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Economic Development in Vietnam, Japan, Korea and Taiwan, 1900-1945; Convergence and Divergence in the Chinese Periphery*

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Introduction

Since the late 1980's, after almost forty years of war and stagnation, Vietnam has been experiencing drastic economic reforms, including opening to foreign investment and regional integration with ASEAN countries. These institutional changes have been associated with steady economic growth. Following decades of divergence in terms of per capita output or income at purchasing parity power, Vietnam is finally converging with the levels reached by fast growing East Asian countries. However, a sizable gap still remains, even when comparing with China. The magnitude of the shocks caused by the Indochina War and Vietnam War, and the difficulties in achieving economic reunification explain, to a large extent, why Vietnam is lagging behind neighbouring countries such as Thailand or Indonesia. During the late 1940's and early 1950's per capita incomes in Vietnam and these countries were still similar¹. The gap with East Asian countries increased during the Vietnam War, but also at the end of this war, in 1975, in the context of political reunification of North and South Vietnam under Communist rule.

The purpose of this paper is to explore and explain the present income gap by considering Vietnam's economic development in historical perspective and by comparing its economic performances with those of East Asian countries. It is also expected that such a study may eventually contribute to the evaluation of Vietnam's potential for an economic catch-up during the coming decades, but this aspect is beyond the immediate scope of the present research. One may argue that the most relevant comparison would be with Southeast Asian countries or China, and that it should focus on recent decades. We adopt a totally different view. Our first premise

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is that we should go back to the pre-WWII period in order to identify the roots of the divergence between the economic performance of Vietnam and that of other Asian countries. Accordingly, the study will exclusively concern the 1900-1945 period. Our second premise is that the most relevant comparison is with the other countries of the Chinese periphery: Japan, Korea and Taiwan².

Vietnam clearly belongs to Southeast Asia in terms of physical environment, regional integration in trading networks, or even traditional cultural values, technologies and organizations. But Vietnam is also a nation of the Chinese periphery, along with Japan, Korea, and Taiwan, and shares with these countries, and China, a common cultural heritage that has been appropriated and adapted to local conditions and national values. This millenary influence has resulted from international trade in cultural goods and technologies, which has been the most important channel of influence in the case of Japan and Korea, along with the travel of scholars, artists and religious representatives³. Ideally, the study should include a broader comparison with most Southeast and Northeast Asian countries, including China. In the case of a comparison with China, the difficulties would be twofold: on the one hand, availability of data; on the other hand, relevance in terms of scale. Considering the size of the country, a comparison with China would imply considering Vietnam as equivalent to one of the Southern China provinces; the same remark applies to Indonesia.

Apart from these practical considerations, the reasons for giving special attention to a comparison with Japan, Korea and Taiwan are related to the initial conditions and patterns of economic development. The present income gap between Vietnam and Southeast Asia is still huge; but with Japan, Korea and Taiwan, this gap is now tremendous. One should remember how similar the initial conditions in these countries were until the second part of the 19th century. Vietnam shared many common features with the rest of Chinese periphery: intensive rice cultivation and diversified agriculture (tea, cotton, silk), active cottage industry, efficient shipbuilding and shipping industries. It had a tradition of importing technologies from China, but also from the West, for example in printing, weapons, military infrastructure, and silk reeling. Vietnam also had a strong sense of collective identity and national interest, a remarkable accumulation of human capital (in terms of, for example, mass education and health), and a sophisticated administrative system of Confucian bureaucracy.

As a consequence of Japan's economic development during the late 19th century, and catch up with western industrial countries during first half of the 20th century, the most relevant comparison might be regarded as with Korea and Taiwan. Yet, living standards in Japan were still very similar to those in Vietnam, Korea and Taiwan between 1900 and 1945. In addition, Japan provides a useful benchmark for evaluating the gap in terms of time lag, measured in years, reaching the same level in terms of per capita output, and the possible contraction or increase in this time lag. Another reason for a comparison with Japan is that this country was not only an explicit model for the economic development of Korea and Taiwan under colonial rule, but also for Vietnam.

This paper is organized into four sections: section one discusses the data sources, methodology and institutional context in the first half of the 20th century. Section two proposes a quantitative appraisal of Vietnam's gap in economic development. Section three investigates several possible factors explaining the divergence of Viet-

nam's economic performances. Section four summarizes and concludes.

I. How should economic changes in Vietnam, and in Japan, Korea and Taiwan be compared?

As a prerequisite for exploring the economic performances of Vietnam, in comparison with those of Japan, Korea, and Taiwan, we have to identify the differences in their institutional contexts and in the quantitative information available. We also have to take into account the possible impact of population changes and expose the procedures implemented for estimating and comparing quantitative indicators.

1. Institutional context and data sources: reconstructing historical economic indicators

When attempting to explain the divergence in economic performances, one of the first hypotheses could be that it is related to a divergence in institutional settings, as a consequence of the installation of French rule in Vietnam. But it appears that France and Japan had introduced colonial administrative frameworks and ideologies of gradual assimilation that were not fundamentally different. In the Chinese periphery, these two imperialist powers were confronted with similar pre-colonial economic and institutional frameworks, in Korea, Taiwan and Vietnam. They adapted to these conditions by associating the local Confucian elite with the colonial administration, especially in the field of tax systems, control of foreign trade, and more broadly economic policy.

The French and Japanese colonial systems were similar in various other aspects, including the choice of direct rule in Vietnam and systematic collection of statistics on several aspects of production, transportation, public finance, prices and international trade. Although the data sources on Vietnam before 1945 are not as comprehensive as for Japan or former Japanese colonies, a large amount of information was recorded and published in statistical yearbooks and other official reports. Considering available data sources, it is surprising to find that while economic development of Japan, Korea and Taiwan has been studied extensively, from both quantitative and institutional viewpoints, quantitative appraisal of Vietnam's economic performances has, until now, attracted lesser interest. The consequence is a limited availability of statistics or analyses of institutional, economic, and population changes before WWII.

Vietnam's economic conditions under French rule were studied after WWII but in a context of strong ideological biases. Most of the scholars involved were Marxists, either in the West, Japan or communist countries which, as a rule, adopted the official view of the Viet-Minh (or later the North Vietnamese official ideology). They saw French economic exploitation as the main cause of decline in economic conditions, finally resulting in the emergence of a revolutionary uprising. This approach persisted even during the early 1980s (for example in Murray (1980)), although a more balanced view finally prevailed after the reunification, even among scholars formerly supportive of the North Vietnamese struggle (Brocheux and Hemery (1995)).

Ironically, the US administration shared the same kind of ideological prejudices during the Indochina War and Vietnam War. Both sides were of the opinion that it was unnecessary to investigate long term macroeconomic dynamics. The end of the

Vietnam War, in 1975, and the reunification, in 1976, did not encourage a re-exploration of Vietnam's economic performance before WWII. Paradoxically, the communist and US anti-colonialist views had in common their perception of Vietnamese people exclusively as victims, reproducing former colonial prejudices in the sense that they neglected the role of the Vietnamese as actors in their own history before their recovering of full independence in 1954.

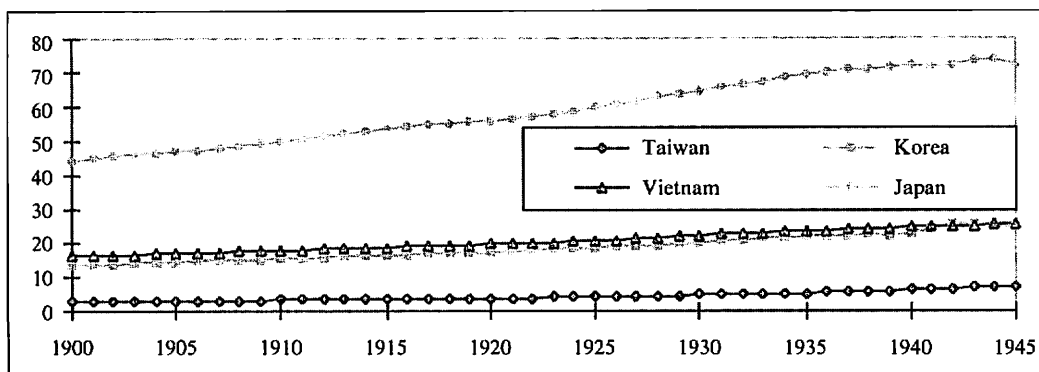
This relative lack of interest in the quantitative economic history of Vietnam is also explained by the difficulties in estimating Vietnam's national accounts or other statistics. Because Vietnam was divided into three regions which, in turn, were among the five countries of the Indochinese Union (French Indochina), official statistics of the General Government of Indochina also incorporated Cambodia and Laos. The present study relies upon several preliminary results obtained by the Asian Historical Statistics Project, the final aim of which is to reconstruct national accounts of Asian countries, including Vietnam.

2. Population changes: totally exogenous or partly endogenous?

At a first sight, one might argue that the impact of population change upon Vietnam's economic development could be disregarded, at least before WWII, considering the growth of cultivated areas in southern and central Vietnam (called Cochinchina and Annam under French rule). However, in various official reports on the economic conditions in the northern region (called Tonkin under French rule) the excessive population growth was underlined as one of the most important factors in the stagnation of per capita agricultural output. Despite massive public investment in dams, dykes and irrigation networks, it was impossible to improve yields in rice cultivation, or in several other crops, at the same pace as population growth. Accordingly, population cannot be disregarded as totally exogenous. But one should not expect a simple, one pattern, explanation.

To our knowledge there is no evidence that altruistic behaviour, corresponding to the interaction between population and growth described by Barro and Becker (1988), might explain changes in Vietnam's fertility rate during the 20th century. If there is an endogenous component in population change, it should certainly include internal and international migration. Even before the pre-colonial period, adventurous ethnic Vietnamese used to move spontaneously from overcrowded northern areas to the southern rice frontier where cultivable land was plentiful and population density very low. Immigration by ethnic Chinese, usually skilled workers, was also a traditional feature in Vietnam. Although these flows were probably amplified by French colonization, they remained much more limited than in Malaysia or Thailand. These remarks on the endogenous population and migration also apply to Japan, Korea and Taiwan.

Even if we can disregard the impact of population changes upon economic performances, estimating population series is a prerequisite for calculating per capita economic indicators. Vietnam's population censuses did not have the same quality or accuracy as those undertaken in Japan and Taiwan, or even Korea. The only possible exception is Cochinchina, where official data appears comparable, in terms of reliability, to the population censuses of pre-WWII Korea. The lack of accuracy in the pre-WWII censuses for Annam and Tonkin was to some extent a pre-colonial legacy; the consequence of reluctance on the part of the rural population to accept, within the

Figure 1 Population of Japan, Korea, Taiwan and Vietnam 1900-1945

In million; Sources: Banens (1999), Mitchell (1995), Mizoguchi (1988).

limits of self-ruled villages, official inquiries by agents of the central administration⁴.

The reconstruction of Vietnam's population by Banens (1999), based on age structure, suggests an underestimation of the population by official population censuses before WWII, at least in Annam and Tonkin. Demographic growth was therefore much lower than previously assumed. Contrary to the official view of the colonial administration on the excessive increase of Vietnam's population, it appears that the growth rate was lower than in Japan, Korea, and Taiwan (Figure 1). Per capita value or volume does not necessarily reflect the level of development in the earlier stage of industrialization, when an important share of the population was still living in the traditional agrarian society. We may eventually compare aggregate figures for Vietnam and Korea, whose populations were broadly equivalent, but, in the case of Japan and Taiwan, the difference in total population is too large. For this reason, we use per capita indicators exclusively in this study.

3. Convergence or divergence? β or σ ?

Although quantitative evidence is still unavailable, we could expect a process of divergence in per capita income in East Asia during Japan's earlier stage of industrialization (corresponding to the last decades of the 19th century and first decades of the 20th century). We also know that Taiwan and Korea managed to reduce the income gap with Japan, especially during the 1980s and 1990s. During the interval, there were probably phases of convergence and divergence in per capita income. Considering the similarities in initial conditions among countries of the Chinese periphery we could expect, in the case of Vietnam, a trend of convergence in per capita income with Japan, and eventually with Korea and Taiwan, during the first half of the 20th century.

Ideally, we would like to investigate the convergence issue in a similar pattern as in Barro and Sala-i-Martin (1992) and Baumol (1986) studies based on per capita GDP of industrialized countries. If the same set of data were available, we might identify sub-periods characterized by β convergence (or divergence) and σ convergence (or divergence). In the first case, the convergence implies a reduction in differences in per capita income with the leading economy. In the East Asian context, we could expect β convergence as a result of spread of new technologies and organization models, for example the spread of the appropriate Japanese technologies and organ-

izational innovations to several countries catching up with Japan. In the second case, we could expect σ convergence, corresponding to a reduction in the dispersion of per capita incomes, to appear as a consequence of international reallocation of factors within the Chinese periphery, or more largely within the Asian region. This would imply growth rate differentials between the poorest and the richest countries, in favour of the former.

Our ambitions are more limited due to the lack of available information. We do not have per capita GDP series for Vietnam that would allow investigation of β convergence. In addition, our sample is too small. Investigating σ convergence would require extending the coverage to Southeast Asian countries, for which per capita GDP series are only partially reconstructed for the pre-WWII period. In the present paper, our aim will be twofold: first, to identify pre-WWII trends in Vietnam's economic development, in terms of convergence and divergence with Japan, Korea and Taiwan, using quantitative indicators. Secondly, to investigate the relationship with institutional change, in order to identify possible turning points in the development process of Vietnam. In our view, the key issue is not the pace of convergence but the possibility, and in that case the timing, of a shift from a β convergence trend to a divergence trend between 1900 and 1945. Stylized facts on Vietnam's economic development, as roughly described by Brocheux and Hemery (1995), suggest that 1930 was a turning point. Quantitative analysis based on proxy of GDP and industrial indicators could provide further evidence.

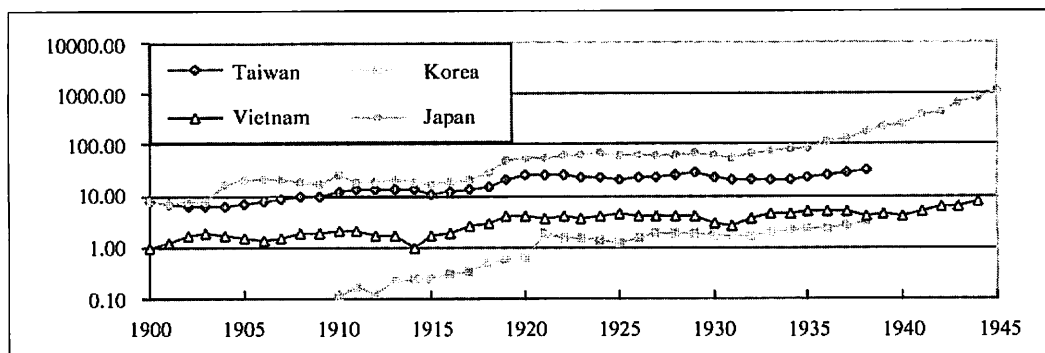
II. Economic performances between 1900 and 1945: a quantitative appraisal

For a quantitative comparison of economic performances in the Chinese periphery between 1900 and 1945, we can rely upon previous studies on Japan, Korea and Taiwan⁵. Per capita GDP series are not yet available in the case of Vietnam, but we can rely upon a set of estimated series including population, public finance, foreign trade and various industrial indicators. Since we are not interested in business cycles but in long trends, the comparison will use per capita output or stock (for infrastructure) rather than the growth rate figures. Presentation in logarithmic scale will allow a direct identification of the convergence or divergence process, and of the turning point in these trends.

1. Macroeconomic indicators: Public expenditure as a proxy for national income and export as a proxy for GDP

Available macroeconomic estimates on Vietnam's public finance and international trade can be used as substitutes for GDP. There is no reason to assume that public expenditures or exports accounted for a constant ratio of GDP but, on the other hand, the long term trends of these variables provide an indication of economic development⁶. Since these figures are in value, we have to convert Vietnam's currency (Indochina piaster) in Japanese yen at the current exchange rate (yearly average of the Saigon market rate), considering that the volatility of the exchange rate was limited⁷.

The level of public expenditure (Figure 2) was comparable in Vietnam and in

Figure 2 Public Expenditure in Japan, Korea, Taiwan and Vietnam 1900-1945

Per capita, in current Japanese yen; conversion at market exchange rate in the case of Vietnam's public expenditures; calculation based on Banens (1999), Bassino (1999), Mizoguchi (1988), Mitchell (1995).

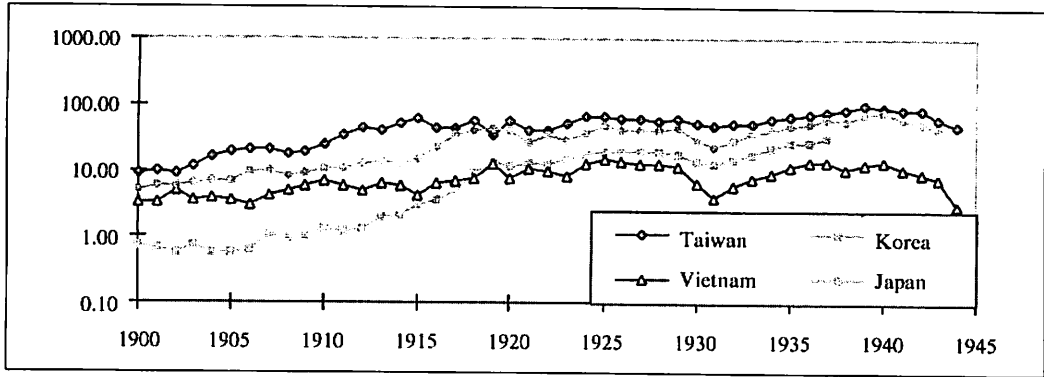
Korea during the 1920s and 1930s. A significant gap existed with Japan and Taiwan, although in the latter case it may be the result of the inclusion of both central and local public finances in our figures. The level of public finance in Korea was much lower during the first decades of the 20th century, with a converging trend slowing down after WWI. This pattern suggests Korea catching up with Vietnam, at least in terms of public finance, and therefore a likelihood of public investment in infrastructure, after the Japanese occupation and formal colonization.

This situation, halfway between Taiwan and Korea, suggests that Vietnam's level of economic development was comparable to the Japanese colonies. Considering the amount of investment in infrastructure in Korea under the Japanese rule, one may suspect that the role of public finance in the process of capital formation in Vietnam under French rule was an essential one. During the 1930s, Vietnam was not lagging behind Korea but experienced a decade of relative stagnation, as in Taiwan, while public expenditures were on the rise in Korea and Japan. The contraction in public expenditures, as measured in Japanese yen, actually corresponded to a contraction in real terms in Vietnamese currency during the 1930s. It may have amplified the recession in Vietnam, while Japan adopted a different economic policy inspired by Finance Minister Takahashi (Nakamura (1994)).

International trade could be used as a proxy for GDP, in the case of exports⁸. Here again, there is no reason to assume a constant share. Rather, we may expect an increasing trend in per capita exports and imports over the period, especially since our series are in current yen. We find on international trade series (Figure 3) several features already observed on public finance series, but with an amplification of the trends. Vietnam's total exports are increasing only slowly in current terms while the figures are rising more steadily for the three other countries before WWII. As in the case of public finance, Korea is catching up during the 1910s, from an initial level much lower than Vietnam. During the 1930s, we can observe a decline and then stagnation in Vietnam, while Korea and Taiwan figures keep growing until the outbreak of WWII.

Under French rule, Vietnam's trade balance was characterized by a structural surplus as a result of exports of huge quantities of rice, and other raw materials such as maize, rubber, fish and coal, mostly to the East Asian market. This was associated with a French drain corresponding to a huge deficit in the balance of services. The

Figure 3 Exports from Japan, Korea, Taiwan and Vietnam 1900-1945



Per capita current Japanese yen; conversion at market exchange rate in the case of Vietnam's export; calculation based on Mizoguchi (1988), Banens (1999), Bassino and Bui (1999), Mitchell (1995).

magnitude of the decline of Vietnam's exports during the early 1930s suggests an asymmetric shock (the decline was limited for Korea and Taiwan). The conversion of Vietnam's series in current Japanese yen reduces the impact of the decrease in exports, which was actually much steeper in piaster.

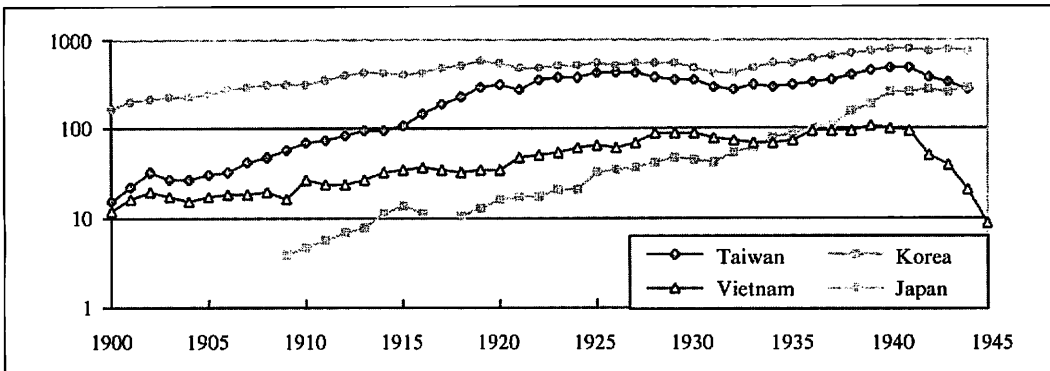
Comparison of the structure of exports by commodities indicates a contrast between Vietnam and Korea (Bassino and Bui (1999), Hori (1995)). During the 1930s Korea experienced a rise in the share of manufactured goods in exports, as observed in the case of Japan at the end of the 19th and the beginning of the 20th century. In the case of Vietnam, exports of manufactured goods remained comparatively limited, although they included cement, some cottage industry products and various processed goods such as tin, zinc and rubber. Concerning the breakdown of import items, the increase in the share of capital goods and intermediate goods in the imports of Korea and Taiwan had no equivalent in Vietnam. Therefore, the pattern of industrialization of the Japanese colonies during the 1930s (food industries in Taiwan, light and heavy industries in Korea) has no equivalent in the case of Vietnam.

2. Evidence from industrial indicators: national patterns of economic development

In order to compensate for the lack of macroeconomic series, we have to rely on indirect methods for evaluating the convergence of per capita income and must identify national patterns. Industrial series in volume, when measured as per capita output or stock of capital, can provide an acceptable proxy for measuring the level of development of Korea, Taiwan and Vietnam, and the time lag with Japan. The selection of data covers indicators generally regarded as closely related to per capita income, for a given technological, historical and geographical context. The sample includes coal mining (Figure 4) electric power (Figure 5), manufacturing output (beer and cement, Figures 6 and 7), transportation (railways and motor vehicles, Figure 8 and 9), and education (Figure 10).

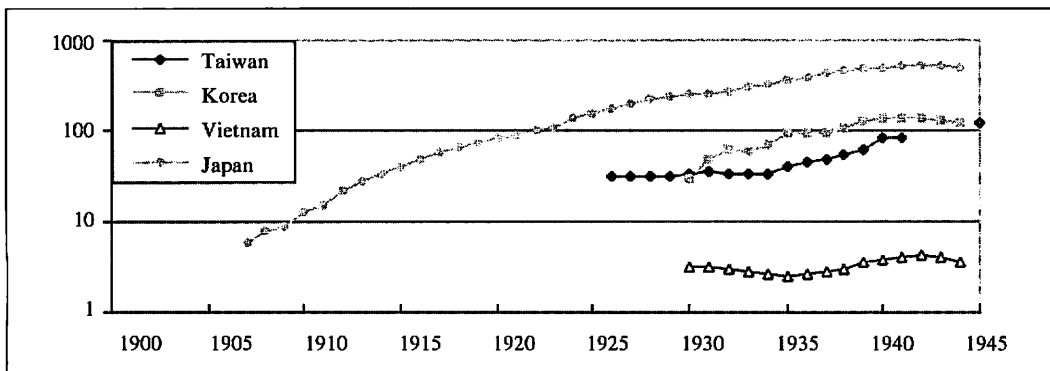
Electric power is obviously a better indicator than coal mining output since it does not depend on the country's natural resources. However, electric power output series are not yet available for the whole 1900-1945 period, while all four countries of

Figure 4 Per Capita Coal Output in Japan, Korea, Taiwan and Vietnam, 1900-1945



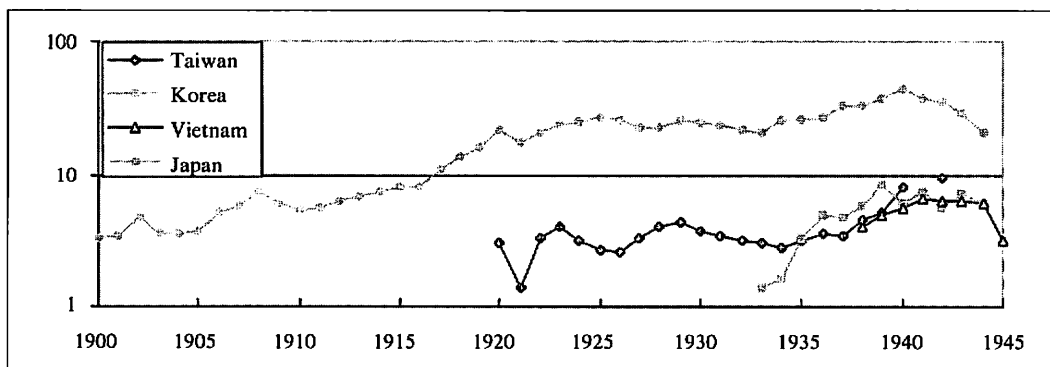
In kg per capita; calculation based on Banens (1999), Mitchell (1995), and *Indochina Statistical Yearbook* (various issues).

Figure 5 Per Capita Electric Power Output in Japan, Korea, Taiwan and Vietnam 1907-1945



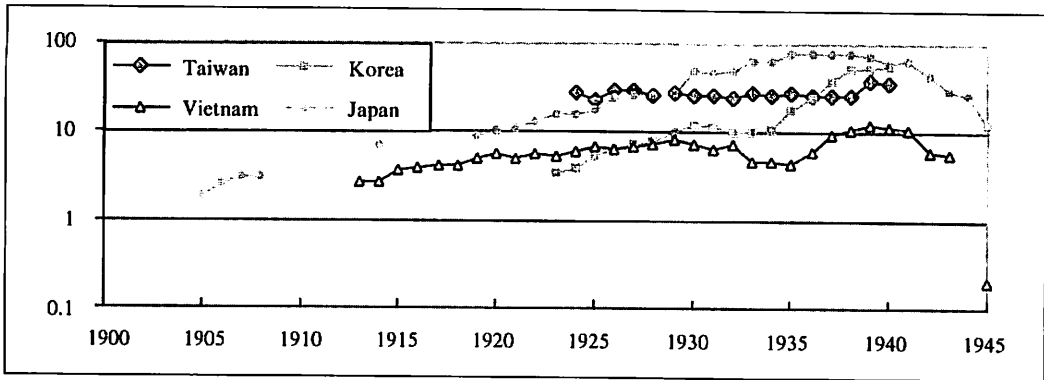
In kWh per capita; calculation based on Banens (1999), Mitchell (1995), and *Indochina Statistical Yearbook* (various issues).

Figure 6 Per Capita Beer Production in Japan, Korea, Taiwan and Vietnam 1900-1945



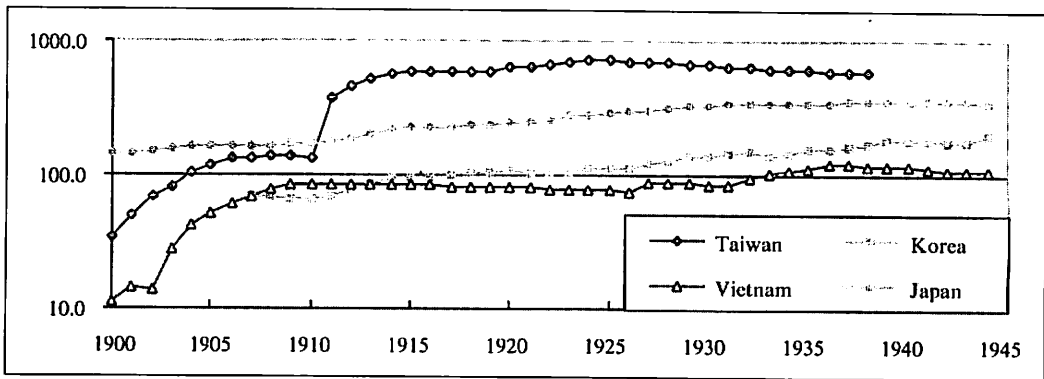
In litres per capita; calculation based on Banens (1999), Mitchell (1995), and *Indochina Statistical Yearbook* (various issues).

Figure 7 Per Capita Cement Production in Japan, Korea, Taiwan and Vietnam 1905-1945



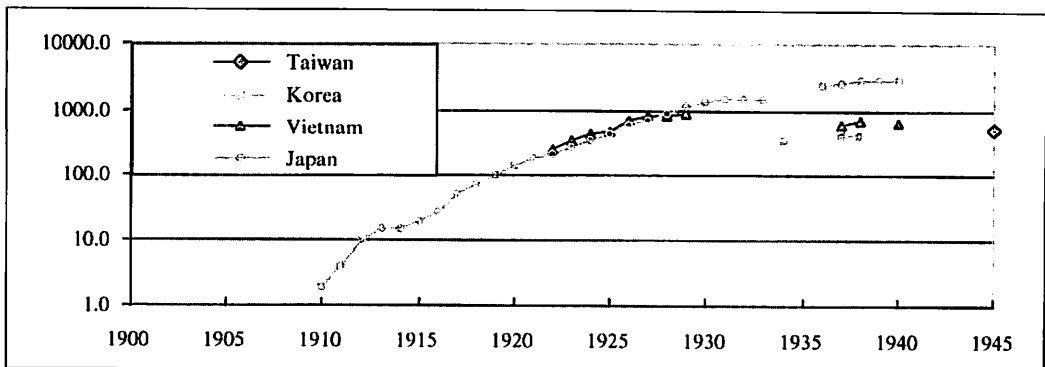
In kg per capita; calculation based on Banens (1999), Mitchell (1995), and *Indochina Statistical Yearbook* (various issues).

Figure 8 Mileage of Railway Networks in Japan, Korea, Taiwan and Vietnam 1900-1945



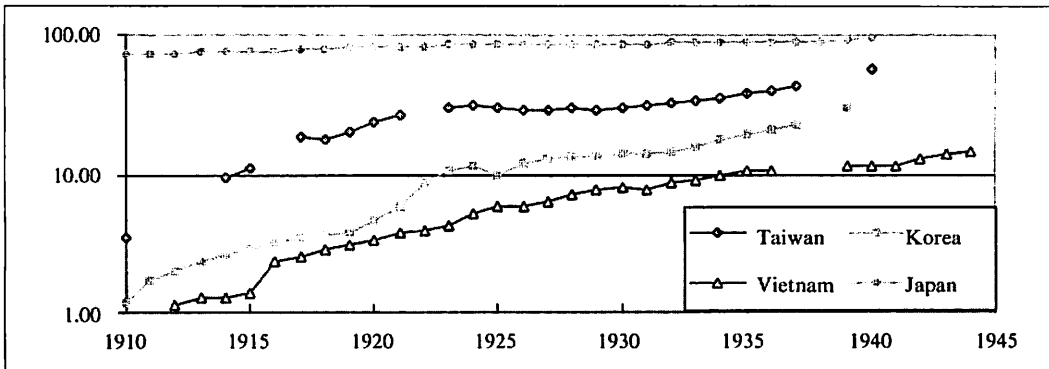
In km per million inhabitants; calculation based on Banens (1999), Mitchell (1995), and *Indochina Statistical Yearbook* (various issues).

Figure 9 Motor Vehicles (Cars, Trucks and Buses) in Japan, Korea, Taiwan and Vietnam 1910-1945



Vehicles per million inhabitants; calculation based on Banens (1999), Mitchell (1995), and *Indochina Statistical Yearbook* (various issues).

Figure 10 Enrollment Rate in Primary Education (Girls and Boys) in Japan, Korea, Taiwan and Vietnam 1910-1945



As a share of the age group; calculation based on Banens (1999), Mitchell (1995), and *Indochina Statistical Yearbook* (various issues).

the sample had abundant coal mining sites easily exploitable. Regarding manufacturing, the General Government of Indochina recorded output figures for a limited number of items. The choice of beer and cement is related to the availability of series but the most important reason for selecting these two items is their relationship with the level of economic development. Beer can be considered as a good indicator of the development of a middle class in Asia. It was not a national alcoholic beverage, either for the colonial powers, or for the native populations in the colonies, the latter having their own traditions in producing rice wine. Thus, beer consumption was not affected by cultural biases. Cement output series in volume provide an interesting indicator for evaluating the spread of new technologies in construction and civil engineering. For studying the evolution of economic activity in transportation, the most suitable indicators would be the value and volume of shipments. However, the data currently available are limited to approximations of the stock of capital: mileage of the railway networks; number of motor vehicles in circulation.

The different industrial figures are very suggestive but, in our view, the best indicators of economic development in the Asian context of the early 20th century are enrollment rates in primary and secondary education. In this field, Japan was decisively ahead before the turn of the 19th century. This country is therefore an ideal benchmark for investigating the process of convergence. The massive investment in primary education in Taiwan and, to a lesser extent, in Korea, is one of the most original characteristics of the Japanese imperialism. Comparison with the situation in Vietnam indicates that enrolments were slightly lower than in these two territories but that trends of convergence towards Japan's level existed in all the three countries of the Chinese periphery (Figure 10). The French commitment towards education in Vietnam had no equivalent in the rest of the French colonial Empire. It was initiated early in the colonization, during the 1860s in Cochinchina, and resulted in the creation of a new social group that was able to compete with the traditional intellectuals, the mandarin elite, in terms of prestige and commitment to the administration of the country. Osborne (1972) appropriately describes the development of a system of education, according to a typical French pattern, as a "qualified triumph".

When comparing differences in performance in education we should take into account initial pre-colonial settings and colonial social structures. The share of ethnic

minorities in Vietnam's population was comparatively very high while enrollment was extremely rare among these populations, with the exception of ethnic Chinese who had very high enrollment rates. In addition, the traditional network of private local schools, funded by villages, did not collapse immediately after the colonization. These institutions, which were similar to late Tokugawa and early Meiji Japan "terakoya" (schools of temples), still dominated in parts of the countryside after WWII, especially in Central and Northern Vietnam (Annam and Tonkin).

The other per capita indicators suggest a more limited convergence towards Japan's level, although with some similarity among Korea, Taiwan, and Vietnam. In the case of beer output (Figure 6), we can observe almost the same level for Korea, Taiwan, and Vietnam during the 1930s, with average per capita consumption broadly equivalent to the Japanese level in 1913. In the case of motor vehicles (Figure 9), Vietnam was clearly ahead of Korea and Taiwan during the 1920s, at a level equivalent to Japan. One might argue that inequality was probably more pronounced in Vietnam (or more broadly in Southeast Asia), than in Japan, Korea and Taiwan, and that this may explain the high rate of equipment in Vietnam before WWII. However, Gourou (1936) indicates that even in relatively poor Tonkin, road transportation by bus was affordable by an increasing proportion of peasants during the 1930s.

When observing other indicators, for which we have longer series, we suspect something of a shift around the late 1920s and early 1930s. Before 1930, Vietnam was ahead of Korea and relatively close to Taiwan for coal output (Figure 4), cement output (Figure 7) and railway networks (Figure 8) (in fact for railways, ahead before WWI). An overall trend of convergence towards Japan's level existed, although a sizable gap remained. After 1930, Vietnam's indicators were stagnating or even declining. In the meantime, Korea was catching up from a very low level (before 1913), towards Japan or Taiwan's level during the 1930s. While, during the 1920s, the convergence process also concerns Vietnam, this country was experiencing a divergence after 1930. These features suggest that a take off existed in Vietnam before 1930, but that the institutional context or economic policies did not allow this trend to continue. In the meantime, Korea and Taiwan were on their way towards industrialization. The 1920s correspond to the last decade of superiority in Vietnam's performances over Korea. After 1930, we observe a sharp contrast between the stagnation and decline of Vietnam, and the high-speed growth of Korea towards the levels of Taiwan and Japan.

This is confirmed by electric power output series (Figure 5), which are currently available for Korea, Taiwan and Vietnam from the late 1920s or early 1930s. Electric networks were developed earlier (from the end of the 19th century in Vietnam), but were limited to private consumption for lighting by administrations, and a few household or private companies. During the same period, Japan was already engaged in the development of mass consumption and power generation for factories (mining, printing). In the case of Vietnam, the gap with Japan, Korea and Taiwan is tremendous in the 1920s and 1930s. The spectacular growth rate in Korea is clearly related to the creation of electrochemical plants by the biggest Japanese trusts (Hori (1995)). No equivalent existed in Taiwan, whose economic development was built on agriculture (sugar) and light industry. The initial economic development of Vietnam, during the first decades of the century, was based on the previous cluster of technologies, including coal, railways, and cement. The increasing gap between Taiwan and Vietnam,

whose industrial structures were comparatively similar before 1930, suggests a failure of the state and/or the market in a development of Vietnam's economy based on the new wave of technologies and innovations.

III. Entrepreneurial spirit and economic policies

This section will attempt to identify institutional changes that may have been causative of the relative decline of Vietnam after 1930. Three possible explanations are investigated. First, an eventual lack of private and public entrepreneurial spirit, and especially a lack of commitment on the part of the administrative elite. Secondly, a relative inability of the local elite and political authorities to adopt what, at that time, seems to have been a superior model of economic development, namely the Japanese model. Thirdly, the impact of French economic policy on Vietnam's economic performances.

1. Administrative and business elite in Vietnam, in Japan, and in Japanese colonies

The involvement of the local elite in civil administration and their role in the development of new businesses was unique to Vietnam, especially within the framework of the French Empire. The administrative autonomy was obviously a matter of geographical distance between France and Vietnam. But the ability of local civil servants to elaborate and implement economic policy with relative autonomy was also related to the qualification and commitment of civil servants, whether French or ethnic Vietnamese, belonging to the administrative elite. As early as 1901, the first paper by a Vietnamese official was published in the *Bulletin Economique de l'Indochine* (an official periodical publication of the General Government of Indochina). As early as the 1910s, Vietnamese senior officials were participating in economic commissions appointed by the General Governor, an example being the commission on currency policy held in 1920, while at the same time ethnic Chinese and Koreans still had a very limited role in the Japanese colonial administration. For their interest in figures and investigation of new experiments abroad in public administration, the Vietnamese administrative elite could be compared with the innovative bureaucrats of pre-WWII Japan.

From the viewpoint of French civil servants, an experience in the colonial administration in Vietnam was seen as an asset, while other colonies remained rather unattractive, at least for non-military high rank officials. Undoubtedly, the high salaries and living standards were strong incentives for applying for a position in Vietnam. But it should be noted that many French civil servants had remarkable careers in the central administration or politics. In a similar, but more structural pattern, Korea and Taiwan, and the Manchukuo after 1930, were significant fields of experimentation in new forms of cooperation between business and administration by young ambitious bureaucrats (Kobayashi (1995)). The same kind of remark applies to the University of Hanoi and French high schools of Hanoi and Saigon⁹. The University of Hanoi was unique within the French Empire for the proportion of natives, most of them Vietnamese, among the academic staff in the late 1930s. The number of students at the University of Hanoi was relatively small before 1940; it was

more prestigious for the local elite to send their children to study in France. But the emergence of a local academic community could be paralleled with the development of public or private universities in Taiwan and Korea.

Another aspect of the dynamism of the local elite is evidenced by the development of entrepreneurial spirit among ethnic Vietnamese during the first half of the 20th century, including in the field of new manufacturing industries. Traditionally, in pre-colonial and early colonial times, ethnic Chinese or Sino-Vietnamese from mixed marriages were dominant in entrepreneurial businesses, trade, mining, or even in several cottage industries (for example, pottery) and cash crop plantations (for example, pepper). During the 1920s and 1930s, ethnic Vietnamese were described in official reports as increasingly active, and even aggressive, competing successfully with ethnic Chinese, who nonetheless retained their stronghold in international trade, wholesale trade and finance. The result was a probable domination of ethnic Vietnamese in the case of new business ventures in manufacturing, a fact partly explained by connections with the top rank civil servants in charge of economic policy, or embryonic industrial policy. However, the emergence of a new generation of entrepreneurs in Vietnam was only a weak mirror image of the equivalent in Japan, Korea and Taiwan.

In the meantime, young Vietnamese people belonging to the traditional or new elite were disillusioned by the incapacity of French democrats and socialists while they were in power during the 1920s and 1930s. They were regarded as having failed, or having been unable, to translate their liberal views into political practices and administrative reforms in Vietnam. As a consequence, the new generation of the Vietnamese elite was increasingly attracted by authoritarian political ideologies borrowed from abroad, either Chinese Guomintang, or Russian communism. This situation was in contrast to the capacity of the Japanese administration to make the Pan-Asiatic imperialist ideology acceptable, fashionable or attractive, in Japan but also in Taiwan, or even in Korea and Manchuria. It is tempting to link the changes in political atmosphere and the divergence in macroeconomic performances. But it is not clear whether this divorce was causal in the economic stagnation of the 1930s or, on the contrary, a consequence. The difference in timing, economic expansion but increasing political divorce during the 1920s, suggests that the first explanation is the more likely¹⁰.

2. Japan as a model for economic development

Meiji Japan has been considered as a model by a large number of politicians, business people and scholars in Taiwan, Korea and China, before, during and after the colonization, or military occupation in the case of China. In these countries, nationalists intended to emulate the Japanese experience, either fighting against the Japanese or collaborating with them. Before 1930, the Japanese model had little impact outside the sphere of intervention of Japanese early imperialism, except in Vietnam where the influence was comparable in intensity to what was observed in the other countries of the Chinese periphery (or in China). It therefore appears that Vietnam (or Indochina) was not an exception but, on the contrary, was the most receptive Southeast Asian country (or colony) in terms of diffusion of the Japanese economic model. But the model was seen almost exclusively from the positive side, as a consequence of the French rule. Among the members of the traditional Vietnam-

ese elite, Japan was seen first, in the late 19th century, as a possible ally for fighting the French in Tonkin and Annam¹¹.

The “Look East” policy (*Duong Du*; literally “travel to the East”, the East of course being Japan) promoted by Vietnamese nationalist leaders such as Phan Boi Chau had a rather disappointing end. After 1909, Japan withdrew its support for the nationalist Vietnamese, as a consequence of the British alliance and French neutrality in the Russian-Japanese war. But, ironically, the Look East policy had an important legacy among the colonial administration. Japan’s industrial development during WWI attracted considerable interest, which led to investigation of Japanese colonial policy in Taiwan, and its economic impact. Direct links between the General Government of Indochina in Hanoi and the French Ambassador in Tokyo, Paul Claudel, were aimed at stimulating economic co-operation. Japan was seen as a possible exporter of capital goods corresponding to appropriate technologies, and Vietnam had surpluses of rice, coal, and other raw materials, as well as cement, exportable to Japan and Japanese colonies.

The General Government of Indochina itself was the most efficient and resolute propagandist of the Japanese model. A good illustration is provided by the number of articles on Japan and Japanese colonies in the *Bulletin Economique de l’Indochine*, in comparison with the number of those on Siam, Indonesia, the Philippines, India, Singapore or Malaysia. But, as in the other countries of the Chinese periphery, and in China, the exponents of this policy had mixed feelings. Economic co-operation with Japan was seen as an opportunity for enhancing technology dissemination and output growth, and expanding intra-Asian trade. The final aim of increasing trade was to import more capital goods. On the other hand, the French Navy and General Government of Indochina were fully aware of the technical skills of Japan (the former ally had been very helpful during WWI in repelling the German U-boats), and Japan was increasingly seen as a future menace. Accordingly, development of the industrial potential in new manufacturing industries, metal, chemical, electrical or telecommunications equipment and transportation was considered to be a strategic priority in anticipation of open military conflict with this ambitious imperialist power.

3. The impact of French economic policy on Vietnam’s economic development in the pre-WWII period

Quantitative indicators suggest that around 1930 Vietnam experienced a turning point in economic performance, from steady economic development to stagnation. The year 1930 corresponds to the spread of the World depression but there is no reason to assume that it was associated with asymmetric shocks in the Asian region, and that Vietnam was any more affected than other East Asian or Southeast Asian countries. Thus, our task is to identify institutional changes specific to Vietnam that occurred at that time. Consideration of the implications for Vietnam (and Cambodia or Laos) of French policy to enhance economic integration with the Empire, both on commercial and monetary issues, is an obvious starting point. It is true that this policy was not limited to France. The British did almost the same with the so-called “Imperial preference”, and in the meantime Japan promoted a stronger economic integration with the colonies.

What was specific to Vietnam, in the framework of the French Empire, could be

described in terms of gravity models. While France was the main trading partner for Vietnam in terms of imports, it was not true in terms of exports before the 1930s. Although distortions in trade increased during that period, Vietnam was not totally closed to other exporters of manufactured goods. Vietnam's exportable surplus was primarily oriented towards Asian countries. This imbalance was the result of distortions introduced by the colonial rule in the second half of the 19th century. But, given Vietnam's structural trade surplus, and considering that French consumable and capital goods were neither inferior in quality nor much more expensive, we may assume that these distortions had no decisive impact.

More importantly, Vietnam was an exception, before 1930, among French colonial territories in terms of monetary policy. It was the only territory to retain its national currency, called piaster by the French colonial authorities. The silver standard of the piaster proved to be an asset for exporting to similar silver standard areas, Hong Kong and China. In addition, exchange rates remained rather stable with other Asian countries (Bassino and Nakagawa (1999)). Vietnam was deeply involved in intra-Asian trade and, before 1930, it seems that only import flows were distorted from what is defined as natural from the viewpoint of gravity models (Linneman (1966)).

The depreciation of the franc against the piaster and most Western and Asian currencies was a bonanza for Vietnam's economy during the 1920s. Preliminary results on terms of trade during that period suggest that conditions globally improved for Vietnam, especially for capital goods, mainly imported from France (Bassino and Bui (1999)). In addition, huge amounts of French capital were invested in Vietnam, in relation with the new business opportunities but also a search for capital gains in French francs. Indochina was the only safe haven for French investors in the French Empire. The decisive shift in the structure of Vietnam's international trade was not the result of protective tariffs or discriminatory barriers but the consequence of the franc-peg policy adopted for the piaster in 1930, in conjunction with the return of French franc to the gold standard. During the 1930s, Vietnam was the only Asian country to maintain a strong currency (until the French renouncement to the Gold Standard in 1936).

The consequence was that consumer and capital goods imported from France remained affordable, but Vietnamese rice, coal and cement surpluses were too expensive for export to the Asian markets. Siam and Burma, the two most important competitors of Vietnam as rice exporters to the Chinese and Southeast Asian markets were the winners of this shift in the exchange rate policy. The French Imperial market was a substitute but relatively unattractive because it was unable to absorb as much rice as the former Asian importers, and also the price in piaster was lower than before 1930. But Vietnamese exporters (including French companies) had no other choice. The high price for this access to the French market was paid by Vietnam's consumers who had to accept further protection or easier access for goods imported from France that were no longer competitive (Marseille (1984)). The French companies exporting to Vietnam goods that needed protection were, as a rule, producing low quality goods in labor intensive industries. It was exactly the kind of manufacturing output that Vietnamese entrepreneurs (ethnic Vietnamese, Chinese or French) were increasingly able to produce locally as substitutes for imports, and they were unable to obtain protective tariffs, even though the General Government had good

reasons to promote local manufacturers for strategic purposes.

In that sense, the economic integration promoted by the French Empire was not like the protection implemented within the Japanese colonial Empire. Japanese Empire regional integration, although based on unequal relations, was compatible with natural trade patterns as predicted in a gravity model. More importantly, it was largely based on an increase of intra-industry trade, especially in the case of Korea (Hori (1995)), while the French imperial framework was based on inter-industry trade. The paradox is that the attempt of the General Government of Indochina to negotiate a commercial agreement with Japan was actually relying on an approach of Asian regional integration. This indicates that “the French” is not a workable concept when analyzing economic conditions in Vietnam before WWII. As for top rank civil servants, a large proportion of private agents had no reason to be supportive of Imperial preference. French companies installed in and exporting from Vietnam, were victims of the French franc-peg, in exactly the same way as Vietnamese or Chinese entrepreneurs. The increase in business failures during the 1930s suggests that there were many more losers than winners.

IV. Summary and concluding remarks

The main results obtained when comparing economic statistics of Vietnam, Japan, Korea and Taiwan could be summarized as follows:

As a whole, Vietnam’s level of economic development between 1900 and 1945 appears slightly lower than Taiwan’s, much lower than Japan’s, but broadly comparable to Korea’s. This is evidenced by per capita public expenditures and export figures, and by industrial indicators. The comparison with Japan, Korea and Taiwan appears fully justified. Although further investigation will be required as a consequence of the upgrading of Vietnam’s economic statistics estimates, it seems that no drastic change could be expected. This result therefore appears to be quite robust and of significant importance for future studies.

The national patterns in economic development are clearly different; the most notable feature is the recession and stagnation that Vietnam experienced during the 1930s. Vietnam entered on the road towards stagnation after an early but short-lived economic development, experienced between the 1890s and 1920s. Japan, Korea and Taiwan were on their way to high-speed growth (after the temporary economic collapse of the 1940s). In terms of income gap, Vietnam was probably ahead of Korea during the 1910s and 1920s, although the income gap tended to reduce. It seems that the period before 1930 witnessed a β convergence within the Chinese periphery, corresponding to a reduction of the income gap between Japan and Vietnam, Taiwan or Korea. During the 1930s, we observe a contrast between the pursuit of the convergence in the case of Taiwan and Korea and, by contrast, the beginning of Vietnam’s divergence in terms of per capita income¹².

There is no evidence that a lack of entrepreneurial spirit or local bureaucrats’ misbehavior might explain the decline of Vietnam’s economic performance. On the contrary, the Vietnamese elite positively answered to the challenges of economic modernization. It seems, however, that the French central government’s inability to introduce institutional reforms in Vietnam and its decision to implement new princi-

ples of Imperial economic policies in the 1930s had a decisive impact. This may explain most of the political and economic turmoil of that period. Differences in the national patterns of development and technology dissemination may provide complementary information. Several industrial indicators are either much lower in the case of Vietnam, electric power being the most impressive, or are very high, for example the number of cars.

Reconstruction of the national accounts of Asian Countries, currently being undertaken by the Asian Historical Statistics Project, could allow further investigation by way of a comparison extending to other Southeast Asian countries. Another approach to analyzing Vietnam's economic development could involve distinguishing the Northern and Southern parts of Vietnam. A significant income gap existed before WWII; prices and wages were, on average, around 20% lower in Hanoi than in Saigon. Cochinchina could be compared with Taiwan: these were two areas of intensive agriculture associated with a development of light industry following the expansion of rice cultivation estates, cash crops and plantations. Tonkin could be compared with Korea, two areas of rapid development of mining and heavy industry.

Notes

- 1 These observations are confirmed by official reports comparing the purchasing power parity of day workers, by converting the day wage in kg rice, in Saigon, Tokyo, and Manila (Royer (1950)).
- 2 Let us define the Chinese periphery as the group of countries deeply influenced by China, but with distinctive national characters or identity, including therefore Taiwan, considered as a Chinese offshoot, historically equivalent to Singapore.
- 3 Similar exchanges existed with Vietnam but, in this country, the Chinese influence was also the consequence of a sizable immigration. This situation was comparable to a certain extent with the case of Taiwan although, in Vietnam, Chinese immigrants were traditionally integrated into the native population after two or three generations.
- 4 Estimating population more accurately necessarily had implications in terms of the tax system. Another source of discrepancy is the share of ethnic minorities. They accounted for a majority of the population in the highlands of Tonkin and Annam and were estimated very broadly. By contrast, recorded figures could be seen as quite reliable for ethnic Chinese and the ethnic minorities of Cochinchina (Khmer, Malay, Cham, etc).
- 5 On Japan, Ohkawa, Shinohara and Umemura eds. (1964-1988), Ohkawa, Shinohara, Meissner (1979), and Nishikawa, Odaka, Saito eds. (1996)); on Korea and Taiwan, Mizoguchi and Umemura (1988), Hori (1995), Mitchell (1995).
- 6 Another distortion may result from the fact that estimates of Vietnam's public finance and international trade series are necessarily based on figures for Indochina (Bassino (1999), Bassino & Bui (1999)).
- 7 This is not really the case for the 1930s, more exactly between 1930 and 1936, a period of appreciation of the piaster against most Asian currencies. Ideally, we should use purchasing power parity exchange rate of Indochina piaster against the Japanese yen. This estimation is under construction as part of the ASHSTAT project.
- 8 Import figures provide a proxy for GDE; since the evolution is similar to exports, it did not appear necessary to present these data.
- 9 Among the students and professors, both Vietnamese and French, many had an important role in academics or politics after WWII. The most illustrative example is Pierre Gourou, whose academic career culminated after WWII as professor at the College de

- France, the most prestigious French Institution. His research assistant Nguyen Vo Giap, had an even more famous role. As top military leader in the Viet-Minh, he was the General who inflicted, in 1954, a final defeat on the French army in Dien Bien Phu.
- 10 Ironically, the only period in which the French ideology regained, temporarily, certain credibility was WWII. The General Governor had no other choice but to implement a strict equal opportunity policy for the access of French and Vietnamese to medium and high rank positions in civil administration. The impossibility of travelling abroad, and thus of studying in France, provided a favorable ground for developing the University of Hanoi. The General Governor adopted an extremely resolute way, establishing mass organizations for young Vietnamese (and French living in Indochina, many of them Eurasian) modeled on totalitarian regimes. A significant number of the Viet-Minh cadres of the post WWII communist insurgency were actually first trained in this youth league, successfully competing with pro-Japanese organizations for attracting young nationalist Vietnamese (Daloz (1987)). The destiny of these prospective new "Indochinese nationalist elite" clearly indicates the failure of French colonial administration.
 - 11 Actually, Japan offered discrete but sizable support to Vietnamese nationalist organizations, welcoming an informal government in exile and training young Vietnamese in military institutions in Japan.
 - 12 But a convergence in per capita income temporarily occurred at the end of WWII, as all East Asian economies collapsed (Royer (1950)). This indicates that figures for 1945 or 1950 do not provide a good benchmark for international comparison, especially within the Asian region.

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