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Confronting Global Poverty: The Role of Institutions, Expanding Opportunities and Market Liberalization

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Executive Summary

NGOs, governments, bilateral agencies and international organisations now place poverty reduction at the heart of their development strategies. There is, however, a more limited consensus on how this goal can be achieved. This report takes an evidence-based approach to the determinants of growth and poverty reduction and uses this to develop an agenda for confronting global poverty.

We emphasize three themes.

The first theme is the need to *build institutions* to promote growth and development. Institutions are the humanly devised constraints (or the 'rules of the game') that shape human action. We discuss the evidence relating to the importance of secure property rights and political institutions that promote good governance and accountability.

Our second theme is *expanding opportunity*. We emphasise the importance of improving the ability of the poor to accumulate both physical capital (through better financial markets) and human capital (through better education systems).

Our third theme is *market liberalization*. Here, we underline the need to (selectively) deregulate labour and product markets to create a more fexible and dynamic economy. This is particularly important in encouraging outward orientation.

Throughout, we stress the complementary of these themes and reinforcing nature of the policies that they suggest. We also discuss the evidence on how these themes relate to poverty reduction.

Data limitations mean that evidence on the determinants of growth in average incomes is more prevalent than direct evidence on determinants of the incomes of the poor. However, there is a considerable body of evidence across the world and from work on Indian states of India, that growth and poverty reduction go hand-in-hand. Historical periods of poverty reduction are overwhelmingly associated with periods of growth with changes in inequality being of less (quantitative) importance for poverty reduction.

We also discuss evidence from micro-economic studies, especially those that link policy to growth and poverty reduction. Many recent studies rise to the challenges of performing convincing empirical tests of policy by randomizing interventions with appropriately chosen treatment and control groups. Detailed micro-studies also allow for an understanding of how the impact of policy reforms can depend on the institutional environment in which reforms are undertaken. This is particularly important where reforms need to be sustained over a long period of time. Throughtout, we emphasise the complementarity between findings from microeconomic evidence with that generated by cross-country macroeconomic studies.

While the themes that we develop are general in scope, the approach taken here also stresses the need for country-based strategies. We illustrate this by looking in detail at the case of India, where a large body of micro- and macro-evidence is available. A similar evidence base is also being built up in other developing countries and this should play an important role in informing policy going forward. We emphasise the role played by country-specific policy evaluations in developing policy strategies tailored to the needs of specific countries..

Poverty and growth around the world and in India

The stock of high quality observations on poverty, derived from household surveys, has greatly expanded over the past decade. It is now possible to chart the broad progress of global poverty reduction from around 1987 to 2001, and to explore its determinants. World Bank estimates show that the number of people living below $1.03 (in 1993 PPP terms) per day has fallen from roughly 28% of the world's population in 1990 to 21% in 2001. However, the number of people living below this poverty line has fallen from 1.12 billion to 1 billion over the same time period. This raises serious doubts about the possibility of achieving the Millennium Development Goal on poverty, namely to halve the number in poverty between 1990 and 2015. However, behind this slow progress in the world as a whole there lies significant regional variation. The East Asia region has experienced remarkable success, reducing the number in poverty by 42% in the same period. By contrast, over the same period the Sub-Saharan Africa region has seen 66 million people enter poverty on net.

We use cross-country time series data to explain some of the reasons for this variation in performance. Growth in average income is, unsurprisingly, strongly associated with reductions in poverty. Indeed, except under radical changes to the shape of the income distribution, an increase in per-capita income must necessarily feed into a mixture of poverty reduction and increased inequality. Using cross-country time series data we observe far more of the former than the latter throughout the period for which data are available. These findings are confirmed in a similar study based on data from Indian states, using the years 1958-2000. India is almost unique in having a track record of comparable household surveys for estimating poverty and inequality over such a long time span. The overwhelming share of poverty reduction in this period has been due to growth in average incomes. The picture from inequality changes is less clear-cut.

While scope remains to use redistribution to help the poor, the practical means for doing so via conventional tax and redistribution schemes are quite limited in many developing countries. Far more realistic are schemes that allow the poor equal access to policy benefits, production opportunities and markets.

Institutions

The role of institutions in promoting economic development is now widely accepted. However, the challenge for policy makers is to flesh out the details of this broad brush claim. The institutional approach shifts the focus away from discussions about specific policies and is thus more easily squared with the notion that there is a wide variety of approaches that can be used to achieve successful growth and poverty reduction. Further, an approach built around institutional reform puts more weight on policy implementation, rather than just policy choice. Microeconomic evidence can be especially useful here.

We look at the importance of institutions as they affect the property rights that are enjoyed by the poor. The importance of strong property rights is well established in economic theory, with proposed benefits including improved investment incentives, better access to credit and reductions in the deadweight loss of informal protection systems. But evidence on these mechanisms has emerged only recently. Influential macro-evidence argues that the strong correlation between property rights and development can be interpreted causally. In some cases, colonial settlement patterns determined the property rights institutions that were created, and subsequent economic development.

Microeconomic evidence on property rights points to some of the mechanisms via which this works. For example, in rural areas, a wave of land reform in recent decades provides evidence that improving farmers' land rights improves agricultural productivity and promotes investment. In urban areas, 'land titling' schemes, which formalise existing *de facto* rights to land, have also been common. Evidence suggests that such schemes improve the likelihood that urban residents can participate in the labour market since they no longer need to protect their property. Such rights can also promote access to credit. The evidence suggests that land titling and tenancy reform schemes can provide an effective basis for pro-poor property rights improvements. Finally, an important, but often overlooked, component of secure property rights is the existence of an effective legal system that can credibly threaten to punish infringements, and to settle private disputes quickly. Legal reform is likely to be another means of improving the institutional environment to promote growth and poverty reduction, especially since the poor find it most difficult to access the formal legal system.

Institutions are also important in shaping governance and accountability. We consider three specific institutional features that, on the basis of the evidence, appear important. First, an effective mass media plays an important role in monitoring politicians, promoting their responsiveness to citizens' needs, and reducing corruption. Regulation, state ownership and anti-defamation laws have been used to protect politicians from the monitoring role of the media. Especially important, from the perspective of the poor, is the local media which monitors actions of local politicians and bureacrats. Second, decentralization is an extremely common form of recent institutional change. While there is suggestive evidence that decentralization of public service delivery increases the likelihood of these services reaching the poor, policy is running somewhat ahead of the evidence. The key issue is to encourage decentralization in those dimensions of policy-making in which local governments' advantages are strongest. Finally, political reservation schemes, which reserve parliamentary seats for disadvantaged minorities, appear to improve the allocation of public goods to these disadvantaged minorities, and thereby (typically) to a segment of the poor. These schemes may be an effective way of improving the participation of the poor in policy-making.

Expanding opportunity

Redistribution in poor countries tends to take the form of expanding the opportunities that poor people face. This resonates with a traditional strategy for alleviating poverty – improving access to and accumulation of assets, either in the form of human and physical capital. A long

tradition of thinking in economics has emphasised how 'poverty trap' mechanisms can mean that a lack of assets denies access to the accumulation of assets.

Education systems play a vital role in allowing the poor to accumulate human capital. There is little doubt that low levels of human capital are a major source of poverty. But expanding opportunity via human capital accumulation requires improvements in both the demand for, and supply of, education. The demand side is often neglected, but children in poverty often face strong short-term incentives not to attend school. Recent evidence suggests that these barriers can be overcome in straightforward ways; subsidies that lower the cost of school attendance (fees, uniforms, textbooks etc), and rewards (from cash transfers for parents, to free meals for children) conditional on school attendance, are proven to work where they have been studied. Improving the supply of education, however, is more difficult. Both the quantity and quality of education need to be considered here. Quantity can be expanded through increasing public supply, and this can be further complemented by encouraging entry of private and NGO-run schools. In terms of quality improvements, a rapidly growing body of evidence considers quality improvements in the form of pedagogical innovations, such as increasing the number of teaching inputs (for example, secondary teachers, classroom assistants, or even just textbooks). Other evidence stresses the need to improve the incentives that education providers face, and finds that incentive schemes for teachers can be effective. NGO-run schools have been important drivers of innovation, but they need to be encouraged to evaluate as well as to innovate.

It is widely recognized that imperfect financial systems in developing countries can prevent the poor from accumulating physical capital. This is likely to act as a barrier to entrepreneurship and ultimately to poverty reduction. Microfinance constitutes a pervasive attempt to improve the poor's access to finance. This refers to a whole array of institutional innovations (typically revolving around the use of group-lending schemes and dynamic repayment incentives) that aim to improve on the structural failings of financial markets in the absence of assets that can be used as collateral. However the theory and practice of microfinance have progressed far ahead of empirical evidence documenting its impact. This is an area where convincing micro-evidence is badly needed, and the providers of microfinance (typically

NGOs) need the encouragement and resources necessary to perform evaluations. While microfinance has typically been fostered by NGO-led initiatives, some governments have sought to legislate for improved access to credit through state-led bank expansion schemes. Some evidence suggests that these schemes can reduce poverty.

Liberalization

The growth of private firms is essential to achieving growth and poverty reduction. However, many countries have adopted regulatory regimes that have limited the development of private business and markets more generally. While such regulation may be aimed at a legitimate goal of fixing market failures or helping the poor, the reality has often been different. The danger is that regulation favors special interests and is tailored to suit incumbents over entrants. This may have adverse conseqeunces for growth and hence may be harmful to the poor. An emerging body of evidence sees (selective) market liberalization as an important aspect of growth promotion. We consider two specific areas of liberalization: deregulation and outward orientation.

Deregulation may be important in both labour and product markets. Labour market regulation typically involves wage controls (such as minimum wages) and constraints on hiring and firing. Economic theory suggests that such regulation is good for workers in the formal sector (the sector in which regulations are enforced), and detrimental to those in the informal sector. This is a major concern in developing countries where the informal sector is often much larger than the formal sector, and home to many of the poor. Labour regulation may also reduce firms' productivity levels, as well as dampening the productivity-enhancing potential of reallocating labour across firms. This, in turn, diminishes incentives for firms to invest. Some empirical evidence confirms this theoretical view, and finds that labour regulation reduces growth and increases poverty.

Product market regulation is also extremely common in developing countries. Barriers to the entry of firms are particularly pervasive. These can take the form of explicit controls on the number and type of firms in a sector (such as in semi-planned economies), or administrative red tape with which new firms need to comply. Other important barriers may not come from official policies. Non-policy barriers to entry include corruption, a lack of access to credit, and imperfect information about entrepreneurial opportunities. Evidence

suggests that all of these barriers to entry harm growth, and limit the productivity improvements that come from allowing the best firms to prosper and the worst firms to fail. There may also be complementarities between product and labour market regulations with product market regulations being more damaging when labour market regulation favors workers.

It is no longer controversial that outward orientation is important for development, but the details remain unclear. A number of recent studies highlight the importance of domestic conditions which augment the effects of trade liberalization. Many of the gains from trade rest on a country's ability to reallocate resources from low-productivity to high-productivity sectors. When labour and product market regulation is binding, these reallocations are severely hindered, and thus so too are the gains from trade. Equally important is the chasm that often exists between remote rural areas where many of the poor live, and international borders. The former may benefit much less from lowering tariffs if the cost of getting products to and from these areas is high. Studies of the effect of NAFTA on Mexico typically find large positive effects on northern states of Mexico, but no effect on the southernmost states. Good transportation infrastructure (roads, railways and ports) is even more important in an outward oriented environment.

1. Introduction

The problem of persistent poverty remains one of the main challenges facing the globe in the twenty-first century. While progress has been made – most notably in Asia – there is still insufficient progress to fuel complacency. Good economics is still needed to inform the debate about how to deal with the problem of global poverty.

This paper discusses how a variety of economic evidence can be brought to bear on what works in dealing with the problem of endemic poverty. It develops a three theme approach bringing together macro- and micro-evidence. The paper is set in the context of important debates about the forces that shape economic development. The influential work of Acemoglu, Johnson and Robinson (2001) has reignited interest in the role of institutions – with long-lived roots – in fostering development.[2] This is often contrasted with approaches that emphasize more the role of geography and its impact on the disease environment – as in Sachs (2001). A view is also emerging that education plays a key role in shaping how institutions work and evolve – see Glaeser et al (2004).

The focus in all of these contributions and in most contributions by economists is on growth in income per capita as a measure of development. Given the strong and robust link between income and poverty, this makes sense. Income per capita has a first order consequence for poverty reduction and income growth explains a large amount of global poverty reduction (as we review in the next section). Most of these debates also play out, for the most part, in the context of cross-country analyses of development experiences. This makes sense given that the sort of variation that is being studied is most easily collected at that level. But it is often unclear, therefore, how to join up these far-reaching discussions about long-run development with the kind of micro-economic evidence that has emerged in the past quarter century or more of development research. Hence one of the challenges is to provide a more unified view which develops insights from a wide variety of sources. Bridging and unifying macro- and micro- evidence in

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[2] See also Hall and Jones (1999) for a related thesis.

this way helps in the development of a policy agenda for confronting poverty in the twenty-first century.

This paper develops three themes that can be used to unify many of the current debates as well as joining up insights from macro- and micro- evidence. The first of these emphasizes the role of institutions in promoting growth and development. Institutions here are to be understood in the sense of North (1990), as the rules of the game or the humanly devised constraints that shape human interaction (page 3). This includes a wide range of factors including the operation of legal and political systems. In principle, this is a very broad agenda indeed. Here, we develop two specific sub-themes that are relevant to poverty reduction.

The first of these sub-themes is the creation of and respect for property rights. There is growing evidence from macroeconomics that the creation of a means of access to secure title can lead to an improved investment climate and better gains from trade. But this requires state investment in support for property through the creation of legal systems and institutions that limit the arbitrary use of state authority. What kinds of institutions a country has may, as Acemoglu, Johnson and Robinson (2001) have argued, depend on history which may be affected by the kinds of colonial structures put in place in many instances. Improving property rights is relevant in particular to the poor who may suffer greater injustice by being unable to access formal legal systems. They may also have fewer options, for example in credit markets, when they lack secure access to titles on their properties. Property rights protection can therefore promote both growth and poverty reduction. This is an area where we are gaining insights from cross-country differences and from the impact of titling programs in a more micro-economic setting.

Our second sub-theme is governance and accountability. These can in many instances be linked to property rights protection. For example, a government that does not respect property rights often needs to be removed from office to rectify the problem. However, it refers to a much wider array of institutional investments that support the effective provision of public goods and services. These require state structures with good incentives for officials to act in the public interest and which select the right kinds of individuals to make public decisions. Mass media and democracy can play an important role in monitoring politicians and in giving them the incentives to act in the public interest.

Decentralization of provision can help make service provision in the form of education and health care more effective if local bodies are aware of local needs and more accountable to the local citizenry. Better educated and healthier citizens are likely to be productive and hence to contribute more to growth. There is also the potential for a direct impact on poverty through allowing the poor to gain access to better services.

Our second theme is expanding opportunity. Here we focus on what allows households, and the poor especially, to gain access to and to accumulate assets such as human and physical capital. The former means investment in schooling which has directly productive benefits. However, it is increasingly realized that schooling has a wide array of indirect benefits in improving social capital and in governance. Improving access to physical capital often means improving savings and credit opportunities. There are many dimensions of disadvantage that afflict the poor and the inability to access credit to develop their productive potential is an important one. Credit rationing may also lead to the persistence of inequality by acting as a damper on mobility. This has led to a large number of initiatives around the globe under the heading of microfinance. There is an emerging body of micro-evidence on the basis of which to assess the quantitative importance of improving access to credit.

The third theme is market liberalization. This has two components – deregulation (of labour and product markets) and outward orientation. There is a danger that this theme will be misconstrued given the claim that the Washington Consensus,[3] for so long viewed as the dominant paradigm in development policy, put great weight on such ideas. Moreover, this was a source of controversy with the term 'neo-liberal' often being used to paint a picture of a development strategy based on unfettered markets. We emphasize in our discussion that market liberalization is not an end in itself and needs to be pursued as part of a broader strategy in which the poor are given the resources and institutions to benefit from access to markets. Second, there is no presumption that totally free markets are the end aim. However, there is a need to be clear about the objectives of regulation and to evaluate the

[3] John Williamson coined the term `Washington Consensus' to describe an apparent consensus among development policy-makers – see, for example, Williamson (2000).

impact and incidence of regulations empirically before reaching a conclusion.

We argue that one of the obstacles in the process of growth and poverty reduction in the developing world is the presence of barriers to the development of markets – barriers that do nothing to help the poor. One good example is the regulation of labour markets. In a number of countries creation of restrictions on hiring and firing workers has resulted in a protected sector which acts as a barrier to entry for the poor. Equally, barriers to entry in product markets and trading networks can result in monopoly rents that frequently hurt both poverty and growth. While there may be many dimensions in which government regulatory policies are needed – for example, limiting child labour, improving health and safety and limiting environmental damage – there is a need to engage carefully with an appreciation of whether all regulations in place are needed and achieve their stated ends.

Our discussion of market liberalization also emphasizes the merits of an outward-oriented strategy of development emphasizing integration into the world economy. Even though this may sometimes create losers whose interests need to be safeguarded, the case for protecting industries that are uneconomic at world prices needs careful scrutiny. There is now an emerging body of research that examines the distributional implications of market liberalization. While lacking universal validity, this research is broadly encouraging to the view that market liberalization, used wisely, can be an important force for growth and poverty reduction.

The evidence that we examine to support the view that these three themes provide a basis for a poverty reduction strategy comes from a wide variety of sources. While the themes are general, the approach also stresses the need for country-based strategies using the best available evidence. We illustrate this by looking at the case of India in detail. There is now a wealth of empirical evidence to draw on in the Indian context and clearly such a rich evidence base is unlikely to be available everywhere. However, we emphasize throughout that the debate about policies that achieve poverty reduction is now firmly focused on empirical evidence.

While we have separated out the strategy into three components, it should be clear that none is self-standing. There is a self-reinforcing complementarity between the themes. For example, promoting good governance and better accountability of politicians should support effective investment in human capital. This in turn should feedback onto improvements in government performance as individuals become more politically aware and able to influence policies. This should also ensure that such regulations as are put in place are those that are subject to proper scrutiny and evaluation. Thus it is important to view them as a collective strategy where all three move together to provide a basis for poverty reduction.

The remainder of the paper is organized as follows. In the next section, we discuss the problem of poverty and what is known about the link between poverty, growth and distribution. Section three takes on the institutions theme and presents macro- and micro-evidence on institutional reforms which are conducive to reducing poverty and promoting growth. In section four we develop the expanding opportunities theme focusing on how improving access to education and finance can help people escape poverty. Section five assesses the evidence on how various types of market liberalization can contribute to poverty reduction and growth. Section six looks at India as a case study and demonstrates how careful, within-country analysis allows us to draw lessons on the institutional and policy reforms which contributed to poverty reduction in the post-independence period. In section seven, we pull together the analysis from the preceding six sections to build a policy agenda for confronting poverty in the twenty-first century. Section eight concludes.

2. Poverty Around the World

In this section, we discuss what is known about poverty around the world, including how it is measured and how it has evolved. We will also look at the link between poverty, growth and inequality, and relate this to the feasibility of achieving the Millennium Development Goal (MDG) target of halving global poverty between 1990 and 2015.

2.1 Quantifying poverty

Obtaining reliable measures of poverty requires information about the distribution of income or consumption within a country. This requires household surveys, the designs of which have to be similar to allow comparability across countries. The World Bank has played a major role in expanding collection of such data. At the latest count there was comparable distributional data on around 82 out of a total of 158 low and middle income countries representing about 88 percent of the total population of the developing world (Chen and Ravallion, 2001). Our picture of poverty is therefore, by definition, partial and may be biased by the fact that selection into the sample is unlikely to be random. It nonetheless represents a dramatic improvement over the situation in the mid-1980s when survey data was only available for 22 countries. Comparability problems remain; however, improvements in poverty counts represent one of the key achievements of the World Bank Research Department over the past twenty years.[4]

To allow comparison of poverty rates across countries, Chen and Ravallion (2001) use World Bank 1993 Purchasing Power Parity (PPP) exchange rates for consumption to construct an international poverty line of $1.08 per day. This line, commonly known as the dollar a day line, is representative of poverty lines found in low income countries and enables comparison of poverty across countries (see Ravallion, Datt

[4] The latest poverty data from around the world can be found at http://www.worldbank.org/research/povmonitor/.

and van de Walle, 1991 for the original methodology). This line is converted to prices prevailing at each survey date using the country-specific official Consumer Price Index to allow comparisons across time. To obtain regional estimates it is assumed that the average poverty rate for countries without distributional data equalled that for countries with such data at the regional level. Given that it is based on poverty lines in the poorest countries, poverty rates based on this method should be viewed as conservative for middle income countries.

It is the poverty rates obtained using this method for 1990 that are used as the baseline against which fulfilment of the poverty reduction MDG will be measured. They represent our best estimates of global poverty. Table 1 gives estimates for both the proportion and

Table 1: Poverty across the globe

	Poverty headcount							
	1981	1984	1987	1990	1993	1996	1999	2001
East Asia & Pacific	56.65	38.77	28.04	29.54	24.89	15.91	15.3	14.32
EAP (excluding China)	39.27	32.11	26.84	19.66	15.1	11.88	8.6	8.11
East Europe & Central Asia	0.79	0.61	0.44	0.54	3.74	4.38	6.29	3.46
Latin America & Caribbean	10.06	12.17	11.29	11.6	11.78	9.44	10.47	9.91
Middle East & North Africa	5.08	3.83	3.17	2.32	1.58	2.01	2.65	2.35
South Asia	51.51	46.77	45.04	41.26	40.06	36.65	32.76	31.89
Sub-Saharan Africa	41.62	46.26	46.86	44.52	44.05	46.07	45.72	46.38
Total	**40.43**	**32.95**	**28.45**	**27.94**	**26.31**	**22.26**	**21.52**	**20.7**
Total (excluding China)	**31.48**	**29.73**	**28.45**	**26**	**25.53**	**24.09**	**22.89**	**22.17**

Note: Poverty headcount is defined as the percentage of people with income below $1.08 a day, in 1993 PPP $. Calculations extracted from http://iresearch.worldbank.org/PovcalNet/jsp/index.jsp, August 2005, and are based on all available household surveys (see Chen and Ravallion (2001) for a complete discussion of the methodology).

number of people living below $1.08 day (at 1993 PPP) for different developing regions of the world in 1987, 1990, 1993, 1996, 1998 and 2001.[5] In 1990 the headcount index – which measures the proportion of people below the dollar a day line – is 27.94%, which corresponds to 1.12 billion people. We see, however, that these headline poverty figures mask a significant amount of regional variation. The bulk of the poor in the world in 1990 are situated in three regions – East Asia,

Table 1 (continued): Poverty across the globe

	Number in poverty (millions)							
	1981	1984	1987	1990	1993	1996	1999	2001
East Asia & Pacific	749	537	408	432	397	264	262	250
EAP (excluding China)	129	112	100	64	63	52	40	39
East Europe & Central Asia	3	3	2	2	17	20	29	16
Latin America & Caribbean	33	44	44	48	51	43	51	49
Middle East & North Africa	7	6	5	4	3	4	6	5
South Asia	466	453	466	455	468	452	427	431
Sub-Saharan Africa	128	155	171	177	189	214	235	243
Total	**1386**	**1198**	**1096**	**1119**	**1126**	**997**	**1010**	**995**
Total (excluding China)	**766**	**773**	**788**	**751**	**792**	**785**	**787**	**784**

Note: 'Number in poverty' is a count of the number of people (in millions) with income below $1.08 a day, in 1993 PPP $. Calculations extracted from http://iresearch.worldbank.org/PovcalNet/jsp/index.jsp, August 2005, and are based on all available household surveys (see Chen and Ravallion (2001) for a complete discussion of the methodology).

[5] These developing regions comprise countries which are classified as low or middle income by the World Bank. High income countries are not considered.

South Asia and Sub-Saharan Africa. These regions account for 95% of the total number; in terms of both the proportion and numbers in poverty these three regions dwarf Eastern Europe and Central Asia, Latin America and the Caribbean, and Middle East and North Africa.

In 1990 East Asia has 29.54% of its population living in poverty, which is below the developing world average, but still contributes 442 million, over a third of the global tally. The vast majority (87%) of these come from China. South Asia and Sub-Saharan Africa in contrast have much higher than average proportions of their populations in poverty in 1990 – 41.26% and 44.52% respectively. South Asia with 455 million (41% of the 1990 total) is the greatest net contributor to global poverty with the bulk coming from India. A further 177 million of the world's poor in 1990 were located in Sub-Saharan Africa comprising roughly a fifth of the global total. The picture that emerges from the cross-section is of a highly uneven distribution of poverty across the globe. This perception of heterogeneity is reinforced if we look at the national poverty rates which underlie the regional estimates. For example, in South Asia the headcount for Sri Lanka lies well below that for Nepal or India. Even within India we see pronounced variation across states (see Section 6 and Datt and Ravallion, 2002). Thinking about poverty as having an even, global reach thus makes little sense.

The Millennium Development Goals (MDGs) refer specifically to poverty reduction from 1990. It thus makes sense to look at changes in poverty over time (see Table 1). Between 1990 and the latest estimates for 2001 we see that the headcount index has fallen from roughly 28% to 21% – roughly a seven percentage point fall in the proportion of people in poverty. The decline in numbers in poverty is more modest, falling from 1.12 billion to 1.00 billion, corresponding to roughly 120 million people exiting poverty as defined by the dollar a day line. These numbers have to be approached with caution and are sensitive to the data used and time period chosen (see Deaton, 2002).[6]

[6] For example if we take 1987 as a starting point we see that the numbers in poverty had actually *increased* by around 17 million. This point was emphasised in the World Development Report 2000/2001: Attacking Poverty (World Bank, 2001a). Deaton (2002), however, points out that another key World Bank document published in the same year, Globalization, Growth and Poverty (World Bank, 2001b), shows the numbers in poverty falling by 200 million between 1980 and 1998 with no trace of an increase between 1987 and 1998. The reason for the discrepancy is that the latter report uses historical data up to 1993 from Bourguignon and Morrison (2002) and

What seems robust in the survey data is that though the proportion in poverty is falling the actual numbers in poverty show limited change.[7]

What is even more interesting from a policy perspective is the fact that we observe such different poverty trajectories across regions in the 1990-2001 period. Over this period the poverty rate in East Asia drops from 29.54% to 14.32% and numbers in poverty fall from 432 to 250 million. These correspond to 51% and 42% reductions respectively. The bulk of the changes are accounted for by dramatic reductions in poverty in China. These figures are startling – over eleven years the region has come close to halving the proportion in poverty. That is, the region is on course to achieving the MDG poverty reduction targets fifteen or so years ahead of schedule. The reductions observed in this data continue trends seen in historical data of dramatic and rapid reductions in poverty (see Ahuja et al, 1997). They represent the largest fall in poverty ever witnessed in history and have led to reference to a 'miracle' taking place in East Asia.

This pattern over time is in strict contrast to what we observe in Sub-Saharan Africa (see Table 1). There, poverty rates have remained stagnant, moving from 44.52% in 1990 to 46.38% in 2001, and numbers in poverty have increased from 177 to 243 million corresponding to roughly 66 million entering poverty. There is thus no sense in which Sub-Saharan Africa is on route to achieving the MDG poverty target. If anything it is threatening to go in the opposite direction.[8] This African tragedy contrasts with the East Asian miracle.

The situation in South Asia is intermediate between East Asia and Sub-Saharan Africa. Poverty rates dropped from 41.26% to 31.89%, and numbers in poverty decreased from 455 million to 431 million

then switches to using primary survey-based data thus missing out the 1987-1993 period where numbers in poverty where seen to be rising according to these measures (see Table 1).

[7] Due to their greater reliability and comparability across time we only use survey-based estimates in the poverty analysis carried out in this paper.

[8] This is happening in Eastern Europe and Central Asia. The poverty situation in terms of proportions and numbers in poverty has also been somewhat stagnant in Latin America and the Carribean

between 1990 and 2001. The share of the world's poor in South Asia and Sub-Saharan Africa has thus increased from 57% to 68% between 1990 and 2001 whereas the East Asian share has declined from 38% to 25%. Based on this evidence, South Asia, which has the largest concentration of poor people, cannot be deemed to be 'on track' in terms of halving the proportion in poverty by 2015.

2.2 Poverty and growth

Poverty can be reduced by an increase in the size of the national per capita income or by giving a larger share of that income to the poor through some form of redistribution. A key issue is how much poverty is reduced by economic growth.

The two main sources of growth are factor accumulation – human and physical capital formation – and technological change. These may affect the poor both directly and indirectly. For example, human capital has a direct effect through making the poor more productive. However, it may also have an impact on technology adoption which affects the well-being of the poor indirectly. When it comes to technology, some agricultural technologies, such as Higher Yielding Varieties (HYV), have historically been viewed as a key part of long-run poverty reduction. Other technologies such as telecommunications could also have direct and indirect effects. There may also be forms of technological change that are more appropriate for the poor and hence have an especially large impact on their well-being.

Indirect effects of economic growth on poverty are in part due to equilibrium responses to the growth process and through improved access to public goods. In terms of the former, technological change may expand the demand for factors owned predominantly by the poor (such as raw labour input) raising wages of households with low levels of land and physical and human capital. There may also in general be complementarities between physical capital and labour. General economic growth and structural change may also increase public spending on public goods which have a direct impact on the well-being of the poor as well as making them more productive. Even this simple account emphasizes that theoretical poverty-growth linkages are far from straightforward.

The relationship between economic growth and poverty is ultimately a task in quantification. Here, we look at the macroeconomic perspective using the cross-country poverty data from the World Bank discussed above. When it comes to aggregate evidence, we know a lot more about changes in income per capita that we do about movements in the distribution of income. The latter can be characterized in simple ways with a one parameter family such as a Gini coefficient or the standard deviation of the income distribution in logs, or from some more complete description like a Lorenz curve or the CDF of the whole distribution. Those who study the latter in more detail are used to the pitfalls of focusing on the latter (for example changes in distribution where Lorenz curves cross).

For cross-country purposes, the data available are typically rather crude with simple characterizations of distribution inevitably dominating the debate. This can have important consequences for research method and results. For example, imposing a log normal income distribution implies that only two parameters are needed to completely describe the distribution. As shown by Dollar and Kraay (2002), this implies a mechanical relationship between the income of the poor and the Gini coefficient (by assumption). Hence, changes in distribution are then forced to work their way via changes in the Gini with all the potential that has for missing important underlying changes in distribution (in addition to households changing positions within a given aggregate distribution).

There are two well-known stylized facts about the cross-country distributional data. First, changes in inequality are not significantly correlated with changes in income per capita. How much economic significance can be read into this is moot. Most of the variation in inequality measures is well known to be cross-sectional (see Li, Squire and Zou, 1997). This could be either because structural features of the economy (ownership and social relations) change only slowly or because the design of survey instruments gives small differences over time while giving larger differences between countries. Either way, it is not too surprising to find that changes in inequality are not strongly correlated with changes in income per capita.

The second fact is that changes in absolute poverty are significantly negatively correlated with changes in income per capita. This is also consistent with inequality being uncorrelated with growth. The share of income going to the poor goes up on average with aggregate output, without any predictable offsetting effect due to inequality changes.

A key magnitude in assessing the anti-poverty effectiveness of growth is the *elasticity of poverty reduction with respect to income per capita* which we denote by η.[9] Estimates of this elasticity can be obtained in a variety of ways. Here, we focus on running regressions of

[9] The current poverty targets are framed in terms of the headcount index. This is most easily approached by supposing that we can write household income as $y = \alpha\,\mu$ where μ is mean income and α is therefore interpreted as the proportion of mean income enjoyed by a particular measurement unit. Then if the poverty line is z and α is distributed on some interval [0, A] with density $f(\alpha, t)$ at date t then

$$\text{headcount} = \int_0^{z/\mu} f(\alpha)d\alpha = F(z/\mu)$$

The effect of a change in log national income on poverty is now easily seen to be

$$-\frac{z}{\mu}f\left(\frac{z}{\mu}\right).$$

Now notice that it is easy to compute the annualized growth rate that will reduce poverty by one half over 25 years from

$$\frac{1}{2} = \int_0^T e^{-g\eta(t)t}dt$$

where

$$\eta(t) = \left(\frac{z}{\mu(t)}\frac{f\left(\frac{z}{\mu(t)},t\right)}{F\left(\frac{z}{\mu(t)},t\right)}\right)$$

is the elasticity of poverty reduction with respect to income. This elasticity can change over space and time depending on how μ changes and on how the distribution of income changes. If we assume that income distribution is log normal, then it is straightforward to obtain the following analytical classification of the elasticity:

$$\eta = -\frac{1}{\sigma}\frac{\frac{1}{(2\pi)^{1/2}}\exp - \frac{1}{2}\left\{\frac{\log z - \log\mu + \frac{1}{2}\sigma^2}{\sigma}\right\}^2}{\int_{-\infty}^{\frac{\log z - \log\mu + \frac{1}{2}\sigma^2}{\sigma}} \frac{1}{(2\pi)^{1/2}}\exp - \frac{1}{2}\{x\}dx}.$$

As Bourgignon (2002) stresses, this result implies that η is itself a function of per capita income, and inequality. That is, the linear forms we use in this and the following sections should be treated only as approximations.

the form:

$$\log(P_{it}(0,z)) = \theta_i + \eta \log \mu_{it} + \varepsilon_{it}$$

where P_{it} (0, z) is the headcount poverty rate based on the dollar a day poverty line (see Ravallion and Chen, 1997), θ_i is a country fixed effect, and μ_{it} is real per capita national income. This method of estimation only works if there is more than one observation on poverty for each country in the data. In effect, all countries that appear only once are eliminated from the data set. In Table 2 we see that η is negative and significant, confirming that increases in income per capita are associated with reductions in poverty. This is in line with a growing body of evidence on this issue.

Using estimates of η, it is straightforward to derive the (annual) per capita rate of economic growth that will halve poverty in a period of twenty five years as:

$$g_{half} = \frac{\log\left(\frac{1}{2}\right)}{25\eta}$$

In Table 2 we see that for the whole sample η = -1.96 which corresponds to g_{half} being 1.4% compared to an historical per capita growth rate of 1.6% for the 1960 to 1990 period. Thus, halving the proportion of people living below a dollar a day is broadly consistent with historical growth performance. Or expressed differently (as in the final row of Table 2), real GDP per capita would have to increase by a total of 35% between 1990 and 2015 to achieve the MDG poverty reduction target.

If we include regional as opposed to country fixed effects as we do in column (2) of Table 2, then the elasticity is quite a bit smaller (-1.11) and the required growth rate is 2.5% with aggregate growth needed being 62%. This gives a sense of the imprecision of the estimates. More generally, care is warranted in treating these types of estimates as being anything more than illustrative. There are serious issues regarding comparability of data across countries and the coverage of countries in regions is partial. The authors were struck by the wide variety of estimates that can be obtained depending on the method and

Table 2: Growth and poverty around the world 1990-2015

	Whole sample (country fixed effects)	Whole sample (region fixed effects)	East Asia and Pacific	Eastern Europe and Central Asia	Latin America and Carribean	Middle East and North Africa	South Asia	Sub-Saharan Africa
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Elasticity of poverty with respect to income per capita	-1.96 (0.32)**	-1.11 (0.08)**	-1.18 (0.16)**	-1.42 (0.16)**	-1.07 (0.14)**	-1.23 (0.35)**	-1.35 (0.27)**	-0.54 (0.09)**
Annual growth rate needed to halve poverty by 2015	1.40%	2.50%	2.30%	2.00%	2.60%	2.30%	2.10%	5.20%
Historical growth 1960-1990	1.60%	1.60%	3.30%	2.10%	1.20%	1.00%	1.90%	1.00%
Total growth needed to halve poverty by 2015	35%	62%	59%	49%	65%	56%	50%	130%

Note: The first row represents the coefficient on log real income per capita in a regression of log poverty headcount on log real income per capita. The second row uses this coefficient to calculate the annual growth rate that would be required to halve poverty (in each region) by 2015. The third row reports the historical annual growth rate for each region from 1960-1990. And the final row reports, on the basis of the coefficient in the first row, the total increase in real GDP per capita needed to halve poverty in each region by 2015. Robust standard errors are in parentheses. * indicates statistical significance at the 5% level, and ** at the 1% level. Poverty data are extracted from the World Bank's Poverty Monitor website, August 2005. Income per capita data is real GDP per capita (constant 1995 US $), from the World Development Indicators (2004 version). Growth rates are calculated from WDI real GDP per capita data over 1960-90 where this data is available, and by extrapolating observed country growth rates backward where it is not; whole sample and regional growth rates are calculated as the geometric annual growth rate between the sample's total GDP in 1960 and its total GDP in 1990.

data used.[10] One key finding is that the elasticity of poverty with respect to national income is much smaller than with respect to household consumption (or income) implying the need for higher growth rates in order to halve world poverty. This is because increases in national income only partly translate into increases in household consumption or income.[11] We are also not controlling for factors like income inequality in the regressions which might affect how growth in national income maps onto poverty reduction (though we address this shortfall in Section 2.3).

It seems reasonable to expect the relationship between national income and poverty to vary across countries. We can relax the assumption that η is uniform by running the regression for different sub-groups of countries (such as different geographical regions). In this case, there are too few observations for a fixed effects regression. However, we allow the intercept and slope to vary across regions. Growth elasticity estimates shown in columns (3) to (8) of Table 2 vary markedly across regions. In all regions there is a negative relationship between growth and poverty. Looking region by region the elasticities we find look similar to the specification with regional fixed effects (column (2)) but are uniformly smaller (in absolute size) than for the specification with country fixed effects (column (1)). The smallest elasticity is for Sub-Saharan Africa.

In Eastern Europe and Central Asia the growth rate needed to halve world poverty of 2.4% may be compared to an historical growth rate of 2.0%. This would suggest that it is in a strong position relative to other regions in terms of achieving its MDG poverty target. Dramatic institutional changes and collapses in output which have accompanied transition however are likely to complicate the relationship between growth and poverty and indeed poverty has been rising in a number of

[10] Atkinson and Brandolini (2001) discuss these general issues using cross-country comparisons of inequality data.

[11] This suggests that if researchers are trying to look at the effect of changes in national income on poverty, then they should be using much lower elasticities than if they are looking at the effect of consumption changes on poverty (see Collier and Dollar, 2001).

countries in the region in recent years.

The fortunes of the South Asia region rest significantly on the performance of India and, if the current growth performance is maintained, then it will likely exceed the required threshold of 2.1% per year. Latin America has a serious growth deficit based on historical performance. It would need to maintain a growth rate at more than double its historical average in order to achieve the poverty MDG. The Middle East and North Africa Region also needs to improve on its historical record.

In Table 2 we see that Sub-Saharan Africa is an outlier in terms of growth having a limited impact on poverty. As a consequence the annual per capita growth rate required to halve poverty is high (5.2% compared to 1.4% in the whole sample).[12] And this rate of growth appears even more daunting when taken alongside the historical average of 1.0% per annum for the 1960 to 1990 period. The growth rate needed to halve poverty in Sub-Saharan Africa between 1990 and 2015 is thus five times its historical average. Such observations lead one to seriously question the feasibility of the poverty reduction goals proposed at the Millennium Summit for the case of Sub-Saharan Africa.

On the other end of the spectrum is East Asia. The region has a poverty-growth elasticity of 1.18 which is more than twice that in Sub-Saharan Africa. Annual per capita growth in the region for the 1960 to 1990 period is about 3.3% which compares favourably with the 2.3% needed to halve poverty by 2015. The confluence of a higher than average poverty-growth elasticity and high rates of economic growth help us understand why the region had already by 2001 halved its 1990 poverty rate (see Table 1).

Though crude and based on imperfect data these estimates help to underline the centrality of growth for poverty reduction efforts. In the aggregate and at the regional level higher growth does translate into reductions in poverty – the debate about growth promotion simply cannot be marginalized. This said it also clear that the amount of growth needed to halve poverty is large relative to historical averages. This implies two things. First, understanding what drives growth must be

[12] The total growth needed to halve poverty in the region is also about twice that in East Asia.

viewed as a core objective for those who wish to achieve the MDG targets. Given that drivers of growth are likely to vary across and within countries the microeconomics of growth is likely to take centre stage here. Second, growth may not be enough. Identification of the policy and institutional changes which can directly reduce poverty (holding growth constant) or which can improve the mapping of growth onto poverty (i.e. measures that increase η) must be viewed as the second plank of the global poverty reduction strategy.

2.3 Poverty and distribution

The other main approach to poverty reduction is explicit efforts to change the distribution of income. This has two parts – changes in the asset base of the poor and changes in their power to secure more resources through redistribution. Below, we will discuss these issues in detail.

In looking at the cross-country picture, somewhat less attention has been paid to the importance of redistribution in poverty reduction than to growth. This may, in part, reflect a view in certain quarters that concerns about redistribution are unscientific or based on unwarranted political judgements. The growth territory is then regarded as much safer for objective analysis. As we discuss further below, the way in which the political process responds to inequality and growth is a key issue in understanding poverty reduction. The role in improving democracy to secure better political rights for the poor is a key theme. These issues are now frequently discussed under the more general heading of empowerment.

In non-democratic settings, it is perhaps not so surprising that the poor may receive little attention from policy-makers. However, even in many democratic settings, there are good reasons to think that the political power of the poor may be much less than their numerical strength would suggest. There is plenty of evidence that the poor tend to vote less regularly than the rich and are less likely to become political activists. Institutional arrangements to enhance the power of the poor and their possible consequences for long-run poverty reduction become an interesting possibility. A good example is the mandatory representation of low caste groups and women in India. These provide an intervention that aims to shift the balance of power. We discuss the

evidence on this below.

Some idea of inequality at the regional level can be seen from the third row of Table 3, which uses the standard deviation of the income distribution (in logs) as the measure of inequality. These data confirm what is widely believed – Latin America is the most unequal part of the developing world. Second is Sub-Saharan Africa. Inequality is lowest in South Asia – this block of countries is also relatively homogenous in this respect, as reflected in the small standard deviation.

In view of this discussion, it is interesting to ask how variations in inequality map into poverty differences (controlling for income per capita). This can be investigated by running regressions of the form:

$$\log(P_{it}(0,z)) = \theta_i + \eta \log\mu_{it} + \beta\sigma_{it} + \varepsilon_{it}$$

where σ_{it} is the standard deviation in logs of the income distribution. When this is estimated with country fixed effects, we find that β is equal to 4.38 with a (robust) standard error of 0.57 (column (1), second row). This coefficient drops to 3.13 with a standard error of 0.33 when we include regional fixed effects (column (2)). This suggests that there is positive association between inequality and the level of poverty within a country.

To get a 'back of the envelope' feeling for the order of magnitude of this effect, we conducted the following thought experiment. Suppose that in each region of the world, we could lower the level of inequality by one standard deviation (for that region).[13] Then how much would poverty fall? The answer is given in the last row of Table 3. In Latin America this is 43% while it is 35% in Sub-Saharan Africa. In South Asia, the number is only 15% reflecting (in part) the fact that initial inequality is lower in this region.

These results do emphasize the need for some focus on inequality reduction. Moreover, increases in income per capita that lead to increases in inequality might be expected to have some significant dampening effect on poverty reduction. The bottom line is clear – in

[13] The motivation for proceeding this way is that there may be underlying structural features of these economies which allow us to benchmark how much inequality reduction it is reasonable to look at.

Table 3: Inequality and poverty reduction around the world

	Whole sample (country fixed effects)	Whole sample (region fixed effects)	East Asia and Pacific	Eastern Europe and Central Asia	Latin America and Carribean	Middle East and North Africa	South Asia	Sub-Saharan Africa
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Elasticity of poverty with respect to income per capita	-2.05 (0.25)**	-1.2 (0.07)**	-1 (0.34)**	-1.05 (0.14)**	-1.07 (0.13)**	-1.06 (0.26)**	-1.36 (0.32)**	-0.73 (0.10)**
Effect of inequality (std. dev. of log income) on poverty	4.38 (0.57)**	3.13 (0.33)**	-1.25 -1.56	6.79 (0.97)**	3.31 (0.54)**	-2.84 -2.02	3.66 (1.47)**	1.57 (0.35)**
Standard deviation of income distribution in logs (with standard deviation of this measure in parentheses)	0.79 -0.23	0.79 -0.23	0.7 -0.12	0.58 -0.1	0.95 -0.13	0.72 -0.07	0.59 -0.04	0.94 -0.22
Poverty decline after a one standard deviation reduction in inequality	100%	72%	N/A	68%	43%	N/A	15%	35%

Note: The first row reports the coefficient on log income per capita in a regression of log poverty headcount on log real income per capita and inequality (as measured by the standard deviation of log income). The second row reports the coefficient on inequality in the same regression. The third row presents the average inequality (of countries within each region) and, in parentheses, the standard deviation of this measure (across all countries in each region). The final row presents the percentage reduction in poverty headcount that would result from a one standard deviation (for each region) in inequality, based on the coefficient in the second row. In rows one and two, robust standard errors are in parentheses. Income and poverty data as in note to Table 2. Inequality data extracted from the World Bank's Poverty Monitor website, August 2005. Whole sample and regional standard deviation of income in logs are calculated as an average (over time) within each country in the sample, and then an average over countries. 'N/A' indicates a calculation based on a coefficient that is not significantly different from zero.

these data, inequality in the underlying distribution matters.

Quite what one learns about policy from this is moot – especially in view of the quality of the data. Even if the message is that inequality reduction could have a significant impact on poverty, there are two major concerns. First, the usual question arises about whether there is some kind of equity-efficiency trade-off. By comparing the coefficients η and β some sense of this can be attained. A country that experiences a 5% increase in inequality (beginning at a standard deviation in log income of 0.76) requires an increase in income per capita of 14% to restore it to the same level of poverty. However, in this regard, the recent literature has called into question the theoretical validity of this trade-off and, as yet, there is little evidence to back this view (see Benabou, 1996). The second concern is with choosing policies to affect distributional change. We will discuss these in more detail in the next section. When discussing redistribution, one should not be thinking of conventional taxation and redistribution schemes. As we discuss below, these are likely to be a variety of schemes that transform production relations and enhance the political power of the poor.

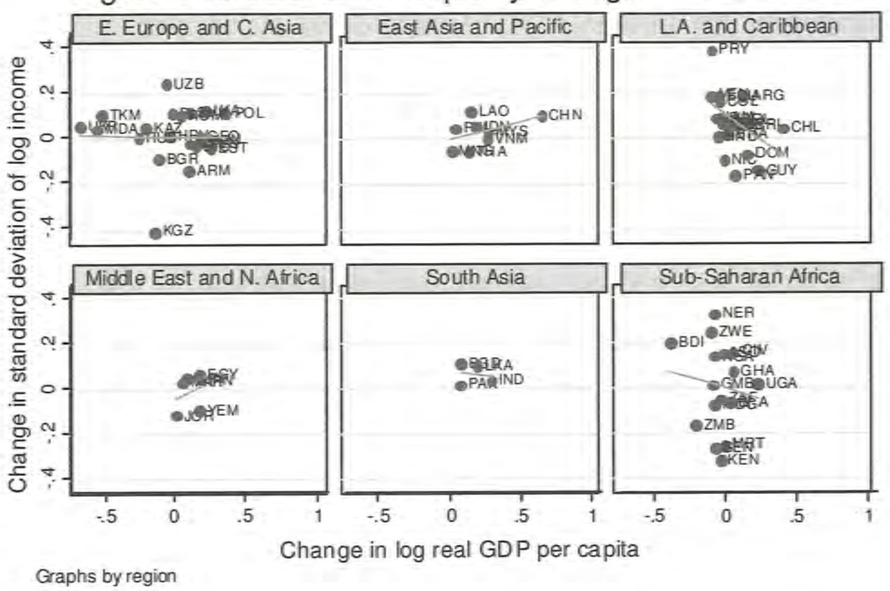
2.4 Growth and distribution

Beginning with the seminal work of Kuznets, there has been much debate about how growth and distribution are linked. He posited the famous inverted 'U' shape with inequality first rising and then decreasing. Since then, there have been numerous theoretical and empirical studies that have sought to validate this idea. However, it would be difficult to point to any convincing evidence for Kuznets's hypothesis (see Banerjee and Duflo, 2003 for a review). In fact, there is a firmly established empirical regularity in existing data that growth and distributional changes are largely uncorrelated.

The 1990s are an interesting period in which to revisit these debates. They were a period in which a number of economies increased their rate of growth, some after periods of stagnation. This could therefore represent the upward sloping part of the Kuznets curve. In

Figure 1, we graph the relationship between growth and the change in inequality in the 1990s. The data show a mixed pattern. In some regions – Latin America and Sub-Saharan Africa – there appears to be a negative correlation between changes in growth and inequality. Since Sub-Saharan Africa is the poorest sub-sample, this seems hard to square with the standard Kuznets view. In East Asia and the Pacific the correlation between growth and the change in inequality is positive. In other regions, the relationship is flat.

Figure 1: Growth and inequality changes in the 1990s



Note: Real GDP per capita is measured in 1995 US $, and is as reported in the World Development Indicators (2004 version). Plotted observations are from countries and years in the World Bank's Poverty Monitor database as of August 2005. For each country with at least two observations in the 1990s, the difference between the first and last 1990s observations is plotted. The straight line is the line of best fit for each region.

Even if one sets aside concerns about whether changes in inequality are meaningful over such a short period, these results defy the suggestion that there is any systematic relationship between growth and inequality in the 1990s. Moreover, looking only at the y-axis, it is also clear that the 1990s do not appear to be a period where inequality increased across the globe.

2.5 From patterns to policy

The above discussion underpins the need for an approach to global poverty reduction with a firm focus on growth. Inequality and policies that affect distribution may also be important.

Our next task is to discuss approaches to poverty reduction. We will consider factors that shape both growth and redistribution. We develop a three pronged approach under the headings: institutions (Section 3), expanding opportunities (Section 4) and liberalization (Section 5).

Institutions provide the framework in which public and private resource allocation takes place. Expanding opportunities emphasize that asset accumulation and access to productive assets is a vital part of the fight against poverty. Liberalization emphasizes the need to provide a context in which government intervention is targeted towards things that expand opportunity and enhance productive opportunities. There is also a need to provide access to markets and public goods for the poor. We will emphasise that there is growing evidence to support the relevance of these themes as a basis for effective poverty reduction.

Much of the economic policy of the 1990s was conducted in the shadow of the Washington Consensus which emerged in the late 1980s to describe a set of policies that commanded widespread consent at this time. At the heart of the consensus was the importance of sound fiscal and monetary policy. The consensus also affirmed the importance of secure property rights. More controversially, it emphasized greater openness to trade and a focus on privatization. The former has led some commentators to see it as the handmaiden of globalization. The Washington Consensus did not emphasize capital market liberalization. This, more controversial, component was added to the original prescription in the 1990s. The focus on privatization led some commentators to brand the Washington Consensus as 'neo-liberal'. As Williamson (2004) emphasizes, this characterization is misleading.

In spite of the way in which it is discussed, the Washington Consensus was not intended to be a *pre*scription for development, but a *de*scription of a set of policies that commanded widespread support. The focus of the consensus was on policies that would allow developing economies to resume growth. These had resonance for the OECD too where memories of the stagflation of the 1970s and its consequences were fresh in policy-makers' minds.

For the most part, the world has moved on from debates surrounding the Washington Consensus. But it does still provide a useful benchmark for more recent thinking. During the 1990s, debates about institutional reform and issues of governance became increasingly central in mainstream economics and the policy sphere. Indeed, the idea that development is about getting institutions right is now a widely accepted dictum. We take on the institutions theme in Section 3.
There was also little direct concern for redistribution. The Consensus emphasized broad-based taxation with a focus on targeted public expenditures to help the poor. However, in practical terms, targeted programmes were frequently under pressure in an environment where macro-stability through budget balance is an overriding concern. In Section 4 we take on the theme of redistribution and discuss various ways of expanding opportunities for the poor. We focus in particular on factors that enable the accumulation of physical and human capital which received limited emphasis in the original Consensus.

Our focus on liberalization perhaps provides the most resonance with the themes of the Washington Consensus. But we should be clear at the outset that we are not advocating a free-market approach to achieving poverty reduction. The liberalization theme will emphasize that a number of rigidities due to government intervention are not servants of growth or poverty reduction – representing in many instances the power of special interests. Appropriately designed liberalization reforms in the form of deregulation and outward orientation can therefore be vehicles for reducing poverty. This theme is developed in Section 5.

The three aspects of a poverty reduction agenda that we develop should not be taken in isolation – they are essentially *complementary*. To take an example, liberalization of markets may achieve very little *per se* unless it is combined with expanded opportunity for the poor and improvements in market supporting institutions such as the legal system and infrastructure. Moreover, far from arguing for a reduction in government intervention, we will emphasize the need for strong government of the right sort at the core of any development strategy.

Another overarching theme of our approach is the need for a basis in sound evidence. While the credibility of any particular piece of evidence can only be assessed on a case-by-case basis, we also maintain that there is need to look at all evidence on offer whether looked at from

a macro- or microeconomic perspective.

In discussing the evidence, we begin by discussing our three themes at a general level, presenting evidence that has emerged from comparisons of policies and outcomes across countries at the macroeconomic level. Such comparisons are useful signposts to an outline of a poverty reduction agenda, but they have little to say about the finer details of a policy reform or how it is to be implemented. To learn about such details, we compile evidence of a more microeconomic nature, examining specific policy details from individual country experiences. This approach has a number of advantages: it examines policies on the level at which they operate – on the ground; it better identifies the precise mechanisms of policy influence, which improves the prospects for extrapolating to different environments; and it provides a more detailed agenda about exactly how to implement the policy effectively. In Section 6 we describe in detail this process at work in one country – India. Joining up the macro- and micro-evidence from across the globe provides the foundations for an agenda for confronting global poverty which we develop in Section 7.

3. Institutions

The recent economics literature puts a great deal of weight on the role of good institutions in promoting economic development. Here, we will explore the link between institutional structure and poverty reduction. There is nothing particularly new in the idea that development and institutional change are closely linked. It was at the heart of the Nobel Prize winning work of Douglass North. The current preoccupation with good institutions builds on North's insights.

The term institution is often used quite loosely in policy discussions. Moreover, what is meant by a good institution is even vaguer. Nonetheless, the mantra of good institutions has caught on and has come to dominate contemporary thinking. But the literature is only just getting to grips with how to think about institutional change and how to build good institutions.

The institutional approach shifts discussions about development policy in some useful ways. It gets away from discussions about specific policies which were, for example, at the core of the Washington consensus. Thus, it is more easily squared with the notion that there is a wide variety of approaches that can be used to achieve successful growth and poverty reduction. Rodrik (2004) has argued persuasively that the absence of an institutional focus was an important weakness of the Washington Consensus viewed as a prescription for development. The focus on institutions recognizes that what matters to economic success is creating good incentives for production and distribution of public and private goods. There are many ways – and many policy measures – to achieve this. The policies of the Washington consensus also irritated those who thought that it was trying to create a monolithic path to development. The history of post-war development illustrates a wide variety of development paths. At one extreme is the current path being pursued in China which certainly follows no conventional model. A number of other East Asian economies grew using models which were entirely different from that proposed in the Washington Consensus. The successful transition economies in Eastern Europe have used quite a different strategy still. But in all cases, there is no mystery from an economic point of view.

The institutional approach puts a lot more weight on policy implementation, and not just on policy choice. Mainstream policy

economics in an earlier era tended to take a more technocratic view of government with the process of policy formation and implementation being given little attention. But in more recent discussion, notably in the World Bank (2004), this is now at centre stage.

An institutional approach also makes clear why good policies are not always enough. For example, policy credibility can be important. Having a good policy today may be fine, but the real issue is often to maintain that policy going forward and to convince both the private sector and other branches of government of this. The importance of credible commitment is a resounding theme in North's original work on institutions. His main example was the importance of establishing credible commitments to allow the state to grow strong while resisting the temptation to behave in a predatory fashion. North also emphasizes the importance of credible commitments in public finances – making it cheaper and easier for governments to issue debt in an open market.

How to establish credibility in practice is far from clear. One possibility is to create institutions that are under more limited state control and hence are less inclined towards opportunistic behaviour. This is the logic of independent central banks. Another is to structure the political system with appropriate separation of powers and with the right structure of 'veto players', i.e. those who have countervailing authority in policy decisions. The classic example here is the separation of powers between a president and legislature or a bicameral parliamentary system.

Finally, an institutional focus is also helpful in understanding the inertia in economics and policy making. Institutions are clearly harder to change than policies and have strong historical roots. Good examples are the cases of Russia and Sub-Saharan Africa where forces of tradition arguably played a strong role in shaping the reform experience. This focus on institutions provides a means for thinking about culture and history in shaping economic progress.

We look at the importance of institutions under two main headings for which empirical evidence is strong. The first pertains to the production of private goods and emphasizes the factors that encourage secure property rights. The second concerns production of public goods and emphasizes the centrality of responsive and accountable government.

3.1 Property rights

There are many factors that shape the creation and enforcement of property rights. Historically, many countries have found it quite difficult to establish institutions that effectively enforce such rights. Schematically, one can think of private property being under threat from two main forces – anarchy and predation.[14]

The problem of anarchy arises because the government is too weak. Individuals cannot secure their rights against claims of other private actors who might act either using coercive power or the organs of the state to weaken property rights. The answer to the problem of anarchy was understood by Hobbes, among others, who emphasized the need for a state to regulate inter-personal transactions.

The development of formal legal systems allows more transactions to be enforced by the state rather than relying on informal mechanisms such as membership of a social network. This development widens the use of contracts and can permit greater gains from trade to be realized. This requires institutions that both monitor transactions and punish contractual failure.

The problem of predation arises when a government uses coercive force to undermine property rights. This could either be through the tax or legal system. For example, monopoly marketing boards have long been used as a means by governments to extract returns from the investments of farmers.

The role of good institutions in this context is to support the creation of property rights through limiting the power of government. This includes having an appropriate legal structure in place as well as a system of enforcement. Such things often evolve over long periods and it may be difficult to build the trust in institutions that is required to make the creation of rights credible.

The cross-country data show a strong cross-sectional correlation between measures of property rights protection (in particular expropriation risk) and income per capita. Some, most notably Acemoglu, Johnson and Robinson (2001), have interpreted this as indicative of institutional strength. However, the main difficulty is

[14] See Djankov et al (2003a).

knowing which way the direction of causation runs. In their ground-breaking paper, Acemoglu, Johnson and Robinson (2001) use a measure of settler mortality in colonies as a way of trying to cut through the issue of causality. This variable is measured around 1700 and is historically predetermined. They argue that the latter drives property rights without having a direct effect on income per capita. Moreover, there is a strong correlation between settler mortality and the risk of expropriation measure of property rights that they use.

Acemoglu, Johnson and Robinson (2001) argue that the reason that settler mortality drives modern day property rights enforcement lies with the historical incentive to invest in institutions that promote long-term investment. Where settlers could not settle, there was more focus on short-run extractive regimes rather than building an institutional structure for the long run. They show that the correlation between property rights and income per capita may indeed be causal. For this reason, their paper has increased interest in the whole debate about the role of good institutions to support property rights in promoting development.

The Acemoglu, Johnson and Robinson (2001) results focus on the effect of property rights security on growth outcomes. There is no evidence that they also impact on poverty beyond the effect on growth. However, as we saw in the last section, the effect of income on poverty is extremely important. We can use these results to get a feel for how far an improvement in property rights can increase income per capita and thus contribute to poverty reduction. Using their estimated coefficient, we find that an increase in protection of property rights across the globe of half of one standard deviation would be sufficient to halve global poverty (Besley and Burgess, 2003). This exercise suggests that improvements in property rights could indeed be an important factor in poverty reduction even though the effect is assumed to be purely via growth.

Findings like these have led to many debates and reinvigorated discussions of institutions (and property rights in particular). One of the main concerns is whether the link between settler mortality and income per capita is really due to institutions. For example, Glaeser et al (2004) argue that the link to income per capita works via human capital rather than via institutions. This fits well with the discussion of expanding opportunity below, and gives another reason to suspect that human capital has social benefits.

How to map from these findings into concrete policy suggestions about property rights is not immediately clear. Given issues of comparability across countries and institutions, it is seldom, if ever, possible to derive highly specific policy proposals from cross-country analysis. In any country, the policies that can be selected and maintained are shaped by the political, legal and social institutions in that country. Making real improvements often involves far more than passing a law or a budget appropriation.

Such concerns suggest a move to a more country-specific and microeconomic level. In doing so it is helpful to consider rural and urban property rights separately. An early study of rural property rights was performed by Besley (1995), who provides microeconomic evidence for the effect of property rights on investment by studying a cross-section of land rights in Ghana. Besley (1995) studies an area where most farmers have multiple plots of land, but where a farmer's rights may differ across his plots. He finds evidence of the importance of property rights for investment incentives, in that farmers were found to invest more on their more secure plots.

Other evidence on the importance of rural property rights comes from India, where a prominent policy reform since independence (in 1947) has concerned 'land reform', a term describing legislation that is designed to improve the property rights of agricultural tenants, smallholders and tenants over the land they farm. Besley and Burgess (2000) study the state-level variation in land reform legislation passed from 1958 to 1992, and find that land reforms had a strong poverty reducing effect. Reforms that improved tenancy rights were particularly effective, whereas reforms that were more distributive in nature (land-holding ceilings and land consolidation acts) had no significant effect. This confirms anecdotal evidence that large landholders were able to avoid the redistribution of their assets, but were unable to block changes in the terms of tenancy.

Banerjee et al (2002) confirm the importance of tenancy reform, in a more microeconomic study of West Bengal. Tenancy reform in West Bengal gave tenants permanent tenure on the land they sharecropped, as long as they paid 25 percent of the output as rent. While this redistribution (of bargaining power) might suggest a standard trade-off between efficiency and equity, Banerjee et al (2002) find that regions with tenancy reform had faster agricultural productivity growth than similar neighbouring regions without it. They interpret this result as due

to the improved incentives (to invest, and work hard) that tenants faced after the reform. We discuss both of these findings from India in more detail in Section 6.

A number of further microeconomic evaluations have been conducted elsewhere, and Pande and Udry (2005) provide a comprehensive survey of the more robust findings of these reforms. They conclude that property rights reforms usually increase farm productivity and investment (and to a weaker extent, credit availability), but that there is a great deal of variation across experiences. While this heterogeneity is not well understood, there is suggestive evidence that the effects of land titling are weaker in situations where previous land tenure arrangements were very informal.

While improving farmers' rights to the land they farm is important in rural areas, this is of little help to the huge mass of urban poor around the world. However, a simple property rights reform that has been especially common in urban areas in recent years is land titling (or registration), popularized by de Soto (2000). These reforms involve taking land claims out of the informal realm (i.e., rights through lineage, community-based holdings, or squatters' rights), and registering them with the legal system so as to make them more formal. While the effects of such a purely paper-based reform could be doubted *a priori*, results are typically encouraging in practice. One compelling effect of improved urban property rights was identified by Field (2004) in her study of titling reform in Peruvian urban slums. Field (2004) finds that households are more likely to go to work after the rights to their homes are improved, corroborating anecdotal evidence that one household member would need to remain at home to protect the property in the absence of formal rights. This very simple reform removed the deadweight loss associated with enforcing property rights through informal measures.

The discussion so far has revolved around (urban and rural) land rights, which are likely to be an especially salient dimension of property rights for the poor (whose primary asset is likely to be land). However, property rights, defined more broadly, matter to firms as well as farmers. If property rights affect the economic performance of firms then this may impact those whose livelihoods depend on the wages paid by these firms. Johnson, McMillan and Woodruff (2002) provide suggestive evidence on this point from entrepreneurs in five Eastern European countries (Slovakia, Poland, Romania, Russia and Ukraine).

Their survey asks entrepreneurs whether they have to make extralegal payments to the government, payments for 'private protection', and/or additional unofficial payments. Answering no to these questions is a very strong predictor of how much (of his current cash flow) an entrepreneur invests. Interestingly, property rights as measured in this manner appear to be far better at predicting investment behaviour than do measures of access to credit (though because they survey only existing businesses, credit could still be a significant barrier to entry) .

An important but commonly overlooked dimension of property rights concerns their enforcement via legal systems. There is an emerging cross-country literature which has argued that different legal origins (for example, common law versus civil law origins) have given rise to differences in legal and judicial systems and procedures, and these procedural differences account for a range of features of economies. They argue that legal systems are crucial to the enforcement of contracts and that this shapes the way in which economic structures evolve. For example, Djankov et al (2003b) asked an international association of legal firms (Lex Mundi) to document the legal procedures that would be required for two common cases (the eviction of a non-paying tenant, and the collection of a bounced cheque) in each of 109 countries. Their resulting index of legal 'procedural formalism' is driven by legal origins, and is associated with higher expected duration of judicial proceedings, low perceived judicial quality, and more corruption. Another study (La Porta et al, 1998) finds that legal origin is a strong predictor of the development of financial markets. However, despite the clear association between legal origins and legal outcomes, there is little evidence that legal origin is correlated with aggregate measures of economic performance.[15]

More microeconomic evidence on the importance of courts is beginning to emerge. Johnson et al (2002) provided suggestive evidence as part of their study of entrepreneurs in Eastern Europe discussed above: an entrepreneur is more likely to invest if he feels that the courts are effective at enforcing property rights. Chemin (2004)

[15] See Acemoglu and Johnson (2005) for an extensive discussion of this issue. They argue that expropriation risk is much more robust as a predictor of aggregate performance compared to legal origins.

makes courts the focus of his study of small (less than 10 workers), informal non-agricultural firms in India, where many courts take years to settle a trial. Such firms would take any legal cases to their local court, but information about these local courts is sparse. Fortunately, the efficacy (in terms of speed and case back-log) of local courts is highly dependent on that of higher-level courts within the same state. Chemin (2004) thus exploits the state-level variation of court speed (the number of cases pending in state-level courts), and finds that firms in states with relatively slow courts are much less likely to write contracts and go to court to settle contractual disputes. And this appears to have an effect on important outcomes: firms in states with slow courts are smaller, less productive, and less likely to invest. While there remains some concern that the effect of courts may be proxying for other state-level characteristics that drive such outcomes, the results on contracting behaviour are suggestive of the importance of courts in developing countries. In a similar vein, Visaria (2006) finds that the setting up of "debt Recovery tribunals" in Indian states as a means of expediting the disposal of debt recovery cases was associated with banks lending more money to businesses at lower rates of interest.

3.2 Governance and accountability

The second aspect of institutions is that relating to governance and accountability. The problem of poverty cannot be addressed without strengthening the state in dimensions that are relevant to the poor. This is particularly important in the provision of public goods and services where the recent policy agenda has put much more emphasis on private alternatives to government, such as non-governmental organizations, stepping in where the state has failed. While it is evident that this may fill an important short-run need, there are concerns over whether private organizations are sufficiently transparent and accountable to substitute for state action in the long-run. However, a central problem is that many states in the developing world are democratic only in a formalistic sense.[16] For example, they may hold elections, but the disadvantaged

[16] Notably absent from the (cross-country) literature is any convincing evidence about the merits of a democratic setting for economic policy outcomes. For example, Mulligan, Gill and Sala-i-Martin (2004) argue that there is also very little difference between economic policies in democracies and non-democracies. This is true in spite

are poorly represented and, in any case, are uninformed.

There is a need for an understanding of comparative institutional advantage to investigate both theoretically and empirically which organizational solutions are best suited in particular circumstances. While we are still some way from a complete understanding of these issues, there is a growing concern with creating the theory and evidence relevant to these issues.

There are two main strands to the economics literature on governance and accountability. The first concerns the need to provide ways of preventing governments from fulfilling those functions where it performs badly or by improving its performance in essential tasks. Chief among these concerns are measures to limit corruption. There is now a large body of evidence demonstrating a negative correlation between measures of corruption and economic performance (see, for example, Mauro (1995)). However, it is doubtful whether this constitutes a causal relationship. That said, corruption is symptomatic of resource misallocation. There is now less acceptance of the more benign view of corruption that it 'greases the wheels' in the face of an overbearing state. Corruption can have a corrosive effect on the conduct of policy and politics. It undermines faith in government to resolve problems and can lead to arbitrary redistribution of the costs and benefits form state intervention.

The other aspect of good governance is increasing the efficiency and effectiveness of government in delivering public goods and services. This could mean government that is more responsive to the needs of citizens – especially the poor. The geographical placement of public services and the kinds of priorities that are adopted may affect the extent to which increased tax revenues earned through economic growth are spent.

Discussions of governance and accountability typically focus either on reducing corruption or improving the responsiveness of government. In democratic settings, improved accountability is an

of the broad consensus on the importance of representative democracy. Many of the dilemmas faced by the policy-makers arose precisely because they operated under democratic constraints. Hence, it is no surprise after reading these essays that the data show little link between democracy and economic performance.

important theme. The general accountability theme is discussed in Besley (2006, chapter 4) which uses an agency model of politics emphasizing the importance of imperfect information to problems of government. This means that citizens have limited means of monitoring what policy makers do. To improve the workings of government requires a better system of monitoring. In a representative democracy, the electoral process is the central means of ensuring this. However, checks and balances on leaders may also be important even where elections are limited.

There are two main issues to be dealt with – selection and incentives. The first of these refers to the need to have policy made by competent and honest policy makers. The second refers to making sure that policy makers make good decisions once they are in office. A key issue is to understand how institutions improve the workings of government by improving either selection or incentives.

The remainder of this section discusses three specific institutional features that, according to the best evidence available, appear to promote governance and accountability. These institutional features are: a free mass media; decentralized political power to local governments; and the constitutional reservation of elected positions for members of disadvantaged minorities. While the measures that we discuss are quite specific and may not be applicable everywhere, they are useful in illustrating the approach that we take to formulate an agenda. They illustrate the importance of an evidence-based agenda and one where there is a sound theoretical grounding to our understanding.

3.2.1 Mass media

The role of the mass media is best viewed by thinking of policy formation as a principal-agent problem where the government is the agent and the citizens are the principals. The problem for the citizens is to control government and to motivate it to work in the public interest.[17] This kind of approach puts weight on the importance of transparency as

[17] Besley (2006) reviews this approach to government in general and discusses the role of the media in that context.

a means of enhancing accountability in government. This means allowing citizens better access to information as a means of rewarding and disciplining government. Indeed, without such information, elections may not be very effective in bringing about good government. Information is most likely to flow freely when the media is allowed to operate without government interference either via open covert censorship or other forms of influence.

The media may be an important force in increasing accountability through increasing information flows. In a cross-country setting Brunetti and Weder (2003) find that press freedom and corruption are negatively correlated. Djankov et al (2001) find that patterns of media ownership (especially state ownership) are related to corruption as well as a variety of other indicators of government quality. Suggestive of a link to effective elections, Besley and Prat (2006) find that less state ownership of newspapers and less ownership concentration are correlated with higher government turnover.

All of the evidence just cited comes from cross-country studies. Besley and Burgess (2002) provide more disaggregated evidence from India. An important state-level policy issue in India is the responsiveness of government to natural disasters, in terms of relief expenditure. Besley and Burgess (2002) find that the presence of an active newspaper media in an Indian state will significantly increase the state government's responsiveness to a natural disaster. An important finding for policy (and for removing concerns that newspaper circulation is picking up other variables) is that the effect is driven by local newspapers written in local languages and not by major national newspapers. We discuss this finding in more detail in Section 6.

Another example of the potential power of the media comes from Ugandan school funding. In the mid-1990s, as reported by Reinikka and Svensson (2004), Ugandan schools received only 20 percent of the funds that were allocated to them by the central government; the remaining 80 percent was deemed to be 'captured', or misappropriated. After this became public, the government began publishing monthly newspaper accounts of its transfers to local governments. By 2001, schools were receiving 80 percent of their entitled benefits. Reinikka and Svensson (2005) evaluate the importance of newspapers in making this information public and reducing capture. They find that local communities that are close to newspaper outlets (and hence have higher newspaper circulation) had larger decreases in

capture over the period of the newspaper campaign. While there is a risk that the proximity to newspaper outlets is proxying for other factors (such as political participation), the findings are suggestive of the power of the mass media.

A final example studies a programme in Brazil that randomly audited municipal expenditures to detect corruption. Ferraz and Finan (2005) compare municipalities whose mayoral elections were held before the disclosure of audit results with those that were held after disclosure. Mayors found to be corrupt by a pre-election audit were less likely to be re-elected, and this effect was stronger in municipalities with local radio stations. This example highlights how the media and democracy interact to punish poorly performing incumbents.

More informal mechanisms for encouraging the flow of information, involving the typically tight social networks in rural villages, are also of interest here. One telling example comes from a recent study on road-building contracts in Indonesia, by Olken (2005). While this study is not directly related to accountability of politicians to citizens (Olken measures the extent of corruption among local workmen being paid by the government to build local roads), his evidence on the power of information is suggestive. Olken finds that increasing the probability of audit strongly decreases the amount of over-billing by workmen. But interestingly, it was apparently well known that the only realistic punishment from being caught over-billing was to have the audit results read out at a village 'accountability meeting'. While there is a risk that this effect was partly due to the corrupt workmen's possibly perceived risk of another type of punishment, it seems that the power of social sanctions to reduce corruption is strong.

3.2.2 Decentralization

An important proposal for improving governance in delivering services has been efforts to promote decentralization of public service delivery. The main idea is to enhance accountability by strengthening local decision making. In principle, this should reduce waste and corruption. It should also allow better targeting of policies towards the neediest groups. Decentralization is also part of the wider theme of empowerment – providing poor people with a greater say in the way that the state operates.

The 1990s saw many decentralization experiments around the globe. However, while there is some promising evidence for proponents of decentralization, the jury is still out. There are concerns about whether local elites are able to capture local government. There is also evidence that the degree of fragmentation in society is a key component in public service delivery – see the discussion in Easterly (2001). In the collection of macro-data, part of the difficulty lies in how to measure decentralization. Treisman (2002) employs a number of different measures in a study across 166 countries, but finds mixed results. When using a measure based on fiscal decentralization, decentralized countries provide more paved roads but worse health facilities; but a measure of decentralization based on the number of tiers of elected government is negatively associated with paved roads and health facilities. Clearly the details and mechanisms of decentralization need to be considered at the microeconomic level.

One issue is whether decentralized governments are better at targeting pro-poor programmes and services. Besley, Pande and Rao (2004) study the allocation of 'below poverty line' (BPL) cards in South Indian villages. These cards are intended to be given to the neediest within a village, as they entitle the holder to public benefits. In all villages, those most likely to receive a card are the landless, the illiterate and those from 'scheduled' castes or tribes (traditionally disadvantaged castes and tribes). But in villages that hold decentralized public meetings to discuss resource allocation, these characteristics matter significantly more in determining who holds a BPL card. Galasso and Ravallion (2005) evaluate a decentralized targeting programme in Bangladesh that sought to encourage school enrolment among rural children by giving food to households, conditional on children's attendance. The policy was intended to be targeted towards the poor, and this was to be achieved through two stages: first, the national governments were to identify poorer villages; and second, decentralized village committees were to identify the neediest within villages. The authors find that decentralized village committees were much more effective at targeting the programme to the most needy than was the national government. Overall, the selection was only mildly pro-poor (12 percent of poor households were selected, as compared with 8 percent of non-poor households), though this is combined with a highly pro-poor village-level allocation. This is suggestive of the idea that local programmes such as this are less likely to be captured when beneficiaries are identified at local levels.

A second issue is the extent to which politicians' decisions over public goods spending reflects the preferences of their citizens. Foster and Rosenzweig (2001) study 250 Indian villages over a 20 year period in order to address this question. They exploit the existence of two clear interest groups in such villages: the landed, and the landless. Villages that decentralized their local governance allocated more public goods to purposes that benefited the landless majority (roads) and less to purposes that favoured the landed elite (irrigation canals). Further, the change was more pronounced in villages with a relatively large landless population. In a similar vein, Faguet (2004) studies a large decentralization programme in Bolivia and finds that decentralization enabled local communities with less political clout at the national level (such as those from small municipalities, and non-state capitals) to attract more of the national budget. Before decentralization the nine state/departmental capitals received 92 percent of the national municipal-level budget, but after they received only 38 percent. Further, allocation of these budgets changed dramatically from production targets (transport, energy etc.) to social targets (education, water, etc.), which Faguet (2004) interprets as decentralization better reflecting the preferences of citizens.

Participatory budgeting takes decentralization one step further, by directly involving citizens in the policy-making process. The most famous example of such a scheme comes from Porto Alegre, Brazil, where each neighbourhood holds popular assemblies in which local residents discuss investment priorities, evaluate past investments, monitor accounts, and elect representatives to the city council. Santos (1998) provides suggestive evidence of the effects of this 1994 reform in Porto Alegre, observing that over the period access to basic sanitation (water and sewage) and enrolment in education nearly doubled, and government revenues went up by 48 percent. It is impossible to separate out the participatory budgeting reform from other possible changes in Santos's period of analysis, but it is implausible that such striking gains are completely independent of the reform.

3.2.3 Political reservation

Finally, we discuss schemes of political reservation that seek to include disadvantaged minorities (who are typically poor) in the political process by reserving political positions for them. Such schemes are especially prevalent in post-independence India, where a portion of parliamentary seats have been reserved for low caste candidates. Pande (2003) finds that the scheme was successful at allocating employment (in quota-based public jobs) to members of the minority groups; a reserved politician from a given minority group allocated more of these jobs to his/her minority group than in similar constituencies without the reserved seat. Chattopadhyay and Duflo (2004) evaluate a huge scheme that required randomly-chosen villages to elect a village chief (in decentralized local elections) from an under-represented group. Some villages were required to elect a woman leader, and others a scheduled caste/tribe leader. In reserved villages, public good allocations were closer to those preferred by the reserved minority (as expressed to survey teams before the policy change).

It is clear that, at least in the case of India, this policy innovation has the potential to achieve its aim of involving minorities in the political process and ensuring that their views are heard. However, evaluations of this institutional design have been confined to India and thus its wider applicability is uncertain.

4. Expanding Opportunity

We turn now to the second main strategy for alleviating poverty. This has a more traditional flavour – emphasizing access to and accumulation of assets. Under this heading, we emphasise both access to human assets through education as well as physical assets through saving and borrowing.

4.1 Access to education

The need to promote human capital accumulation in developing countries is beyond doubt. Differences in human capital levels across countries are striking. Moreover, within poor countries, there is a wide disparity in human capital across individuals. There is little doubt that low levels of human capital are a major source of poverty. This claim is borne out by the best estimates for developing countries, where micro-econometric studies show significant returns to education with an additional year of schooling yielding an extra 6-10% increase in earnings (Krueger and Lindhal, 2001). This evidence appears robust across both methods and locations.[18] This suggests an agenda with scope to use investment in education as a means of attacking poverty.

One of the central unresolved issues surrounding human capital is the extent to which there are external benefits of education. Moreover, if such externalities exist, then which groups have the greatest spillovers. This is important since the case for subsidizing education is greatest among those groups. The impact of education on income per capita can be explored in both micro-data on households/individuals and macro-data. If externalities are important, then we might expect the latter to produce higher estimates. However, as Krueger and Lindahl (2001) have shown, this does not appear to be the case. They attribute this to the difficulty of measuring average educational attainment at the country level accurately. For example, quality differences between countries are likely to be significant. This

[18] Recent studies have paid a great deal of attention to issues of measurement error and the endogeneity of the decision to acquire education.

will tend to bias down estimates and hence make it look as if education is less important at the cross-country level.

One particular issue of concern is the disparity in a number of countries between the educational attainment of boys and girls. Thus, one of the MDGs is to achieve gender parity in school enrolment by 2015. But to achieve such a goal, there is a need to understand the complex economic and social constraints on education demand. It is also important to realize that low quality state-funded education may also inhibit school attendance. Gender equity in education is often portrayed as an equity issue. But there is also a huge efficiency loss due to the misallocation of the talents of a significant fraction of the workforce. Thus, gender discrimination may also lower income per capita and contribute to poverty through this channel. Esteve-Volart (2004) finds suggestive evidence of exactly this in her study of male-female ratios in the workforce (managers and manual labours) across Indian states, in the period 1961-1991.

The importance of gender is further borne out in studies of the impact of women's education on household behaviour. There are a variety of studies which explore returns other than via the standard income channel – for example on health (see Strauss and Thomas, 1998). These issues are likely to be of particular importance among the poor.

To expand opportunity via human capital accumulation requires an understanding of what drives the demand for and supply of education. Most countries have made *bona fide* efforts to expand education at the primary level. However, attendance remains incomplete. On the *demand* side, this is in part due to the high opportunity cost of schooling when children can be deployed in the labour force. This may be exacerbated by credit constraints, which we discuss in the next section. In both cases, they are issues that afflict the poor and hence create a cycle of poverty. Interventions to deal with these issues need not be confined to the sphere of education and require interventions targeted towards the problem after it is identified. For example passing and enforcing child labour laws may lead to long-run benefits by increasing human capital formation. Two studies report on how directly improving students' incentives to attend school can increase participation markedly. Kremer, Moulin and Namunyu (2002) examine a programme in which an NGO provided free uniforms and textbooks (which parents need to pay for) to randomly selected schools.

These schools saw a 15% rise in schooling, largely by reducing the number students dropping out. The PROGRESA programme in Mexico provided cash transfers to parents, conditional on their children attending school. Schultz (2004) exploits the randomized roll-out of this programme to find a significant effect: a 3.4% increase in enrolment on average for grades 1 through 8, and a 14.8% increase among girls who had completed grade 6. Interventions such as providing school meals may also provide a carrot that increases school attendance.

However, most recent efforts in the education sphere have focused on the need to improve the *supply* side in education. This ties together the concern about institutions with the issue of human capital accumulation. Recurrent supply-side problems occur involving both the quantity and quality of education supplied. There is a great deal of evidence concerning the *quantity* side of supply-expansion. One example comes from the world's largest programme in quantity-expansion, a huge school construction programme in Indonesia. Duflo (2001) evaluates this programme and finds significantly higher growth in schooling levels and earnings in the districts of Indonesia in which these schools were placed. Her estimate of the return to education, 8 percent higher wages per additional year of schooling (on average), is remarkably close to the estimate of countless other studies (see Ashenfelter et al (1999) for one meta-study). This robustness increases our confidence that the returns to education are indeed significant.

While progress has been made in increasing the quantity of education in LDCs, it has become increasingly apparent that the current *quality* of education systems throughout the developing world is dramatically failing the poorest and most disadvantaged groups. Improving educational quality, however, is not an easy matter.

One approach involves attempting to improve the pedagogical means through which education is provided. Pedagogical innovations can be powerful but need to be evaluated carefully and from a nuanced, case-by-case perspective. An example illustrating this caveat comes from a study of a programme to provide free textbooks in Kenya. Glewwe, Kremer and Moulin (2002) find that randomly provided textbooks in Kenya increased test scores by 0.2 standard deviations, but only among students who were already better than average (the bottom 60% of students experienced no effect). In another example, Banerjee and Kremer (2002) consider a programme that provided a second teacher to schools in India. Schools receiving an additional teacher were randomly selected, but these extra teacher schools performed no better on standardized tests. However, a similar programme placed an additional classroom assistant (not a trained teacher) in randomly selected schools, but assigned the assistant to work with the least-performing students. Banerjee et al (2004) find that *this* intervention was successful at raising test scores (of students of all abilities). Studies of this sort highlight the subtleties of targeting education quality by increasing seemingly vital inputs.

A second approach to improving the quality of education provision addresses the incentives faced by those who supply education, rather than the provision itself. Problems of low quality are frequently rooted in the bureaucratic structures that organize and fund education provision. Many recent educational reforms have focused on the need to deal with this problem. The power of carefully designed teacher incentives is evident, but again the details matter greatly. For example, in much of the developing world, teacher incentives (through pay) are weak. One clear indicator of this is alarmingly high absenteeism. Kremer (2000) reports that teacher absenteeism (number of days absent) in Kenya is around 20%, and Banerjee and Duflo (2005) report a rate of 24% from one (not atypical) district in India. A remarkable teacher incentive scheme that drastically reduced teacher absenteeism in India is studied by Duflo and Hanna (2005). The scheme required primary school teachers to photograph themselves, with their classes, using a date-stamping camera. Regularly-attending teachers could thus prove that they attend regularly, while poorly-attending teachers could now be punished when they did not attend. In addition, teachers were paid bonuses for good attendance. Predictably, attendance rose significantly.

The success of this incentive scheme is probably due to two factors: the performance target was clearly and objectively defined, and its incentive structure was simple. Banerjee and Duflo (2005) illustrate the importance of these characteristics by discussing other, less successful, schemes whose structure was less effective. One lesson that emerges from their review of (albeit localized) studies is that schemes administered or enforced more subjectively (for example, by a headmaster's evaluation) are less effective. Another well-known limitation of incentive schemes is that incentives based on performance in one dimension are unlikely to improve performance along other dimensions. An example of this occurred in Kenya, and is presented by Glewwe, Ilias and Kremer (2003). Schools implemented 'prize' schemes for the teachers of schools performing well on tests; this did improve test scores overall, but had no effect on teacher attendance. This is perhaps unsurprising, but it reveals an important reminder that incentive schemes need to be carefully targeted directly on the performance variable that they are designed to affect.

Closely related to this discussion of quality improvement is the remarkable rise in the presence of NGOs in the education sector (and in the provision of many other public goods) in many developing countries. Private provision of education by a competing plurality of NGOs is likely to encourage innovation and experimentation in product delivery, just as we argue below in the case of NGO microfinance provision. In the vein of incentives, recent theoretical work has argued that one advantage of NGO provision lies in the selection and matching of those who work there. Besley and Ghatak (2001) suggest an approach to public good provision that emphasizes the importance of 'mission' formation in galvanizing effective organizations. NGOs may be better able to match agents who are motivated by the same mission. An implication is that education is better provided by those who value education most (and are hence most motivated to provide it well).

One study, by Sukontamarn (2005), illuminates these ideas empirically. Sukontamarn contrasts the effectiveness of state-run and NGO-run schools in Bangladesh. The NGO-run schools are organized differently: they are more likely to have a higher percentage of female teachers, to maintain Parent-Teacher Associations (PTAs) and to have smaller class sizes. And the NGO-run schools have significantly higher girls' education outcomes such as test scores (with no change to the boys' outcomes), as well as higher enrolment (again, working chiefly through higher girls' enrolment). Sukontamarn's study further illustrates that the characteristics that distinguish NGO-run schools from state-run schools (high percentage of female teachers, PTAs and smaller classes) are exactly those that are driving the superior performance. It is possible that this NGO is better at aligning incentives within its schools than is the government; but it is equally possible that the NGO is better at matching motivated agents with an organization whose mission they agree with. However, it is clear that a wider body of empirical evidence is needed before wide-ranging policy recommendations concerning NGO-run schools can be made.

4.2 Access to credit

It is widely recognized that credit constraints are an endemic feature of low income economies. Moreover, with poor countries, it is the poor who are typically excluded from formal finance. The roots of financial development are complex. They include the problems of information that increase the transaction costs of lending. There are also issues of enforcement, due to weaknesses in legal systems and poor incentives in financial organizations (especially those with soft budget constraints due to government under-writing).

The recent theoretical literature emphasizes links between inequality and development via the operation of credit markets. Even if the poor have poor have access to investment opportunities, it may be difficult for them to exploit these opportunities because they are unable to borrow (see Banerjee and Newman, 1993, and Aghion and Bolton, 1997). This can create households stuck in poverty traps. These ideas underpin the large cross-country literature on credit which shows a strong correlation between financial depth and growth (see, for example, King and Levine, 1993).

But simply expanding financial depth mechanically is unlikely to deal with the fundamental causes of financial under-development. As in the case of schooling, the prevailing view has now shifted firmly towards an appreciation of the fact that mechanisms of expansion and delivery matter. The microfinance revolution has encouraged the view that institutional innovation in delivery is key. This recognizes squarely that it is necessary to deal head-on with the factors than inhibit credit market development. It also imports ideas from the operation of informal credit markets at the interface between formal lenders and borrowers.[19]

Microfinance is a catch-all term for an array of institutional innovations that are designed to provide the poor with small-scale loans. NGOs have been at the forefront of these innovations in credit delivery. While the institutional forms vary, a number of features are common to different programs. First, loans are often made only to groups of individuals. This has two theoretical advantages: (i) group-lending

[19] See Armendariz de Aghion and Morduch (2005) for an excellent review of the main ideas.

schemes provide incentives for similar types of individuals to group together, which creates a self-selection effect that encourages good borrowers to participate and bad borrowers to stay out of the market; and (ii), group-lending schemes also provide incentives for individuals to monitor their peers, which it is assumed they can do more effectively than a bank could. Second, dynamic incentive schemes, such as those that begin with small loan amounts that increase only upon satisfactory repayment, are common. Finally, many programmes demand repayment at regular and frequent intervals during the life of the loan, in contrast with the standard loan contract that asks for full repayment ex post. There are good theoretical reasons to believe that these and other institutional features are successful innovations, which will enable the poor to access credit without high loan subsidies. Further, since the 'microfinance revolution' has spread via a trial-and-error approach, on the back of thousands of (often competing) NGO practitioners, there are good reasons to believe that microfinance has proven successful in practice as well.

There is no doubt, however, that the theory and practice of microfinance have progressed far ahead of empirical evidence documenting its impacts. Because individuals self-select into microfinance, and because programmes are typically placed non-randomly (either in places where they are likely to need the least subsidies, or places that are most needy), comparisons of those who participated with those who did not have the potential to be dangerously misleading. One careful study is provided by Pitt and Khandker (1998), who evaluate a series of micro-lending programmes in Bangladesh. They make progress by comparing households who are just eligible (households must have less than half an acre in land to participate) with those who are just ineligible. Their results are striking. Household consumption is found to rise by 18 taka for every 100 taka lent to a woman, and by 11 for every 100 lent to a man. The households were more likely to send their boy(s) to school (regardless of whether the father or mother received the loan), but no more likely to send their girl(s) to school; this may suggest that girls are called upon to help take care of work that their mothers had done prior to borrowing. Microfinance has been the subject of such attention, and is so pervasive in many developing countries, that extremely solid evidence, from a variety of settings, is badly needed.

A second attempt to make finance accessible to the poor goes by the name of 'social banking'. This state-led policy encouraged (or required) state-owned or state-regulated banks to open in rural areas, and to lend to the poor at subsidized rates in these locations. This type of intervention has fallen out of favour for fear that it is loss making, too easily captured by elites, or simply unable to achieve the stated aims. However, Burgess and Pande (2005) find that the Indian social banking expansion (the largest the world has seen) was remarkably successful at reducing poverty. Interventions such as these are notoriously difficult to evaluate, because bank placement is so far from random. On one hand, bank placement is deliberately targeted at the poorest areas; but on the other hand, banks attempt to locate branches in the most lucrative areas. Burgess and Pande (2005) exploit the details of the Indian bank expansion policy to get around these problems of reverse causation (see details in Section 6), and find that rural banks reduced poverty, increased agricultural wages, and promoted non-agricultural economic activity. While it is yet to be seen exactly how the bank expansion programme achieved these outcomes, there is little doubt as to its efficacy.

While most analyses of credit market failures consider the informational asymmetries that plague credit transactions, a commonly overlooked dimension is that of legal systems that can effectively enforce debt contracts. This relates credit provision to the discussion of property rights, in that effective courts are needed to enforce contracts in both cases. Visaria (2006) studies a policy innovation in India that created 'debt recovery tribunals' in the hopes of accelerating banks' recovery of non-performing loans. These tribunals dealt exclusively with debt recovery cases, and were given the remit to follow a streamlined procedure that emphasized a speedy adjudication of cases and swift execution of the verdict. Visaria (2006) finds that even within the same loan, once the tribunal was created, payments on the loan were more likely to be paid on time.

5. Liberalization

The Washington Consensus put a fair amount of weight on privatization, deregulation and openness. It was formulated in an era in which a number of OECD countries were embarking on a similar program of economic reform. This, above all, created the association between Reaganite and Thatcherite policies – dubbed neo-liberal in some quarters – and the Washington Consensus.

Many countries have adopted regulatory regimes that have limited the development of free markets. These are frequently given well-meaning motivations such as fixing market failures and making sure that weaker economic agents are not exploited. However, the reality is often rather different. Often such interventions are captured by special interests who use them to establish and extract rents. Second, the empirical basis for the claim that regulations deal effectively with their purported objectives is weak. Far from being seen as the hand-maiden of unfettered markets, some aspects of deregulation can now legitimately be viewed as being friendly towards the poor. This shift in thinking about market liberalization is key to further promoting the interests of the poor and is increasingly supported by empirical evidence. In this section we discuss some of this evidence, focusing on two main areas of liberalization: deregulation and increasing outward orientation.

5.1 Deregulation

The post-war model of economic development followed in many countries saw the state as the main actor in promoting growth. To this end, a huge variety of regulations were put in place to influence the private sector. Many of these were passed with the noblest of intentions, intending to promote faster and more equitable development.

Lately there has been a significant rethink in mainstream economics on the efficacy of many attempts at regulation. First there are issues of competence – does the government have sufficient information and enforcement capacity to pick optimal regulations and to make them work effectively? Second, the assumption is that the structure which sets and implements regulation is benevolent.

However, this rather naive view of government is now widely questioned. If regulation responds to powerful sectional interests, there is no reason to think that it will reflect the broad interests of citizens let alone the poor.

Alongside these broad-based concerns, we now have access to a larger body of empirical literature that allows us to assess how regulation is working. This empirical evidence has increasingly revealed that (noble as the intentions of the architects of regulation may have been) regulation has been neither an engine of economic development nor a boon for the poor.[20] In this section we discuss, in particular, reforms to the regulation of firms' abilities to hire and fire workers (labour market regulation), and to enter and exit markets (product market regulation). Clearly there are many other spheres of regulation that could be studied, but these serve to make our main points.

Labour market regulation typically takes two forms. First, policies may directly affect the wages that regulated sector workers receive. Such policies include minimum wages and restrictions on the industrial relations environment (e.g. the bargaining terms between firm owners and workers). Second, policies aim to reduce the variability of workers' earnings through employment protection legislation. These policies typically impose costs on hiring and, especially, on firing workers. Both types of regulation act to increase labour costs, and standard economic theory suggests that, in the anticipation of these costs, firms will simply hire less labour (they will find less labour-intensive ways of producing, or simply choose to cut back on investment because not enough of the returns to investment will be kept by the owners). That is, while regulation is likely to be positive for those workers on the 'inside' of the formal sector (those who are fortunate enough to work there), it is likely to be damaging to those on the 'outside' (those who work in the informal sector, or are unemployed). This insider-outsider divide is likely to have ramifications for poverty reduction because formal sector insiders are relatively well paid, and unlikely to constitute the poor. An additional social cost of

[20] This comes as no surprise to students of the political economy of regulation – see, for example, Stigler (1971) and Shleifer and Vishny (1998).

labour regulation is that, as in the case of any additional regulatory burden, informal sector firms will simply decrease their willingness to join the formal sector. This cost may be borne by consumers (through reduced quality of service), or by taxpayers who have a smaller base from which to draw tax revenues.[21]

Macroeconomic evidence for some of these ideas is provided by Botero et al (2004), who collect data on labour regulation policies from 85 countries. They consider the regulation of labour in two broad areas: employment laws (concerning how flexibly firms can adjust the terms of their labour contracts); and collective relations laws (the powers granted by the law to labour unions and the laws governing collective disputes). They find that both sorts of labour regulation are associated with lower labour force participation and higher unemployment, especially for the young (more likely to be 'outsiders' with respect to the formal labour market).

Besley and Burgess (2004) provide more microeconomic evidence on the effect of labour regulation on economic activity in India. Indian states, which have some jurisdiction over labour policies, began with the same labour legislation at independence (in 1947). Since then, however, states have made amendments to this legislation that have gone in various directions (whether pro-employer, or pro-employee) at various times – and some states made no changes at all. Such a setting provides an ideal laboratory in which to study the effect of labour regulation. Besley and Burgess (2004) find that regulating in a pro-employee direction increases urban poverty. Explaining this finding, Besley and Burgess (2004) find that registered manufacturing firms (those for whom the labour legislation is binding) in pro-employee states invested, hired, and produced less than similar firms in pro-employer states. As expected, the converse was true in the unregistered (informal) sector, as capital and labour moved from the formal to the informal sector in response to the legislation. We discuss this study further in Section 6.

Further microeconomic evidence is relatively thin, because the number of recent labour market reforms to study is quite low. Kugler (2004) studies one reform, which, in Colombia in 1990, reduced the cost

[21] See Botero et al (2004).

of firing workers in the formal sector. Kugler finds that this change did lead to increased churning of workers in and out of unemployment, but that total employment in the formal sector rose. In particular, new entrants to the sector were more likely to be young, highly educated, and to be hired by large firms; this is suggestive evidence of the misallocation of labour under the previous policy of costly dismissal, and for the idea that when workers are costly to firms they will employ fewer of them.

Product market regulations are just as common as labour market regulations in developing countries. With many developing countries having passed through long periods of central planning, deregulation of the economy to improve the climate for investment and entrepreneurship is increasingly emphasized. Obviously claims about the impact of regulation can only be assessed on a case-by-case basis. Economic analysis is increasingly playing a role in putting some structure on this problem and in identifying specific directions for reform. Djankov et al (2002) for example collect data on the time and number of procedures an entrepreneur must complete to officially open a business in 85 developing countries. They find that heavy entry regulation is associated with less democratic governments, greater corruption and larger unofficial economies, giving support to the idea that entry regulations are not in the public interest.

A detailed microeconomic study of entry regulations reform is provided by Aghion et al (2005). A significant component of India's pro-market reforms (in the 1980s and 1990s) was the removal of its 'industrial licensing' policy, the keystone of Indian industrial planning. Licensing policy sought to limit firm entry (and expansion of facilities, or into new product lines, by incumbent firms) in particular states and industries. When it was removed (in some industries in 1985, and in others in 1991), firms were free to enter and expand when and where they wished. Aghion et al (2005) find that this policy reform had a significant complementarity with the labour regulations studied in Besley and Burgess (2004): firms in pro-employer states expanded (and new firms entered), while those in pro-employee states contracted or exited. The labour market environment in an Indian state therefore exerted a significant influence on how industries responded to liberalization via delicensing.

While the above discussion has concerned legislation that explicitly regulates entry, additional barriers to entry in many

developing countries are manifold (for a review centred on transition countries, see McMillan (1995)), going far beyond explicit anti-competitive policies. Many barriers to doing business that we have already discussed (such as a lack of credit, poor property rights, or ability to enforce contracts) are likely to be especially detrimental to firms at start-up. Other barriers include predatory practices by state-owned firms (see Young, 1995, on China), and the informational demands involved in finding suppliers and customers from scratch (see Ronnas, 1992 on Vietnam). A related barrier (developed at length by Hausmann and Rodrik, 2002) involves the disadvantage of being the first entrant in a new industry or location. Later arrivals can free-ride on the successful experimentation of the first-comers, creating a strong disincentive to be the first entrant. While our picture of these effects at the microeconomic level in developing countries is incomplete, evidence on the benefits of low barriers to entry from developed countries (especially the United States, including from its early history) is compelling.

There is a mounting body of evidence that barriers to exit are equally important to the growth process as barriers to entry. The ongoing replacement of inefficient incumbent firms by more productive entrants (often armed with leading-edge technologies, a willingness to experiment, or simply good luck) is commonly referred to as the process of 'creative destruction'. When it is costly to exit an industry, failing firms (already in existence) may decide not to exit, and may instead leave the market cluttered with misallocated inputs. This can act as a barrier to entry to newer, more productive firms. Further, anticipating costly barriers to exit may discourage entry of new firms. That is, barriers to entry and exit go hand in hand.

The most pervasive barriers to exit are bankruptcy regulations, which can be extraordinarily high in some developing countries, but unfortunately there is no direct evidence of the effect of these regulations in a developing country. However, a vast body of indirect evidence on the importance of creative destruction, has been compiled by Bartelsman, Haltiwanger and Scarpetta (2004). They report on firm-level panel data evidence from fourteen developing countries, and find that between 20 and 50 percent of productivity growth (in the last decade) in these countries is due to the effect of less productive firms exiting and more productive firms entering.

A final area of product market regulation concerns limits to the private ownership of firms in certain sectors. Privatization was part of the Washington Consensus but convincing microeconomic evidence on its effects is limited. It is useful to distinguish between three distinct privatization agendas that surfaced over the past twenty five years – private goods privatization, public service privatization and post-communist privatization. A number of privatization experiments concerned divestment of production of private goods where the theoretical case for public ownership was weak. Apart from concerns over the distribution of the rents from public ownership, this is perhaps the least controversial form of privatization. One convincing microeconomic study of this sort of privatization comes from the Mexican privatization experience, in La Porta and Lopez-de-Silanes (1999). They find that firms are, on average, 24 percent more profitable after privatization, and that the bulk (60 percent) of this improvement came from genuine productivity gains (rather than higher consumer prices, or lower labour costs).

But the privatization agenda runs much deeper than this. There are large parts of the economy – education, health care, pensions, airline security and railways – where the divergence between private and social returns may indeed speak in favour of some form of public ownership. The assertion of the primacy of private ownership in this context is much more ideological and not based on any strong theoretical or empirical case.[22] The cause of the Washington Consensus was damaged by being associated with those who wanted to push the agenda in the social sphere. In places like Chile, this agenda was pushed hard, but with mixed success. In the social policy field, there has, however, been a more benign 'privatization by stealth' in the form of increasing involvement of NGOs in public service delivery throughout the developing world.

[22] However, a recent study by Galiani et al (2002) provides an example of an instance in which social costs were better addressed by private firms than by the pre-privatization public firm. Galiani et al (2002) study the provision of public water supplies, which entails a number of health externalities (due to water-borne diseases) that competing private providers may fail to internalize. However, despite these reservations about the privatization of water, Galiani et al (2002) find that child mortality fell by 5 to 7 percent due to the water privatization programme. While there are theoretical reasons to believe that the private sector will not provide at the first-best level, it seems that it is, nonetheless, doing a better job than the public sector in this particular context.

Another privatization agenda was that which followed the collapse of communism in Eastern Europe. Most of this consisted of private goods privatizations. It is distinctive mainly because of the scale of the activity and the weakness of institutions for a market economy which had to be built in many cases alongside the privatization process. The privatization issues faced here had little to do with the agenda of the Washington Consensus. Given the extent of public ownership, privatization was inevitable. Here, the main issues concerned the structure, speed and form that it would take. In this case, there was little experience to guide mass privatization. Such privatization is frequently blamed on the dramatic increase in poverty and increases in inequality in post-Communist transition. While there is little doubt that some transition experiences could have been handled better with hindsight, some dislocation was inevitable. As patterns of transition have settled, there is now more of a sense of those parts of the world whose economic structures and problems resemble those of those parts of the traditionally developing world and those that will enter the first world, facing the challenges that this entails. For the former group, the general lessons discussed here are applicable, although the strategy for each country will be quite specific.

Our aim here has not been to argue that deregulation is always and everywhere justified. However, it is also important to rely on empirical evidence as a means of seeing how regulations are working in the developing world. Without proper economic studies and evaluation, there is a danger that regulatory regimes that promote neither growth nor poverty reduction will prevail. There is also the point that deregulation can be achieved at relatively low cost so that where the micro evidence is supportive deregulation may represent a potent means of reducing poverty and enhancing growth.

5.2 Outward orientation

The value of openness to trade in goods and services is not hugely controversial. Moreover, the experience of China and India in integrating into the world economy, following on from the East Asian miracle, illustrates the power of this in practice. Arguably this bout of global integration has provided the most rapid sustained fall in global poverty that the world has ever witnessed (see Besley and Burgess, 2003).

But just how such integration should take place still provokes debate. The Washington Consensus did reflect a greater scepticism about the usefulness of infant industry protection as a means to pursuing economic development. The latter was a key part of the mainstream approach to development in the early post-war era. But the formulation of the Washington Consensus in many ways marked the end of naive state-led development strategies, which had dominated for a generation. This was fuelled in major part by the concern that controlled trade regimes created rents and fostered political opportunism. Influential commentators such as Peter Bauer, Jagdish Bhagwati and Anne Krueger were wise to this early on. But it took a while for their views to become accepted. The Washington Consensus marked the watershed.

This is not to argue that the logic of how governments intervene to promote industrial development is not important. Indeed the intellectual underpinnings in terms of imperfect information and coordination failure are part of mainstream economics in a way that they were not fifty years ago. The key question is how to design policies which are conducive to economic development. For this, the political prerequisites need to be understood. Amsden (1989) and Wade (1990) provide insightful commentaries on the East Asian experience. Generalizing from this, Hausmann and Rodrik (2002) argue that the key feature of trade policy in successful economies is the way in which it is conditioned on performance. The current Indian and Chinese efforts towards global integration are not experiments in wholesale trade liberalization, but efforts at generating a carefully managed path towards greater openness.

In moving from a broad policy recommendation in favour of outward orientation to the microeconomic details, two commonly overlooked caveats to classical trade theory are likely have a strong bearing on how trade liberalization affects the poor: factors of production are largely immobile between sectors and this stifles the potential gains from trade, but complementary policies can alleviate this problem; and transport costs between producer and consumer can be so significant in developing countries that tariff reform has only a negligible effect. Both of these problems are likely to afflict the poor most severely

When factors of production (such as labour and capital) are unable to move between sectors in response to a trade shock, traditional gains from trade (due to reallocating factors to more productive uses) cannot arise. Worse, immobile workers in non-comparative advantage sectors are likely to be hurt by trade. Topalova (2004) finds this to be the case in India, in its trade liberalization episode during the early 1990s. Using data from 1983-1998, Topalova (2004) compares the rate of poverty reduction in districts where workers were highly concentrated in the liberalized industries with districts where workers were not. Changes in manufacturing tariffs were relatively bad for poverty in pro-employee states (in which labour finds it relatively difficult to move between sectors) but relatively good in pro-employer states.

Flexible capital markets are also likely to be important in determining how a country responds to trade liberalization. This speaks further to the importance of access to credit, as argued above, in the case of allowing comparative advantage sectors to expand. But it also speaks to the importance of allowing comparative disadvantage sectors to contract through the existence of efficient bankruptcy procedures. Indeed, Pavcnik (2002) finds in her study of Chile's trade liberalization that over half of the aggregate productivity gains were due to the exit of inefficient firms. These concerns over factor immobility in developing countries are especially important when it comes to the effect of liberalization on the poor, who are likely to be the least able to move their labour or capital to better sectors.

Another important dimension is transport costs. The transportation infrastructure within most developing countries is notoriously poor. Indeed, internal transportation costs are likely to be so high that it is hard to imagine the rural poor being significantly affected by tariff changes at the border. On the importing side, Hanson (2003) corroborates this notion when he finds that the cost of transporting goods from the United States to the southern states of Mexico is at least 40 percent higher than to the border states; it is therefore unsurprising that Hanson (2004) and Nicita (2003) find zero effect of the NAFTA trade liberalization on Mexico's southern states, but significant positive effects in the northern states. The flip side of high costs for foreign producers penetrating urban markets is the high costs of exporting from rural markets to consumers abroad. Backward rural infrastructure will lead to high marginal costs of exporting.

Further, each potential export market incurs significant fixed costs of informational, reputational and distributional natures. These fixed costs are usually too high for small firms to bear on their own. Recent evidence from French firms, for example, suggests that only the largest 20 percent of firms export at all, and most of them export to very few foreign markets nearby (Eaton et al, 2004).

Whether countries should pursue capital market liberalization is more controversial. However, as Williamson notes in his essay, this was not part of the original Washington Consensus. It did, however, become part of the so-called "augmented Washington Consensus" which gained prominence in the 1990s and had significant policy influence. The subsequent economic crises in Russia, East Asia and Latin America from late 1990s onwards were frequently attributed to unwarranted pursuit of capital market liberalization and outward orientation (Hall and Jones, 1999). Because capital market liberalization policies typically affect an entire country at once, microeconomic evidence of their effects is missing to date.

6. Lessons from India

The previous three sections have argued that there is sound macro- and micro-evidence for the importance of three themes – institutions, expanding opportunities, and liberalization – for poverty reduction. The real challenge is to move beyond generalities and isolated within-country experiences towards specific recommendations for policy in any given country. To illustrate this process at work we present, in this section, work which tries to identify the institutional and policy drivers of poverty reduction in one of the world's most important countries – India.

India is home to a third of the people in the world who live on less than $1 a day. What happens in India will have a central bearing on whether the Millennium Development Goal of halving global poverty by 2015 is achieved. In this section we focus on work which uses sub-national data bases to identify the policy and institutional reforms that are capable of reducing poverty and encouraging growth. This evidence-based, microeconomic approach to policy making is common in OECD countries but is only now spreading across the developing world.

India is a federal democracy. The states of India are shown in Figure 2. Our focus is on the sixteen main states of India which account for 95% of the Indian population. The *Lok Sabha* (central parliament) and *Vidhan Sabhas* (state legislative assemblies) are directly elected bodies set up to carry out the administration of central and state government respectively. The socialist Congress party which formed the first government after independence from the British (in 1947) has been the dominant political force in state elections. However, as is evident in Figure 3 its importance has waned over time and in all states political competition between party groupings has been increasingly intense.

Figure 2: Map of Indian states (1965-2000 boundaries)

Note: State boundaries are drawn as they were prior to the creation of new states in 2000, since all analysis in this study concerns the 1965-2000 state definitions. The 16 largest (by population) states in India, those examined in this study, are: Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Jammu & Kashmir, Karnataka, Kerala, Madhya

Since independence the states of India have experienced very different growth and poverty reduction trajectories. This allows us to look at the links between poverty reduction, growth and distribution in great detail. This constitutes the first part of the analysis in this section.

The second part of the analysis in this section is concerned with linking institutional and policy reforms to poverty and growth outcomes in order to build up a picture of what types of reform have been effective in the post-independence era. Here we are helped by the fact that the Constitution of India which came into force in 1950 divides tax and expenditure powers between central and state governments. The national government has exclusive powers over areas such as foreign

affairs, international trade, credit and monetary policies, and those areas having implications for more than one state. The states are responsible for public order, public health care, agricultural development, irrigation, land rights, fisheries and industries, and minor minerals. Some areas are the joint responsibility of both the national and state governments, namely education, industrial relations, transportation, social security and social insurance. This division of powers combined with political competition has meant that different states within the federation have tried different types of policy and institutional reforms. We exploit this unique within-country variation to identify effects of policy and institutional reforms.

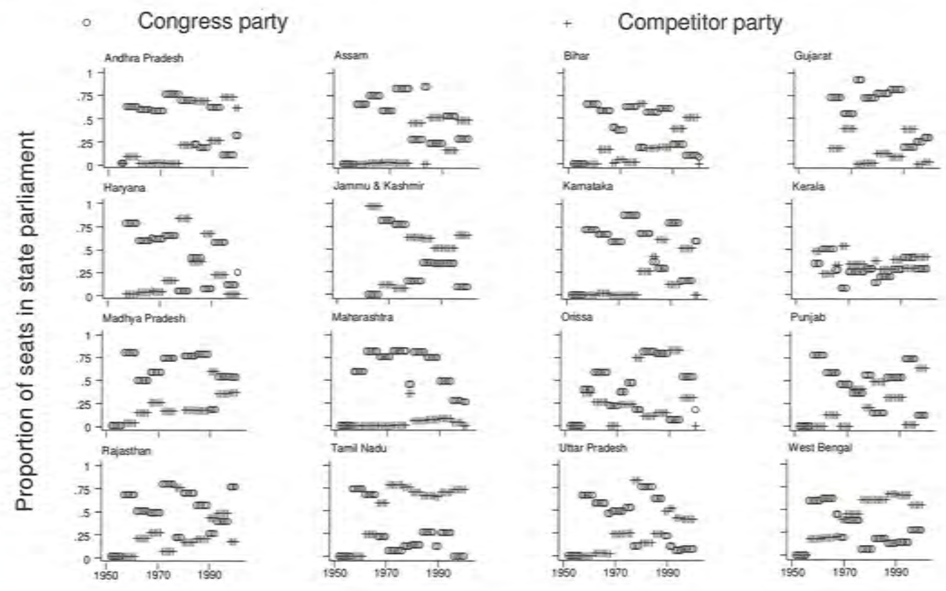


Figure 3: Political competition across Indian states

Note: Data span all state elections from 1950-1998, from Butler, Lahiri and Roy (1991), updated by Burgess and Pande (2003). The Congress party (which here includes the Indian National Congress, Indian National Congress Urs and Indian National Congress Socialist parties) was the dominant party throughout the period. 'Competitor party' plots the seat share of Congress's main competitor, which varies by state and over time. See Appendix 2 of Besley and Burgess (2002) for details on the construction of this variable.

The agenda for poverty reduction which emerges from this analysis is far from being a blueprint. It represents a synthesis of work done by the authors and by other researchers working on Indian sub-national data over the past five years or so. Nonetheless the insights we gain are relevant to those interested in building a global poverty reduction agenda. Our findings emphasize why scientific enquiry using carefully collected data must lie at the heart of the policy-making process. Empirical approaches based on sub-national data provide the most credible base for economists to influence the debate about global poverty reduction. The scope for further expanding the use of policy evaluation in India and other developing countries is enormous. At present, our knowledge is patchy and specific to the countries and policies that have been studied. Whether successful policies studied, for example, in India can be replicated elsewhere is moot.

It is clear that expanding the scope of properly evaluated policy experiments provides an exciting practical agenda. To appreciate its importance one need only contemplate the alternatives. The broad brush policy prescriptions from cross-country studies rarely lead to reliable and specific policy prescriptions. It also seems unlikely that pure theory will be much of a guide. More worrying is the possibility that bald assertion, intuition and ideology dominate the debate about global poverty reduction.

Even in the absence of firm evidence on the anti-poverty effectiveness of a wide variety of programs and institutional changes from all parts of the globe, studies that emphasize the role of institutional change are able to alter the climate of opinion. They undermine the cynicism that often surrounds debates about global poverty, suggesting that little or nothing can be done. Even if there are political constraints to adopting good policies and institutions, it is still important to know when the poor have benefited from such change elsewhere.

The work on India emphasizes how differences in economic growth and in the extent to which economic growth affects poverty are important in explaining why some states experience more rapid poverty reduction than others. Our overarching theme is on the centrality of the institutional context in which policy and accumulation decisions are made. The policy and institutional reforms pursued by individual states turn out to be central to explaining their poverty and growth experiences. Domestic reforms implemented at the sub-national level

have had a central bearing on poverty and growth outcomes. State-level reforms which promote accountability, expand opportunity and liberalize economic activity all have a role to play.

6.1 Poverty, growth and distribution in India

To examine the links between poverty, growth, distribution and policy in India during the post-independence period we follow the sixteen main states of India (which account for more than 95% of the population)[23] over the 1958-2000 period. To do this we assembled a rich data base poverty, inequality, growth and policy and institutional reforms at the state level for this period. Data on poverty and inequality come from repeated household surveys carried out by the National Sample Survey Organization.[24] National accounts data, which allow us to look at economic growth in different states across the period, come from the Indian Central Statistical Office. Data on state policy and institutional reforms were compiled by the authors and come from a wide variety of sources.

Figure 4 examines how output has evolved in post-independence India.[25] Before the mid to late 1970s economic growth was somewhat sluggish and unstable. After 1975 growth in real total output per capita picked up with some indication of an acceleration from the late 1980s. If we break down total output into primary and non-primary components we find that the growth acceleration from the mid to late 1970s was mainly accounted for by increases in non-primary output growth. Primary sector growth has been both low and stable over the

[23] For a map of the states of India see Figure 2.

[24] We are grateful to Ozler, Datt and Ravallion (1996) who created the state level data base on poverty and inequality for India.

[25] The classification of sectors used in India's national income accounts is as follows. Primary: agriculture, forestry, fishing, mining and quarrying. Secondary: registered manufacturing, unregistered manufacturing, electricity, gas and water supply, and construction. Tertiary: trade, hotels and restaurants, railways, transport by other means, storage, communication, banking and insurance, real estate and ownership of dwellings, public administration and defence, and other services.

whole 1960-1997 period. Understanding which factors encourage the diversification of production activities away from agriculture is thus central to understanding the overall pattern of economic growth in post-independence India.

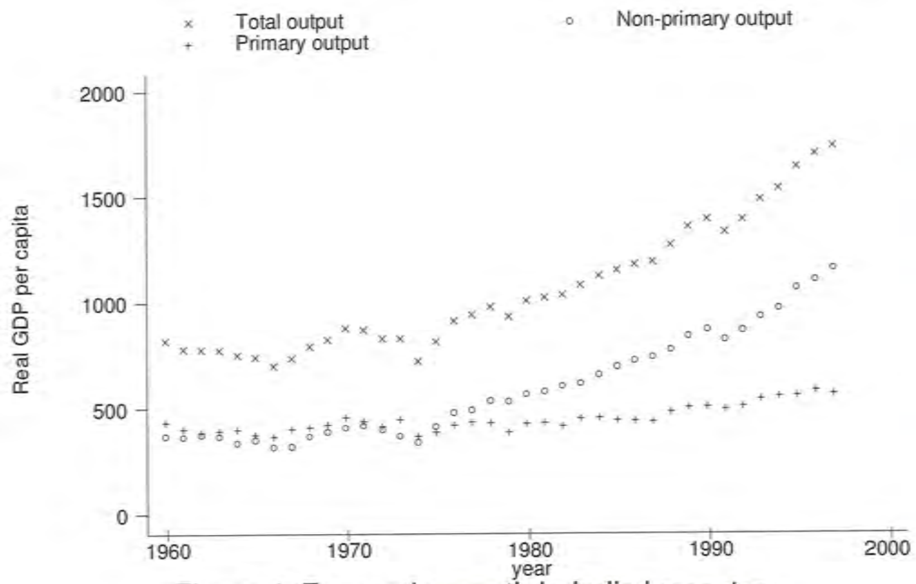


Figure 4: Economic growth in India by sector

Note: Data are from 1960-1997, from the Department of Statistics, Ministry of Planning and Implementation, Government of India. Real GDP per capita is measured in units of 1973-74 rupees. The primary sector consists of mining and quarrying, forestry and logging, fishery, and agriculture; and the non-primary sector consists of all other activities (manufacturing, construction, electricity and gas, transport, storage, communication, trade, banking, and public administration.) Only the 16 largest states (by population) are included in the all-India total plotted here.

An even more interesting pattern emerges when we look at the record of economic growth in different Indian states for the same period (Figure 5). Here, within the same country, we see an enormous amount of heterogeneity in economic performance. Andhra Pradesh, Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Punjab and Tamil Nadu exhibit rapid increases in total output driven by increases in non-agricultural output. Agricultural output per capita has been relatively flat in most states except for Punjab and Haryana where it has been a

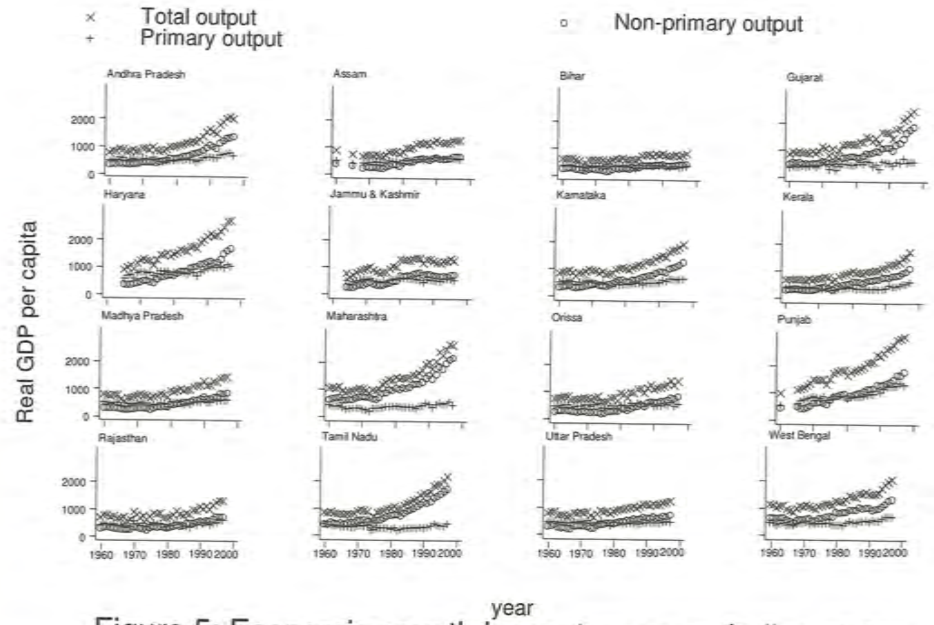


Figure 5: Economic growth by sector across Indian states

Note: Data are from 1960-1997, from the Department of Statistics, Ministry of Planning and Implementation, Government of India. Real GDP per capita (for each sector) is measured in units of 1973-74 rupees. The primary sector consists of mining and quarrying, forestry and logging, fishery, and agriculture; and the non-primary sector consists of all other activities (manufacturing, construction, electricity and gas, transport, storage, communication, trade, banking, and public administration.) The sixteen states plotted are India's sixteen largest states by population.

significant contributor to economic growth. In Assam, Bihar, Jammu and Kashmir, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal both non-agricultural and agricultural growth have been sluggish across the whole period. Overall rates of economic growth in these states have been significantly lower than in the fast growing states. In Figure 6 we break out non-agricultural output into secondary sector output of which the main component is manufacturing and tertiary sector output of which the main component is services. In all the fast growing states manufacturing has been a key driver of overall economic growth. Post-1980 the importance of services grows rapidly in the fast growing states replacing manufacturing as the main driver of economic growth. In the slow growing states growth in both services and manufacturing is moribund throughout the period.[26]

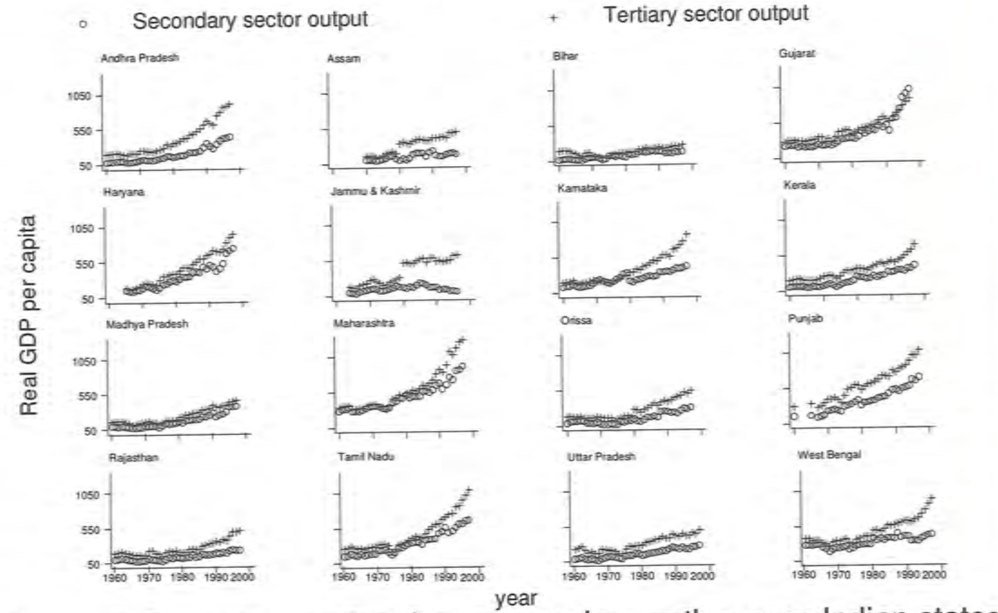


Figure 6: Secondary and tertiary economic growth across Indian states

Note: Data are from 1960-1997, from the Department of Statistics, Ministry of Planning and Implementation, Government of India. Real GDP per capita (for each sector) is measured in units of 1973-74 rupees. The secondary sector comprises manufacturing, construction, electricity and gas; and the tertiary sector comprises transport, storage, communication, trade, banking, and public administration. The sixteen states plotted are India's sixteen largest states by population.

Growth rates thus divide the sixteen main states of India into two groups of equal size: a backward group where growth and structural change have been limited and a forward group where economic growth and diversification have been intensifying over the period. Why do some Indian states grow rapidly whilst others remain mired in backwardness? Given the concentration of the world's poor in India few questions in economics can be more important. Growth heterogeneity in

[26] West Bengal is an intermediate case where manufacturing growth has been extremely sluggish but where growth in services picked up post-1980.

India is particularly intriguing given that all states are under the same central government. To look for answers we will need to look at policies and institutions, which differ across Indian states.

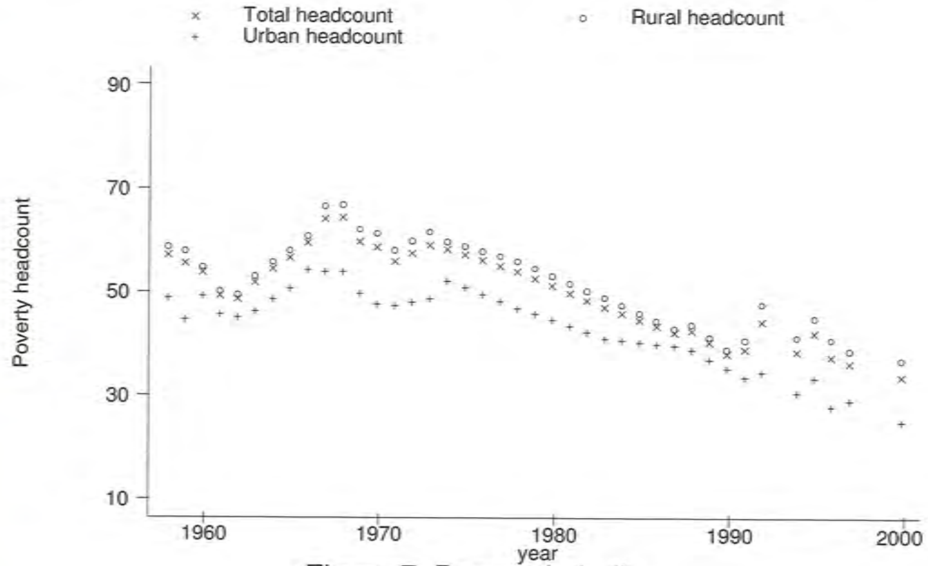


Figure 7: Poverty in India

Note: Data are from 1958-2000, from Özler, Datt and Ravallion (1996), and are derived from the Indian National Sample Survey Organisation's annual household surveys. Poverty headcount is defined as the percentage of people living below a poverty line recommended by the Indian Planning Commission, with separate lines for rural and urban areas. Only the 16 largest states (by population) are included in the all-India total plotted here.

What is the pattern when we look at poverty? Figure 7 graphs proportions of the population below the rural and urban poverty lines from 1958-2000.[27] Averaging over the period, a massive 48 percent of the Indian population falls below the poverty line, 49 percent in rural

[27] The estimates of poverty that are derived from the NSS data use the urban and rural poverty lines developed by India's Planning Commission. These poverty lines were chosen to assure that some predetermined nutritional requirements are met. Official poverty lines by state have been updated by the Planning Commission over time using the Consumer Price Index for Agricultural Labourers and the Consumer Price Index for Industrial Workers for rural and urban poverty respectively.

areas and 41 percent in urban areas.[28] These high rates of poverty and India's enormous population help explain why the country contributes a third of the global tally of those living below a dollar a day. Looking at changes over time we see that up to the 1970s the pattern of change is unclear but then there is an overall decline in both rural and urban poverty. Overall the poverty rate falls by 63 percent over the period.

This pattern, however, varies greatly across states (Figure 8). Matching up the growth and poverty plots in Figures 5 and Figure 8 it is clear that states that have experienced higher rates of economic growth have tended to experience more rapid reductions in poverty. Rapid expansion of the secondary and tertiary sectors (Figure 6) is associated with high overall rates of growth (Figure 5) and rapid falls in poverty (Figure 8). In states where the pace of economic transformation has been slow, poverty has tended to remain stagnant. Bihar, the slowest growing and least transformed state in India, for example, experienced a slight *increase* in rural poverty over the 1958-2000 period.

Household data collected across the 1958-2000 period enables us to examine how the income distribution has changed over time across Indian states. In Figure 9 we plot the evolution of the all India total, rural and urban inequality (as measured by the standard deviation of log household income). Urban inequality lies above rural inequality but there is no clear pattern of change over time. There is also no clear pattern of change at the state level and no clear differences in trends between fast and slow growing states (see Figure 10). Rural and urban series tend to move together and there is little evidence of a widening gap between rural and urban inequality.

[28] Figure 5 uses data from the NSS rounds spanning the period 1957-58 to 1999-2000. While surveys up to 1993-94 (50th round) generate relatively uncontroversial estimates, the survey design and sampling changed from then on, so that questions have been raised regarding the comparability of the quinquennial 50th and 55th rounds of the Consumer Expenditure Survey. As a consequence, and even though official estimates show a steep reduction in poverty measures in the 1990s (except for Assam and Bihar), it is not clear whether these estimates are accurate. There has been considerable debate about this issue, leading to an array of adjusted numbers (Deaton and Dreze 2002, Sundaram 2001, Lal et al 2001, Sundaram and Tendulkar 2003a, 2003b, 2003c).

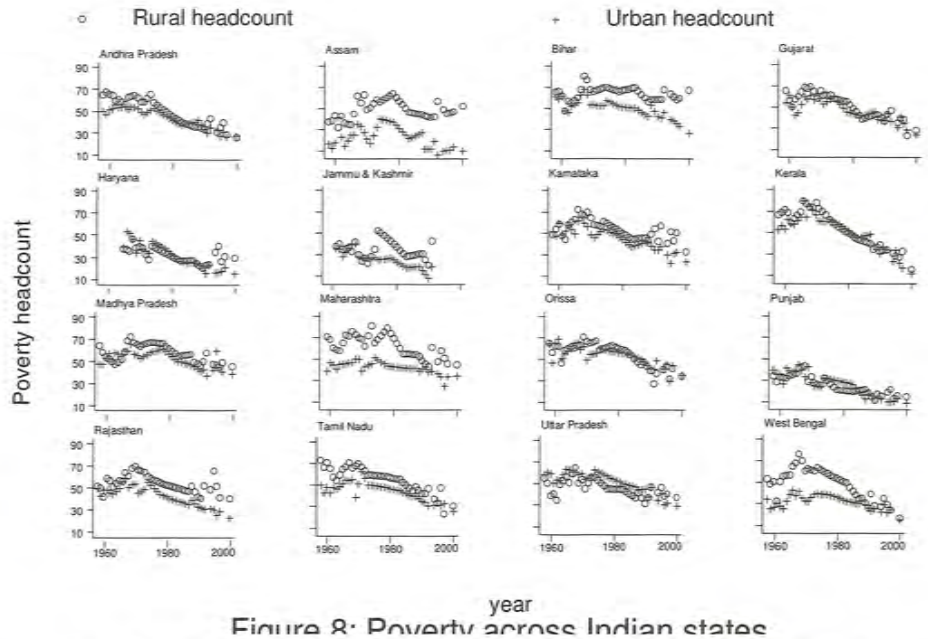


Figure 8: Poverty across Indian states

Note: Data are from 1958-2000, from Ôzler, Datt and Ravallion (1996), and are derived from the Indian National Sample Survey Organisation's annual household surveys. Poverty headcount is defined as the percentage of people living below a poverty line recommended by the Indian Planning Commission (1993), with separate lines for rural and urban areas. The sixteen states plotted are India's sixteen largest states by population.

We are now in a position to link poverty to growth in India, analogously to the way we analyzed the poverty-growth link in Section 2 above. To do this we run simple regressions, separately for each state, of the form:

$$p_{st} = \alpha_s + \beta_s y_{st} + \varepsilon_{st}.$$

where s denotes an Indian state and t denotes a year, α_s is a state fixed effect, p_{st} is the log of the poverty headcount ratio, and finally y_{st} is the log of income per capita.[29] These regressions are run separately for the

[29] It is important to note that y_{st} refers to (the log of) income per capita not consumption per capita. In many ways it would be natural to use the latter, but for the fact that most studies of growth look at determinants of income and not of consumption. Hence, it would not be straightforward to translate conventional

sixteen main Indian states for the period 1958-2000 exploiting the fact that, as seen in Figures 5 and 8, there is significant heterogeneity in both growth and poverty reduction across Indian states.

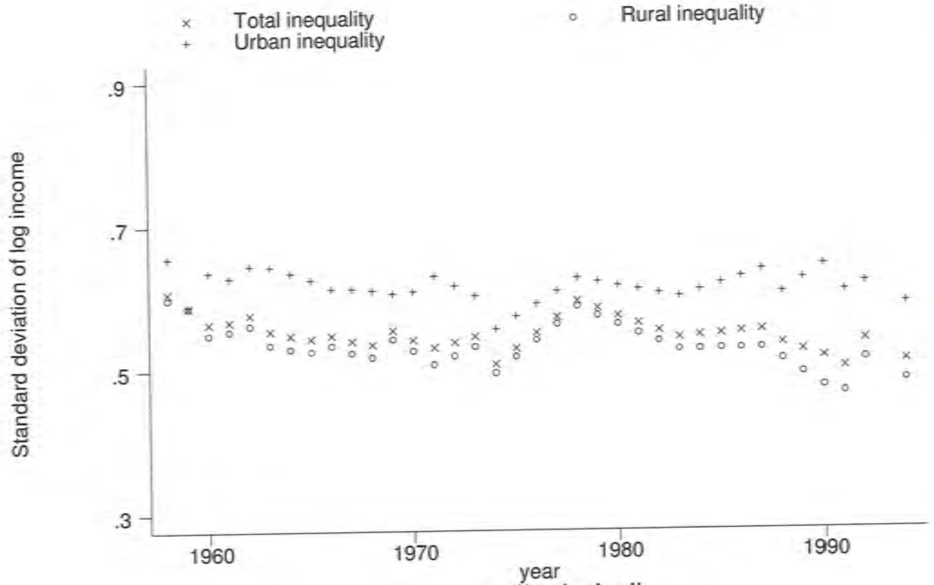


Figure 9: Inequality in India

Note: Data are from 1958-1994, from Özler, Datt and Ravallion (1996), and are derived from the Indian National Sample Survey Organisation's annual household surveys. Inequality is measured as the standard deviation of the natural logarithm of household incomes. Only the 16 largest states (by population) are included in the all-India total plotted here.

The coefficient β_s represents the poverty reduction efficiency of growth within each state. As both poverty and income per capita are measured in logs, this coefficient is the elasticity of poverty with respect to growth. It tells us the percentage reduction in poverty that was achieved for each percentage increase in income per capita. States with a higher

statements about growth into statements about poverty. If we look at poverty/consumption elasticities, we find a larger number. However, this is explained by the fact that a regression of log consumption per capita on log income per capita at the state level yields a coefficient which is significantly below one.

value of β_s (in absolute terms) have experienced growth spells that have yielded greater poverty reduction. Thus having a high β_s provides a plausible notion of growth being more effective in reducing poverty. The magnitude of β_s gives us a sense of the extent to which the poor are included in, and hence benefit from, the growth process. Understanding what factors – economic, social and political – are associated with high β_s, provides a way of thinking about how to operationalize poverty reducing growth.

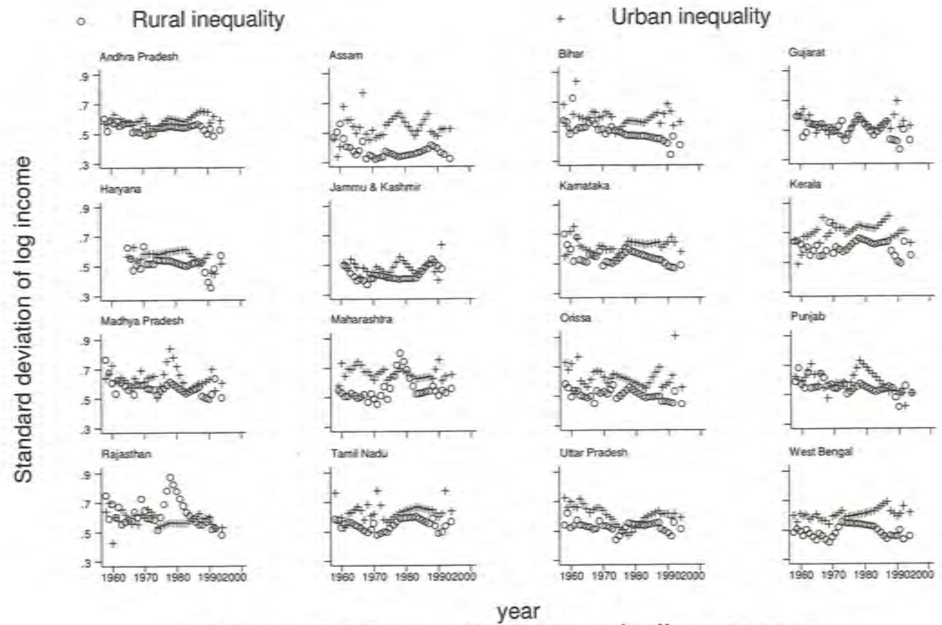


Figure 10: Inequality across Indian states

Note: Data are from 1958-1994, from Özler, Datt and Ravallion (1996), and are derived from the Indian National Sample Survey Organisation's annual household surveys. Inequality is measured as the standard deviation of the natural logarithm of household incomes. The sixteen states plotted are India's sixteen largest states by population.

The explained component of poverty reduction between any two time periods in a given Indian state will be a function both of the state poverty-growth elasticity β_s and the state growth rate g_s:

$$\Delta \hat{p}_{st} = \hat{\beta}_s g_s$$

where the estimated coefficient $\hat{\beta}_s$ represents the estimated poverty reduction efficiency of growth within each state. This coefficient summarizes many things, but it loosely summarizes how much growth within a state is poverty-reducing.

Column (1) of Table 4 shows the elasticities of poverty with respect to growth for India's states. The estimated elasticities are negative in every case, confirming that increases in income per capita are associated with poverty reduction. This is consistent with the findings in Section 2, and of a variety of studies (Dollar and Kraay 2002, Ravallion 2004, Besley and Burgess 2003, Bourguignon 2002). The average elasticity estimated for India is -0.64, with an average (robust) standard error of 0.08. The size of the coefficient means that an increase in growth of one percent is associated with a reduction in poverty of 0.64 percent. That is, growth reduces poverty less than proportionally. However, this is only an average, and we are more interested in seeing whether some states are more efficient than others in reducing poverty through growth. Table 4 shows that elasticities range from -0.30 for Bihar to -1.23 for Kerala. This tells us that within the same country Bihar would need four times as much economic growth as Kerala to achieve the same level of poverty reduction. This is a good indication that the poor in Bihar are less included in the growth process.

It is interesting to see how these numbers compare with the cross-country estimates presented in Section 2 (see Table 2). These estimate the poverty elasticity with respect to income per capita to be -1.96 (with a robust standard error of 0.32) for a sample of 88 low- and middle-income countries. This is much higher (in absolute terms) than the average estimated elasticity for Indian states of -0.64. Although India's average elasticity is very low in international terms, the estimates by state show the variety across India's states: in particular, Kerala and West Bengal exhibit encouraging larger-than-one elasticities, in the range of the best regional elasticities in the world. On the more negative side, a bunch of Indian states (namely, Bihar, Assam, Madhya Pradesh, Maharashtra, and Rajasthan) show elasticities as low as those of Sub-Saharan Africa.

Hence Table 4 exhibits variation in poverty-growth elasticities among India's states that is approximately as big as the variation at the global level. This degree of heterogeneity of India's states' elasticities is very interesting from a policy perspective: what has made Kerala's growth more poverty-reducing than Maharashtra's growth? Why in

Table 4: Poverty and growth across Indian states

Coefficients from regression of:	poverty on GDP				poverty on inequality
	β_s	g_s	$\bar{g}(\beta_s - \bar{\beta})$	$\beta_s(g_s - \bar{g})$	γ_s
State	(1)	(2)	(3)	(4)	(5)
Andhra Pradesh	-0.75**	0.027	0.18	0.35	-1.29
Assam	-0.42**	0.01	-0.34	-0.34	-1.79**
Bihar	-0.33**	0.008	-0.48	-0.32	-0.02
Gujarat	-0.63**	0.029	-0.02	0.38	1.48*
Haryana	-0.6**	0.031	-0.07	0.45	3.4**
Jammu & Kashmir	-0.57**	0.018	-0.11	-0.12	-1.47
Karnataka	-0.48**	0.023	-0.24	0.08	-0.29
Kerala	-1.16**	0.025	0.81	0.36	0.21
Madhya Pradesh	-0.39**	0.017	-0.39	-0.11	0.89*
Maharashtra	-0.4**	0.025	-0.37	0.12	0.55
Orissa	-0.69**	0.018	0.08	-0.15	2.25
Punjab	-1.07**	0.031	0.67	0.81	4.74**
Rajasthan	-0.39**	0.018	-0.39	-0.08	0.49
Tamil Nadu	-0.58**	0.025	-0.1	0.18	-1.1
Uttar Pradesh	-0.64**	0.013	0	-0.38	-0.41
West Bengal	-1.13**	0.016	0.77	-0.41	1.06
Average	-0.64	0.021	0	0	0.54

Note: Column (1) reports the coefficients from a regression, for each state individually, of log poverty headcount on log real GDP per capita. Column (2) reports each state's rate of real per capita GDP growth over the period. Column (3) reports each state's deviation from the average in terms of growth-poverty elasticity; column (4) reports the same in terms of the growth rate. Elements in columns (3) and (4) have been divided throughout by the average amount of poverty reduction. Column (5) reports the coefficient on inequality (as measured by the standard deviation of log income) from a regression of log poverty headcount on log real GDP per capita and inequality (as measured by the standard deviation of log income). Data are from 1960-1998. Real per capita GDP data are from the Department of Statistics, Ministry of Planning and Implementation, Government of India; poverty and inequality data are from Özler, Datt and Ravallion (1996), and are derived from the Indian National Sample Survey Organisation's annual household surveys. Statistical significance levels obtained using robust standard errors, where * indicates significance at the 5% level, and ** significance at 1% level.

some states has growth been associated with impressive poverty reduction, like in Kerala, while in others, like Bihar, has economic growth only led to modest poverty reduction? It is possible that some of this heterogeneity can be explained by different initial conditions. In particular, we may expect states that have better education and infrastructure to be more able to transform growth into poverty alleviation effectively. The empirical evidence on the importance of institutions, for instance, takes us one step forward in thinking about why these initial conditions may matter. Nevertheless, there is also the possibility that differences in the poverty reduction experiences of states can also be explained by differences in the policy climate, as suggested by a growing body of evidence that links state level policies with economic performance.

As we argued in Section 2 when using cross-country data, it is natural that distributional changes may contribute to changes in the poverty headcount, above and beyond growth. To study this effect, in column (5) of Table 4 we introduce a measure of inequality into the picture, so that we are effectively estimating, separately for each state:

$$p_{st} = \alpha_s + \beta_s y_{st} + \gamma_s \sigma_{st} + \varepsilon_{st},$$

where σ_{st} denotes the standard deviation of the logarithm of income.[30]

The poverty-inequality elasticity varies a lot in size and sign. For example, for Haryana and Maharashtra, more income inequality is associated with *greater* poverty, while Andhra Pradesh, Bihar and Karnataka show significantly negative elasticities – an increase in income inequality is associated with poverty reduction. For the remaining states, as well as for the average of all states, the inequality-elasticity is not significantly different from zero. The pattern of variation between inequality and poverty is therefore much less clear-cut than that between economic growth and poverty. This is not to say that inequality is not important. However, it is clear that the data does not associate inequality reduction with poverty reduction in the same way as it presents a robust picture linking economic growth and poverty reduction.

We now suggest a way of decomposing the explained component of each state's poverty reduction experience. We separate out that part of a state's performance that is due to its growth record against that part which is due to its anti-poverty effectiveness from a given amount of growth. That is, we consider the following decomposition:

[30] This is calculated from the gini index according to the formula $\sigma = \sqrt{2}\Pi^{-1}\left(\frac{1+G}{2}\right)$, where Π denotes the cumulative standard normal distribution and G is the gini index divided by 100 (Aitchison and Brown, 1966).

$$\Delta\hat{p}_{st} = \overline{\beta}\overline{g} + (\hat{\beta}_s - \overline{\beta})\overline{g} + \hat{\beta}_s(g_s - \overline{g}),$$

where $\overline{\beta}$ is the average (across states) estimated poverty-growth elasticity and $\overline{g}$ is the average (across states) growth rate. The first term is thus the average reduction in poverty, the second term is a measure of a state's efficacy at reducing poverty through growth, and the third term is a measure of how a state's growth level compares with that of other states.

Intuitively, there are two routes through which poverty reduction performance can be enhanced:

1) By having higher than average poverty-growth elasticities – i.e. the $(\hat{\beta}_s - \overline{\beta})\overline{g}$ element.
2) By having higher than average growth rates – the $\hat{\beta}_s(g_s - \overline{g})$ element.

We then let the data tell us which states have done better than average in any of the relevant dimensions. The values given by the decomposition of these elements are in Table 4. The poverty-growth elasticity component is in column (3), while the growth rate component is in column (4).

Examining the sign of these two effects allows us to group states into four groups:

- $--$ states – these are low performing states which are doing worse than average in terms of both poverty elasticities and growth rates
- $++$ states – these are high performing states that are doing better than average in terms of both poverty elasticities and growth rates
- $+-$ states – these are states which have higher than average poverty elasticities but lower than average growth rates
- $-+$ states – these are states which have lower than average poverty elasticities but higher than average growth rates

Table 5: Classification of states according to total poverty-growth elasticity and growth rates

	(+) High growth	*(-) Low growth*
(+) High poverty elasticity	Andhra Pradesh Kerala Punjab	Orissa West Bengal
(-) Low poverty elasticity	Gujarat Haryana Karnataka Maharashtra Tamil Nadu	Assam Bihar Jammu & Kashmir Madhya Pradesh Rajasthan Uttar Pradesh

Note: Each state is classified according to whether its poverty-growth elasticity (column 1 of Table 4) is higher or lower than the average across all states, and whether its growth rate (over the period 1960-1998, column 2 of Table 4) was higher or lower than the average across all states.

This classification (shown in Table 5) will allow us to think about the heterogeneity in poverty reduction experience in India. From a policy perspective, we want to know what it is in terms of policy that high performing states are doing differently to low performing states.

Table 6 examines the links between diversification, inequality and poverty. Column (1) confirms that there is a negative and significant relationship between GDP increases and poverty reduction across Indian states in the post-independence period. In column (2) we see that increasing the share of state GDP accounted for by non-primary production activities is also associated with a fall in poverty. We see that this effect remains when we control for the overall effect of GDP on poverty in column (3). In column (4) we see that a shift in production away from primary activities towards both secondary and tertiary production activities is associated with a reduction in poverty. In contrast in column (5) there is no discernible relationship between changes in inequality and changes in poverty. This result also holds if we control for state GDP in the regression (column (6)).

Table 6: Poverty, growth and inequality in India

Dependent variable: log of poverty headcount

	(1)	(2)	(3)	(4)	(5)	(6)
Log real GDP per capita	-0.372 [0.064]**		-0.37 [0.063]**	-0.347 [0.62]**		-0.326 [0.072]**
Diversification (non-primary GDP/total GDP)		-0.44 [0.181]**	-0.48 [0.178]**			
Secondary diversification (secondary GDP/total GDP)				-0.354 [0.17]**		
Tertiary diversification (tertiary GDP/total GDP)				-0.388 [0.17]**		
Standard deviation of log income					-0.044 [0.184]	0.091 [0.188]
Constant, and state and year fixed effects	YES	YES	YES	YES	YES	YES
Number of observations	568	568	568	568	562	523
R-squared	0.87	0.87	0.88	0.89	0.85	0.88

Notes: Robust standard errors are in parentheses. * indicates statistical significance at the 5% level, and ** significant at the 1% level. Data are from 1960-1998. Real per capita GDP data are from the Department of Statistics, Ministry of Planning and Implementation, Government of India; poverty and inequality data are from Özler, Datt and Ravallion (1996), and are derived from the Indian National Sample Survey Organisation's annual household surveys.

6.2 Drivers of poverty reduction in India

In this section we focus on the question of which policy interventions work in India. We look at a number of important policy areas where there is robust empirical evidence of an effect of policy on poverty and/or economic growth. Our focus is on evidence from analysis of sub-national data (at the state, district, industry and household level).

The areas of policy and institutional reform that we find to be effective resonate with the macro- and micro-evidence from Sections 3, 4 and 5. We find a significant link between land reform and other types of property rights, and poverty reduction in the Indian context. The issue of how governments can be made accountable to citizens also turns out to be key. We find that mass media and political competition play a role in making governments more responsive to the policy preferences of citizens. Political reservation and decentralization also seem to play a role in ensuring that disadvantaged groups are politically represented. Education and access to finance also emerge as central elements of a poverty reduction strategy for India. Female education and labour force participation appear to have a central role to play in increasing economic growth and reducing poverty. We also provide evidence that rural branch expansion played a role in enabling poor households to transform their production and employment activities and exit poverty. Our final focus falls on internal and external liberalization where we document links between labour regulation, delicensing, outward orientation and growth and poverty.

Much of the policy analysis that we report on uses state-level panel data for the entire post-independence period. It exploits the fact that, since India is a federal democracy, states have received different policy treatments during the post-independence period. This provides an ideal testing ground for looking at how policy reforms affect poverty and growth.

To assess the effect of policies on poverty requires that there be a credible source of reasonably exogenous policy variation. The studies that we discuss here proceed as follows. The main dependent variables that can be studied are income per capita and poverty. For some vector of policy variables, this permits the analyst to estimate panel data regressions of the form:

$$y_{st} = \alpha_s + \beta_t + \gamma x_{st} + \phi z_{st} + \varepsilon_{st}$$

where y_{st} is the outcome variable of interest (e.g. poverty) in state s at time t, x_{st} are policy variables of interest (i.e. land reform, access to finance, human capital, gender, regulation and political economy variables), α_s is a state fixed effect which captures initial conditions and sources of permanent heterogeneity such as geography and history, β_t is a year dummy variable which controls for macro-economic influences which are common across states, and z_{st} are variables which control for other factors that could affect poverty or growth.

The coefficient of interest is therefore γ, which tells us whether variation in a given policy effect is systematically related to an outcome variable like poverty. Unbiased estimation of policy effects requires that the policy variables (x_{st}) be uncorrelated with the error term. The inclusion of state fixed effects α_s is important here as sources of fixed social, political, economic and cultural variation which are likely drivers of policy choices are controlled for. The variables z_{st} can also help to control for time-varying influences on policy choice, for example by including measures of political control. Thus, while the policy variation is not experimental, the Indian context does provide a promising context for identifying policy effects.

In practice, most of the work so far has focused on policies that drive growth and poverty as right hand side variables. Much less is known about drivers of inequality. This mirrors the limitations of the cross-country evidence discussed in Section 2.

For the remainder of this section, we report primarily on work that exploits sub-national data to look at the effects of policy on outcomes. We emphasize the importance of drawing on such quantitative studies in informing the policy debate. We believe that this evidence-based approach plays an important role in shaping the agenda.

6.2.1 Institutions

Property rights

The bulk of the rural poor in India are located in rural areas and engaged in agriculture. This makes property rights over agricultural land a central focus of policy. Individuals with little or no land are forced to work for landowners as tenants where they could be evicted or laid off at will. As a result their livelihoods are highly insecure and they represent the poorest groups in Indian society.

Land reform became a pressing issue in the post-independence period. In the 1950 Indian constitution property rights over agricultural land are the responsibility of Indian states. States therefore had the exclusive power to enact and implement land reforms. The political composition of the state legislatures varied across states and time and this affected the types of land reforms which were implemented in a given state. This happened because parties represented in the state legislatures had different priorities with some emphasizing particular types of land reform more than others.

India therefore represents an ideal laboratory for examining whether different types of land reforms affected poverty. It was home to the largest body of land reform legislation ever passed in a single country. The legislation was designed to break down feudal relationships in agriculture and to provide tenants, smallholders and labourers with enhanced property rights over agricultural land. To look at the link between land reform and poverty Besley and Burgess (2000) coded all of the land reform acts passed in each of the sixteen major Indian states after independence.

These acts fell into four categories. Tenancy reform acts strengthened the property rights for tenants over the land they farmed. As tenancy contracts had been largely oral with no basis in law these acts meant that landowners were no longer able to evict tenants at will and the security afforded by these acts was a step toward tenants obtaining ownership rights over the plots they farmed. Another set of acts abolished intermediaries who had acted as tax collectors for the British and as rent collectors for large landowners. The breaking down of this feudal land administration system tended to mean that tenants and smallholders could retain more of the surplus they produced. Land ceiling acts reassigned landholdings above a certain threshold to the landless. This was the most redistributive type of land reform whereby property rights over excess land were forcibly removed from large landowners and passed to those with little or no land. Land consolidation acts, the final type of land reform, brought disparate plots together into larger parcels that could be farmed more efficiently.

Using state panel data for the period 1958 to 1992 Besley and Burgess (2000) find that states that passed more land reform acts experienced greater falls in rural poverty. Land reforms account for about one tenth of the actual reduction in poverty over the period. Securing stronger property rights over agricultural land for the rural poor has been an important means for lifting them out of poverty. This

is an important finding as it runs counter to the widespread belief that land reforms had been ineffective in India due to political impediments to implementation.

When the authors break out the land reform acts by type they find that those which seek to reform the conditions of tenancies and to abolish intermediaries are strongly associated with reductions in rural poverty. Land ceiling and land consolidation acts are found to exert no effect on rural poverty. The fact that the most redistributive land ceiling acts delivered nothing in terms of poverty reduction points to failures in implementation. Attempts to directly expropriate land often run into difficulties as landed elites lobby to block or reverse measures, drag cases through courts and exploit loopholes to avoid passing on land. In India state legislatures dominated by communist parties were prone to pass land ceiling legislation.

It is the less redistributive tenancy reforms and the abolition of intermediaries which strengthen the property rights and bargaining power of tenants and smallholders which are associated with poverty reduction in India. Property rights reforms which change production relations in agriculture clearly have had a role to play in tackling poverty. Whilst these reforms fall short of the large scale redistribution of land from rich to poor they have the virtue of having been peacefully implemented in a democracy. They provide two of the poorest groups in rural India – tenants and smallholders – with an increase in security. And as the returns to cultivation for these groups improve they will tend to remove themselves from the agricultural labour market thus pushing up wages for the landless. Besley and Burgess (2000) find that land reforms are associated with higher agricultural wages thus pointing to an indirect route via which the landless in India can benefit from land reform.

Enhancing the property rights and bargaining power of the land-poor would thus seem to hold out some promise for tackling poverty. Particularly when these groups have little power and have been trapped in the lower reaches of long established feudal hierarchies. Banerjee et al (2002) study Operation Barga which was aimed at getting tenants in West Bengal to register with the land revenue authorities. Registered tenants would be entitled to permanent and inheritable tenure as long as they paid 25 % of output as rent. They were also able to retain a higher share of output relative to the pre-registration period. Despite these benefits the government had to set up camps in villages to encourage tenants to register, often against their landlords' wishes. Banerjee et al (2002) found that there were sizeable benefits associated with strengthening the property rights of tenants in West Bengal. Relative to districts in neighbouring Bangladesh agricultural productivity increased in West Bengal districts with the advent of Operation Barga. Amongst West Bengal districts larger increases in tenancy registration rates were associated with larger increases in agricultural productivity.

The reformation of agricultural property rights in India has clearly brought benefits to those with little or no land. The property rights of these groups over the land they farmed were weak and they had limited defence against eviction and expropriation. They were also often the target of taxes and rents levied by the state and landowners. Though the livelihoods of these groups remain insecure today there is no doubt that land reforms which codified their rights over land and reduced the rents and taxes levied upon them have had positive implications for rural poverty. Being able to hold onto a larger share of the harvest would boost incomes. Greater security would boost incentives to invest in and put effort into the land. Better defined property rights might also enable small farmers to get access to credit markets in order to fund investments and other activities. Even those left without land after the reforms might benefit from the upward pressure exerted on agricultural wages.

However, for many urban residents property rights over land remain insecure. For example large numbers of urban Indians are slum or shanty town dwellers. Whether making rights over urban land more secure by granting land titles, through schemes that have been popular in Latin America (which we discussed at length in Section 3), would help urban residents to improve their standard of living is an open and important research question.

A commonly overlooked dimension of property rights is that good property rights laws need good courts to enforce those laws. As discussed in Section 3, Chemin (2004) uses variation across Indian states to study the effect of slow courts (even minor cases can take many years to be processed in some states) on productivity, growth and the decision to subcontract among small, informal entrepreneurs. He finds that, even within the same (narrowly-defined) industry class, firms in states with relatively slow courts experience greater problems with contract enforcement and underperform relative to firms in states where courts are more efficient.

Governance and accountability

Mass media: India is buffeted by natural disasters – droughts, floods, earthquakes and typhoons. The largest of these such as the 2004 tsunami in southern India or the 2001 earthquake in Gujarat make it into the international media. However the large majority of these events are on a much smaller scale affecting only a district or part of a district where they would not even be reported in the Indian national media. They are, however, a major cause of concern for populations living in affected areas which rely on state action to survive and rebuild their lives. Understanding what makes government responsive to citizens' needs is a key issue in political economy. In particular, we would like to understand what institutions – economic, social and political – can be built to enhance the effectiveness of the state in social protection.

Over time the disaster relief system in India has become well developed. State involvement in the procurement, storage, transportation and distribution of food grains via the public food distribution systems provides state governments with the ability to target surpluses at areas where food has become scarce. Calamity relief expenditures by state governments cover a range of direct relief measures including drinking water supply, medicine and health, clothing and food, housing, veterinary care and assistance for repair and restoration of damaged property. The codes that govern public distribution of food and calamity relief in India stem from the Famine Relief Codes put in place after 1880.[31] They emphasize the need for local administrators to look for signs, such as large drops in food production and increases in food prices, which signal an impending crisis. The aim is to respond by increasing the public distribution of food and through the setting up of public works programs and relief centres to prevent hardship.

Whether these responses are triggered and the generosity of the

[31] Frequent and severe famines during both the 18th and 19th centuries were a major source of concern to the British Administration which came to power in 1858. This led to the setting up of Famine Commissions, most notably that of 1880, which produced a set of Famine Codes – detailed guidelines for local administrators about the anticipation, recognition and relief of famines and other natural calamities.

response will depend on the incentives faced by politicians and bureaucrats who face many competing claims for the resources they control. Independence in India brought with it two key institutional innovations which may have affected these incentives: democracy and a free press. In contrast television and radio largely remained under state control. There is a long tradition dating back to John Stuart Mill and Thomas Jefferson arguing that both the ballot box and a free press are essential to ensure that governments are responsive to the needs of citizens.

Observing the actions of politicians via the press is important as this information can be used by voters to inform voting decisions. Vulnerable voters care greatly about whether they will be protected in the future and they can get a signal about this by observing via newspaper articles how politicians respond to shocks which do not affect them. Mass media thus expands the set of people who get a signal about whether the politician is responsive from those who are directly affected by a shock to all those who read newspapers reporting on the shock and its aftermath. Realizing that being unresponsive may generate a mass of citizens who will vote against him a politician may decide to respond to the natural disaster. In effect a free press and democracy create incentives for opportunistic politicians to be responsive even if they would have preferred not to be. While not benevolent, they are willing to respond when it is in their interest to do so. By putting in effort, they can distinguish themselves from dead-beat incumbents who do not respond at all and they are more willing to do this when their actions are visible.

We would therefore expect state governments in India to be more responsive to natural disasters when and where the media industry is more developed. Besley and Burgess (2002) use state panel data on newspaper circulation, politics, drought and flood shocks and policy responses to study what drives government responsiveness in the period 1958-1992. They find that a given fall in food production yields greater public food distribution in situations where newspaper circulation is higher. Similarly, a given level of crop damage due to floods yields more calamity relief expenditures when newspaper circulation is higher. Thus, higher newspaper circulation is associated with the government being more responsive to droughts and floods.

India is a linguistically diverse country and the large array of languages in which newspapers are published is symptomatic of this. In our data set we have annual circulation broken down into nineteen different languages. As state boundaries in India were drawn in 1956 along linguistic lines each state tends to have a local language. Hindi and English are the two languages that have a national reach. Besley and Burgess (2002) find that when newspaper circulation is broken out by language it is higher circulation in the state-specific languages which makes state governments more responsive to droughts and floods. These findings make sense as we are studying responses by state governments and regional newspapers will have a greater propensity to report localized events. Furthermore, vulnerable citizens are less likely to have access to publications in Hindi and English because local languages are the *lingua franca*. Hence, the regional press, which writes in the local language and has a greater incentive to cover local issues, is at the heart of why media development encourages government responsiveness.

It is important that the vulnerable have enough electoral power to swing outcomes if politicians are to be responsive to their demands. This is more likely to be true when electoral turnout is high and political competition intense. Using state panel data for the period 1958 to 1992 Besley and Burgess (2002) find that greater electoral turnout is associated with greater responsiveness – as food production falls or as flood damage increases, having higher turnout in the previous election tends to increase the responsiveness of governments to these events. This is consistent with the idea that electoral threats will tend to be greater where states have a greater tradition of turning out to vote. They also find that, for a given fall in food production or level of flood damage, having greater political competition (which is defined as minus the absolute difference between seats occupied by the ruling party and its main competitor) leads to greater public food distribution and calamity relief. Greater political competition is thus associated with increased government responsiveness. Together these results confirm the importance of politics to the relief process.

How to make governments accountable to citizens is a central question in development. The Indian study has made clear how democracy and a free press can create incentives for elected officials to respond to citizens' needs as regards disaster relief policy. Elections provide an incentive for politicians to perform which can be enhanced by development of the media. Through this mechanism we would expect responsiveness of the government to salient issues such as crisis management to be greater where the media is more developed.

Representative democracy and the development of free and independent regional presses appear as key factors in ensuring protection for vulnerable citizens. There is little doubt that governance and accountability are pressing issues in other areas of government policy and working out how to incentivize politicians to deliver the policies that citizens want will be a core area of future research.

Our results underline the potential role of civil society, media being a key branch, to an effectively functioning democracy. The formal institutions of political competition (such as open elections) are not sufficient to deliver a responsive government unless voters have the real authority to discipline poorly functioning incumbents. This requires effective institutions for information transmission to voters.

Decentralization: As discussed in Section 3, in response to perceived government failure in a number of developing countries, recent times have seen a dramatic rise in institutional reforms that attempt to improve the process by which governments make decisions on behalf of their citizens. These schemes typically aim to increase the extent of citizens' 'participation' in government decision-making, to increase government accountability, reduce corruption, improve the extent to which pro-poor policies successfully reach the poor, and ensure that minorities are not neglected in the decision-making process. India is no exception to this trend. The 73rd Amendment Act of India in 1993 made it mandatory for Indian states to hold elections for local governments (named 'Gram Panchyats') and to give them policy-making powers.

Some villages in India added to their decentralized local government an institutional feature that was designed to promote participation in and improve the quality of local decision-making. Local governments held village meetings ('Gram Sabha meetings') to discuss resource allocation in the village. Besley, Pande and Rao (2005) collected household data in Southern India in order to study which members of the villages were more likely to attend the meetings, and to evaluate the effectiveness of the meetings. Within villages that hold the meetings, women and illiterates were less likely to have heard of and attend meetings, scheduled tribes/castes and the landless were no more likely to have heard of but more likely to attend meetings, and the upper caste and landed were more likely to have heard of but no more likely to attend. That is, the meetings appear to have been attended by the most disadvantaged groups. Turning to policy outcomes, Besley,

Pande and Rao (2005) consider the process by which the local government allocates Below Poverty Line (BPL) cards (which entitle their holders to benefits) to those most deserving of them. As expected, the authors find that the cards are targeted towards landless, illiterate and SC/ST villagers in all villages. However, these constituents were even more likely to receive a card if the village had held a Gram Sabha meeting in the past year. While some caution is warranted in interpreting these results (villages that decide to hold Gram Sabha meetings might be special in other, unobserved ways), the results are suggestive of the effects of participatory democracy in effectively targeting benefits.

Foster and Rosenzweig (2001) use panel data on individuals from 250 villages in rural India to argue that local elections in India increased the responsiveness of local governments to the wishes of the majority (i.e. the poor). They find that when local governments started being directly elected, roads (which create employment and favour the masses) were more likely to be chosen by politicians for village public investment than irrigation canals (which favour the landowning elite).

Political reservation: Another dimension of accountability is the extent to which disadvantaged minorities are able to participate in the policy-making process. This is a particular concern in the case of India, where the hierarchical caste system has contributed to the economic deprivation of those born into lower castes. In anticipation of this problem, the post-independence Indian constitution was designed with a pro-minority affirmative-action element built in: a portion of parliamentary seats were only able to be held by scheduled caste (SC) and scheduled tribe (ST) (the lowest castes) candidates. Pande (2003) finds evidence that such a reservation scheme was effective at targeting this minority: reserved members of parliament successfully secured a higher allocation of quota-based employment in their constituencies. India also wrote a reservation strategy into its vast decentralization programme in 1993. The position of chief in several randomly chosen (newly created) local governments was to be reserved for women and scheduled castes/tribes. Chattopadhyay and Duflo (2004) found evidence that such reservations did allow the reserved group to change policy in their favour: governments with reserved female chiefs were more likely to allocate funds towards public goods that women expressed a relatively strong preference for in village meetings; and lower caste households in communities with a (reserved) lower caste chief were more likely to receive private benefits.

6.2.2 Expanding opportunity

Access to education

Under the Indian constitution education is mainly the responsibility of states. Education outcomes may vary across states because some state governments place greater emphasis on expanding access and on making efficient use of public resources. Because attitudes towards women's role in society have varied across states and time education outcomes are also likely to show differences between the sexes.

1991 census figures for India indicate that educational attainment in India is strikingly low. The literacy rate is 63% for males and 36% for females. These rates are lower than those in many east and south-east Asian countries even 40 years ago, and are no higher than modern day rates in Sub-Saharan Africa (Dreze and Sen, 1995). Moreover, there are large inequalities in educational achievements across states – male literacy rates range from 50% in Andhra Pradesh and Bihar to 93% in Kerala, and female literacy rates vary from 17% in Rajasthan and 20% in Uttar Pradesh to 84% in Kerala.[32] In each state there is also pronounced variation over time. Literacy rates have been improving over time but at very different rates in different states.

As education affects the set of production tasks that individuals engage in we might expect education levels to affect rates of growth and poverty reduction across Indian states. If the bulk of the population in a state is unable to read or write this may constrain their ability to raise productivity and exit poverty. Trivedi (2002) explores this issue in state panel data for the period 1965-1992 to see whether there is a link between male and female secondary school enrolment rates and economic growth. He finds that there is a positive and significant relationship between both male and female enrolment rates and the annual rate of growth in per capita state income. He also finds that female enrolment rates exert a larger impact on economic growth than male enrolment rates and that states which have larger gender gaps in education have lower steady state incomes.

Esteve-Volart (2004) uses state panel data for the period 1961-1991 to examine the aggregate costs in terms of development of gender

[32] These figures were obtained from the 1991 Census of India.

discrimination in the labour market. She uses labour force survey data to estimate the ratio of female to male managers and female to male to workers in different states. She finds that having ratios that are skewed towards males acts as a brake on development. A ten percent increase in the female to male managers ratio would increase total state output per capita by 2 percent whereas a ten percent increase in the female to male workers ratio would lead to an 8 percent increase in output per capita.

These results suggest that investments in human capital may represent a key means of increasing economic growth in Indian states. Widening access of females to education and the labour force seems to be a particular priority. The low levels of human capital in India, particularly for females, represent a key barrier to participation of the poor in economic growth.

How such increases in human capital will be achieved in India remains an open question. There appear to be two clear lines of attack. The first line of attack comes through a range of pedagogical innovations that have attempted to improve the quality and relevance of education, in particular for poor and disadvantaged children, through curriculum reform, employment of female teachers for girl-friendly schools, hiring assistant teachers to deal with large class sizes, and new teaching methods and materials (including books, and information technology). The effectiveness of these innovations requires careful evaluation, for their effects are not always obvious and the details are important. For example, Banerjee and Kremer (2002) consider a simple increase in what is often believed to be the most essential input: teachers. They evaluate a programme in India that provided a second teacher to randomly selected one-teacher schools, but find that the effect on test scores is indiscernible. However, a remedial education program which hires young women from the community to teach lagging children was successful in pushing up test scores, according to a randomized design by Banerjee et al (2004).

The second line of attack is improving the governance and accountability of schools to tackle systemic failures such as widespread teacher absenteeism. These initiatives include promoting parental and community involvement, changing the incentives facing teachers and students, and involving non-state actors and NGOs in providing education. Duflo and Hanna (2005), for example, show that when primary school teachers are required to photograph themselves with a certain number of students each day this had a positive effect on teacher attendance. And the scheme was extremely cost-effective, as the teacher's bonus for attending class was chosen so that the average teacher's wage did not increase.

Access to credit

There is a growing body of evidence that credit constraints are binding in India. Indirect evidence comes from Banerjee and Munshi (2004), who study the knitted garment industry in the southern Indian town of Tirupur. They compare the capital stock of firms run by two types of owners: 'Gounders', traditional agriculturists who originate from Tirupur but have only just entered the garment industry due to collapse of local agriculture; and 'Outsiders', who moved to Tirupur recently because of its reputation as a centre of excellence in knitted garments, and have vast experience in the trade. Surprisingly, the Gounders own twice as much capital as the Outsiders on average, but this effect disappears among older (up to 10 years old) firms. It is clear that the Gounders, with their superior community ties, are able to access finance much more easily at start-up, but that surviving Outsiders eventually build a superior reputation for creditworthiness. More direct evidence for credit constraints comes from Banerjee and Duflo (2004). All banks in India must lend at least 40 percent of their credit to firms in the so-called 'priority sector', which consists of small-scale firms. Banerjee and Duflo examine the effects of two changes to the definition of 'small-scale' and find that these priority sector reservations are indeed binding, in that firms that were newly defined as 'small-scale' quickly borrowed more (even though interest rates did not change). This indicates that the priority sector credit reservation was indeed binding, and is suggestive of the fact that firms of this size were credit constrained.

Having access to finance has long been considered central to enabling people to alter their production and employment choices and thereby exit poverty. Having access to credit or savings facilities may play an important role in enabling the poor to invest in new production activities. However, the poor throughout the world often have limited access to formal financial institutions. This is often particularly the case in the rural areas of developing countries.

An all-India rural household credit survey carried out in 1951 revealed that virtually no rural households had access to commercial banks. The government identified lack of access to finance as a significant reason why growth was stagnant and poverty persistent in rural areas. The failure of banks to enter rural areas was seen as a brake on entrepreneurship and the emergence of new activities. Moreover the lack of access to formal financial services often meant that rural residents were forced to rely on informal moneylenders who charged high rates of interest.

The government responded to these problems by first nationalizing the commercial banks in 1969 and then by imposing a license rule in 1977 which stated that for each branch opened in a banked location (typically urban) banks had to open four branches in unbanked locations (typically rural). This license rule was removed in 1990 and branch building in rural areas came to a halt. Between 1969 and 1990 bank branches were opened in roughly 30,000 rural locations with no prior formal banking institutions (unbanked locations). As a result of the imposition of the 1:4 rule, states which had fewer bank branches per capita before the program in 1961 received more bank branches between 1977 and 1990 leading to both a reduction and an equalization in population per bank branch. 'Priority sectors' consisting of entrepreneurs, small businessmen and agriculturalists, as well as 'weaker sections' such as lower caste and tribal households, were explicitly targeted in the mandated lending practices of rural banks.

Burgess and Pande (2005) exploit the imposition and removal of the 1:4 license rule to isolate the policy driven element of rural branch expansion. They find that the expansion of bank branches is associated with a significant reduction in rural poverty. Urban poverty was unaffected. They also find evidence that the reductions in rural poverty were linked to increased savings mobilization and credit provision in rural areas. Starting from a low base at nationalization the number of rural savings and loan accounts increased to 126 million and 25 million respectively by 2000 (Reserve Bank of India, 2001). This expansion points to a role for rural bank branches in enabling rural households to accumulate capital and obtain loans to make longer term productive investments.

Agricultural labourers are the poorest group in the Indian countryside as they have limited access both to land and to non-agricultural employment activities. The wages that accrue to them are considered an important and independent marker of rural welfare. Burgess and Pande (2005) find that rural branch expansion was associated with an increase in the wages of agricultural labourers. This suggests that as economic conditions improved due to rural branches enabling people to start up new businesses the set of people willing to do agricultural labour, diminished thus driving up wages. These results point to an indirect mechanism via which the poorest of the poor in India might benefit from rural branch expansion even if they do not transact directly with banks.

Burgess and Pande (2003) provide evidence that rural branch expansion enabled households to diversify production and employment out of agriculture into more productive service and manufacturing activities. They find that rural bank branch expansion was associated with an increase in total state output per capita over the 1960-2000 period. This increase was restricted to the non-agricultural sectors, in particular the small scale manufacturing and service sectors. The fact that the extension of credit and saving facilities into rural areas acted as a spur for entrepreneurship and the starting up of new production activities helps us to understand the link with rural poverty. As structural change encouraged by the arrival of rural bank branches proceeded individuals were drawn out of poverty as they moved into more productive, typically non-agricultural activities.

The study is silent on whether the rural branch expansion program was a more cost-effective means of reducing poverty than potential alternatives. Indeed the fact that bank loan default rates were in the range of 40 percent during the 1980s caused the program to be discontinued should make us sanguine about the advisability of attempting such a program in other contexts without proper consideration of both costs and benefits. The paper does highlight how access to finance may be critical in enabling poor, rural residents to begin new economic activities and thereby exit poverty. Indeed the evidence is consistent with a range of new evidence that suggests that returns to capital in low income countries, and India in particular, are extremely high (for a summary of this evidence, see Banerjee and Duflo, 2005).

This of course raises the issue of how access to finance can be most effectively achieved. Microfinance institutions have monitoring advantages over commercial banks which can help keep default rates down. However, the experience in India since the rural branch network was frozen in 1991 has also pointed to some disadvantages of these types of institutions. Most notably they cannot be coerced to open operations in most backward parts of India. Trying to coordinate

penetration of all rural, unbanked locations of a certain description is simply not possible with a collection of autonomous NGOs. It is also not clear to whom microfinance institutions are accountable. How NGOs, private and state-run financial institutions can best design interventions which improve access to credit and saving opportunities remains an important task for future research.

Large schemes like the Indian social banking experiment may have a number of advantages over microfinance schemes: they can be widely implemented easily, they may be able to take advantage of the government's scope and scale advantages for service delivery, and they can avoid the complications that are necessary to make microfinance work (lending to groups only, with small loans and frequent repayment). However, concern has been raised over the possibility that social banking, like many other state-led programmes, might be 'captured' by the government or elites and used for ulterior motives. Indeed, when revisiting the Indian social bank data, Cole (2005) finds evidence for banks being used to fulfil political, rather than poverty reducing, aims. Specifically, Cole observes that the amount of credit given is significantly higher in election years, and that this excess election year credit occurs only in states where the ruling party had a narrow margin of victory in the previous election. While this is clearly evidence for the fact that social banks were not allocated completely optimally (from a poverty-reducing point of view), this serves only to strengthen Burgess and Pande's finding that social banks can be good for poverty-reduction elsewhere; in India, the banks were somewhat captured, but evidently incompletely so. Sufficient monitoring of the delivery of social banking would be necessary to improve on this.

6.2.3 Liberalization

Deregulation

Manufacturing has historically played a large role in the structural change accompanying economic development and has been a key driver of growth and poverty reduction. For example, the share of manufacturing in GDP increased three-fold in a number of East Asian countries between 1960 and 1995 (e.g. from 8% to 26% in Malaysia). These countries also experienced sharp reductions in poverty.

After independence in 1947 India embarked on a period of planned industrialization. The landmark piece of legislation was the

Industries Regulation and Development (IDRA) Act of 1951 which introduced a system of industrial licensing to control the pace and pattern of industrial development across the country and which memorably became known as the 'License Raj'. In effect the 1951 Act brought all registered manufacturing firms under central government control.

The manufacturing sector in India consists of two sub-sectors: registered (formal, about 9% of GDP) and unregistered (informal, about 5% of GDP) manufacturing. Firms are required to register if they employ more than ten employees and utilize electric power, or if they employ more than twenty employees and do not use electric power. When we examine the economic performance of the registered manufacturing sector we find large differences in performance across states during the 1958-1992 period. Over this period registered manufacturing output per capita grew by 3.3 percent per annum in India as a whole. This, however, masks significant variations across states. Some states (Andhra Pradesh, Gujarat, Karnataka, Tamil Nadu and Maharashtra) show striking growth, while other states (Assam, Jammu and Kashmir and West Bengal) stagnate, albeit from very different base levels. For example, West Bengal, which had the highest level of registered manufacturing output per capita at the beginning of the period, had fallen to seventh in 1992 – an average decline of 1.5 percent per annum. Its performance contrasts with Andhra Pradesh which grew at nearly 6 percent per year over the same period.

Besley and Burgess (2004) study the role of labour market regulation in explaining manufacturing performance in Indian states between 1958 and 1992. Such regulation is frequently cited in explanations of India's poor growth performance over this period.[33] The charge is that granting excessive bargaining power to organized labour blunted investment incentives and gave India a generally unfavourable business climate. The data on labour regulation come from looking at state amendments to the Industrial Disputes Act of 1947. While the act was passed at the central level, state governments were given the right to amend it under the Indian constitution. The emphasis on central planning in India meant that state governments have had limited

[33] See, for example, Stern (2001), and Sachs et al (1999).

influence on industrial policy outside the area of industrial relations. We read the text of each amendment (113 in all) and classified each as pro-worker, pro-employer or neutral. This gave a sense of whether workers or employers benefited or whether the legislation had no appreciable impact on either group. Thus although all states have the same starting point, they diverged from one another over time. Having obtained the direction of amendments in any given year, we cumulated the scores over time to give a quantitative picture of how the regulatory environment evolved over time. This is our basic regulatory measure used below. Regulation applies to a specific sector, formal manufacturing; smaller firms in informal manufacturing are not covered.

This method classifies states as either treatment or control states. The latter are states that do not experience any amendment activity in a pro-worker or pro-employer direction over the 1958-1992 period. There are six of these: Assam, Bihar, Haryana, Jammu and Kashmir, Punjab and Uttar Pradesh. Among those that have passed amendments, our method classifies six states (Andhra Pradesh, Karnataka, Kerala, Madhya Pradesh, Rajasthan and Tamil Nadu) as pro-employer. This leaves four pro-worker states: Gujarat, Maharastra, Orissa and West Bengal.

In effect then, starting from the 1947 legislation introduced by the socialist Congress party some states are moving in a pro-business direction, others in a pro-worker direction and others are doing nothing. Using state panel data for the 1958-1992 period Besley and Burgess (2004) find the direction of labour regulation to be a key factor in the pattern of manufacturing development in India. Regulating in a pro-worker direction was associated with lower levels of investment, employment, productivity and output in registered manufacturing. In contrast, output in the unregistered manufacturing sector is increased as labour regulation moves in a pro-worker direction.

These differences in economic performance are found to have important implications for welfare. Regulating in a pro-worker direction is associated with higher urban poverty. The economic significance of these effects can be gauged by examining what urban poverty would have been in 1990 had states not passed pro-worker or pro-employer amendments. Without its pro-employer reforms, Andhra Pradesh would have urban poverty that was 112 percent of its 1990 level. Similarly, had West Bengal not passed any pro-worker amendments it would have had urban poverty that was 11 percent lower in 1990. This comparison starkly brings out how the direction of regulatory change matters. There would have been around 640 000 more urban poor in Andhra Pradesh in 1990 and around 520 000 fewer urban poor in West Bengal had these states not amended the Industrial Disputes Act.

The results leave little doubt that regulation of labour disputes in India has had quantitatively significant effects. In India, the hand of government has been at least as important as the invisible hand in determining resource allocation. This has provoked heated debate about which aspects of this role have constituted a brake on development. It is apparent that much of the reasoning behind labour regulation was wrong-headed and led to outcomes that were antithetical to their original objectives.

The paper finds little evidence that pro-worker labour market regulations have actually promoted the interests of labour and, more worryingly, that they have been a constraint on growth and poverty alleviation. Our findings that regulating in a pro-worker direction was associated with increases in urban poverty are particularly striking as they suggest that attempts to redress the balance of power between capital and labour can end up hurting the poor.

The analysis reinforces the growing sentiment that government regulations in developing countries have not always promoted social welfare. The example that we have studied here is highly specific and it is clear that it cannot be used to promote a generalized pro- or anti-regulation stance. Future progress will likely rest on improving our knowledge of specific regulatory policies. Research involving particular country experiences will be an important component of this. Only then can the right balance between the helping and hindering hands of government be found.

More radical liberalization of the Indian economy started to take place from the mid-1980s when the licensing regime (which regulated the opening, closing, expansion and diversification of registered manufacturing firms) began to be dismantled. This was followed by a reduction in tariff barriers and an opening to foreign trade in the early 1990s. Aghion et al (2005) construct a measure of when each three digit industry was delicensed in India – that is, the year in which all requirements to hold licenses was abandoned. Using a panel of 3-digit state industries for the period 1980-1997 they find that industries located in pro-employer states grew more quickly than industries

located in pro-worker states when they were delicensed. Similarly when tariffs were reduced being located in pro-employer state conferred a growth advantage over being located in a pro-worker state. This points to complementarities between different types of internal liberalization. Liberalization is not uniformly beneficial and institutional and other conditions at the state or local level matter for whether a firm or industry will benefit from liberalization.

Outward orientation

India opened up its borders to international trade in a series of tariff reductions in the early 1990s. It is often argued that this increased competition (from foreign firms) will force domestic firms to cut slack, make innovations necessary for survival, or become more productive for other reasons. A study on a panel of manufacturing firms in India by Topalova (2003) finds evidence for this: firms in relatively more liberalized industries became relatively more productive after trade liberalization. The exact mechanisms involved, however, are not clear.

Another recent study by Topalova (2004) attempts to go beyond this look at one aspect of the economy, the productivity of manufacturing firms, and provide evidence of the broad 'general equilibrium' effects of trade liberalization in India. Topalova looks directly at the effect of trade liberalization on poverty, in effect combining the income (changed prices of goods made) and consumption (changed prices of goods bought) effects of trade liberalization. Topalova (2004) compares the poverty-reduction experience in districts that were heavily exposed to highly liberalized industries (i.e., had a high share of workers in these industries) with that of districts whose workers were relatively unexposed. She finds that the more exposed districts had slower poverty reduction on average, but that the effect is being driven largely by the effect of agricultural tariff reform on rural poverty. Interestingly, the manufacturing effect appears to be confined to those states that Besley and Burgess (2004) identified as having pro-employee labour regulations at the time of the trade reform. This is suggestive evidence for the complementarities between flexible labour markets and outward orientation.

7. An Agenda for Confronting Global Poverty

By pulling together the macro- and micro-evidence on links between institutional and policy reforms and poverty we are able to discern the contours of an agenda for confronting global poverty. Our agenda is distinctive for three main reasons.

First, our overarching theme is on the centrality of the institutional context in which policy choices and accumulation decisions are made. The institutions that lie behind the economic and political environment within which individuals accumulate skills, and firms accumulate capital and produce output must take centre stage. Moreover, institutions also shape policies which affect private decisions. Institutional reform can both contribute directly to poverty reduction but is also often essential to the success of reforms which attempt to expand opportunities or to better integrate the poor into domestic and global markets. This makes it clear how the three elements of our agenda are complementary and need to be pursued together. Policy failures are often the result of the institutional context within which policies are implemented being ignored.

Second, our agenda is firmly evidence-based. Policies have too often been the result of ideology. We use cross-country analysis to provide signposts for what works but emphasize the need to base policy recommendations on findings from sub-national studies. Taking the macro and micro evidence together is fruitful. Lessons are emerging where sub-national findings are often consistent with the broader cross-country picture. Micro-evidence provides a means of modelling incentives at the ground level and makes more specific and applicable the kind of knowledge available in the aggregate. Building up bodies of evidence based on various countries can help to create a menu of anti-poverty policy options for consideration and comparison.

Third, our agenda for reducing poverty is based on using consistent and common theoretical frameworks within which to evaluate policy and institutional reforms. Basing the analysis on solid theoretical foundations helps to increase the portability of findings to different settings. It enables researchers to compare and contrast findings from a wide variety of contexts to gain a better understanding of what works

where and why. Being able to reason about empirical evidence in a well-defined theoretical structure is extremely important in terms of understanding how institutional and policy reforms affect incentives and behaviour (which ultimately determine whether reforms are successful or not). Advances in political economy have been important in providing a basis for developing an agenda that puts more weight on institutional change. Recent work which tries to develop frameworks for understanding what factors drive growth at the microeconomic level is also important in this regard.

Our agenda consists of a three-pronged strategy focusing on institutions, expanding opportunity and liberalization. In previous sections we have presented a body of evidence that supports the relevance of these three themes. The point of this section is to distil the main elements of our agenda for confronting global poverty. We believe that this agenda can play a useful role in both shaping domestic institutional and policy reform and the agenda of aid agencies.

7.1 Institutions

The lives of the poor around the world are often highly insecure. Their land and assets are often at risk of being expropriated. There is compelling macroeconomic evidence that secure property rights are important for attracting investment and for fostering trade. Microeconomic studies are beginning to elucidate how secure property rights can be provided in a variety of contexts. Full-fledged redistributive land reform has met with limited success due to blockage from potential losers.[34] There is, however, increasing evidence that reforms that make rights over agricultural land more secure can be an important vehicle for reducing poverty. Tenancy reform, for example, is likely to be politically feasible as it does not necessarily involve a redistribution of ownership rights over land. In many cases this will involve strengthening the legal system to prevent the rich and powerful from circumventing, through loopholes or corruption, legislated policies not in their favour.

[34] Except where the political will existed to override resistance from the landed, such as in revolutionary China and Vietnam.

The urban poor often live on land over which they have limited legal claims. The evidence on urban titling suggests that this may be an effective mechanism for raising the welfare of the poor in urban areas. Land titling is often feasible as it simply formalizes existing informal land rights to publicly-owned property, and is thus unlikely to be opposed. Facilitating and streamlining the registration process is key to the success of attempts to confer land titles over rural and urban land. Often it is corruption and red tape that stand between a poor person and a land title. Deregulation is often a key part of conferring land rights on the poor.

It is also clear that property rights over land need to be supported by institutions, which enforce the legal rights that the poor have over their land. Property rights can be viewed as part of a broader set of mechanisms for legal enforcement of commitments, like contracts. Legal reform may be an extremely cost-effective way to promote property rights enforcement. This is because the costs of developing an efficient and effective legal system are largely up-front. Once it is established that courts can and will punish illegal behaviour, the mere threat of taking a case to court becomes credible. That is, effective courts are likely to act as a deterrent to opportunistic behaviour, without ever having to be used. Effective courts are central to maintaining law and order which is a central element of the investment climate in a country. The evidence that property rights reforms can play a central role in enabling people to exit poverty is compelling. The challenge is to find concrete means of enacting and implementing these reforms in a wider variety of settings.

A free and open media emerged as central to improving accountability. The mass media allows citizens to monitor the actions of politicians and bureaucrats responsible for implementing public policies. When combined with democracy, information gleaned from the media provides citizens with the means of punishing poorly performing incumbents and of rewarding those that deliver policies which match their preferences.

Regulation, state ownership, anti-defamation laws and a host of other mechanisms have been used to protect politicians from the media. Removing barriers to entry of private media companies can serve as a powerful means of empowering the media to perform its role as a watchdog on the actions of politicians. Regulatory and ownership controls which impose government control and ownership on mass

media companies are a prime target here. The quality of media provision is likely to increase as the extent of competition in the market increases. Allowing entry of private media companies is particularly important as privately-owned media are more likely to be effective at monitoring the actions of government. Beyond entry, allowing media companies to freely report on the actions of individuals and governments without fear of reprisal is a second major challenge. Decriminalizing negative reporting by journalists on the actions of politicians via the removal of anti-defamation laws is also important in this respect.

Freedom of the media is often lacking in a large number of developing countries and this often goes hand in hand with government control or ownership of the media creating a significant barrier to the operation of representative democracy. Allowing mass media companies to operate in a free and open manner to enable citizens to effectively monitor the actions of politicians and bureaucrats represents a key means of promoting government accountability in developing countries.

Decentralization is also emerging as an important means of empowering the poor. Central to the argument for decentralization is the premise that actions of local government officials are more transparent. Various accountability mechanisms such as village meetings to review how funds are being spent on local public goods can help to reduce corruption and misappropriation. It has to be recognized, however, that the power of decentralization to promote the interests of the poor rests on the assumption that local government is more accountable to these citizens which may or may not be the case. Caution therefore has to be exercised as our evidence base in this area is somewhat weak.

One aspect that does appear important is that decentralization takes place to a level which is more likely to be both more informed about the needs of the poor and more accountable to these needs. This is plausible when 'local' refers to the village level, but less so when it refers to higher (e.g. regional) levels. In this regard, the role of the media discussed above, in particular the local media, seems doubly important as there may be complementarities between an active media and decentralization of government.

In light of this, but in the absence of overwhelming evidence, it seems as though policy-makers should encourage decentralization only tentatively until further evidence is available. In particular, decentralization should be reserved for those dimensions of policy-making in which local governments' advantage is likely to be strongest. The allocation of targeted programmes is likely to be one of these areas, given the informational advantages of local governments.

A final mechanism for improving governance and accountability is to provide political reservation for disadvantaged groups (e.g. women and minorities). The evidence does suggest that political reservation helps to skew public resources towards these groups thus rebalancing historical disadvantages. Whether such schemes are an effective means of tackling high poverty rates in these groups is unclear. Targeting the poor irrespective of group identity would seem like a fairer scheme but may be more difficult to implement. Targeting poverty rather than identifiable groups also helps to reduce the resentment felt by groups excluded by affirmative action programs. The effect of political reservation (and of affirmative action more generally) on overall poverty is also little understood.

7.2 Expanding opportunity

Redistribution of the tax/transfer type prevalent in the developed nations has been less common in the developing world. This, in part, reflects the fact that poor countries have greater difficulties identifying and extracting revenue from the rich and in identifying individuals to whom such revenue should be transferred. Redistribution in poor countries tends to take the form of expanding the opportunity set that poor people face. Expanding access to education and finance are two key means of enabling the poor to become more productive and to exit poverty. Institutions which enforce property rights and promote accountability, it turns out, are essential to the success of efforts to expand opportunity in poor economies.

A number of policy insights are emerging from research on education. Both the quality and quantity of education are important, and need to be improved. Quantity can be expanded through increasing public supply. There is typically strong demand for inexpensive public schooling but bringing political will in line with citizens' preferences is a key challenge. Mechanisms to improve government accountability discussed above are important in this respect. Allowing free entry of private and NGO-run schools can also complement public supply.

Quantity and quality are also linked via demand. Gross failures such as high teacher absenteeism can greatly curtail the attractiveness of schools to students and parents. There are also good reasons to expect that some students will need incentives to attend school. Further, there is ample evidence that students respond well to initiatives that reduce the costs of going to school, or the benefits (even in the form of simple cash incentives or nutritional supplements) of going to school.

Improvements in the quality of schooling are also key here, and require a far more nuanced approach. Incentive failures which result in widespread problems such as teacher absenteeism need to be tackled head-on, through monitoring and other mechanisms. There is also a need for greater experimentation in the area of pedagogy and school management and governance. NGO and private schools can play a useful role in this respect. Finding out how to make schools more accountable to parents and student needs is critical. Policy-makers involved in education would do well to remember two key elements: quality is at least as important as quantity, and the simplest way to improve quality is to ensure that those providing education have incentives to do it well. Choosing the appropriate mechanism for expanding education is important. New work in the area is paying much more attention to the market conditions under which education is provided and the incentives faced by different providers.

The large cross-country literature on credit shows a strong correlation between financial depth and growth. However, the poor tend not to have access to banks and other formal financial institutions, and so aggregate credit expansion may not necessarily deliver benefits to the most disadvantaged groups. Expanding access to credit for the poor also stands out as a key element in overall strategy for confronting global poverty. One line of attack on this issue has been to look at the functioning of informal institutions which, to some extent, have filled the void left by market and state failure to reach the poor. This has led to a focus on microfinance typically provided via NGOs. Another line of attack has been to look at whether changing the way that formal credit institutions deliver credit can affect outcomes with a focus in some countries on development or social banking.

In terms of microfinance, it seems clear that policy-makers could encourage access to credit among the poor by encouraging diverse microfinance NGO activities by removing barriers to NGOs entering the credit sector. Competition between providers would help select those

NGOs which are best suited to delivering financial services to the poor. The case for subsidies to microfinance (which are still very common), however, can only be justified in the face of strong evidence for social benefits. To establish social benefit a promising step for policy-makers would be to tie subsidies to convincing (i.e. randomized) cost-benefit analyses of specific programmes, something that subsidized NGOs are typically not asked to do at present, and seem completely unwilling to do voluntarily (presumably for fear of a bad assessment, or a desire to focus on actually doing microfinance rather than evaluating it). In this regard, it would seem wise for policy-makers not only to demand cost-benefit studies, but also to supervise and fund them.

With reference to social banking, the (limited) evidence that we have does suggest that such programs can help to reduce poverty. What is less clear is how cost-effective these programs are as repayment rates are often extremely low. No easy ranking of microfinance and social banking as regards cost effectiveness is available. Both types of program can confer significant benefits as measured in terms of increased expenditure or income. However, both types of schemes also incur significant subsidies. The demonstrated advantage of microfinance in terms of repayment needs to be balanced against disadvantages in terms of reaching the poorest individuals and localities. Reaching the poorest in rural areas, who are often involved in subsistence agriculture and who cannot make frequent repayments, for example, is problematic. One thing which is clear is that coercion is needed to expand credit into backward rural areas and to reach poorer individuals. And here government may have some advantages in terms of coordination, legal powers and resources. There is also the issue of whether providing a savings function is important. The fact that a number of microfinance operations are evolving into banks which offer this service suggests that it may be. Questions of governance and accountability also need to be addressed as it is often not clear to whom NGOs are accountable. Similarly development banks may be unresponsive to the needs of their customers.

7.3 Liberalization

The post-war model of economic development was built on a raft of regulation. Such regulation was often justified as the welfare improving

actions of benevolent governments intent on fixing market failures. Insofar as such market failures are a cause of poverty, this was closely allied to the poverty reduction agenda. However, there is increasing empirical evidence that, noble as the intentions of the architects of regulation may have been, many forms of regulation have been neither an engine of economic development, nor a boon for the poor.

The case of labour regulation illustrates this problem well. The original rationale for providing job security to formal sector workers may have been well intended. It is clear, for example, that formal sector workers face adjustment costs from changing jobs. However, viewed from a poverty reduction perspective, the instinct to impose the barriers to labour adjustment on firms turns out to be mistaken. There are too many unintended consequences: firms will hire fewer workers, invest less in new machinery and technology, and possibly even contract and move to the informal sector with its reduced benefits for workers. Sacrificing efficiency (and formal sector tax revenue) for the sake of formal sector workers is also a particularly regressive policy in most developing countries because workers in the informal sector (who remain unprotected) are typically far poorer than those in the formal sector. As a result, the vast majority of developing country workers, those in the informal sector, are only harmed by labour regulation.

The agenda that emerges is clear. There is no doubt that the growth of private firms is essential to the growth process. Governments must be encouraged to allow these firms to grow as freely as they wish, and to fail if they are not productive enough to survive. This will allow a country to take advantage of the processes of competition and creative destruction that are at the heart of growth. If anything, the entrepreneurial spirit should be encouraged to prosper, by attacking implicit barriers to entrepreneurship such as the areas we have already discussed (property rights and legal reform, access to credit, and access to education). The international policy-making and donor community can play a significant role here.

As far as regulation is concerned, it is likely that labour regulation is just the tip of the iceberg. It is time for a fundamental rethink of many regulations surrounding access to land and water for firms. Electricity (where pricing is often biased against manufacturing), infrastructure and red tape are also major concerns in this area. It is also important to rethink what factors conducive to economic growth at the local level are required. Deregulation is often difficult to achieve, as once rent-generating regulations are in place they are difficult to remove. The progress that has been achieved over the past decades has occurred mainly in times of crisis, and has been largely externally imposed by multilateral organizations. Two commitment devices have potential for success – creating regulatory structures that delegate decision-making powers to independent regulators (or to central banks, in a broader macroeconomic setting), and joining external groups (such as the WTO or the EU) that hold their members to certain pro-competitive standards.

Our discussion on the evidence of outward orientation suggests a number of policies that should go hand in hand with any trade liberalization episode. First, factor mobility should be encouraged through flexible labour and capital markets; this resonates with themes developed earlier. While allowing workers and business owners to fail may run counter to the instincts of many policy-makers, it needs to be remembered that the failure of these enterprises signals only that those resources can be better used (and better paid) elsewhere in the economy. Policy-makers should not only refrain from hindering this process through regulations, but aim to accelerate it by removing barriers of entry to new firms in new sectors. Second, policies that aim to reduce transport costs are essential for allowing a country to prosper from globalization. Policies to improve the transportation infrastructure such as roads, railways and ports are likely to interact well with open trade policies. These will reduce the marginal cost of exporting and importing, but exporters in particular need help with the fixed costs of accessing foreign markets. Here, innovations such as exporting boards and special export zones are likely to help, as are policies that encourage overseas business linkages through trade fairs and the 'business diplomacy' activities of embassies.

Whether or not a particular part of a country benefits from or is harmed by a growing outward orientation is likely to depend on the local institutions and policies. This makes it clear that the domestic reform agenda is intimately linked to the international reform agenda.

8. Conclusions

We began by emphasizing the magnitude of the challenge presented by the problem of global poverty. We live in an era in which two global giants – China and India – are making unprecedented progress towards conquering the problem of chronic deprivation even though both face enormous challenges going forward.

Development economics is now driven by the desire to provide convincing quantitative evidence from persuasive empirical methods to meet the challenge of global poverty. While it may sometimes seem that we are frustratingly far from the kind of systematic understanding that we would need to deal with all the issues, this report has offered a window on the state of play. This reveals grounds for optimism. No longer should it be acceptable to insist on solutions that are not supported by evidence.

The three aspects of poverty reduction that we are emphasizing here are motivated by our take on the state of knowledge in this area. While every step needs to be country-specific and tailored to the problem in hand, our hope is that the framework presented here can help in joining often disparate elements of the policy agenda together.

References

Acemoglu, Daron, Simon Johnson and James A. Robinson, "The Colonial Origins of Comparative Development: An Empirical Investigation", *American Economic Review* 91(5), pp. 1369-1401, 2001.

Acemoglu, Daron and Simon Johnson, "Unbundling Institutions", *Journal of Political Economy* 113(5), pp. 949-995, 2005.

Aghion, Philippe, Robin Burgess, Stephen Redding, and Fabrizio Zilibotti, "The Unequal Effects of Liberalization: Theory and Evidence from India", mimeo LSE, 2005.

Aghion, Philippe and Patrick Bolton, "A Trickle-Down Theory of Growth and Development with Debt Overhang", *Review of Economic Studies*, 64(2), pp. 151-72, 1997.

Ahuja, V., B. Bidani, F. Ferreira, and M. Walton, "Everyone's Miracle? Revisiting Poverty and Inequality in East Asia", in *Directions in Development Series*, Washington, DC: World Bank, 1997.

Aitchison, J. and J. Brown, *The Log-Normal Distribution,* Cambridge: Cambridge University Press, 1966.

Amsden, Alice, *Asia's Next Giant: South Korea and Late Industrialization*, New York: Oxford University Press, 1989.

Armendariz de Aghion, Beatriz and Jonathan Morduch, *The Economics of Microfinance,* Cambridge: MIT Press, 2005.

Ashenfelter, Orley, Colm Harmon and Hessel Oosterbeek, "Empirical Estimation of the Schooling/Earnings Relationship – A Review", *Labour Economics*, 6(4), pp. 453-470, 1999.

Atkinson, Anthony B. and Andrea Brandolini, "Promise and Pitfalls in the Use of Secondary Data-Sets: Income Inequality in OECD Countries As a Case Study", *Journal of Economic Literature*, 39(3), 771-99, 2001.

Banerjee, Abhijit, Shawn Cole, Esther Duflo and Leigh Lindon, "Remedying Education: Evidence from Two Randomized Experiments in India", mimeo MIT, 2004.

Banerjee, Abhijit and Esther Duflo, "Addressing Absence", mimeo MIT, 2005.

Banerjee, Abhijit and Esther Duflo, "Do Firms Want to Borrow More? Testing Credit Constraints Using a Direct Lending Program", mimeo MIT, 2004.

Banerjee, Abhijit and Esther Duflo, "Growth Theory through the Lens of Development Economics" in Philippe Aghion and Steven H. Durlauf (eds.) *Handbook of Economic Growth, Vol. 1A*, Amsterdam: Elsevier, 2005.

Banerjee, Abhijit and Esther Duflo, "Inequality and Growth: What Can the Data Say?", *Journal of Economic Growth* 8(3), pp. 267-299, 2003.

Banerjee, Abhijit, Paul J. Gertler, and Maitreesh Ghatak, "Empowerment and Efficiency: Tenancy Reform in West Bengal", *Journal of Political Economy*, 110(2), 239-80, 2002.

Banerjee, Abhijit and Michael Kremer, "Teacher-Student Ratios and School Performance in Udaipur, India: A Prospective Evaluation", mimeo Harvard, 2002.

Banerjee, Abhijit and Kaivan Munshi, "How Efficiently Is Capital Allocated? Evidence from the Knitted Garment Industry in Tirupur", *Review of Economic Studies* 71(1), pp. 19-42, 2004

Banerjee, Abhijit and Andrew Newman, "Occupational Choice and the Process of Development", *Journal of Political Economy"*, 101(2), pp. 274-298, 1993.

Bartelsman, Eric, John Haltiwanger and Stefano Scarpetta, "Microeconomic Evidence of Creative Destruction in Industrial and Developing Countries", mimeo World Bank, 2004.

Benabou, Roland, "Inequality and Growth" in B. Bernanke and J. Rotemberg (eds.), *NBER Macroeconomics Annual 1996*, pp. 11-74, 1996.

Besley, Timothy, "Property Rights and Investment Incentives: Theory and Evidence from Ghana", *The Journal of Political Economy* 103(5), pp. 903-937, 1995.

Besley, Timothy, *Principled Agents? The Political Economy of Good Government*, Oxford University Press, 2006.

Besley, Timothy and Robin Burgess, "Can Labor Regulation Hinder Economic Performance? Evidence from India", *Quarterly Journal of Economics,* 2004.

Besley, Timothy and Robin Burgess, "Halving Global Poverty," *Journal of Economic Perspectives*, 17(3), pp. 3-22, 2003.

Besley, Timothy and Robin Burgess, "The Political Economy of Government Responsiveness: Theory and Evidence from India", *Quarterly Journal of Economics,* 117(4), pp. 1415-1451, 2002.

Besley, Timothy and Robin Burgess, "Land Reform, Poverty, and

Growth: Evidence from India", *Quarterly Journal of Economics*, 115(20, pp. 389-430, 2000.
Besley, Timothy and Maitreesh Ghatak, "Government versus Private Ownership of Public Goods", *Quarterly Journal of Economics*, 116(4), pp. 1443-1372, 2001.
Besley, Timothy, Rohini Pande and Vijayendra Rao, "Participatory Democracy in Action: Survey Evidence from India", *Journal of the European Economics Association Papers and Proceedings,* Vol. 3 (2-3), pp. 648-657, 2005.
Besley, Timothy and Andrea Prat, "Handcuffs for the Grabbing Hand? Media Capture and Government Accountability," *American Economic Review* 96(3), pp. 720-736, 2006.
Botero, Juan C., Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Shleifer, "The Regulation of Labor", *Quarterly Journal of Economics*, 119(4), 1339-1382, 2004.
Bourguignon, François, "The Growth Elasticity of Poverty Reduction: Explaining Heterogeneity across Countries and Time Periods", mimeo DELTA, 2002.
Bourguignon, Francois and Christian Morrison, "The Size Distribution of Income among World Citizens, 1820-1990", *American Economic Review* 92(4), pp. 727-44, 2002.
Brunetti, Aymo and Beatrice Weder, "A Free Press Is Bad News for Corruption", *Journal of Public Economics* 87, pp. 1801-1824, 2003.
Burgess, Robin and Rohini Pande, "Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment", *American Economic Review* 95(3), pp. 780-795, 2005.
Burgess, Robin and Rohini Pande, "Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment", mimeo, BREAD Working Paper No. 37, 2003.
Chattopadhyay, Raghabendra and Esther Duflo, "Women as Policy Makers: Evidence from a Randomized Policy Experiment in India", *Econometrica*, 72(5), pp. 1409-1443, 2004.
Chemin, Matthieu, "Does the Quality of the Judiciary Shape Economic Activity? Evidence from India", mimeo LSE, 2004.
Chen, Shaohua and Martin Ravallion, "How Did the World's Poor Fare in the 1990s?", *Review of Income and Wealth*, 47(3), pp.283-300, 2001.
Cole, Shawn, "Fixing Market Failures or Fixing Elections? Agricultural Credit in India", mimeo MIT, 2005.

Collier, Paul and David Dollar, "Can the World Cut Poverty in Half? How Policy Reform and Effective Aid Can Meet International Development Goals," *World Development* 29:11, pp. 1787–802, 2001.
Datt, Gaurav and Martin Ravallion, "Is India's Economic Growth Leaving the Poor Behind?", Policy Research Department Working Paper, World Bank, 2002.
De Soto, Hernando, *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else,* Basic Books, New York, 2000.
Deaton, Angus, "Is World Poverty Falling?", *Finance & Development*, 39:2, 2002.
Deaton, Angus and Jean Dreze, "Poverty and Inequality in India: A Re-Examination", *Economic and Political Weekly* September 7, 2002, pp. 3729-48, 2002.
Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, "The Regulation of Entry", *Quarterly Journal of Economics* 117(1), pp. 1-37, 2002.
Djankov, Simeon, Caralee McLeish, Tatiana Nenova, and Andrei Shleifer "Who Owns the Media?", mimeo Harvard University, 2001.
Djankov, Simeon, Edward Glaeser, Rafael LaPorta, Florencio Lopez-de-Silanes and Andrei Shleifer, "The New Comparative Economics", *Journal of Comparative Economics* 31 (4), pp. 595-619, 2003a.
Djankov, Simeon, Edward Glaeser, Rafael LaPorta, Florencio Lopez-de-Silanes and Andrei Shleifer, "Courts", *Quarterly Journal of Economics* 118 (2), pp. 453-517, 2003b.
Dollar, David, and Aart Kraay, "Growth Is Good for the Poor", *Journal of Economic Growth* 7(3), pp. 195-225, 2002.
Dreze, Jean, and Amartya Sen, *India: Economic Development and Social Opportunity*, Delhi: Oxford University Press, 1995.
Dreze, Jean, and Amartya Sen (eds.), *Indian Development: Selected Regional Perspectives*, Delhi: Oxford University Press, 1997.
Duflo, Esther, "Schooling and Labour Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment", *American Economic Review*, 91(4), pp. 795-813, 2001.
Duflo, Esther and Rema Hanna, "Monitoring Works: Getting Teachers

to Come to School", mimeo MIT, 2005.
Easterly, William, *The Elusive Quest for Growth – Economists' Adventures and Misadventures in the Tropics*, Cambridge: MIT Press, 2001.
Eaton, Jonathan, Samuel Kortum and Francis Kramarz, "An Anatomy of International Trade: Evidence from French Firms", mimeo NYU, 2004.
Esteve-Volart, Berta, "Gender Discrimination and Growth: Theory and Evidence from India", STICERD Development Discussion Paper No. 42, LSE, 2004.
Faguet, Jean-Paul, "Does Decentralization Increase Government Responsiveness to Local Needs? Evidence from Bolivia", *Journal of Public Economics*, 88, pp. 867-894, 2004.
Ferraz, Claudio and Frederico Finan, "Exposing Corrupt Politicians: The Effect of Brazil's Publicly Released Audits on Electoral Outcomes", mimeo UC Berkeley, 2005.
Field, Erica, "Entitled to Work: Urban Property Rights and Labor Supply in Peru", mimeo Harvard, 2004.
Foster, Andrew D. and Mark R. Rosenzweig, "Democratization, Decentralization and the Distribution of Local Public Goods in a Poor Rural Economy", mimeo Brown University, 2001.
Galasso, Emanuela and Martin Ravallion, "Decentralized Targeting of an Anti-Poverty Program", *Journal of Public Economics* 89(4), pp. 705-727, 2005.
Galiani, Sebastian, Paul Gertler and Ernesto Schargrodsky, "Water for Life: The Impact of the Privatization of Water Services on Child Mortality", mimeo Berkeley, 2002.
Glaeser, Edward, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer, "Do Institutions Cause Growth?", *Journal of Economic Growth*, 9(3), pp. 271-304, 2004.
Glewwe, Paul, Nauman Ilias and Michael Kremer, "Teacher Incentives", mimeo Harvard, 2003.
Glewwe, Paul, Michael Kremer and Sylvie Moulin, "Textbooks and Test Scores: Evidence from a Prospective Evaluation in Kenya", mimeo Harvard, 2002.
Gugerty, Mary Kay and Eduard Miguel, "Ethnic Diversity, Social Sanctions, and Public Goods in Kenya", *Journal of Public Economics*,89(11-12), pp. 2325-2368, 2003.
Hall, E. and Charles I. Jones, "Why Do Some Countries Produce So

Much More Output Per Worker Than Others?," *Quarterly Journal of Economics*, 114(1), pp. 83-116, 1999.
Hanson, Gordon, "Globalization, Labor Income and Poverty in Mexico", NBER working paper number 11027, 2004.
Hanson, Gordon, "What Has Happened to Wages in Mexico since NAFTA? Implications for Hemispheric Free Trade", NBER Working Paper Series 9563, 2003.
Hausman, Ricardo and Dani Rodrik, "Economic Development as Self-Discovery", mimeo Harvard, 2002.
Johnson, Simon, John McMillan and Christopher Woodruff, "Property Rights and Finance", *American Economic Review*, 92(5), pp. 1335-56, 2002.
King, Robert and R. Levine, "Finance and Growth: Schumpeter Might be Right" *Quarterly Journal of Economics*, 153(3), pp. 717-738, 1993.
Kremer, Michael, "Education Reform", in Anne O. Krueger (ed.), *Economic Policy Reform: The Second Stage*, University of Chicago Press, 2000.
Kremer, Michael, Sylvie Moulin and Robert Namunyu, "Unbalanced Decentralization", mimeo Harvard, 2002.
Krueger, Alan and Mikael Lindahl, "Education for Growth: Why and for Whom?", *Journal of Economic Literature* 39(4), pp. 1101-1136, 2001.
Kugler, Adriana, "The Effect of Job Market Security on Labor Market Flexibility: Evidence from the Colombian Labor Market Reform", NBER Working Paper Series 10215, 2004.
La Porta, Rafael and Florencio Lopez-de-Silanes, "The Benefits of Privatization: Evidence from Mexico", *Quarterly Journal of Economics* 114(4), pp. 1193-1242, 1999.
La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Sheifer and Robert Vishny, "Law and Finance", *Journal of Political Economy* 106(6), pp. 1113-1155, 1998.
Lal, Deepak, Rakesh Mohan and I. Natarajan, "Economic Reforms and Poverty Alleviation. A Tale of Two Surveys", *Economic and Political Weekly* March 24 (2001), 1017-28, 2001.
Li, Hongyi, Lyn Squire and Heng-fu Zou, "Explaining International and Intertemporal Variations in Income Inequality", *The Economic Journal*, 108(446), pp. 1-18, 1997.
Mauro, Paulo, Corruption and Growth, *Quarterly Journal of Economics*

110(3), pp. 681-712, 1995.
McMillan, John, "*Markets in Transition*", in David M. Kreps and Kenneth Wallis (eds.), *Advances in Economics and Econometrics: Theory and Application*, Cambridge: Cambridge University Press, 1995.
Mulligan, Casey B., Richard Gil and Xavier Sala-i-Martin, "Do Democracies Have Different Public Policies than Non-Democracies?" *Journal of Economic Perspectives*, 18(1), pp. 51-74, 2004.
Nicita, Alessandro, "The Effects of Mexican Trade Liberalization on Household Welfare", mimeo World Bank, 2003.
North, Douglass C., *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press, 1990.
Olken, Benjamin A., (2005), "Monitoring Corruption: Evidence from a Field Experiment in Indonesia", mimeo Harvard, 2005.
Özler, Berk, Gaurav Datt, and Martin Ravallion, "A Database on Poverty and Growth in India", Washington: World Bank, 1996.
Pande, Rohini, "Can Mandated Political Representation Increase Policy Influence for Disadvantaged Minorities? Theory and Evidence from India", *American Economic Review* 93(4), pp. 1132-1151, 2003.
Pande, Rohini and Christopher Udry, "Institutions and Development: A View from Below", in R. Blundell, W. Newey, and T. Persson (eds.), *Proceedings of the 9th World Congress of the Econometric Society*, Cambridge: Cambridge University Press, 2005.
Pavcnik, Nina, "Trade Liberalization, Exit and Productivity Improvements: Evidence from Chilean Plants", *Review of Economic Studies*, 69, pp. 245-276, 2002.
Pitt, Mark and Shahidur Khandker, "The Impact of Group-Based Credit Programs on Poor Households in Bangladesh: Does the Gender of Participants Matter?", *Journal of Political Economy*, 106:5, pp. 958-996, 1998.
Ravallion, Martin, "Pro-Poor Growth: A Primer", mimeo World Bank, 2004.
Ravallion, Martin and Shaohua Chen, "What can new survey data tell us about recent changes in distribution and poverty?", *World Bank Economic Review*, 11, pp. 357-82, 1997.
Ravallion, M., Datt, G., and van de Walle, D., "Quantifying Absolute Poverty in the Developing World", *Review of Income and Wealth* 37, pp. 345-361, 1991.

Reinikka, Ritva and Jakob Svensson, "The Power of Information: Evidence from a Newspaper Campaign to Reduce Capture of Public Funds", mimeo IIES, 2005.
Reinikka, Ritva and Jakob Svensson, "Local Capture: Evidence from a Central Government Transfer Program in Uganda", *Quarterly Journal of Economics* 119 (2), pp. 679-705, 2004.
Reserve Bank of India, *Banking Statistics 2000*, Mumbai, 2001.
Rodrik, Dani, "Getting Institutions Right", mimeo Harvard University, 2004.
Sachs, Jeffrey, "Tropical Underdevelopment", NBER Working Paper No. 8119, 2001.
Sachs, Jeffrey, A. Varshney and N. Bajpai (eds.), *India in the Era of Economic Reforms*, Delhi: Oxford University Press, 1999.
Santos, Boaventura de Sousa, "Participatory Budgeting in Porto Alegre: Toward a Redistributive Democracy", *Politics and Society* 26, pp. 461-510, 1988.
Schultz, Paul T., "School Subsidies for the Poor: Evaluating the Mexican PROGRESA Poverty Program", *Journal of Development Economics* 74(1), pp. 199-250, 2004.
Shleifer, Andrei, and Robert W. Vishny, *The Grabbing Hand: Government Pathologies and Their Cures*, Cambridge: Harvard University Press, 1998.
Stern, Nicholas, *A Strategy for Development,* Washington DC: World Bank, 2001.
Stigler, George J., "The Theory of Economic Regulation", *Bell Journal of Economics and Management Science* 2, pp. 3-21, 1971.
Strauss, John and Duncan Thomas, "Health, Nutrition and Economic Development", *Journal of Economic Literature* 36(2), pp.766-817, 1998.
Sukontamarn, Pataporn, "The Entry of NGO Schools and Girls' Educational Outcomes in Bangladesh", mimeo LSE, 2005.
Sundaram, K. "Employment and Poverty in the 1990s: Further Results from NSS 55th Round Employment-Unemployment Survey, 1999-00", *Economic and Political Weekly*, August 11 (2001), 3039-49.
Sundaram, K., and Suresh D. Tendulkar, "Poverty Has Declined in the 1990s: A Resolution of Comparability Problems in NSS Consumer Expenditure Data", *Economic and Political Weekly*, January 25 (2003), 327-37, 2003a.
Sundaram, K., and Suresh D. Tendulkar, "Poverty in India in the 1990s:

An Analysis of Changes in 15 Major States", *Economic and Political Weekly*, April 5 (2003), 1385-93, 2003b.

Sundaram, K., and Suresh D. Tendulkar, "Poverty in India in the 1990s: Revised Results for All-India and 15 Major States for 1993-94", *Economic and Political Weekly*, November 15 (2003), 4865-72, 2003c.

Topalova, Petia, "Factor Immobility and Regional Impacts of Trade Liberalization: Evidence on Poverty and Inequality from India", mimeo MIT, 2004.

Topalova, Petia, "Trade Liberalization and Firm Productivity: The Case of India", IMF Working Paper 04/28, 2003.

Treisman, Dan, "Decentralization and the Quality of Government", mimeo UCLA, 2002.

Trivedi, Kamakshya, "Educational Human Capital and Levels of Income: Evidence from States in India, 1965-92", mimeo University of Oxford, 2002.

Visaria, Sujata, "Legal Reform and Loan Repayment: The Microeconomic Impact of Debt Recovery Tribunals in India", mimeo Boston University, 2006.

Wade, Robert, *Governing the Market: Economic Theory and the Role of the State*, Princeton: Princeton University Press, 1990.

Williamson, John, "What should the Bank think about the Washington Consensus?", background paper for 2000 World Development Report, available at http://www.iie.com/papers/williamson0799.htm, 2000.

Williamson, John, "A Short History of the Washington Consensus", presented at the conference "From the Washington Consensus Towards a New Global Governance'", Barcelona, 2004.

World Bank, *World Development Report 2004: Public Service Delivery,* 2004.

World Bank, *World Development Report 2000/2001: Attacking Poverty,* 2001a.

World Bank, "Globalization, Growth and Poverty", mimeo World Bank, 2001b.

Young, Susan, *Private Business and Economic Reform in China*, Armonk, N.Y.: M.E. Sharpe, 1995.

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