural, Policy-Failure, Global and Civil Society Induced

In addition to country risks, non-commercial risks include *event risks* of four broad types. The first are classified in the insurance industry as Acts-of-God or acts-of-nature and are well known. The insurance industry developed its actuarial capacities and grew around the coverage of such risks for individuals and firms in a wide variety of contexts in home and host countries. The range of natural events is quite wide. The few sub-risks outlined in Figure 5.1 in that category are more indicative than exhaustive. An issue of importance is that what were once thought to be acts-of-nature are now being associated with the cumulative effects of 'acts-of-man' such as global warming/climate change. They are increasing the incidence of natural event risk; e.g. floods, droughts, coastal damage and mudslides. The insurance industry still provides cover against such risks as natural event risks although at the cost of increasing premiums, reflecting their greater frequency.

The risk of damage from natural events in developing countries is often perceived as being higher than in other countries because of: (a) the relative absence of preventive infrastructure such as reinforced river banks and coastal dyke defences; and (b) the absence of sufficient funding, as well as of civil defence organisations, training, and institutional infrastructure to contain and cope with the effects of natural disasters after they have occurred. Differentials in insurance premiums for foreign firms attempting to cover such risks in LDCs obviously reflect those conditions.

Though sometimes confused with policy risk, there is another type of event risk caused by policy failures. Since 1980, the *risk of financial and economic crises* caused by external shocks and cumulative policy failures has increased significantly in the developing world. The recurrent risk of such events is amplified and exacerbated by a process of globalisation that is not within the control of governments or TNCs. It is compelling faster partial and highly imperfect integration (in some instances prematurely) of fragile developing economies with the more robust economies of the developed world. The 'developed-developing asymmetry', rather than policy failure on the part of individual countries, is a more important cause of disruptive events than is generally recognised.

Global integration is occurring mainly through trade and financial systems. In developing countries highly imperfect trade and financial systems, with weak institutions

governed by inconsonant policies, are integrating in different ways and at different speeds with more advanced and already integrated systems of North America, the EU and capital surplus East Asia. The process of uncontrolled, discontinuous integration is creating feedback pressures through inward and outward surges of short term capital caused by movements in trade and by asymmetries in policies, information, investment motives, herd instincts, and hedging proclivities. Together these forces create pressures on both developed and developing country financial systems. But the systems of developed countries are robust and resilient enough to absorb them without disruptive events occurring. That is not the case in developing countries where weaker, less developed financial systems cannot absorb such pressures in the same way. Instead, recurrent financial crises occur in developing countries through bouts of over-ingestion followed by severe indigestion. It is difficult to see how the risk of such events can be diminished except through better management of debt crises and capital surges in individual countries. These need to be made to work in the same ways, and as non-disruptively and seamlessly, as normal corporate or municipal insolvency and bankruptcy procedures work within developed countries. Until that happens, policy-induced and globalisation-induced event risk will heighten and grow.

The problems of global integration are currently confined to trade and financial systems between the developed and developing worlds. In the not-too-distant future they will inevitably spill over into the only remaining part of economic systems that does not yet have an interface – i.e. labour markets. In developed and developing countries these markets do not yet interact directly – in the way that markets for goods, services and money do – through open price competition for jobs in a globally integrated market. That prospect, or spectre, is still some distance away. But highly protected labour markets in individual countries do interface indirectly through such phenomena as the export of relatively lower-skill jobs from developed to developing countries through FDI.

In many developed and developing countries there are signs that labour markets are taking the strain of globalisation without yet being exposed to the full pressures of integration. Some of the pressures on developed labour markets are vented through attempts at curbing or slowing down competition from labour in developing countries through countervailing civil society pressures for the adoption of higher labour standards on a worldwide basis. It can only be a matter of time before those pressures make themselves felt more openly and disruptively through ructions and painful adjustments in the labour markets of developed and developing countries. In such circumstances the transmission mechanism that is creating such pressures – i.e. FDI flows to developing countries – is likely to be subject to even greater policy-induced event risk than it is now.

The third type of event risk is one that need not necessarily occur in the host country concerned but could be a *global event risk* or one that occurred elsewhere that impinged on the risk facing foreign investors in distant host countries. September 11th 2001 was a classic example. Though the cataclysm occurred in New York its shock was

felt worldwide. FDI in hotels and tourism investments around the world, including developing countries and LDCs, suffered a catastrophic drop in operating revenues. So did investments in airlines and other forms of transportation. Unrelated sectors suffered for some time because of the virtual cessation of business travel until things settled down. But September 11th is not the only example. The unresolved issues in the Middle East affect FDI in countries as distant as Sudan, Somalia and the Maghreb. The perennial threat of conflict in Kashmir affects foreign investment in Nepal, Bangladesh and Sri Lanka. Similarly, a disruption in the functioning of global capital markets as in October 1987 can affect FDI for the next 12 months in the poorest countries of Africa, as did the dollar crisis in 1978. Though it is possible to insure against a number of event risks, these kinds of unrelated global event or 'event elsewhere' risks are uninsurable. It is virtually impossible to determine, to the satisfaction of an insurance company, the extent of actual damage that such events do to the operations of a particular firm in a particular country, even though its management may be in no doubt about the damage done.

Finally, a fourth type of event risk has become prominent in the era of civil society direct action. Failure to exercise corporate social responsibility as defined by NGOs in the areas of human rights, labour or environmental standards can lead to campaigns that instigate political action or reaction from host country governments, or disrupt company operations even if governments do not act. Such outcomes can materialise from orchestrated boycotts of a company's products.[90] Manufacturers of consumer goods produced mainly in LDCs but sold around the world under a global brand are particularly vulnerable to such events. And these can occur on a continuum ranging from the sublime to the ridiculous.[91] Sanctions have been applied as a result of civil society pressures that have had a direct risk bearing on company operations. For example, a number of US firms were forced to exit from South Africa in the 1980s and early 1990s as a result of sanctions imposed by the US and European governments in direct response to civil society pressures aimed at apartheid. But sanctions have been applied by the US on foreign firms and on third-country firms operating in countries where the case for imposing them is less clear-cut (e.g. Cuba, Iran, Iraq, Libya, Syria, Sudan, North Korea and Myanmar) causing major disputes between the US, Europe and Japan on the international legitimacy of such actions. Nevertheless the firms caught in the middle have suffered from serious temporary business disruption.

Oil and mining companies often operate in remote, isolated parts of LDCs that may be the locale for separatist, ethnic, religious or revolutionary insurgency. Such foreign

[90] Pepsico decided to withdraw from Myanmar in 1997 when a boycott of its products by an alliance of NGOs known as the Free Myanmar Campaign resulted in the cancellation of a $1 million contract to supply Harvard University. Similar boycotts resulted in the eventual withdrawal of Heineken, Carlsberg, Levi Strauss, Liz Claiborne, and Eddie Bauer from Myanmar as well.

[91] For example, in 1998, the New York City Council considered a ban on city government contracts with any company investing in one of 15 countries that it alleged were persecuting Christians, including among them China, Indonesia, Saudi Arabia, Egypt and Pakistan.

firms are faced with a serious dilemma when attempting simultaneously to maintain good relations with the police and military forces that are protecting them against violence but may, at the same time, be perpetrating human rights atrocities on separatist guerrillas. Yet they invariably come under intense civil society scrutiny that affects their operations and places them in untenable positions.[92]

There is no specific form of risk insurance that can be obtained to cover the risk of damaging events occurring as a result of civil society pressures whether rightly or wrongly exercised. The only viable, long-term risk-mitigation approach appears to lie in the adoption of CSR codes and best practices to minimise the possibility of such risks materialising. For that reason, this type of event risk may come to be classified as an operational or business risk rather than a non-commercial risk, although the motivations that result in such events are distinctly non-commercial. However, private insurers still have to accept, as official and private creditors have done, that CSR is an intrinsic part of corporate behaviour. It affects commercial prospects and the acceptability of products and brands to consumers and can be influenced by civil society pressures. When that acceptance is reached the motivation for business disruption caused by civil society direct action may matter less than the consequence when it comes to the insurability of that particular risk.

5.4 The Changing Nature of Non-Commercial Risk and Its Interactions with Commercial Risk

Sharp distinctions are made in theory between political (non-commercial) and economic (commercial) risk. But these distinctions are frequently blurred in practice. That reality is one that extant mechanisms for risk mitigation neither acknowledge nor build into their risk insurance contracts and instruments. It is the problem caused by the overlapping of commercial and non-commercial risk that requires new approaches, responses and public-private initiatives in risk mitigation. Risk management packages need to be developed that accommodate this reality for FDI to flow in greater quantities and into a more diverse range of activities in the LDCs. This crucial point requires some elaboration.

When political actions in a host country influence economic conditions in an industry, or affect the commercial prospects of foreign or non-indigenously owned 'domestic' firms directly – by increasing the likelihood of sabotage, accidents, fires, physical violence or thefts – the distinctions between political and commercial risks begin to blur. This is, for example, the case in Zimbabwe today. Similarly, to the extent that policy failures weaken the ability of host governments to meet contractually binding commitments to foreign investors (e.g. guarantees to make foreign exchange available to them, or to provide equity in a joint venture situation, or to raise tariffs to cost-recovery levels) then political and economic risks again overlap. In these instances it

[92] This has happened for example with BP in Colombia, Shell in Nigeria, and BHP in Papua New Guinea.

becomes difficult to make the distinction between a specific political event, a policy cause or reaction, and a commercial effect.

Sometimes, foreign firms are faced with hostile actions taken by host governments or their civil societies. These actions may be motivated by political (e.g. incitement by an opposition party or by a particular faction in government), labour (union agitation), or environmental (local community or NGO) grievances against foreign firms. In such cases it becomes difficult, if not arbitrary, to differentiate between what is 'political' and what is 'commercial'. Yet this difficulty is not taken into account by risk-insurers because it is extremely difficult to disentangle the nature of the political risk from its commercial cause or effect. The difficulty of separating political risk from other kinds of risks poses risk coverage challenges that may result either in too much unnecessary coverage or too little coverage of the wrong kind. An insightful example helps to make the point:

> "Suppose somebody comes along and throws a bomb at a train that hauls coal from Exxon's mines or blows up a pipeline carrying oil or gas. If the bomb thrower claims he was motivated by political concerns, the investor may be covered by political risk insurance. If he claims he was motivated by environmental concerns, or by labour grievances, the investor may not. The investor may therefore have to choose between having a given set of operations insufficiently covered, or having to cover those operations for every conceivable eventuality, from commercial through to political."[93]

Present efforts to mitigate country risks appear to accommodate (and charge premiums for) risks that may no longer be significant. For example, MIGA and private insurers emphasise the insurance they provide against expropriation. But that source of political risk has diminished even if it has not disappeared. Though that was a live risk in the 1960s and 1970s, it diminished significantly in the 1980s and 1990s. For example, one study counted 83 instances of nationalisation by developing countries in 1975 alone, but between 1981-92 there were only 11 expropriations.[94] But, while the risk of nationalisation may have diminished even further as universal acceptance of market models of economic development accelerated around the world in the 1990s, other traditional sources of country risk have not abated while new sources of risk are emerging.

Although expropriation risk has diminished, the way in which political risk affects foreign investor returns and host governments' attempts to control the behaviour of foreign firms have become subtler. Clearly, many developing countries have not yet fully made the transition from command-control regimes to 'light touch' market regimes. In their defence it might be said that even in developed countries, governments occasionally resort to similar 'subtlety' when it suits their political purposes. Instead of resorting to expropriation, which is a strategic response that closes all options, host

[93] Example provided by Andrea Macdonald, Treasurer, Exxon Exploration Company, quoted in Moran, 1998 op cit.

[94] Minor, 1994. Interestingly, in the only two cases (Indonesia and Argentina) in which a MIGA Guarantee was called, both involved expropriations.

developing countries are now resorting more to tactical responses that leave their options open.

They now resort instead to 'contract frustration' by: blaming foreign investors for non-performance in accord with original undertakings even when no conditionalities have been agreed; cancelling permits, licenses or clearances on environmental and social grounds; withholding approvals on the grounds of insufficient prior consultations having taken place with all affected groups; raising difficulties with sub-sovereign levels of government on benefit and cost sharing; and exposing the foreign investor to costly delays through administrative procrastination and parliamentary or judicial reviews on the basis of trumped up public interest litigation. Thus instead of expropriating the project, host governments can subject its completion and operation to delays that place the foreign investor under intense financial pressure either to renegotiate terms or to make side-payments to get physical and financial completion certified and permit operations to start. This form of politically motivated 'business interruption' is a political risk but one which 'event-triggered' risk insurance coverage does not provide protection for.

Risks of war, civil and neighbourhood conflicts, independence and cessation movements, along with demands for greater autonomy, devolution and self-government in ethnically distinct sub-regions of many developing countries increased in the 1990s. Ethnic and religious tensions have heightened. Sadly, Islam is now being identified as a new risk in Eastern and Western Europe, in South Asia and the US especially after the events of September 11th 2001. Terrorism has gained currency as a weapon of political expression.

The emergence of competitive local business interests in more advanced developing countries (but also in LDCs like Tanzania, Uganda and Zambia) has been identified as another type of political risk.[95] These interests may wish to enter, or share in, what used to be the sphere of large global TNCs. Powerful local businessmen are not averse to using their political connections (whose election campaigns they invariably finance) to procure favourable treatment or preference over foreign firms or even to force a joint-venture arrangement that the foreign firm may prefer to avoid. With TNCs now emerging from the developing world, the circles in which foreign and domestic firms compete or predominate are beginning to overlap. In dealing with local business pressures that are applied on them, host governments and weak legal systems in host countries often do not provide reliable protection to foreign firms under the 'equal treatment' clauses that have been readily agreed to in bilateral investment treaties.

These examples show that non-commercial (political) risks present an ever-evolving set of circumstances that are difficult to pin down as 'events' that can be anticipated or specified in advance and insured against accordingly. The issues this difficulty raises are taken up in the next chapter.

[95] Wells, 1998 in Moran, 1998 op cit.

6 Mitigating Risks for Foreign Investment in LDCs: Options and Lacunae

6.1 Introduction

This chapter looks at the formal risk mitigation options available, what they offer, what their limitations are, and where more work needs to be done on instruments, markets and mechanisms to ease the risk burden for foreign investors to unblock FDI flows to LDCs. In focusing on this group some considerations arise that need to be highlighted.

First, the general lack of creditworthiness of LDCs and their disadvantaged situations make it clear that risk mitigation requires public intermediation for guarantees that are credible. When they offer guarantees and protections to foreign investors in good faith, whether under BITs or under specific project agreements, the financial and institutional capacity of LDC governments to deliver on their commitments is always in doubt. Foreign investors would be exposing themselves to additional 'default risk' if they relied on LDC guarantees without enhancement from more creditworthy sources.

Private risk insurers are unlikely to assume, on their own balance sheets, LDC risks transferred from investing companies or creditors when the probability of these risks materialising is very high. That makes public involvement in risk mitigation – whether by bilateral or multilateral agencies – a *sine qua non* for FDI in LDCs. But public involvement is unlikely to suffice. If foreign investors in LDCs were to rely solely on *official* bilateral and multilateral intermediaries for securing risk cover then – given their limitations of capital, specialised risk-management and actuarial manpower, and the time-consuming way in which they work – the system would grind to a halt. Instead of being facilitated and increased, FDI flows to LDCs would slow down to a trickle. **The only solution therefore is for more effective and frequent public-private interaction in offering risk cover and risk management options and services to foreign investors in LDCs.**

Second, traditional (first generation) FDI in LDCs will probably remain concentrated in natural resources (mining and hydrocarbons) and tourism. Given their structural weaknesses, and the barriers discussed in Chapter 3, it would be sanguine to assume that LDCs provide the right host environment for globally integrated manufacturing investment aimed at producing exports for world markets. Inward FDI in manufacturing for protected domestic markets – typical in the 1970s – has dried up. Protection now has a very short shelf life in a WTO driven world.

There will, of course, be exceptions to this general rule as the growth of the garment manufacturing industry in Bangladesh attests. Some successful exporting countries that developed through privileged quota access to the EU (e.g. Mauritius) have now become high labour cost countries. It is possible that some of their plants may be unbolted and relocated to LDCs like Mozambique and Madagascar. After all, Mauritius itself was the recipient of such plants from Singapore, Hong Kong and Taiwan in the 1980s. But, most traditional FDI in LDCs will not be in the manufacturing sector

other than for high bulk, high weight and low-value food processing, brewing and beverage products intended for the domestic consumer market but not protected nor intended for export (except perhaps across contiguous land borders).

Third, over the next decade an increasing proportion of FDI in LDCs will be in second-generation infrastructure (electricity, telecommunications and water), in financial services and, to a lesser extent in the IT services sector. FDI in the IT sector will not be associated with developing global software export capacity but in servicing the domestic base of IT installations and expanding the use of IT in LDC governments and domestic firms. It will probably be premature to expect FDI to flow into third-generation areas in LDCs such as the private provision of social (health, education and municipal) services although there may be a trickle of such investment in pioneering projects. FDI in the financial and IT services sector is more likely to be financed through internal equity resources of parent companies or through corporate finance rather than through project finance.

Fourth, a larger proportion of FDI to LDCs will emanate from other developing countries. For many LDCs, industrially advanced neighbours will be the main source of FDI. This is already happening in the case of: (a) South Africa as a source of FDI in Eastern and Southern Africa and Anglophone West Africa; (b) India for LDCs in South Asia; and (c) Thailand and Malaysia for FDI in Cambodia, Laos and Myanmar. Developing source countries for FDI do not have the same bilateral export credit and risk insurance institutions and capital to rely on for mitigating risks in LDCs that OECD home countries have. In most instances such FDI is likely to be for smaller projects than those typically financed by FDI from OECD countries. It will be undertaken by TNCs from developing countries that have less capital and fewer capabilities than their OECD counterparts. Developing country firms investing in LDCs might classify as SMEs in OECD countries although they are indisputably large in their home country environments. Such firms have neither the resources, nor the spare internal staff expertise and managerial capability, to cope with the burdensome administrative complexities and time costs involved in obtaining risk cover from the World Bank, MIGA, IFC or the regional development banks. They are likely to forego obtaining risk cover of the type that is currently on offer or forego making investments in LDCs that they otherwise might have been tempted to make.

These four points need to be kept in mind when considering ways of increasing FDI in LDCs. What also needs to be kept in mind is that no generic discussion of risk mitigation is likely to cover all the issues of risk and risk-cover that arise in the case of specific project investments in a vast range of different sectors, industries, countries and circumstances. The discussion in the remaining sections of this chapter focuses on the most typical scenarios that are likely to arise for foreign investors seeking risk cover for project investments in LDCs. They focus on investments funded via project finance. Projects funded with corporate finance, or internal equity resources, usually do not seek, nor do they obtain, the same type of risk cover. Adopting the project finance route is an implicit or explicit strategic choice for incorporating a broader element of

risk mitigation. It provides direct investors with greater protection than relying entirely on corporate finance or equity for funding investments in LDCs. This happens for reasons elaborated on below.

The sections that follow also discuss risk mitigation in a context that applies mainly to project investments in natural resources and infrastructure – investments that are capital-intensive and whose assets are immobile – rather than on projects and investments which are less capital intensive and whose physical assets are mobile. The former begs for risk cover because it is a hostage to changes in terms after the investment has been made in ways that the latter is not. This issue has been discussed in the previous chapter.

6.2 Relying on Project Finance to Lower and Manage Risks

Project finance helps to fund new investment by structuring the financing package around the project's operating cash flow. It uses the project's assets for collateral, without requiring additional guarantees or commitments from project sponsors. It brings in a wide range of investors, creditors and risk insurers, with different characteristics, strengths, specialisations and risk-bearing capacity into the financing package. In contrast corporate finance relies on the credit standing of the parent company in the home country behind the project and looks to its balance sheet for the security needed by creditors and portfolio investors.

As a technique, project financing enables project sponsors to alleviate risk and secure financing at a reasonable cost, although the cost is higher than the cost of financing a project from equity resources or with corporate finance. The reason is that project finance involves a considerable amount of prior financial design and engineering, a series of negotiating rounds involving project sponsors, creditors, risk insurers and host governments, a large amount of legal documentation and a number of contractually binding agreements.

Project finance requires expertise from accountants, investment/development bankers, and lawyers in home and host countries. It involves detailed project feasibility studies and appraisals (sometimes more than once) that require sophisticated analysis of all aspects of a project amenable to being appraised in advance (i.e. technical, financial, market, social, economic, organisational, labour-related, local community and environmental impact); supported by detailed breakdowns of operating and capital costs and by equally detailed market and financial projections. These processes are meant to identify and assess the major risks that may arise in a project during its development, construction and operation. Such appraisals take time to put together. Contractually binding documents based on expert analysis have to be negotiated and agreed by all parties concerned, with risk allocation and burden-sharing among parties being specified and explicated before financial closure can be reached. Generally, a project finance package might cost 20% more than a typical corporate finance package and perhaps 30% more than direct equity financing from the internal resources of the sponsoring

firm. But its risk-reduction and risk-sharing impact is expected to justify and recover that incremental cost over the life of the project.[96]

By involving specialist financiers with different motivations and skills, project finance provides a wider range of recourse options in covering a variety of risks in an economically efficient and fair manner. At the same time it insulates parent companies of project sponsors in LDCs (i.e. the firm actually undertaking and managing the investment) from the risk of recourse to their own balance sheets. It limits their risk exposure to their equity commitment to the specific investment should the project fail to perform. With greater emphasis on improved corporate governance, a contractually based project finance approach ensures greater transparency and specificity in financial arrangements and reduces the risk of malpractices such as transfer pricing and offshore profit management. Under non-recourse project finance, the investors and creditors involved in financing a project have no direct recourse to the parent companies that stand behind a project sponsor in a LDC. Limited recourse finance permits some recourse to parent companies behind project sponsors in the form of pre-completion guarantees for project construction or for physical or financial completion before a project enters into commercial operations.

Because risks are shared among a variety of interested parties contractually bound to each other (direct equity investors, portfolio equity investors, senior and subordinated creditors and preferred creditors), the project financing discipline flushes out all the risks that are likely to arise in a project and helps to establish its viability as a stand-alone legal and economic entity. In allocating the risks and financial requirements of a project across a group of creditworthy specialist financiers from global markets, it achieves economic efficiency by assigning risks to those in the best position to absorb or mitigate them under contracts that can be enforced with a high degree of certainty. Thus, project finance makes it possible to undertake projects that are too large or too risky for a single sponsor to handle. It permits official investors and creditors who have a special relationship with host governments to become involved. Their presence in a project-financing package can influence host government behaviour before and after an investment is made, and throughout the operating life of a project, thus providing partial insulation from the risks accompanying changes of governments and obsolescing bargains.

The types of specialist finance that a typical project financing package might incorporate include *inter alia*: commercial bank loans; direct equity; portfolio equity from infrastructure or country funds or institutional investors; quasi-equity in the form of preferred shares and convertible loans or bonds; senior and subordinated long-term

[96] For example, the Exxon Exploration Company calculates that using project finance for its investments in developing countries is at least 20% more expensive than self-finance, which the company can afford for almost all of its projects. Besides, self–financing can speed up the investment process by 3–6 years depending on the investment being made. Nevertheless, Exxon prefers to resort to project financing for the risk sharing and risk management benefits it offers. See Macdonald, 1998 op cit.

loans; suppliers' credits; market-issued fixed coupon bonds or floating rate notes; securitised receivables under long-term sales contracts; export credit facilities and risk insurance; bilateral aid agency loan or credit; multilateral loans or credits either single (A-loans) or syndicated with commercial lenders to provide a preferred credit umbrella (B-loans); and internally generated cash. In addition, a project financing package might be accompanied by ancillary risk mitigation through off-balance sheet transactions (i.e. commodity derivatives, interest rate derivatives, currency derivatives, long-term forward contracts and swaps) aimed at reducing or eliminating price risk and reducing uncertainties in the movement of these variables to within the bounds of the manageable.

The largest share of a project finance package normally comprises various types of short and long-term debt. That share can vary between 60-80% (resulting in debt-to-equity ratios varying from 1.5 to 4.0) depending on the nature of the project, its gestation period, the debt servicing risks involved, the reliability and security of its revenues, and the predictability and containability of its costs. Such a financing structure results in the largest financial risk being taken by creditors, who have no direct control over the management of the project. Creditors therefore try to protect their exposure through a *security package* comprising a combination of collateral (usually the project's physical assets) and tightly monitored debt servicing contracts that accords them seniority and privileged protection in having their loans repaid first before financial returns can accrue to other investors. The quality of the security package is closely linked to the effectiveness of risk mitigation arrangements for the project. [97]

In terms of risk mitigation and risk management, project finance offers foreign investors the opportunity to structure investor-creditor-host government relationships in a way that involves 'prominent potential victims'[98] as financial participants. Host government concerns (because of consequences and sanctions that may follow) about harming the interest of 'prominent victims' can act as a powerful deterrent in preventing untoward behaviour on the part of host country authorities toward a project. Such deterrence has become a key risk mitigation mechanism used by parent investors and senior lenders in constructing a project's financial structure. But apart from deterrence, TNCs prefer project financing to corporate or self-financing for other reasons: (a) in the case of mining and hydrocarbon projects, project financing structures are instrumental in convincing host country governments to permit the retention of some

[97] A typical security package will usually include: a mortgage on available land owned or leased by the project; all fixed assets; sponsor commitment of project support through share retention and project funds agreements; assignment of major project agreements including construction and supply contracts and off-take agreements; financial covenants ensuring prudent and professional project management; an assignment of insurance proceeds for specific risks covered; and assurances that environmental and social concerns have been adequately anticipated and accommodated in the project's design and management. The quality and strength of the security package permits creditors to avoid bearing a significant risk that they may have to take over project operation, and governs a project's creditworthiness, thus influencing the share of total financing that can be funded by creditors.

[98] This terminology is attributable to Shanks, 1998 in Moran, 1998 op cit.

hard currency earnings offshore in order to finance debt service and meet suppliers' bills and maintenance costs; (b) such structures permit sponsors to align the interests of various partners in flexible ways, particularly those of 'weak partners' (e.g. host governments) who may not be able to fund their share of project expenditures; and (c) project finance permits the project sponsor's foreign parent to limit its equity exposure and spread available equity resources across a portfolio of projects thus reducing global investment risk through project and country diversification.

The last of these reasons may not, however, always be compelling. Under project financing structures it is the equity investor that bears the greatest risk of loss and, of course, potential for gain in the event that a project in a LDC proves to be spectacularly successful. Also, it is the sponsor that has to pay the most of the additional cost of project finance (thus resulting in effective equity dilution) and bear the time-cost of delays in coming to closure. There is the problem of 'creeping recourse' even under 'non-recourse' arrangements. Creditors not only have a prior, senior claim on project cash-flows, they often look to parent company support – e.g. construction and completion guarantees, take-or-pay commitments, throughput obligations, cash-flow cushions and insurance coverage.

6.3 A Perspective on Risk Bearing and Risk Mitigation: Who takes which Risks?

Harking back to Figure 5.1 in the previous chapter and the discussion that was developed around it, it is useful to reprise in adumbrated form the kind of risks that are covered by the project sponsoring firm itself and those risks that are laid off to third parties either through normal business insurance purchase or through specially tailored risk cover obtained from either private or official sources. Figure 6.1 below uses the same matrix to identify the parties that are most affected by and best placed to take particular risks.

As observed earlier, project sponsors should absorb financial and operating risks since these are commercial risks. Financial risks can be shared with creditors although creditors usually take measures through security packages to protect themselves. Only when such packages failed to yield sufficient value would the risk of a loss materialise for a creditor. Creditors also avail of other risk mitigation options to reduce their exposure risks. These include, for example, associating their long-terms with those of official preferred lenders under syndicated B-loan arrangements that offered the umbrella of preferred creditor cover implicitly to private lenders under these arrangements. But that option covers them from country (i.e. non-commercial) rather than commercial credit risk.

In the case of currency risk, the project sponsor investing in a LDC may not have control over fluctuations and volatility in currency values, convertibility or repatriation. While currency risks are more economic than political they are influenced by actions (or failures) of host governments. Therefore these risks need to be borne or shared by them. But, most LDC governments are not in a position to bear such risks,

Figure 6.1 Patterns of Possible Risk-Sharing Under FDI Project Financing Packages

Commercial Risks						Non-Commercial Risks	
Financial Risks		Operational Risks		Business Risks		Country & Event Risks	
Risk	Risk-Taker	Risk	Risk-Taker	Risk	Risk-Taker	Risk	Risk-Taker
Balance Sheet	Investors Sponsor Creditors Guarantors	**Business Strategy & Market**	Investors Sponsor Creditors Guarantors	**Legal**	Sponsor Legal Adv. Creditors Guarantors	**Political**	Investors/ Sponsor Creditors Government MIGA/OBI/ MDB Private Insurers
Income Statement	Investors Sponsor Creditors Guarantors	**Mgt. Systems & Operations**	Sponsor Mgt. Agency IT Supporter	**Policy change**	Investors Sponsor Creditors Guarantors Government	**Credit-Worthiness**	Sponsor Creditors Government MIGA/OBI/ MDB Private Insurers
Capital Adequacy	Suppliers Investors Sponsor Creditors Guarantors	**Technology**	Technology Provider Equipment Supplier	**Financial System**	Investors Sponsor Creditors Guarantors Government	**War & Conflict**	Government MIGA/OBI/ MDB Private Insurers
Credit	Investors Sponsor Creditors Guarantors Suppliers Customers	**Fraud & Corruption**	Investors Sponsor Creditors Guarantors Insurers	**Business Support**	Investors Sponsor	**Natural Event**	Government Private Insurers
Liquidity	Investors Sponsor Creditors Guarantors Suppliers Customers	**Business Disruption**	Investors Sponsor Creditors Guarantors Insurers	**Infra-structure Service Failure**	Investors Sponsor	**Policy Failure Event**	Investors Sponsor Creditors Government
Interest Rate	Investors Sponsor Creditors Counterparty Derivatives			**Environ-mental Factors**	Investors Sponsor Creditors Guarantors Government	**Global Event Impact**	Investors Sponsor Creditors Government
Currency	Investors Sponsor Creditors Counterparty Derivatives Government MIGA/OBIs Insurers			**Comp-etition**	Investors Sponsor Creditors Guarantors	**Civil Society Pressures**	Investors Sponsor Creditors Government MIGA/OBI/ MDB

especially when aggregated for all FDI in their countries. Therefore it becomes necessary for 'other interlocutors' to provide partial risk coverage. Official agencies can do so either as liquidity-providing intermediaries (i.e. with host governments remaining responsible for the ultimate risk but being able to discharge their obligations over a long period of time) or as risk-takers on their own balance sheets). Absent the availability of such options FDI flows to LDCs would remain inhibited.

Business risks depicted in Figure 5.1 would be taken as a matter of course by investors operating in developed and some of the more advanced developing countries where such risks would either not arise or be sufficiently small for investors to absorb them without liquidity or solvency being threatened. But in LDCs foreign (and domestic) investors are exposed to a high level of business risk that cannot be classified as commercial nor are they entirely non-commercial. They represent a grey area, but one in which some risk mitigation is essential if foreign investors are to be persuaded to invest in LDCs. Yet, this is an area in which risk mitigation is either unavailable or, if available, has little impact especially when it came to policy and regulatory risks.

That poses serious problems for investors in infrastructure and natural resource projects in LDCs. It is unreasonable to expect foreign investors to bear non-commercial risks without full or partial risk cover. The direct guarantees of developed country governments protecting investors against political risk can be accepted by foreign investors without qualms, because of their intrinsic financial strength and their established creditworthiness in global capital markets. But, direct or indirect guarantees of developing and LDC governments cannot be accepted in the same way, because they lack the financial and credit standing that make them credible and acceptable.

Political and non-commercial risk insurance (PRI) is available from official and private sources. But the cover they provide suffers from operational and practical limitations (as the subsequent sections will show) as well as premium pricing complications. Such cover usually insures against specific pre-defined and anticipated political events and wars or conflicts; it does not insure against what cannot be anticipated or conceptualised as an event in advance. Normal insurance cover is also available for protection against natural events (Acts-of-God). But no cover is available for events triggered by policy failures, by global acts of terrorism that have implications for investments generally, or for events triggered by pressures applied by civil society. Thus there are lacunae in the types of business and non-commercial risk cover that foreign investors in LDCs can avail of. These gaps are deterrents to increased FDI flows but are not necessarily amenable to being filled quickly without more thought and 'product development' by official and private insurers.

6.4 Covering Commercial Risks: Existing Practices & Suggestions

The burden of financial and operational risk mitigation devolves on the management of the project firm. In LDCs many of these risks can only be mitigated through specific management protocols, practices and techniques applied in each particular area

of risk. Over the long-term, the aim should be to develop in LDCs the same market-based options for commercial risk mitigation that are available in more advanced developing countries and to develop in more advanced developing countries the options available in developed countries, although the latter step is not an immediate concern.

Some operating risks that investors face in LDCs can be covered by business insurance, although 'normal' business insurance coverage in a LDC varies from that available in a developed country. Typically, insurance for the operations of a foreign-owned plant would include: property insurance; loss of revenue resulting from breakdowns of machinery and equipment; loss of revenue from business interruption resulting from property damage; and third party liability covering accidents, breaches of health and safety regulations, employees' compensation, automobiles and other mobile equipment, and for pollution damage and clean-up. But such comprehensive cover is usually not available in most LDCs where insurance companies are often inefficient government owned monopolies. Nor is insurance cover available for losses due to fraud or corruption or for losses from business disruption due to causes other than accidents and natural events.

Bilateral aid-funded public-private partnerships or private-private partnerships between insurance companies in LDCs and counterparts in donor countries might go some distance in improving the quality and scope of insurance cover provided to foreign (and domestic) business firms in selected LDCs and reducing this area of commercial risk. Such partnerships can be limited to providing insurance for a single large FDI project and/or expanded to use a single project venture as a template for improving insurance cover more generally for businesses throughout the country. Depending on their nationality, some foreign firms in LDCs have the option of availing of improved cover from insurance companies in neighbouring countries, or in the home countries of parent companies.

For example, insurance cover for business operations and for protecting assets from theft, accident and fire damage for projects in Mozambique can be obtained from South African insurers especially when the foreign investor is a South African affiliate or subsidiary, and sometimes, even when it is not. That is equally true of cover from an Indian insurer for a project in Nepal, or from a Thai insurer for a project investment in Cambodia or Laos. Similar cover can be obtained from home country or third country banks for certain types of commercial credit risk (e.g. in relations with suppliers, customers or service providers) when such cover is not available through local banks.

When it comes to bearing the risk of interest rate movements in local currency there is no market-based risk mitigation device available in a typical LDC. By contrast there are many options that a foreign firm has – i.e. market-traded as well as tailored derivatives and forward instruments – in a developed country and in developing countries with advanced financial markets (e.g. Brazil, Chile, India, Korea, Malaysia, Mexico, the Philippines and South Africa). It should be possible in larger LDCs to arrange interest rate swaps between a large, nationally important foreign investor (e.g. a mining or oil company or an electricity generator) and the central bank. But, in most

instances, the central bank's ability to deliver on the swap as a credible counterparty would need to be bolstered by an agency like IFC, the World Bank or a regional development bank for the region concerned.

Multilateral Development Bank Facilities for Central Banks: Special purpose loans and credits need to be made to LDC central banks by multilateral financial institutions that have the in-house expertise in dealing with such derivative instruments. Facilities for these purposes (which in LDCs would invariably need to be financed by IDA type concessional credits) need to be accompanied by technical assistance for pricing, monitoring and executing such transactions. A financial-cum-TA package to provide interest and currency swaps to eligible foreign (and large domestic) investors needs to be developed urgently for central banks in LDCs. These facilities should aim at enabling them to provide better risk mitigation options to foreign investors (and domestic firms) for managing risk exposure to policy-induced or external-shock induced volatility in local interest rates and currencies.

The World Bank pioneered the development of the global long-term derivatives market in the 1980s starting with long-term currency swaps. In that pioneering tradition it needs to place greater emphasis on building up and backstopping institutional capability in LDC central banks to develop tailored and synthetic derivatives to meet the interest and currency risk management needs of foreign (and large domestic) investors. That this type of facility has not been developed for a number of the larger LDCs reflects a gap in the managerial mindset and operational perspective of MDBs as to what is really important for private sector development in these countries.

MDBs need to explore proactively the options they have for encouraging greater FDI flows other than through traditional (but ineffectual) devices such as B-loans and partial credit and risk guarantees (discussed later). In Tanzania the World Bank devised an innovative tailored approach for mitigating currency convertibility risk for the Songo-Songo Gas & Power Project described in an accompanying case study. In the event, it was not resorted to because the escrow account (cash trap) provided for in the project's financial structure had built up to a level where the sponsors felt they could take the residual currency risk exposure on their own books.

In the MTN Telecommunications Project in Uganda, credit enhancements were provided by Sida in the form of a guarantee for notes in local currency (Uganda Shillings-UGS) issued on the capital market by MTN and privately placed with financial institutions. That enabled MTN to obtain local currency funds that it would not otherwise have been able to access. Sida's credit enhancement enabled MTN to reduce financing and balance sheet risk significantly. By enabling the company to match the currency composition of its streams of revenue and debt service payment outflows it helped the company to reduce currency risk. Such enhancements may be a useful way of providing infrastructure projects in LDCs with access to local currency.

Infrastructure projects incur capital expenditures in local currency mainly for civil works, land, buildings and construction. They earn revenues entirely in local currency

although they attempt to peg tariff rates (at least partially) to movements in the value of the local currency versus the US dollar in order to reduce currency value risk on foreign currency capital inputs and borrowings. Increasing the local currency content of financing addresses a number of financial (balance sheet and income statement) risks as well as currency risk. But when it comes to currency risk, credit enhancements mainly reduce currency value risk. They only reduce currency convertibility and repatriation risk to the extent that the project does not have a larger amount of currency to convert and repatriate in order to meet larger external payment obligations.

6.5 Non-Commercial Risk Insurance (NCRI): Market Growth, Official & Private Options

The unprecedented growth of FDI in developing countries between 1990-2000 has moderated since 1997. That has been partly because of events such as the Asian crisis of 1997–98 and September 11th 2001. It has also been because FDI flows and stock in developing countries have grown rapidly between 1990-97 creating a much larger base, so that the same high rates of annual growth have become difficult to sustain. Accompanying this growth in FDI flows and stocks has been even faster growth in non-commercial risk insurance (NCRI) provided to cover FDI through the 1990s. NCRI has been important in sustaining FDI growth, although the linkage between FDI and NCRI is neither direct nor proportional. NCRI is linked more with growth in stocks of FDI in developing countries than with annual net flows. But the links between FDI flows, the growth of FDI stocks and the growth of NCRI may be stronger in LDCs than developing countries as a whole.

Growth of FDI and NCRI in the 1990s commenced at a time when the Multilateral Insurance Guarantee Agency (MIGA) came into being as an affiliate of the World Bank. It was a fortuitous coincidence. When MIGA started operations in 1989 no one could have predicted how timely its birth would prove to be. In its early days MIGA was proportionately a larger provider of NCRI (reflected in an average market share of 6% between 1990-93 compared to under 2% since 1997) when the market was in its infancy and when MIGA's coverage was confined to limited political and transfer (repatriation) risk. Before then, political risk was insured mainly by official bilateral insurers (OBIs) and ECAs. It was focused more on export credit insurance than on investment insurance.

Crude estimates from available sources of the NCRI market (Table 6.1) suggest that it has grown from coverage of about $1.5 billion in 1990 to over $100 billion in 2001. But NCRI does not include just 'political risk' (Figure 5.1). It includes other risks as well. The estimates provided above need to be treated with caution. The actual volume of political risk insurance is notoriously difficult to determine because of the secrecy surrounding the amount of NCRI cover underwritten by private insurers. Most insurance companies refuse to divulge the amount of political risk they have taken on their own books or laid off in reinsurance markets. Nor do insured parties or host governments (on whom such insurance reflects unfavourably) like to publicise these risks.

Table 6.1 Growth of NCRI relative to FDI in Developing Countries 1990–2001

	NCRI Risk Exposure ($Bn)	Net FDI Flows ($Bn)	FDI Stocks In Developing Countries ($Bn)	MIGA Political Risk Guarantees Issued			
				Exposure Amount ($Mn)	No.	Amt of FDI Facilitated ($Bn)	Market Share %
Years							
1990	1.5	24.1	357.8	132	4	1.0	8.8%
1991	3.8	35.7	392.6	59	11	0.9	1.6%
1992	5.8	47.1	475.9	313	21	0.6	5.4%
1993	8.5	66.6	541.2	374	27	1.8	4.4%
1994	12.1	90.0	694.7	372	38	1.3	3.1%
1995	22.2	107.0	849.3	672	54	2.3	3.0%
1996	28.2	131.5	896.0	662	68	6.5	3.1%
1997	37.6	172.6	1,043.7	614	70	4.7	1.6%
1998	47.8	176.8	1,219.3	830	55	6.1	1.7%
1999	64.7	185.4	1,740.4	1,310	72	5.2	2.0%
2000	84.0*	178.0	1,979.3	1,605	53	5.5	1.9%
2001	105.0*	168.2	2,113.7	2,000	66	5.2	1.9%

* Estimates

Source: Extrapolated from Jaffe and Reith, 1997. Data supplemented from various private industry sources. GDF 2001; WIR 1998 and 2001 and MIGA Annual Reports 2000 and 2001

Table 6.1 has been developed using base data from a syndicate at Lloyd's of London for the period 1991-96 and extrapolating it using available data on premiums collected and estimates from various sources (like MIGA) of what growth rates in NCRI were between 1998–2001.[99] Although Table 6.1 cannot make any claims about being accurate, it is indicative in terms of broad orders of magnitude, supported by strands of evidence available from a variety of sources (in the private insurance industry; unwilling to be quoted) and represent the authors' best estimates. The estimated seventy-fold growth in NCRI exposure has been faster than growth in FDI flows or stocks. It reflects the importance being attached to NCRI by foreign investors, especially after 1993. The market developed slowly in the early 1990s, consolidated its base between 1994–96, and took off after 1997 when events unfolded that underlined the importance of covering non-commercial risk. From 1998 onwards a series of events, with September 11th 2001 being unique among them, have served to underline the importance of NCRI and the need for it to evolve to accommodate new contingencies that are arising daily. There was spectacular growth in the market (averaging 30% annually) between 1998-2001 with foreign investors emphasising that, after 1997, political risk had become more important in influencing their decisions to invest in developing countries.[100]

[99] For example in an unpublished study, Asian Development Bank staff estimated total premium income for such insurance at $450 million in 1998 whereas knowledgeable underwriters at Lloyd's, AIG, CITI and other private insurance companies have suggested amounts that result in believing $450 million to be less than half the premiums collected in that year for all types of NCRI (as listed in Figure 5.1) and not just narrowly defined 'political risk'.

[100] Growth estimate noted in a forward by MIGA's Executive Vice President introducing Moran, 2001 (p. 2).

Although NCRI has grown dramatically it covers only a fraction (less than 5%) of outstanding FDI stocks in developing countries. That reveals the untapped potential that exists for further growth in the market. Table 6.1 indicates growth in NCRI cover between 1990–2001 comparing it to FDI flows and annual growth in FDI stocks in developing countries. It also shows MIGA's relative contribution to the NCRI market. In 2001 private insurers were estimated to account for over 60% of the total NCRI market. Their market share is expected to increase to over 80% by 2005. With MIGA and other multilateral agencies now accounting for less than 5% of global NCRI cover, that would imply that bilateral providers of NCRI (dominated by OPIC in the US) account for between 30–35% of the total amount of NCRI being provided at the present time.

MIGA has observed that the share of infrastructure projects now accounts for 25% of its NCRI business compared to less than 3% in 1992–93. But with more infrastructure projects involving political risk exposure to sub-sovereign entities as well as sovereign governments (as parties to contractual obligations), it has become more difficult for risk insurers, foreign investors and foreign creditors to reach agreement on risk allocation and risk sharing among parties.

6.6 The Emergence and Role of Private Insurers in the Long-term NCRI Market in the 1990s

As the NCRI market has grown, so has the role and share of *private insurers*. Before 1990, coverage of political risks was considered a task for the public sector. Of course, private players (i.e. various syndicates) in the Lloyd's of London insurance and reinsurance markets have been providing political risk cover for investments in Europe and Japan since the end of World War II. But the lumpiness, unpredictability and duration of NCRI make it difficult to apply the normal disciplines of actuarial analysis to NCRI premium pricing. Exposure in NCRI is built up quickly but takes a considerable length of time to diminish, constraining private insurers from laying off risk by disaggregating and selling participations across a number of insurers to spread the total risk burden. Recovery of physical assets (against NCRI claims paid-off) is a task that governments are better equipped to perform than private insurers. For these reasons, the bulk of NCRI until 1990 was issued by bilateral ECAs under export credit financing arrangements. Investment insurance was limited to expropriation, war or insurrection and to currency inconvertibility and transfer risk for very short durations – usually no more than three years.

In 1990 private insurers in the NCRI market were few. They provided a limited number of standard NCRI options that did not fully accommodate the needs of foreign investors in LDCs. The coverage they offered was short and limited. But, with the creation of MIGA and increased activity by bilateral ECA insurers, space was created for a number of new players to enter the NCRI market and provide political risk cover on their own book. Since 1995 several new players have entered the market, including, inter alia, global insurance firms like ACE, AIG, AIU, Chubb, CITI, CIGNA, Exel,

Global Re, Munich Re, Zurich Re and Unistat Assurance. An estimate made by AIG in 1998 suggested that at that time there were 23 private insurance companies and 43 syndicates at Lloyd's that were underwriting political risk insurance.[101]

The competitive structure of the market now makes it possible to insure over $1 billion in NCRI coverage on a single risk. Most of this new non-commercial risk insurance capacity engages in the medium and long-term end of the market. The new private players operate on their own and participate in joint public-private interactions with MIGA as well as bilateral risk insurers on a project-by-project and country-by-country basis. Their entry has expanded the total capital base against which NCRI can be provided, thus creating more capacity for existing types of standard NCRI coverage and creating competition in developing new types of coverage and extend different forms of protection to suit a continuously evolving variety of circumstances.

Private insurers (and in particular the Lloyd's syndicates[102]) have a reputation for flexibility, speed, innovation and commercial underwriting flair in addressing the mixture of complex risks and conceptualising the types of events that NCRI entails and protects against. Private insurers provide standard PRI but are capable of tailoring insurance policies to meet the specific needs of particular projects and clients. The most important contribution of new private insurers in the NCRI market has been to lead the way in extending and improving the quality of risk coverage, i.e. lengthening its duration, widening the scope of risks covered and increasing the amount of exposure that insurers are willing to underwrite for a single investment. The infusion of competition has led even traditional (and official) insurers to go along with these new developments.

Private insurers dominate an area of NCRI which official multilateral and bilateral insurers (except some ECAs) do not operate in, i.e. short-term trade finance related NCRI. While that activity is not directly germane to FDI as such, the availability of such cover helps to mitigate some of the financial and operating risks that foreign enterprises in developing and least developed countries are exposed to in their daily business. The maximum exposure period for this type of NCRI risk is six months. In some instances private insurers are putting together short-term political and commercial risks and providing a combined insurance package for both.

Private insurers operate differently from public insurers. Whereas the risk cover provided to foreign investors by MIGA and ECAs are made public and a matter of record,

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[101] Salinger, 1998.

[102] Lloyd's underwriters have traditionally run and controlled the syndicates for which they underwrite. They can adapt and modify their policies as they go along to suit different client circumstances in a flexible, responsive manner. In private insurance companies the underwriter is a part of the company's middle management, obliged to conform to existing policies laid down by their Boards until they are changed. For that reason, Lloyd's tends to attract innovative underwriters who can tailor their products and policies at very short notice.

private policies contain mandatory secrecy and confidentiality clauses. These are aimed at preventing host governments from finding out about the existence of such policies for fear of creating moral hazard and encouraging host governments to treat insured investors differently from the uninsured. Standard PRI policies underwritten by private insurers contain three specific exclusions of losses incurred by investors including those arising from: (a) war or civil war unless such contingencies have specifically been written into the policy and an additional war risk premium paid; (b) failure of the insured investor to obtain all proper licenses, clearances and approvals by all relevant authorities at all levels of governments or to comply with all local laws; and (c) financial or operating default.

Many LDC host governments resent the fact that foreigners investing in their country are purchasing private PRI and adding another layer of investment cost that has to be covered by higher local profits. For infrastructure investments, higher initial costs usually translate into higher tariffs. A number of host governments have therefore attempted to offer their own insurance alternative, not realising that such an attempt defeats the purpose of the foreign investor seeking NCRI cover in the first place. If a foreign firm feels it needs political risk insurance, it is hardly likely to buy it from an entity owned by the same government from which protection is being sought!

In the long run, the only way to reduce or remove the cost of NCRI cover is to remove the need for it by transforming political, administrative, legislative and judicial environments and behaviour in host countries in ways that reduce the perception and actuality of political risk. There are some countries where there is little demand for political risk insurance but great demand for insurance against the risks of civil disorder in the form of strikes, riots and civil society instigated demonstrations and disruptions that all cause business interruption and revenue losses for foreign investors. Such insurance can cost as much, if not more, than standard political risk insurance

6.7 The Role of Official Multilateral Risk Insurers

The principal official multilateral providers of NCRI are:

- The *World Bank Group* comprising: the International Bank for Reconstruction & Development (IBRD), its soft-window, the International Development Association (IDA) – and two affiliates, the International Finance Corporation (IFC) and MIGA as well as ICSID
- The *Regional Development Banks*, i.e. IADB, AsDB and EBRD but not the AfDB to any discernible extent
- Other *sub-regional multilateral insurers* such as the Inter-Arab Investment Guarantee Agency (IAIGA)

The Multilateral Investment Guarantee Agency (MIGA): By far the largest of the multilateral NCRI providers is MIGA, established in 1988 with initial capital of SDR 1 billion. In March 1999 a capital increase of $850 million was authorised and by mid-June 2001 MIGA's capital base was nearly $2 billion. MIGA was set up to fill the

gaps that were perceived to exist in NCRI coverage at the time for FDI in developing countries and especially in the LDCs. Those gaps have narrowed considerably with the infusion of private firms in the NCRI market in the mid-1990s. But MIGA nevertheless retains a useful role in many countries where the involvement of an intergovernmental agency is felt to be an essential ingredient in deterring, moderating or correcting host country behaviour that might have an adverse impact on foreign investment.

MIGA's main advantage emanates from its intergovernmental ownership. In 2001 its shareholders comprised 154 countries with another 12 in the process of completing membership formalities. MIGA can provide risk cover to investors from all its member countries, investing in other member countries. Except in unusual circumstances (approved on a case-by-case basis) it cannot provide risk cover to investors in their home countries (i.e. domestic firms) or in countries that are not members. Nor can it provide cover without obtaining the consent of the host government concerned. MIGA's political risk guarantees cover foreign direct equity and related debt investments, including loans and loan guarantees provided by shareholders provided they have a maturity of at least three years. It can provide NCRI cover for technical assistance, management contracts, franchising contracts and licensing agreements.

Equity investments can be covered up to 90% plus an additional 450% of the investment contribution to cover cumulative earnings attributable to the investment. Debt (i.e. loans and loan guarantees) can be covered up to 95% of the principal amount (with higher exceptions being made in unusual cases) plus an additional 135% of the principal amount to cover accrued interest over the life of the loan. Risk cover is typically available for up to 15 years and, in some cases, 20 years. By contrast, private insurers are unlikely to provide risk cover for more than 10 years although this limit is continuously being stretched. Its single risk cover limit in 2001 was $200 million (compared to over $1 billion for private insurers) although MIGA can arrange for a higher limits by syndicating.

The pricing of MIGA's risk cover is determined by the nature of country and project risk with the effective price varying depending on the type of investment and the industry or sector in which it is being made. Annual premium rates vary between 30 and 100 basis points or bps (i.e. 0.30% to 1.00%) per risk with a premium of 150 bps being charged in exceptional cases. Premiums have to be paid at the beginning of each contract period. Compared to the private sector (with premiums ranging from 25 to 500 bps) MIGA's pricing structure is flat. Its premiums do not reflect fully the risk differentials across the full spectrum of developing countries adequately. Under MIGA contracts, the investor has the option of cancelling coverage (and stopping premium payments) after three years but MIGA cannot cancel the coverage before the agreed final term at its own option unless the insured investor defaults on contractual obligations to MIGA.

Because its goal is to facilitate new FDI flows to developing countries, MIGA cannot insure projects that are already operating although private insurers can. It can insure green-field projects, as well as expansions, modernisations, privatisations, or

restructurings, provided some new investment is involved. In keeping with its objective of promoting economic growth and development the investment projects it insures must be financially and economically viable, environmentally sound (established through comprehensive environmental impact assessments), and consistent with the labour, social and other development standards of the host country (and beyond). These additional qualifications defining the eligibility of the projects it can insure have turned many investors away from seeking MIGA insurance because of the additional time and expense involved in demonstrating to MIGA's satisfaction that their projects meet these conditions.

The risks covered by MIGA in 2001 are of four types: expropriation, war and civil disturbance, breach of contract and currency transfer with investors being able to choose any combination of these. MIGA does not cover contract frustration, obsolescing bargains, or creeping expropriation, nor does it cover policy and regulatory risk. Claims against MIGA can only be activated and paid out provided the insured claimant is either denied appropriate judicial or arbitration relief, or after a judicial or arbitration award has been made in favour of the claimant but not honoured by the host government. That usually means that settlement occurs 2-3 years after the initial default by the host government has triggered remedial action by the insured investor and only after due process has been followed. MIGA does not cover the incremental costs and losses of the insured claimant (which can be quite substantial) during that period of time.

In 2001 MIGA issued its 500th guarantee and paid out on its first claim for $15 million, against which it has now started recovering repayment from the government concerned (Indonesia). In that year MIGA's gross NCRI exposure was $5.2 billion and its net exposure was $3.2 billion. Its income from premiums, fees and commissions totalled $36.5 million and its income from investments of paid-in capital and reserves (amounting to $767 million) was a further $30.4 million. But after accounting for its expenses, MIGA's net income for the year 2001 was just $19.6 million ranking it below the smallest private insurance companies operating globally.

By 2001 MIGA had provided NCRI cover for investments in 78 developing countries including 12 (out of 49) LDCs. Total coverage exceeded $9 billion with the amount of FDI facilitated between 1990-2001 being estimated by MIGA at $41 billion. That compares to an FDI stock of over $2 trillion in developing countries and cumulative FDI gross inflows of $1.95 trillion over the same period. Thus MIGA facilitated investments that amounted to about 2% of total FDI flows to developing countries. It falls within the range of 'errors and omissions' taking into account the poor quality of FDI statistics.

The distribution of MIGA's net risk exposure portfolio was: 36% in financial services where it insured global banks investing in the financial sectors of developing countries; 30% in infrastructure; 14% for mining, oil and gas; 9% for manufacturing; 6% for services; 3% for agribusiness and 2% for tourism services. Thus 80% of its net risk exposure was concentrated in financial services, infrastructure and natural resources.

By region, 47% of its net exposure was in Latin America and the Caribbean; 23% in Europe and Central Asia; 13% in sub-Saharan Africa; 9% in East Asia and the Pacific; 5% in South Asia and 3% in the Middle East and North Africa. Over 80% of its portfolio was concentrated in middle-income developing regions. Only 14.3% of its exposure was in twelve (of 49) LDCs. Of these five (Bangladesh, Guinea, Mozambique, Tanzania and Zambia) accounted for 11.1% of MIGA's net exposure or 78% of the LDC total with the other seven countries accounting for 22%. Over 87.5% of MIGA's guarantees were provided to investors from developed (OECD) countries with less than 12.5% for investors from developing countries. In the latter case, investors from four developing countries (South Africa, Turkey, Brazil and Mauritius) accounted for 10.7% of MIGA's exposure thus accounting for nearly 86% of all developing country investors.

Though it pioneered the NCRI market for long-term foreign investments, MIGA's role has receded as the capacity of the private insurers has grown. As an official institution bound by its constitution and with tortuous approval and clearance processes involving its intergovernmental Board of Directors and Council of Governors, MIGA has been slower to innovate in terms of product development. Private insurers have been quicker in pushing the edge of the NCRI envelope with their quicker procedures, greater responsiveness and 'feel' for where new client needs are emerging and how they might be met. But MIGA has been innovative in launching its Co-operative Underwriting Program (CUP) with private insurers, which represents a significant *public-private interaction* in the NCRI market.

MIGA has been innovative in expanding its non-financial investment promotion and technical assistance services to encourage greater FDI flows to the developing world. But they seem to be aimed at countries already attracting large amounts of FDI rather than LDCs (though MIGA's rhetorical emphasis is the opposite). Indicative of the anxiety of the World Bank Group to avoid prolonging any default on the part of a member country to a group affiliate, an experimental programme is being launched under which the IBRD would provide a contingent loan to a host country to fund its obligations to MIGA. If a claim insured by MIGA has to be paid out because the host country has defaulted on its obligations to a foreign investor insured by MIGA, then the IBRD would disburse funds to that country under the contingent loan so that it could pay back MIGA immediately. Thus MIGA would be made whole while the host country would be obligated to repay all amounts withdrawn under the contingent loan to the IBRD over the tenure of the loan (usually 15 years) on standard IBRD (hard) terms.

MIGA played a useful but diminishing role in the NCRI market between 1990-2001. Absent a change in its constitution, and without greater flexibility and operational responsibility for underwriting delegated to its line managers and staff, it is difficult to see how MIGA (although it is the least bureaucratic of WBG affiliates) can compete with private insurers in a fast moving, ever changing marketplace. It may have a role to play through CUP in forming insurance syndicates and taking risks in countries where

private insurers might be wary of taking exposure without the umbrella of 'preferred creditor' protection.

It is difficult to make a case (although it understandably tries to) that MIGA has made a significant development contribution. Its activities have not promoted genuinely innovative or path-breaking projects; nor do they appear to have covered investments that would not have taken place anyway without its involvement. On the other hand its bureaucracy and slow approval procedures, and its insistence on higher environmental and social standards for the investments it covers than are required by local laws, as well as its insistence on having expensive and time-consuming EIAs and project appraisals undertaken by potential clients, appear to have deterred many firms from availing of its services. It is not known whether these firms abandoned their inclination to proceed with the investment without cover. Whether MIGA's operations justify the investment of time and money that its shareholders have vested in it remains an open question, although its continuation would on balance appear to add to, rather than detract from, the risk mitigation options that foreign investors in LDCs ought to have.

The World Bank's (WB's) Partial Risk, Partial Credit and Policy Risk Guarantees: Strictly speaking, the WB's partial risk, partial credit and policy risk guarantees are not PRI products as such. They do not cover foreign investors in the way that MIGA's risk cover does, or in the way a parallel equity investment by IFC in a project might mitigate risk for the project sponsor by spreading the equity risk and providing the comfort of a privileged institutional umbrella. The WB's guarantees are meant to provide safety for *creditors* lending to a foreign investment under a project financing structure. They benefit the foreign investor indirectly rather than directly by making it easier for creditors to come into a financing structure for a particular foreign investment. A World Bank guarantee for a commercial creditor's involvement in a project financing structure provides the project (and therefore the investor's interests) with the cover of preferred creditor status. It confers protection in deterring untoward behaviour by host governments against the interests of a particular foreign investment or FDI in general. But the WB guarantee does not ameliorate the foreign investor's direct equity risk exposure in any material way.

If the project fails, or the host government defaults on its agreements and does not later make good, the lenders under a project's financing structure might be partially protected in getting some of their loan principal back under the WB guarantee. But the foreign investor would still lose its equity investment partially or entirely. Thus WB guarantees (which have been availed of to an insignificant extent and not as widely as had earlier been hoped) are a hybrid and indirect form of risk mitigation that cannot be classified as potent 'risk insurance' or 'risk cover' for foreign direct investors in any contractually meaningful sense.

The WB's *partial credit guarantee* (PCG) covers all occurrences and causes of non-payment (and not just the materialisation of sovereign risk) for a designated part of a creditor's loan to a project – usually the later maturities. They are only available to

IBRD eligible countries and not to IDA-only countries, thus excluding the LDC universe. Through PCGs the WB encourages institutions to lend for a longer duration than they otherwise might or to stretch out the maturities of bonds issued in capital markets. Typically commercial bank lenders with such guarantees are willing to stretch maturity periods from the usual five years to ten years. PCGs are intended to be flexible instruments in accommodating different structures to suit different client needs such as: coverage of principal for bullet maturity bonds; rolling (nonreinstatable) coupon and principal guarantees for bullet maturities; and later maturity principal repayments of amortising syndicated loans.

PCGs are applied in cases where creditworthy sovereign borrowers have limited access to medium and long-term capital markets or to fill a financing gap for large public or private infrastructure investments. They help to enable more attractive financing for such projects, usually resulting in making tariffs more affordable. This type of guarantee is typically used for projects involving sovereign (rather than private) borrowing from commercial lenders that is counter-guaranteed by the government. The counter-guarantee raises another important issue that is not appreciated by the non-cognoscenti. The WB provides an interim guarantee only as an intermediary and not as ultimate guarantor.

By providing a partial risk or credit guarantee the WB is not (and neither do any of its affiliates although IFC is supposed to under its Charter) taking any risk on its own balance sheet – except perhaps for a short period when it has to pay out to a guaranteed creditor and before it has collected that amount back from the host government.[103]

Essentially a WB guarantee is a pass-through guarantee of the host government itself. Under IBRD and IDA Articles of Agreement it cannot be anything else. It is made more acceptable to the creditor because the WB – which has a higher credit standing and reputation to maintain in global financial markets than a typical developing host government – has promised to honour it, whereas such a promise made by the host government, even if well-intended, would not mean very much if it was not creditworthy.

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[103] As an example of how a PCG works and why it might be useful, the Leyte-Luzon geothermal power project in the Philippines is instructive. Apart from providing a direct loan for the project, alongside commercial lenders, the WB provided a guarantee for a $100 million bond issue floated by the Philippine National Power Corporation (PNPC) in the US institutional market. The guarantee was in the form of an option given to institutional investors to 'put' the bonds to the WB (selling them at par to the WB) on their maturity date for the full amount of the principal then due (i.e. in Year 15). That enabled the PNPC to float a 15-year bond issue in the US bond market; an unprecedented feat considering that the market had refused to consider bond issues for any Philippine entity exceeding a 10-year maturity. The 'put option' guarantee enabled the bonds to be sold to the Rule 144a institutional market comprising pension funds and other 'safe' investors that were only permitted to buy investment grade bonds and instruments, thus introducing the Philippines to a new investor base. The Philippine government had to provide an indemnity to the WB for providing the put option guarantee. This example shows how the PCG works but it did not protect any foreign direct investor (only the bond investor) from political risk.

The *partial risk guarantee* (PRG) covers creditors (not investors) for specified sovereign risks arising from a government's default on contractual obligations, or the occurrence of certain force majeure events of a 'political' nature. Such risks or events might be specified to include: (a) maintaining an agreed regulatory framework for a project; (b) adhering to agreed formulas for determining or escalating tariffs for an infrastructure project; (c) delivering key inputs, such as fuel for a power generating project under the terms of a fuel delivery agreement; (d) compensating the project for delays or interruptions caused by government actions such as delays in providing licenses approvals and consents; (e) political events such as a change of government resulting in the new government reneging on the commitments of its predecessor; (f) requiring foreign currency to be made available to a project for meeting its payment obligations; (g) unfavourable changes in national laws; (h) expropriation and nationalisation; (j) the host government obstructing an agreed process of arbitration; and (k) non-payment of agreed termination amounts or an arbitral award following a covered default.

The protection to the foreign direct investor under such a guarantee comes from specifying the circumstances in which an investor might be entitled to withhold payments from a project, triggering a default.[104] Under such a guarantee, the host government signs an indemnity agreement with the WB agreeing to reimburse the WB for any amounts WB has had to disburse to lenders under the guarantee. PRGs are useful where there is a high risk of policy reversal and where the government's counter-guarantee and the WB's direct involvement are critical to securing private loan financing. In such cases PRGs can help catalyse long-term private financing in infrastructure projects on improved terms with a degree of assurance that a host government's commitments on tariffs and inputs will be met. A PRG does not increase the host government's obligation to protect private interests in a project investment; it simply bolsters the quality of obligations it has already agreed.

Policy Based Guarantees (PBGs): These guarantees – which should be called market access guarantees – do not apply to private investors and FDI. They are designed to support IBRD eligible countries that are performing well to access global capital markets when access is temporarily blocked or restricted. They are aimed at bolstering the market's assessment of a country's creditworthiness. They are similar to PCGs in covering all events of non-payment for a portion of the scheduled repayments of com-

[104] An instructive PRG example was a $360 million guarantee (provided jointly by the WB and the Exim Bank of Japan) to a commercial bank syndicate covering part of a $680 million loan the syndicate was making to private investors for financing a power project in which they had a $360 million equity stake. The project's revenues were secured through a long-term sales contract with Pakistan's national electricity company. The WB-Exim guarantee could be called if the government of Pakistan defaulted on any of a number of undertakings it had made to the private power generating company. The government simultaneously agreed to an indemnity agreement with the WB and Exim to reimburse them for any amounts that had to be disbursed to the commercial lenders if the government defaulted and the guarantee was called. Thus the creditors were partially protected. But that protection also indirectly extended to the project sponsors who benefited from the government having to keep its word under the arrangements agreed, of being penalised under its indemnity agreement.

mercial bank syndicated loans or bonds floated in capital markets. PBGs are an alternative to adjustment loans in that the primary funds come from commercial sources rather than IBRD although similar requirements apply: i.e. that client countries should have a strong track record of good policy performance and have external financing needs that fulfil key development priorities.

Guarantee Fees: WB guarantees are expensive. Their costs, which have to be paid on top of the interest and front-end costs of the loans being guaranteed, deter extensive resort to them, giving rise to the perception that the WB prefers to lend directly to countries rather than to guarantee obligations to private creditors. IBRD charges a guarantee fee of 100 bps per annum on the exposure arising from disbursed and outstanding balances paid out under guarantees, along with a standby fee of 25 bps per annum on committed but undisbursed exposure. In addition it charges a front-end arrangement fee of 100 bps on the amount guaranteed. It charges private borrowers an additional initiation fee of 15 bps or $100,000 (whichever is higher) of the guaranteed debt as well as a processing fee of 50 bps of the guaranteed debt to cover the cost of any administrative expenses the WB may have to incur. These fees are charged up-front. In the rare instances when IBRD guarantees are provided in IDA-only countries, the WB charges a fee of up to 300 bps per annum on disbursed and outstanding exposure and a standby fee of up to 100 bps per annum on committed but undisbursed amounts. In addition it charges front-end, initiation and processing fees for providing these guarantees. When guarantees are provided by IDA, a guarantee fee of 75 bps is charged on exposure to IDA arising from balances disbursed and outstanding against guarantees with a standby fee of 25 bps on undisbursed commitments and with the same front-end, initiation and processing fees.

The WB's guarantee programme was launched in the late 1980s and 'revitalised' in 1994. It has been heralded frequently as a significant contribution to risk mitigation. But the WB has made surprisingly few guarantees so far – fewer than fifteen in eight countries over a span of fifteen years! Its total outstanding guarantee exposure in mid-2001 was less than $1.4 billion or under 1% of the Group's total loan exposure. Thus, as workable risk mitigation devices the WB's guarantees have limited reach and value. In theory, these guarantees are supposed to result in an umbrella of protection for participants in a project financing structure. To the extent that the WB has to pay out on a guarantee claim because the host government has violated contractually binding undertakings, the country concerned has to reimburse the Bank immediately under its indemnity agreement. That provides a financial disincentive for governments to default.

In providing a guarantee the WB has a direct interest in ensuring that: (a) the host government makes credible commitments to protect the interests of a foreign financed project and (b) through the exercise of whatever leverage it has, that the government delivers on those commitments to prevent the guarantee from being called. Thus the financial disincentive to the government of having the Bank's guarantee called and the deterrence value of the Bank's leverage are supposed to work together in mitigating risk; at least in theory.

It has not turned out that way in reality. Experience with the WB's (few and far between) guarantees suggests that they are inefficient risk-mitigation instruments in instances when there is a high probability that the risks being guaranteed will materialise. It is in such instances that investors and creditors seek WB guarantees and are willing to pay the high extra cost involved to transfer their risk. But it is precisely in such instances that the WB prefers to avoid giving the guarantee (dragging its feet in doing so) and focuses instead on getting the risks reduced to a reasonable level. But that usually cannot be made to happen in the short run. The availability of WB guarantees encourages creditors participating in financing a project to seek broader protection from the host government (using the WB as a tool) than they need or require, for reasons of their own which makes such projects unnecessarily burdensome to host governments. While guarantees may provide specific protection to specific investors in specific transactions, they are no substitute for substantive long-term regulatory reform, which is what the WB is more interested in.

IFC's Role in Risk Mitigation: Unlike the WB's guarantees or MIGA's risk insurance products, IFC did not, until 2000, have any products or instruments specifically aimed at mitigating risks that private foreign investors took in making investments in LDCs. Its role was based on its regular operations and the expertise it had developed over the years, as both the largest multilateral player in financing private foreign and domestic investment in developing countries, and as a packager of project finance and syndicated commercial loans. The provision of equity by IFC, alongside equity provided by project sponsors, (supposedly) extends implicit comfort to private investors. Projects in which IFC has invested equity can and do fail for commercial reasons. But the intrusion of non-commercial reasons and risks in influencing their prospects is something that IFC uses the WB's leverage to avoid or rectify. That applies also to its B-loan programme, under which it extends to creditors participating in its loan syndicates the privileges of implied preferred creditor status that it has assumed for itself as a member of the World Bank Group.[105]

Up to 2000, IFC assisted foreign investors to mitigate their investment risks by: (a) risk-sharing in projects directly alongside investors through its own equity investments; (b) reducing risk through careful appraisals and structuring skills; (c) syndicating loans with commercial creditors in a way that provided them with preferred creditor umbrella cover; and (d) exerting its influence as a member of the WB Group which has considerable development financing and 'seal-of-approval' leverage over host country governments.

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[105] This is often a bone of contention with governments. Although the World Bank (and IDA's) charters have specific provisions that could be interpreted to endow them with preferred status, IFC's charter was designed specifically to avoid giving it that status. For that reason, IFC was required not to seek government guarantees for its investments whereas the IBRD and IDA must have such guarantees as a matter of course. Those, and other, charter provisions were intended to make clear that IFC was not to have preferred treatment other than that which its intergovernmental ownership itself secured. Yet, over the years, IFC has manoeuvred itself into using its membership of the World Bank Group as a means of exerting preferred creditor/investor status implicitly.

Since 2000, however, IFC has developed its own risk mitigation products. It provides clients with access to asset-liability management services (to reduce balance sheet risk) and offers its clients tools such as currency swaps, and interest rate swaps, caps, collars and floors by acting as an intermediary between its clients and market counter-parties. IFC also provides risk-sharing structures and guarantees that allow its clients to transact directly with market counter-parties without its financial intermediation. Beginning in 2001 IFC began offering *partial risk guarantees* to clients. These covered client repayment and interest servicing obligations on bonds and loans. IFC's guarantees are available for debt instruments as well as the trade obligations of client companies. They cover commercial as well as non-commercial risk.

IFC can also provide *local currency guarantees* but only to the extent that it is able to fund its commitments by mobilising local currency and hedging its exposure in the local swap market. Guarantee fees are consistent with IFC's loan pricing structure. It is more varied and sensitive to country, project, sector and industry risk than the pricing terms of the World Bank or MIGA. In 2000-01 IFC has taken on exposure of $600 million in guarantees, nearly half the level of the World Bank but in a very short span of time.

Regional Development Bank Guarantees:[106] The regional development banks have guarantee programmes (for PRGs and PCGs) modelled on those of the World Bank. But unlike the World Bank, the RDBs do not always ask governments for counter-guarantees or indemnities.

The Inter-American Development Bank (IADB) had total guarantee exposure amounting to over $531 million (net present value of $312 million) at the end of 2001 of which $337 million was subject to call. Its political risk guarantee programme began in 1995. The first guarantee was issued in the following year but the programme was moribund until it was ramped up in 2000 and 2001 with PRGs being approved for five projects[107] and PCGs for two projects in those two years. Its PRG contracts cover: breach of contract risk; termination risk; as well as currency convertibility and transfer risk and other pre-specified risks such as expropriation or other arbitrary or confiscatory government actions. PRG coverage is for up to 50% of total project cost or $150 million, whichever is less.

[106] For this section only the activities of the Asian and Inter-American Development Banks have been looked at. The EBRD does not operate in the LDCs and the African Development Bank has no specific risk mitigation or guarantee programme to speak of.

[107] A particularly interesting example of a PRG provided by IADB was for the Salitre municipal water project in Colombia in 1997. Under the risk mitigation arrangements for this project, the municipality was required to buy out the foreign investor if any of a specified list of events occurred. The IDB provided a PRG for the issuance of notes issued to finance the debt component of the project. The PRG would result in the IADB making payment to a group of note-holders if the buy-out was triggered and the municipality let more than 10 days pass without making good on its obligations. IADB did not require a government counter-guarantee; instead it obtained host government assurance that it would not contest IADB's efforts to salvage the assets up to the amount needed to repay all the noteholders.

Its PCGs provide two combinations of all-risk cover. These range from coverage for all risks for the entire maturity of a loan or bond issue in local currency or for later maturities of a term-loan or bond issue in US dollars. PCGs are tailored to provide the most effective credit enhancement for the debt instrument being considered so as to extend its maturity and lower its cost to the extent possible. PCG coverage is for up to a maximum of 25% (in very rare cases 40%) of project costs subject to a maximum of $75 million per project.

In 2001, IADB introduced a *partial currency credit risk guarantee* for use with local currency domestic bond issues. The aim of these PCCRGs – essentially a credit enhancement – is to bridge the gap and cover the risk between the local currency investment demands of portfolio institutional investors (such as pension funds) and the needs of long-term bond issuers (i.e. project sponsors or their creditors) as well as contribute to the development of domestic currency bond markets.

In the same year, IADB initiated *reinsurance* of its political risk guarantees with three insurance agreements with separate private reinsurance companies that enabled IADB to lay off $172 million of its open guarantee exposure. It proposes to cover at least 50% of its guarantee exposure through reinsurance as a matter of its own risk management policy from 2002 onwards. IADB also has an equivalent of the WB's PBGs.

In 2000 the IADB launched a Guarantee Disbursement Loan (GDL) Pilot Program for a maximum of $1 billion that could be drawn by borrowing countries (each limited to a maximum of $250 million) implementing a macroeconomic programme satisfactory to IADB. Under GDL, borrowing countries have the flexibility to choose either a conventional IADB loan or have a commercial borrowing or bond issue guaranteed instead.

The Asian Development Bank (AsDB) also extends PRGs and PCGs for projects in its member countries. Although guarantee operations were authorised by its Board in 1995, its first guarantee was not issued until 1999. AsDB's political risk guarantee programme is almost identical to that of the IADB. It is only dissimilar in that AsDB's guarantees cannot be issued on a stand-alone basis. They can only be provided for project investments in which AsDB has direct participation as a creditor. Also, coverage is only for debt instruments and not for equity. As with IADB, the AsDB's *partial risk guarantees* can be issued for a private sector project, without the need for a counter-guarantee from the host government, for a maximum of $150 million or 50% of total project cost, whichever is lower. Fees, paid up front, are market-based and comprise a front-end fee, a guarantee fee, and a standby fee. In the case of its PCGs, which provide comprehensive commercial and political risk cover – for late maturities of principal and/or interest service – guaranteed payments are usually due 10 or more years after the loan inception date.

Since the 1997-98 financial crisis, Asian borrowers, project sponsors, co-financiers and host governments have wanted to hedge currency mismatch risks by borrowing in the same currency in which revenue is earned. The PCGs offered by AsDB can there-

fore cover local currency domestic bond issues or long-term loans from local banks in borrowing countries. Its PCG limits are the same as for the IADB.

At the end of 2001 the nominal face value amounts of the PCGs and PRGs committed by AsDB were $318 million and $251 million, respectively. But AsDB's net guarantee exposure outstanding was just over $355 million (net present value of $231 million) none of which was yet due for call. At the end of that year ADB had approved a total of 11 PCGs and three PRGs. Together these had resulted in mobilising incremental long-term commercial financing of about $1.5 billion as syndicated commercial loans and in bonds and notes issued in domestic Asian capital markets.

6.8 The Role of Bilateral Non-Commercial (Political) Risk Insurers

Apart from private and multilateral NCR insurers, another group of institutions is active in the NCRI market. It comprises *official bilateral insurers* (OBIs) including ECAs, investment agencies and dedicated risk insurance agencies. ECAs became involved in NCR insurance some time ago when, in a typical project finance structure for FDI in developing countries, it became necessary for them to provide PRI during the project construction period, i.e. when contractors and equipment suppliers from their respective countries were intensively exposed to risk. More than twenty OECD countries have established either specific agencies or programmes for providing NCRI to promote and safeguard international investment by their own nationals.

The largest eleven OBIs (premiums generated and risk exposure) are the Overseas Private Investment Corporation (OPIC) of the United States; the Export Insurance Department of the Ministry of Trade & Industry (EID-MITI) of Japan; HERMES and Treuarbeit of Germany; the Compagnie Francaise d'Assurance pour le Commerce Exterieur (Coface) of France; the Export Credit Guarantee Department (ECGD) of the United Kingdom; the Export Development Corporation (EDC) of Canada; Sezione Special per l'Assicurazione del Credito all'Exportazione (SACE) of Italy; the Export Finance & Insurance Corporation (EFIC) of Australia; the Nederlandesche Credietverzekering Maatschappij Holding NV (NCM) of the Netherlands; CESCE of Spain; and EKN of Sweden.

These ECAs/OBIs, and 35 others like them belong to the Berne Union, an association of these agencies that meets every quarter and shares information on global investment and insurance trends. Between them, the OBIs supported exports valued at over $500 billion in 2001; insured or part-financed projects in non-OECD countries to the tune of around $100 billion; and insured direct outward FDI from their countries of about $20-25 billion. Unlike multilateral or private risk insurers, ECAs/OBIs have paid out over $150 billion in insurance claims over the last ten years. They have been compelled to write down nearly $80 billion in their own debt claims on heavily indebted developing countries under debt forgiveness programmes. They have salvaged and recovered about 65% of their claim losses from host countries through patient, persistent recovery efforts.

The role of these agencies in world trade is crucial. Most of the export credit business of these institutions is accounted for by dealing with one another. Despite the losses they (i.e. their governments) have absorbed between 1982-2001, OBIs continue to provide investment insurance against the three (standard) political risks: expropriation, war and civil war, and currency convertibility/transfer. But their NCRI coverage now applies mainly to investments made by their national firms in developing countries and not in other OECD countries where the need for NCRI has diminished. OBIs will only insure investments in developing countries with which their own country has a bilateral investment treaty (BIT) incorporating the normal host country undertakings and guarantees usually sought under such treaties to protect foreign investment and respect property rights.

OBIs went into the NCRI market through the export credit route, which required cover to be provided for commercial and non-commercial risk for the equipment being exported and the financial facilities that attended such exports. Their risk insurance exposure to developing countries increased dramatically in the 1990s although they took heavy losses on their direct loan exposures to these countries that had been built up in the 1970s and 1980s. The evolutionary path of OBIs entering NCRI through export credit has led to some confusion about the distinctions that have since emerged, although they remain blurred in many minds, between 'export credit insurance', 'investment insurance', 'political insurance' and 'non-commercial risk insurance'. Though often used interchangeably the last three terms do not mean the same thing. Investment risk insurance covers both commercial and political risk insurance. And, political insurance comprises only one component of NCRI (as Figure 5.1 attempts to make clear).

The situation with OBIs has also become confused because of the impact of the OECD Consensus on standardising the terms of export credits. PRI for investment was not, however, covered by the OECD Consensus although there have been moves in recent years to standardise premium rates so that premium subsidies do not become a hidden competitive device among OECD countries to gain advantage in export markets. So long as PRI provided by OBIs was confined only to equity that did not matter. But when PRI was also provided to cover debt, overlap became inevitable. Most OBIs now provide PRI for equity and debt. They cover risks that go beyond the definitions that have been applied to the term 'political risk' by institutions such as MIGA.

The result is that a broad grey area has emerged between what was traditionally export credit insurance and what is now PRI for investment. In the past, the bulk of PRI was issued under standard export credit arrangements. But since 1990, the oligopoly that OBIs had over NCRI has eroded with the entry of private insurers who have rapidly taken over market share. The multilaterals have too small a share of the NCRI market to have made a significant difference to OBI business. This leads to the question of whether OBIs are prepared to play the role into which they are slowly being squeezed – i.e. being NCR insurers of last resort taking only business or political risks that neither private insurers nor multilateral agencies want to take simply in order to promote their country's exports.

The mandates of many OBIs are coming under strain. They are required by their governments to forego providing NCRI cover where private insurers are willing to take the risk. Thus OBIs have to be 'insurers of last resort' (take the worst risks that are the most likely to materialise) and break even at the same time. If OBIs are to remain solvent they will need a balanced spread of risk in their portfolios.[108] Inevitably this will mean providing cover for the kind of risk that private insurers would be willing to take. The question that arises is the extent to which the private insurers and OBIs need to co-operate and where they will compete. Some interesting possibilities for *public-private interaction* are arising which will be dealt with in the final section of this chapter on that subject. But in looking at the issue of public-private insurer co-operation vs. competition it has to be taken into account that private sector insurers are required to pay taxes and are subject to stiff regulatory oversight by industry regulators. Many OBIs are not subject to these requirements. OBIs also have the advantage that the political risk cover facilities they provide result in the banks they insure being able to avoid statutory prudential provisioning requirements (i.e. zero weighting in central bank imposed risk matrices) while that is not the case when the same banks are covered by private insurers for the same risks.

6.9 Ultimate Recourse to Host Governments for NCRI Cover: The Problems of Aggregation

When it comes to NCRI cover provided by official multilateral or bilateral insurers – whether specific counter-guarantees and indemnities are required from host governments by the primary insurers and guarantors or not – their risk exposure is ultimately backstopped by the 'guarantee' of the host country governments to make good. If host governments cannot make good immediately, they are still obliged to make good at some point in the future. Under BITs, and their membership commitments in multilateral institutions, that obligation never disappears unless it is extinguished by contractual consent. That is not the case with private risk insurers who take the risk on their own book or manage it by laying it off and spreading it across a number of other insurers and reinsurers. The extent to which they eventually salvage or recover assets assigned to them after they have paid off their claims depends on their own astuteness rather than on host country guarantees provided under binding treaties.

If, in the ultimate analysis, the host country is the final 'guarantor' of most of the non-commercial risks that it poses to investors, why don't foreign investors rely on its guarantees directly rather than rely on those of intermediaries; especially if those interme-

[108] OBIs usually do not lay off their risks in reinsurance markets as private insurers (and now the IADB as well) do. For example a Lloyd's syndicate with a $50 million risk exposure for expropriation risk will usually lay it off in the reinsurance market and run a net exposure risk of only $2.5 million against its policy. Also that syndicate's annual premium income across all lines of insurance may be $200–300 million. Thus even a $50 million claim pay-out on the expropriation policy written by that syndicate may reduce its bottom line by only around 1% of its annual turnover. That is not how it works for OBIs.

diaries then have to turn around and recover from the host government anyway, by hook or by crook? As explained earlier, the answer lies in two attributes that developing country host governments lack where foreign direct investors are concerned: creditworthiness and credibility. If they had those attributes (as developed countries do) then the question of intermediation by more credible and creditworthy agents would not arise – at least not to the same extent. The NCRI market would then be much smaller than it is. But if foreign investors were to rely directly on the guarantees of host governments there would probably be less FDI, particularly for infrastructure in the developing world.

As things stand, foreign investors are, understandably, unwilling to accept guarantees of host governments to cover political risks that the same governments have created in the first place. The circularity has a ring of the absurd. But it sums up the situation. Foreign investors would rather purchase insurance from, and pass their risks on to, credible intermediaries that are better equipped (constitutionally and capacity-wise) to bear and manage those risks. The concern of foreign investors, however, is not who bears the ultimate risk but who they can collect from – in the event that the risks they have insured themselves against actually materialise (usually because of host government default) – and how quickly. But the concern of the intermediaries that have stepped in to fill the credibility gap and provide the insurance to investors is to either avoid or reduce their losses from paid-out claims to the minimum. That means recourse to the host government for making good on their default. Until private insurers returned to the NCRI market in the 1990s, it was generally accepted that the parties best able to influence host governments to rectify their (intended or unintended) defaults and honour their obligations were either governments or intergovernmental agencies in which defaulting host governments held a stake.

The problem that arises with host governments being the guarantors of ultimate resort for covering non-commercial risks – despite the obvious justice of the principle that those who do damage must pay for it – is the fallacy of aggregation. It is in the nature of a developing country host government to be chronically short of resources. That is a key characteristic of being a 'developing' government. Most host governments default not because they are inherently dishonest and want to. They do so because they frequently and inadvertently over-commit themselves and find they have to; or because they make tariff adjustment and rate-of-return promises to foreign investors in order to attract investment that they later find they cannot keep without incurring significant "political" risks themselves – i.e. the risk of being voted out of office.

Obviously, most host governments (especially in LDCs) do not organise themselves as well as they should, nor plan as well as they should, nor have much control over the realisation of their plans. Most of them (in LDCs) are vulnerable to external vicissitudes that make their own public revenues volatile and unpredictable. In nascent, fragile democracies with many handicaps – not the least being a lack of education, awareness and literacy on the part of the majority of their populations – host governments are permanently vulnerable to irresistible internal populist political pressures. These usually compel them to incur unproductive expenditures that their exchequers

cannot afford, and to provide (and maintain in some form or other) subsidies for tariffs – for mass consumption of essential public utilities –that are insufficient to cover the costs of producing those services.

Given these typical circumstances, there are obvious arithmetical limits (as the recurring debt crises of the 1980s and 1990s have amply demonstrated) – as well as a self-defeating dynamic that is intrinsically illogical – for investors and insurers to resort to expanding demands for sovereign guarantees, counter-guarantees, indemnities, performance undertakings and implementation agreements, so as to protect themselves against NCR for privately financed infrastructure projects. Such demands result in a rapid build-up of the host government's contingent liabilities and make the country even less creditworthy.

There are ways of disaggregating and managing the build-up of these contingent liabilities through greater resort to carefully cut-up partial host guarantees than continued reliance on the 'all or nothing' blanket approach.[109] But even partial guarantees have their limitations. It would be better to adopt clear formulas for tariff adjustments, along with resort to reliable and quick dispute resolution mechanisms that remove the burden of accumulating and unmanageable contingent liability burdens. If such dispute resolution mechanisms are not available in the host country then alternative mechanisms acceptable to both host governments and investors need to be resorted to.

Optimal supporting conditions – in the form of functional legal and regulatory regimes and creditworthy contracting parties – needed for credible enforcement of investor rights under project finance structures for infrastructure projects, do not yet exist in countries that are in need of such investment. Attempting to overcome that deficiency through one demand after another for host government guarantees is not a sustainable way of making private infrastructure projects financeable and profitable in the long run. Limited guarantees that are within the government's 'performance limits' might be resorted to for one or two priority projects initially as a transitional measure.

But such guarantees cannot and should not be sought for all infrastructure projects in all developing countries. Doing that negates the advantages of privately financed infrastructure development and is inconsistent with sustainable privatisation objectives. It also results in a rapid, severe erosion of sovereign creditworthiness and increases the prospect of the host government defaulting on its debt and guarantee obligations. Apart from over-anxious investors, the worst culprit in demanding host country guarantees and counter-guarantees is the World Bank because of its charter. MIGA, IFC and the regional banks often do not require such guarantees. Since the OBIs do, experience suggests that they are prepared to live with the consequences of overstepping the mark and taking the hit.

In the final analysis, there may be some superficial logic and appeal for foreign inves-

[109] See for example Shanks, 1998 op cit. in Moran, 1998 op cit (pp. 89–92).

tors or their risk insuring intermediaries to seek overlapping guarantees from host governments that they will meet their contractual obligations for private infrastructure projects. But, there is a cumulative negative impact in making the government liable up front not only for a single missed payment on a contract, but for all future payments, interest, accrued interest and interest in arrears, and even for a high guaranteed return to the investor for the entire life of projects that may stretch beyond 25-30 years.

No sensible investor interest is served by an approach that assumes an infinitely elastic capacity on the part of host governments to add to contingent liabilities indefinitely. Facing contradictory pressures to privatise their utilities and being held responsible at the same time – under structurally flawed domestic conditions that cannot be remedied quickly – to ensure that privatisation succeeds with high returns to investors guaranteed in one way or another no matter what, puts host governments in a terrible financial and political bind. Ultimately, there have to be clearly recognised limits – that are transparent and public – on the extent to which host governments should be forced to provide cover up front to compensate for legal and regulatory deficiencies in their systems that cannot be rectified overnight. Both official and private risk insurers need to be aware of these limits in each host country and avoid making demands that can neither be met or that create a self-defeating moral hazard and increase rather than decrease non-commercial risk.

6.10 Contents and Limitations of Extant Political Risk Insurance

What PRI and NCRI Cover: Most foreign investors, and many NCR insurers, would agree that – while PRI and NCRI are available from a variety of sources at competitive premiums – extant NCRI products from different insurance sources do not cover adequately, or even address, the key (and continually evolving) non-commercial risks that should be covered. In that respect, private NCR insurers are the most flexible, swift and responsive. OBIs and MIGA are more rigid and less responsive in changing their coverage to embrace a variety of contingencies and adapt as swiftly as circumstances evolve.

The main deficiency with NCRI contracts is that insurers are only prepared to pay out against the occurrence of events that can be legally and specifically defined, anticipated in advance, and against which probabilities of the risk materialising can be actuarially assessed. Foreign investors in developing countries, on the other hand, want NCRI coverage against uncertainties and risks whose precise nature cannot be known, narrowly defined, identified, or assessed in advance. For example, in most developing countries it is virtually impossible to know beforehand every legally required approval and clearance to be obtained from every public agency, at every level of government, for a complex private infrastructure project that has never been done in that country before. Some agencies make up requirements for approvals as they go along. It is difficult for foreign investors to ascertain whether those agencies are legally entitled to ask for and enforce those requirements. They want protection against abuse by host go-

vernments of normal approval processes and practices (i.e. contract frustration), as well as against eventualities and outcomes that may be unanticipated, unclear and vague at the time an investment is made but that become clearer as projects come into operation and host government behaviour responds.

Although discussions of PRI and NCRI are usually conducted in broad terms on the assumption that there is a clear common understanding of what these terms mean, the devil that lies in the detail belies that assumption. To begin with it is essential to understand what the term 'political risk insurance' – which constitutes only one dimension of non-commercial risk insurance (Figure 5.1) – actually covers. PRI usually means 'asset-backed cross-border insurance protection to cover the withdrawal of recognition of a foreign firm's property rights in assets that are movable and immovable'. PRI is usually less expensive for assets that are movable and usable elsewhere (e.g. a plane, ship, crane, oil rig, trucks, etc.). It is more expensive for immovable assets such as land, buildings, fixed equipment, factories, plant and immovable machinery, etc. Typically PRI will cover:

- *Confiscation:* defined as appropriation to the use of the State or appropriation to the public treasury by way of penalty
- *Expropriation:* defined as "the act of depriving or taking out of the owner's hands"; this term overlaps with confiscation but is more often used in the context of appropriating property for public use with some compensation being paid
- *Nationalisation:* defined as "bringing property or assets under State control and ownership by converting them into the property of the State"
- *Deprivation:* which implies something more temporary than acts of confiscation, expropriation or nationalisation. These imply something permanent and imply the "act of taking away or removing a possession". Some PRI policies provide cover against the insured party being deprived of the use or possession of the assets and property that are insured
- *Forced Abandonment:* this circumstance is not always covered by standard PRI policies, but when it is covered it is aimed at responding to conditions in which the insured party is forced to leave or abandon its premises, equipment and assets in circumstances that are prejudicial to the safety and well being of its personnel, usually following an order or threat from the host government or any of its instrumentalities. It is an event that sometimes (but not always) precedes confiscation or expropriation. Forced abandonment occurs when host governments want to use the excuse that they had to take over foreign owned plants or enterprises because these had been abandoned by their owners.
- *Contingent Deprivation:* this is not always covered by standard PRI policies. It takes deprivation coverage a step further by offering coverage for all the perils covered by 'deprivation' but also covers situations in which the home country of the insured party declares an embargo or sanctions of any sort against the host country, or cancels export or import licenses affecting the movements of goods between home and host countries in either direction.

The first four of these 'events' are known in the PRI trade as CEND. They constitute the core events that PRI policies cover. The latter two events need to be specifically provided for with insurers agreeing to include them in modified and tailored PRI policies. Standard PRI policies do not attempt to define each and every situation in

which CEND events are deemed to have occurred. They qualify them broadly but clearly so that, for example, 'expropriation' under a given policy will only be deemed to have occurred if it is selective (i.e. limited to a particular enterprise or firm) and permanent. CEND coverage protects a foreign investor from interference by a host government with the investor's fundamental ownership and property rights. Such interference may occur through direct asset seizure or take the form of actions that amount to 'creeping expropriation'. That happens, for instance, when host governments levy punitive or selective taxes on a particular enterprise aimed at making that venture unviable; or when governments wrongfully terminate operating licenses and approvals against health and safety standards to close a plant down. Or they may refuse to grant entry visas to critical technical expatriate personnel without whom the plant would not be able to operate.

Host governments have the right, under international law, to expropriate (but not confiscate) foreign-owned assets provided they pay compensation on a prompt, adequate, fair value and effective basis. When assets are seized and taken over but not compensated, CEND cover responds by paying out on a claim for compensation to the insured for the net book value of the asset or, in the case of a creditor, for the payments that could not be made by the investor because of expropriation. But different insurers define what constitutes expropriation differently. Some policies will cover discriminatory and selective expropriation that affects only the insured investor. Most CEND coverage requires a sufficient period to expire after the act of expropriation (usually 6 to 12 months) before the act is considered irreversible and compensable.

Many PRI policies also cover *currency convertibility* or *transfer risk* (but not devaluations, i.e. value risk) as a 'political risk' although it is not strictly 'political' as such. It is an economic risk outside the control of a foreign investor. Under certain conditions, it may even be outside the control of the host government except in the sense that it is the cumulative impact of poor policies that lead to such a situation arising. Sometimes that risk materialises as a result of an external shock completely outside the control of the host governments, e.g. a collapse in the price of the country's commodity exports or an increase in the price of key imports, e.g. oil and fuel.

Because of their fragile external finances and low holdings of international reserves, many developing host countries are obliged to have controls on current and capital accounts. These prevent regular, matter-of-course – i.e. without prior express approval of the central bank and treasury on a case-by-case basis – repatriation of profits, dividends, interest on foreign loans (whether parent shareholder or creditor loans to the project company in the host country) and of capital or principal. To attract foreign investment, developing host countries provide exemptions to foreign investors from such controls, assuring them of the freedom to make such payments and remittances with only pro forma approvals by the central bank. However, when an economic or financial crisis occurs and the host country is being guided by IFIs (World Bank and IMF) in managing its external accounts, such exemptions can be withdrawn or suspended without prior notice or negotiation. It is that risk – of suddenly not being able

to convert local currency earnings into foreign funds and then being able to remit them out of the country – which many PRI policies also cover.

Currency transfer risk policies cover 'active blockage' (i.e. a local law or rule that prevents conversion and transfer) and 'passive blockage' (i.e. procedural delays by the central bank in processing requests by a foreign firm to convert and repatriate funds). In the case of 'passive blockage' a period (3-6 months) would need to be defined to specify what an excessive delay might be. The policy would cover an insured party for the full amount (paid out in foreign currency) that could not be converted or transferred. However, a currency transfer risk policy would not cover an insured party if – when the investor applied to a host central bank for converting local into foreign currency – the central bank not only failed to convert but also did not return the local currency. In that event insurers would deem the currency to have been expropriated and it would need to be covered under expropriation rather than transfer risk for the investor to recover his loss.

Many PRI policies also cover war and civil disturbance risk although separate insurance from private insurers has always been available to cover only such risks. Private insurers make a distinction between 'political risk' and 'war and conflict' risk. Official insurers generally do not, by providing war and civil disturbance risk cover as part and parcel of their PRI policy cover. MIGA allows investors to mix and match from any of the four risks it covers. From our viewpoint 'war and civil disturbance risk' is seen as distinct from 'political risk' although it is a 'non-commercial risk'. Standard business insurance policies can be written to cover losses arising from riots, strikes and civil disturbances but not from losses arising from war or civil war. The latter coverage has to be provided for separately.

Finally many PRI policies include coverage for breach of contract risk. Again, breach of contract risk is not strictly or always a 'political risk'. It can occur for non-political, commercial or economic reasons. It may occur as a result of, or be triggered by earlier performance default on the part of the foreign firm rather than necessarily a default on the part of the host government. For these reasons, it is essential for PRI policies including breach of contract risk cover to define the breaches being covered and usually limit this coverage to breaches that can be identified as being attributable solely or mainly to host government action or inaction.

In the event of a breach of contract the foreign investor would need to invoke a prespecified dispute resolution mechanism (e.g. national or international arbitration in a pre-agreed forum, e.g. ICSID, ICC or UNCITRAL) spelt out in the insurance policy and in the project agreement between the foreign investor and the host government. The investor would then need to obtain an arbitral award for damages and wait for a period of time (6-12 months) for damages to be paid out by the host government or agency concerned before a claim for insurance could be triggered. Breach-of-contract policies usually also provide compensation for damages incurred (e.g. revenues lost) in the event of a failure of the dispute resolution mechanism to function as a consequence of host government actions.

Private insurance policies can cover non-commercial risks, like accidents or acts of nature and Acts-of-God, either on a specific basis (i.e. for each type of act against which risk is sought, e.g. an earthquake or a flood) or on a more general basis covering all acts of nature. In the latter case the premium would be higher. Usually these policies are available on a standard basis for up to a year and are renewable annually with premium adjustments. But there are no insurance policies that cover events caused by cumulative policy failures (e.g. a financial crisis or meltdown) or such as those that occurred on September 11th, 2001.

What PRI and NCRI do NOT Cover: What the previous sub-section makes clear is that PRI and NCRI are limited in one important way, i.e. risk insurance is available to cover the risk of discrete events that have occurred in the past, which can be specified, with which there is some experience to assess, and whose impact is measurable. It focuses on risks that were prevalent before but may not be germane to the present and future. For example, the continued emphasis on expropriation and creeping expropriation of most PRI policies seems increasingly misplaced. The world in the 21st century is different from the world of 1950-90. Market-based economic systems are now accepted and established worldwide. SOEs have been discredited. The public sector is receding from an ownership role to a regulatory one. That tendency needs to be strengthened and encouraged with recidivism being discouraged. It is of course possible that the cycle may yet turn again and SOEs come back into vogue. But that prospect is not on the horizon just yet.

The risks faced by foreign firms in developing countries and LDCs in the 1990s, and those likely to be faced in the coming decades, are more subtle risks than those of asset seizure. They concern the transitional problems and dislocations that have arisen with an initial sharp and discontinuous change in the nature and role of governments in developing countries. That change began in 1990. It is unlikely to approach completion for a few decades yet. Host governments in LDCs are in the process of shifting from dictatorships, autocracies, kleptocracies and various genres of confused command-control regimes toward more centrist democratic and plural regimes attempting to regulate and govern social market economies. They do not as yet have sufficient experience with such economic governance, nor do they have the institutional support systems they need to sustain it. Even if well-intended, their behaviour may seem (and may be) capricious and arbitrary to foreign investors accustomed to different regimes, rights and recourse options.

Developing countries will be going through a difficult transition in redefining the role of government vis-à-vis the private sector for some time. It is behavioural uncertainty at that interface, rather than the predatory motives and inclinations of venal governments, that is creating the risks that foreign investors confront. These are compounded and amplified by the institutional and capacity shortcomings of governments, legislatures, judiciaries and deficient market-support systems. At the heart of these difficulties lies the compelling dynamic of the obsolescing bargain that characterises a wide range of second-generation FDI, particularly in infrastructure.

It is not that there have been no changes in PRI and NCRI in response to the changing pattern and nature of risks. Experimental insurance contracts are being innovated all the time, especially by private insurers, in dealing with risks such as contract frustration, mid-project changes in contractual bargains, and documentation risk. But these have been few and far between. There is no clear body of international law and precedent establishing an investor's right to compensation for contract frustration as there is for expropriation. Even when PRI policies try to provide for contract frustration, payouts against such policies are invariably held up for lack of conclusive proof about the impact of host government actions and about whether it was an investor default that triggered the government's action.

NCRI policies have therefore not addressed all the non-commercial risks that foreign investors confront. What is needed are contracts that are robust, but flexible and adaptable to meet the needs of foreign investors, yet sufficiently well designed and structured so as to avert the possibility of risk-insurers being exposed to open-ended, incalculable contingent liabilities. Clearly, experiences with PRI, export credits and debt write-downs in the 1980s and 1990s have seared the memories of private insurers and OBIs. Their search for specificity in PRI contract construction as a means of self-protection through learning is understandable. But it does not help to solve the problem.

The 'insurance' problems that arise with today's risks, especially for FDI in infrastructure are: (a) determining what the 'contract' between the foreign investor and host government was at the time the investment was made, especially when understandings were implicit rather than explicit; (b) determining when an event has occurred that triggers the need for a claim against insurance; (c) ascertaining the losses likely to be incurred by the investor between the time a claim is made and when it is settled; (d) measuring the actual damages involved and incurred; and (e) locking in investors and insurers into relatively rigid contractual structures for long periods of time without provisions for periodic changes in content and coverage or sufficient provisions for liquidity. Even when events are provable and damages are quantifiable, the market may still not be able to cover the risks of very large multi-billion dollar investments (although these are unlikely to arise in LDCs).

These problems make it difficult to mitigate risk purely through insurance without collateral measures at accelerating improvements in the cause of the problem – i.e. unreliable, inefficient and non-credible administrative, legal and judicial systems in host countries. As improvements in these systems will take time, there may be some merit in considering the creation of acceptable systemic international alternatives (such as for example a fast-track International Civil Court for Foreign Investors in Stockholm) that foreign investors and host governments can have recourse to and expect impartial and fair treatment from in seeking juridical recourse.

While PRI typically covers expropriation and creeping expropriation the distinction between such the latter and valid regulatory measures can be murky and contentious. For example, a foreign investor investing in an infrastructure project in a developing

country in 1995 may feel that new regulations introduced in 2000 requiring the project to adhere to new (and, in the investor's view, onerous) environmental, labour, health, safety and social standards and conditionalities is imposing a cost burden that was not anticipated at the time of entry. The investor may believe such regulations to be unfair and represent creeping expropriation. The host government may feel compelled to introduce such regulations as a consequence of external pressures from donors and civil society. In a changing climate the investor may feel that the contract is being breached if the extra costs are not permitted to justify a tariff escalation. No insurance contract can anticipate or accommodate that type of conflict, nor can arbitration or adjudication help matters, without one party or the other feeling aggrieved at the impact of moving goalposts on either the viability of the project or the international reputation and credibility of the host government.

Imputed or alleged breaches of contract by host governments under infrastructure projects with complex tariff and cost escalation formulas represent perhaps the most significant risk category that remains uninsurable under standard PRI breach-of-contract policies. Sometimes, minor technical changes are made by host governments as a response to legitimate domestic concerns and pressures, in toll-road concession agreements, electricity and water tariff adjustment mechanisms and approval processes. Foreign investors may see these or other amendments as fundamental changes in the 'rules-of-the-game' that were mutually understood by host governments and foreign investors at the time of investment entry. Often it becomes difficult, even for experts, to determine whether such amendments actually do constitute breaches of contracts.

Nevertheless, such changes can be portrayed by foreign investors (for insurance purposes) as de facto 'creeping expropriation' if they do not have specific breach-of-contract cover. As a purely legal issue, minor amendments may or may not constitute breaches of contract or incipient expropriation depending on whether the amendment is accompanied by a denial of remedies, constitutes a violation of national or international law, or selectively discriminates against the insured investor. But in practical terms trying to resolve such issues through recourse to law is likely to be expensive and time-consuming with no insurance coverage of the additional costs thus incurred. Although MIGA and OPIC provide insurance to accommodate this risk, their cover is tied to the exhaustion of specified judicial or arbitration remedies that may take 2-3 years to conclude. During that time the project may become commercially unviable. If insurance contracts require arbitration and judicial remedies to be exhausted, then the procedures specified should be fast-track, involving internationally recognised and experienced arbitration institutions and take no longer than 12 months to complete if insurance for this purpose is to be meaningful and effective.

A common derivative of contract frustration is 'politically induced business interruption'. Here the host government may not resort to amending or frustrating contracts. It may simply stop the business from functioning through court action or public demonstrations, undertaken not by the host government itself but by a sub-sovereign government or proxies. In this case the foreign investor does not lose control or posses-

sion of the project as such. This can occur in host countries when governments or sub-sovereign governments change and the incoming regime wants to force renegotiation of the original contract in the public interest to score political points. Such action is a serious threat to project viability and stoppages of very large capital-intensive projects (e.g. a 1000MW electricity generating plant) for periods of weeks or months can result in losses amounting to tens of millions of dollars. But there is no PRI or NCRI cover for 'politically induced business interruptions'.

In the mining and oil industries, and some multi-country electricity projects, foreign investments can be in amounts of over $2–3 billion. Although this does not generally apply to LDCs there are some cases even in those countries (oil in Angola, gas in Bangladesh, oil and gas in Myanmar, mining in Zambia) in which upstream investments can be of a very large size. The insurance available from OBIs, multilaterals and private insurers for such investments is limited and partial. Combined with the requirement in most insurance policies to turn over the keys of such a project (that may involve sophisticated proprietary technology) in order to obtain insurance coverage (e.g. for expropriation or breach-of-contract) raises questions about the utility and relevance of PRI for these types of projects.

Also, as indicated earlier, the currency convertibility protection offered by PRI and NCRI policies are confined to just that – convertibility and transfer. They do not protect against risks of devaluation and value fluctuation. Those risks are outside the control of foreign investors and, in some instances, outside the immediate control of the host government. In rare cases the World Bank can be caught in a conflict-of-interest between its roles as a risk-insurer and as a policy-interlocutor when it has provided a PRG, or if MIGA and/or IFC have been involved in a project, in a country in which the World Bank is attempting to persuade the host government about the merits of a large devaluation.

Finally, most PRI or NCRI policies cover defaults and risks concerning actions taken by sovereign host governments. They are not adapted to providing cover for action by sub-sovereign levels of government that can be more damaging, particularly in the case of infrastructure projects. Water projects, for instance, are invariably exposed to risk in dealing with provincial governments, local governments or rural and urban municipalities, as are projects in renewable energy and rural energy provision.

To its credit, MIGA is undertaking a review to see what it might do to expand its coverage to embrace 'contract frustration' and 'sub-sovereign risk'. But, as an official multilateral agency, the implications of such changes will need to be considered and reconsidered at several levels before effective and useful changes to its policies can be made to cover these particular risks. Also, proposals have been made for 'enhanced breach-of-coverage' contracts that address some of these problems and are discussed in the next section.

Finally, the pricing of premiums for PRI and NCRI can make a difference at the margin if not to project viability, then to exposure to regulatory risk (especially in the case of infrastructure). PRI premiums add to project operating costs. Higher incre-

mental costs need to be recovered through higher incremental tariffs. When that happens the risk increases that the host government may not approve the incremental tariff adjustments. No host government wants to explain to its public that the tariffs they pay are higher than necessary because foreign investors are protecting themselves against the arbitrariness of the government.

Present PRI policies, premiums and payment terms are not structured to meet the requirements of flexibility or liquidity. Yet, the amount of PRI that an investor may need, and the price it should pay, can vary greatly over the life of a project and be quite different in the construction and operating stages. But traditional PRI contracts do not permit such flexibility; they can only be put in place and left in place. They can be cancelled only once. Increasingly, large investors are turning to capital markets to find ways of covering risk that risk insurance does not cover adequately or does not cover in a sufficiently flexible way that enables investors to associate specific risks with specific costs and to 'trade' these risks in derivative markets in order to avoid very large premiums and to retain a measure of liquidity. These options are discussed in the next section of this chapter.

6.11 Innovations to Enhance Non-Commercial Risk Mitigation

Some headway has been made by traditional risk insurers – i.e. the OBIs – and new players in the PRI/NCRI markets – i.e. multilaterals and private insurers – in trying to address evolving non-commercial risks that emerged in the 1990s. But it is clear that new innovations in NCRI product development and new public-private institutional arrangements will both be necessary if risk mitigation product and market development are to keep pace with growing and changing demands on the part of foreign direct investors in developing countries and LDCs. Where new product and service innovations are concerned, the main areas of evolution will probably need to be in:

- *Better Risk/Return Management* for FDI-financed infrastructure projects in LDCs
- Continued *Evolution of New Products* in the PRI Industry itself
- *Innovations in Capital and Derivative Markets* using credit enhancement and securitisation to attract new sources of risk-mitigating finance, and new instruments to provide foreign investors with optimum combinations of risk management options.

Better Contractually Embedded Arrangements for Adjustable Risk/Return Management in FDI-financed Infrastructure Projects in LDCs: Harking back to a point raised earlier, there is a 'quasi-rational dimension' that impels inevitable changes over time in the bargain between foreign investors (in large capital-intensive resource-based or infrastructure projects) and host governments in developing countries where these investments are made.[110] Foreign investors in such projects aim to arrange and secure 'bargains' with governments for terms that compensate them for risk, uncertainty and an adequate average return on their global project portfolios. That may mean trying to

[110] Moran, 1998 op cit (pp. 11).

secure an extraordinary return on a particular investment to cover for below average performance of other projects in other countries. They then attempt to ensure that these terms remain unchanged for the life of the project. Before they make the investment they are in a stronger bargaining position than host governments in driving the bargain through on their terms.

Host governments have different objectives and operate under different pressures. They need to attract FDI and will agree to generous bargains with foreign investors to secure their entry. But once entry has occurred, the bargaining power of the host government changes in its favour. Once a project is seen to be operating well and the risks and uncertainties that the foreign investor took have receded in memory, host governments come under domestic political pressure to change the terms of the bargain, especially where regulated tariffs for infrastructure projects are concerned. They become unwilling to permit foreign investors to capture what they come to believe are excessively high returns for the life of the project. That happens when governments change in host countries, with incoming regimes feeling under no obligation to respect the 'over-generous' terms agreed to by the previous government. Indeed those terms may have been publicly aired as a political issue when the incoming regime was in opposition at the time the project investment was being agreed. Successor regimes are likely to find it (rationally) in their political and economic interests to renegotiate large, politically sensitive and prominent contracts to impress their voting publics.

The structural vulnerability of foreign investors to changes in bargaining power before and after an investment is made in a developing country cannot be wished or contractually negotiated away. Host governments cannot be expected to behave 'graciously' or 'decently' in respecting terms of earlier bargains that are no longer in their political or economic interest to honour. Developed country governments would not do that either. It is not an issue of dishonesty or disingenuous intent. It is a reflection of reality in peculiar environments where foreign investments have to be 'negotiated' in the first place, rather than being 'rule-based' and uninfluenced by government discretion.

No amount of legal and financial structuring can mitigate political risks in a project that is perceived to be fundamentally unfair, or in which even slight changes in legal or regulatory environments are likely to create incentives for either party to breach its original agreement. These problems do not arise where tariffs and returns are established by markets that work, where regulation is competent and credible, and where legal recourse can be relied upon. They only arise in environments where none of these conditions hold and project returns are dependent on how much advantage one party to a contract can take of the other at different points in time.

Given those realities, seeking and obtaining PRI or relying on financial engineering to defend against eventual changes in the basic terms of infrastructure or natural resource contracts appears to be a sub-optimal way for foreign investors to manage fundamental causes of risk. It would seem better to accommodate – at the outset when investments are first made – the changes in terms that might be made over time voluntarily by the foreign investor, providing that certain (reasonable) threshold returns and per-

formance targets have been achieved that would justify a change in terms in favour of the host country.

The reason for suggesting this is that even when host governments face domestic political pressures to change the terms of agreements with foreign investors, they withhold doing so if there are provisions in the original contract for such changes to occur of their own accord within a period of time that is politically tenable. When original agreements do not provide for temporal changes in terms, but instead attempt to protect and enshrine what are later seen as unfair terms for the life of the project, then the host government is put in a position where it has no choice but to act. This prisoner's dilemma for the host government can be avoided if a 'horizon of stability' for infrastructure investment agreements was set at ten years after projects commenced operations.[111] The 10-year limit is chosen because the discounted NPV of changes in terms of project contracts thereafter is insignificant. In reality, ten years might be where negotiations begin, with agreement being reached on changing terms anywhere between 5–8 years after commencement of operations depending on the country, industry, project and whether threshold returns have been achieved before the change in terms is automatically triggered. Contracts might allow for a margin of variability to give host governments political 'wiggle-room' for manoeuvre.

Continued Evolution of New NCR Products in Insurance Markets: Risk insurers in PRI markets are continuously trying to improve their products and insurance policies. But core problems remain unresolved. For example, urgent progress needs to be made to resolve the problem of *multiple pledging of shares* [112] through co-operative arrangements across a group of insurers and creditors in a single project financing structure. What is needed is a co-operative approach under which insurers and lenders can co-operate under a single framework agreement to maximise joint recovery of assets from a host government after a claim has been paid out with pro rata sharing of the proceeds of any settlement in proportion to the relative outstanding exposure of each.

The issue does not concern simply the equity shares involved. It should be broadened to cover an assignment of all rights to whatever represents economic value in a project

[111] This was suggested by the OECD Expert Group on Investment Policy for the Commonwealth of Independent States (CIS). See Moran, 1998 op cit (p. 83).

[112] Political Risk Insurers require that, in the event of an expropriation claim being paid out, the insured investors should turn over their shares in the project enterprise free and clear of any liens (i.e. being mortgaged to creditors) as a condition of receiving a compensation pay-out against their claims. Only that protection permits the insurers to pursue their own claims against the host government in their attempts to salvage or recover whatever assets they can. However, under typical project financing arrangements, creditors in a financing package invariably require that all project assets, including the investor's shares, be pledged to them under the terms of a security package for their loans. This leads to the dilemma that both insurers and creditors in a project want the same shares to be pledged, free of encumbrances, to each of them. Inability to resolve this dilemma between insurers and creditors has resulted in many project finance structures being ruptured. In 2000, two US official agencies, Exim Bank and OPIC, reached a 'Joint Claims Agreement' that represents some progress in the right direction. But both these agencies belong to the same shareholder – the US. OPIC has also worked out mutually acceptable solutions on a case-by-case basis with a number of other official bilateral and multilateral financial institutions.

in a form that cannot be compromised by other parties. Shares may represent one element of economic value but other elements may include features such as the assignment of arbitral awards or termination payments or whatever turns out to be the net litigation payment. Put that way the arrangement appears easy to arrive at. It is anything but. The legal complexities involved are nightmarish especially when it comes to pledge sharing between official and private institutions that have different legal and preferred status. Nevertheless incremental progress is being made. In some project finance structures, commercial lenders are obtaining PRI themselves so that they do not need to rely on pledged shares for recovery. Various options are possible in theory but they need to be implemented in practice.

In particular, multilateral lenders might be persuaded to release their liens on shares allowing OBIs to pay out on their claims to insured investors. Multilaterals and OBIs might jointly agree to make combined claims on host governments for recovery using their official leverage. The key to resolving this problem is for each institution involved – official or private – to avoid going to any lengths to protect its own position, especially when that may jeopardise the prospects of recovery for the group of involved parties. Insurers and creditors (and individual institutions within these two groups) should not be permitted, under project agreements, to compromise each other's interests unilaterally in pursuing claims against a host government. Those claims should be pursued jointly with official institutions respecting the particular needs of (non-preferred) private insurers and creditors while the latter need to agree to arrangements that permit the former to use their leverage fully in exacting recovery from the host government en groupe.

To reach a practical solution to this problem the answer may lie in investors, creditors and insurers involved in a single project financing structure to discuss possible remedies to cope with this eventuality at the outset of making the initial arrangements. One option might be to include expropriation insurance coverage for investors and creditors and arrive at a pre-determined allocation of risks and recoveries prior to final documentation being drafted for project financing, security packages and insurance arrangements.

A second urgent issue in the PRI market concerns *enhanced breach-of-contract coverage*. Standard breach-of-contract coverage requires insured investors to exhaust local judicial and agreed arbitration remedies and receive an arbitral award for damages which the host government (or its instrumentality) does not honour before a claim pay-out can be made. The length of time such procedures may take, especially if the host government drags its feet throughout (which it invariably does when matters have to go to arbitration), can result in the project company going bankrupt before these tortuous processes are completed. An enhanced breach coverage (EBC) policy might go some distance toward mitigating this particular risk.[113] Essentially it could be struc-

[113] Jenney, 2001.

tured as a contingent provisional payment that might be triggered automatically upon any violation of a contractual undertaking by the host government or its relevant agency without any violation of international law.

Under EBC the risk insurer would provide a lump-sum payment to creditors to compensate for the foregone debt service payments (or the balance of the loan amount outstanding) triggered by the violation, or to investors to compensate for estimated loss of revenue (and any damages) incurred. In turn, insured creditors and investors would turn over their rights to pursue stipulated dispute resolution procedures to the risk insurer who would initiate arbitration procedures. The payout made by insurers to creditors/investors would be adjustable after the arbitral award was made and recovered. If the award were the same as the amount paid out by the insurer to the creditor/investor, the matter would be closed. If less, then the creditor/investor would need to pay back the difference to the risk insurer. If more, the insurer would settle the difference with the creditor/investor.

The problem with 'breach of coverage' that arises for risk insurers is the distinction between the actions of a host government as a political entity (in which case political risk is definitely involved) and its actions as a commercial party to a business contract (in which commercial risk and not political risk is being incurred). Most PRI and NCRI policies only cover risks arising from the actions of a government as a political entity and are therefore subject to redress under the provisions of international law. They do not cover risks arising from the behaviour of a government (or its instrumentality) in a commercial capacity.

It is this schizophrenic aspect of dealing with governments – requiring investors/creditors to believe that host governments split their personalities, depending on the occasion, into separate political and commercial compartments – that bedevils the PRI market and confuses the protections available. In other words, as far as the law is concerned, a dispute with the government does not automatically mean that it is a political dispute. It can be a commercial dispute. That is the reason for the boundary between political and commercial risk being more blurred that risk insurers prefer to acknowledge in the cover they provide. The basic problem is that many of the risks that investors would like to see covered under the PRI rubric are viewed by risk insurers as uninsurable commercial risks. But in reality it is impossible to draw the line between a government's political behaviour and its commercial behaviour; especially when the former is driven by the latter.

These two examples should serve to suffice how existing PRI policies and products might be improved incrementally without attempting to write an exhaustive litany of investor wish lists for PRI and NCRI. It is more important that progress is made in one or two key areas than diverting attention to a vast number of areas all of which are not of equal priority and where progress is unlikely to be made as quickly.

6.12 Innovations in Capital and Derivative Markets for Improved Risk Mitigation

Credit Enhancement: The example of Sida's Guarantee for MTN in Uganda (the first such case in a LDC; see annex B) highlights one way of how local capital markets can become involved in financing and in mitigating risk (in this case balance sheet risk, revenue risk and currency risk) for foreign investors in LDCs. But this is only one example of the connection between capital markets and risk mitigation. There are others. The IADB provided a credit enhancement in Colombia for a municipal water project in 1997 while the AsDB and World Bank have provided a small number of PCGs for similar purposes. The widespread application of credit enhancement for local capital market debt issues (either for traded issues or for private placement with local financial institutions that have investable surpluses for long-term investment) in LDCs holds more promise than has been tapped so far. It can help to complement the foreign currency component of the financing structure for infrastructure projects than was earlier realised.

Infrastructure projects run by capable private companies are ideal vehicles for stable and secure debt investments by long-term local financial institutions such as pension funds, and life as well as general insurance companies. Every LDC has some form or other of this kind of institution. Providing the safety of the investment they make in local infrastructure projects is assured by a credible credit enhancer (for a sufficient period of time until the risk is perceived as worth taking without the enhancement), these parties can provide local currency project financing in large amounts (thus reducing asset-liability and cash flows currency mismatches) *and* offer *de facto* political risk protection. Host governments would be less likely to act in ways that hurt the interests of a foreign infrastructure project if it hurts the financial interests of local pension funds (especially government pension funds) and insurance companies.

A Guarantee Facility for Sub-Saharan Africa: One way of widening application of the credit enhancement option is offered by a recent proposal to create a Guarantee Facility for Sub-Saharan Africa (Guarantco)[114] intended mainly for infrastructure projects; although there is no obvious reason why its scope should be limited to that purpose and foreclosing the prospect of using it for other types of projects. The proposed Guarantco would be the institutional embodiment for carrying out on a wider scale in sub-Saharan Africa the valuable contribution that Sida made with its credit enhancement in Uganda. It is an idea that is worth taking further and bringing to fruition as soon as possible.

Securitisation: An alternative to credit enhancement is to mitigate risk through securitisation of receivables in local or global capital markets (depending on whether the receivables are export revenues or local currency earnings) by the project company. Securitisation can be used by mining and oil companies, banks, telephone companies

[114] Ljung and Sergo (in cooperation with Jansson and Garman), 2002.

and governments that have future receivables – in the form of credit card payment streams, international telephone revenues, or a steady flow of expected expatriate remittances – to convert future receivables into immediate cash through securitisation. That cash pool is then used as a liquidity cushion for managing financial and balance sheet risks (e.g. asset or reserve write-downs, revenue shortfalls or cost overruns).

Mining companies in LDCs frequently establish special purpose offshore trusts to capture all or parts of their export proceeds. They raise commercial loans or float bond issues by pledging their export receivables as security for their creditors or bondholders. These creditors or bondholders have first call on export proceeds with the financing being structured so that their claims constitute no more than a fraction of the total earnings of the project company. Such arrangements can often improve the credit rating of project companies and enable them to borrow in global markets at a lower cost. Costs can be lowered even further if securitisation is accompanied by credit enhancement.

Cash Traps: Effort has also been focused on various escrow accounts and lien arrangements that enable an infrastructure project to tap into the future revenue flows of the project's main buyer (usually a government utility in the case of electricity or water). Under some project agreements negotiated for electricity projects, the project investor (setting up a privately financed electricity generating plant selling electricity to a government-owned or privately regulated transmission or bulk wholesaling company) has the right to tap into its buyer's revenue streams if specific risks materialise as a consequence of host government action or inaction. That enables the project to access financial resources at a time when its cash flow is interrupted through no fault of its own. Such arrangements are exploring uncharted terrain and treading into areas where legal protection for lien positions to be protected on buyer revenues in host countries has not been legally tested. But work remains to be done in this area, which may offer another option to PRI for risk mitigation.

Ideas have been floated from a variety of sources to bridge the gap between risk transfer and risk financing. Risk transfer involves the shifting of contingent liability from one party (the insured) to another (the insurer) for a cost (the premium). Risk financing does not transfer any risk to another party. It simply spreads out over a longer period of time the financial burdens of an expected loss that a project company believes has a 20-50% probability of occurring. Risk financing involves 'finite insurance' – involving instalment payments of the expected loss into a reserve or escrow account over a period of years (stretching out before and after the loss event) thus spreading out the impact over time and making it more affordable to bear from project net operating revenues than from an up-front capital outflow burden (involving its own additional interest costs).

Hybrid risk mitigating instruments can be developed combining elements of risk transfer and risk financing with the relative proportions of each being varied depending on: the needs of the risk managing entity and its appetite for self-exposure; the probability of the loss occurring and its likely severity; the appetite of the insurer for taking on the

risk; and the pricing for bearing the exposure involved. Such hybrids require specification of: the coverage amount; the portion of risk to be transferred to the insurer; and the residual risk to be financed by the insured party through instalments. Periodic payments made by the insured party under this instrument would involve combining the instalment payment for risk financing with the premium payment for risk transfer. Such structures have tax benefits (because premiums for risk transfer are deductible while reserve set-asides are not) and involve an element of capital and interest accrual (forced saving) in the unlikely event that the expected loss fails to materialise. If the loss materialises, the insured party is covered in a manageable way with the part of the loss that it could not afford to bear being borne by the insurer and the rest being spread out over time. Such an instrument could be cheaper than a traditional insurance policy and would permit a sophisticated project company to tailor its risk exposure more finely than through traditional insurance instruments.

Derivatives Markets (in futures, options, swaps and forwards as well as combinations of these, e.g. swaptions) are being used by a number of sophisticated investors to cover a variety of commercial risks (mainly financial and operating risks) for their investments in developing countries including price and revenue risks for key inputs and commodity outputs; interest rate risks and currency risks. But the use of these markets is limited to covering risks for relatively short periods of time (except in the case of long-term currency and interest rate swaps) or for highly specific, segregated risks that are uniform in nature and that can be quantified and traded. These markets fail when the price of what is being covered (e.g. a currency) moves outside expected bounds through a large, sudden shock that was unforeseen by the market. Under such circumstances derivative markets do come under strain and sometimes break.[115] But these markets are robust and resilient. Even when severely disrupted they bounce back. With imagination and product innovation they can be used for managing and hedging non-commercial risk as well.

The reason that capital and derivatives markets offer the next frontier beyond traditional insurance markets for non-commercial risk mitigation is that their financial capacity for risk-bearing is several times that of the pool of capital available in insurance markets. Capital markets can handle risks of longer duration and are more receptive than insurance markets to new types of risk structures and instruments for managing them, providing the two criteria of liquidity and tradability can be met in creating the new instruments.

Credit derivatives are being used extensively for risk management financial instruments that isolate credit risk and package it into a market tradable instrument (an option or a swap). A default swap is like an insurance contract in that a buyer of protection (the insured) pays a set amount (the premium) to a provider of protection (the insurer) for the right to receive a lump sum (an insurance claim) if a specified default event (the

[115] As happened on Black Friday in October 1987 when there was a global stock market meltdown or as once again in 1998 with the LTCM crisis.

covered risk) occurs before the term of the swap expires. The 'default trigger' under a default swap can be either a standard event that occurs regularly or a customised event in the same way that insurance policies can be standard or custom-tailored.

Though periodic problems erupt in this nascent market, credit derivatives are being used to handle a key 'political risk', i.e. currency inconvertibility. It is the type of risk that lends itself to a derivative instrument. Although the duration of most inconvertibility default swaps today is three years, the volume of 10-year swaps is rising. These instruments are tradable, offer more liquidity (in that they can be bought and sold on the derivative exchanges) and are cheaper than a traditional PRI policy to cover convertibility risk. The problem is that they are only available for developing country currencies in which large daily volumes are traded (e.g. Brazil, Mexico, South Africa) and not yet for LDCs although the concept offers potential for tailored currency swaps to cope with LDC currency risk to a greater extent. But credit derivative markets are in the formative stage and have many problems that need to be ironed out. The Financial Services Authority of the UK has recently published a working paper on cross-sector risk transfers that focuses on the growing involvement of unregulated and under-capitalised insurance companies operating in a market they do not fully understand.[116]

Since the Enron debacle in November 2001, volumes in the credit derivatives market have surged although that development has raised concerns among regulators about some of the moral hazards being created on the part of major creditors who hedge their credit risks in derivative markets and thus lose the incentive to help troubled borrowers work themselves out of cash-flow difficulties. The credit derivatives market is presently focused mainly on corporate credit; but there is no theoretical reason why a credit derivatives market that traded a much wider range of developing country credit risk (and eventually political risk) could not be developed with the involvement of the IFIs. There are many practical reasons why such a step may be difficult to take but that should not prevent its being explored actively with a view to making it a reality in the medium term.

In theory there is no reason why such derivative contracts cannot be extended to handle more complex political risks provided these events can be defined in more standard terms (e.g. contract frustration or contract defaults). If and when that conceptual and practical barrier can be breached then contract default swaps in particular industries (e.g. separately for electricity, water, gas, oil, etc.) may become a more usable instrument, but at present the practical barriers to this theoretical possibility becoming a reality remain very high.

Catastrophic Risk Exchange (Catex): Another avenue that provides a risk mitigating possibility is Catex – an electronic trading floor originally designed to handle trading in catastrophic risks, i.e. earthquakes and hurricanes. Catex emerged after several bad hurricanes in the US and Caribbean resulted in losses that exceeded the capacity of

[116] The Times, London, May 2, 2002.

insurance companies that had written these policies to cover them. New players and new risk spreading techniques were urgently needed in the market. Catex was established in 1996 and has opened up the possibility of similar types of risks being traded, e.g. political and war risks, that are infrequent, but extremely severe when they occur, and are not susceptible to actuarial or predictive modelling techniques.

Catex now posts all types of risks and permits them to be traded on the exchange. The exchange permits two-way direct trades of standard $1 million units of risk. Breaking these risks down into digestible standard units permits a larger number of players to participate in the market beyond the large insurance companies. Each insurer (similar to an option writer on the options exchanges) can take as many or as few units of a number of different risks as it likes and can afford irrespective of the total size of the single project risk to which a unit might relate. Many different insurers take on similar risks in the same project on one day and can trade in and out of them continuously to manage their risk exposure in keeping with their preferences and limits. The structure enables a number of very small insurance companies that might not normally trade in catastrophic or political risk insurance markets to participate through this structure because it provides continuous liquidity and permits insurers to avoid lock-ins when they perceive risks changing. As with all derivatives, this can be done not by unwinding positions but by buying offsetting contracts.

At first Catex permitted only qualified insurance companies and large insurance brokers to participate in the exchange in order to avoid speculation and avoid counterparty defaults. It plans to permit major universal banks and capital market players to participate on the exchange (many were doing so through their captive in-house insurance companies) as soon as legislation and regulation governing the exposure of these players is in place. The costs of trading at Catex are modest and its capacity for dealing in political risk would be substantially enhanced if OBIs and multilateral risk insurers were to participate on the exchange. That would open up a number of new possibilities.

More recently, *avant garde* proposals have been made for combining securitisation with derivatives, drawing lessons from the asset-backed securities market to examine how PRI might be securitised.[117] As with suggestions to standardise and trade various types of political risk on Catex, growing interest in the potential for securitising PRI also has its roots in previous efforts to securitise catastrophe insurance. But, for PRI to be securitised five prior conditions must be met: (a) primary insurers must retain substantial exposure to the loss risks being securitised to avoid the usual problems of adverse selection, asymmetric information and moral hazard; (b) the probability of loss must be relatively high; (c) the corresponding premiums for taking the risk exposure must be attractively priced; (d) the size of the securitised issue must be large enough to make the transaction costs involved affordable; and (e) the loss trigger must be determined independently of the primary insurer and be symmetrically transparent to all participants in the securitised issue.

[117] Finnerty, 2001.

If those conditions can be met, then securitised tradable market instruments could be designed like credit derivatives, with a notional principal contract amount, a strike price spread and an option (or swap) expiration date. For PRI derivatives to be traded they would need to have: (a) contracts with uniform qualities and properties; (b) the backing of objective information available to all traders on issues affecting the price of the contract and of the underlying risk; and (c) reliable indexes for each different type of political risk. These would allow those players in the market with long (buyers of options) or short (sellers) positions to monitor and assess their exposure continuously and liquidate their positions on a take-gain or stop-loss basis, depending on the parameters they set for themselves about the returns they wanted from exposure in this market or the maximum losses they were willing to tolerate.

The risk data for such PRI derivatives would need to go sufficiently far back in time for statistically meaningful options pricing models to be built with the investment vehicles covering large pools of individually idiosyncratic risks whose aggregate behavioural characteristics could be reliably analysed (as they are in the case of securitised mortgage pools). The pricing structure for these derivatives would be complex. But the development of derivatives would enable indemnity risk (i.e. dollar-for-dollar cover) to be hedged through basis risk (leveraged cover) depending on changes in the index. It would also make the PRI market instantly liquid and amenable to more fluid risk insurance management by insurers and insured parties alike (provided of course they knew what they were doing). Indexed derivatives would help insurers to diversify concentrated risk much more easily than laying bits of it off in reinsurance markets, thus increasing front-line insurance capacity and allowing the insurance market to function much more efficiently by tapping into the capital market through the derivative interface.

But although the idea is appealing in theory much work remains to be done to convert it into practice. Because PRI risk is fundamentally indemnity risk it suffers from adverse selection and moral hazard in ways that cannot easily be compensated for. Actions to reduce loss risk cannot be easily monitored nor can potential damages be accurately estimated. The market for PRI is imperfect and incomplete. Attempts to derive accurate indexes for PRI have not succeeded (as yet) and PRI risk exposure may be less associated with sovereign risk than with sub-sovereign and project, sector, or industry risk. Nevertheless this remains a promising area for further exploration and product development and eventually the practical barriers with securitisation of PRI will be lowered.

What has all this got to do with risk mitigation in LDCs? Clearly, credit enhancement and securitisation of receivables is more pertinent to their circumstances. But if insurance companies are able to create larger, more liquid markets for managing risk exposure they are taking in the more advanced developing countries then they create more headroom for taking risks in LDCs that they are not yet prepared to cover. For these countries the premiums charged by private insurers are unattractive to project sponsors. The latter would need to rely on coverage by official insurers whose policies are

less flexible and less easily changeable over time. Dealing with official insurers has high administrative and time costs attached which often offset the implicit or explicit subsidies on their premiums.

It is difficult to be dogmatic about developments in sophisticated markets not being applicable to LDCs. In the short run that may be the case. But circumstances change quickly. Until recently no one believed that local capital markets in LDCs could help to finance infrastructure projects, or that improving risk management options for foreign project sponsors was feasible. It has taken very few cases to prove both those notions wrong. Credit enhancements have opened entirely new possibilities in LDCs. So might credit derivatives and PRI derivatives if they can be made to work. At the very least they would release insurance capacity that would enable LDCs to benefit from a cascading effect.

6.13 Risk-Mitigating Public-Public and Public-Private Interaction

One of the more noteworthy developments in risk mitigation in the 1990s was the increasingly close co-operation that occurred among OBIs, multilateral insurers such as MIGA and the private insurance industry. This has been particularly valuable in providing PRI for large infrastructure projects that are characterised by significant political risk. In promoting those 'partnerships' MIGA and OPIC have played instrumental and pioneering roles for which they deserve considerable credit. Some of these initiatives deserve special mention.

MIGA's Cooperative Underwriting Programme (CUP): This mechanism combines coverage from MIGA and private insurers for up to $300 million in PRI per project. It operates in a manner similar to IFC's B-loan syndication programme. CUP is a co-insurance arrangement in which one tranche of the insurance exposure is for MIGA's own account and the other tranche of exposure is borne by the 'cooperating underwriter'. But MIGA is the principal insurer of record in underwriting, both its own coverage and the coverage provided by private insurers for the same project. If a covered risk materialises, MIGA and the private insurer each pay their respective share of the claim to the insured investor. But MIGA pursues recovery on behalf of itself and the private insurer with any recovery realised being shared pro rata between MIGA and the private insurer. And the prospects of recovery by MIGA are much greater than if the private insurer attempted to recover on its own. MIGA has unique subrogation rights as an international public institution and has concluded agreements with host member countries on the legal protection of MIGA-insured investments and the use of local currency derived from such investments.

Thus CUP provides a protective covering umbrella for the combined insurance arrangement with MIGA effectively sharing its status as a preferred multilateral entity (by virtue of its membership in the World Bank Group) with private insurance companies. CUP enables private insurers to benefit from MIGA's claims and recovery procedures and subrogation rights. It reduces administrative requirements since only a

single insurance policy is issued. And, where civil society is concerned it provides the added benefit that the project being insured will meet high environmental, labour and social standards based on the World Bank's rather stringent criteria (developed in response to acute pressure from international NGOs). Also, CUP offers some large TNC investors the opportunity of having their own captive insurance companies participate under the MIGA umbrella. Such public-private interaction adds to incremental capacity for expanding PRI and provides a measure of stability and balance to the industry.

In 2001 MIGA underwrote PRI under CUP with fourteen private insurance companies, five of whom became new partners in that year. Although CUP was launched in 1996 it really did not get off the ground till 1999 and has since then expanded considerably. The cumulative amount of PRI underwritten through CUP by mid-2001 amounted to over $1 billion in risk exposure.

Other Public-Private Arrangements: MIGA has also entered into other interactive ('partnership') reinsurance arrangements with private insurers enabling it to reduce its own direct exposure to loss while allowing private sector insurers to participate in PRI transactions that they would not have been willing to enter into directly themselves. In 1999 it concluded long-term reinsurance arrangements with the ACE Insurance Company and XL Capital Ltd. (building further on earlier arrangements with ACE in 1997).[118]

The key terms of these arrangements were that: (a) the two private companies would each assume PRI exposure of up to $50 million per project and $150 million per country while (b) MIGA would retain complete discretion and control over pricing policy and underwriting decisions. As a result of these arrangements, MIGA's own project and country net risk exposure limits have increased substantially (nearly doubled) to $110 million and $385 million, respectively, with MIGA's gross country underwriting limits (before reinsurance) increasing even further to $200 million per project and $655 million per country.

An example of the extended power of this arrangement was the reinsurance arrangement that MIGA signed with the ACE Global Markets Syndicate at Lloyd's of London covering a $50 million loan by Lloyd's Bank UK to its wholly owned subsidiary in Argentina. The loan is to be used by the subsidiary to expand its residential mortgage lending operations through its 51 branches in that country. The reinsurance agreement with a tenor of 15 years permitted MIGA to extend its long-term coverage, the direct effect of which was to enable the maturity of residential mortgages in Argentina to be lengthened considerably.[119]

Up to mid-2001 MIGA had reduced $1.9 billion in its gross risk exposure through

[118] West and Martin, 2001.
[119] West and Martin, 2001.

facultative reinsurance with private insurers. In addition to its arrangements for interacting with other risk insurers in the PRI market, MIGA also has an active programme for increasing and strengthening its links with insurance brokerages in the developed and developing worlds in order to extend its retail outreach capacity by using the private sector's extensive brokerage branch infrastructure that already exists rather than attempting to reach out to investors on its own – which would be an inordinately costly and infeasible alternative.

Other Risk-Mitigating Public-Public Interactions: In addition to its CUP with private insurers, MIGA and the principal OBIs also have entered into collaborative arrangements for two-way reinsurance with one another. As of 2001 MIGA had entered into reinsurance arrangements with ten OECD risk insurance agencies (Austrian, British, Canadian, Finnish, French, German, Japanese, Norwegian, Spanish and American).

MIGA has pioneered 'partnerships' with a growing number of public risk insurers in developing countries, responding to their interest in promoting greater FDI flows within the developing world (South-South FDI flows). So far MIGA has entered into MoUs with public agencies in 12 developing countries, with agencies in Kuwait, Saudi Arabia and Singapore, and with two multilateral development banks for this purpose.

Apart from what MIGA does, OBIs from OECD countries also collaborate (even as they compete) frequently with one other in large projects where capital equipment is being sourced from several OECD countries. With multi-sourcing of capital equipment for infrastructure (and other large capital-intensive) projects in developing countries now becoming routine and more prevalent than single-country sourcing, there is strong pressure on OBIs (and multilaterals alongside them) to work more closely together not only in co-insurance and reinsurance arrangements but also to avoid duplicating the very high administrative costs of undertaking 'due diligence' exercises. Some progress has been made in these areas (e.g. between Coface and ECGD and between EID-MITI and J-EXIM). But more remains to be done.

A by-product of increasing public-public and public-private interaction in the PRI industry is a trend toward the standardisation of terminology and of the structure and wording of PRI policies. That is of clear benefit to the foreign investors that are being insured and facilitates coinsurance and reinsurance arrangements considerably. As private insurers interact and cooperate more frequently with MIGA and OBIs (such as OPIC and EDC) they become accustomed and adopt the policy wordings used by these agencies gradually leading to industry-wide uniformity and standardisation. That trend is helpful to their clients, whose lawyers do not have to study several individual documents for much the same product. It is leading to the kind of convergence that takes one step further toward making the creation of capital market-traded PRI derivatives products possible. Eventually it will result in converting indemnity risk (confined largely to the pool of capital available in insurance markets) into basis risk (thus enabling the much larger pool of capital available in capital markets to participate in these risks) while allowing greater liquidity and risk management flexibility for PRI insurers – public and private.

Documentation Risk: These developments need to be widened and strengthened as there is now much greater 'documentation risk' emerging in the PRI market. Most OBIs have operated on the principle that the investors or creditors they insure are responsible for their own documentation. Thus, if a claim arises and the cause is imperfect documentation, this does not constitute an insured risk. In the case of project finance this poses a unique problem given the fact that typically, the documentation for such arrangements when piled together can be two metres high and one metre wide. In many developing host countries where PRI cover is being provided, key aspects of the legal framework governing such arrangements are unclear or untested. Yet if OBIs and other insurers take on the task of vetting all documentation clause-by-clause, they would be exposing themselves to higher risk of payouts and incurring astronomical administrative expense burdens. The issue of documentation risk is becoming a critical one to which insufficient attention has been paid.

Public-Private Interactions through MDB/IFC B-Loan Programmes: Similar to MIGA's cooperative underwriting programme are the 'B-loan' programmes employed by IFC and the specialised private sector lending units and facilities of the World Bank and the regional development banks. Operating in the same way as CUP, but involving commercial loans instead of syndicated insurance cover, these programmes mobilise private sector funds (mainly from global commercial bank syndicates) to participate in the debt component of project financing and risk management structures for large and complex FDI investments in developing (and least developed) countries.

Under these arrangements the public agency (MDB) and private lenders (banks) share in the project financing risk although it is the public agency that remains the lender of record to the project entity (with the B-loan usually not being guaranteed by the host government). This helps to obtain financing for longer maturities and lower cost than would be available to project entities in commercial loan markets if the public participation element were absent. It also provides the umbrella security of preferred creditor status to the private lenders involved under such arrangements, thus bestowing on them tacit seniority over other private lenders that they would not have by lending on their own. A major advantage for private lenders is that lending under B-loan protective umbrella arrangements enables them to escape (partially or completely) the risk provisioning requirements that national bank regulators would impose on them had they lent for these projects on their own.

B-Loan Domestic Currency Variant: The B-Loan concept could be taken one step further by having a variant that also brings domestic commercial banks into the financing structure. That would have the same effect as a credit enhancement provided by an MDB or a bilateral donor (like Sida) for a bond or note issue in the local capital market. It would enable domestic currency funds to be raised in larger amounts for infrastructure projects, thus reducing the financing, balance sheets and currency risks for foreign investors in the project. By including major local commercial banks (and insurance companies with liquid funds or mutual funds) in the debt component of a project financing structure, with cross-default clauses incorporated in the project loan

agreements, any defaults on debt service payments to foreign creditors would trigger a default on local creditors as well (and vice versa) thus putting additional pressure on host governments to avoid taking actions that might compromise the financial integrity of FDI-financed projects.

Clearly, dealing with a number of different types and classes of foreign and local lenders adds significant complexity to the debt and security packages that need to be arranged under such structures. These security-sharing arrangements raise difficult inter-creditor issues among differently situated creditors subject to different national regulatory and legal jurisdictions. Accommodating these complexities in an efficient manner has resulted in the emergence of common lending agreements accompanied by complicated inter-creditor agreements on security sharing, recourse and the 'multiple pledge of shares' problems that arise with the conflicting needs of creditors (to have those shares as part of the project collateral in a security package) and those of risk insurers (to pursue salvage rights).

The Case for Further Public-Private Interaction: The re-entry of private sector risk insurers in the PRI and NCRI markets in the 1990s (after a prolonged absence through the 1980s based on major losses incurred by the private insurers on PRI in the 1970s and early 1980s) has changed the nature of the balance between public and private insurers in this market. Clearly, governments do not want their OBIs and ECAs (nor the multilateral agencies in which they are shareholders) to take on PRI exposure that they do not need to if the private sector is willing to take such risks. After all, many OBIs and ECAs have taken even larger hits (financed by the taxpayer) than the private insurers on their risk and debt exposures to developing countries in the 1980s and early 1990s although they have now recovered from those losses. But the re-entry of private insurers does not mean either a receding or a redundant role for the OBIs and multilaterals.

On the contrary, the risk exposure of both public and private insurers in the PRI/NCRI market is likely to grow in tandem because their roles are distinctive and complementary. Private insurers increase the capital risk-bearing capacity for PRI by increasing the resources available for compensation in the event that risks materialise. OBIs and multilaterals (by virtue of their being public) provide a unique deterrent capacity (i.e. the ability to avert or prevent risks from materialising in the first place), early dispute resolution capacity, and a stronger salvage and recovery capacity (in dealing with other governments) than private insurers could ever have. These are distinctly different strengths that need to be combined in the PRI market. In the long term, the aim of both public and private agencies should be to reduce and eventually eliminate political risk (although it would be impossible to eliminate all non-commercial risk) in the same way that political risk has diminished dramatically, if not yet disappeared, where the exposure of investors and creditors in developed countries is concerned.

For that reason, the need for public (OBIs and multilateral) and private insurers, and the need for more intense and effective interactions between them, is likely to grow although there remains an uncomfortable suspicion in the minds of many OBIs that

the entry of private insurers into PRI will result in their diminution either to irrelevance and to eventual demise. Alternatively the concern is that if they do not disappear altogether, OBIs will become 'insurers of last resort' with concentrated adverse selection risk and a very high probability of unrecoverable payouts.[120] Both those concerns appear unfounded for the reasons outlined above.

Instead, the case for further public-private interaction between OBIs and private insurers – on a country-by-country basis (i.e. in each OECD country) and between OBIs, multilaterals and private insurers co-operating together across country lines in complex financing structures – remains strong because of the need to ensure that: (a) foreign investors in projects in the developing world continue to have a broad range of choices for obtaining PRI in order for the PRI market to be competitive and efficient; (b) no single risk-bearer is required to operate in a manner that results in no risk diversification and excessive concentration of adverse selection risk; (c) the range of skills, expertise and institutional infrastructure that exists among public OBIs is nurtured and developed for the benefit of the entire PRI industry rather than being compromised and eroded.

But public-private interaction in PRI is not trouble-free. Several problems exist that have not yet found a satisfactory solution.[121] To give but two examples: First, when OBIs purchase reinsurance from the private sector they augment their risk exposure capacity and leverage their resources. But they do so at a cost to the private insurer. The most obvious one is that OBIs issue long-term contracts. If they issue a contract with a 20-year tenor, the insurer has to accept a 20-year credit risk on the reinsurer. If the reinsurer goes bankrupt in that period (not an entirely unusual occurrence) and a claim on the PRI contract has to be honoured, the insurer then becomes obliged to step in and pay the claim.

A second example concerns the potential limitation of discretionary action that an OBI accepts (implicitly or explicitly) when it reinsures with a private insurer. In a reinsurance arrangement, the private insurer accepts a responsibility to cover the OBI for that part of the risk exposure that has been reinsured. It also accepts a fiduciary responsibility to protect the interests of the reinsurers in a loss and recovery situation. When a government behind the OBI acts in a manner (e.g. agrees to debt forgiveness involving insured creditors) that violates the interests of reinsurers, the private insurer who arranged the reinsurance contract is put in an impossible situation. When OBIs purchase commercial reinsurance (as they regularly do) their governments do not fully realise the implications in having to subordinate political considerations to commercial rectitude.

Finally, OBIs need to realise that private reinsurers commit few resources to really understanding the risks they are taking on. They are doing it on faith that the OBIs

[120] Stephens, 1998.
[121] Salinger, 1998 op cit.

have done their due diligence and been prudent in taking the risk exposures they have. The innocence of reinsurers works to the disadvantage of OBIs when claims roll in. At that point innocent reinsurance capacity pays its dues but then withdraws to avoid exposing itself to such risk again. For OBIs and multilaterals to interact sustainably over the long term with private insurers it would be preferable for them to work with structures that create knowledgeable and professional private underwriting capacity.

6.14 Specific Risk-Mitigating Public-Private Interactions for LDCs

What is most needed however, especially to enable smaller foreign investors from developing countries anxious to invest in neighbouring LDCs, is to simplify and extend their access to PRI and NCRI without their having to rely on the battalions of lawyers, accountants and investment bankers that the large TNCs from OECD countries take for granted in structuring their project finance arrangements and incorporating PRI and NCRI into them. These types of investors do not have the capacity to deal with different players in the PRI market individually and require access to professionally packaged PRI services.

If donor countries like Sweden are serious about wanting to see FDI in LDCs increase through improved risk-mitigation public-private partnerships and initiatives, then they need to ensure that complex NCRI services can be simplified and made user-friendly for the kind of investors most likely to invest in LDCs other than for resource or large infrastructure projects. That means investing resources in private and quasi-private (i.e. public-private) institutional structures with expertise in PRI and NCRI that can be offered to these different types of investors at an affordable price and in an accessible way.

One possibility is in the creation of a 'Foreign Investment Risk Mitigation Advisory and Packaging Service' specifically aimed at foreign investors from developing countries intending to invest in LDCs. Such a service could be located either at MIGA or at EKN or operate under the umbrella of a well-known international insurance company with an extensive branch network in developing countries that could deliver these services more effectively. These three options would need to be examined closely to determine which would offer the most net advantages. The service being proposed would need to comprise experts (whose compensation might partly be funded by donors until the service became self-sufficient) who are knowledgeable about PRI and other NCRI policies and products and know their way around both the official and private PRI institutions and markets.

Apart from advising foreign investors from developing countries on PRI options and their value addition in a project financing package, these experts could help such investors put together a PRI package involving OBIs, multilaterals and private insurers on a cost-recovery based fee which would be recovered if the project went ahead. In that sense the service would be a combined consultancy-cum-brokerage service specialising in PRI.

Another possibility that requires consideration – in order to address the root cause why PRI is becoming so necessary, especially for more complex infrastructure projects – is the creation of international fast-track capacity for swift dispute resolution, arbitration and judicial adjudication combined. It is frequently noted that new types of NCR and political risks are emerging in the 21st century that are different from the typical CEND risks that most PRI contracts are presently structured to address. The main protection that investors now seek is from the risks of contract frustration and politically induced business interruption rather than confiscation or appropriation. It is the reality of the obsolescing bargain that gives most cause for concern. These risks are heightened because inadequate (often incompetent) legal and judicial recourse is available to project investors (especially if they are foreign) in host countries. Judiciaries are almost never independent and usually adjudicate unfairly in favour of governments or alternatively hold up the process of judicial resolution indefinitely. Recourse to international arbitration is interminably slow and expensive.

Under these circumstances it is worth raising the possibility of creating an International Civil Court for Foreign Investors in Stockholm (to complement the International Criminal Court in the Hague) that might help circumvent these problems and create an alternative venue of substantive recourse for foreign investors. For it to work the judgements of such a Court would need to be binding and respected. Unless, however, the proposed Court departed entirely from typical legal process and could be made to work in real time (i.e. its judgements could be delivered in less than 12 months for each case), it would not be an idea worth pursuing further. Nevertheless it is floated because it appears illogical to put the entire weight for resolving the problem of imperfect commercial bargains and contracts on PRI and NCRI – which represent sub-optimal solutions and approaches – and not addressing the real problem.

7 Mitigating Risks for FDI in LDCs: Recommendations on the Role of Bilateral Donors

7.1 The Case for Pro-Active Bilateralism to support FDI in LDCs

FDI is now the predominant channel for financing commercially sustainable development in LDCs. The role of ODA in that respect has changed. Between 1950-80 ODA financed the bulk (65–80%) of physical and productive investment for development. Most of this investment was undertaken by recipient governments and/their state-owned enterprises. It was generally ill conceived and poorly managed. It was often aimed more at supporting exports of capital goods from particular donor countries than supporting development in recipient countries. 'Investment' was a figleaf for these unproductive transfers. Unsurprisingly, such investment earned low or negative returns. The infrastructure created by such investment deteriorated quickly for lack of care and maintenance. In turn, the debt created to finance such public investments could not be repaid to official sources.

Oddly, no serious connection was made in the development community until the mid-1990s between the failure of such investment and the fact that it was: (a) driven by donor *governments*, while (b) being owned and managed by recipient *governments*. Instead, the conclusion reached in the 1980s was that ODA was unsuited to financing development investment and better deployed for broader purposes, i.e. 'getting policies right'. Thus, through the 1980s a large part of ODA flows were diverted to budget and balance-of-payments support to fund structural adjustment. In the 1990s, ODA priorities shifted yet again and ODA has since financed mainly debt service, humanitarian and emergency assistance, food aid, technical assistance, poverty reduction and social expenditures.

Less than 15% of total ODA now finances productive investment that creates employment and increases output and exports so that LDCs can make a living in an increasingly competitive, global market-orientated, WTO-driven world. Necessary though social expenditures are in addressing the human dimensions of development, they do not enable LDCs to invest in growth and earn their way out of the poverty trap. Funding social expenditures with aid has served to increase and exacerbate aid dependency. There has not been sufficient domestic saving, investment and growth in the productive economy of LDCs to sustain such expenditures in the medium and long run. And there is no sign that such developments will occur anytime soon. The poverty trap for LDCs has thus been worsened by the inescapable circularities of an aid trap and another debt trap.

ODA now reflects the social preferences and priorities of civil societies and governments in *donor* countries. Recipient governments and the private sector in *developing* countries are concerned that it does not address their urgent investment and growth needs. That role is being delegated entirely to FDI. Meanwhile unsustainable debt burdens continue to cripple most LDCs. Token attempts (such as the two HIPC Initiatives) have been made by the donor community to justify the pretence that something substantial is being done to alleviate debt burdens when, in reality, that is far

from what is actually being achieved. Both HIPC Initiatives are failures of the 'too little and too late' variety.

The view has (rightly) taken hold that productive investment is a task best left to the private sector. The disciplines involved in managing productive investment, and even more importantly, of effecting technology and know-how transfers and of 'purpose-specific' human resource development, are more efficiently handled by TNCs on a sustainable long-term basis than by government-to-government technical assistance interactions. But that leaves LDCs out in the cold. Very few have capable indigenous private sectors brimming with local entrepreneurial talent and capabilities to maximise absorption from FDI. If they did, they would not be LDCs. And, LDCs provide the least fertile and most unattractive environments for foreign investors.

In a world in which investment regimes are being liberalised quickly, these 49 countries are ill placed to compete for FDI with the other 150 countries that are developing or in transition.[122] LDCs face intense competition in attracting FDI from more competitive low-income countries that are not LDCs (e.g. India and many transition economies). These competitors are more industrially advanced, better endowed with human, social and institutional capital and have large domestic private sectors. Yet, given the structural disadvantages they have, LDCs will not grow or develop unless they are able to attract FDI, provide a congenial home for it and benefit from its presence by absorbing its strengths into the local economy. Before they can do that, they need to lower the barriers they pose to FDI and that heighten commercial and non-commercial risks that foreign investors have to take when they invest in such environments. If a virtuous spiral of inward FDI flows to LDCs is to be started and sustained it will need official help in the short and medium term. But such help will need to be deliberately phased out over the long term in order to avoid a permanent subsidy element becoming embedded in supporting FDI flows to LDCs.

Experience through the 1990s suggests that multilateral institutions have serious 'attitude problems' in galvanising such flows to LDCs, although their charters suggest that is what they were set up to do. Unfortunately their *modus operandi*, their vulnerability to the volatility of their changing (rarely well chosen) leaderships, and the perverse incentives under which their staff operate do not make them best suited to performing the task for which they were originally created. Bluntly put, the way in which they function is inimical to productive exchanges with the private sector. Clearly that needs to change. But it will take some time to do given the rigidity of their internal organisational cultures.

That leaves the onus on the bilateral side of the official system to do what it can to support FDI to LDCs in ways that do not create permanent dependencies on subsidies or result in the wrong sort (i.e. subsidy chasing) of FDI. Given what has been said in previous chapters, and what can be learnt from the case studies outlined, there are a

[122] Fifty if East Timor is also included as it inevitably will be.

number of things that bilateral donors like Sweden can do – including of course getting multilateral institutions to change and become more responsive and effective – in the short, medium and long term to mitigate risks and unblock FDI flows to LDCs. The following sections elaborate on some ideas in that direction.

7.2 What Can Bilateral Donors do in the Short-term (0-2 years)?

Bilateral donors can take a number of measures to kick-start and sustain FDI in LDCs in the short-term. These measures include: (a) extending extant risk mitigation capabilities, and (b) encouraging FDI flows to LDCs in other ways as well.

7.2.1 Extending Extant Risk Mitigation Capabilities

The following measures come to mind where European bilateral donors are concerned:

1 Increase funding of multilateral risk insurance agencies (like MIGA) for covering LDC political and other non-commercial risk through a special purpose capital or guarantee pool provided by like-minded donors dedicated to covering political risk in LDCs.
2 Sponsor a regional risk cover agency or institutional capacity at the EU level (a European MIGA equivalent associated with or as part of the EIB) that would focus on LDCs and African political risk cover and would seek the same status as MIGA.
3 Increase the PRI capacity of *bilateral* ECAs/OBIs (e.g. EKN in Sweden) through specific funding or subsidies for covering political risks in LDCs.
4 Encourage and, if necessary, subsidise the start-up of cooperative underwriting programmes (CUPs) based on the MIGA model at the *bilateral* (donor) level between OBIs and private insurers in the domestic market. In Sweden, the Ministry, Sida and EKN might consider hosting a conference (in the next few months) at which key OBIs and private insurers that have established a presence in the PRI/NCRI market might get together to explore what might be done to: (a) provide risk cover for LDCs, many of which are presently off cover; (b) develop standard NCRI insurance cover policies for LDCs; and (c) extend further the attempts being made to provide 'enhanced breach of contract cover' to include 'contract frustration' and 'politically induced business interruption' risks. It would be too much to expect such a conference to achieve satisfactory outcomes immediately. But the process of developing public-private partnerships between OBIs and private insurers for providing joint risk cover in LDCs by building on their respective strengths, and for developing insurance products that meet the real risk insurance needs of potential foreign investors in LDCs, does need to be kick-started. Sweden could play a useful role in taking a step in this direction.
5 Encourage and strengthen similar PPPs at the *regional* level by pooling the capacity of European OBIs and EU private political risk insurers in specific public-private partnerships aimed at covering PRI and NCRI in LDCs.[123] Capital set-asides by OBIs could be matched by a capital grant from the EDF for this specific purpose.

[123] The problem here might be that private insurers may not wish to have their PRI exposure publicly known. The problem could be overcome in two ways: (a) either through the MIGA approach of announcing the overall limits beforehand and then showing the specific instances of cover as MIGA risk exposure; or (b) respecting private insurer concerns for privacy by not making public their share of risk exposure.

6 Provide *project-related subsidies to cover part of the premium costs* for PRI or NCRI for specific projects being undertaken by source country, or eligible European, or eligible developing country firms in LDCs.
7 Encourage the development of *public-public partnerships between OBIs* (EKN in the case of Sweden) and their nascent counterparts in key *developing* countries that are becoming major source countries for FDI in neighbouring LDCs (i.e. with ECAs in *India* for LDCs in South Asia; in *Thailand* and *Malaysia* for FDI in Cambodia and Laos; and *South Africa* for LDCs in Africa).
8 Establish Guarantco and extend its remit for providing pooled credit enhancement not only for sub-Saharan Africa but also for LDCs in other regions.
9 Encourage bilateral donor agencies to encourage local currency funding of infrastructure projects and reducing investor currency and funding risks by expanding their guarantee capacity for credit enhancement. This can be done both by adding directly to bilateral donor agency risk capital resources for this specific purpose but also by using the 'callable capital' device employed in the MDBs for this purpose without necessarily drawing down immediately on cash budgetary resources when the insurance cover has to be paid out.

7.2.2 Other Ways of Increasing FDI Flows to LDCs

As far as donor country (and aid agency) actions beyond pure risk mitigation are concerned, the following are worth considering further:

10 Providing full (100%) or large partial (50-80%) tax credits, rebates, or deductions (depending on which of these would have the greatest impact on influencing TNC behaviour in the donor country concerned) for the equity invested by home country companies in LDCs against their tax liabilities in their home countries.[124]
11 Establishing special-purpose 'FDI-in-LDCs' investment promotion departments (with commensurate budgets) within bilateral aid (e.g. Sida) or investment (e.g. Swedfund) agencies, thus ensuring that support for FDI flows is as important a bilateral priority as any other in aid programmes. These departments would work closely with specific IPAs – from at least 8-10 LDCs that feature prominently in a bilateral donor's aid programme – to 'market' the investment potential of each of those LDCs in donor countries on a specific targeted basis. They would extend the limited capacity of LDC-IPAs enabling them to leverage their limited resources.
12 Their activities would include: (a) determining investment priorities with each of the LDC-IPAs they were working with; (b) targeting specific companies and TNCs in their home countries; (c) apprising them of opportunities in LDCs and do the necessary groundwork for providing them with basic information about the specific investment possibility; (d) screening firm prospects and arrange for LDC-IPA officials to visit targeted companies for intensive interviews and discussions in the pre-investment stage; (e) helping to part-finance environmental impact assessments and meet other pre-investment costs that may otherwise deter the investor company from going further; (f) helping to prepare documentation (MoUs, LoIs, etc.) to facilitate investment decision-making; (g) undertaking targeted media initiatives in their countries to present these LDCs and the investment opportunities they offer in a positive light; and (h) institutional capacity

[124] This idea has been proposed in Mistry, 2002.

building in partner-IPAs through intensive arrangements for staff training, exchange programmes and arranging greater LDC-IPA staff exposure to the corporate world in Europe.

13 Augmenting bilateral aid agency capacity in their field offices (e.g. Sida-DCOs in Swedish embassies in LDCs) to assist and liaise locally with the LDC-IPA concerned in following up on specific investment project opportunities by including an experienced (retired volunteer?) private sector specialist in DCOs on a pilot programme basis for 2 years in 3 or 4 LDCs (e.g. Afghanistan, Bangladesh, Angola, Tanzania). If the pilot programme was successful, it could be expanded to all LDCs in which the donor country had a major interest.

14 Increase direct bilateral participation in private infrastructure funds (such as Sida's participation in the AIG Africa Infrastructure Fund (managed by the Emerging Markets Partnership) through more consistent public-private partnership arrangements and orient these funds towards LDC investments to the extent possible rather than having them concentrate mainly on non-LDC countries.

15 Explore the possibility of establishing a small special purpose LDC Infrastructure Investment Fund that would provide equity and debt financing as well as mobilise domestic currency resources for lending to infrastructure projects in LDCs outside of Africa as well (especially in West, South and East Asia and in the island LDCs of the Pacific).

16 Set up the proposed Risk Mitigation Advisory Service (Chapter 6) for foreign investors in LDCs and especially for investors from other developing countries who would not have either the resources or the network capability for dealing with major private insurers, OECD-OBIs, or MIGA. This service would attempt to 'package' risk cover services for investors in a similar fashion to a specialised insurance broker.

7.3 Initiatives to promote FDI in LDCs: Medium Term (0-5 years)

Over the medium term the nature of bilateral donor efforts at inducing sustainable FDI flows to LDCs might focus on activities that would take longer to show results than the fifteen options listed in the previous section. Clearly, although these activities might bear fruit only after five years or so, they need to be started now, at the same time as the short-term measures. These activities should include:

17 Working with multilateral partners and the private sector to develop *financial systems and capital markets of LDCs* more rapidly than is currently being envisaged. If financial markets in LDCs are not improved dramatically (with the import of talented human capital as is characteristic of any sophisticated financial market anywhere today) they risk being permanently disenfranchised in a globalising world.

18 Where bilateral donors can make a unique contribution over multilateral donors (whose comparative advantage lies in policies and other more macro and meso functions) is in engaging in intensive 'regulatory-partnership' arrangements between financial system regulators in particular donor countries with regulatory agencies in LDCs to ensure not only that sound laws, rules and regulations are developed, but that they are applied and enforced.

19 Bilateral donors can provide seed funding to encourage their non-banking institutions to establish a presence in LDC financial systems that would be shunned by the private sector. They need to subsidise the costs of entry into LDC markets of their securities

exchanges, insurance companies, pension fund and asset management companies, their household finance and mortgage companies, and their postal and giro savings systems for small savers in LDCs. They also need to facilitate the development of securities and insurance brokerages and smaller financial service firms into LDCs to 'force' a pace of development of the financial system that would otherwise simply not occur.

20 Bilateral donors (especially members of the EU) can do more to: (a) provide open access to their domestic consumer markets to all products of LDCs; (b) encourage their domestic firms through favourable tax treatment or through grant support for partial cost-coverage (e.g. trading firms, supermarkets and other consumer goods retailers) to develop supply sources so that LDCs can take advantage of the preferential access they have but are not availing of; and (c) encourage developing country investors to invest in LDCs to take advantage of privileged access to donor markets. Privileged and preferential market access for LDCs should be provided between now and 2010 when it should start being gradually phased out, i.e. completely phased out by 2015.

21 Set up an International Commercial Court (ICOM) in Stockholm specifically designed to resolve disputes between LDCs (not all developing countries) and foreign investors (Chapter 6). The ICOM would be established specifically to address the core difficulty that requires foreign investors to acquire political risk insurance, the premiums for which are particularly expensive where LDCs are concerned. It should be set up to resolve all disputes within a maximum period of 12 months with the costs of civil action being shared equally by the foreign investor and the LDC government (or government agency concerned). European bilateral donors could agree to subsidising 50% of the operating costs of such an institution for the first ten years. The existence of such an institution would help to lower PRI premiums considerably. All FDI in all LDCs would be automatically subject to ICOM's dispute resolution and adjudication jurisdiction.

7.4 Long-Term Options to Consider (0-10 years)

The long-term options that bilateral donors might consider for bolstering the foundations of the future sustainability of FDI flows to LDCs would address those barriers to FDI that are presently not being addressed adequately by either bilateral or multilateral donors:

22 Providing sustained long-term institutional and human capacity building assistance for LDC accounting, legal and judicial systems to improve their performance and capacities when it comes to dealing with foreign investors swiftly, impartially and equitably. Such assistance would be provided through counterpart accounting, legal firms and judiciaries in partner donor countries through long-term partnership programmes that would be partly funded by aid. For foreign investors to have credibility in such systems over the medium term, it may be necessary to staff local commercial courts in LDCs with expatriate adjudicators, judges and advocates from donor countries and have them phased out over 10-15 years by which time total confidence in LDC nationals being able to run these systems with the same degree of professionalism and probity should have been established in the minds of foreign investors.

23 Providing similar support for political and broader governance institutions, i.e. government machinery and ministries, especially the law and justice ministries as well as for parliament and parliamentary institutions for the effective functioning of democracy, and representative civil society institutions that can exert additional checks and balances in

ways that even parliamentary systems in developed countries cannot. Such efforts should be based on the premise that economic reform cannot be sustained without addressing and following through on urgently needed reforms in the way that governance in LDCs functions at all levels. It is not enough for donors to proselytise and wring their hands endlessly about this issue. It now needs to be tackled decisively. Political and governance reform should be tackled on the same footing and in the same way as economic reform. Indeed in some LDCs it may be appropriate to take a pause in pushing through successive rounds of further economic reforms that are unlikely to work unless they can be embedded in political and judicial reform. The latter may need more emphasis than the former in LDCs (and other developing countries) over the next decade.

24 Such assistance would include long-term partnership arrangements for institutional and capacity building between counterpart ministries in donor countries and LDCs (with each donor picking no more than two LDCs or vice versa), as well as between: their parliaments; ombudsmen and watchdogs such as central auditing and accounting agencies; judiciaries; labour unions; chambers of commerce and industry associations; and between their NGOs (though these would need to be carefully selected to ensure that these partnerships are productive rather than counterproductive).

But beyond the direct long-term interactions between bilateral donors and LDCs to improve the institutional foundations on which FDI (and indeed all economic activity) can rely, there are longer term measures that donor countries need to consider for the future development of PRI and NCRI markets themselves. These measures (taken not by their aid agencies but by finance ministries, regulatory agencies and monetary as well as securities exchange authorities but most especially by their OBIs, private insurance companies and capital market players) include:

25 Supporting the future evolution and development of PRI and NCRI capacity in their own domestic markets and in the wider regional European market through more productive public-private partnerships between OBIs and private risk insurers.

26 Facilitating the entry of PRI and NCRI derivative products into capital and derivative markets by sponsoring the research and development of PRI and NCRI derivatives based on experience gained and lessons learnt in both credit derivative markets as well as in catastrophic risk markets. A future generation of new derivative products in these markets – aimed at transforming open-ended (and unmanageable) indemnity risk to which insurers are exposed over a long-term into limited capital market risk that might be shared by a much broader range of risk-takers interested in making such markets – is clearly needed. This development would enable PRI and NCRI risk to be shared over a much larger global capital pool than exists in insurance markets – whose own capital pool can contract quite dramatically when events such as September 11th 2001 occur – and would permit such risk to be traded more transparently, adding also to liquidity (Chapter 6).

This broad compendium on possible measures over three distinct temporal horizons provides a rich menu for digestion and further discussion within the political risk insurance industry. It also calls for more research. But it provides a sufficiently diverse range of measures and options that donors can, and should, seriously consider as part of a wider effort to increase FDI in LDCs.

ANNEX A

Case Study 1

Tanzania: The Songo-Songo Gas & Power Project

This case study[125] is the first of three aimed at highlighting issues raised in the first six chapters of this Study. It is based on the Songo-Songo Gas & Power Development Project in Tanzania, the second private independent power project (IPP) undertaken in the country, but the first under a new governance regime for the electricity and gas industries. It brings out the risks that arise for private investors in an LDC undergoing a major transformation of its economic model and regimes of market governance, and the various ways in which these risks have been contained and mitigated.

The case study is structured along lines that highlight sequentially: (a) the country's political and economic setting and its transition from a parastatal-dominated, command-control socialist economy to a regulated market economy; (b) developments in the electricity and gas sectors and in their governance and regulatory regimes; (c) the Project and its key characteristics that influenced the way in which it was structured and handled; (d) the environmental and social sustainability dimensions of the Project and the way in which they were dealt with; (e) project risks, risk allocation and sharing, and arrangements for risk mitigation; and (f) key lessons that emerge from the Project.

The Country Setting for the Project

Independence & Emergence: The United Republic of Tanzania came into being in 1964, after mainland Tanganyika and the islands of Zanzibar and Pemba achieved independence from Britain in 1961 and 1963, respectively, with Julius Nyerere as the first President of the Union. The Arusha Declaration of 1967 provided the charter for Tanzania's post-independence pursuit for the next 20 years of: a one-party socialist state, an extreme socialist (quasi-communist) economic model, a development strategy based on state domination, ownership and control of economic activity, and especially of industrialisation and modernisation.

Over those two decades, the combination of its internal policy choices and a series of external shocks, resulted in Tanzania effectively bankrupting itself. Politically, however, Tanzania remained stable. The Nyerere government's focus on basic primary education and rural development succeeded in uniting a number of disparate tribes into a

[125] This case study relies on information obtained from the World Bank (IDA) Staff Appraisal Report on the Project (Report No. 21316-TA) dated August 21, 2001 and available for downloading from the www.worldbank.com website. The Appraisal Report provides a remarkably clear, unusually detailed and frank account of the Project. It is an exemplary document for which the staff concerned deserve considerable credit. Ms. K. Rasmussen, the Team Leader for the Project at the World Bank was unusually helpful in providing her insights and guidance to the consultants for this Study. Her openness and her efforts are greatly appreciated.

single nation with a common language and identity. Unlike most of its neighbours, Tanzania is relatively unafflicted by serious ethnic divisions (other than resentment of the relative prosperity of the non-indigenous resident Indian community) or continual tribal turbulence. Its society may be poor, but it has a strong sense of pride and confidence in itself.

Post-Independence Economic Decline & Stagnation: In the immediate aftermath of independence, the adoption of inward-looking, statist import substitution and industrialisation policies applied behind high tariff walls, along with the deteriorating performance of parastatal corporations, led to a gradual breakdown of its economy and of economic relations with Tanzania's neighbours. Along with divergent developments in neighbouring countries, these trends contributed to the demise of the East African Community to which Tanzania belonged in 1974. The middle and late 1970s were characterised by inappropriate policy responses in getting the economy to adjust to three successive oil shocks that helped to derail Tanzania's development trajectory. Attempts to adhere for too long, and for ideological reasons, to policies and structures that were proving unworkable by resorting to unsustainable borrowings, only made the eventual *denouement* more severe.

The Need for Change: In 1986, in the midst of a severe debt crisis and economic collapse, President Nyerere stepped down from office voluntarily after 22 years when he reached retirement age. It was one of the rare peaceful and 'democratic' (to the extent that one-party states can be democratic) transitions of leadership that occurred in sub-Saharan Africa. He was succeeded by President Ali Hassan Mwinyi whose first government, on assuming office, embarked on an ambitious 'economic recovery programme' (ERP) supported by the IMF and the World Bank. ERP caused unemployment and social dislocation as key parastatals were shut down and dismantled. It did not deliver the results expected as swiftly as had been hoped by Tanzania's international interlocutors, partly because of the drag effects of Tanzania's unsustainable debt burdens, and partly because of the absence of sufficient social safety net provisions in the design of ERP.

The Beginnings of Reform: ERP was therefore bolstered by another economic and social action programme (ESAP) in 1989 with more emphasis on social safety nets and ameliorating the costs of dislocation. The thrust of both ERP and ESAP was to change Tanzania's underlying economic paradigm. Both aimed at dismantling the extensive system of state administrative and price controls that had paralysed the economy and relying on private sector initiative to drive economic activity instead. The trade and exchange system was liberalised, price control and state monopolies were abandoned, and the state-controlled (limited, inefficient and insolvent) financial system was opened up to private domestic and foreign entry.

Reforms Compromised by not dealing with Tanzania's Debt Burdens: But neither ERP nor ESAP addressed adequately Tanzania's crippling debt burdens. Between 1986-95 Tanzania's annual debt service payments were, on average, equivalent to 5-6% of GDP. The gains of incipient recovery were thus being exported via debt service to the IFIs,

which by then had become Tanzania's most burdensome creditors. Tanzania had hardly any commercial debt to speak of. Its bilateral debt was almost as large as multilateral debt, but it did not pose as much of a burden. Bilateral debt was subject to arrears tolerance, rescheduling and reduction in ways that 'preferred' multilateral debt was not. In that period, net transfers to Tanzania on the official debt account were insignificant and a large proportion of aid inflows were offset by debt service outflows.

The Crippling of Infrastructure: One of the most damaging effects of state control was on Tanzania's infrastructure. By 1990 it had virtually ceased functioning and had become the most serious physical constraint to growth and to private investment. Although domestic and foreign investors were willing to invest (as evidenced by a fairly dramatic rise in FDI and round-tripped flows), the absolute constraints on improving and expanding power, water, transport and telecommunications severely inhibited private investment from increasing as rapidly as investors, and the government, might have wished. The rehabilitation of key infrastructure – especially roads, railways and ports – became a key priority with emphasis on rehabilitating and expanding power, water and telecommunications assuming importance a stage later.

Encouraging Responses to Revised and Consolidated Reform Efforts: Despite the drag effect of an unsustainable external debt burden, Tanzania's economy began responding to ERP/ESAP reforms in 1989 with an average growth rate of 5% per annum being recorded between 1990-94 (or 4% for the 1986-94 period) compared to an average of 2% between 1976-85, and an even sharper decline in per capita income given a population growth rate of about 3% in the 1970s and 1980s.

Reversals in the Mid-1990s: But the momentum of reform and growth faltered with the onset of another economic crisis in 1995-96. That was caused in part by the debt burden, and in part by the second Mwinyi administration departing from its commitment to sustaining reforms in the face of populist pressures triggered by the dislocations and social consequences of reform programmes. The failure of the government to deliver on conditionalities led the IMF and World Bank to defer disbursements under their adjustment programmes in 1995 with concomitant action being taken by bilateral donors, who ceased providing Tanzania with critical balance-of-payments support as well.

The End of One-Party Rule, Change in Government and Revival of Reform Efforts: At the end of 1995 the Mwinyi government was succeeded by the incoming administration of President Benjamin Mkapa, representing yet another sharp break from the past. After three decades of one-party rule, multi-party local elections were held in 1994 and parliamentary elections in 1995. President Mkapa moved swiftly to restore good relations with the IFIs in 1996 by delivering credible commitments on meeting their conditionalities and unblocking access to external finance. That turnaround put the economy back on a recovery and growth path. Annual GDP growth was restored to an average of 4% between 1997-2001 with private investment and FDI responding.

Current Economic Characteristics: In 2001 Tanzania had a Gross National Income of $9.3 billion, a population of 33.8 million (growing at 2.6% annually) and a real per capita income of $280 making it one of the poorest countries in the world. Its 1999 human development index (HDI) rating of 0.436 resulting in its being ranked 140th out of the 162 countries rated. Tanzania also ranked very low on the 'corruption perceptions index' (CPI) of Transparency International with a score of 2.2.[126] It ranked 82nd out of the 91 countries rated.

Structure of the Economy: The economy remains largely agrarian. Agriculture accounts for over 45% of output, 85% of exports and 65% of employment although its topography, climate and agricultural technology limit cultivated crops to only a small fraction (less than 20%) of Tanzania's 945,000 sq. km. of land area. In contrast, industry accounts for 16% of output (with manufacturing accounting for half of that) and 5% of exports (mainly mineral) while providing employment for under 10% of the labour force. The services sector (including the tourism sector which accounted for 10% of export earnings) accounted for the remaining 39% of GDP and 25% of total employment (mainly in government services). With a series of devaluations and controlled floats between 1967-94 followed by a floating rate in 1995, the Tanzanian shilling has lost 99.97% of its value since the country's independence, dropping from a nominal exchange rate of 33 US cents in 1964 to 0.11 US cents in 2001.

Focus of Current Reforms: The Mkapa administration, now into its second term, has focused single-mindedly on: fiscal and structural reforms aimed at fiscal responsibility; sweeping privatisation and private investment in all sectors of the economy; refocusing budget priorities on social expenditures, poverty reduction and human development; and prioritising infrastructure and financial sector development. The economy is now more robust and resilient in weathering external (commodity price) and internal (weather and drought) shocks. Markets are freer though still imperfect. The public sector has shrunk dramatically in size but is still in need of urgent efforts at institution and capacity building.

Donor & Private Sector Response: Supportive of the government's efforts and performance toward making fundamental reforms work and endure, the donor community pledged over $1 billion annually in 2000 and 2001. Those amounts were equivalent to 11% of GNI and amounted to roughly $30 per capita. The credibility of the Mkapa government to private investors has also resulted in annual FDI flows increasing from zero between 1985-91 to $50 million in 1995 and over $190 million in 2000. If infrastructure and administrative constraints could be lowered or eliminated it would not be unreasonable to expect these amounts to be three or four times larger on a sustainable basis.

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[126] The Corruption Perceptions Index is rated on a scale of 0 to 10 where the highest score, 10, represents no corruption and 0 represents the greatest amount of corruption. On this scale, Finland, with a score of 9.9, is rated the least corrupt country while Bangladesh, with a score of 0.4, rates as the most corrupt. (Source: Transparency International, 2001).

The Electricity & Gas Sectors in Tanzania

The Songo-Songo Gas & Power Project (SSGPP) is being undertaken in the midst of a fundamental transformation in the institutional structure and character of the electricity industry and the incipient stages of development of the gas industry in Tanzania. Developments in both sub-sectors reflect the overall thrust of economy-wide reforms and the creation of new regulatory regimes. Clearly these changes hold considerable promise and opportunity for SSGPP and successor projects in the future when the new system has been shaken down and proven to work effectively. But, until that happens, both the electricity and gas sectors confront risks and uncertainties. The quality of their management will determine outcomes that are presently hoped for but not assured. What is certain, however, is that there is no alternative to the changes being effected. Continuing as in the past is no option. Attempting to make the present monopoly utility structure work would require an act of faith that disregards the experience of the last 35 years, when such efforts have repeatedly been made but failed.

Background: The power sector has been a major constraint on growth and development in Tanzania for some time. At present less than 7% of the population has access to grid-based power and off-grid power is in its infancy. The power system is imbalanced in terms of investments in hydro and thermal generation and in terms of collateral investments in transmission and distribution. Each of these three areas has major shortcomings and the overall management of the system by the monopoly utility is weak. Power is available mainly to the Dar-es-Salaam conurbation, which consumes 50% of the system's output. Since 1992 there have been several major brownouts and blackouts caused by poor rainfall affecting Tanzania's predominantly hydroelectric system. Exceptionally severe load shedding was experienced in 1994, 1997 and 2000 (when up to 40% of the system's capacity was unusable) resulting in disruption and damage to Tanzania's industrial sector and in its principal urban areas. By 2000 Tanzania did have some reserve thermal capacity in place but Tanesco ran out of funds to buy the fuel to put those latent spinning reserves into operation when they were needed.

Given the fiscal pressures the government faces, the public sector does not have the resources to invest in increasing the power system's generating capacity, strengthening the transmission network, reducing system losses (23% of power generated), and improving the coverage and quality of distribution. Nor is the performance of the public utility such as to make continued reliance on it for managing the investment needed a feasible option. Yet, the investment needed to meet expected demand growth up to 2010 and to increase access to electricity is estimated by the World Bank to exceed $500 million for generation, transmission and distribution, with other estimates ranging between $600-800 million depending on the sequence of investment and the rate of expansion of the grid and of access to electricity. There is no prospect of the government being able to finance that level of investment from public resources. The only option open to government is to unbundle and privatise the system in the most practical and efficient way.

Tanesco: Generation, transmission and distribution until the end of 2001 were all

carried out by the single monopoly public utility Tanesco (the Tanzania Electricity Supply Company). It has one of the highest average tariffs for power in the world (US 11.2 cents per kwh inclusive of 20% VAT). And, it generates electricity from one of the cheapest sources (hydro). Yet, Tanesco was unable to cover its O&M costs or meet its debt service obligations. It had major revenue shortfalls from system losses, inadequate expenditure control and low collection rates on its bills. Previously other parastatals and government did not pay Tanesco's bills but that situation began to be rectified in 2000. Moreover, in the past, government obliged Tanesco to make social investments that were not financially viable without covering its costs.

Though steps have been taken by government since 1998 to improve the situation, Tanesco's overall performance leaves much to be desired. It has not been able to meet increased demand for electricity nor improve access. Although it has made renewed efforts to strengthen the reliability of the distribution network and reduce the backlog of connections, progress has been unsatisfactory. In 2000 Tanesco's net loss increased to TSH 141.5 billion ($157 million) from TSH 200 million in 1998, and the company violated a number of financial commitments made to its creditors. It is overstaffed and poorly managed. A recent management audit suggested that it could save TSH 22 billion ($25 million) annually through management improvements.

Problems with the First Private Investment in Power Generation (Tegeta): Tanesco's operations and finances have also been compromised by arbitrary, ill-considered government actions. For example, in 1995 the Mwinyi government hastily signed agreements with Malaysian investors (IPTL) to set up a 100MW diesel-fired plant at Tegeta (a suburb of Dar-es-Salaam). This was done to meet urgent power needs after the 1994 load-shedding crisis and reduce dependence on hydro-generation. The Tegeta plant was to generate thermal power that Tanesco would buy for its grid. The precise financial terms and conditions were left open to be negotiated on the basis of verifiable costs. It was widely believed in public and private circles in Tanzania and Malaysia, though it has never been proven, that the deal struck by the previous government on Tegeta was a questionable arrangement.

At the end of 1995 the government changed. In April 1998, while Tegeta was being constructed, Tanesco issued a default notice to the private investors indicating that their costs were inflated. Several rounds of negotiation were held between Tanesco and the investors through 1998. But differences remained unresolved on the capital cost, and on the calculation and value of monthly capacity and energy charges to be paid by Tanesco (as the buyer) under the power purchase agreement (PPA). In November 1998 Tanesco exercised the dispute resolution clauses in the contract and referred the dispute to ICSID. The ruling, issued 32 months later, reduced the capital cost by 18% and absolved Tanesco from any claims for damages from the private investors. Tegeta was commissioned in early 2002. This point has been elaborated upon because it had a direct bearing on delaying SSGPP. While Tegeta was in dispute the government suspended all negotiations on SSGPP. Tegeta also highlighted risks that had to be accommodated in the SSGPP financial structure and arrangements.

Restructuring & Privatising the Electricity Sector in Tanzania: Having abandoned plans to revive Tanesco and attempt to achieve the impossible in making it a viable utility, the government decided to restructure and privatise the electricity sector. This involves: (a) creating a new legal and regulatory framework for the sector; (b) establishing a regulatory authority; and (c) unbundling and divesting Tanesco and separating rural electrification from its commercial operations.

Interim Management Contract: Until it was divested, government needed to ensure that Tanesco continued to function without load shedding and with continuing improvement in its finances. To improve Tanesco's operational and financial management, GoT appointed a new Board and Chairman in August 2001 and decided to make further changes in its Board of Directors in January 2002. It has also recruited a new team of experienced utility managers to run Tanesco on a daily basis in the two-year run up to privatisation. Five potential bidders for the management contract were short-listed for invitations to bid competitively for a performance-based 'management support services contract' in 2001. The government awarded a final contract to the successful bidder (Netgroup of South Africa) at the end of that year.

Cleaning Up Tanesco's Books: In an effort to clean up Tanesco's books prior to appointing interim managers, the government eliminated its arrears to Tanesco through an initial debt swap of TSH 37 billion; relieving Tanesco of the obligation to service the debt it owed to government effective in February 2001. From July 2001 onwards the government required all ministries and agencies to be current on paying their bills to Tanesco and permitted Tanesco to cut off connections if they fell into arrears. The intent was to reduce the government's remaining accounts payable to Tanesco to a maximum of 60 days during 2002 and 45 days by 2003. To mitigate the impact of the cost of Tegeta on Tanesco's average retail tariff the government set aside TSH 29 billion ($30 million) in its 2001/02 budget to part-subsidise Tanesco's contractually binding payment of monthly capacity charges and to fund a liquidity facility.

In addition to this budgetary support, however, Tanesco will need to increase its average retail tariff by 6% when Tegeta is commissioned and a further 6% in the following year in order to achieve its financial performance targets for 2001-03. If the anticipated efficiency gains are achieved by interim management before Tanesco is divested no further tariff increases should be required. After divestiture it is anticipated that tariff rates should start coming down with greater competition and increased efficiency through private sector management in generation and distribution and with improved management of the transmission backbone. How soon tariffs come down, however, depends on how quickly private sector entrants into various parts of the electricity industry will need to recoup their invested capital, on the debt/equity structures and the consequent debt servicing requirements of the projects financed, as well as on future movements in currency exchange rates and local and foreign interest rates.

Government's Strategy and Objectives for Reforming the Electricity Industry: The government's reform strategy for the electricity industry is aimed at achieving the following key objectives:

- Ensuring the commercial viability of the industry
- Ensuring its access to market resources (domestic and foreign) for future investment
- Creating a conducive environment for private sector entry
- Increasing access to electricity nationwide
- Improving system security and reliability with no load shedding and no interruptions to supply
- Reducing the costs of generation, transmission and distribution thereby reducing retail tariffs
- Removing the constraints that power infrastructure poses to investment and growth
- Removing the public financing burden from expanding and securing commercial power supply
- Focusing public financing on expanding rural electrification that is less viable commercially

Tanesco is to be unbundled vertically into separate generation, transmission and distribution businesses. The objective is to privatise all three and then encourage further horizontal unbundling by introducing competition among several independent private companies in the generation and distribution sub-sectors. The entry of a number of independent private operators into *generation* is expected to increase and consolidate a rational pattern of phased investment in expanding, diversifying and balancing hydro and thermal capacity to: ensure system reliability; optimise base and peak load generation operations; and introduce sufficient competition in power generation so as to minimise average as well as marginal power generation costs through market pressures. Private competition in *distribution* is intended to attract investment into: expanding the commercially viable customer base across the country as rapidly as possible, and strengthening the distribution network throughout the country, thus improving customer service and satisfaction levels.

If experience from elsewhere is a guide, *transmission* is likely to prove the most difficult to privatise and operate since it is likely to remain a closely regulated monopoly. Major investments are needed to rehabilitate, stabilise and extend the transmission backbone, which is imbalanced geographically. Also, large transmission investments will need to be made to facilitate the trading of power through the proposed Southern African Power Pool in a manner that would enable Tanzania to import power from surplus countries (e.g. Zambia) and export it – by wheeling it through its national grid – to deficit countries (e.g. Kenya) as a commercial business in its own right. Private investors are unlikely to take the risk of making such large (vulnerable) investments until they can be assured that such investments will be secure and permitted to earn returns sufficient to recover investment and financing costs and reward shareholders for taking the risks involved.

The Present Timetable for Unbundling and Divesting Tanesco: The government proposes to engage an international investment bank (through a competitive bidding process) to handle the privatisation sale of the unbundled Tanesco companies in December 2002 and to begin granting concessions for more private generation plants and for private electricity distribution companies at the same time. The first sale of the unbundled companies is expected in March 2004. The target is to complete the dives-

titure process by June 2005. Divestiture planning can, however, begin only after: (a) unbundling plans have been physically implemented – i.e. Tanesco has actually been separated into three separate operating units with all actual and contingent assets and liabilities being appropriately assigned to each by the interim Managers; (b) new legislation governing the operation and regulation of the electricity industry has been passed; and (c) the regulatory authority has been established and an independent electricity regulator has been appointed.

The government's timetable is to begin restructuring the electricity industry and Tanesco in three steps beginning in September 2002 by: (a) having the interim Managers separate the distribution unit out first as an independent business entity first in order to improve revenue collection; (b) implementing another debt swap to make Tanesco a commercially and financially viable entity prior to separating the transmission unit from generation; and (c) having the regulatory authority approve the necessary tariff adjustments to enable private power generating companies to operate on a commercially viable basis without having to negotiate individual contracts with the transmission unit. The government plans to: convert Tanesco's remaining outstanding debt owed to the government into equity when restructuring begins; create a market for wholesale power supply; and open retail supply up to full competition beginning in January 2003.

The way in which it is expressed, the overall timetable for electricity industry reform and Tanesco's unbundling and divestiture seems a bit muddled with a number of cross-cutting events overlapping in ways that are not entirely clear. The timetable seems compressed and ambitious making the process vulnerable to errors when critical steps are taken by different parties under the pressure to meet an unrealistic timetable. It is not clear from the documentation available that the government understands exactly what is involved in detail and which steps precede other steps. At present, it appears as if the dates for completing different parts of the timetable have been proposed by different consultants (and deadlines have been set by reform programme funding agencies) without full co-ordination among them. Each step that is involved in the reform and unbundling process needs to be identified and integrated into a critical path flow chart. The government needs to do that in order to understand exactly what has to be done, by whom and by when and what particular steps become vulnerable to delays if slippage occurs in other linked steps.

Creation of the Regulatory Authority for the Electricity Industry: The government proposes to establish multi-sector regulatory agencies to regulate market operations across the economy. For the electricity industry the responsible regulatory agency will be the Energy & Water Utilities Regulatory Authority (EWURA). It will also have responsibility for regulating the gas, water and sewerage sectors in addition to regulating broadcasting and radio transmissions. Consultants are being recruited to design the institutional set-up and operational guidelines for this regulatory body and to define a capacity-building and staff development programme as well. The question, of course, is whether the fragile absorptive capacity of government machinery will be-

come overstretched by managing so many radical transformations in so many sectors all occurring at the same time.

The Bill for an Act to establish EWURA was passed in April 2001 and the government was committed to have the Authority established by the end of that year. EWURA will be an independent corporate body, governed by its own Board of Directors under a non-executive Chairman appointed by the President. The Board will comprise in addition five non-executive directors appointed by the relevant Ministers and the Director-General of the Authority. Specific regulators will be appointed for each industry being regulated by the Authority and will work under the Director-General. The duties and functions of EWURA in the several sectors that it regulates are to:

- Promote effective competition and achieve economic efficiency
- Protect the interests of all consumers
- Promote availability of regulated services to all consumers including low-income, disadvantaged and rural consumers
- Enhance public knowledge, awareness and understanding of regulated sectors
- License qualified private operators to enter the sectors that it regulates
- Establish quality standards for the goods and services regulated
- Establish standards for terms and conditions of supply of these goods and services
- Determine and monitor the appropriate level of rates, tariffs and charges for these goods and services
- Monitor the performance of the regulated sectors in relation to levels of investment, availability and quality of services, cost of services as well as efficiency of production and distribution of services
- Facilitate the resolution of complaints and disputes
- Disseminate information to the public about matters relevant to its functions
- Consult regularly with other Regulatory Authorities

Issues in the Gas Sub-Sector: For the realisation of its future plans for the electricity industry it is crucial that Tanzania exploits its limited natural gas resources for power, although residual gas is likely to be available for industrial use and modest potential exports to neighbouring countries. As public resources are limited, Tanzania needs to develop its gas infrastructure (extraction wellheads, pipelines and pumping) with private sector investment as well.

Hydrocarbon exploration in Tanzania dates back to 1952. But it has taken nearly half a century to reach the point of exploiting commercial gas reserves, although finds were made 20-30 years ago. After a series of events involving oil companies with exploration rights relinquishing their concessions to other oil companies, commercial (though not very large) gas fields were found at Songo-Songo East in 1974 and Mnazi Bay in 1982. The proven gas reserves available for commercial exploitation at Songo-Songo (East) are estimated at 595 bcf (billion cubic feet); more than sufficient to meet the fuel needs of SSGPP (337 bcf) for the 20 years of the PPA. The gas is of high quality – 97% methane and less than 1% of inerts including carbon dioxide and nitrogen. About 16 bcf have been firmly established with a single discovery well at Mnazi Bay. There are promising structural finds also at Nyuni, Songo-Songo West and Barakuni.

In the 1980s the Tanzanian Petroleum Development Corporation (TPDC) entered into a series of agreements with international oil companies but the pace and scope of exploration under these arrangements were uneven and no further finds were made. Following a spell of invaluable and prolonged technical assistance obtained by MEM and GoT from the Commonwealth Secretariat, TPDC was able to revive exploration under production-sharing agreements (PSAs) – signed during 1995-99 – with small private oil and gas firms from Australia, Canada, Ireland and the UK. A Commonwealth Secretariat team assisted GoT with preparing documentation for and assisting directly with all these negotiations. These PSAs cover geographically dispersed concessions on the mainland, the islands of Zanzibar and Pemba, and for deep sea seismic data gathering. A couple of the exploration wells have yielded promising results. Songo-Songo reserves are now being developed under SSGPP. The government is currently in negotiations with Tullow Oil (Ireland) and Cinergy (USA) for a similar gas-to-electricity project in Mnazi Bay.

A series of governments in Tanzania have considered various alternatives for gas resource utilisation since 1982. The options have included electricity generation, the production of ammonia fertiliser, gas exports to Kenya and combinations of all three. But, after years of study, aborted negotiations with uncreditworthy investors and procrastination – which has been costly in terms of public expenditures wasted, as well as opportunities foregone over nearly 20 years – the government finally reverted to the conclusion originally reached in 1982, i.e. that the best use of the gas resources available was primarily for thermal power generation. SSGPP represents the first attempt at actually using Tanzania's gas reserves. It is the second IPP project after the IPTL project commissioned at Tegeta. About 337 bcf (or 57% of proven reserves) at Songo-Songo will be needed to meet the fuel requirements for the electricity component of the project. Another 100 bcf has been reserved for future electricity projects. The remainder will be available for industrial use and export.

A study carried out to determine the institutional and regulatory requirements for the gas sub-sector recommended regulation by contract for each commercial project undertaken prior to a regulatory framework being warranted (depending on how much more gas is found) or put in place. It recommended a gas pricing policy that reflected fully the price of competing fuel alternatives. These recommendations have been adopted *in toto* for SSGPP with the project arrangements accommodating gas sector development considerations as well. Sector-related arrangements specifically require:

- Identifying the interests and obligations of third parties (other than the direct participants in the Project) where the use of gas resources are concerned, including the terms under which Songas will process and transport gas for third party sales
- Providing a forum for dispute resolution on gas sector development and policy issues including resort to independent arbitrators
- Providing open access to the gas pipeline for other potential gas distributors and independent power producers (IPPs)
- Providing for a transportation fee formula that will allocate the fixed and variable costs of pipeline construction and operations across all users of the pipeline according to the additional gas revenues derived from each user

- Fixing the price of gas produced by Songas in an independent, transparent manner that would exclude Songas from fixing on its own the price of gas sold to third parties and would ensure that Songas is not given any price or access advantage over other IPPs
- Undertaking a further Study to review all the institutional options for gas sector policy formulation, revenue assurance for the government and the role of the public sector in new gas exploration and exploitation investments.

These sectoral developments in the electricity and gas sub-sectors provide the policy and regulatory context in which the Song-Songo Project is being undertaken.

The Songo-Songo Gas & Power Development Project

Project Objectives: The main *development* objective of Songo-Songo Gas & Power Development Project (SSGPP) is to exploit Tanzania's natural gas reserves to produce least-cost-power generation for domestic household and industrial use and for gas exports in an *environmentally and socially sustainable* and *economically efficient* manner. Secondary objectives are to: (a) promote private sector participation (through ownership and management of independent power projects – IPPs) in the power and gas sectors; (b) increase the access of the poor to electricity supply along the gas pipeline corridor through (c) financially and institutionally sustainable rural community electrification schemes to areas that are not presently served by connections.

SSGPP is the first key component in meeting the optimum (least-cost) long-term power development sequence specified under the Power System Master Plan (PSMP) for satisfying Tanzania's electricity requirements up to 2010. The Project is:

- the most environmentally sustainable solution to generating electricity because it uses the cleanest available natural hydrocarbon fuel source;
- the most economically efficient solution to next-phase power generation in providing cheaper electricity for industrial use; and
- aimed at reducing the burden of public financing by involving private investment (and risk-taking) in the development of gas infrastructure and in the privatisation, conversion and expansion of existing thermal (diesel) capacity at the Ubungo Power Plant (UPP) located near Dar-es-Salaam.

Also, the Project will have the following broad benefits and effects by helping to:

- Eliminate the institutional and technical constraints that have prevented the Tanzanian power system from operating and expanding through private investment as efficiently and effectively as it should
- Improve capacity utilisation (of the generating plant) by enabling a more efficient balancing of thermal/hydro loads at base and peak and increasing system reliability, reducing voltage fluctuations and improving service quality
- Increase GoT's fiscal revenues through gas sales and through tax receipts from Songas
- Release foreign exchange by substituting a cleaner indigenous fuel source for fuel imports

Project Content & Components: SSGPP has three components that are quite distinct from one another and are to be undertaken by different entities (executing agencies):

1 ***The Songas Component:*** involving island infrastructure development; offshore and onshore wellhead and new pipeline facilities; UPP privatisation, conversion and expansion; engineering; and project management. This component has a **total cost of $273.5 million** and will be implemented by a private company – Songas. About 26.3% of this cost will be financed by **$72 million of equity** contributed by the shareholders in Songas while the remaining 73.7% (or **$201.5 million**) will be financed by **long-term debt**. The debt will be provided by: (a) the Government of Tanzania (GoT) to the Project and financed by an IDA credit of $161.5 million to the government that will be on-lent to Songas for 20 years with 3.5 years' grace at a cost of 7.1% fixed per annum; (b) an EIB loan of $40 million lent to Songas for 20 years with 4 years' grace at a cost of 6.0% pa; and (c) an ABB suppliers' credit of $1.5 million to Songas for 16 years (no grace) at a cost of 7.73% pa. Songas bears the forex risk on all these loan facilities.
2 ***The Environmental & Social Component:*** including wayleave village electrification; resettlement infrastructure; environmental and social impact mitigation and management; and project monitoring and compliance. This component will cost $13.5 million and will be implemented largely by the Ministry of Energy and Minerals (MEM) except for the resettlement infrastructure that will be implemented by Songas. Tanesco will have project oversight over the village electrification scheme included in this component. Almost all of this component will be financed by GoT via an IDA credit ($13.2 million) with the remainder ($0.2 million) being financed by Songas. Songas has also expended a significant amount of its own funds for previous EIAs and SIAs that have not been included in the overall costs of this particular Project but nevertheless represent significant sunk costs for the sponsor.
3 ***MEM Institution & Capacity Building Component:*** aimed at enhancing the project implementation, monitoring and reporting capability of the Ministry and costing $8.2 million. This component will be financed entirely by GoT (via an IDA credit for that amount) and implemented by MEM.

The Songas Ownership and Management Company: Songas, a private company registered in Tanzania involving a number of foreign and domestic shareholders (including financial institutions – see below) has been established to develop, build, own and operate the Songas component of the Project. There is no eventual transfer of project assets contemplated from Songas to the government or any public agency at the end of the PPA or thereafter. The shareholder agreement builds in an increasing stake in Songas by domestic shareholders over the life of the PPA.

The Songas project is a BOO rather than a BOOT arrangement. Songas will extract and process the natural gas from the Songo-Songo island reservoir (East) and transport it to Dar-es-Salaam by a new pipeline. The bulk of the gas will be delivered to UPP where it will be used to fire converted (diesel) generators with 112MW capacity. UPP will be privatised and its debt assumed by Songas in exchange for 100% of the shares. Once Songas has taken it over, UPP will be expanded by 38MW to reach a total installed capacity of 150MW. Power produced by UPP will be sold to Tanesco (and eventually to its successor, privatised transmission or distribution entity) under a PPA.

The remaining gas will be piped to the Twiga cement plant near Dar and for other industrial use. Under SSGPP a joint-venture consortium will be formed between TPDC

and Pan-African Energy Tanzania (PAT) – the majority foreign private shareholder in Songas – to market gas to commercial and industrial users and arrange gas exports to neighbouring countries. Under the Project, Songas is obliged to pipe gas to users at point-of-use under a transparent gas transport pricing mechanism.

Under the Production Sharing Agreement (PSA) that Songas has agreed to, the revenues from gas sales to users other than UPP will accrue: (a) *first*, to Tanesco (and its successor to which the PPA obligation is eventually assigned upon unbundling and divestiture) and will result in decreasing capacity payments by Tanesco to Songas, and the benefit will (hopefully) be passed on to power consumers in the form of reduced tariffs; and (b) *second*, to the PAT-TPDC joint venture.

One criticism made of the Songas component of the Project is that it reflects a misplaced priority for financing at this time. The problem with investment in the Tanzanian electricity sector is not an insufficiency of generating capacity but an inadequacy of balanced investment in transmission and distribution, resulting in an unnecessarily high level of system losses for technical reasons (apart from a high level of pilferage and theft of power). The second part of that criticism appears, undoubtedly, to be correct. Investment is needed in transmission and distribution. But the first part appears misplaced. Songas is not really adding to generating capacity except by a marginal amount (38MW) to bring UPP up to an optimum installation size. It is converting that capacity to use a cleaner indigenous fuel that will save major amounts of foreign exchange on importing diesel fuel or LNG. It is also exploiting, after too long a delay, a natural resource that is best used for power generation rather than another purpose as confirmed by the PSMP. The value of the Project is reflected in its high internal return to the economy, which is quite distinct from the financial returns that accrue to shareholders and any benefits that may accrue to customers in the form of (eventually) lower tariffs for electricity.

Songas Shareholders and their Equity Contributions: Songas is owned principally by the **AES Corporation** (via the UK subsidiary of a US parent company) and has a total equity base of $76 million equivalent. AES has an initial shareholding of 65.7% (equivalent to $50 million); which represents the amount it (and the previous project sponsors which AES bought out) has spent since 1995 on developing this Project (installing 75MW of diesel capacity at UPP under a public-private partnership with the government and spending $26 million on the well workover programme at Songo-Songo). CDC (UK) has an equity stake of $18 million (or 23.7%); Tanesco and TPDC jointly have a stake of 5.3% ($4 million) and EIB also has a stake of 5.3% through Tanzania Development Finance Ltd. (TDFL). The equity breakdown in Songas is better illustrated in the Table below.

Shifting Pattern of Shareholding over Time: But this pattern of initial equity holding is structured to change over time with the redemption of the Preferred A and B classes of Stock (held by AES and by CDC/EIB respectively) discussed below. At the end of 10 years when the Preferred B class stock has been redeemed the resultant shareholding pattern will be as shown in the penultimate column. When the 20-year PPA period

Pattern of Equity Shareholding in Songas

	Type & Class of Equity ($ Mn)			Total Equity			
	Common	Preferred A	Preferred B	$ Mn.	%-0Y	%+10Y	%+20Y
Shareholder							
AES Corporation (Sponsor)	2.06	47.94	0.00	50.00	65.7	75.6	19.7
Tanesco & TPDC	4.00	0.00	0.00	4.00	5.3	11.7	38.2
CDC (UK)	3.60	0.00	14.40	18.00	23.7	10.4	34.4
EIB via TDFL	0.80	0.00	3.20	4.00	5.3	2.3	7.7
Total:	10.46	47.94	17.60	76.00	100.0	100.0	100.0

expires and the Preferred A class stock has been fully redeemed, the patterns of shareholding will be as shown in the last column of the table.

AES will increase its stake to 75.5% after 10 years but reduce it to below 20% after 20 years. On the other hand, CDC's equity stake will drop to 10.4% when its Preferred B class stock has been redeemed after 10 years but will then rise again to 34.4% at the end of 20 years when AES' Preferred A stock has been taken out. EIB's equity will drop to 2.3% and then rise again to 7.7%. At the end of 10 years the foreign shareholders' total stake will be 88.3%, dropping to 61.8% at the end of 20 years (compared to the 94.7% stake they have now) while the stake of the domestic entities (i.e. the eventual successors to Tanesco and TPDC) will be increased to 11.7% at the end of 10 years and 38.2% at the end of 20 years from their initial stake of 5.3%. The pattern of shareholding therefore tilts in favour of domestic shareholders over time; assuming of course that nothing changes over the next 10 and 20 years and Songas undertakes no expansion – which is unlikely. But the total amount of equity (discounting any reserves built up over time) will diminish to the level accounted for only by common stock and reserves. The financial projections done for the project show outstanding common equity and retained earnings amounting to nearly $33 million in 2023 at the end of the PPA term.

Returns to Shareholders: Under the shareholding arrangements agreed, the equity stake of the foreign shareholders is to be held in different combinations of common and preferred stock while the holdings of the domestic entities are held only in common stock. The preferred shareholders will reduce their equity stake gradually over the life of the project. **Preferred A Class stock** held by AES ($48 million) and funded partly by the project management fees it receives for running Songas will have a **targeted 22% annual return** through the capacity payment that Tanesco has to pay. Preferred A Class stock is to be redeemed at face value in equal instalments over the 20-year PPA period at the rate of 5% ($2.4 million) each year. **Preferred B Class stock** held by the foreign financial institutions (CDC and EIB) has a targeted **18% annual return** in nominal terms and is to be redeemed at face value in equal semi-annual instalments over a 10-year period. The **Common Equity** shares are also expected to earn a targeted

return of 18% per annum. None of these returns are guaranteed under the Project agreements. But given the structure of payments for capacity and the control that the project sponsor has over the project it is likely that these returns will be met or exceeded (if performance targets are exceeded). The common shares of TPDC will be granted in lieu of the pipeline right-of-way land that it surrenders to Songas while those of Tanesco will derive from its surrendering the land it owns at Ubungo around UPP along with the transfer of the power plant.

Changes in the Shareholding Interest in Songo-Songo: Since 1993, when the government first invited bids for the Songo-Songo gas development project, much has happened in changing the nature and composition of shareholding and sponsorship interest in the Project as shown below:

1993: GoT invites investment bids from 14 oil and gas companies and IPPs for the Project
1994: Ocelot Energy of Canada (OEC) and Trans-Canada Pipelines (TCP) win the bid
1995: GoT signs Agreement of Intent with OEC and TCP and exploratory work begins
1997: GoT suspends work/negotiations on the Project because of problems with IPTL at Tegete
1999: Following the merger of TCP with Nova Corporation, a decision is taken to divest TCP's international portfolio. AES acquires TCP's interest in Songo-Songo because of its interest in the IPP component.
2000: Ocelot sells its Canadian assets and reinvests all its funds in oil and gas projects in Africa. Ocelot changes its name to Pan-African Energy to reflect its new African focus.
2001: PAE enters into an agreement with AIG African Infrastructure Fund (a $400 million active portfolio fund managed by Emerging Markets Partnership) and Rand Merchant Bank of South Africa to establish a new joint venture called PAE Pan-African Energy Corporation.
2001: PAEC becomes parent company and principal sponsor of Songo-Songo Project through its Tanzanian subsidiary PAE Tanzania Ltd. (PAT) as the principal developer/operator.
2001: AES, which holds TCP's interest in the Songo-Songo Project, agrees to buy out PAE's remaining interest in the Project completely. AES becomes the sole project sponsor.

Although AES now owns the sole interest in the Songo-Songo Project, AES is an IPP and not a gas production company. Under the AES-PAEC arrangement, PAT no longer has any equity interest in SSGPP. But, it retains its operational role and obligations with regard to developing the Songo-Songo *gas field* and in the production of gas at the wellhead. PAT's gas expertise will be employed on the same terms. It will be a subcontractor to Songas for the gas production part of the Project. Also, PAT will joint venture with TPDC to develop that part of the market for gas usage that is not related to the production of electricity (i.e. AES' forte).

The Songas Component of SSGPP: This component of the Project is structured as a B-O-O arrangement with a 20-year PPA with Tanesco (and its successor) on a take-or-pay basis. Under the PPA Tanesco has to make fixed (capacity) and variable (energy use) payments to Songas on a monthly basis. O&M of the project's operating facilities are subject to agreed technical specifications and tight budgets. The PPA includes penalties and bonuses to ensure that Songas operates the project prudently in accor-

dance with best practices and maximises capacity utilisation. Songas is responsible for constructing, operating and managing the project facilities on the agreed timetable under the agreed budget. Any cost overruns or sub-standard performance are borne by Songas and will erode its equity.

The responsibility for generating revenues from a commercial market for gas not used by Songas for electricity production at UPP (and supplying the Twiga cement plant) is borne by the PAT-TPDC joint venture and not by Songas.

Physical Contents and Assets Created under the Songas Project Component: The gas-to-electricity component of the Project comprises: (a) marine flow-line laterals (totalling 6.5 km in length) to connect three existing offshore marine platforms built above the wellheads; (b) land laterals to connect the two wells on Song-Songo Island to (c) a dual train gas processing plant with continuous capacity of 70 Mcf/day that is to be built at the north-western corner of the Island with (d) associated infrastructure such as a pipe receiving area, camp and plant infrastructure, refurbished extended jetties and boats, and an improved airstrip; (e) provision for housing for plant workers and managers and for plant maintenance workshops along with (f) electricity generating and desalination plants to provide electricity and water; as well as (g) wastewater and sewage treatment systems. Songas will supply 3,000 gallons per day of water and 250kw at the plant boundary for the regular inhabitants of the Island. These will be distributed to individual households by a local community organisation.

Dry gas from the plant will be transported to the mainland by: (h) a 25 km (x12" diameter) marine pipeline from Songo-Songo to Somanga Funga and then by (j) a 207 km (x12" diameter) land pipeline with 65 Mcf/day capacity to UPP with (k) a 16 km (x8") long lateral spur connection to the Twiga cement plant near Dar-es-Salaam. The land pipeline may be tapped at points *en route* to supply small quantities of gas to villages and towns along its route. Gas will be supplied to fuel the 2x18.5 ABB and 2x37.5 GE gas turbines at UPP and the electricity generated will be supplied to a nearby Tanesco sub-station.

The Songas project component also includes (m) a sophisticated state-of-the-art integrated optic-fibre communications and pipeline monitoring system for voice-data-fax-cellular services to link the gas plant, pipelines, UPP site, Twiga and Songas administrative offices; (n) conversion and upgrade of the ABB and GE turbines at UPP and their restoration to 'as new'; (o) a new building at UPP to house the Songas IPP operations control centre along with (p) power plant maintenance and instrument workshops; (q) auxiliary mechanical, electrical, and liquid-fuel handling and storage systems; and (q) electric metering systems, high voltage interconnection gear and upgraded distributed control systems at the Tanesco connection to communicate with the gas plant, Twiga and UPP.

Finally, the Songas component includes: (r) clearing the backlog of O&M work at UPP that has been deferred for lack of funds; (s) project engineering work; and (t) project management personnel, facilities and infrastructure.

Project Economic Benefits & Returns to the Government: Apart from returns to shareholders in Songas (which also include two government agencies) what are the returns from the project for GoT and the country? After all, a $300 million project investment is a very sizeable undertaking for a $9 billion economy. The benefits to GoT are a combination of the following:

- Inward equity investment of nearly $75 million for a single project
- Immediate privatisation of UPP thus removing a debt liability of $22 million and an annual average debt service liability of $3.3 million over the next ten years from the books of GoT
- Inward debt financing of over $220 million between 2001-2003 with an average grant element of 80% implying a high degree of concessionality and therefore an immediate net financial gain of over $150 million in NPV terms[127]
- A major boost for GoT's privatisation and economic transformation programmes with the level of private investment in energy and gas expected to be increasing by $5 million *annually* from 2004 onwards (WB estimate)
- A significant contribution to creating and strengthening market regulatory regimes for two infrastructure sectors whose development will unblock further private investment and FDI
- Annual forex savings to the economy increasing from $42 million in 2004 to $44 million in 2006 as a result of domestic fuel substitution for power generation and industrial use
- Increased fiscal revenues from gas sales of $7 million in 2004 increasing to $8.5 million by 2006
- Net annual receipts of about $13 million from Songas as a result of the 'interest spread' GoT captures by on-lending IDA and EIB funds on quasi-commercial terms to Songas for 20 years and a further estimated $2-3 million in the principal payments 'spread' between 2006-2012 arising from the mismatch in grace periods on GoT loans to Songas relative to much longer grace periods on the IDA and EIB credits to GoT
- A sophisticated cost-benefit analysis of the Project undertaken by the World Bank shows an Internal Rate of Return **(IRR) for the Project of 26%** for the 'minimal and assured outcome' scenario with an NPV of $179 million and a payback period of six years. An expanded IRR calculation allowing for expanded electricity generation by the gas infrastructure being put in place in 2004 (x60MW) and 2005 (x60MW) raises the IRR to 36% and the NPV of the Project to $315 million

Against these benefits it has been noted that a large part of the project is being financed by loans to Songas that GoT assumes the ultimate risk for. These are (fungible) funds from multilateral sources that would have been available to the economy for other purposes. They are not funds that otherwise would not have been obtained. They carry an opportunity cost for the economy (estimated at 12% pa) chargeable from the time these funds are disbursed. This results in an NPV cost to the govern-

[127] It is likely that this benefit would have materialised regardless of the Project since the IDA funds were part of Tanzania's allocation of overall resources. However, the Project is relatively fast-disbursing and will allow Tanzania to capture the benefits of concessional financing quicker than under projects that might have taken longer to disburse.

ment of about $40 million. However the IRR calculations referred to above take this cost into account and net it out.

Environmental & Social Sustainability of the Project

Environmental & Social Sustainable (ESS) Impact Assessments: Projects in developing countries involving energy development of any sort usually have significant environmental and social (local community) implications. SSGPP was no exception. Since invitations for investment proposals were first sent out by GoT in 1993, a total of 27 environmental and social research studies, investigations and impact assessments have been conducted to identify possible negative ESS effects associated with: (a) the gas processing plant on Songo-Songo Island; (b) the underwater laterals and marine pipeline; and (c) the terrestrial pipeline corridor. All the relevant studies are lodged with the World Bank and available for public examination.

As indicated earlier, a significant environmental and social component was included as an integral part of the Project – at an additional cost of over $13.5 million. Stringent ESS conditions and special arrangements for 'ESS impact mitigation' imposed significant additional cost (and time) burdens on the Project and project sponsors. But, to the World Bank's, GoT's and AES' credit, the provisions made for ESS in this Project provide a good example what should be done and how it should be done in similar circumstances.

Environmental & Social Impact Management Plan: The project sponsors incurred substantial costs between 1995-2001 in commissioning a variety of EIAs and SIAs (social impact assessments) and preparing an exhaustive environmental and social management plan (ESMP) to cater to the findings of these impact assessments. Professionals in various disciplines (archaeology, anthropology, botany, geology, civil engineering, community development, economics, public health, sociology, and plant, marine and wildlife biology) contributed to these assessments. The ESMP contains detailed schedules for monitoring ESS activity, as well as the frequency and location of when and where monitoring is to take place. The World Bank approved the ESMP before it agreed to participate in financing the Project. It is in compliance with the Bank's various ESS Guidelines. Songas will be fully responsible for implementing the ESMP and will bear the costs for all activities and their monitoring. It will ensure that all aspects of performance under the ESMP that fall in the purview of construction contractors and sub-contractors will be provided for in contractual agreements with them.

The EIAs found that the Project would have a limited impact on forests and fauna and on sea grass beds. The pipeline wayleave is not a prime area of passage, grazing or migration of the various species of protected mammals in the region as most of the corridor is already populated. There may be some minor disturbance to transient movement of mammals along some parts of the wayleave (especially in the vegetation and forest areas) during pipeline construction but that will end when the pipeline is completed. Because the corridor is populated the SIAs found that there would be a social

impact on resettlement and land acquisition. The conversion of UPP from diesel to natural gas would have a significant positive environmental impact because gas is a much cleaner burning fuel. The key ESS impact mitigation measures built into the ESMP for the Project include:

- *Protecting Biodiversity*: the ESMP specifies measures for protection of mammals along the pipeline corridor although no impact on protected species is expected during or after pipeline construction
- *Impact on Forestry*: the corridor passes through stretches of natural vegetation and 500 m of the Mohoro Forest Reserve (a production forest); the ESMP provides for minimising impact on vegetation and tree cutting and not requiring all the wayleave to be cleared
- *Air Quality*: The Project should bring about major improvements in air quality near Dar-es-Salaam with the conversion of UPP. Air emissions will comply with WB air quality guidelines and the use of Freon-22 at UPP will be phased out. Emissions of fugitive methane will be tightly controlled through a preventive maintenance programme for the pipeline and valves
- *Water Quality*: Songas will provide clean drinking water on Songo-Songo Island with new water treatment facilities; the local community will make arrangements for its distribution to residents
- *Waste Management*: Arrangements have been made to ensure that waste in all areas of project construction and on the Island is disposed of in the most environmentally benign way in compliance with WB guidelines
- *Soil Erosion*: Areas prone to soil erosion will be stabilised; access roads to sensitive soil areas will be closed after construction and the land fully rehabilitated
- *Health & Safety*: Songas is obligated to prepare a gas leak and emergency response plan and to maintain health and safety levels in its plants that are in line with *international* industry standards. Songas will develop a specific policy for dealing with HIV/AIDS among its workers and in project-affected communities throughout the life of the Project
- *Community Development*: In line with AES' codes of corporate social responsibility, Songas is required to annually publish a report on its community development efforts

Environment, Health and Safety (EHS) Management Systems: In designing, constructing and operating the Project, Songas has undertaken to implement EHS management systems conforming to ISO 14001. Standards and procedures under the system will be consistent with those of WHO and WB and will adopt Tanzanian standards if these are more stringent. Each standard will include a minimum set of specific, measurable performance criteria. The Project's management team will review these standards continuously and, where necessary, modify them (upwards) to reflect unfolding operating conditions in conformity with evolving regulatory requirements. These standards will apply across the entire Songas Project component (where Songas has responsibility for execution) and to all personnel without exception.

Each contractor's (and sub-contractor's) environment, health and safety (EHS) management system at each site will be examined, modified as necessary, and approved by Songas prior to construction commencing on any component of the Project. Songas has undertaken to monitor the compliance of each contractor with the undertakings made under the ESMP through a three-tiered control system: (a) the contractor's own quality assurance and inspection programme for the first line of ESS protection;

(b) regular or continual (depending on the site and the work involved) on-line inspections by Songas' own Environmental and Safety Inspectors; and (c) quarterly reporting by Songas to GoT and the World Bank on ESMP execution and monitoring, verified by periodic supervision and monitoring inspection undertaken by GoT inspectors and World Bank project supervision missions.

Sponsor Social Funding Policies: AES as a TNC has a standard policy of contributing up to 5% of its net revenues for local community development. The decisions on amounts and causes to which these funds are donated are left to the local managers of the more than 165 power plants the company operates around the world. Songas will establish similar policies in Tanzania and will be assisted by a change in Tanzanian tax laws that permit companies to deduct up to 2% of their net revenues as expenses against taxable income. Songas' social contributions will focus on the health and education of local communities on the Island, communities near UPP at Ubungo, and along the pipeline corridor.

The World Bank is satisfied that the Project complies with all applicable Safeguard Policies, with the Pollution Abatement Handbook Guidelines and with the standard IFC General Health and Safety Guidelines. It is also satisfied that Songas and the ESMP have taken all reasonable and appropriate measures to mitigate and minimise any adverse ESS impact the Project might have.

Resettlement of Affected Households: In total 2,945 households were affected by the Project of which 188 have been resettled away from the pipeline corridor. The remainder have been affected by way of crop losses and loss of productive capacity, as well as damage and disturbance that will occur during the construction of the Project within the 30-metre width of wayleave in urban areas and 60 metres in rural areas. The number of households that had to be resettled on the mainland was deliberately kept relatively low by routing the gas pipeline for 25 km in densely populated areas within existing Tanesco transmission line wayleaves. About 98% of the households affected (but not needing resettlement) have been compensated for buildings, crops and land. The outstanding 2% concern cases where the householders could not be found, or have expired and where there is a dispute about household property ownership.

The resettlement sites selected were unplanned areas. Professional town planners were employed to complete town plans for these communities for approval by the Ministry of Lands and Human Settlements. Independent audits are being carried out to assess the effectiveness and fairness of the resettlement and compensation programmes to ensure that these are in conformity with World Bank guidelines and safeguard policies. These audits will ensure that any discrepancies or deficiencies will be addressed through inbuilt redress mechanisms. In addition, supplemental socio-economic baseline data are to be collected on the resettled households to ensure that their incomes and livelihoods have not been adversely affected, but hopefully improved, by resettlement. The creation of physical assets, compensation and management of the resettlement programme are expected to cost about $2.5 million.

Cultural Property Protection: The baseline studies revealed that the pipeline corridor ran along 18 archaeological sites, 20 burial sites and two shrines. It is possible that, as construction proceeds, other sites and historical artefacts may be uncovered that have not yet been identified. A salvage procedure for 'Chance Finds' being surrendered to the national Director of Antiquities is being developed before any clearing of the wayleave and trenching is started. Songas is committed to avoid disturbing any culturally important sites by routing the pipeline around them whenever necessary and respecting local community sentiments. It will also put in place an internal system for handling all 'chance finds' in order to catalogue them before handing them over to the authorities. Contractors have been made aware of known culturally sensitive sites and been required to avoid disturbing them. Songas will execute its 'chance finds' programme in collaboration with the national, district and local authorities as well as with local communities and their leaders, including spiritual leaders.

Communications, Consultations and Stakeholder Involvement in the Project: Good communications with all levels of government, the local community, as well as other stakeholders to secure their involvement, participation and understanding of the issues involved have been a hallmark of the Project. The project sponsors have made extraordinary efforts in these directions and they appear to have paid off. The components of the Project that have already been completed have involved extensive communication and consultation with the Tanzanian public at large and, more intensively, with the local communities affected at the terminal points (the Island, Ubungo and at Somanga Funga) as well as along the entire route of the terrestrial pipeline corridor. Songas has earned a national reputation in Tanzania for the quality and success of its consultations and for its information campaign conducted directly and through the print and electronic media.

The resettlement programme for example involved continuous consultations with local communities and affected households for a period of four years between initial pipeline route planning commencing and final compensation being made. Communication and consultation efforts have included:

- Colour brochures prepared in Swahili explaining the Project and what it involves to the public and to local communities
- Videotapes of the Project in Swahili and English
- Extensive print, TV and radio media coverage of specific issues surrounding the Project (technical, environmental, social) conducted by independent journalists and civil society organisations (and encouraged by Songas) in Swahili and English
- A regular radio programme broadcast, informing the public of major issues that have arisen concerning the Project and airing different views on these issues. The frequency of the programme will be increased and coverage expanded during the pipeline construction phase
- Widely broadcast notices in the print and electronic media (TV and radio) in Swahili and English of meetings with local authorities and community leaders inviting the broadest participation
- Frequent meetings with local leaders, community members, NGOs and others to discuss

local community concerns on the Island, along the pipeline route, at Ubungo and at resettlement sites
- Visits and tours by ministers and senior officials (arranged by Songas) to the Island, and other project and pipeline-affected areas to meet local residents and listen to their questions and concerns
- A series of seminars with authorities and officials at all levels of government and with MPs
- Numerous meetings on the Island between Songas personnel, consultants and local residents to explain the gas well servicing and testing programmes, the dangers they pose and what is being done to minimise negative effects

Songas' communication and consultation efforts have helped to build up rapport with local communities and have resulted in broad-based public approval and support for the Project in Tanzania. Special community liaison efforts have provided the opportunity for members of the public and local communities to express their concerns. They have provided a useful safety valve and facilitated identification and management of critical social issues before they become contentious. Visits by Songas' project staff to Ward Executive Officers, village leaders and elders have resulted in more children being enrolled in local schools and more people visiting the community health centres that have been set up under the Project.

Pipeline Corridor Village Electrification and Services Scheme: The people of Tanzania's southern coastal area (opposite Songo-Songo Island) see the gas being exploited as their resource and expect to derive significant direct benefits, especially in obtaining preferential access to regular (grid) electric power. They object to 'their' gas being transported to the north of the country for other people to benefit from in urban areas. GoT on the other hand sees Songo-Songo gas as a national resource whose benefits have to be spread and shared on a countrywide basis.

The compromise reached has been to implement the Wayleave Village Electrification Programme (WVEP) costing $7.6 million to provide electricity and other infrastructure services and to provide: (a) 25 villages along the route of the pipeline with 1,600 solar home systems benefiting 11,000 people directly and providing solar-powered medicine storage refrigerators in each village; and (b) extending the Tanesco grid to another 5 villages located at the northern end of the pipeline with gas-powered electricity to a further 135 homes and small industries; and (c) extending gas pipeline laterals to five other towns in each of which small 500kW gas-fired power stations will be erected to provide electricity to another 3,300 customers. The villages serviced will also benefit from drilled water wells with manual pumps. A training and awareness programme on water-borne diseases will be implemented in every village to safeguard the health benefits of these village water schemes. Telecommunications services in each wayleave village will be facilitated by use of the optic-fibre backbone that will be installed for monitoring the main pipeline.

This hybrid approach to maximising the benefits to affected communities is based on a least-cost analysis of the options. Local participation, through village council committees, will determine the allocation and use of solar home systems, similar to the

village committees that already exist for water, health and education. Townships supplied by gas-fired electricity plants will need larger local loop distribution systems that will need to be constructed and managed by local corporations or co-operatives set up by town councils. Dedicated service providers and operators for the solar home systems and for the gas plants will be invited to bid for investment on a BOO basis.

To safeguard the ESS dimensions of the Project and ensure that agreed commitments are met and standards maintained, ESS monitoring capacity has been installed at the MEM with a number of independent consultants being recruited internationally. These consultants will assist MEM/GoT to establish and execute an appropriate compliance programme for the Songas component of the Project through keeping track of reports as well as regular site visits and checks for verification of reporting.

Though exceptional efforts have been made since it was first conceived in 1993 to ensure that the Project is environmentally and socially sustainable, these efforts have undoubtedly added significantly to project costs and overheads. Overall, the total costs of accommodating the ESS dimensions are estimated at about $15-17 million with $4-5 million being the office and consulting overhead cost of monitoring these dimensions and including them in the project management system.

Project Risks: Their Allocation, Sharing and Mitigation

Delays in Project Implementation & Sunk Costs: As might be expected of any project of this nature and significance (relative to the size of the sector and economy in which it is being undertaken) SSGPP faces a number of financial, operating, business and non-commercial risks of the type outlined in Figure 5.1 earlier. How risky the Project is for Songas and GoT is reflected partly in the fact that a decade will have passed between the investment bid being invited (1993) and the first kilowatt-hour (kwh) of electricity actually flowing from the Project (2003). In that period both the private sponsor and GoT have incurred major sunk costs, although most (if not all) of the sponsor's sunk costs appear to be recovered in the overall financial architecture and engineering of the Project and in the returns that accrue. The Project is being constructed on a tight schedule although many of the pieces (such as the gas wellheads and the power plant) are already in place. Nevertheless Tanzania poses an extraordinarily difficult environment for anything to get done on time. Murphy's law (i.e. that anything that can possibly go wrong will do so) operates with a particular vengeance.

Transitions in National Governance and Sector Regulation: Project risks are also heightened by the fact that SSGPP is being implemented in the midst of profound transitions in the nature of governance in Tanzania and in the regulatory regimes that will eventually govern the electricity and gas sectors. The country is committed to moving from a command-control socialist state to a private sector driven market economy. Definite and resolute steps have been taken in that direction since 1996. The government appears reconciled to moving out of the driver's seat and playing a different role, i.e. ensuring a level playing field for fair competition among all competitors and pro-

viding the essential enabling conditions and environment in which private initiative and entrepreneurship can flourish. But a government administrative structure that has been accustomed to command-control for 35 years and has functioned inefficiently and erratically, does not turn itself around overnight in changing its attitudes and its practices. Moreover, in this changed environment, corruption is even more rife. It adds new and unpredictable risks whenever a government or ministerial structure changes.

Unresolved Uncertainties with Changing Structures: No track record of new-style regulatory performance has been established. Nor will it be for another year or two yet, i.e. until the Project is actually operational. It remains uncertain how quickly the regulatory body governing the gas and electricity sectors will set itself up, how competently it will perform or how efficiently it will work. In that sense although the past is usually a reliable prologue to what might be expected, in this instance there is a sharp break between the future and the past. This is an important area of risk because it determines the stability and longevity of the tariffs that Songas can expect to receive.

Although the Project's revenues are protected under a 20-year PPA signed with Tanesco, that company is set to disappear through unbundling and the privatisation of its three separate parts over the next 2-3 years. It is not yet clear which part will take over responsibility for the PPA with Songas, what its financial circumstances will be and how credible a counterparty monopsonistic purchaser it will be in purchasing all of Songas' power output from UPP. The process of privatising Tanesco will pose new uncertainties and risks for Songas. The project sponsors, other shareholders (including Tanesco's successor in Songas' shareholding), external financiers and GoT/MEM will need to be particularly careful and vigilant in ensuring that the unbundling and divestiture of Tanesco is not done in a manner that works to the disadvantage of Songas or the Project given the implications of collateral damage to all parties occurring in that event.

Balancing Risks through Financial Engineering: All these difficulties notwithstanding, there is reason for believing that the balance of probabilities and the nature of project financing offer a degree of comfort to Songas and its shareholders on the one hand, and to GoT on the other, in coping with the various risks that the Project, its sponsors and GoT are taking. There is an element of the nuclear deterrent strategy of 'mutual assured destruction' (MAD) in the design of contracts for the Project should either Songas or GoT default on their respective obligations to one another for whatever reason. The MAD element is triggered if Tanesco, or its eventual successor after divestiture or GoT default on meeting their obligations under the PPA or if Songas fails to deliver on the Project.

If the PPA is not honoured, Songas can default on the debt service (and eventually on the entire debt) it owes to GoT and that GoT in turn owes to IDA and EIB. Were that to happen, and were the situation not remedied swiftly, the Project would almost certainly be faced with the prospect of expropriation (and, eventually, possible resale to another IPP under new arrangements if GOT had not burnt its bridges with private

IPP investors by then). GoT would then need to work itself out of a bad situation of having on its hands a Project it could not operate – a prospect that both GoT and Songas would, assumedly, exert utmost efforts to avert and avoid altogether.

Project Financing for Risk Mitigation: Songas has resorted to classic 'limited recourse' project financing disciplines and structures for identifying, allocating and mitigating the risks that it confronts in the Project rather than relying on corporate financing on the strength of AES' global balance sheet, or on internal equity financing from AES. Had those options been resorted to, the sponsors would almost certainly have been exposed to a level of financial and operational risk that would have prevented the Project from going ahead. Under the project financing structure, as a BOO arrangement underpinned by a 20-year PPA on a take-or-pay basis, the Parties to the Project arrived at a complex set of contractual undertakings that have been embodied in a bewildering array of documentation.

The Contractual Agreements include, *inter alia*:

- A Project Implementation Agreement among AES, PAE, Songas and GoT
- A Power Purchase Agreement (PPA) between Tanesco and Songas
- A Shareholders' Agreement among AES, CDC, TPDL, Tanesco and TDFL (for EIB)
- An Escrow Agreement among GoT, AES and the Agent Bank (Citibank)
- A Hard Currency Agreement among GoT, AES and the Agent Bank (Citibank)
- A Debenture Agreement between Songas and CDC/TDFL protecting the latter's interests
- A Liquidity Facility Agreement among GoT, Songas and the Agent bank
- A Gas Agreement among GoT, TPDC, PAT and Songas
- A Gas Production Sharing Agreement among GoT, TPDC and PAT
- A Gas Processing & Transport Agreement between Songas and PAT
- An Operators' Agreement between Songas and PAT
- A Wazo Hills Gas Sales Agreement between Songas and the Twiga Cement Plant
- A Sinking Fund Agreement among Songas, Tanesco and an Agent Bank
- The Songo-Songo Facilities Transfer Agreement between TPDC and Songas
- The Ubungo Complex Transfer Agreement between Tanesco and Songas
- A Loan Agreement between IDA and GoT
- A Loan Agreement between EIB and GoT
- Subsidiary Loan Agreements between GoT and Songas
- A Loan Assumption Agreement between Tanesco and Songas
- The Songas Project Agreement between IDA and Songas

GoT (as the on-lender of IDA and EIB funds to Songas), the Project Sponsor (AES), PAE/PAT (the former interest holder in Songas that is still involved in the gas production and residual gas marketing part of the Project), CDC and TDFL (representing the EIB-funded portion in the Songas shareholding) have structured an inter-linked set of Contractual Agreements that provide for Songas and GoT receiving a steady and secure stream of revenues from the Project for the first 20 years of its operating life. Songas revenues are assured via the PPA with Tanesco (and one of its eventual successors after its divestiture). These are projected to rise from $35.5 million in 2003 to a peak of $116.4 million in 2009 before falling back gradually to $35.5 million in 2023 as the capacity charge element of revenues is phased down gradually from 2010 on-

wards although the energy charge keeps on rising. Revenues from the sale of residual gas for other purposes are expected to rise from less than $0.4 million in 2003 to $1.65 million in 2020. GoT's revenues are assured by sales of gas to Songas which are projected to rise from $2 million in 2003 to a peak of $7.6 million in 2020.

The Agreements between the Parties to the Project allocate risks among the parties on the basis of which party is best placed to bear which risk. They also prescribe remedies should the risks materialise. The major risks being borne by the Sponsor (which reduce the risk being borne by GoT in ensuring project completion) are the core construction and operating risks, which include:

- *Project Capital Cost Overrun and Completion Funding Risk*: for which AES has provided a $50 million parent company guarantee to reflect its commitment to completing the Project and financing any cost overruns
- *Project Construction & Commissioning Risk*: that may arise due to either contractor or sponsor default in project design, engineering, construction management, and achieving physical completion
- *Equipment Operating Performance Risk*: should the gas plant, pipeline or power plant performance fail to maintain agreed capacity or to maintain agreed heat rates and gas quality parameters
- *Operating Cost Overrun Risk*: if operating costs, for whatever reason, exceed the agreed O&M budgets based on established technical performance specifications for all equipment items and for the major plant components (gas processing, pipeline transport and power production) as a whole. AES is providing a $10 million parent company guarantee for damages related to wilful misconduct or gross negligence by any of Songas' management staff or employees
- The Sponsor also confronts three major financial risks, including principally:
  Revenue Risk: if Tanesco (or its successor after divestiture) defaults on the PPA. If that risk materialises, under the project financing structure, Songas can counter-default on its debt service payments to GoT. But that counter-default only provides partial risk cover since annual debt service payments represent between 20-25% of annual assured revenues from Tanesco between 2003-07 (because they include mainly interest payments in those years) and between 30-40% of revenues between 2008-23
- *Currency Convertibility and Transfer Risk*: Songas is protected against currency *value* risk to the extent that the PPA requires Tanesco to denominate and pay the (fixed) capacity charge in US dollars. The (variable) energy charge is payable in TSH and is indexed to local inflation. It is not protected against valuation risk. But Songas has an offset, in that the charge it pays to GoT for the gas extracted and burnt is also in local currency. Although Songas' currency *value* risk is covered to the extent of 80-60% (as the relative composition of revenues shifts from the capacity charge to the energy charge from 2010 onwards), its convertibility and repatriation risks are not specifically covered. The World Bank (IDA) had been prepared to provide an innovative contingent credit for $35 million for a currency convertibility fund (CCF) described below to mitigate this risk. Although arrangements for this facility had almost been finalised in negotiations with the previous sponsors (OEC and TCP), in the end the new Project Sponsors (AES) decided not to avail of it (because of the additional cost) and rely on the Escrow Account (described below) instead
- *Liquidity Risk*: which is partially mitigated by establishing the Liquidity Facility described below

The Currency Convertibility Facility (CCF): To accommodate the earlier concerns of the former project sponsors (OEC and TCP) about currency inconvertibility, for repatriating their dividends and redeeming their preferred shares, and to ensure that foreign direct investors could be persuaded to undertake the Project, the World Bank and GoT concluded that a special arrangement would need to be made to address inconvertibility risk. MIGA and other political risk insurers were not prepared to write cover for that risk in view of Tanzania's previous record of default and its continuing weak external account position. The project's forex needs were high relative to the total size of the forex market in Tanzania, accounting for an estimated 4–8% of the total market. With MIGA and other PRI underwriters being unwilling, and with a PRG not being suited for the purpose, the Bank designed the CCF mechanism to mitigate this risk.

The CCF (which, in the event, was not activated) was designed as a financial instrument backed by a contingent IDA credit to provide the sponsors with limited inconvertibility protection (up to $35 million) for paying O&M foreign currency obligations and for dividend and capital repatriation. Songas' annual forex requirements were estimated at $35–50 million (or $700–1,000 million over the 20-year PPA life). CCF would have assured the financial viability of the Project by providing rolling cover for 12 months of forex requirements up to the $35 million ceiling. MIGA would administer the CCF on behalf of IDA and would only pay out on valid claims as needed if Songas could not obtain its forex requirements from the market or GoT. For CCF to work, GoT would issue to MIGA an irrevocable right to draw down on the contingent IDA credit to pay the eligible claims.

The CCF had a term of 15 years leaving the convertibility risk for Songas to bear thereafter. By then Songas would have had enough time to generate adequate cash flows at the agreed tariff. Also the bulk of the preferred stock would have been redeemed and the forex market would have expanded sufficiently to cover the risk for the remaining five years. CCF was structured so as to discourage GoT and Songas from triggering a claim on it. For Songas the deterrents included: (a) an extended transfer delay period before a claim could be filed; (b) a less than full claim coverage ratio; and (c) an annual stop-loss arrangement. For GoT the deterrents were: mandatory use of any forex recovered by MIGA in connection with a paid-out claim to prepay the CCF credit to IDA and IDA's option of accelerating the repayment of the credit if a call was made on the CCF. Thus the instrument was designed to provide risk cover but included penalties for GoT and Songas if the risk actually materialised. CCF would require three additional documents to be agreed (between IDA and GoT; between MIGA and GoT; and between MIGA and Songas) and would be provided as a separate IDA credit since its terms would be substantially different from those for the credit that was funding the loan from GoT to Songas.[128]

The Escrow Account and Liquidity Facility: Songas' operating viability depends entirely on whether Tanesco (and its successor) can meet their power purchase obliga-

[128] Rasmussen, 1999.

tions at the agreed tariff under the PPA. To protect Songas to a limited extent against Tanesco default (which is not unlikely given the precarious state of its finances) a credit enhancement package has been structured under the agreed project financing arrangements to: (a) provide Songas with some protection (and an exit in the event of default by GoT) on its equity exposure through an escrow account in the Project during the construction and operational phases; (b) encourage prompt payments by Tanesco under the PPA through a liquidity account; and (c) provide limited currency convertibility cover.

GoT established the *Escrow Account* with Citibank Tanzania in 1996 with an initial payment of $12.5 million financed through a surcharge it had levied on the sale of petroleum products. By November 1999 the Account (which has to be maintained in hard currency) had reached its target value of $50 million representing the amount of the sponsor's equity exposure in Songas. Any drawdown of funds from the escrow account would be triggered by a GoT default as specified under the contractual agreements. If the default occurred during the project's construction phase, and had not been remedied in the period defined, the project sponsor would terminate the agreements and liquidate its outstanding shares in Songas using the account's proceeds.

When construction is completed and for the operational phase of the Project, GoT's obligation to maintain the escrow account will be reduced by 5% each year ($2.5 million) throughout the life of the 20-year PPA corresponding to the redemption schedule for AES' Preferred A Class stock. Moreover the escrow account balance is attenuated to changing perceptions of risk. If Tanesco or its successor makes timely and complete payments for any consecutive 3-year period of commercial operations, the escrow account balance can be (halved) reduced to $25 million. If that period is followed by another consecutive 3 years of exemplary payment performance under the PPA, the escrow account could be eliminated altogether. The escrow account is therefore designed to protect AES' equity exposure during construction and incentivise a good payments performance record under the PPA. Once those risks have been demonstrated to be small, the need for protection disappears and all amounts in the escrow account are to be remitted to GoT.

To protect Songas against the risk of late, partial or non-payments by Tanesco, a *Liquidity Facility* has also been established under the Project. The facility is designed to smooth out Songas' own cash flows in the event that Tanesco's own cash flows experience short-term disturbance. The Trustee of the facility (a Tanzanian agent bank) is obligated to maintain the liquidity account in US dollars. Initially, the liquidity account is to be funded for up to 4 months of non-subordinated obligations (about $20 million). The funded amount in the facility can be reduced later to two months of 'non-subordinated obligations'[129] if the facility has not needed to be used for at least

[129] These would include: (a) dividends on and redemptions of Preferred shares; (b) O&M expenses; (c) fuel costs and sinking fund payments; (d) taxes payable by Songas to GoT; (e) dividends on Common shares; and (f) amounts required by Songas to pay dividends and redeem preferred shares on schedule.

five consecutive years. It can also be reduced to a 2-month funding level if the facility has been drawn down from, but GoT has replenished the drawdown within 30 days, and that has happened for seven consecutive years.

In the event of total default by Tanesco or its successor, Songas would be able to suspend its debt service payments to GoT (which are estimated at being equivalent to about 25-30% of the revenues received from Tanesco). Songas would also be able to draw down the liquidity facility and GoT would be obligated to replenish the facility within 30 days. If drawdowns from the facility are necessary and GoT fails to replenish the liquidity facility to the contractually agreed levels within 30 days, then Songas can suspend power supplies to Tanesco under the PPA. If GoT has not replenished the Liquidity Facility, after drawdown, within 60 days then that default triggers AES' ability to draw on the escrow account.

Mitigation of Other Financial Risks and the Subsidy on GoT Loans to Songas: Apart from significant risk mitigation for equity loss risk, liquidity risk and currency value risk, Songas is also protected from interest rate risk since the interest rate on its long-term loans from GoT is fixed. It should be noted in this context that the fixed rates being provided to Songas by GoT are extraordinarily generous in comparison with what commercial lending rates would be for loans to projects in Tanzania. Songas' interest rate on long-term US dollar loans (amounting to over $200 million) is an effective 6.8% compared with the yield on a 20-year US Treasury Bond of about 5.2%. That implies a spread of only 160 bps over US Treasuries on a Tanzania credit risk! If Tanzania were open to long-term lending by commercial banks,[130] the effective rates on long-term (5-10 year) US dollar loans would be either an 11–12% fixed rate, or a floating rate with a 700-800 basis point spread over the longest dated LIBOR rate (presently 4.5%). Moreover such lending would probably not occur without a credible back-up credit guarantee that would cost another 2–3% annually on the outstanding balance, assuming that it could be arranged.

Even if the parent company of Songas, AES, were to issue a 20-year, $200 million bond on the global corporate bond market (which may stretch the maturity beyond market absorption), it would probably need to pay a coupon of 8-9% in present market conditions and it would probably on-lend to Songas with a 2% add-on spread.[131] Thus, GoT is on-lending long-term funds to Songas for 20-year maturities that it could not possibly get on the market, and at rates that are at least 4-5% below what fair long-term market rates would be. That provides an effective annual public subsidy

[130] Tanzania is closed to long-term lending by commercial banks. Such lending could only have been arranged with a full (not partial) credit, all-risk guarantee being provided by an institution like EIB or the World Bank.

[131] This is of course hypothetical. It is extremely unlikely that AES would have gone ahead with the Songas Project if it had been required to finance the equity and debt for the Project by itself or rely on commercial financing with WB guarantees (assuming the Bank was prepared to make them).

to Songas in the form of an opportunity gain that is not readily obvious or transparent to the Tanzanian or global public.[132]

Part of that subsidy is being captured by Songas shareholders – i.e. through fairly high semi-assured returns. Another part is being captured by Tanzanian electricity consumers from tariffs that are lower than they would otherwise need to be. The exact proportion being captured by each is difficult to ascertain objectively with any degree of certainty.

However, if the effective full 'market-equivalent' cost were to be charged on loans to Songas, the project would only be financially viable at much higher effective tariff rates for electricity which neither Tanesco nor GoT/MEM would have agreed to. In that case the Project would not have gone ahead. The financial and economic viability of the Project is established and appears so favourable largely because of this significant element of 'below market cost' long-term funding being provided to Songas by GoT resulting from its own access to cheap funds. The subsidy may (or may not) be justified as being absolutely necessary to induce FDI in the energy sector and to encourage private participation in Tanzania's economy. But it is a hefty subsidy nonetheless.

Songas is also insulated to a large degree from *balance-sheet risk* and *income-statement risk* to a considerable degree as a result of the way in which the project financing arrangement has been structured. Even after 2013 there is little risk of an unfavourable *debt/equity risk* materialising (when the Preferred B Class stock has been fully redeemed by CDC and EIB/TDFL) because the outstanding debt burden will be reduced even faster.

Other Risk Mitigating Options for the Project: When GoT and the Songas project sponsors (at that time OEC and TCP, not AES) first signed a Letter of Intent in September 1995 spelling out the scope, structure and financial arrangements for the Songas component of the Project, they considered the possibility of commercial debt financing covered by a WB/IDA Partial Risk Guarantee (although such PRGs were available from IBRD, they only became available from IDA in 1996). It was determined at the time that there was little interest from traditional providers of long-term funds, i.e. ECAs and banks for funding a project in Tanzania because of its classification as a HIPC (highly indebted poor country). That would make it eligible for substantial debt reduction under the HIPC Initiatives and because of their poor experience in the past with lending to the country. If lenders could be found, almost all the debt they provided would need to be covered by some form of credible guarantee.

In early 2000 when AES had become the main project sponsor and financial arrangements for the Project were again being reviewed, the possibility of an IDA-PRG was revisited. The conclusion reached at that time was that since GoT negotiations with

[132] In fairness it must be said that the WB Staff Appraisal Report does make this clear and represents the opportunity gain for Songas as an opportunity cost for the rest of the economy. The WB estimates the NPV of that subsidy to be equivalent to $40 million; not insignificant in the context of a $275 million project.

Sponsors had been substantially concluded the introduction of commercial funding backed by an IDA-PRG would require renegotiation of all the complex inter-linked documents that had been concluded after considerable time, cost and effort. Renegotiation would take another 1-2 years involving further time and development costs for the Sponsor and for GoT. For those reasons renegotiations were not acceptable to the Sponsor.[133]

Earlier IFC (and DEG of Germany) had also been involved as a potential shareholder in the Project and had invested considerable time and effort in it. But it decided not to participate because of the small size of its proposed equity investment portion ($6 million). But CDC was keen to pick up IFC's equity position and eventually bought DEG's equity interest out as well. IFC is, however, indirectly involved in the small residual gas part of the Project (where PAT remains involved as a subcontractor and marketing partner of TPDC) through its investment in the AIG Africa Infrastructure Fund, which is a partner in the PAEC joint venture.

MIGA was also involved earlier with IDA in the Project but was uninterested in providing currency inconvertibility risk or breach of contract risk cover on its own book at the time. It was willing to become involved as Administrator of the IDA-backed CCF but that arrangement did not materialise. In the event, with GoT being locked in as 'its own hostage' to the Project through its on-lending arrangement with Songas, the need for political risk cover is diminished, although inconvertibility and breach of contract risk (as well as contract frustration risk) remain alive.

Contingent Risk Cover with Provision for a Sinking Fund: The Contractual Agreements also provide for a Sinking Fund to be established and financed with a gas surcharge if GoT, Tanesco (or its successor) and Songas jointly agree that such a Fund is required. Such a Fund will probably not be needed until 5-10 years after operations have been in train. It has been envisioned as a limited form of protection against the gas reserves at Songo-Songo East being used up at a faster rate than presently contemplated under the PPA. The Sinking Fund Agreement (to be executed only when necessary) provides for a portion of the tariff under the PPA (the amount to be adjusted annually) to be deposited in a Sinking Fund Account with an Agent Bank. Songas will have the right to draw down on the Sinking Fund as necessary to finance the drilling and completion of additional wells and gas production facilities in order to assure a continuous supply of gas at agreed heat and pressure levels to UPP, Twiga and the gas-fired 500kW turbines being installed under the WVES.

Project Vulnerability to Future Tariff Renegotiation Risk: Despite the MAD element inherent in the interlocking project financing structure for Songas, it remains vulnerable to future tariff risk as the obsolescing bargain model comes into play, especially

[133] The real concern was probably that noted earlier, i.e. that an IDA-PRG financed commercial debt structure would add another 5–6% annual interest plus guarantee cost burden on the Project that would need to be recovered from much higher tariffs given the sensitivity of the project's financing to debt-service costs.

when the Mkapa government changes in the future. The reason is that the PPA locks Tanesco into paying a tariff of **9.1 US cents per kwh** (based on mid-2001 prices) for the next 20 years based on projected load forecasts for thermal generation, capital costs, O&M costs, debt service costs and the targeted returns on preferred and common stock.

This high tariff assumes that the full capital cost load of creating the gas production and pipeline infrastructure will be borne by the UPP tariff based on only 112MW of generation. This assumption is unrealistic. The PSMP least-cost generation sequence indicates that new gas-fired capacity will need to increase by 38MW in 2003 at UPP (already built into the Project) and a further 60MW each in 2004 and 2005 (not yet built into the Project) and again in 2007 and 2009 at a new site. Thus the capital costs are likely to be spread over a much larger generating base (390MW instead of the present calculation base of 112MW) over time than the 20-year lock-in provides for.

Also, out of the 9.1 US cent tariff, about 20% is attributed by the sponsors to delays in reaching financial closure on the project[134] and a further 5.3% is attributed to the outstanding debt owed by Tanesco to GoT, which is to be transferred to and paid by Songas under the Project. Thus over 25% of the tariff (or 2.3 US cents) being charged to Tanesco by Songas and passed on to consumers in Tanzania is due to administrative and policy failures on the part of GoT and the intended recovery of sunk costs (with capitalised interest) that has been structured into project financing arrangements and Contractual Agreements by the Project Sponsors.

Taking the least cost sequence of thermal capacity addition in the PSMP into its calculations, the World Bank estimates that the *weighted average* tariff for projected gas-fired generation should drop down to between **5.1 and 7.5 US cents** by 2010 (depending on gas prices at the well-head varying between US$2.00 and 4.00 per Mmbtu and plant dispatch factors varying between 85-100%). The *incremental* cost of gas-fired generation amounts to only 2.4 US cents/kwh for the 38MW addition at UPP and 4.5 US cents for the additional 278MW of capacity added between 2003-09 (at a gas cost of US$2.00 per Mmbtu).

If they are right, these calculations suggest that a future electricity regulator may have a strong economic and 'public and consumer interest' case in asking for a downward revision of prices in the PPA as a small amount (60MW) of gas-fired capacity is added to the system each year up to 2005 and every two years thereafter to 2009. The present PPA does not allow for a downward drift in the tariff charged by Songas although the

[134] These include capital expenditures incurred (and funded by AES through equity) on the installation of 75MW turbines at UPP in 1995, on the gas well workover programme also funded by sponsors' equity in 1996–97 in anticipation of financial closure on the Project in 1997; and the increases in development costs that took place between 1997–2001 (i.e. between anticipated and actual financial closure). The project sponsors have had to carry interest capitalisation costs as well on total capital expenditures of about $30–35 million. At an opportunity cost of capital of around 10%, that would add another $3–4 million per year on a compounded basis for 5 years thus increasing by a further $20 million the overall cost of equity carry-over for the project sponsors.

numbers suggest that a downward revision (of about 1 US cent per kwh) may well be justified every two years or so beginning in 2006/07 and levelling off at around 6 US cents in 2010. These figures are, of course, expressed in 2001 prices and will need to reflect the changes that occur in inflation over time in the nominal tariffs charged.

Observations and Lessons to Be Learnt

SSGPP has to yet to unfold as an operating project with a history before any 'lessons' can be learnt from it although many observations can be made standing at the sidelines of what appears to have been an exhausting and demanding process of arriving at financial closure, not least for AES, Songas and GoT but also for the lenders and other institutional shareholders involved.

First: SSGPP is a good case study for revealing the extraordinary complexities that surround undertaking an energy infrastructure project and especially a gas-to-electricity project in any LDC. It shows how difficult it can be to attract FDI for infrastructure in an LDC, i.e. how long it can take, how easily the trajectory of negotiations can be derailed and changed, and how often changes can occur in the ownership and sponsorship structure of FDI projects with continual M&A activity (as well as dramatic and unforeseen events such as the collapse of Enron) in global industries.

Second: The Project experience indicates that significant *official intervention* – in this case the joint intervention of several agencies such as IDA, CDC and EIB – is almost certainly necessary, if not indispensable, in bringing *private participation through FDI projects* (especially in infrastructure) to financial and physical closure in LDCs.

Third: Intensive 'official' intergovernmental or bilateral donor intervention is crucial in the incipient stages of project conceptualisation, preparation of bid documents, and the evaluation of investment bids. In the case of SSGPP it is extremely unlikely that the project would have been put on its launch trajectory without the active and continuous assistance of a specialist team from an intergovernmental agency like the Commonwealth Secretariat. That team was instrumental in providing GoT and MEM with the assistance they needed at every early step along the way.

LDC governments and agencies (such as Tanesco and TPDL in this instance) simply do not have the internal capacity (in terms of human and institutional capital, knowledge, experience and expertise) to handle what it takes – in terms of preparing the necessary documentation, doing the necessary searches to identify which companies' bids should be sent out to, preparing the bid invitation documents, evaluating the bids, inviting selected companies for preliminary negotiations, or understanding the various types of financial structures that need to be put in place (and their various implications for the future) for projects at different phases of their lives (i.e. exploration, confirmation, preliminary outline designs, reaching financial closure, construction, completion and operation) – without relying on a considerable amount of external (usually international) advisory and consulting assistance at the outset.

LDC governments usually do not have their own financial resources to select and pay private consultants for these tasks. They would be vulnerable to conflicts-of-interest since most consultants in the oil, gas and electricity industries have worked for a private company that is likely to become involved in bidding. LDC governments need donor assistance for financing technical studies and advisory work. They also need help in following the requisite donor agency procedures for selecting the right consultants and ensuring that no conflicts-of-interest do arise. For that reason, they feel safest when they are working with intergovernmental organisations.

But here again LDCs do not always command the attention of the major multilateral institutions (e.g. the World Bank) in the same way at the early stages of a project's life that larger developing countries do. In the latter, the major multilaterals can lend much bigger amounts more profitably from IBRD resources and their staff can work on projects that are much larger, more complex and more professionally interesting and rewarding. For that reason, access to smaller more responsive institutions like the Commonwealth Secretariat (especially for the early work on the nitty-gritty aspects of project development), is crucial for LDCs, although they do have to turn to the larger multilateral institutions when the project life cycle approaches the financing stage.

These second and third observations clearly imply the need for 'public private interaction' of a close and intensive kind for making FDI happen in LDCs, especially for complex infrastructure projects.

Fourth: Complex projects like SSGPP in LDCs like Tanzania are vulnerable to costly delays because of the government's lack of capacity and shortcomings in comprehending key issues and dealing with them in real time. They can be subject to delays because of other connected events (such as the problems GoT and Tanesco encountered with IPTL at Tegeta resulting in negotiations on SSGPP being suspended for nearly 22 months) and because of institutional and regulatory weaknesses. These time delays can be extremely expensive as SSGPP's financing and tariff structures indicate.

In this particular instance, it is entirely reasonable to have expected the Project to reach financial closure by 1997 and begin commercial operations by 1999. Had that happened, Tanzania would have saved about $150-180 million in imported fuel costs for power between 1999-2003. It would also have avoided the significant losses in output that occurred with the power outage of 2000. Moreover it would have avoided the building up of sunk costs and interest capitalisation in SSGPP that have resulted in agreed tariffs being 25% higher than they needed to be.

Fifth: SSGPP shows how difficult it is (if not impossible) to attract purely private financing for infrastructure projects in LDCs. Given the political and creditworthiness risks that LDCs pose (with most being HIPCs and off cover for OECD-ECAs that have already taken heavy losses on their previous exposure to these countries in the late 1970s, the 1980s and early 1990s) the possibility of attracting commercial or ECA debt financing for infrastructure projects in these countries is between slim and nonexistent. In the unlikely event that long-term commercial debt financing could be

attracted to LDCs it would have to be guaranteed or credit enhanced by a credible guarantor. The all-in costs of such financing would be prohibitive and would probably result in no project going ahead if it had to avail of such financing at full market cost. The reason is that building in the cost of such financing into the tariff structure of infrastructure projects in LDCs would render tariffs unaffordable for all but the wealthiest consumers (who are also in the best position to evade such tariffs through side arrangements) as would have been the case in SSGPP had commercial financing with an IDA-PRG been resorted to.

Under such conditions, the only realistic option is for such projects to be financed with relatively robust debt/equity ratios (which most private investors are averse to because it increases risk exposure and reduces net returns) and with official financing that is on-lent on quasi-commercial terms to the private project sponsor/operator. That too involves a clear element of '***public-private interaction***'.

Sixth: Official long-term financing passed on by governments to private sponsors/operators of complex infrastructure projects in LDCs automatically introduces an element of '***mutual assured destruction' (MAD)*** that should act as a powerful disincentive for either party (i.e. government or the private sponsor) to default on their mutual obligations to one another. In some ways that reduces the CEND risks involved in 'political risk'. But it does not reduce currency inconvertibility, breach of contract, or contract frustration risk. These risks need to be provided for through other devices such as those integrated (or intended to be integrated but later dropped) into the SSGPP financing structure, e.g. escrow accounts, liquidity facilities, sinking funds and CCFs.

Seventh: Under all of the circumstances listed above, what SSGPP makes crystal clear is that even with so-called 'private participation' in public infrastructure (PPI) projects, project financing structures such as those evolved for SSGPP (and with IPTL before it) eventually end up with the governments (or official multilateral or bilateral donors, when concessional funds are involved) of LDCs eventually bearing the bulk of the real risk involved. That happens simply because of the unavailability of long-term commercial debt financing being available to these countries on reasonable terms on which some other party takes the ultimate risk.

For example, in SSGPP, out of the $275 million cost of the Songas component of the entire Project, GoT bears the ultimate risk of repayment on a total of nearly $220 million (since both CDC and EIB count themselves as official preferred creditors as well who would wish to be on a par with IDA in terms of the seniority of their debt and their preference in debt service). Moreover, the equity input of AES is mostly in the form of an already sunk cost which the present project financing structure is helping it to recover in full and with a handsome return. In addition GoT is taking the full risk for the ESS and MEM components of the project for another $20 million. Thus GoT is taking the ultimate risk exposure on $240 million in an all-inclusive project financing of $300 million; or in other words, GoT is taking 80% of the total risk exposure as the price it has to pay for involving the private sector in infrastructure provision.

The only reason GoT can afford to do that is because it is borrowing on IDA/EIB terms over long maturities that reduce the NPV of its nominal risk exposure from $240 million to less than $35 million because of the very high grant element (concessionality) of the funds involved. GoT certainly could not afford to take that kind of risk had it been borrowing IBRD and EIB hard window funds instead of IDA and EDF equivalent funds.

Ninth: In the case of SSGPP most of the interesting events (such as the unbundling of Tanesco and the setting up of the electricity and gas regulatory authorities) have yet to unfold and therefore most of the project story remains to be told some years from now. But these future events pose significant risks in light of the business and governmental environment that Tanzania has, which will make transitions of the kind contemplated much more difficult to bring about in practice than they sound in theory. That is equally true with other LDCs.

Donors would be wise to assist LDCs with further improvements in their governance, legislative, judicial, legal and regulatory systems, and to have the major changes in institution and capacity building that are needed firmly in place *before* projects such as SSGPP are undertaken rather than using such projects as catalysts for triggering these essential changes – as IDA seems to be doing in this instance – and exposing them to an unnecessarily high level of ***regime transition risk***.

Tenth: There may not be much of an option to the SSGPP financing and risk sharing pattern that has emerged in this Project for similar projects in other LDCs. And, finally:

Eleventh: SSGPP establishes a 'gold standard' for how the ESS dimensions of complex infrastructure projects (whether involving private participation or not) in LDCs should be handled. It is difficult to envisage in this instance how things could have been done better in catering to ESS needs than what was done by Songas and AES at the urging and instance of the World Bank. It is to the credit of the lenders, the sponsors and GoT that these issues were handled in such an exemplary manner.

ANNEX B

Case Study 2

Uganda MTN Telecommunications

Introduction

This second case study is about a telecommunications project in Uganda, another LDC. It has features and characteristics that are quite different from the previous (Tanzania) case. MTN is a smaller project that has taken off the ground more quickly in: (i) a regulatory environment that is more set and less fluid although evolving continually to keep pace with rapid technological and market change, and (ii) an overall governance regime that has been changing in a market-oriented direction over a longer period of time, with an established performance record that has reduced the level of perceived political risk on the part of foreign investors and the donor community. MTN is a project that is more technology and human capital-driven in a sector that is changing more rapidly than the gas and electricity sectors. Although capital and import intensive, this project is less so than the Songo-Songo Project. It does not entail the same concerns about environmental sustainability or social dislocation or resettlement; in fact it has few ESS dimensions or implications at all.

But it provides an interesting case study for a different reason. Apart from highlighting a different type of infrastructure input in an LDC economy in a slightly different economic environment than Tanzania's, the MTN case is illuminating because it challenges commonly held 'intuitive' perceptions about financing such projects in LDCs. It has been commonly assumed (not without reason) that LDCs are typically short of domestic savings, capital and investable resources for complex projects involving a high capital and import content. MTN challenges that assumption. It suggests that there may be more local capital available for financing infrastructure and technology projects in LDCs than has generally been acknowledged; although the absolute amount of such capital available may still be limited in the context of the investment that needs to be made in all sectors.

What the case study illustrates is that the key to mobilising domestic capital for such projects is to incentivise it and, from the domestic investors' point of view, 'make it secure' through credible credit enhancements that diminish, if not virtually eliminate, the risk of capital loss. Interestingly the case study also reveals how donor intervention in credit enhancement for the domestic resource mobilisation efforts of a commercial foreign company can achieve significant development objectives.

The case study is structured in the same way as the last but with more emphasis on the economic and country background to demonstrate the level of political and non-commercial risk that Uganda posed given its post-independence history and how far it has come in the last 16 years in reducing political risk perceptions that should have been rated among the highest in the developing world.

The Political and Economic Environment in Uganda

The Immediate Post-Independence Record: When Uganda became independent in 1962 it was an affluent country by prevailing 'developing world' standards. It was wealthier (in per capita income) than most countries in Asia (including Korea) at the time. It was seen in the development community as an imminent success with a manageable population compared to its agricultural and industrial potential, its accumulated international reserves and the amount of local capital available (especially in the resident but non-indigenous Indian business community) for investment in domestic development.

Between 1963-68, under the first administration of President Milton Obote, Uganda seemed to be delivering on that promise with: a rapid rate of agricultural output growth in export crops (coffee, tea and sugar); a high degree of food self sufficiency with exportable surpluses of maize (the African staple); a rapidly growing industrial sector with investments in agro-industry, food processing and textiles; significant investment in integrated infrastructure within the East African Community (EAC) and growing intellectual and cultural leadership in East Africa.

Political Dissonance: Early success, however, proved to be Uganda's undoing. The absence of stable political institutions and an administration that had been weakened too swiftly through well-intended but hasty affirmative action after independence led to severe corruption. It triggered internal political unrest targeting the resident Indian community and exploiting the tribal divide between north and south. Political tension was triggered by the imbalanced accrual of gains from rapid development in those initial years. The progress made between 1963-68 was dissipated and reversed between 1969-71 culminating in a coup led by an army sergeant (Idi Amin) in 1971.

The Idi Amin Catastrophe: Under what turned out to be among the most appalling administrations in modern times, the 1970s were a decade in which Uganda was reduced to a below-subsistence, sub-human existence. The rural population was reduced to foraging, and the urban population to scavenging, for survival. Both were devastated by a breakdown of law and order. The impact of successive oil shocks on a crippled economy compounded the damage done. Amin was overthrown in 1979 but political stability took another seven years to arrive. Attempts, supported by Tanzania, to restore stability by reinstating Obote were unsuccessful. Public revulsion led to his ignominious ouster, causing a brief war with Tanzania and engendering instability for another four years.

By 1985 Uganda's per capita income had fallen to half of that in 1970. The private sector virtually disappeared with the Indian business community having emigrated between 1971-85. The state thus came to dominate what was left of productive activity. But there was no public revenue base, inflation raged (1,000%+) and public expenditure, exports and investment had all fallen to below 10% of GDP. Subsistence agriculture growth revived to an average of 3.5% between 1980-86 when the depradations of Amin's undisciplined troops in the countryside ceased. A politically and socially exhausted, and an economically depleted country – whose physical, so-

cial, and administrative infrastructure had collapsed – was given a reprieve when President Museveni assumed power in 1986.

Reprieve & Recovery: In mid-1987 the Museveni government embarked on an economic recovery programme (ERP) aimed at reducing poverty, restoring fiscal and monetary discipline and rehabilitating the country's physical, institutional and social infrastructure. The ERP encompassed: sweeping civil service reform, revival of private investment through targeted restitution of property to former owners (aimed specifically at encouraging the return of the Ugandan Indian community), significant incentives for exporters, new investors and FDI, and the adoption of market-determined exchange rates. ERP worked largely because of the massive donor backing that underpinned it.

Uganda's performance since 1987 has been unlike many 'flash in the pan' early recoveries, followed by disappointment, in Africa. In Uganda, efforts to revive a strong, sustainable and irreversible growth dynamic in the economy have been determined and unflagging; though they have been compromised occasionally by (unavoidable) military engagement on the Rwanda border and by military misadventure in Congo (DR). These deviations notwithstanding, government commitment to development has been rewarded by strong popular support and equally strong domestic and foreign investment response.

Uganda's experience between 1987–2001 holds out hope for Africa that there is 'life-after-death'. Its return from the abyss is attributable to a combination of: (a) strong government leadership and ownership of the reform effort coupled with (b) improving, but not yet sufficiently strong, public administration; (c) extraordinary and sustained support for the government's efforts by the donor community, albeit at a level that is unsustainable (and undesirable) in the long run; and (d) the equally strong response and 'willingness-to-take-risks' on the part of the domestic and foreign investor community which has seen substantial increases in domestic private investment and FDI inflows.

Economic Structure & Performance: Agriculture remains the mainstay of the Ugandan economy, still employing 70% of the labour force, although its share of output has dropped from 60% in 1989 to less than 43% in 2000. The share of industrial output has risen from 10% to nearly 20% over that period with half accounted for by manufacturing. The service sector has grown less dramatically from 32% to 38% of GDP over the same 12 years. Between 1990–99 Uganda sustained an average real growth rate of 7.3% with underlying inflation of 6%, and a 21% drop in the poverty headcount index over that decade. In dollar terms real GDP has increased from $4 billion in 1989 to $6.5 billion in 2001, impressive by any standard.

Uganda's industrial output has grown by 12% a year while exports of goods and services increased by 15% annually between 1990–1999. In the two years 2000-01, the growth rate slowed to 5% due to adverse weather and deteriorating terms of trade, with export and industrial output growth falling to 7% but inflation still being con-

tained. Uganda's current account deficit in 2000 was 14% of GDP (financed largely by aid and FDI inflows) while its fiscal deficit was an unsustainable 9% of GDP. Aid inflows averaged $700-800 million annually between 1990-99 or about $30-35 per capita, although they fell to $500 million in 2000 (when Uganda's debt burden was reduced). FDI has increased impressively from zero in 1990 to nearly $250 million in 2000. Infrastructure rehabilitation has proceeded apace with a national road grid now being created to connect all parts of the country.

But with a population of over 22.2 million, its per capita income of about $300 makes Uganda one of the poorest countries in the world. With a HDI of 0.435 in 1999 it ranks 141st on the human development scale (just below Tanzania) out of the 162 countries for which the HDI has been calculated. Unfortunately, its corruption perception index of 1.9 ranks it 88th out of 91 indicating a level of corruption in Uganda perceived by investors to be higher than Tanzania.

Gross domestic investment has increased steadily from 12% of GDP in 1990 to nearly 20% of GDP in 2001. But it needs to keep increasing (along with a substantially increased level of domestic saving to make the resource gap financeable) to around 30% by 2010. Growth and investment need to become less aid dependent if they are to achieve the dynamic of irreversibility. Gross domestic savings have only increased from 0% of GDP in 1989 to about 3% of GDP in 2001 although gross national savings were a higher 11% of GDP. But that leaves too large a resource gap being financed by aid and FDI.

Debt Burdens: Fortunately for Uganda, donors recognised quite early the burden of *official* debt that was a drag on sustaining growth in the economy. They moved to alleviate it more quickly than in the case of Tanzania or other HIPCs. Uganda was the first country to be declared eligible for debt reduction under the first HIPC Initiative in 1998 and again under the Enhanced HIPC Initiative in 2000. On the first occasion Uganda was provided with debt relief (not outright reduction) estimated by the IFIs at a nominal dollar value of $700 million although that figure exaggerates the amount of debt relief provided in terms of reducing the *actual* rather than the *contractual* burden. On the second occasion relief was aimed at reducing Uganda's debt-to-export ratio (in NPV terms) to 150%.

These measures have been portrayed as large and significant by the IFIs. But they have not amounted to very much in terms of bringing Uganda's debt burden in line with its economic capacity to service external debt and still grow. Uganda continues to export 3% of GDP through debt service although that is being financed by aid inflows that might not otherwise (i.e. in the absence of the need to service official debt) be quite as large. In fact, Uganda's total debt *increased* between 1990-99 from $2.6 billion to $4.1 billion, with total debt service increasing from $145 million (or 3.5% of GDP) to $185 million (or 2.9% of GDP) reflecting the increasing concessionality of the $1.5 billion in additional debt assumed over the decade. In 2000 however the debt burden was reduced by about $400 million (to $3.7 billion) with debt service falling to $174 million (2.8% of GDP).

Securing the Future: Uganda's economic transformation has been accompanied by political change with strong civil society representation in political discourse and in direction setting for development. The government is composed of broadly based political groupings brought together under an unusual 'no-party' political system. A referendum in mid-2000 on whether the 'no-party' system should continue or be replaced by a traditional multi-party system with 'party politics' dominating centre stage resulted in a 90% vote for continuing with the present system, although a voter turnout of 51% diluted the strength of that 'mandate'.

After 16 years in power no political leader is immune to the waning of popular support, creeping 'regime arteriosclerosis' and bureaucratic complacency. President Museveni has made an enormous contribution to the revival of Uganda. But the absence of sufficiently robust political institutions, and of a transparent, popularly approved basis of leadership succession, continue to pose potentially high political risks for the future. In the absence of strong leadership with popular support and Uganda's north-south tribal divisions again emitting signals of political dissonance, there is cause for discomfort (if not concern) about how secure the future of Uganda is. The political system has crumbled before with devastating consequences. It has not been repaired and rebuilt to a point that can withstand the stress tests that it may be subjected to. It is essential, if the future is to be secured, for further political reform and a democratic basis of leadership succession through a strong 'political market' to be put in place sooner rather than later.

The Uganda Telecommunications Sector

Sector Liberalisation & Reform: Cumbersome (monopoly) posts and telecommunications offices (PTOs) were a standard feature of the colonial inheritance of most developing countries, particularly those in former British colonies like Uganda. Their eventual unbundling in the 1990s was, in retrospect, an inevitable outcome of the liberalisation of the telecommunications industry that started with the UK in the early 1980s and turned into a global trend in the 1990s.[135] Along with over 90 other developing countries that had taken the plunge in the 1990s, Uganda also decided to open up its telecommunications sector to private participation in the mid-1990s.

The development of new technologies has facilitated liberalisation by dramatically reducing entry costs for new operators, especially for cellular services, which permit high investment costs of fixed terrestrial lines to be avoided. New technologies have also facilitated new services (mobile, paging, ISP, and fax) and undermined service segmentation as well the traditional practice of subsidising domestic tariffs by imposing excessively high tariffs on international calls.

[135] Between 1990–98 about 95 developing countries transferred to the private sector the construction, operating and management risk of more than 500 projects in telecommunications involving investments of nearly $215 billion. Two-thirds of that amount went into creating physical infrastructure modernisation and expansion; a third went to governments as revenues for licenses and divestiture.

GoU Objectives: The aim of the Government of Uganda (GoU) in the telecommunications sector was to: (a) avoid further public investment that it could not afford in what had become a *commercial* rather than *public* service sector; (b) expand and improve service quality; (c) rebalance domestic and international call tariffs to avoid cross-subsidies that were deterring development of the long-distance call market while limiting network expansion of domestic lines; (d) make telephones more available and accessible in rural and remote areas; and (e) introduce new products and services such as fax, data and Internet service provision (ISP) as swiftly in the domestic market as possible.

In 1995 Uganda had 65,000 terrestrial telephone lines that had increased to 78,000 by 1999. But Uganda's teledensity was still exceptionally low at 3.5 lines per 1,000 inhabitants compared to an average of 17 for Africa, 84 for the developing world and 604 for the developed world. Despite rapid growth between 1999-2001 the market is in a nascent stage of development and has the potential for rapid growth for some time to come. Although the market size had reached over 200,000 subscribers in mid-2001, MTN estimates the total potential market in Uganda for cellular services at between 1.2 and 1.5 million subscribers before the saturation point is reached. GoU's aim is to reach the African average of teledensity within the next five years by allowing the market to grow at its own sustainable pace under 'natural' demand and affordability parameters, but without the artificial supply constraints on line and service provision that characterised the past.

In pursuing its strategy for sector liberalisation and development, the erstwhile Uganda Posts and Telecommunications Corporation (UPTC) was split into separate post office and telecommunications structures. For telecoms, a public monopoly service provider was established – Uganda Telecom Ltd. (UTL) – with the intention of quickly privatising it. But GoU hesitated in finalising its strategy for the telecommunications sector, although it had allowed the entry of a cellular service operator (Celtel) in 1995 on tight licensing terms limiting its domain to the Kampala metropolitan 'circle' and the conurbation adjacent to the Kenyan border.

Choice of Strategy: Initially GoU favoured an 'incumbent strategy', i.e. corporatising and commercialising UTL and bringing in a strategic foreign private partner to modernise, upgrade and improve the management and financial situation of the company as a prelude to full privatisation. It was thought that bringing in a partner on a *minority* basis, with the partner assuming majority control eventually, would result in GoU deriving 'full value' for a 'crown jewel'. The strategy avoided measures (e.g. premature competition) that might reduce the value of UTL. It was thought that retention by GoU of a majority shareholding in UTL while its finances were improved by the foreign partner would enable the government to secure larger revenues from its residual holding of UTL shares when it later disposed of them in digestible tranches on the domestic capital market.

This option was supported by the World Bank whose study on reforming the telecommunications sector in Uganda[136] recommended that: (a) the initial financial commit-

[136] Quoted in Mustafa et al, 1997 op cit.

ment of the foreign strategic investor should be minimised so as to avoid highlighting the problem of political and financial risk; (b) the foreign strategic partner should form a consortium with *domestic* institutional and private investors to make its involvement politically acceptable; (c) the government should retain a substantial stake in UTL for which it could realise greater value by disposing of it in the domestic capital in spaced out tranches; (d) a fixed initial price for the sale to the foreign investor should be set *without* competitive bidding on future levels of investment; and (e) local networks be franchised immediately to other small domestic private operators-cum-contractors to overcome UTL's capacity limitations on meeting demands for telephone services outside the Kampala and Entebbe metropolitan areas.[137] This strategy would also avoid the need for separating regulation from operations immediately and would permit market regulation to be introduced after full privatisation had been achieved over a period of time in a deliberate and steady manner.

The World Bank thought that such a strategy would reduce the risk exposure of potential foreign strategic investors to a level they would find acceptable. Offering a long period of licence exclusivity to the new owners of UTL would further reduce a high level of perceived risk. But neither GoU nor the Bank realised the full extent of UTL's operational and financial difficulties. They involved writing off a large part of its debt and a conversion of the rest into equity. On realising the distressed financial situation that UTL was in, GoU quickly saw the pitfalls of pursuing such a strategy. Creeping privatisation would be difficult to organise. It would create its own domestic resistance along the way.

Uncertainty about how and when to fully liberalise the sector was caused by political resistance to reform organised by the Board, management and staff of UTL. These vested interests realised that privatisation (and the entry of a foreign partner) would entail a consequent loss of: (a) their (mis)management privileges; (b) discretionary control over the only 'cash cow' among the remaining parastatals; and (c) several hundred well-paid but unnecessary jobs with rationalisation of an over-manned staffing structure. UTL's management therefore ran interference and overvalued the company in order to block the entry of a foreign partner as well as to cover up its own past mistakes in reducing the company to a much lower 'real commercial value'. When negotiations for the sale of a minority stake in UTL began there was a wide gap between the perceptions of GoU and UTL on one side and potential foreign investors on the other about what the 'true' value of UTL was. The cumulative impact on UTL's

[137] The Bank recommended that UTL hand out standardised franchises for local area networks based on competitive local bidding, with former UTL staff being encouraged to make bids. The terms of the franchise would stipulate that a sufficient number of fixed lines be installed in the area served by the local exchange to satisfy initial demand with room for anticipated growth. The lines must be established within a set time frame from the date of franchise approval and maintained to standards specified by UTL. In return franchisees would be entitled to a share of local call revenue generated by each line. The franchisee would be responsible for all billing and collection of line charges as well as installation and handset rental charges and also receive a percentage of revenue from trunk call charges.

finances of meeting commercially unviable social priorities, bilateral financing on inflating the book value of UTL because of high investment costs and poor network planning and management all resulted in UTL being valued at much less by a number of potential foreign strategic partners than GoU was led to believe.

The government therefore decided in 1997-98 to adopt a 'combined strategy' instead of an 'incumbent strategy' for sector transformation. That involved privatising UTL by giving the foreign strategic partners majority and management control at the outset, *while simultaneously creating an opportunity for competitive entry by another national private operator to create a genuine market*. A consortium led by Detecon acquired (through competitive bidding) 51% of UTL for $33 million. With 65,000 active subscribers and an urgent need for upgrading and diversifying its services to compete with two private operators, one national and one limited cellular service provider, UTL will need investment of $50-80 million over the next 5 years. To enable it to compete and enhance its revenue base, GoU also decided to grant UTL a cellular license in 2001 creating more competition in the cellular segment of the market, which is now growing faster than the terrestrial segment and has many more subscribers.

By privatising UTL in 1997 and bringing in a second national operator simultaneously (in 1998), the government, in effect, put itself in a position of being guided by the 'market' in making key policy and regulatory choices. Competition among UTL, Celtel and MTN made it unnecessary to fine-tune a regulatory policy to secure maximum benefits. Instead the market made the difficult decisions through competitive effects. This approach sidestepped the political difficulty of GoU taking and implementing key decisions on issues it did not comprehend in a sector where technologies and markets were changing more rapidly than the government could keep up with.

One of the consequences of privatisation and private sector participation in Uganda (and sub-Saharan Africa generally) has been to bring down the cost per fixed line from about $5,600 per line closer to well below the average of $1,500 for all developing countries.[138] The reason for fixed line costs in Africa being 3.5 times higher than elsewhere have long been disputed. Part of the reason is related to corruption in equipment procurement with intense bilateral donor/supplier competition in winning equipment supply contracts by hook or by crook (usually the latter). A related reason lies in the past dependence of African countries on telecommunications investment being financed almost exclusively by official loans. The low cost of credit has been offset by suppliers from donor countries overpricing their equipment egregiously thus negating the advantage of low-cost funds.[139]

[138] Mustafa et al, 1997.

[139] On a 15-year loan the difference between a capital cost of $5,600 and $1,500 equates to a 26% annual interest rate differential. Hence, unless the equipment was supplied entirely on a grant basis, African countries would have been better off borrowing commercially and buying telecommunications equipment on an internationally competitive basis instead of depending on aid-funded soft loans and export credits for this purpose. This example reveals one of the real costs of excessive aid and donor dependency.

Regulatory Arrangements: As a complement to setting up UTL the government also set up the Uganda Communications Commission (UCC) as the independent regulatory body for the telecommunications and broadcasting industries. UCC was set up because the government realised, on advice from its interlocutors, that it would be difficult otherwise to capture the benefits of reform – i.e. resulting from the transition from a state-owned monopoly to a competitive market that aimed at protecting consumer interests without compromising producer efficiency. To realise these benefits, an efficient and effective regulatory authority would be needed to ensure a level playing field and fair play under clear rules of the game by all firms. The process of regulation was made less burdensome by expanding private entry into the telecommunications market – which in Uganda is very small by international and even developing country standards – and increasing competition. UCC's remit is to:

- Ensure that the market power of the former state monopoly UTL is not abused to the detriment of consumers through continued high tariffs for services, insufficient supply of services, poor service quality and reliability, unresponsive customer service for equipment repair and correcting line faults, slow introduction of new services, inaccurate and incontestable bills, and corruption in rationing or prioritising services
- Protect new operators from the potential or actual abuse of monopoly power by UTL in giving them interconnectivity to its own network at reasonable costs and access to its rights of way without artificial impediments
- Ensure that consumer tariffs are in line with costs and permit reasonable returns to private operators while maintaining steady, gradual downward pressure on tariffs through effective competition rather than through tariff-setting, while discouraging any tendencies toward collusion in tariff setting or tariff convergence among private operators
- Decide how many operators can viably enter the market at future moments in time
- Establish the criteria and licensing terms and conditions for deciding which operators are qualified to enter the market and what pre-qualifications they need to meet in making bids to enter the market
- Create and maintain a favourable investment climate in the sector (through reasonable stability of tariffs, taxes and of other aspects that do not result in arbitrary and sudden uncertainties, risks and costs) for existing operators to expand and keep up with the latest technology and introduce new services as soon as they appear in the international market
- Narrow the gap in the universal availability of services by encouraging competing operators to push the envelope in expanding services to rural and deprived areas with the help of targeted public subsidies for high-priority service provision, while ensuring that private operators remain commercially viable in addressing development and social goals

But UCC was short of the scarce resources that an efficient telecoms regulator needs, i.e. a sufficient number of core multidisciplinary professional staff with qualifications and experience in the economics, engineering, legal, marketing, accounting and financial issues that are peculiar to the telecoms sector and its technology. UCC was therefore structured with a view to: (a) concentrating the focus of available technical assistance from donors to establish a basic regulatory framework; (b) reducing the need for too many regulatory decisions on intricate and detailed technical issues; (c) enhancing regulatory credibility in Uganda; and (d) using scarce human resources more effectively by outsourcing some regulatory and pooling knowledge across different regulatory agencies.

New Operator Licenses: Before it privatised UTL, the government had issued a limited cellular license in 1995 to Celtel Ltd. (Uganda), a private GSM service operator backed by the largest global cellular service provider – Vodafone Airtouch Group. IFC had an initial equity ($640,000) and debt ($5 million) stake in Celtel when it was launched to help finance a capital expenditure programme of $16 million. IFC's equity stake in Celtel was increased by another $10 million in 1999 when Celtel undertook a major expansion spurred by competition with the launch of a second national operator.

In 1998 GoU issued bids for a second national operator license including both a license bid price and a timetable for network rollout. The winning bidder (MTN) proposed in its bid to build 89,600 lines over five years (more than the 50,000 that the bid required) – a target that was incorporated in its license obligations. The MTN license also specifies a price-cap tariff regulation that will continue for the five years that the duopoly in basic services remains in effect. Regulatory intervention in the operating affairs of both licensees (i.e. UTL and MTN) will be limited to monitoring compliance and establishing approaches to providing telephone services in areas that are presently not being served.

Before MTN came on the scene, Celtel had a limited subscriber base (5,000) to which it was charging very high tariffs. With competition in the cellular market and the rapid expansion of MTN's subscriber base – as a result of its marketing, pricing and product strategy aimed at reaching a wider popular base of users beyond wealthy individuals and business people who were the only groups that could afford Celtel's rates – Celtel decided to compete with MTN for market share using a similar marketing and product strategy and pricing structure. Thus tariffs for cellular service have come down substantially without any regulatory intervention, solely as a result of competition.

No further regulatory decisions on tariffs and prices are expected during the license period. Both national licensees were required to negotiate interconnection agreements with each other. Pending agreement, either licensee can request from the other party the immediate application of the prices and terms of a default interconnection agreement appended to the license. Licensees cannot unduly condition the provision of telephone services on the purchase of specific telephone handset equipment or terminal equipment. Cross-ownership of the two private companies is prohibited and the licensees are obligated to provide basic exchange service for resale for use by public pay telephone users.

Uganda thus provides a good example of a reasonably pragmatic and robust regulatory framework based on: (i) a moderately pro-competitive policy and (ii) specification of initial regulatory rules in the licenses of the main operating companies.[140] As noted earlier, a key part of GoU's liberalisation and regulatory strategy was to immediately introduce some competition in all services by authorising a second licensed operator

[140] Smith and Wellenius, 1999.

to compete with UTL in providing competing telephony services for local, cellular, domestic trunk and international call services. Before bids were invited for the second license, the lessons learnt between 1995-98 were applied and refined.

Licenses for both private operators specified in advance the key elements, principles and practices of the regulatory regime. This approach reduced regulatory uncertainty for incoming investors, who were making relatively large capital commitments in the context of the Ugandan economy. It eased the regulatory burden on UCC for establishing a traditional regulatory regime from scratch – which would have been a much more expensive option with considerable reliance over a long period of time on relatively expensive and scarce foreign expertise. And, it served public and consumer interests by addressing regulatory issues in an integrated framework, thus preventing them from becoming the kind of problems that have been experienced elsewhere.

The MTN Project: Contents, Performance & Characteristics

The MTN Project: The initial scope of the MTN Project was defined by its operating license for which it paid $5.8 million after competitive bidding. Under the terms of the license, MTN is also required to pay GoU an annual fee based on its revenues. This fee is to be transferred to the Rural Telecommunications Investment Fund that will part-subsidise the extension of telephone services to rural areas that cannot be served on a commercially viable basis.

Its license – which permits MTN to offer cellular as well as a variety of terrestrial services – required MTN to achieve the following core physical objectives between 1998-2003, i.e. the first five years of a 20-year licensing period (with an option of being extended for a further 10 years):

- Installation of 89,605 operating lines including 2,000 public payphones
- The MTN network has to cover all of Uganda's 37 district capitals
- At least one public payphone to be installed in Uganda's 165 district/county headquarters

MTN calculated that in practice its license required it to cover 216 towns and villages in Uganda at the end of year 5 provided that the minimum requirements of security, power, access by road and transmission distances were applicable.

Running Ahead of Targets: MTN launched commercial services in October 1998, six months after signing the license agreement. By *September 2000* it had overshot its physical installation targets. In 23 months, MTN had installed 113,000 lines thus exceeding its 'line provision' obligation by 26% in two years instead of five, with *annual* targets being exceeded by 315%. Its original business plan had projected that 113,000 lines would be achieved only by March 2004. MTN had also captured a total market share of 56% with the remaining 44% being shared by Celtel (8%) and UTL (36%).

By *March 2001*, MTN had added another 39,000 lines resulting in a total subscriber base of 152,000 and was distributing over 200,000 prepaid phonecards a week. In that

month, MTN estimated its market share to be 62% of the active subscriber base in Uganda with Celtel having also increased its share to 12% with 30,000 subscribers. UTL had lost market share dramatically to 26% of the total market. The sharp fall in UTL's market share prompted GoU to grant it a cellular license in late 2000, a move that neither MTN nor Celtel had expected to occur so soon. UTL began an aggressive marketing campaign in 2001 to win back market share from Celtel and MTN.

The consequence of heightened competition has resulted in Celtel breaking out of its former license area and expanding its network into remote areas while reducing tariffs. UTL has gone even further. Its new mobile service ('Mango') has resorted to aggressive tariff undercutting to attract customers (offering new subscribers free services for the first five months of a minimum one-year contract). MTN believes, however, that this 'loss-leader strategy' cannot be sustained and Mango will lose market share again when long-term commercial tariffs are applied. Active competition has already increased Uganda's teledensity from 3.5 lines per thousand to 9 lines per thousand in just two years resulting in the target of 17 lines per thousand being easily within reach by 2005.

As of mid-2001 MTN had deployed 282 cells on 131 sites in 32 districts across Uganda. It had two mobile switching centres to accommodate 160,000 subscribers with PDH and SDH microwave radio systems being used as the backbone transmission medium. MTN relies on its own transmission systems and is not yet using any interconnectivity with UTL or Celtel. Two gateways have been commissioned enabling MTN to offer international connectivity to 260 countries worldwide. Local access to its terrestrial network is provided through 2 Mbit/s links (ISDN) as well as six wireless local loop cells on three different sites. MTN is constructing its own fibre-optic network in Kampala with a view to offering new broadband services to customers in the Kampala Central Business District.

MTN now offers standard prepaid international roaming, IDD, mobile voice and data, VSAT voice and data, corporate WANS, fax and ISP-connection services. Its value-added services include toll-free emergency connections, voice mail, call barring, waiting and forwarding, fax and text messaging. By mid-2001 MTN had installed 1,800 payphones via its associate company, MTN Publicom Uganda, with the assistance of ASCOM Nordic in providing its expertise with the management of public payphones and MTN providing the infrastructure. MTN is now collaborating with other partners to provide its customer base with value-added Internet services through its broadband infrastructure. It has also established a multiple language Call Service Centre to accommodate the needs of all its present and potential customers across the country.

Under its agreement with Sida, MTN is obliged to extend its network to a further 24 rural towns in 2002 to achieve high priority rural development and social objectives at a cost of about $7 million (the same as the guarantee amount that Sida is providing to MTN for the issuance of notes in the local debt market). The towns to which line connections are to be extended would depend on access and the availability of essential security and services. Typically, such towns would have a population of fewer than

8,000 urban residents although coverage would extend to the surrounding rural population within the town's transmission radius. On average each site would provide access to about 12–13,000 people or a total of nearly 300,000 rural people altogether. L.M. Ericsson of Sweden is expected to supply 20% of the capital equipment needed, which has 95% import content.

In September 2000, MTN envisaged that with the demand growth experienced in its subscriber base over the first two years it would have installed over 200,000 lines (instead of the agreed 89,605) by the time five years were up, representing 223% of its license obligations. But the continued rapid addition of subscribers since then suggests that even this target may be exceeded (possibly increased by another 25% to 250,000 subscribers by end 2003) despite an entirely changed competitive environment with UTL's aggressive entry into cellular services that may increase market size more than adjust market share.

The rate of subscriber growth appears to have caught MTN and its competitors by surprise. It appears to have been triggered by MTN's product and pricing strategy, which has opened up more popular demand for cellular phone services than market research at the time of entry had suggested would be possible. Instead of developing a subscriber base on the basis of the creditworthiness of customers for monthly billings, as Celtel had done (and which was the global cellular industry standard until 1998), MTN had chosen a different market strategy. It developed instead an exclusively *prepaid phonecard system* for its cellular services in Uganda based on its successful experience with these systems in South Africa, Rwanda and Swaziland. That has reduced its customer credit risk, collection risk and its billing system costs to zero, whereas these risks remain substantial for its competitors. With the runaway success of its market and price strategy, MTN intends to offer terrestrial line connections only to business customers and not to individuals in order to avoid customer credit risk.

Shareholding in MTN and Project Financing: To achieve the physical objectives agreed under its license over 5 years, MTN-Uganda's financial base was initially organised with equity capital of $32.5 million (common shares plus subordinated shareholder loans) and long-term debt of $27 million resulting in a robust 55:45 debt/equity ratio in a total capital structure of $59.5 million. The original equity holding was shared as follows:

	1998	2001
MTN-International (Mauritius)	56.25%	50.02%
Telia Overseas (Sweden)	33.75%	32.44%
Tristar Investments (Rwanda)	10.00%	14.88%
Invesco Uganda	--	2.66%

Of these shareholders, MTN and Telia have acquired considerable experience in setting up and operating telecommunications networks in Africa. However, Uganda is

the only country in which a company partly owned by Telia has obtained a license to operate nationwide. MTN-International is owned by a South African holding company, M-Cell, which in turn is owned by a South African industrial conglomerate. The parent company has a strong market base in South Africa with 2.5 million subscribers. The various shareholders also have investment interests in telephone network subsidiaries and affiliates in Cameroon, Namibia, Nigeria, Rwanda and Swaziland.

The original debt structure of MTN in 1998-99 was provided by the following creditors with MTN's license being assigned to the creditors as the security package (with appropriate security sharing agreements among the creditors involved) for the long-term loans:

European Investment Bank (EIB)	$10 million	($ 6.4+€ 3.5 Mn)
Swedfund International	$ 2 million eq.	(UGS 3 Bn)
Nordic Development Fund	$ 2 million eq.	(UGS 3 Bn)
Development Finance Co. of Uganda	$ 1 million eq.	(UGS 1.5 Bn)
Barclays, Stanchart and Stanbic	$ 12 million eq.	(UGS 18 Bn)

The official loans were on quasi-market (intermediate) terms for interest rates and maturities rather than on 'hypothetical pure market terms' (hypothetical because Uganda as a LDC and a HIPC does not have any significant access to global long-term debt or banking markets). But the official loans incur an exchange risk for MTN. The loans provided by the syndicate of the branches of foreign banks located in Uganda, denominated in UGS, were entirely on prevailing local market commercial terms but with no exchange risk. These loans constituted 45% of the total loan package.

Financing for the project was raised more on the basis of a combined corporate-cum-project finance approach rather than on pure project finance as such. The official loans were all secured by guarantees from DEG-Germany (which guaranteed a part of the EIB loan for •6 million), Swedfund (which guaranteed the Swedfund International and NDF loans for $3 million) and NFM-Holland (which guaranteed the remaining portion of the EIB loan for $6.4 million). Citibank (Uganda) also granted MTN a $2 million trade finance facility in 2001.

With implementation running well ahead of schedule, MTN's original capital structure has quickly become obsolete. It now needs nearly double the capital funds for completing its revised (and much larger) 5-year business programme. Instead of the nearly $60 million that was originally envisaged and structured, MTN needs a total of about $115 million (i.e. an additional $55 million) for more than doubling its network capacity. At this overall investment cost level, it is worth noting that MTN will have brought incremental line investment costs in Uganda down to about $600. That is about one-tenth of the average line investment cost recorded by UPTC before the sector was liberalised. But the incremental cost of cellular lines is much lower than terrestrial lines because the material, labour and civil works cost of laying down a copper wire or optic-fibre network is avoided.

To meet expanded needs, the original capital subscription of MTN-Uganda has been expanded with further equity and debt infusion. A new shareholder (Invesco Uganda, a private investment company) has been brought into the equity structure with shareholders having provided additional quasi-equity in the form of subordinated loans (no interest, unsecured, no fixed repayment schedule and subordinated to all other debt from third-party creditors) amounting to about $6 million and retained profits providing another $7.6 million thus increasing shareholders' equity by a total of $13.6 million.

The balance incremental requirement of about $41 million has so far been funded largely by trade payables, short-term borrowings and deferred tax liabilities averaging an outstanding $25 million on MTN's balance sheet for 2001. The Sida-guaranteed Note Issuance Programme for raising local currency short and long-term debt (at maturities ranging from 90 days to 8 years) up to a maximum of about $7 million (or SEK 80 million to cover a maximum Note Issuance Exposure of UGS 12.5 billion) still leaves a funding gap of just over $9 million. With gross turnover of about $20 million per quarter, EBITDA (earnings before interest, tax, depreciation and amortisation) of $10 million per quarter and unencumbered net earnings of $2–3 million per quarter,[141] the company does not need to add to its long-term borrowings. That said, however, increasing long-term debt by a further $10 million would make the long-term balance sheet structure more secure and allow for expansion even beyond the 200,000 line target being contemplated for 2003/04.

Financial Performance & Returns: As a result of changes in its funding structure, the outstanding long-term debt-to-equity has improved from 55:45 to 40:60. The total debt-to-equity ratio has also improved to 45:55 suggesting that the balance sheet remains exceptionally strong, as does the profitability outlook. Sida estimates that MTN's returns on assets will be between 25–35% till 2004 with the *financial* internal rate of return (FIRR) being estimated at 36%.

No overall internal *economic* rate of return (ERR) has been calculated for the Project. Had that been done it would not be surprising to find an ERR in the range of 35–50% given the variety of economic, sectoral and social benefits that have been derived in a very short period of time. As a matter of interest, Sida should commission an ex-post ERR to be calculated for the Project from its 4-year operating history and extrapolate the total EIRR over its 20-year license life.

Project Benefits: The overall economic and developmental benefits from the Project are substantial. MTN's entry has transformed the telecommunications sector in Uganda. Teledensity has increased by 250% in just two years (which generates significant externalities and economic value addition of its own) while tariffs have come down. Service quality has improved, the range of voice, data and Internet services (including

[141] MTN's net profit after all expenses for the fiscal year ended March 31, 2001 was about $11 million, suggesting a quarterly net profit of $2.75 million. This was expected to rise to over $3 million in FY2002 and even further in FY2003.

broadband) has increased and the number of customers with access to telephone services nearly tripled between 1999–2001. GoU's strategic choice of combining UTL privatisation with competitive entry has proven to be astute; better than could have been anticipated when the choice was made. All of this has been achieved through the interplay of competitive market forces than through overt regulatory intervention.

Service penetration outside the main Kampala conurbation into rural areas throughout the country, including some of the less accessible northern parts, has increased dramatically and quickly. From a social point of view, access to public payphones on the part of the poor and to emergency services has been transformed almost overnight. Almost all of GoU's objectives for the sector have been met ahead of time by MTN in a way that they were not by Celtel, nor by UTL.

Until MTN entered the Uganda telecoms market in 1998, Celtel was content to provide limited services at a very high cost to only the rich, privileged end of the market. Between 1995-98 Celtel's subscriber base had increased to just 5,000 and UTL's was 70,000. In fact, UTL's performance, even with new management, was the least impressive until very recently. That may reflect how difficult it is, even for an experienced private operator, to turn around the work culture and performance of a public behemoth accustomed to rationing its customers and treating them as a nuisance rather than servicing their needs. MTN's business strategy has also proved to cater to the needs of the average Ugandan customer for telephone services whereas Celtel's and UTL's did not.

On the whole, it is difficult to fault the project on physical or financial performance grounds, or on the grounds that it has not yielded the economic and social benefits anticipated. On all those counts the Project has over-performed. Sida's choice of a 'winner' (led by the Telia and Ericsson connections) has proven to be better than IFC's, whose role in not getting Celtel to perform at least as well as MTN remains inexplicable.

Sida's intervention in providing a guarantee for a domestic Note Issuance Programme has added further to the benefits already derived from the Project and to be derived later in domestic capital markets when these notes are eventually listed on the Uganda Stock Exchange and traded. The Sida Guarantee has proven that there are institutionally held, long-term local resources available for investment, providing such resources can be guaranteed: (a) safety, and (b) reasonable returns. The intervention has extended the benefits of MTN's rollout to 24 rural towns sooner than they would otherwise have been served making telephone services accessible much sooner to nearly 300,000 potential rural users (assuming a ratio of about 6 users per subscriber, it would increase the number of subscribers by about 50,000).

Environmental and Social Sustainability Dimensions

The MTN Project does not open up the same ESS concerns or implications as the previous case study outlined in Annex A. By their nature, cellular telecoms projects

involve innocuous, clean technologies that have no major environmental impact in terms of emissions that impinge on air or water quality or result in soil erosion or land degradation or depletion. Nor do they result in social dislocations that need to be specifically accommodated or compensated. Their social impact is substantially positive and benign in bringing improved communications capacity to a larger number of people, especially poorer underprivileged people who have had no opportunity in the past for sufficient access to communication services under the fixed-line technology model through monopoly public service provision. A larger number of people have benefited from the services that MTN has provided in three years than from the services provided by the UPTC public monopoly in the previous twenty.

The environmental issues that cellular phone projects raise are the visual impact of the large number of transmission towers that have to be erected at the epicentre of each cell and the still-disputed health effects of microwave radiation on users of handsets and on residents living close to transmission towers. Standard environmental guidelines require these towers to be located away from public facilities such as schools, hospitals, health clinics and community centres. According to Sida, the National Environmental Management Authority (NEMA) of Uganda has examined the ex-post environmental impact of equipment installed by MTN at 26 separate sites that were selected from a random sample deemed to be representative of MTN's cell network of over 130 sites. The NEMA report does not suggest any environmental problems emanating from the Project. MTN asserts that it follows strictly, for their installations and their operations, the World Bank/IFC environmental and social guidelines for exercising corporate responsibility in telecommunications projects.

In terms of more specific and identifiable *social* contributions from its revenues and profits, MTN fulfils its responsibility as a corporate citizen of Uganda by commitment to, and involvement in, the community in a number of ways including:

- Sponsorship of local and national sports teams (although MTN does get some advertising and 'image' benefits from such sponsorship)
- Construction of classrooms in poor urban areas and in village schools
- Provision of school supplies for poor primary and secondary school children
- Sponsorship of Habitat for Humanity in Uganda
- Being the largest single corporate contributor to the Ugandan Red Cross through its innovative 'Win as You Go' project.

Project Risks: Allocation, Sharing, Mitigation, Lessons Learnt

In contrast to the previous case study where SSGPP has yet to unfold and enter the operational phase, the MTN Project has been operational for three and a half years. It is easier to assess with a higher degree of confidence how the risks originally perceived are actually working out.

Risk Allocation & Risk Sharing: In the financing structure arranged for the Project, MTN-Uganda and its shareholders have assumed the bulk of the project construction

risk, the physical and financial completion risk, and virtually all of the operating and financial risk except for the *currency value risk;* although MTN's exposure to even that risk remains substantial. MTN has taken on itself the *convertibility and transfer risk* without obtaining special NCRI or PRI cover; assumedly preferring to operate in the forward and futures market (or tailored arrangement opportunities with foreign commercial banks in Uganda) that exist in UGS.

MTN does not appear to have taken out – at least not transparently – any specific insurance against CEND political risks, breach of contract risk or contract frustration risk.[142] If it had, the events of the last four years would, retroactively, have indicated that it had wasted the money on risk premiums. At its present rate of profitability it is likely that MTN-U's investors will recoup their original investment in another year or so thus enabling them to take even higher exposure than at present to non-commercial risk on their own account.

Obviously MTN-International as the parent sponsor has gained experience over the past 5–7 years with similar projects in a number of African countries (especially LDCs) that have economic and operating environments similar to that of Uganda. In the process, it has developed a unique body of in-house corporate experience (genuine and valuable core intellectual property rights) for handling such projects and taking (and managing) the risks involved without seeking external cover at additional cost. This gives the company a rare competitive advantage in the African cellular market that other firms without similar experience would not have.

That is apparent by contrasting Celtel with MTN. In the Celtel case, the parent sponsor was Vodafone Airtouch, a larger global TNC than MTN (whose base is regional) with operations in over a hundred countries across all continents, compared to MTN's experience in only five or six countries in Africa. Yet with all its resources and capabilities, Vodafone Airtouch decided to seek the cover derived from associating IFC (a 'preferred' member of the WBG) in the equity and debt structure of its project in Uganda (Celtel) whereas MTN did not.

MTN got off the ground much faster, took most of the risks internally and performed better in a shorter period of time than Celtel. Over a period of four years, Celtel developed a subscriber base of just 5,000 customers by marketing cellular service as a *luxury good* rather than a mass consumption good. Even though it was confined to the Kampala circle – which is where most of the customers in Uganda for cellular services still reside – Celtel decided to restrict its market base with a high-tariff, exclusive service approach to maximise the rent-extraction potential of its single cellular operator monopoly. In 23 months MTN developed a subscriber base 22 times that size with its market share in the Kampala area being much larger than the subscriber base of Celtel!

[142] If MTN has taken out a PRI or NCRI policy with a private risk insurer it would be obliged not to disclose that fact under specific confidentiality clauses. As a Guarantor, however, Sida should know whether that is the case although even Sida would be bound by confidentiality not to reveal that possibility. It therefore remains a matter of conjecture.

Thus Celtel threw away a three-year headstart by using its single operator cellular monopoly to charge premium rates and exclude the bulk of the population from access to service. It woke up when MTN arrived and threatened its existence.

There is an obvious lesson here: sheer size, global exposure and experience, financial muscle and good connections are not necessarily what it takes to make a project work in a difficult LDC environment like Uganda. Instead, local knowledge, specific expertise concerning the African environment and knowledge of the particular importance and particular suitability of prepaid phonecards for African customers were far more important.

Interestingly, in the Information Memorandum[143] prepared for its Note Issuance Programme in UGS, the company sees the main risks not as financial, political or 'other' non-commercial risks, even though it is operating in an LDC environment that by definition would be classified as 'very high risk' by almost any professional risk assessor. Instead MTN sees its main risks as: (a) technological; (b) competitive; and (c) currency value fluctuation beyond the bounds of manageability.

Technology Risk: This is an operational risk. MTN identifies three distinct types of technology risk:

- *Event Risk*: which concerns the pace at which telecommunications technology is advancing and requiring MTN to move at the same speed. This exposes the company to the risk of periodic business interruptions resulting from technology upgrades. These are minimised by good upgrade planning and management methodology.
- *Network Risk*: which comprises risks affecting capacity utilisation, network clarity and service interruption. MTN has dealt with these risks by engineering its network on principles of planned redundancy that allow for single failures of major network components to be offset by the availability of redundant components that take up the traffic. MTN has also devised its own system checks and revenue assurance procedures to minimise network fraud.
- *Information Systems Risk*: Information systems requirements, including billing systems and phone card usage tracking systems, have had to be rapidly upgraded and expanded to cope with rapid growth in the customer base. MTN has back-up disaster recovery plans to ensure business continuity in the event of information system operating failures. MTN has its own protocols for controlling staff access to information systems with inbuilt audit trails that minimise the likelihood of unauthorised changes.

Competition Risk: MTN's runaway success has increased its own competition risk. In addition to Celtel, MTN now faces competition from UTL's 'Mango' cellular service that is being extraordinarily aggressive in price-cutting to regain some of the market share that it has lost to MTN and Celtel. The telecommunications market in Uganda became much more competitive in 2001 and 2002, which may slow down MTN's rate of subscriber growth and make it rely on value-addition for securing its revenue

[143] MTN Uganda, 2001.

base. MTN's strategy to cope with competition risk is to maintain its coverage advantage across the country, ensuring better network performance and clarity and retaining its customer base through good value-for-money and quality services.

Currency Value Risk: In an open foreign exchange market that has operated reasonably well for a number of years, MTN does not foresee a significant convertibility or transfer (repatriation) risk. MTN derives most its revenues daily in cash from a wide base of individual and business customers through the sale of cellular handsets and prepaid phone cards. It can convert as much of that cash as it needs to on a daily or weekly basis in forex markets, thus managing its convertibility risk exposure on a daily basis. MTN does not depend on its revenues from lumpy monthly or quarterly payments from a single government agency (as in the case of SSGPP) or a small number of large customers to which it provides short or medium term credit. It does not therefore have much of a *liquidity risk* nor does it take any significant *customer credit risk*; although it does take a vendor credit risk in supplying handsets and phonecards through retail vendors and agents as well as its own retail outlets. Under the price-cap provision of its license, MTN can adjust its tariffs in the event of a major devaluation of the UGS, although competition does exert downward pressure on the tariffs it can charge.

MTN's main concern is *currency value risk* arising from a significant proportion of its equity capital (and long-term funding) costs being in foreign currency while its revenues and some of its operating costs are entirely in local currency. MTN now has annual revenues of over UGS 100 billion while its annual foreign currency debt service requirements are about UGS 3 billion and the value of its foreign debt outstanding is about UGS 17.5 billion (compared to under UGS 15 billion when the debt came on to its books in March 2000). Thus, its capital value risk exposure on the long-term debt owed has already increased by about UGS 2.5 billion ($1.4 million on two EIB loans denominated in euros and dollars equivalent to $10 million) as a result of steady UGS depreciation in two years.

To reduce the mismatch between the currency composition of its capital structure, debt service requirements and dividend repatriation obligations on the one hand, and its income on the other, MTN has decided to manage *currency value risk* by shifting its funding and borrowing requirements from $/• into UGS to the extent possible. It would prefer to convert the proceeds of UGS borrowings into foreign currency to purchase foreign equipment imports and have its debt service and repayment obligations in UGS to match its UGS income stream. But MTN's ability to do so is constrained by the finite availability of long-term UGS funds and the unwillingness of local institutions to lend without credible counterpart guarantees.

The Sida Guarantee helped to overcome that constraint. It opened the door to a new funding possibility that would reduce MTN's currency value risk dramatically if the size of UGS borrowings in MTN's total debt structure could be increased. In its original borrowing structure of $27 million, MTN had borrowed the equivalent of $17 million in local currency (which amounted to borrowings of UGS 19.5 billion at then prevailing exchange rates). It was exposed to currency value risk on 37% of its out-

standing long-term debt. With the UGS Note Issuance Facility (equivalent to $7 million) that the Sida Guarantee has made possible, MTN will have removed the currency risk on 70% of its total long-term debt leaving it exposed to currency risk on the remaining 30%.

The Sida Guarantee Facility (SGF): As noted earlier SGF will make it possible for MTN to expand coverage faster to 24 rural townships in remote areas and making telephone service available to 300,000 poor rural users (based on about 50,000 additional subscribers). SGF will enable MTN to raise funds flexibly in the Ugandan institutional (private placement) market at varying maturities (ranging from 90 days to 8 years, but expected to average four years to stretch the maturity as far as the market is presently willing to go) on a floating rate basis with the interest being paid on outstanding notes every six months at a fine spread (100 bps) over the 182-day Uganda Treasury Bill rate. The Guarantee was necessary because MTN had only a 2-year operating and financial history in Uganda whereas the Capital Markets Authority requires a minimum five-year track record of good performance before a company is eligible for listing any security (whether equity or debt) on the Uganda Securities Exchange.

Of the proceeds realised (a maximum of UGS 12.5 billion), about 95% equivalent to $6.7 million will be converted into foreign currencies (mainly USD and EUR) for the purchase of equipment from L.M. Ericsson and other suppliers. Regulatory approval for the MTN Notes has been obtained from the local Capital Markets Authority and the Notes are expected to be listed on the Uganda Securities Exchange once MTN-Uganda becomes a listed company itself with its shares traded on the exchange. The Central Bank has accorded these guaranteed corporate notes a 50% risk weighting for prudential provisioning by banks. Given the fact that the notes are guaranteed by Sida, this risk weighting seems onerous and costly for the purchasing banks. It is difficult to see why they should not be weighted at 0% or 10% risk weighting giving them a credit status similar to that of the Uganda government, given the fact that Sida's (i.e. the Government of Sweden's) credit rating in international capital markets is a AA+ investment grade rating.

Up to March 2002, MTN had issued three series of 4-year Notes for a total of UGS 9.5 billion with the issues being amortised in equal semi-annual instalments (i.e. 12.5% of each series is retired every six months). The Notes have so far been bought by provident and pension funds and commercial banks. The terms of each series is indicated below:

- First Series: UGS 5.0 billion (first semester) Interest cost: 16.173%
- Second Series: UGS 2.5 billion (first semester) Interest cost: 9.095%
- Third Series: UGS 2.0 billion (first semester) Interest cost: 10.340%

A fourth and final series of Notes (UGS 3 billion) will be issued after the shares of MTN-Uganda have been listed on the securities exchange and the listing formalities of the Note Issuance Programme have been completed. Under the Note Issuance Programme, MTN can retire and reissue Notes during the eight-year maturity horizon as long as the outstanding principal amount does not exceed UGS 12.5 billion. Thus

MTN-Uganda can repay the full amount of the 4-year Notes issued so far and then re-issue a new series of Notes for another 4-year maturity or less.

The Sida Guarantee is provided via a Security Agent (Stanbic Bank Uganda Ltd. which is also the fiscal agent, paying agent and registrar for the Notes) as the intermediary between the Guarantor and Note-holders. The latter do not have direct recourse to the Guarantor. The Guarantee is a partial credit guarantee covering only timely payment of the principal amount and leaving the interest accrued at noteholders' risk. The Sida Guarantee covers only commercial risk, specifically *Insolvency Risk,* i.e. the risk that the Issuer (MTN-Uganda) may go bankrupt before the noteholders have been fully repaid. The guarantee cover specifically *excludes* any political and non-commercial risks, i.e. repayment risks on the Notes arising as a consequence of GoU default such as CEND risks, war and civil disturbance risks, terrorist action risks, or imposition of taxes or payment restrictions that impair the financial standing or liquidity of the Issuer and thus impairing it from discharging its debt servicing obligations on a temporary or permanent basis.[144] The Guarantee also does not cover fraud, embezzlement or corruption, in which the Issuer or its representatives may be involved, as causes of non-payment.

Although the currency denomination of the Notes being guaranteed is UGS, the Sida Guarantee limit is denominated in SEK at a maximum of SEK 80 million with Sida taking no exchange risk on the UGS-SEK exchange rate or between the SEK and any other currency. Given the likelihood of the UGS continuing to depreciate slowly against the SEK in a floating rate regime, that risk denomination works in favour of the Issuer because total guarantee risk cover capacity is likely to exceed the present Note Issuance cap of UGS 12.5 billion UGS by a considerable margin as each year expires.

Under the terms of the Guarantee Agreement, the Guarantor's rights are subordinate to the rights of the Security Agent acting on behalf of the Note-holders and the rights of the creditors involved in the $27 million equivalent long-term debt package for MTN. For providing the Guarantee, Sida charges an annual guarantee fee of 3% of the principal amount outstanding at risk.

Other Risks: Beyond the risks already discussed, MTN is exposed to the normal business and non-commercial risks that any operating business in a LDC would be exposed to (Figure 5.1). But apart from normal commercial insurance cover for the risks of damage to its assets and its human resources, MTN has not sought any specific risk mitigation arrangements for non-commercial risk. Its operating experience so far suggests that it did not need to. But that is not to suggest the absence of such risks. As

[144] The latter risk did materialise with GoU suddenly imposing a VAT of 10% in late 2001 on all cellular service charges including prepaid phonecards. The introduction of VAT had an immediate impact on a very price-sensitive market in restricting cellular phone use. After irate representations from the industry, GoU reduced the VAT to 7%. It was clear that GoU had made no soundings and done no homework on the impact the introduction of a VAT levy would have on the user market and on the revenues of the three companies.

indicated in the conclusion of the first section of this chapter, pure political risk in Uganda remains high, especially where uncertainties about leadership succession and future political stability remain. After 16 years of recovery, Uganda's continued development trajectory remains extremely aid-dependent and even temporary disruptions in aid flows would have a severe impact on the economy. Uganda has also been engaged in military conflicts on its borders and beyond throughout most of the 1990s. Its military expenditures remain far too high in relation to its expenditures on health and education and have inflated its fiscal deficit. All of these factors reduce room for sanguinity about non-commercial risks. But, so far at least, MTN has gambled on stability and it has won.

Domestic Resources for Financing FDI and Mitigating Risks for Foreign Investors in LDCs: Finally, what is interesting about this Project is that *local currency domestic resources* (including retained earnings by the company) have funded nearly 50% of the substantial capital costs expended by MTN so far, even though over 90% of those capital costs have been expended in foreign currency on capital imports. That is a remarkably high proportion of domestic resource-based financing for a relatively sophisticated capital-intensive project in one of the most advanced industrial and service sectors – at least as far as technological and market change is concerned. That proportion of domestic currency resource availability raises fundamental questions about the validity of the traditional intuitive assumptions that are made about the lack of availability of domestic capital and financing for privately funded FDI projects in LDCs. The MTN example is an interesting case of a *foreign* investor being able to mobilise *domestic* resources for investment (and risk mitigation) through a '***public-private interaction***' (i.e. the interaction between MTN and Sida arranged via a foreign bank operating in Uganda) in a LDC.

Clearly, the MTN project in Uganda shows that domestic resources are available for productive investment in LDCs. But how far can that example be extrapolated and generalised throughout the LDC universe? To be productively used, such resources have – in this instance – had to be mobilised by a credible foreign investor and credit enhanced by a credible donor. Would a domestic investor have been able to mobilise domestic resources through local financial institutions to the same extent? And would a domestic investor have been able to secure the credit enhancement backing of a foreign aid donor in the same way? Would a domestic investor have been able to undertake this kind of investment in the first place by packaging the requisite management, technological and financial inputs? There is no definitive way of answering those hypothetical questions. Experience across the LDC universe suggests that the answer may be in the negative. But those questions need asking and the reasons need to be better understood if FDI flows to LDCs are to be increased along with domestic investor participation.

ANNEX C

Case Study 3

Guinea: Urban Water Supply & Sanitation

Introduction

The third and final case study concerns not a single investment but two related projects undertaken to improve water supply and sanitation in the urban areas of Guinea between 1989-2002. These projects, culminating in the Third Water Supply and Sanitation Project financed by the World Bank (IDA) in 1997 (supplementary credit in 2002), have been selected because they represent the first attempt to introduce a *public-private partnership* (PPP) in the water supply sector in a LDC in Africa. Many lessons have been learnt from that case – which has attracted a considerable amount of global attention and comment – that are useful for a study such as this.[145]

The Guinea water case study enables a useful comparative perspective across three infrastructure sectors – i.e. gas-electricity, telecommunications and water – that are covered in this Study. Of these, water still poses perhaps the most complex issues, especially where PPPs are concerned. The main issues concern tariffs, regulation and risk, mainly because water is still largely perceived as a non-discretionary *public good* rather than a discretionary *commercial* good; and because water supply is usually a service offered at the lowest sub-sovereign tier of government, i.e. the municipal tier.

In contrast, owing to a technological and market transformation that has occurred in less than 15 years, telecommunications probably represents the other end of the spectrum of complexity and risk (as the MTN Uganda case study illustrated) in involving the private sector for service provision. Telephone services, and cellular services in particular, are no longer seen in most countries as public goods; they have become quintessential consumer goods for private discretionary consumption. Electricity falls somewhere in between the two on the 'public vs. private good' continuum. Those differences have implications for the kinds of public-private interactions and partnerships that can (or should) be organised across these sectors depending on the extent of the investment, operating, management and financial risks and responsibilities that are being transferred from the public to the private sector.

In developing countries, the entry of private sector participation in water and sewerage is as recent as in other infrastructure service sectors with 1990 being the watershed. Before then water and sewerage were seen, almost universally, as the exclusive preserve of the public sector. The potential for gains from full privatisation in the water sector is as great as it is in any other sector. But *water* – being essential to sustaining life –

[145] The Guinea water case was highlighted in the World Development Report on Infrastructure in 1994 (Box 3.4, p. 62).

arouses more emotive and political public reactions to privatisation than telecoms or electricity, especially where the poor are concerned. Because the poor constitute the largest voter base – although they do not necessarily exercise the greatest political power – in most LDC 'democracies', these sensitivities have to be responded to with care by governments.

In most countries water continues to be treated as a public/social commodity rather than an economic one – i.e. a commodity subject to the laws of cost recovery, with surplus margins for future investment in order to ensure the long-term sustainability and viability of supply. There is considerable social and political resistance from the poor to raising water tariffs to 'cost recovery plus' levels. There is even greater resistance from politically influential middle and upper income citizens who have become accustomed to cheap water for far too long. Such resistance does not apply with quite the same intensity in other sectors. Concerned about these political dimensions, governments (especially in LDCs) have hesitated about the extent to which they have involved the private sector. In the water sector, full-scale privatisation (through divestiture) is very rare with fewer than 4% of the total number of public-private interactions resulting in privatisation. Management contracts and leases (which were resorted to in Guinea) are the more common form of private involvement, especially in Africa.

The Economic, Political and Social Background to the Water Projects in Guinea

The Aftermath of Independence: In terms of natural resource endowments, Guinea is potentially one of the richest countries in Africa. Yet in reality, with a per capita income of under $450 in 2000, it is among the poorest. The gap between potential and reality is explained by prolonged economic and political mismanagement since Guinea's unilateral declaration of independence (UDI) from France. In 1958, the Parti Democratique de Guinée (PDG) led by Ahmed Sekou Toure rejected membership of a 'community of former colonies' proposed by President de Gaulle. UDI led to Guinea being cut off from French financial support and shunned by other donor countries over a long period of isolation during which it developed a strong national identity but destroyed its economy. As in Uganda, Guinea's real per capita income growth plummeted during Sekou Toure's 26-year regime.

Political Evolution: Following the path chosen by many countries in Africa, Sekou Toure governed a one-party socialist state as dictator, surviving several coup attempts until his death in 1984 when the military seized power and established the Second Guinea Republic under Lantana Conte. In 1993, and again in 1998, presidential and parliamentary elections were held, both of which were won by the Parti de l'Unite et du Progres (PUP) that Conte led. In November 2001, the presidential term established under the Constitution was increased from five years to seven and the two-term limit was abolished through a constitutional amendment approved by referendum. The referendum enables Conte to stay on as 'president-for-life' should PUP keep winning elections. The probability of that outcome has been increased (at least tempora-

rily) by PUP's predilection for rigging the vote and incarcerating political opponents. Although Guinea has had just two leaders in the 44 years since UDI, it has not been blessed by economic, political or social stability. Its government machinery has become ossified over that long period, unable to change as responsively as its evolving circumstances have demanded although cabinet ministers out of favour have been changed frequently.

Economic Structure & Characteristics: Guinea covers a large area (246,000 sq. km) for a small population (7.4 million in 2001) with four distinct geographic and climatic regions with roughly equal populations. Three of these are each inhabited by a different dominant tribe (the *Soussou* in Coastal Guinea; the *Peulh* in Middle-Guinea; the *Malikes* in the north-eastern *Haute Guinea* savannah) while Southern Guinea is inhabited by a number of smaller tribes (*Toma, Manon, Kissi* and *Guerzes*). The capital, Conakry, is situated in the coastal region. The country has abundant natural resources including 25% of the world's known reserves of bauxite, along with diamonds, gold and other metals. It also has considerable potential for generating hydroelectric power for its neighbouring region.

Guinea's industrial sector accounts for 36% of its GDP (of $3.1 billion in 2000) and is dominated by mining (32% of GDP) with a small incipient manufacturing sector limited to processing basic foods and beverages for its tiny domestic market. Services account for nearly another 40% of output with agriculture accounting for less than 24% of GDP but for 80% of employment. Although Guinea's per capita income is higher than both, it ranks below Tanzania and Uganda on the human development index with a 1999 HDI of 0.397 and a rank of 150th out of 162. No corruption index has yet been published for Guinea, but foreign investors perceive corruption to be high even by developing country standards.

Economic Reforms: The military's assumption of power in 1984 began a slow, hesitant process of decontrol and liberalisation that resulted in reviving growth to an average of 4% between 1985-96. But with a population growth rate of 2.5%, that translated into per capita income growth of a mere 1.5%. Steady economic progress was interrupted in 1995-96 with a military coup that was quelled but obliged the government to agree to a 50% increase in military pay. The fiscal consequences of that measure were debilitating. A new macroeconomic management team was put in place in mid-1996 to correct the situation. It succeeded in restoring macroeconomic balance, fiscal discipline, transparent budgeting and tackling rampant corruption in the public sector.

Growth was restored to an average of 4.7% in 1997-98 while inflation was kept below 3.5%. But in 1999 the bauxite and aluminium industries suffered a sharp decline in demand and prices while civil war broke out in neighbouring Sierra Leone, creating a large influx of refugees. Both events renewed pressure on its fragile budget and cut Guinea's growth rate to 3.7% inducing a further downward revision to 1.8% in 2000. Guinea resorted to an IMF support programme aimed at restoring growth to above 6% by 2004 but the programme is behind schedule in achieving its targets.

Debt Burdens: Like Tanzania and Uganda, Guinea is overburdened by debt. It has received nominal debt relief under HIPC-1 but not yet under HIPC-2. Its debt stock has increased from less than $1.6 billion in 1984 to $2.47 billion in 1990 and $3.52 billion in 2000. Annual debt service increased from $120 million in 1984 to $169 million in 1990, peaking at $178 million in 1995 when some official bilateral debt relief was provided before HIPC-1 came into being. Debt service fell to $114 million in 1996 as a result of 4% of its debt stock being rescheduled and another 1.5% being written down. But it rose again in the following years and averaged $150 million or roughly 4.5% of GDP between 1997-2000. *All of Guinea's growth between 1990-2000 has been exported via debt service*.

In 2000, debt service (4.5% of GDP) was nearly 250% of the growth (1.8%) registered that year. Because of its unattractive debt profile, and despite its considerable natural resource endowments being attractive to FDI, such inflows have remained modest. FDI in Guinea fell from $18 million in 1990 to zero in 1994. It averaged $20 million annually between 1995-98 and tripled in 1999 (to over $63 million) before falling back in 2000 and 2001 to a $30 million average. Meanwhile, aid flows have declined dramatically from around $420 million (or $63 per capita) in 1995 to $153 million (or $21 per capita) in 2000 with some donors being concerned about a deteriorating political climate.

Political Reforms: Hesitant and slow though progress has been since 1984, Guinea appears to be firmly on the path of economic reform. Economic transformation has been mirrored by political liberalisation since 1990 but with notable reversals. From a former one-party state, Guinea has gone to the other extreme. It now has 46 political parties (for a voting population of about 3 million) of which nine are represented in the 114-member National Assembly elected in 1995. The opposition parties have formed a coalition to challenge PUP more effectively – CODEM (Coordination de l'Opposition Democratique) – but it has proven ineffectual. It failed to agree on a unified opposition candidate to Conte in the 1993 elections. But it did better in the 1998 elections that were won by PUP but with a reduced number of seats in the Assembly. Local elections took place in June 2001 with PUP winning 31 of the 38 communes contested although the elections were marred by violence between PUP and opposition parties. As a result, CODEM has threatened a boycott of the legislative elections to have been held in May 2002 but postponed.

Political opposition to the ruling regime (and political risk) is increasing in Guinea. With Conte having been in power for 18 years but with the regime showing signs of stress and not delivering on expectations, popular resistance to PUP since 1996 has been coalescing. One opposition leader, Alpha Conde, emerged as a charismatic alternative in 1998, with his party, the RPG (Rassemblement Populaire de Guinée) capturing 16.5% of the popular vote. His success led to his arrest after the elections on a charge of sedition. Despite an international and domestic furore, Conde was tried and sentenced to five years' imprisonment. He was released at the end of 2001 with a ban being imposed on his continued involvement in political activity. In early 2002 there

were countrywide strikes by teachers demanding higher wages and the school system was shut down for a fortnight until another fiscally unaffordable compromise was struck.

Outlook: Although the insecurity of its borders has diminished considerably with the de-escalation of conflict in neighbouring Sierra Leone and Liberia over the past year, internal political dissonance has increased the level of potential instability and risk that is building up for the future. A regime change is clearly in the offing although that outcome is being resisted and postponed for as long as possible by Conte and PUP by every means at their disposal – fair and foul. Until that change occurs, Guinea will continue to pose increasing political risk for potential foreign investors. The coming years are likely to see increased economic and political instability until the democratic process is allowed to function properly in ensuring orderly succession of leadership in political parties and in government. The role of the military in influencing political choices and outcomes remains a matter of concern. But until the current regime has changed and the one that replaces it has proven to be stable, any bets on Guinea are likely to be risky ones with the odds being against them paying off.

The Urban Water and Sanitation Sectors

Water Resources: Guinea has abundant water resources except in northern areas bordering Mali and Senegal. But their spatial, quality and temporal dimensions pose complexities in water management. Different geographical areas of Guinea have either too much or too little water. The water available is usually in the wrong place at the wrong time and of the wrong quality. The total annual renewable water resources of Guinea are estimated at 450 billion cubic metres (bcm) of which 166 bcm are exploitable. But despite water abundance, these resources require treatment for human consumption and transport to where concentrations of population are located. Thirteen of the 19 river basins in Guinea are shared with 12 other countries in the region.

Governance of Water Resources and Sanitation: The *Code de l'Eau* (Water Law) governs the management of water resources drawn from river basins. It establishes the juridical basis for the allocation and utilisation of water resources, protection of water quality, the operations of water works, protection of water reserves, planning and management of water resources, setting of water tariffs and international water sharing. Water use is affected by other laws as well, especially those concerning the environment, mining, forests and human settlements. The institutional and agency structure under which water resources are managed is unclear. Overall responsibility for water resources resides in the *National Commission on Water* and the *National Council on Water*, both established in 1994 but not as yet properly functional. The government is in the process of developing a national water resource management policy with coordinated local strategies.

Executive responsibility for water affairs lies with the Ministry of Natural Resources and Energy (MRNE) and is delegated to a single directorate – the *Direction Nationale*

de l'Hydraulique (DNH). Under the Water Law, DNH is responsible for establishing and implementing national water policy, managing water resources and water rights, and exercising responsibility for water that is not specifically assigned to other ministries (e.g. mining or agriculture). Rural water supply is the responsibility of the Ministry of Agriculture, which has a special agency, SNAPE (*Service Nationale d'Amenagement des Points d'Eau*), for the planning, development and maintenance of rural water points. *Urban* water supply is the responsibility of two separate corporations: (a) SONEG (*Société Nationale des Eaux de Guinée*); and (b) SEEG (*Société d'Exploitation des Eaux de Guinée*). The arrangement between SONEG and SEEG is a public-private partnership (PPP) as described below.

The responsibility for *sanitation* is even more fragmented and inefficient. The Ministry of Urban Housing is primarily responsible for planning and executing sanitation works and treatment plants. The Ministry of Land Management controls compliance with public health regulations. MRNE is responsible for environmental regulations governing sanitation while the Ministry of Education is responsible for sanitation through its health programmes for children. The Ministry of Public Health & Social Affairs develops sanitation awareness programmes as part of its public health education and regulatory mandate. A separate agency (PADEULAC or *Programme d'Amelioration de l'Environnement Urbain et de l'Assainissement de Conakry*) is responsible for sanitation in Conakry while DATU (*Direction de l'Amenagement du Territoire et de l'Urbanisme*), under the Ministry of Urban Housing, implements (supposedly) actual investments in sewerage networks.

Urban Water Supply: When the project investments covered by this case study began in 1989, only 10 of Guinea's 33 urban centres had piped water with inadequate services. Despite the abundance of water resources, water production for Conakry was less than 40,000 cubic metres per day (cmd) for a population of over one million residents. There were 12,000 connections for the whole country with only 600 (5%) being metered. Conakry had 9,000 connections with the other nine urban areas with piped water having 3,000.

As a result of the PPP created in 1989 (between SONEG and SEEG), eight other urban centres had piped water systems by 1994, bringing the total to eighteen. The number of connections had increased to a total of 30,500 with 95% of these being metered. Water connections in Conakry had increased to 21,000 and water production had increased to 100,000 cmd. Between 1980-95, access to safe water increased from 15% to 55% of the total population. Despite this progress much remained to be done between 1995-2005. The Conakry water supply network still suffered from unacceptably high system losses (47% compared to 15% in well managed systems) and urban standpipes remained a significant financial burden for the government. Although major investments and expansion of the water supply system had been undertaken between 1989-94 along with the introduction of private management of water operations, less than 55% of the urban population had access to *safe* water through home connections or standpipes in 1995.

Sanitation: The situation with urban sanitation was even worse. This sub-sector was disorganised and lacking in financial, institutional and human resources. Less than 9% of the urban population was connected to a sewer network in 1995. The remainder used pit latrines but of poor design and grossly inadequate standards. Conakry's sewer network was dilapidated and in urgent need of rehabilitation. Heavy rainfall frequently flooded the inadequate drainage system with storm water and resulted in sewerage being spilled into the streets. There were no sewage treatment plants and industrial effluent as well as residential waste was discharged directly into the ocean. Pit emptying was carried out manually in unhygienic conditions with human waste being dumped in the ocean or in open areas. These practices led to a high incidence of water and sanitation-related diseases and adverse health effects. Morbidity due to enteric and parasitic diseases is high throughout Guinea with regular outbreaks of cholera and malaria of epidemic proportions.

SONEG and SEEG: SONEG was set up as a fully state-owned water corporation under MRNE to plan, manage and own the water infrastructure investments made in urban centres around the country. It is responsible for raising finance for new investments and taking on the related debt and debt servicing obligations. It is an independent, semi-autonomous agency that can recruit and dismiss staff directly (outside of civil service rules) and set its own compensation levels and structures. It can also negotiate and award contracts for building water pipe networks, treatment plants and related civil works directly. But it is responsible only for water and not for sanitation and sewerage.

Under the terms of their public-private partnership, SONEG leases its assets to SEEG, which is a joint-venture company that is majority-owned (51%) by a French private consortium with 49% being owned by the state. The French private partner charges a management fee to SEEG for its management inputs and operating expertise. SEEG operates urban water supply services and maintains the infrastructure throughout urban Guinea at its own commercial risk, but does not take the ownership or financial risks associated with any of the water infrastructure assets. It leases them from SONEG under a ten-year renewable PPP arrangement. SONEG's only source of revenue is the lease fees it receives from SEEG, whereas SEEG's revenues are derived from water tariffs and connection charges from residential, commercial and industrial consumers.

The Guinea Water Projects: Objectives & Content and Project Performance

Project Objectives & Content: In both 1989 and 1997 when the two major water projects were undertaken and financed by IDA, their principal (rolling) objectives and content were to:

- Rehabilitate the deteriorating infrastructure of existing urban water supply systems (1989 and 1997)
- Expand urban water supply connections as rapidly as possible (1989 and 1997)
- Improve and expand sewerage infrastructure and connections (1997)

- Contract out to the private sector (supported by proper training and support) the operation and management of Conakry's sewerage system by end 1998 (1997)
- Construct a sewage treatment facility and rehabilitate a waste stabilisation pond for sludge and sewage treatment (1997)
- Prepare a national water resources management plan and groundwater studies to guide future investments in the sector (1997)
- Establish piped water connections in all 33 urban centres by 2005 (1997)
- Increase access to safe water rapidly in Conakry to meet 100% of urban household demand by 2005 by constructing two additional storage reservoirs (1997)
- Maximise the supply of water from existing sources and water systems (1989 and 1997)
- Minimise leakage and losses from the water network (1989 and 1997)
- Manage water demand more effectively through an economic tariff structure and metered consumption (1989 and 1997)
- Maximise the efficiency of SEEG's water supply operations (1997)
- Cross subsidise social connections for the poor (1989 and 1997)
- Calibrate new investments to those that are essential and viable and defer other investments until they are financially and economically viable (1989)
- Strengthen the planning and management capabilities of SONEG (1989)
- Rehabilitate and support SONEG's technical, commercial and financial operations through a PPP lease contract with a private water management company – SEEG (1989)
- Strengthen SONEG institutionally and financially (1997)

Project Financing: The Guinea water projects were financed by sovereign borrowing. They were undertaken in 1989 and 1997 respectively with a supplementary IDA credit being made in 2002 to complete the second project. They were estimated to cost a total of $150 million to which IDA contributed a total of $70 million. Under standard on-lending arrangements, about $40 million of this amount has been relent by the Government to SONEG on IBRD terms (20 years maturity, 5 years grace at an interest rate of 7%) while $8.4 million has been provided to SONEG by the Government in the form of equity. SONEG bears the foreign exchange risks on these loans. Interest during construction was to be capitalised and repaid over the life of the subsidiary loan (i.e. over 20 years) while counterpart funding would be provided by SONEG from internal resources.

Project Performance and Achievements: The achievements of the two projects as reported by the World Bank are summarised below:

- Access to safe water in urban areas has increased from 38% in 1989 to 55% in 1995 and an estimated 70% in 2001
- SONEG's capacity for financial management, tariff-setting and reporting has improved. It has emerged as a sound, commercially autonomous and financially viable institution
- SEEG's involvement has expanded and improved water supply service in 18 urban areas through improved billing and collection performance
- Revenues collected by the urban water supply sector have increased from $2 million in 1990 to over $14 million in 1995 and $18 million in 2000. The objective of achieving full cost recovery was met
- A declining scale of subsidies that was designed in 1989 to ease the pain of too large a tariff shock to consumers in one go was phased out in 1995

- The volume of water that was billed grew from 4 million cubic metres to 14 million cubic metres between 1990-95
- Government water consumption and waste was reduced from 7.5 million cubic metres in 1989 to 5.4 million cubic metres in 1993 as a result of better metering and billing
- The expansion rate (pipe networks and connections) of the water system in urban areas has been boosted by large pipeline and treatment plant investments made by SONEG in 1992-93 (under the 1989 Project) being completed and put into operation by 1994
- SONEG's investments in fixed assets increased from GNF 13.8 billion in 1989 to over GNF 126 billion by 1995 and (a projected) GNF 260 billion by 2002
- SONEG's revenues have increased from GNF 0.62 billion in 1990 to over GNF 6 billion in 1995 and a projected GNF 17.5 billion in 2002
- There has been a discernible decrease in construction contract costs and delays after contracts have been signed
- Water tariffs have been increased as agreed under the projects with private consumer tariffs increasing from 15 US cents per cubic metre (pcm) in 1989 to 88 US cents pcm in 1997 and further to nearly $1.00 in 2000
- Consequently, SEEG's revenues from water sales increased from GNF 1.2 billion in 1989 to GNF 7.5 billion in 1995 and GNF 13.8 billion in 2002
- As a result of increases in tariffs, billings and external financing, the urban water sector's cash reserves increased from a substantial deficit in 1989 to GNF 6 billion in 1995

Project Failures: The main failings experienced since 1989 have been that:

- Government interference in awarding contracts resulted in procurement delays; contracts that were to have been signed in 1990 were not awarded until 1992-93
- The PPP lease that governs the operations of SEEG and the protection of its foreign currency income was instrumental in overall improvements in urban water supply service and access. But SEEG had not significantly improved the *efficiency* of the water supply network after more than five years of private management by 1995. It came under pressure in the 1997 project to improve its performance, which it is doing very slowly
- SEEG's operational performance might have been different if the PPP lease had contained performance-based incentives and penalties for non-performance
- Water losses from the system are still about 47% of total clean water produced and supplied
- Delays by SEEG in transferring SONEG's share of its fixed cost tariff affected SONEG's capacity to provide for bad debts and cover its expanded depreciation set-asides
- SONEG's financial results would have been better had SEEG made the annual tariff increases effective at the beginning of each year and improved its customer relations
- SEEG's foreign management fees increased from GNF 87 million per month in 1989 to GNF 202 million per month in 1994
- SEEG's salary expenses remained too high, increasing from GNF 342 million to GNF 2.1 billion in 1995 because the company was slow in training local managers and transferring management responsibilities from French managers to Guinean nationals
- SEEG's costs for maintenance, equipment and French partner-related costs were high. Its efficiency factor of 50% was low compared to an industry standard of 80%. This suggested that the French partner may have transferred some of its returns through higher costs (above-the-line) rather than through profit dividends (below-the-line)
- Provisions for bad debts were a surprisingly high 18% of water revenues. They were meant to cover Government payment arrears and late payments from private customers

- The original equity investment by the French private partner in SEEG was very low and the PPP was not a vehicle for attracting FDI to any significant extent
- The original equity of SEEG was GNF 1.3 billion in 1989 (about $2 million at 1989 exchange rates) of which the French partner contributed 51%
- SEEG's net worth increased to about $3.5 million at the end of 1994 entirely through internal accruals and retained earnings with net worth at the end of 2002 being projected at $13 million, accumulating through retained earnings
- While these accruals show sound performance they also suggest disproportionate returns accruing to the foreign private investor in SEEG for a small notional investment

Water Tariff Structure: The average urban water tariff in Guinea is made up of the:

- *Tarif exploitant*, which was intended to cover SEEG's operating expenses, both foreign and local. The foreign currency element of this tariff was funded by a donor subsidy on a sliding scale from 100% in 1990-93, to 80% in 1994 and 60% in 1995 and then being phased out thereafter in order to smooth out the burden on water consumers. But that was ended in 1995 resulting in an increase in the *tarif exploitant* from GNF 425 pcm to GNF 550 pcm in September of that year. The local currency part of the tariff covers SEEG's local expenses. Both elements of this tariff have provisions that permit them to be modified with changes in economic circumstances (e.g. in the event of a devaluation). Under the financial projections made for the projects, this part of the tariff was expected to peak at GNF 510 in 1996 and decline thereafter to GNF 410 over the next four years of the lease.
- *Redevance*, which is designed to cover SONEG's operating costs, investment expenses and debt service costs. This part of the tariff is supposed to be collected by SEEG on behalf of SONEG and transferred to SONEG immediately. The *redevance* was GNF 420 pcm in 1995. It was to be maintained at a level (GNF 520-560 in 1995 equivalent terms) that would be sufficient for SONEG to finance its investment plans and meet its debt service obligations in full.

A 'social discount' is applied to the tariff charged to the poorest. In 1995 the discount was about 22.75% resulting in the tariff being paid by such consumers as GNF 680 instead of the average retail tariff of GNF 880. Also, whereas the actual cost of a connection is GNF 300,000 ($300) the actual charge levied for the connection is GNF 60,000.

In 1995 the composition of the tariff was balanced almost 50:50 between these two elements. But financial projections for the projects indicated that over time the *redevance* proportion would be expected to increase with the *tarif exploitant* element declining in relative terms.

Project Benefits: The key project benefits were expected to include:

- Expanded access to clean water and sanitation for an increasing part of the urban population reaching 100% coverage in Conakry by 2005 and in the 32 other urban centres by 2010
- Improved urban health and reduce the incidence of water and sanitation-related diseases by a substantial margin by 2005 and 2010
- Improved viability and sustainability of infrastructure investments in water and sanitation
- Improved management, efficiency and productivity of water assets
- Removal of the unavailability of water as an obstacle to industrialisation and development
- Establishing cost-recovery principles in the water sector and in other infrastructure sectors

- Improve the productivity of the poor, especially of women and children, by reducing the time spent collecting water at standpipes and transporting it manually to their dwellings
- A major impact on poverty alleviation, i.e. by improving health, hygiene and increasing the capacity for economic activity on the part of the poorest

These benefits notwithstanding, the economic rate of return calculated by the World Bank for the two projects was estimated at around 13%. That rate is exceptionally low and makes the project a marginal investment. Part of the reason for such a low rate is that the specific health and poverty alleviation benefits of the project (and especially its sanitation aspects) could not be calculated in quantitative terms and were treated as externalities. The only benefits calculated were those that would occur from the incremental quantity of water supplied.

Environmental & Social Sustainability Dimensions

The ESS dimensions of the related water and sanitation projects are expected to be benign and beneficial. Since the project investments are aimed mainly at the maintenance, rehabilitation and expansion of the existing water supply networks in urban centres, no major negative environmental implications were foreseen. Detailed environmental impact assessments (EIAs) were undertaken by the World Bank for both water and sanitation projects. The government also prepared a National Environment Action Plan focusing on natural resource management. The projects would result in significant environmental and social benefits by rectifying the presently unacceptable arrangements and standards for sewerage, sanitation and human waste disposal in Conakry and other urban centres. They were also expected to have a significant positive impact on poverty alleviation.

The physical construction works that were undertaken under the projects did not require any resettlement or have any negative environmental effects apart from transient disruptions in traffic and some temporary noise pollution. Associated with these two projects are other IDA financed projects aimed specifically at improving the urban environment in Guinea. These projects augment the provisions made under the two water and sanitation projects for waste management and drainage.

Under the projects, specific provisions were made for: reinstatement of all surfaces with improved standards after pipe-laying; sites for pipe-fittings to ensure unobtrusive locations for any chambers whose covers would be flush with road surfaces; and exposed pipes being protected from corrosion. To minimise transient disruptions, SONEG and DATU undertook to: limit the amount of trench kept open at any time; limit pipe stringing operations by contractors; provide financial incentives for prompt trench refilling; restrict dumping of trench soil to cause inconvenience or hazard; and to provide for safe trench crossings by vehicles and pedestrians. Special arrangements were also made for continuous monitoring under the supervision of a specialised consultant (by the University of Conakry's environment studies department) to minimise negative effects from the poor maintenance of lagoons or a breakdown of wastewater management systems.

Projects Risks and their Mitigation

The private partners in SEEG took very few risks except the normal commercial risks that any qualified operator would be expected to take under a PPP lease arrangement. They took no financial or political risk of any significance and their investment was too small to require any form of risk coverage. Their returns were assured from profits, dividends, capital appreciation (of the value of their 51% stake in SEEG) as well from above-the-line take-outs such as management fees and charges levied by the foreign partner on SEEG. Their currency risks were covered under specific arrangements for the repatriation of the foreign portion of the *tarif exploitant*. The risks that were taken were borne by the government and (indirectly) by IDA. These involved:

- Unwillingness on the part of government to approve higher water tariffs in urban areas.
- Lower than expected water consumption due to economic conditions, high tariffs and low demand for water connections that would result in making the substantial investment costs financially and economically unviable.
- The unwillingness of consumers and poor communities to pay cost recovery charges for water and sanitation services which would also impair the projects' financial viability.
- Non-performance by the private partner in SEEG to which no significant penalties were attached and insignificant losses would accrue to the partner if it defaulted.
- Uncontrolled expansion of inadequate water operations in secondary urban centres that might jeopardise the financial viability of the sector and of SONEG.

These risks were mitigated through the following measures:

(a) Making tariff increases a condition of effectiveness and disbursement of IDA credit proceeds
(b) Introducing a social element in the programme to accommodate the poorest consumers at a discounted cost
(c) Piggy-backing the project on other projects being financed bilaterally (by France and Japan) to provide water connections to low-income households at heavily subsidised costs
(d) Undertaking 'beneficiary assessments' and using town mayors, NGOs and community leaders as a public information dissemination channel to extol the benefits of having connections for clean water and sanitation
(e) A primary survey of the demand for water in urban areas across different income groups and assessing their willingness to pay both connection charges and monthly tariffs
(f) An undertaking by SONEG that it would not make any new investment costing more than $5 million unless it could satisfy the World Bank in detail that such an investment was financially, economically, technically, environmentally and socially viable and sustainable

Lessons Learnt from the Guinea PPP Water Lease

Despite the substantial gains made under the PPP lease agreed between SONEG and SEEG, pioneered in the 1989 project and strengthened by the 1997 project (with the lease being renewed for another ten-year period in 1999), several problems and lessons have emerged from that first experiment with PPPs in the water sector in Africa that

were worth noting.[146] The project-specific lessons that emerge from this case study are adumbrated below:

- The water supply system in the urban centres of Guinea, and particularly in Conakry, did not improve and expand as rapidly, or in the manner anticipated, when the PPP lease was first designed. Water losses remain at a very high 47% of system production. New connections to the system were added at a slower pace than expected, though the lease did not specify annual or overall performance targets (unlike the MTN license in Uganda and the PPA for Songo-Songo in Tanzania).
- Despite the 49% state shareholding in SEEG, the relationship between SONEG and SEEG has not been as smooth as it should have been; a factor that was not anticipated nor provided for in the PPP lease. This diminished the efficacy of SONEG's monitoring and regulation of SEEG's operations and resulted in system losses being larger and system efficiency being lower than they should have been.
- Both SONEG and SEEG in their own respective domains had the capacity to influence the rate of new connections and reduce water losses. But each blamed the other for the absence of sufficient progress. SONEG attributed the slow pace of connections to SEEG's reluctance to make new connections from existing extensions to the pipe network. SEEG argued that the demand for new connections was in areas where SONEG had not yet laid a pipe network.
- SONEG clearly defaulted in reducing water losses by effectuating rehabilitation work on dilapidated pipes much too slowly. But SEEG compounded the problem because its low production costs did not give it a sufficient incentive to stem water leakage through better maintenance operations.
- Whereas tariff increases were approved more quickly by government than had been expected (thus removing tariff risk), SEEG's commercial losses started rising as tariff increases led to more defaults on bills and stronger incentives for illegal water connections.
- In 1996 nearly 56% of SEEG's bills went unpaid or were delayed. Government departments also did not pay their bills promptly as they had not budgeted for the tariff increases imposed, especially in the 1989-95 period. In 1989 bills to government accounted for 50% of all water revenues. By 1996 the government's share had dropped to 30% but it was still heavily in arrears to SEEG. As a consequence, SEEG did not pass on the *redevance* part of the tariff to SONEG as it was supposed to thus triggering 'mutual damage'.
- Eventually this problem was resolved in 1996 among government, SEEG and SONEG by mutual settlement of cross debts. IDA made it a condition of the 1997 credit that arrears owed to each other by government, SEEG and SONEG should be cleared before the credit could be made effective.
- Improved coordination between SEEG and SONEG did not resolve concerns about reducing water losses and increasing the rate of new connections. These issues were found to remain problematic because commercial risks are shared by SEEG and SONEG while financial risks are borne by SONEG and government.
- SONEG controls SEEG's revenues and profitability by controlling the pace at which the existing network is rehabilitated and of new investments that expand the network. The problem is aggravated by the absence of a clear dividing line between SEEG's role as a lessee and 'operator' of the urban water system and its role as a service contractor to SONEG

[146] This part of the case study relies extensively on the findings of Brooke Cowen, 1999.

for maintenance, rehabilitation and extension, which are performed by SEEG for SONEG on a cost-plus basis.

- PPP Lease Contracts require a high level of administrative capacity to design and monitor along with the political and commercial will on the part of both 'partners' to stick to their letter and spirit. Contrary to popular perception they are not easier to manage than concessions. For PPP Leases to work they need a clear division between the 'public partner' as asset owner and investor and the 'private partner' as the lessee-operator without other sub-contracting arrangements impinging on these roles and blurring distinctions between them.
- The Guinea case indicates clearly that the government had limited success in bringing clear commercial incentives to influence the behaviour of the private operator despite its shareholding of 49% in SEEG and despite the provisions of the PPP lease agreement between SONEG and SEEG. SONEG's impaired capacity to regulate SEEG properly has resulted in its inability to judge whether SEEG's periodic requests for tariff adjustments are warranted and justified.
- To the extent that SONEG passively approves all of SEEG's tariff adjustment requests, SEEG takes virtually no commercial risks and passes the entire risk burden on to the consumer. When arrears materialise it passes that risk back on to SONEG through indirect financial transactions.
- Water tariffs in Guinea are now among the highest in the world. Yet SEEG is using the tariff adjustment mechanism to pass on a large proportion of the commercial risk that it should be bearing to SONEG and government. Thus better tariff scrutiny and tougher regulation of water tariffs may be in order to protect both consumer and government interests.
- Another implication of weak monitoring by SONEG of SEEG's operations and sources of cash flow is its inability to segregate clearly SEEG's role as sub-contractor with its role as operator. Weak monitoring and information systems would make it difficult for SONEG to detect financial transfers between activities undertaken in SEEG's operating role (i.e. subject to commercial risk) and those undertaken in its sub-contracting role (which are cost-plus and shielded from commercial risk). Undetected transfers between these two distinct activities could result in SEEG's operating activities being subsidised by charges to SONEG for its sub-contracting activities.
- These difficulties notwithstanding it would be wrong to conclude that the PPP lease was a failure. It was not. It resulted in major improvements in many areas. But the lease agreement could have been made 'less imperfect'.
- One of the main lessons that emerge from Guinea is that LDCs are prone to being taken advantage of by the private sector if they insulate private partner-operators from too many risks through leases and limited-involvement arrangements. They should instead expose the private sector to as much risk as the private sector is willing to bear as quickly as possible and let the foreign investor rely on other risk mitigating devices. Government should not bear all the risks while the private operator takes all the profits. The more risks that are passed on to private investors the more incentive they have to perform at 'best practice' levels.
- Socialisation of costs and privatisation of profits is a poor principle to apply simply to avoid immediate privatisation of key infrastructure assets in certain politically sensitive sectors. The risk sharing implied by the long, slow route toward privatisation that Guinea took has proved difficult to implement as planned. Consequently, gains to consumers

have been lower and costs to government have been higher than planned under the PPP lease arrangement.

- One way of avoiding the monitoring and 'imperfect information' problem that SONEG experienced with SEEG is to contract out the monitoring function to private accounting and auditing firms unrelated to the private investor in the operating company. This may be essential if undisclosed financial transfers between operating and sub-contracting activities are to be detected or deterred and to minimise the possibility of 'gold-plating' sub-contracting costs and charges.
- Guinea does not appear to have used the first ten years of the PPP lease contract well in building up high-quality regulatory capacity and improving on the terms of the lease, possibly moving it toward a concession requiring the private sector to take on more of the responsibility or investment and more of the financial risk. After ten years of relatively profitable operations in Guinea, SEEG should be able to take those responsibilities and risks.

Apart from these project-specific lessons, some broader lessons also emerge for PPPs in the water sector in other developing countries. These include, for example:

- In LDCs with limited administrative capacity, simplifying PPP arrangements can do much to simplify monitoring, regulation and reducing uncertainty. If such arrangements are to improve the performance of the private operator, then a combination of incentives and independent monitoring is essential. Two requirements are indispensable: (a) clear and indisputable quantitative performance indicators and targets (both overall and annual) as well as (b) an agency with the independence, credibility, financial and human resources, experience and integrity to perform the monitoring and regulating role.
- Performance indicators (such as quantitative reductions in water losses or improvements in efficiency) on which incentives are structured should be based on unambiguous definitions of 'losses' and 'efficiency'. These indicators should be entirely (and not just partially) within the control of the private operator.
- Success in motivating private operators depends heavily on government ministries and agencies paying their own bills promptly and being prepared to cope with disconnection of services if they do not. They should not expect, nor obtain, favoured treatment.
- Because water supply and sanitation systems remain natural monopolies (in ways that electricity and telecommunications no longer are), competition is difficult to achieve in distribution and collection and cannot be used as a counterbalance to regulation. Because water is essential to life it has also to be provided to the poorest segments of the population, often at subsidised cost although in many LDCs, existing systems for allocating scarce water resources are incompatible with efficient or equitable use of these resources.
- Water and sanitation are best suited to management and delivery at the local rather than provincial or national levels. With municipal jurisdictions governing these services, complex inter-jurisdictional issues and responsibilities need to be resolved before private operators can be brought in at a level of risk they are willing to take.
- Because so much of the water and sanitation infrastructure is buried underground, obtaining an accurate and comprehensive picture of the state of the infrastructure is costly and increases the pre-investment expenditure that needs to be made before private investor entry into the sector can be assured.
- Because water and sanitation have large externality effects on public health and the environment, a powerful regulatory role has to be played even after private sector involvement has reached the stage of full privatisation.

These and other broader lessons for private participation in the water and sanitation sectors over a broad range of PPP options and arrangements are encapsulated in the three figures shown below.

Characteristics of Competition in Specific Aspects of Water Supply & Sanitation

Activity	Characteristics of Competition
Allocation of Water Resources	Natural Monopoly in each Hydro-geographical Unit
Regulation of Water Use	Natural Monopoly
Construction of Water Provision Capacity	Competitive depending on access to base water resource
Bulk Supply Generation	Monopoly/Restricted Oligopoly (Maximum 2-3 suppliers)
Water Treatment	Local Area Monopoly
Local Distribution of Water and Local Sewerage Network	Local Area Monopoly
Sewage Treatment	Local Area Monopoly
Equipment & Water Appliance Sales	High degree of Competition with low consumer risk
Plumbing Services for Customers	High degree of Competition but high consumer risk

Source: Brooke Cowen, 1999

Options for PPPs in the Water Sector with Allocation of Risk and Responsibility

PPP Option or Type of Contract	Asset Ownership	Operations & Maintenance	Capital Investment	Commercial Rick	Duration of Contract
Service	Public	Public & Private	Public	Public	1-2 years
Management	Public	Private	Public	Public	3-5 years
Lease	Public	Private	Public	Shared	8-15 years
Build-Operate-Transfer	Private	Private	Private	Private	20-30 years
Concession	Public	Private	Private	Private	20-30 years
Privatisation	Private	Private	Private	Private	Indefinite

Prerequisites for Various PPP Options to be Successful in Water & Sanitation

PPP Option or of Contract	Stakeholder Support/ Political Commitment Needed	Cost-Recovery *Tariffs*	Quality of Information Needed	Regulatory Capacity Require-ments	Country Credit *Rating*	Potential Benefits of Option
Service	Unimportant	Unnecessary Short-term	Limited	Minimal	Immaterial	Low
Management	Low-to-Moderate	Preferred	Sufficient	Moderate	Immaterial	Moderate
Lease	Moderate to High	Necessary	Good	Strong	Immaterial	Moderate +
BOT	Moderate to High	Preferred	Good	Strong	Good	High
Concession	High	Necessary	Very Good	Strong	Good	Higher
Privatisation	Very High	Necessary	Very Good	Strong	Good	Very High

ANNEX 1

Lists of Least Developed Countries and 'Poor' Countries

LDCs (UN Definition)	Plus Other Poor Countries (World Bank Definition)
Africa:	**Africa:**
Angola	Cameroon
Benin	Congo, Republic of
Burkina Faso	Cote d'Ivoire
Burundi	Ghana
Cape Verde	Kenya
C.A. Republic	Nigeria
Chad	Zimbabwe
Comoros	
Congo Democratic Republic of	**Eastern Europe**
Djibouti	Albania
Equatorial Guinea*	Armenia
Eritrea	Georgia
Ethiopia	Moldova
Gambia	
Guinea	**Central Asia**
Guinea-Bissau	Kyrgyz Republic
Lesotho	Mongolia
Liberia	
Madagascar	
Malawi	
Mali	
Mauritania	
Mozambique	
Niger	
Rwanda	
Sao Tome and Principe	
Senegal	
Sierra Leone	
Somalia	
Sudan	
Tanzania U.R.	
Togo	
Uganda	
Zambia	
East Asia:	**East Asia:**
Cambodia	Vietnam
Laos People's Democratic Republic	
Myanmar	
Pacific:	
Kiribati	
Solomon Islands	
Tuvalu	
Vanuatu	
South Asia:	**South Asia:**
Afghanistan	Pakistan
Bangladesh	
Bhutan	
Maldives	
Nepal	
Latin America Caribbean	**Latin America Caribbean**
Haiti	Bolivia
Mid-East:	Guyana
Yemen Republic of	Honduras
	Nicaragua

** Not included in the WB List*

ANNEX 2

Persons Met

Sweden

Mikael Söderbäck, Chief Policy Coordinator, Sida
Jan Engström, Senior Advisor, Sida
Gunnar Philgren, Special Adviser, Ministry for Foreign Affairs
Bo Jerlström, Ambassador, Ministry for Foreign Affairs
Katarina Eriksson, Senior Financial Analyst, Tetra Laval International
Ulla Holm, Director, Tetra Laval International
Bo Leander, Senior Vice President, SEK, Swedish Export Credit Corporation
Eva Cassel, Director, The Swedish Export Credits Guarantee Board
Catharina Ringborg, President, Swedish Water Development
Nils Lindstedt, Vice President, SKANSKA
Lars Holmberg, Senior Vice President, ABB Structured Finance
Marie Sjödin Enström, Manager, SCANIA
Christoffer Ljungner, Senior Vice President, SCANIA

Denmark

Svend Riskjær, Director, The Industrialisation Fund for Developing Countries
Anders Paludan-Müller, Senior Consultant, Ministry of Foreign Affairs
Lene Mollerup, Senior Assistant, Ministry of Foreign Affairs

USA

Michel Wormser, Director, Project Finance and Guarantees, The World Bank
Anita Marangoly George, Principal Investment Officer, IFC
Jenifer Wishart, Infrastructure Department, IFC
Guy P. Pfeffermann, Chief Economist of the Corporation & Director, Economics Department, IFC
Joseph Battat, Manager, FIAS, The World Bank and IFC
William P. Underwood, Executive Director, United Nations Association
Barbara Samuels, President, Samuels Associates
Bernardo Frydman, Deputy Manager, Inter-American Development Bank
Kenroy A. Dowers, Financial Specialist, Inter-American Development Bank
Michael Jansa, Director, Emerging Markets Partnership
Tunde Onitiri, Assistant Director, Emerging Markets Partnership
Magathe Ibrahim Sagna, Investment Officer, Emerging Markets Partnership
Peter M. Jones, Manager, MIGA, Multilateral Investment Guarantee Agency
Gerald T. West, Director, MIGA, Multilateral Investment Guarantee Agency
Apurva Sanghi, Program Officer, PPIAF, The World Bank

Russell Muir, Program Manager, PPIAF, The World Bank
Barry Herman, Chief, United Nations
Krishnan Sharma, International Economist, United Nations
Sirkka Korpela, Director, UNDP

Tanzania

S. M. Ali Abbas, Economist, Ministry of Finance
Benson Ateng, Senior Economist, The World Bank
Charles Groom, Country Manager, CDC Capital Partners
Eva Hagwall, Private Sector Development Advisor, Sida, Embassy of Sweden
Ralph Kårhammar, Regional Infrastructure Advisor, Sida, Embassy of Sweden
Baruany Elijah A. T. Luhanga, Managing Director, Tanzania Electric Supply Company Ltd.
Bashir J. Mrindoko, Commissioner, Ministry of Energy and Minerals
Salvator J. Ntomola, Director, Investment Facilitation, Tanzania Investment Centre
Mwara Shoo, Senior Petroleum Geologist, Ministry of Energy and Minerals
Vedasto C. R. Rwechungura, Programme Officer, The World Bank
Sten Rylander, Ambassador, Embassy of Sweden
Al Warrington, Project Manager, AES Corporation/Songas

Uganda

Hans Andersson, Ambassador, Embassy of Sweden
Michael Atingi-Ego, Director, Research Department, Bank of Uganda
Mike Blackburn, Chief Financial Officer, MTN Uganda
Robert Blake, Country Programme Manager, The World Bank
Per Dans, First Secretary, Sida, Embassy of Sweden
John Downer, Chairman, UDB Restructuring and Management Team, Uganda Development Bank
Japheth B. Katto, Chief Executive Officer, Capital Markets Authority
Ben Lewis, Corporate Director, Barclays
Charles Ofori, Executive Director, Standard Chartered Bank Uganda Ltd.
James Aaron Olumbe, Treasurer, MTN Uganda
Andrew N. O. Owiny, Executive Director, mbea, Brokerage Services (Uganda) Limited
Inga Rudadiri-Nyangabyaki, Manager, Finance & Administration, mbea, Brokerage Services (Uganda) Limited

ANNEX 3

Public-Private Patterns of Risk Sharing in FDI Projects and PPPs in LDCs

Providers of Risk Mitigation and Bearers of Risks

Types of Key Risks	Foreign Private Partner	Domestic Public/Pvt. Partner	Host Government		Creditors		Home/DonorGovt.			Multilateral Agency		Private Insurance Company
			Sovereign	Sub-Sovereign	Domestic	Foreign	Inv. Fund	Aid Agency	OBI	Guarantee	Loan/Credit	
Financial Risk												
Capital Adequacy Risk	●	●			●	●	●					
Dept Service Risk	●	●			●	●						
Credit/Enhancement Risk	●	●			●	●		●				
Liquidity Risk	●	●			●	●						
Interest Rate Risk	●	●	●		●	●	●					
Currency Risk	●	●	●	●	●	●	●		●	●		
Operational Risk												
Strategy/Market Risk	●	●			●	●	●					
Management Systems Risk	●	●										●
Technology Risk	●											●
Fraud Risk	●	●			●	●	●					●
Business Disruption Risk	●	●					●					●
Business Risk												
Legal Risk	●	●					●					
Documentation Risk	●	●			●	●	●					
Policy Risk	●	●			●	●	●				●	●
Regulatory Risk	●	●	●	●			●	●		●	●	
Infrastructure Service Risk	●	●										●
Environment Risk	●	●	●	●			●	●				●
Non-Commercial Risk												
Political Risk (CEND)		●			●	●	●	●	●	●	●	●
Breach of Contract Risk			●	●					●	●		●
Sovereign Credit Risk						●	●	●			●	●
War & Conflict Risk		●	●	●	●		●	●	●	●	●	●
Catastrophic Event Risk			●	●	●			●				●
Financial Crisis Risk	●	●	●	●	●	●	●	●	●		●	
Global Event Risk	●	●	●	●	●	●	●	●				

ANNEX 4

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- Key functions for the MDBs as a system in a globalized world
- The need for new products and differentiated pricing
- Division of labour in the international system
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