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PATH DEPENDENT POSSIBILITIES OF TRANSFORMATION:
AGRICULTURAL CHANGE AND ECONOMIC DEVELOPMENT IN
NORTH AND SOUTH VIETNAM

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Path dependent possibilities of transformation: Agricultural change and economic development in north and south Vietnam

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Introduction

Colonialism is back on the research agenda. The influential works of Engerman and Sokoloff (E&S) and Acemoglu, Johnson and Robinson (AJR) have set the focus specifically on the long-term effects of factor endowments and colonial impact. The emphasis is not explicitly on colonialism per se, but on the initial conditions that shaped the long-term effects of colonialism. This is achieved via institutional mechanisms; especially those that perpetuated colonially rooted inequalities, and have led to significant disparities in wealth and political power. The extractive institutions set in colonial times have continued to play a detrimental role for the possibilities of countries to develop after independence.

That present-day development has historical origins is a well-placed point. No doubt, institutions are central to economic and social development, and history provides many examples showing that they have a tendency to be persistent. Nevertheless, several issues remain to be settled before conclusions can be drawn about how colonial institutions interact with long-term development dynamics. The concept of extraction gives rise to many questions. What does it mean and how can it be measured? How does it influence the development process over time? To what extent is it reasonable to infer a causal link to current economic performance from the set-up of institutions often established centuries ago? Finally, and most importantly for the dissertation, how do extractive institutions relate to factor endowments (mainly man to land ratios)?

These are the central questions that the dissertation discusses. Their relevance for development is inherent in the debate as more scholars are pointing at the importance of the long-term institutional effects of historical phenomena (i.e. Dell 2010, 2012; Nunn, 2009; Rodrik et al, 2004). Authors set themselves in identifying the key historical event that might have led to a path dependence story. There is also an underlying policy implication in these works. If institutions are essential for development, understanding how current institutions have come to be might be key for a successful institutional reform. The importance of deeply rooted inequalities and their effect on current levels of development was a main feature of the 2006 World Bank Report on Equity, and since the publication in 2012 of Acemoglu and Robinson's book, Why Nations Fail, the concept of

extractive institutions and the importance of institutional reform have infiltrated different spheres of development policy.

The dissertation relates to the two theories (Acemoglu, Johnson, and Robinson, 2001; Engerman and Sokoloff, 1997, 2002, 2005, 2012) in *three* ways: first, it *complements*, as it discusses a case of late colonisation in Asia (only AJR partly includes this type of colonisation). Second, it *qualifies* the potential mechanisms. And third, it presents a *different understanding* of development paths based on extraction.

The two rice economies of Vietnam become a sort of natural experiment to explore the dynamics derived by their distinct factor endowments at the time of colonization. The Red River Delta (in the north) was already heavily populated in the 19th century, while the Mekong River Delta (in the south) was a land frontier economy. In line with the current literature pointing at how history matters for today's development, a historical analysis of this case is relevant, not least as Vietnam is currently considered "a development success story" (WB, 2015). Vietnam has combined decades of remarkable GDP per capita growth along with an extraordinary reduction of poverty and inequalities. This transformation is difficult to reconcile with a country devastated by two wars, invasions, economic embargo, and famine during the 20th Century. For Sweden in particular, the relation with Vietnam is special indeed; Sweden was the first Western country to establish diplomatic relations with Northern Vietnam in 1969 and since then, Vietnam has become a significant recipient of Swedish development cooperation (see Sida's overview report, 2010).

The dissertation has the implicit limitation of a case study, and hence facing constraints in the possibilities of generalization. This said, it joins the warning voices lifted by economic historians and historians (e.g. Austin, 2008a; Hopkins, 2011; McCloskey, 2015; Woolcock et al, 2010) over the dangers of oversimplification of how institutions evolve over time and standardised policy blueprints.

The dissertation does not refute the importance of institutions, but brings them into the context of a rural economy. The debate on diverging paths of transformation is intrinsically linked to the differences in industrialisation (e.g. the timing and the extent). The excessive focus on the colonial institutions that might preclude the industrialisation of the colonised countries might, in turn, overshadow the transformations of the rural

economy at the time, along with the potential incentives and constraints embedded in it. For instance, Cochinchina (the southernmost region of today's Vietnam) became the third largest exporter of rice in the 1920s, in barely a couple of decades. Following the argument that it is only the factor endowments at the time of colonisation that determines the long-term effect would exclude the impact of the Great Depression, for instance.

When historical research is based on colonial data, characterized by a paradoxical abundance of records but scarcity of evidence, the claim that historical events and processes might be useful to understand current problems has to be considered carefully. The dissertation seeks to identify sequences of causally related events. This requires a combination of methods to help contextualize evidence that is more circumstantial than direct (Fogel, 1982). The case of Vietnam (Indochina) is representative of the challenges intrinsic to this type of economic research, but warns about methods that assume history instead of exploring it under a theoretical lens (however scant the evidence is).

The Rice Deltas of Vietnam: setting the empirical study

The study of Vietnam is one of both devotion and neglect. It has indeed attracted much scholarly attention to different landmarks of its history, especially the last century. Notwithstanding, there has not yet been an attempt to analyse its development by using a framework that attempts to link its colonial past to current economic performance. The dissertation attempts to fill that gap.

Vietnam has been considered a "miracle" economy with GDP growth rates averaging 7 per cent since 1990, which has been achieved without major increases in income inequality. Quite the contrary, it is an exemplary case of poverty reduction. In 1993, 60 per cent of the population lived under the 1 dollar per day poverty line. By 2006, the rate had been reduced to 16 per cent (World Bank Vietnam Data).

In order to explain this successful transformation, the current literature normally focuses on Doi Moi; a major institutional change that meant progressive liberation and commercialization of the economy starting in 1986. This major reform added to ongoing economic reforms of Vietnam's agriculture that had already started in 1980. In the aftermath of the Second Indochinese War (the "Vietnam War"), yields had stagnated, and

rice and other basic produce had to be imported. De-collectivising agriculture by freeing input and output markets, and shifting decision making on crop management and resource allocation towards farming households are considered as factors conducive to the change (Pingali & Xuan, 1992; Young et al, 2002). These major initial reforms were aimed at 'getting agriculture moving' (Mellor and Adams, 1986; Timmer, 2009).

Rice again became a major driver of the economy, as it had been during colonial times. Vietnam rapidly turned out to be the second largest world rice exporter after Thailand. In 2000 rice occupied 7.6 million ha and 94 per cent of the total grain output, to which the south contributed 45 per cent of the area and 50 per cent of the output (Young et al, 2002). The south contributed to 80 per cent of the total rice exports (Nguyen and Tran, 2008).

Rice is the main staple and is cultivated throughout the country, but the main production is localized in the two rice bowls: the Mekong River Delta in the south and the Red River Delta in the north. Young et al (2002) carried out a comparative study of the two rice deltas, and found that, in 1989/1990, the average yield was slightly higher in the Mekong River (4.5 to 4.1), whereas rice-cropping intensity was higher in the Red River (1.59 to 1.47). Despite these similarities, rice production per household (kg/year) was 4.4 times higher in the South, and the amount sold was 27 times larger than in the North. This was just the beginning of an increasing outperformance of the Mekong, in yields, land intensification, and labour productivity, compared to the Red River Delta. A key differentiating factor is that in the Red River Delta the size of farmland was 0.23 ha on average, scattered over 6 to 8 non-consecutive plots, whereas in the Mekong River Delta, the farmland was not fragmented and reached 1.1 hectare on average (Kerkvliet and Selden, 1998).

It is commonly argued that the South was able to take better advantage of the domestic and international market liberalization for rice and other agricultural commodities (Benjamin and Brandt, 2004). While it is undeniable that the economic performance of the south was remarkable, both in its capacity to increase income levels and reduce poverty and rural inequality, there are two fundamental questions that remain unanswered: i) what was causing or impeding the transformation in rural north Vietnam? And ii) what made the southern farmer more "able" to take advantage of the domestic

and international markets? These same questions could be asked for the 1920s. Why was the Southern (Cochinchinese) rice farmer more able to take advantage of the commercialization opportunities brought by French colonialism than the Northern (Tonkinese) farmer?

For the modern phenomenon, a large number of authors, especially the reference work of Pingali and Xuan (1992), are tracing de-collectivization of farming as one of the fundamental causes of Vietnam's re-emergence in world rice markets in 1989. As already indicated, this phenomenon was driven by the south; it was the Mekong River Delta, once again, that drove the export boom. But collectivization had barely affected 6 per cent of the farmers there (Pingali and Xuan, 1992). From a theoretical point of view, it might be problematic to attribute causality to a non-significant phenomenon, unless one is to argue for a counterfactual according to which it was the non-collectivization, along with the opening up of the economy and the liberalization of markets (releasing artificial distortions in prices; eventually lifting rice exports quotas, etc), that facilitated the change. This however meant that there were pre-existing conditions that would have been in place prior to the reforms or even to reunification in 1975. Nonetheless, this might initially be considered counterintuitive as the common and widespread perception of South Vietnam was as a land of large landholdings, absentee landlordism, rubber plantation economy, etc. (Wiegersma, 1988). This is not easily reconcilable with the claim that the Southern Vietnamese were "more able" to take advantage of the new market opportunities.

Hence, as geographical variables continued to play a role in explaining the differences in economic performance after a nation-wide institutional reform, the explanations so far remain incomplete. Heltberg (2002, p. 14) highlights "...the historical division and separate economic systems of North and South Vietnam" as an explanation. In this line and with focus on the two rice economies, the dissertation develops an alternative framework to assess the impact of factor endowments in the agricultural transformation of the two deltas.

Colonial Institutions: a sufficient condition?

One of the main arguments of the dissertation is the importance of the effect of factor endowments in economic processes. This is the so-called factor endowment approach to the understanding of the processes of economic growth, or lack thereof, which took place during colonial times (see Lewis, 194; Myint, 1958; Austin, 2008b, for Africa). In other words, the relative availability of land and labour, which were to be the most important pre-colonial factors, had a decisive influence on the type of agricultural transformation and processes of capital formation during colonial times.

The study shows how scarcity of land in relation to labour, as in the case of the Red River Delta, puts constraints on the cultivation system, which in turn, and contrary to a standard (neo)classical economics model, does not lead to excess labour. The marginal returns to labour (measured not as inputs, but person-hour) tend toward zero and land becomes more fragmented. This fragmentation is an attempt to: first, accommodate increases in population and second, diversify cultivation risks by spreading plots over areas of different soil fertility and possibilities of intensification of land use. The probable outcome is a large economy in subsistence and subject to low opportunity costs of labour. This is in large degree due to the marked seasonality of an increasingly intensified cultivation of rice (in both land and labour). This interpretation does qualify, at least for rice cultivating economies, AJR's claim that (historical) population densities may be used as a proxy for higher income per capita. Furthermore, this points at a potential mechanism by which factor endowments constrain the surplus capacity of the economy, which in itself could have a long-term effect.

The Mekong River Delta's transformation of its rice economy, on the other hand, accords with Myint's (1958) Vent-for-Surplus theory. Along with investments in infrastructures, and access to markets, new land was put under cultivation, which resulted in increases in surplus production, and eventually an export boom, most remarkably in the 1920s. Land intensification was carried out by adding new land under cultivation as a result of labour intensification. This was a Boserupian process by which labour added more hours to cultivation per year by, for instance, seasonally migrating. This indicates that there were greater incentives to expand the frontier than to intensify existing rice lands. Still, this regime of growth does not lead to an agricultural transformation, as a

sustained increase in surplus production can be achieved without technological progress in rice cultivation.

The implicit logic of this growth pattern might hypothetically be reflected in increasing stratification over time within the rice economy. This outcome would be due partly to growing inequalities within villages and among farmers, and partly to a trade dominated by French and Chinese actors (as discussed by Gunnarsson, 1978, and Hopkins, 1973, in an African context). In the village economy it is probable that there were processes of increasing stratification as a result of household differences (number of labourers), land size and quality, indebtedness, and a degree of luck. Land availability, along with increasing access to markets and higher rice prices, set new incentives that conditioned the behaviour of all actors in the rice trade. The interests were not always aligned however. While larger landowners (absent or local) and local administrators sought to restrict labour movements (á la E&S), the French administration had incentives to allow labour movements towards the frontier (settlement) in order to increase land production and export (which was a main source of revenue). This necessity of putting more land under cultivation also led to the formation of a landed elite, distant from the frontier lands (á la Domar). The combination of different actors, opportunities, and constraints led to conflicts, which became apparent in the aftermath of the Great Depression and especially after the 1940s (Scott, 1976). As outcomes, riots, land left uncultivated, political opposition, and eventually wars cannot be ignored.

The overall caveat towards the existing literature, especially AJR's, is that the same colonial power and initial policies did not lead to the same processes and outcomes at the local level. The importance of local institutions, which is highlighted by E&S in later works (2012), should regain theoretical and analytical importance in the discussion. For our cases, the significance of the village economy, in influencing economic institutions and their potential change, should be brought into the analytical framework.

Colonial versus Local Institutions

The importance of the village economy brings us to our second criticism to the existing literature. It is undeniable that colonial governments (in the colonies and the core countries) had an impact. Nonetheless, when the focus is on inequalities (seen as effects

on a broad cross section of the population) the importance of other actors cannot be neglected. This is especially relevant in areas of high population densities. AJR argue that colonial powers could reinforce (or establish) extractive institutions. They allow for such a possibility despite their claim that colonialism was an exogenous shock. Needless to say, the acceptance of such a premise might compromise their general hypothesis that the 'Reversal of Fortunes' is due to an institutional reversal. Colonialism would not have been a necessary condition for the reversal if extractive institutions had already been in place. For E&S' theory, since the focus is on the Americas, the long duration of colonisation dilutes the discussion of initial colonial agency. However, for the late colonisation of Africa and Asia, where indirect rule was more common, discussing agency becomes paramount, especially in relation to a potential long-term effect.

This dissertation adheres to the common objective of assessing the extent of extraction during colonial times. It is suggested, though, that if extraction is to be understood as surplus extraction, two caveats should be made: i) surplus capacity of the economy is conditioned by the factor endowments and its relation to agricultural transformation; and ii) the analysis has to be disaggregated to the village economy and the farmers themselves. The dissertation maintains that the possibilities of extraction are also institutionally conditioned by factor endowments. The argument is that the distinct factor proportions of the Northern and Southern Deltas created different village structures and socioeconomic relations, which, in turn, influenced the opportunities and constraints of farmers. This might consequently have had an effect on their behaviour. In other words, the understanding lies in discussion of the open versus closed village economies, which is also embedded in the Moral Economy (Scott, 1976) versus Rational Peasant debate (Popkin, 1979).

The differentiation between these two camps of the controversial debate has very little to do with the rationality of the farmers; that is, that one was more rational than the other. The Northern farmer, as much as his Southern counterpart, behaved equally rationally. They were bounded differently, however.

The dissertation claims that the Red River Delta was closer to a rice version of a bimodality pattern of agriculture (latifundia-minifundia) than the land abundant areas with larger landholdings, where related large tenancy landholdings predominated

(Cochinchina-Mekong River Delta). The consequence is that the key to understanding extraction in the North may not lie in tenure conditions. On the contrary, it may be best understood first, in the difficulties for farming households to generate a surplus, and second, in the mechanisms that create relationships of dependency among farmers, and between the villages' landed elite and peasants. This is what Geertz (1973) called 'involution'. This dissertation argues that involution was probably present in the rice economy of the Red River Delta, but cannot be causally attributed to colonialism. These economic and institutional processes had probably made Tonkin fall into a High Level Equilibrium Trap, as land productivity was at its highest given the existing technology and input-output relationship (concept used by Elvin and Huang to explain China's falling behind).

Extractive Institutions and Path Dependence

This takes us to the understanding of how these processes that took place during colonial times could have a long-term impact. The dissertation adds two extra nuances to the current literature; first, mainly in the differentiation between inequalities and extraction during colonial times, and, second, in the consequent long-term impact.

Extraction, in a Moral Economy context, is worst when it leaves the majority of the population at subsistence. This, unlike Scott's claim, exemplifies Tonkin more than Cochinchina (though it is a probably valid claim that the Cochinchinese farmers were more vulnerable to market mechanisms than their Tonkin counterparts).

In order to incorporate the importance of the distribution of income in the economy, and its relation to the capacity of generating a surplus, we apply the Milanovic et al (2007, 2011) concepts of Extraction Ratio and Inequality Possibility Frontier. This method allows us to include another dimension to the understanding of inequalities, extraction, and extractive capacity. The evidence gathered for the colonial period indicates that inequalities in land distribution were probably greater in the South than in the North. This assertion is also supported by qualitative sources indicating stratification and probable polarization of the rice economy in the South. SRI Land reform report (1968, vol. I, part 2, B-19) reported that the concentration of landownership was one of the highest in the Far East. The outcome was, however, a *lower extraction ratio* than in the

North. This is because, despite the unevenness in the distribution of land, the possibilities of accumulation were greater, and the South was consequently not a subsistence economy with the characteristics and extent of the North. The economic and institutional dynamics were different.

Post-colonial Transformation

Nonetheless, the outcome of colonial times does not explain how Vietnam, especially the south, could undertake a dynamic and rather inclusive agricultural transformation from the late 1980s onwards.

If we take it back to the current related literature, the dissertation is not aimed at testing or rejecting either theory. The relevance of both works is not simply limited to the understanding of history per se, but clearly, as with AJR, the objective is to also have a say on the development paths of today. AJR's Reversal of Fortune thesis, due to the similar premises of analysis (differences in factor endowments), might inform our understanding of the cases.

The implications of the Reversal of Fortune thesis, and Acemoglu and Robinson's works, are twofold: on the one hand, they attempt to establish the long-term impact of colonialism. This means that the performance of economies today (see 1995 GDP per capita) cannot be fully explained if one does not include colonialism and the good or not so good extractive institutions. Consequently, colonialism and its institutions are a necessary condition for today's world distribution of income per capita (see world in relation to European colonialism). On the other hand, they have identified that the root of the failure of countries today lies in their political institutions (Acemoglu and Robinson, 2012). Institutions need to be changed for transformation to take place, and one may assume that it is via extending the "good" institutions, e.g. property rights, to a broad cross section of the population (AJR, 2001, p. 31).

For the case of Tonkin, with higher population densities, the theory predicts that the French would either reinforce or set extractive institutions, and this would lead to an institutional reversal and, hence, of fortunes. The relatively lower income per capita that the Red River Delta presents today (in relation to the south) could consequently be explained by the persistence of colonial extractive institutions.

Since AJR do not define what they mean by extractive institutions¹, but juxtapose them to the good ones, we could argue that what the French did was to reinforce the Moral Economy of the village. While one could consider this to be an empirically valid claim, it would also imply that it is the persistence of such institutions that hinders today's agricultural transformation. The only aspect of AJR's thesis that may be related to the Moral Economy is the lack of de jure property rights to land, since the relations (precolonial and colonial) were feudal. This, however, was partly altered during the collectivistic decades, and property rights have now become formally institutionalised via the land reforms of 1988 and 1992 (Hayami, 1994). Farmers have been granted land rights. Indeed, other more informal mechanisms, such as resistance by local authorities to allowing farmers to sell land (as some authors have argued) could have a minor resemblance to the institutional relations of a closed village community. This said, land rights and liberalization of markets have not led to increases in land transactions (Deininger & Jin, 2003). There is also evidence pointing at the difficulties of using land as collateral due to the extensive land fragmentation. This extensive land fragmentation, which hinders the surplus capacity of farmers and their possibilities of achieving sufficient economies of scale to make new technologies profitable, reduces the actual value of land. These processes are most probably the fundamental obstacle to the transformation. This is however neither an outcome of the current reform nor of colonial institutions.

The dissertation argues that the Red River Delta seems to fit the idea that there is path dependence, although it is not driven by institutional factors. It is the effect of factor proportions that seems to have been persistent in reducing the opportunity costs of labour, partly because by the extensive labour intensification of the land intensification processes (Boserup, 1965), and partly by increasing transaction costs. The overall implication of such a claim is that colonialism does not seem to have a causal role in today's obstacles to growth in the Red River Delta. It is more probable that the fragmentation of lands, to accommodate population pressure and land availability (increasing irrigated areas or lifting land to protect it from floods), created a pattern of agricultural transformation that left farmers with scattered and small plots. But a solution

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¹ AJR list the following as examples of extractive institutions: taxation, slave trade, mining economies.

for the farmers was not to grant them property rights, as that did not alter the dynamics in a fundamental way. The coordination costs for initiating processes of land consolidation were likely very high. Needless to say, the political costs associated with an institutional intervention (such as the European enclosure movements) were probably even higher. For this case, both the explanatory and the predictive powers of AJR's theory are limited.

The South is the most puzzling. The expectation based on AJR is that French would have settled there. But they did not. If we accept the Vietnamese settlement as a small-scale household economy, the outcome should have been the "good" trajectory. This was not the outcome either. From the point of view of land inequalities, the colonial outcome of the South is better predicted by E&S. Nonetheless, given the significant differences of type of crop and the institutional impossibility of recurring of the worst forms of labour accumulation, inequalities were probably lower than in Latin America. The indications are however that land inequalities in Cochinchina were high, with a Gini coefficient around 0.8 (FAO statistics). The drawback is that those outcomes cannot explain the transformation that the South was to experience later on.

Determinism and Path Dependence

For both E&S and AJR, institutions are persistent. Self-reinforcing mechanisms keep AJR's political extractive institutions and E&S's historically rooted inequalities influencing current performances. This resembles a path dependence argument.

The dissertation argues that the South story, however, was not one of path dependence. To validate such a claim, two potential counterarguments are first addressed: empirical inaccuracy or a theoretical shortcoming. For the first counterargument, the claim is that the empirical evidence presents a negatively biased outcome of colonialism in South Vietnam. Simply, it was not as bad as has been put forward. This counterargument is unlikely since the conflicts and eventually the war could be considered as indicators of the seriousness of the grievances voiced by the peasants. Our findings, i.e. an economy with large land inequalities but not as extractive (measured by the Extraction Ratio) might theoretically denote that Cochinchina, and possibly other land abundance economies of the time, were hybrids of the two extreme cases presented by AJR or a

modified version of E&S's path. One could argue that thanks to the period of colonisation and to the lower extent of extractive institutions (seen as the institutions to restrict labour and keep population at subsistence), there were better possibilities for economic stratification. In other words, inequalities probably increased but, as long as the extraction ratios did not increase faster, the path was not initially determined. In this understanding, two potential critical junctures came after the Great Depression, when the collapse in prices revealed the degree of indebtedness in the cultivation, and for many actors, such as milling companies, this meant bankruptcy. What if the French administration had actively reached out to the small farmers with credit, instead of to the larger landowners? Or carried out a reform to improve the land tenure conditions? Equally important to this institutional line of argumentation is the understanding that one of the greatest obstacles was the lack of economic specialization (no major technological investments) and hence lack of diversification of the economy. The Great Depression revealed more than a marketing and credit problem. It was a regime of economic growth without transformation. A second potential critical juncture was at the time of Independence and American intervention.

Second, this understanding could lead to an alternative reading of South Vietnam. There is path dependence, but the theory we have is not completely appropriate since it is based on extreme cases of extractive institutions (E&S). What if the institutional changes derived from the land availability meant a change in farmers' opportunity cost of labour and behaviour (risk aversion and other social norms, less tighter social relationships of dependency)? This might be interpreted as a counterforce to the elites and hence a relatively more inclusive economic process. This proposition would be more in line with Popkin (1979), i.e. farmers behaved differently in the South thanks to the open village economy (also brought up by Rambo, 1973; Hickey, 1967). Such a hypothesis may explain the war and the resistance against collectivization. This is theoretically a possibility, but how is it possible to empirically validate such a claim? The effects of the frontier on the behaviour of the main actors and the regime of Vent-for-Surplus probably led to a path of increasing inequalities, and conflict. The overall implication is that there was a path of transformation different from the one followed in previous European colonisation or in areas with different factor proportions. This possibility will require

further empirical research to include other economies with similar conditions to Cochinchina, and its undergoing.

A Final Note on History, Path Dependence, and Change

In conclusion, what has the modern agrarian transformation of South Vietnam illustrated in this respect? Could the problem lie in attributing deterministic properties to institutional persistence and inertia? David's (1997) Economics of Qwerty is one of the most well-known examples of path dependence. In his view, these processes are, and must be, stochastic sequential processes (David, 1997, p. 15). North argues along similar lines "if, however, the foregoing story [the evolution of land history in the US] sounds like an inevitable, foreordained account, it should not. At every step along the way there were choices—political and economic—that provided real alternatives. Path dependence is a way to narrow conceptually the choice set and link decision-making through time. It is not a story of inevitability in which the past neatly predicts the future" (North, 1990, p. 98-99).

Consequently the dissertation contends that the South cannot be understood as a story of path dependence in a strict sense. The path that was derived from its factor endowments and institutional formation predicted (based on current theory) the extractive path and scant possibilities of transformation (seen as reduction of inequalities and increasing income per capita). Does that mean that history does not matter? The answer is no. History matters in more ways than path dependence; it matters in shaping the sequences of causally related events and processes, where institutional change is possible. Then, history matters not because it is following a deterministic path, but because there could be change. But understanding change, in the past or present, cannot be achieved without taking into consideration the choices available, conditions, actors, and the foregone opportunities. It matters because, otherwise, there would not be paths of development (as argued by North, 1990). In a world where the past did not play a role or could be altered by institutional reform (á la AJR), Northern and Southern Vietnam would have had similar paths of transformation after Doi Moi.

Still, the important thing is to understand which institutions matter for the "good" transformation. While property rights are important, Adelman (1986) has developed a

more comprehensive framework for the understanding of how a broad cross-section of the population may benefit from change (institutional and technological). She provides with a set of parameters to assess how inclusive (seen as equalizing opportunity), a development strategy is. Access to markets (such as the liberalization derived from Doi Moi) may not be sufficient; the possibilities of productivity improvements of the main assets of the majority of the population are more fundamental. In this study, the focus has been mainly on land. Land size and distribution/tenure interact in the processes of allowing farmers to invest and respond to new incentives. This way of understanding the two rice Delta economies in Vietnam has shed more light on the recent inclusiveness of agricultural transformation in the South versus some bottlenecks in the North (in a modern form of High Level Equilibrium Trap). The developmental (policy) implications are greater, since Adelman's framework includes the complexity in the relations between economic and institutional mechanisms. The dissertation suggests that these are enlightened by the analysis of historical processes.

References

- Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution *NBER* Working Papers: 8460.
- Acemoglu, D., & Robinson, J. A (2012). Why Nations Fail: The Origins of Power, Prosperity and Poverty Crown Publishing Group.
- Adelman, I. (1986). A Poverty-Focused Approach to Development Policy. In J. J. P. Lewis & V. Kallab (Eds.), *Development Strategies Reconsidered*. Washington D.C.: Overseas Development Council.
- Austin, G. (2008a). The 'reversal of fortune' thesis and the compression of history:

 Perspectives from African and comparative economic history. *Journal of International Development*, 20(8), 996-1027. doi: 10.1002/jid.1510
- Austin, G. (2008b). Resources, techniques and strategies south of the Sahara: revising the factor endowments perspective on African economic development, 1500-2000. In L. L.

- London School of Economics and Political Science (Ed.), LSE Research Online Documents on Economics.
- Benjamin, D., & Brandt, L. (2004). Agriculture and Income Distribution in Rural Vietnam under Economic Reforms: A Tale Of Two Regions William Davidson Institute Working Paper: University of Toronto
- Boserup, E. (1965). The Conditions of Agricultural Growth. The Economics of Agrarian Change Under Population Pressure, Etc: London.
- David, P. A. (1997). Path Dependence and the Quest for Historical Economics: One more Chorus of the Ballad of QWERTY. DIscussion Papers in Economic and Social History. University of Oxford. Oxford.
- Deininger, K., & Jin, S. (2003). Land sales and rental markets in transition evidence from rural Viet Nam *Policy Research Working Paper Series*: The World Bank.
- Dell, M. (2010). The Persistent Effects of Peru's Mining Mita. *Econometrica*, 78(6), 1863-1903.
- Dell, M. (2012) Path Dependence in Development: Evidence from the Mexican Revolution *Havard Working Paper*
- Domar, E. D. (1970). The Causes of Slavery or Serfdom: A Hypothesis. *The Journal of Economic History*, 30(1, The Tasks of Economic History), pp. 18-32.
- Elvin, M. (1972). The High-Level Equilibrium Trap: The Causes of the Decline of Invention in the Tradiional Chinese Textile Industries. In W. E. Wilmott (Ed.), *Economic Organization in Chinese Society*.
- Elvin, M. (1973). The Pattern of the Chinese Past: A Social and Economic Interpretation: Stanford University Press.
- Engerman, S., & Sokoloff, K. (1997). Factor Endowments, Institutions, and Differential Paths of Growth Among New World Economies. In S. Haber (Ed.), *How Latin America Fell Behind*. Stanford: Stanford University Press.

- Engerman, S., & Sokoloff, K. (2002). Factor Endowments, Inequality, and Paths of Development Among New World Economics *NBER Working Papers*: National Bureau of Economic Research, Inc.
- Engerman, S. L., & Sokoloff, K. L. (2005). Colonialism, Inequality, and Long-Run Paths of Development. In N. W. Papers (Ed.): National Bureau of Economic Research, Inc.
- Engerman, S. L., & Sokoloff, K. L. (2012). Economic Development in the Americas Since 1500: Endowments and Institutions: Cambridge University Press.
- FAO. (2008). Trends in Land 2008. from http://www.un.org/esa/sustdev/publications/trends2008/land.pdf
- Fogel, R. W. (1982). Circumstantial evidence in "scientific" and traditional history In D.C. e. al. (Ed.), *Philosophy of History and Contemporary Historiography*. Ottawa:Ottawa; University of Ottawa Press.
- Geertz, C. (1973). The Interpretation of Cultures: Selected Essays: Basic Books.
- Gunnarsson, C. (1978). The Gold Coast Cocoa Industry 1900-1939: Production, Prices and Structural Change: Economic history association.
- Hayami, Y. (1994). Strategies for the reform of land policy relations. In R. Baker (Ed.), Agricultural policy analysis for transition to a market-oriented economy in Vietnam.

 Rome: FAO.
- Heltberg, R. (2002). Causes of Inequality in Vietnam. Institute of Economics, University of Copenhagen. Copenhagen.
- Hickey, G. C. (1967). Village in Vietnam. Yale University Press
- Hopkins, A. G. (1973). *The Economic History of West Africa*: Addison-Wesley Longman, Limited.
- Hopkins, A. G. (2011). Causes and Confusions in African History. *Economic History of Developing Regions*, 26(2), 107-110. doi: 10.1080/20780389.2011.625243
- Kerkvliet, B. J. T., & Selden, M. (1998). Agrarian Transformation in China and Vietnam. *The China Journal*, 40(July), 37-58.

- McCloskey, D. N. (2015). It was Ideas and Ideologies, not Interests and Institutions, which changed in Northwestern Europe, 1600-1848. *The Journal of Evolutionary Economics*, 25(1), 57-68. doi: 10.1017/S1744137415000478
- Milanovic, B., Lindert, P. H., & Williamson, J. G. (2007). Measuring Ancient Inequality NBER Working Papers: National Bureau of Economic Research, Inc.
- Myint, H. (1958). The "Classical Theory" of International Trade and the Underdeveloped Countries. *The Economic Journal*, 68(270), 317-337. doi: 10.2307/2227598
- North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*: Cambridge University Press.
- Nunn, N. The Importance of History for Economic Development *The Annual Review of Economics* (1), 65-92 doi:10.1146/annurev.economics.050708.143336
- Pingali, P. L., & Xuan, V.-T. (1992). Vietnam: Decollectivization and Rice Productivity Growth. *Economic Development and Cultural Change*, 40(4).
- Popkin, S. L. (1979). The Rational Peasant: The Political Economy of Rural Society in Vietnam: University of California Press.
- Rambo, A. T. (1973). A comparison of peasant social systems of Northern and Southern Viet-Nam: a study of ecological adaptation, social succession, and cultural evolution: Center for Vietnamese Studies, Southern Illinois University at Carbondale.
- Ravallion, M., & van de Walle, D. (2006). Does Rising Landlessness Signal Success or Failure for Vietnam's Agrarian Transformation? World Bank Policy Research Working Paper. Washington: World Bank.
- Rodrik, D., Subramanian, A & Trebbi, F. (2004) Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development *Journal of Economic Growth* (9), 131-165
- Scott, J. C. (1976). The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia: Yale University Press.
- Thaarup, J. And Villadsen, S. (2010) Long Term Development Cooperation between Vietnam and Sweden *UTV Working Paper*, Sida

- Timmer, C. P. (2009). A World Without Agriculture: The Structural Transformation in Historical Perspective: AEI Press.
- Wiegersma, N. (1988). Vietnam: peasant land, peasant revolution: patriarchy and collectivity in the rural economy: Macmillan.
- Woolcock, M, Szreter, S. & Rao, V. How and Why Does History Matter for Development Policy? World Bank Policy Research Working Paper no. 5425
- World Bank (2005) 2006 World Development Report Equity and Development Washington: World Bank
- World Bank (2015) http://www.worldbank.org/en/country/vietnam/overview accessed on December 23, 2015
- Young, K. B., Wailes, E., Cramer, G., & Khiem, N. T. (2002). Vietnam's Rice Economy: Developments and Prospects: Arkansas Agricultural Experiment Station.

Path dependent possibilities of transformation: Agricultural change and economic development in north and south Vietnam

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Introduction

Colonialism is back on the research agenda. The influential works of Engerman and Sokoloff (E&S) and Acemoglu, Johnson and Robinson (AJR) have set the focus specifically on the long-term effects of factor endowments and colonial impact. The emphasis is not explicitly on colonialism per se, but on the initial conditions that shaped the long-term effects of colonialism. This is achieved via institutional mechanisms; especially those that perpetuated colonially rooted inequalities, and have led to significant disparities in wealth and political power. The extractive institutions set in colonial times have continued to play a detrimental role for the possibilities of countries to develop after independence.

That present-day development has historical origins is a well-placed point. No doubt, institutions are central to economic and social development, and history provides many examples showing that they have a tendency to be persistent. Nevertheless, several issues remain to be settled before conclusions can be drawn about how colonial institutions interact with long-term development dynamics. The concept of extraction gives rise to many questions. What does it mean and how can it be measured? How does it influence the development process over time? To what extent is it reasonable to infer a causal link to current economic performance from the set-up of institutions often established centuries ago? Finally, and most importantly for the dissertation, how do extractive institutions relate to factor endowments (mainly man to land ratios)?

These are the central questions that the dissertation discusses. Their relevance for development is inherent in the debate as more scholars are pointing at the importance of the long-term institutional effects of historical phenomena (i.e. Dell 2010, 2012; Nunn, 2009; Rodrik et al, 2004). Authors set themselves in identifying the key historical event that might have led to a path dependence story. There is also an underlying policy implication in these works. If institutions are essential for development, understanding how current institutions have come to be might be key for a successful institutional reform. The importance of deeply rooted inequalities and their effect on current levels of development was a main feature of the 2006 World Bank Report on Equity, and since the publication in 2012 of Acemoglu and Robinson's book, Why Nations Fail, the concept of

extractive institutions and the importance of institutional reform have infiltrated different spheres of development policy.

The dissertation relates to the two theories (Acemoglu, Johnson, and Robinson, 2001; Engerman and Sokoloff, 1997, 2002, 2005, 2012) in *three* ways: first, it *complements*, as it discusses a case of late colonisation in Asia (only AJR partly includes this type of colonisation). Second, it *qualifies* the potential mechanisms. And third, it presents a *different understanding* of development paths based on extraction.

The two rice economies of Vietnam become a sort of natural experiment to explore the dynamics derived by their distinct factor endowments at the time of colonization. The Red River Delta (in the north) was already heavily populated in the 19th century, while the Mekong River Delta (in the south) was a land frontier economy. In line with the current literature pointing at how history matters for today's development, a historical analysis of this case is relevant, not least as Vietnam is currently considered "a development success story" (WB, 2015). Vietnam has combined decades of remarkable GDP per capita growth along with an extraordinary reduction of poverty and inequalities. This transformation is difficult to reconcile with a country devastated by two wars, invasions, economic embargo, and famine during the 20th Century. For Sweden in particular, the relation with Vietnam is special indeed; Sweden was the first Western country to establish diplomatic relations with Northern Vietnam in 1969 and since then, Vietnam has become a significant recipient of Swedish development cooperation (see Sida's overview report, 2010).

The dissertation has the implicit limitation of a case study, and hence facing constraints in the possibilities of generalization. This said, it joins the warning voices lifted by economic historians and historians (e.g. Austin, 2008a; Hopkins, 2011; McCloskey, 2015; Woolcock et al, 2010) over the dangers of oversimplification of how institutions evolve over time and standardised policy blueprints.

The dissertation does not refute the importance of institutions, but brings them into the context of a rural economy. The debate on diverging paths of transformation is intrinsically linked to the differences in industrialisation (e.g. the timing and the extent). The excessive focus on the colonial institutions that might preclude the industrialisation of the colonised countries might, in turn, overshadow the transformations of the rural

economy at the time, along with the potential incentives and constraints embedded in it. For instance, Cochinchina (the southernmost region of today's Vietnam) became the third largest exporter of rice in the 1920s, in barely a couple of decades. Following the argument that it is only the factor endowments at the time of colonisation that determines the long-term effect would exclude the impact of the Great Depression, for instance.

When historical research is based on colonial data, characterized by a paradoxical abundance of records but scarcity of evidence, the claim that historical events and processes might be useful to understand current problems has to be considered carefully. The dissertation seeks to identify sequences of causally related events. This requires a combination of methods to help contextualize evidence that is more circumstantial than direct (Fogel, 1982). The case of Vietnam (Indochina) is representative of the challenges intrinsic to this type of economic research, but warns about methods that assume history instead of exploring it under a theoretical lens (however scant the evidence is).

The Rice Deltas of Vietnam: setting the empirical study

The study of Vietnam is one of both devotion and neglect. It has indeed attracted much scholarly attention to different landmarks of its history, especially the last century. Notwithstanding, there has not yet been an attempt to analyse its development by using a framework that attempts to link its colonial past to current economic performance. The dissertation attempts to fill that gap.

Vietnam has been considered a "miracle" economy with GDP growth rates averaging 7 per cent since 1990, which has been achieved without major increases in income inequality. Quite the contrary, it is an exemplary case of poverty reduction. In 1993, 60 per cent of the population lived under the 1 dollar per day poverty line. By 2006, the rate had been reduced to 16 per cent (World Bank Vietnam Data).

In order to explain this successful transformation, the current literature normally focuses on Doi Moi; a major institutional change that meant progressive liberation and commercialization of the economy starting in 1986. This major reform added to ongoing economic reforms of Vietnam's agriculture that had already started in 1980. In the aftermath of the Second Indochinese War (the "Vietnam War"), yields had stagnated, and

rice and other basic produce had to be imported. De-collectivising agriculture by freeing input and output markets, and shifting decision making on crop management and resource allocation towards farming households are considered as factors conducive to the change (Pingali & Xuan, 1992; Young et al, 2002). These major initial reforms were aimed at 'getting agriculture moving' (Mellor and Adams, 1986; Timmer, 2009).

Rice again became a major driver of the economy, as it had been during colonial times. Vietnam rapidly turned out to be the second largest world rice exporter after Thailand. In 2000 rice occupied 7.6 million ha and 94 per cent of the total grain output, to which the south contributed 45 per cent of the area and 50 per cent of the output (Young et al, 2002). The south contributed to 80 per cent of the total rice exports (Nguyen and Tran, 2008).

Rice is the main staple and is cultivated throughout the country, but the main production is localized in the two rice bowls: the Mekong River Delta in the south and the Red River Delta in the north. Young et al (2002) carried out a comparative study of the two rice deltas, and found that, in 1989/1990, the average yield was slightly higher in the Mekong River (4.5 to 4.1), whereas rice-cropping intensity was higher in the Red River (1.59 to 1.47). Despite these similarities, rice production per household (kg/year) was 4.4 times higher in the South, and the amount sold was 27 times larger than in the North. This was just the beginning of an increasing outperformance of the Mekong, in yields, land intensification, and labour productivity, compared to the Red River Delta. A key differentiating factor is that in the Red River Delta the size of farmland was 0.23 ha on average, scattered over 6 to 8 non-consecutive plots, whereas in the Mekong River Delta, the farmland was not fragmented and reached 1.1 hectare on average (Kerkvliet and Selden, 1998).

It is commonly argued that the South was able to take better advantage of the domestic and international market liberalization for rice and other agricultural commodities (Benjamin and Brandt, 2004). While it is undeniable that the economic performance of the south was remarkable, both in its capacity to increase income levels and reduce poverty and rural inequality, there are two fundamental questions that remain unanswered: i) what was causing or impeding the transformation in rural north Vietnam? And ii) what made the southern farmer more "able" to take advantage of the domestic

and international markets? These same questions could be asked for the 1920s. Why was the Southern (Cochinchinese) rice farmer more able to take advantage of the commercialization opportunities brought by French colonialism than the Northern (Tonkinese) farmer?

For the modern phenomenon, a large number of authors, especially the reference work of Pingali and Xuan (1992), are tracing de-collectivization of farming as one of the fundamental causes of Vietnam's re-emergence in world rice markets in 1989. As already indicated, this phenomenon was driven by the south; it was the Mekong River Delta, once again, that drove the export boom. But collectivization had barely affected 6 per cent of the farmers there (Pingali and Xuan, 1992). From a theoretical point of view, it might be problematic to attribute causality to a non-significant phenomenon, unless one is to argue for a counterfactual according to which it was the non-collectivization, along with the opening up of the economy and the liberalization of markets (releasing artificial distortions in prices; eventually lifting rice exports quotas, etc), that facilitated the change. This however meant that there were pre-existing conditions that would have been in place prior to the reforms or even to reunification in 1975. Nonetheless, this might initially be considered counterintuitive as the common and widespread perception of South Vietnam was as a land of large landholdings, absentee landlordism, rubber plantation economy, etc. (Wiegersma, 1988). This is not easily reconcilable with the claim that the Southern Vietnamese were "more able" to take advantage of the new market opportunities.

Hence, as geographical variables continued to play a role in explaining the differences in economic performance after a nation-wide institutional reform, the explanations so far remain incomplete. Heltberg (2002, p. 14) highlights "...the historical division and separate economic systems of North and South Vietnam" as an explanation. In this line and with focus on the two rice economies, the dissertation develops an alternative framework to assess the impact of factor endowments in the agricultural transformation of the two deltas.

Colonial Institutions: a sufficient condition?

One of the main arguments of the dissertation is the importance of the effect of factor endowments in economic processes. This is the so-called factor endowment approach to the understanding of the processes of economic growth, or lack thereof, which took place during colonial times (see Lewis, 194; Myint, 1958; Austin, 2008b, for Africa). In other words, the relative availability of land and labour, which were to be the most important pre-colonial factors, had a decisive influence on the type of agricultural transformation and processes of capital formation during colonial times.

The study shows how scarcity of land in relation to labour, as in the case of the Red River Delta, puts constraints on the cultivation system, which in turn, and contrary to a standard (neo)classical economics model, does not lead to excess labour. The marginal returns to labour (measured not as inputs, but person-hour) tend toward zero and land becomes more fragmented. This fragmentation is an attempt to: first, accommodate increases in population and second, diversify cultivation risks by spreading plots over areas of different soil fertility and possibilities of intensification of land use. The probable outcome is a large economy in subsistence and subject to low opportunity costs of labour. This is in large degree due to the marked seasonality of an increasingly intensified cultivation of rice (in both land and labour). This interpretation does qualify, at least for rice cultivating economies, AJR's claim that (historical) population densities may be used as a proxy for higher income per capita. Furthermore, this points at a potential mechanism by which factor endowments constrain the surplus capacity of the economy, which in itself could have a long-term effect.

The Mekong River Delta's transformation of its rice economy, on the other hand, accords with Myint's (1958) Vent-for-Surplus theory. Along with investments in infrastructures, and access to markets, new land was put under cultivation, which resulted in increases in surplus production, and eventually an export boom, most remarkably in the 1920s. Land intensification was carried out by adding new land under cultivation as a result of labour intensification. This was a Boserupian process by which labour added more hours to cultivation per year by, for instance, seasonally migrating. This indicates that there were greater incentives to expand the frontier than to intensify existing rice lands. Still, this regime of growth does not lead to an agricultural transformation, as a

sustained increase in surplus production can be achieved without technological progress in rice cultivation.

The implicit logic of this growth pattern might hypothetically be reflected in increasing stratification over time within the rice economy. This outcome would be due partly to growing inequalities within villages and among farmers, and partly to a trade dominated by French and Chinese actors (as discussed by Gunnarsson, 1978, and Hopkins, 1973, in an African context). In the village economy it is probable that there were processes of increasing stratification as a result of household differences (number of labourers), land size and quality, indebtedness, and a degree of luck. Land availability, along with increasing access to markets and higher rice prices, set new incentives that conditioned the behaviour of all actors in the rice trade. The interests were not always aligned however. While larger landowners (absent or local) and local administrators sought to restrict labour movements (á la E&S), the French administration had incentives to allow labour movements towards the frontier (settlement) in order to increase land production and export (which was a main source of revenue). This necessity of putting more land under cultivation also led to the formation of a landed elite, distant from the frontier lands (á la Domar). The combination of different actors, opportunities, and constraints led to conflicts, which became apparent in the aftermath of the Great Depression and especially after the 1940s (Scott, 1976). As outcomes, riots, land left uncultivated, political opposition, and eventually wars cannot be ignored.

The overall caveat towards the existing literature, especially AJR's, is that the same colonial power and initial policies did not lead to the same processes and outcomes at the local level. The importance of local institutions, which is highlighted by E&S in later works (2012), should regain theoretical and analytical importance in the discussion. For our cases, the significance of the village economy, in influencing economic institutions and their potential change, should be brought into the analytical framework.

Colonial versus Local Institutions

The importance of the village economy brings us to our second criticism to the existing literature. It is undeniable that colonial governments (in the colonies and the core countries) had an impact. Nonetheless, when the focus is on inequalities (seen as effects

on a broad cross section of the population) the importance of other actors cannot be neglected. This is especially relevant in areas of high population densities. AJR argue that colonial powers could reinforce (or establish) extractive institutions. They allow for such a possibility despite their claim that colonialism was an exogenous shock. Needless to say, the acceptance of such a premise might compromise their general hypothesis that the 'Reversal of Fortunes' is due to an institutional reversal. Colonialism would not have been a necessary condition for the reversal if extractive institutions had already been in place. For E&S' theory, since the focus is on the Americas, the long duration of colonisation dilutes the discussion of initial colonial agency. However, for the late colonisation of Africa and Asia, where indirect rule was more common, discussing agency becomes paramount, especially in relation to a potential long-term effect.

This dissertation adheres to the common objective of assessing the extent of extraction during colonial times. It is suggested, though, that if extraction is to be understood as surplus extraction, two caveats should be made: i) surplus capacity of the economy is conditioned by the factor endowments and its relation to agricultural transformation; and ii) the analysis has to be disaggregated to the village economy and the farmers themselves. The dissertation maintains that the possibilities of extraction are also institutionally conditioned by factor endowments. The argument is that the distinct factor proportions of the Northern and Southern Deltas created different village structures and socioeconomic relations, which, in turn, influenced the opportunities and constraints of farmers. This might consequently have had an effect on their behaviour. In other words, the understanding lies in discussion of the open versus closed village economies, which is also embedded in the Moral Economy (Scott, 1976) versus Rational Peasant debate (Popkin, 1979).

The differentiation between these two camps of the controversial debate has very little to do with the rationality of the farmers; that is, that one was more rational than the other. The Northern farmer, as much as his Southern counterpart, behaved equally rationally. They were bounded differently, however.

The dissertation claims that the Red River Delta was closer to a rice version of a bimodality pattern of agriculture (latifundia-minifundia) than the land abundant areas with larger landholdings, where related large tenancy landholdings predominated

(Cochinchina-Mekong River Delta). The consequence is that the key to understanding extraction in the North may not lie in tenure conditions. On the contrary, it may be best understood first, in the difficulties for farming households to generate a surplus, and second, in the mechanisms that create relationships of dependency among farmers, and between the villages' landed elite and peasants. This is what Geertz (1973) called 'involution'. This dissertation argues that involution was probably present in the rice economy of the Red River Delta, but cannot be causally attributed to colonialism. These economic and institutional processes had probably made Tonkin fall into a High Level Equilibrium Trap, as land productivity was at its highest given the existing technology and input-output relationship (concept used by Elvin and Huang to explain China's falling behind).

Extractive Institutions and Path Dependence

This takes us to the understanding of how these processes that took place during colonial times could have a long-term impact. The dissertation adds two extra nuances to the current literature; first, mainly in the differentiation between inequalities and extraction during colonial times, and, second, in the consequent long-term impact.

Extraction, in a Moral Economy context, is worst when it leaves the majority of the population at subsistence. This, unlike Scott's claim, exemplifies Tonkin more than Cochinchina (though it is a probably valid claim that the Cochinchinese farmers were more vulnerable to market mechanisms than their Tonkin counterparts).

In order to incorporate the importance of the distribution of income in the economy, and its relation to the capacity of generating a surplus, we apply the Milanovic et al (2007, 2011) concepts of Extraction Ratio and Inequality Possibility Frontier. This method allows us to include another dimension to the understanding of inequalities, extraction, and extractive capacity. The evidence gathered for the colonial period indicates that inequalities in land distribution were probably greater in the South than in the North. This assertion is also supported by qualitative sources indicating stratification and probable polarization of the rice economy in the South. SRI Land reform report (1968, vol. I, part 2, B-19) reported that the concentration of landownership was one of the highest in the Far East. The outcome was, however, a *lower extraction ratio* than in the

North. This is because, despite the unevenness in the distribution of land, the possibilities of accumulation were greater, and the South was consequently not a subsistence economy with the characteristics and extent of the North. The economic and institutional dynamics were different.

Post-colonial Transformation

Nonetheless, the outcome of colonial times does not explain how Vietnam, especially the south, could undertake a dynamic and rather inclusive agricultural transformation from the late 1980s onwards.

If we take it back to the current related literature, the dissertation is not aimed at testing or rejecting either theory. The relevance of both works is not simply limited to the understanding of history per se, but clearly, as with AJR, the objective is to also have a say on the development paths of today. AJR's Reversal of Fortune thesis, due to the similar premises of analysis (differences in factor endowments), might inform our understanding of the cases.

The implications of the Reversal of Fortune thesis, and Acemoglu and Robinson's works, are twofold: on the one hand, they attempt to establish the long-term impact of colonialism. This means that the performance of economies today (see 1995 GDP per capita) cannot be fully explained if one does not include colonialism and the good or not so good extractive institutions. Consequently, colonialism and its institutions are a necessary condition for today's world distribution of income per capita (see world in relation to European colonialism). On the other hand, they have identified that the root of the failure of countries today lies in their political institutions (Acemoglu and Robinson, 2012). Institutions need to be changed for transformation to take place, and one may assume that it is via extending the "good" institutions, e.g. property rights, to a broad cross section of the population (AJR, 2001, p. 31).

For the case of Tonkin, with higher population densities, the theory predicts that the French would either reinforce or set extractive institutions, and this would lead to an institutional reversal and, hence, of fortunes. The relatively lower income per capita that the Red River Delta presents today (in relation to the south) could consequently be explained by the persistence of colonial extractive institutions.

Since AJR do not define what they mean by extractive institutions¹, but juxtapose them to the good ones, we could argue that what the French did was to reinforce the Moral Economy of the village. While one could consider this to be an empirically valid claim, it would also imply that it is the persistence of such institutions that hinders today's agricultural transformation. The only aspect of AJR's thesis that may be related to the Moral Economy is the lack of de jure property rights to land, since the relations (precolonial and colonial) were feudal. This, however, was partly altered during the collectivistic decades, and property rights have now become formally institutionalised via the land reforms of 1988 and 1992 (Hayami, 1994). Farmers have been granted land rights. Indeed, other more informal mechanisms, such as resistance by local authorities to allowing farmers to sell land (as some authors have argued) could have a minor resemblance to the institutional relations of a closed village community. This said, land rights and liberalization of markets have not led to increases in land transactions (Deininger & Jin, 2003). There is also evidence pointing at the difficulties of using land as collateral due to the extensive land fragmentation. This extensive land fragmentation, which hinders the surplus capacity of farmers and their possibilities of achieving sufficient economies of scale to make new technologies profitable, reduces the actual value of land. These processes are most probably the fundamental obstacle to the transformation. This is however neither an outcome of the current reform nor of colonial institutions.

The dissertation argues that the Red River Delta seems to fit the idea that there is path dependence, although it is not driven by institutional factors. It is the effect of factor proportions that seems to have been persistent in reducing the opportunity costs of labour, partly because by the extensive labour intensification of the land intensification processes (Boserup, 1965), and partly by increasing transaction costs. The overall implication of such a claim is that colonialism does not seem to have a causal role in today's obstacles to growth in the Red River Delta. It is more probable that the fragmentation of lands, to accommodate population pressure and land availability (increasing irrigated areas or lifting land to protect it from floods), created a pattern of agricultural transformation that left farmers with scattered and small plots. But a solution

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¹ AJR list the following as examples of extractive institutions: taxation, slave trade, mining economies.

for the farmers was not to grant them property rights, as that did not alter the dynamics in a fundamental way. The coordination costs for initiating processes of land consolidation were likely very high. Needless to say, the political costs associated with an institutional intervention (such as the European enclosure movements) were probably even higher. For this case, both the explanatory and the predictive powers of AJR's theory are limited.

The South is the most puzzling. The expectation based on AJR is that French would have settled there. But they did not. If we accept the Vietnamese settlement as a small-scale household economy, the outcome should have been the "good" trajectory. This was not the outcome either. From the point of view of land inequalities, the colonial outcome of the South is better predicted by E&S. Nonetheless, given the significant differences of type of crop and the institutional impossibility of recurring of the worst forms of labour accumulation, inequalities were probably lower than in Latin America. The indications are however that land inequalities in Cochinchina were high, with a Gini coefficient around 0.8 (FAO statistics). The drawback is that those outcomes cannot explain the transformation that the South was to experience later on.

Determinism and Path Dependence

For both E&S and AJR, institutions are persistent. Self-reinforcing mechanisms keep AJR's political extractive institutions and E&S's historically rooted inequalities influencing current performances. This resembles a path dependence argument.

The dissertation argues that the South story, however, was not one of path dependence. To validate such a claim, two potential counterarguments are first addressed: empirical inaccuracy or a theoretical shortcoming. For the first counterargument, the claim is that the empirical evidence presents a negatively biased outcome of colonialism in South Vietnam. Simply, it was not as bad as has been put forward. This counterargument is unlikely since the conflicts and eventually the war could be considered as indicators of the seriousness of the grievances voiced by the peasants. Our findings, i.e. an economy with large land inequalities but not as extractive (measured by the Extraction Ratio) might theoretically denote that Cochinchina, and possibly other land abundance economies of the time, were hybrids of the two extreme cases presented by AJR or a

modified version of E&S's path. One could argue that thanks to the period of colonisation and to the lower extent of extractive institutions (seen as the institutions to restrict labour and keep population at subsistence), there were better possibilities for economic stratification. In other words, inequalities probably increased but, as long as the extraction ratios did not increase faster, the path was not initially determined. In this understanding, two potential critical junctures came after the Great Depression, when the collapse in prices revealed the degree of indebtedness in the cultivation, and for many actors, such as milling companies, this meant bankruptcy. What if the French administration had actively reached out to the small farmers with credit, instead of to the larger landowners? Or carried out a reform to improve the land tenure conditions? Equally important to this institutional line of argumentation is the understanding that one of the greatest obstacles was the lack of economic specialization (no major technological investments) and hence lack of diversification of the economy. The Great Depression revealed more than a marketing and credit problem. It was a regime of economic growth without transformation. A second potential critical juncture was at the time of Independence and American intervention.

Second, this understanding could lead to an alternative reading of South Vietnam. There is path dependence, but the theory we have is not completely appropriate since it is based on extreme cases of extractive institutions (E&S). What if the institutional changes derived from the land availability meant a change in farmers' opportunity cost of labour and behaviour (risk aversion and other social norms, less tighter social relationships of dependency)? This might be interpreted as a counterforce to the elites and hence a relatively more inclusive economic process. This proposition would be more in line with Popkin (1979), i.e. farmers behaved differently in the South thanks to the open village economy (also brought up by Rambo, 1973; Hickey, 1967). Such a hypothesis may explain the war and the resistance against collectivization. This is theoretically a possibility, but how is it possible to empirically validate such a claim? The effects of the frontier on the behaviour of the main actors and the regime of Vent-for-Surplus probably led to a path of increasing inequalities, and conflict. The overall implication is that there was a path of transformation different from the one followed in previous European colonisation or in areas with different factor proportions. This possibility will require

further empirical research to include other economies with similar conditions to Cochinchina, and its undergoing.

A Final Note on History, Path Dependence, and Change

In conclusion, what has the modern agrarian transformation of South Vietnam illustrated in this respect? Could the problem lie in attributing deterministic properties to institutional persistence and inertia? David's (1997) Economics of Qwerty is one of the most well-known examples of path dependence. In his view, these processes are, and must be, stochastic sequential processes (David, 1997, p. 15). North argues along similar lines "if, however, the foregoing story [the evolution of land history in the US] sounds like an inevitable, foreordained account, it should not. At every step along the way there were choices—political and economic—that provided real alternatives. Path dependence is a way to narrow conceptually the choice set and link decision-making through time. It is not a story of inevitability in which the past neatly predicts the future" (North, 1990, p. 98-99).

Consequently the dissertation contends that the South cannot be understood as a story of path dependence in a strict sense. The path that was derived from its factor endowments and institutional formation predicted (based on current theory) the extractive path and scant possibilities of transformation (seen as reduction of inequalities and increasing income per capita). Does that mean that history does not matter? The answer is no. History matters in more ways than path dependence; it matters in shaping the sequences of causally related events and processes, where institutional change is possible. Then, history matters not because it is following a deterministic path, but because there could be change. But understanding change, in the past or present, cannot be achieved without taking into consideration the choices available, conditions, actors, and the foregone opportunities. It matters because, otherwise, there would not be paths of development (as argued by North, 1990). In a world where the past did not play a role or could be altered by institutional reform (á la AJR), Northern and Southern Vietnam would have had similar paths of transformation after Doi Moi.

Still, the important thing is to understand which institutions matter for the "good" transformation. While property rights are important, Adelman (1986) has developed a

more comprehensive framework for the understanding of how a broad cross-section of the population may benefit from change (institutional and technological). She provides with a set of parameters to assess how inclusive (seen as equalizing opportunity), a development strategy is. Access to markets (such as the liberalization derived from Doi Moi) may not be sufficient; the possibilities of productivity improvements of the main assets of the majority of the population are more fundamental. In this study, the focus has been mainly on land. Land size and distribution/tenure interact in the processes of allowing farmers to invest and respond to new incentives. This way of understanding the two rice Delta economies in Vietnam has shed more light on the recent inclusiveness of agricultural transformation in the South versus some bottlenecks in the North (in a modern form of High Level Equilibrium Trap). The developmental (policy) implications are greater, since Adelman's framework includes the complexity in the relations between economic and institutional mechanisms. The dissertation suggests that these are enlightened by the analysis of historical processes.

References

- Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution *NBER* Working Papers: 8460.
- Acemoglu, D., & Robinson, J. A (2012). Why Nations Fail: The Origins of Power, Prosperity and Poverty Crown Publishing Group.
- Adelman, I. (1986). A Poverty-Focused Approach to Development Policy. In J. J. P. Lewis & V. Kallab (Eds.), *Development Strategies Reconsidered*. Washington D.C.: Overseas Development Council.
- Austin, G. (2008a). The 'reversal of fortune' thesis and the compression of history:

 Perspectives from African and comparative economic history. *Journal of International Development*, 20(8), 996-1027. doi: 10.1002/jid.1510
- Austin, G. (2008b). Resources, techniques and strategies south of the Sahara: revising the factor endowments perspective on African economic development, 1500-2000. In L. L.

- London School of Economics and Political Science (Ed.), LSE Research Online Documents on Economics.
- Benjamin, D., & Brandt, L. (2004). Agriculture and Income Distribution in Rural Vietnam under Economic Reforms: A Tale Of Two Regions William Davidson Institute Working Paper: University of Toronto
- Boserup, E. (1965). The Conditions of Agricultural Growth. The Economics of Agrarian Change Under Population Pressure, Etc: London.
- David, P. A. (1997). Path Dependence and the Quest for Historical Economics: One more Chorus of the Ballad of QWERTY. DIscussion Papers in Economic and Social History. University of Oxford. Oxford.
- Deininger, K., & Jin, S. (2003). Land sales and rental markets in transition evidence from rural Viet Nam *Policy Research Working Paper Series*: The World Bank.
- Dell, M. (2010). The Persistent Effects of Peru's Mining Mita. *Econometrica*, 78(6), 1863-1903.
- Dell, M. (2012) Path Dependence in Development: Evidence from the Mexican Revolution *Havard Working Paper*
- Domar, E. D. (1970). The Causes of Slavery or Serfdom: A Hypothesis. *The Journal of Economic History*, 30(1, The Tasks of Economic History), pp. 18-32.
- Elvin, M. (1972). The High-Level Equilibrium Trap: The Causes of the Decline of Invention in the Tradiional Chinese Textile Industries. In W. E. Wilmott (Ed.), *Economic Organization in Chinese Society*.
- Elvin, M. (1973). The Pattern of the Chinese Past: A Social and Economic Interpretation: Stanford University Press.
- Engerman, S., & Sokoloff, K. (1997). Factor Endowments, Institutions, and Differential Paths of Growth Among New World Economies. In S. Haber (Ed.), *How Latin America Fell Behind*. Stanford: Stanford University Press.

- Engerman, S., & Sokoloff, K. (2002). Factor Endowments, Inequality, and Paths of Development Among New World Economics *NBER Working Papers*: National Bureau of Economic Research, Inc.
- Engerman, S. L., & Sokoloff, K. L. (2005). Colonialism, Inequality, and Long-Run Paths of Development. In N. W. Papers (Ed.): National Bureau of Economic Research, Inc.
- Engerman, S. L., & Sokoloff, K. L. (2012). Economic Development in the Americas Since 1500: Endowments and Institutions: Cambridge University Press.
- FAO. (2008). Trends in Land 2008. from http://www.un.org/esa/sustdev/publications/trends2008/land.pdf
- Fogel, R. W. (1982). Circumstantial evidence in "scientific" and traditional history In D.C. e. al. (Ed.), *Philosophy of History and Contemporary Historiography*. Ottawa:Ottawa; University of Ottawa Press.
- Geertz, C. (1973). The Interpretation of Cultures: Selected Essays: Basic Books.
- Gunnarsson, C. (1978). The Gold Coast Cocoa Industry 1900-1939: Production, Prices and Structural Change: Economic history association.
- Hayami, Y. (1994). Strategies for the reform of land policy relations. In R. Baker (Ed.), Agricultural policy analysis for transition to a market-oriented economy in Vietnam.

 Rome: FAO.
- Heltberg, R. (2002). Causes of Inequality in Vietnam. Institute of Economics, University of Copenhagen. Copenhagen.
- Hickey, G. C. (1967). Village in Vietnam. Yale University Press
- Hopkins, A. G. (1973). *The Economic History of West Africa*: Addison-Wesley Longman, Limited.
- Hopkins, A. G. (2011). Causes and Confusions in African History. *Economic History of Developing Regions*, 26(2), 107-110. doi: 10.1080/20780389.2011.625243
- Kerkvliet, B. J. T., & Selden, M. (1998). Agrarian Transformation in China and Vietnam. *The China Journal*, 40(July), 37-58.

- McCloskey, D. N. (2015). It was Ideas and Ideologies, not Interests and Institutions, which changed in Northwestern Europe, 1600-1848. *The Journal of Evolutionary Economics*, 25(1), 57-68. doi: 10.1017/S1744137415000478
- Milanovic, B., Lindert, P. H., & Williamson, J. G. (2007). Measuring Ancient Inequality NBER Working Papers: National Bureau of Economic Research, Inc.
- Myint, H. (1958). The "Classical Theory" of International Trade and the Underdeveloped Countries. *The Economic Journal*, 68(270), 317-337. doi: 10.2307/2227598
- North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*: Cambridge University Press.
- Nunn, N. The Importance of History for Economic Development *The Annual Review of Economics* (1), 65-92 doi:10.1146/annurev.economics.050708.143336
- Pingali, P. L., & Xuan, V.-T. (1992). Vietnam: Decollectivization and Rice Productivity Growth. *Economic Development and Cultural Change*, 40(4).
- Popkin, S. L. (1979). The Rational Peasant: The Political Economy of Rural Society in Vietnam: University of California Press.
- Rambo, A. T. (1973). A comparison of peasant social systems of Northern and Southern Viet-Nam: a study of ecological adaptation, social succession, and cultural evolution: Center for Vietnamese Studies, Southern Illinois University at Carbondale.
- Ravallion, M., & van de Walle, D. (2006). Does Rising Landlessness Signal Success or Failure for Vietnam's Agrarian Transformation? World Bank Policy Research Working Paper. Washington: World Bank.
- Rodrik, D., Subramanian, A & Trebbi, F. (2004) Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development *Journal of Economic Growth* (9), 131-165
- Scott, J. C. (1976). The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia: Yale University Press.
- Thaarup, J. And Villadsen, S. (2010) Long Term Development Cooperation between Vietnam and Sweden *UTV Working Paper*, Sida

- Timmer, C. P. (2009). A World Without Agriculture: The Structural Transformation in Historical Perspective: AEI Press.
- Wiegersma, N. (1988). Vietnam: peasant land, peasant revolution: patriarchy and collectivity in the rural economy: Macmillan.
- Woolcock, M, Szreter, S. & Rao, V. How and Why Does History Matter for Development Policy? World Bank Policy Research Working Paper no. 5425
- World Bank (2005) 2006 World Development Report Equity and Development Washington: World Bank
- World Bank (2015) http://www.worldbank.org/en/country/vietnam/overview accessed on December 23, 2015
- Young, K. B., Wailes, E., Cramer, G., & Khiem, N. T. (2002). Vietnam's Rice Economy: Developments and Prospects: Arkansas Agricultural Experiment Station.