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# Agrikulturell och ekonomisk utveckling i Nord- och Sydvietnam

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Montserrat López Jerez, *Deltas apart: Factor endowments, colonial extraction and pathways of agricultural development in Vietnam*, Lund studies in economic history 1400–4860: 69 (Lund: Lunds universitet 2014). 270 s.

## *A Brief Overview of the Dissertation*

The title is very clear on what the dissertation is about: *Deltas Apart: Factor Endowments, Colonial Extraction and Pathways of Agricultural Development in Vietnam*. This study provides an explanation of the different pathways of agricultural change and economic development in north and south Vietnam. It shows that pre-colonial factor endowments conditioned the development of the rice economies of the two deltas in Tonkin and Cochinchina. The study relates to, and deviates from, the new literature on the colonial origins of contemporary development, and proposes an alternative understanding of how historical processes of economic transformation are shaped. The analysis revives the factor endowment approach (Boserup, Myint), re-interprets an old and controversial debate (Moral Economy versus Rational Peasant), and presents a new understanding of extraction in colonial times based on Milanovic, Lindert and Williamson. The study's theoretical interpretation of scant empirical data suggests that factor endowments conditioned the surplus capacity and shaped the institutional arrangements, which affected the equality of opportunity for the majority of rice farmers. This is a topic that is dear to my heart – I started working on agricultural development and food security in Vietnam in 1989, with Professor Vo Tung Xuan, one of the world's leading rice scientists, and Dr. Cao Duc Phat, now the Minister of Agriculture and Rural Development, as close colleagues.

The dissertation was stimulated by a recent strand of economic and institutional history that examines the role of colonialism in subsequent

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developmental pathways of "latecomers," especially the work of Engerman and Sokolov and Acemoglu, Johnson and Robinson. It is a pretty linear story: factor endowments determine population densities which then determine the type of European settlements which in turn determine the nature of extractive institutions and these determine whether the country follows a "good" or a "bad" development path.

It is the thesis of Ms López Jerez that this recent literature, and their institutional mechanisms, do *not* explain Vietnam's path of agricultural development from the mid-19<sup>th</sup> century to the present. The dissertation then explains in careful detail what *does* explain the divergent pathways in the two major rice producing deltas of Vietnam—the Red River Delta in the north and the Mekong River Delta in the south. The short answer is that the driver is factor endowments themselves, not subsequent institutional arrangements. The rest of the discussion focuses on methodological issues, data availability and reliability, empirical results and finally implications for our understanding of how agricultural development takes place and lessons for policy.

### *Methodology*

There are three possible methodological approaches to answering such a basic question about the long-run drivers of agricultural development. The first is to do a controlled historical experiment. Consider alternative universes where the French do one of four things: "Do Not Colonize," "Colonize the North but not the South," "Colonize the South but not the North," or "Colonize both the North and the South"—historical experience in the "real" universe." Our observer would carefully watch these four different pathways for at least 100 years, perhaps getting graduate students to promise that their children and grandchildren would carry on the research. In due course the historical experiment would be complete and the results written up for publication.

The second approach is to build a detailed, historically validated Computable General Equilibrium (CGE) model of both North and South Vietnam and "run" it for 100 years to see the impact of different colonial policies, local responses and so on. A serious problem would be how to handle specific weather shocks – should this be done stochastically or structurally?

The third approach is to study history, study theory, and then frame a "plausible" hypothesis about pathways of agricultural development, including what causes what. Causality is critical in such studies. Then go to "the data" to see if they are "consistent" with this hypothetical generalization. As is well known, Professor Alexander Gerschenkron at Harvard University championed this historical approach in the 1960s. It is appropriate that I

am a reviewer of this dissertation, using the Gerschenkronian approach, as I was a student of Gerschenkron's in the 1960s and subsequently taught a variation of his graduate course in the 1980s and 1990s to Harvard economics Ph.D. students.

It is obvious that of these three methodological approaches, the first is impossible, so much for randomized controlled trials – RCTs – to address big, messy questions. The second approach, CGE modeling, is basically irrelevant – neither the data nor the underlying functional relationships are known ahead of time. So that leaves the third approach, which is really difficult.

Let's be clear. This dissertation is trying to tell a "theoretically plausible story" based on the best available – and highly incomplete – data, to "test" its relevance to actual historical pathways and outcomes.

### *Data and the Key Issues*

Ms López Jerez has assembled an intimidating array of data sources. I actually have nothing to add to her extensive discussion, except to stress, as she does, that despite all the effort in the archives, in Aix-en-Provence and Washington DC, and beyond, there are very big gaps in how useful the data are to addressing the fundamental questions in the thesis. That is the reality of economic history.

The development paths of the Red River Delta (RRD) and the Mekong River Delta (MRD) have been quite different for over two centuries. To make this judgment, outcomes are measured by standards of living of rural inhabitants, especially rice farmers – a very large share of the rural population. Despite the imposition of uniform French colonial practices early in the 20<sup>th</sup> century, the pathways are *sharply* different. The North is in a "High-Level Equilibrium Trap," the South followed a "Vent-for Surplus" model of frontier expansion until the 1930s. Inequality became very high in the South, but "extraction of surplus" by elites and colonial powers was greater in the North. This is a real paradox.

Ms López Jerez explains the paradox not by using colonial exploitation and institutions as drivers, but by an earlier starting point: the key driver is factor endowments, especially the land/man ratio. As noted in the abstract and references cited there, an earlier literature dealt with this issue – the "moral economy of the peasant" (Scott) versus the "rational peasant" (Popkin). Scott was referring to the institutional arrangements in the North, driven by intense pressures of population on land resources; Popkin was referring to opportunities in the South for entrepreneurial peasants to strike out on their own in a frontier environment. As Ms López Jerez argues, both arguments might be right because they are analyzing fundamentally different environments, even if technically in the same country.

### *Results*

The dissertation actually tells a very clear and compelling story. North and South Vietnam followed very different pathways of agricultural development despite a common French colonial heritage. Perhaps even more compelling, there has been even faster divergence since the North won the "US war" and achieved unification over the entire country. To be sure, there is much greater inequality in the South than in the North, but labor productivity is higher both on average and at the margin. Peasants respond much more effectively and quickly to new technologies and opportunities for structural change. The South is a much more mobile society than the North.

The dissertation has a quite lengthy discussion about the "lack of specialization" in both societies, that is, a diversification away from rice and into higher valued productive activities. But this was clearly a survival strategy in the North – if a household did not produce enough rice for its own subsistence it risked its very existence on a very thin and volatile rice market. In the South, the motivation was very different but the result was the same. Expanding the frontier into extensive rice production was very profitable. It made no economic sense for rural households to diversify away from rice in the face of that production possibility frontier. We perhaps should think of that as a form of "specialization" in order to put the debate to rest.

### *Implications*

(1). The dissertation has fascinating implications and parallels to other settings with sharply different resource bases but similar governance or institutional structures. Consider Indonesia, where Java seems very similar to the RRD whereas the Outer Islands seem to follow the MRD pathway. Or the divergence between Japan and Thailand after 1880, when the two countries had similar real per capita incomes (according to Maddison). What accounts for the sharp divergence in pathways over the next century? A primary explanation is that educational investments in densely settled Japan had very high payoffs relative to low costs of provision. Thailand was the opposite: rural education cost a lot per pupil and there was low demand because of work opportunities on the farm and on the frontier. Thailand fell behind Japan in economic terms because education turned out to be the key investment for economic growth. Why did not North Vietnam invest more in educating rural children to leave the farms and enter an industrial work force? Is the real French colonial legacy that it did not permit the North to industrialize?

(2). The failure of Vietnam to industrialize, especially in the North along Japanese lines, now haunts the current Vietnamese government and its development strategy. A "catch-up" model using state-owned enterprises (SOEs) requires a lot of (scarce) capital while using relatively little (abun-

dant) unskilled labor. Because the South was not caught up to a significant extent in this SOE model, it stands to win the economic development race if the emphasis on SOEs continues. Regional inequality will surely worsen.

(3). "History matters." But it matters in very complicated ways. It takes a *very* sophisticated understanding of social dynamics, technological opportunities and political economy as these match up against both static and dynamic factor endowments.

### *Questions Raised by the Analysis*

Inevitably, in a dissertation as broad-ranging and historically deep as this one, a wide range of questions arises. I have tried to array them from fairly specific to quite general, but this is a continuum.

(1). What single piece of data, or data set, would have been most helpful in confirming the story in the dissertation? The answer from Ms López Jerez, that more complete and representative data on living standards in the two regions would make the argument more concrete, led to a follow-on question: Do we know whether the French recruited soldiers from rural areas in both the North and the South? If so, did they keep records of heights and weights of entering recruits? Such data have obvious biases built in, but have been quite revealing in other circumstances. This is a topic for further research.

(2). By contrast, is there any historical evidence that might come to light that would upset the conclusions of the dissertation – how robust are the results? The response was quick and clear: evidence that families or entire villages moved from an impoverished and heavily populated RRD to the frontier opportunities in the MRD would seriously undermine the main thrust of the dissertation – that these two regions were not integrated and followed largely independent development paths because of different resource endowments, despite common French colonial rule. As of now, no such evidence exists.

(3). How do we distinguish between "path dependence" and "importance of colonial extraction" as historical processes? A related issue is the difference between "High Level Equilibrium Trap" and "involution?" Are these both dead-end Malthusian processes, or are there "ways out" of either. Empirically, do we know anything about the amount of gold received by the French Treasury in Paris during the colonial era? Angus Maddison prepared a ledger of Dutch receipts from the Netherland East Indies during several decades of colonial rule and these were very revealing about the factors affecting the profitability of the colony and the ability to extract resources from it. No similar accounts seem to be available for the French experience in Vietnam.

4). The basic methodology used in the dissertation is something similar to Robert Bates' "analytical narratives" as a framework for organizing the research and analysis. Bates tried to be quite formal about his process and the dissertation is not constrained by such concerns, but the objectives are similar – to bring some scientific rigor to the study of individual and probably unique topics. What are the strengths and weaknesses of the "case method" for understanding historical *events* and *processes*? What is the role of theory? Where does appropriate theory come from for these kinds of analyses? This enters into an old controversy over whether there can be "theory without facts," or "facts without theory..." Surely there have to be both, working together.

(5). Finally, a speculative question. If you were a peasant in 1925 and were randomly assigned to a village in Vietnam and could only specify whether it would be in the RRD in the North or the MRD in the South, which would you prefer? James Scott and Sam Popkin would probably have different answers to the question<sup>1</sup>, reflecting perhaps different attitudes towards risk, inequality and entrepreneurial opportunities. What does the dissertation say about these trade-offs?

Although honored to be asked to serve as faculty opponent for this dissertation, and with thanks to the Department of Economic History, Lund University, for the invitation, I noted that the model of "external examiner" at Lund University is very difficult. It is virtually impossible to do justice in a 30 minute summary to a dissertation as complicated, rich and subtle as this one. At the outset, I congratulated Ms López Jerez on producing such an interesting and potentially important study.

1. Sam L. Popkin, *The Rational Peasant: The Political Economy of Rural Society in Vietnam* (Berkeley 1979); James Scott, *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia* (New Haven 1976).