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## Asian Historical Statistics Project (AHSTAT-COE Project) Vietnam 1895-1954 Research Group (VN98-1)

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#### Abstract

This paper proposes a survey of sources and works on Vietnam's historical statistics available in the different specialised libraries and archives, mainly in Vietnam and France, and investigates methods to be implemented for estimating Vietnam's national accounts under French rule (1895-1954). While most of the sources on the period are related to former French Indochina, our aim is to produce time series corresponding to present day Vietnam. This task constitutes a first step toward a quantitative appraisal of Vietnam's economic dynamics from the middle of the nineteenth century to the end of the twentieth century. Due to the weakness of the French administration, especially in Arnam and Tonkin, few data were collected before 1893. For this reason, we will not consider here the first colonial period, French military occupation and administration of Cochinchina and further invasion of Arnam and Tonkin.

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#### Introduction

This paper proposes a survey of sources and works on Vietnam's historical statistics available in the different specialised libraries and archives, mainly in Vietnam and France, and investigates the method to be implemented for estimating Vietnam's national accounts under French rule (1895-1954). This task constitutes a first step toward a quantitative appraisal of Vietnam's economic dynamics from the middle of the nineteenth century to the end of the twentieth century.

While most of the sources on the period are related to former French Indochina, our aim is to produce time series corresponding to present day Vietnam. Under French rule, Vietnam remained implicitly, for the colonial administration, a political and economic reality. The three geographical parts of Vietnam had each got a different political status: Cochinchina was a colony, Annam and Tonkin protectorates, and in consequence Annam's Emperor did not even come to possess even a nominal authority over the south. But a large part of the former Annam Empire Confucian administrative framework and manpower remained unchanged, including the colony of Cochinchina. In terms of the prevailing economic reality, Vietnam was seen as being different from Cambodia and Laos. This is exemplified by the fact that trade between Cambodia and Vietnam was monitored by the colonial administration although no custom tariff or restriction existed (while trade between Annam or Tonkin and Cochinchina was not reported). Public receipts and expenditures were registered with the exception of Cambodia and Laos. Furthermore part of the currency was issued in Phnom Phen, and was thus concerned solely with Cambodia, although the coins and notes were exactly the same and circulation of the currency was free within the limits of Indochina.

Reconstituting long-term time series for Vietnam's national accounts and for other economic, demographic and social indicators for the modern period, between 1858 and 1945, and up until 1954, after Vietnam's formal independence, would seem to be at first glance a relatively easy task. They are many available sources, both public and private, and part of the work of collecting the data has already

been done. But, due to the weakness of the French colonial administration, especially in Annam and Tonkin, it appears that few data were collected before 1893. Estimating Vietnam's national accounts for the first colonial period, French military occupation and administration of Cochinchina and further invasion of Annam and Tonkin, would require an extensive use of indirect methods applied to fragmentary data. For this reason, we will not study this period during the first step of this research. After 1895, the French colonial administration officially took control of the whole territory of present-day Vietnam. Revolts and political unrest did not resume but the civil colonial authorities were able to find enough collaborators among the Vietnamese traditional elite to develop a comprehensive tax system, and to monitor rice and mining production, external trade, and even, to some extent, population.

Our research confronts three further obstacles:

- (1) The collection of time series data was characterised by imprecision and lacunae which was caused by the institutional framework and from Vietnam's economic situation in the modern period. The French colonial administration ruled the country, with the assistance of the former Annam Empire administration, composed of civil servants trained in traditional schools and selected through the Confucian examination process. This is one of the main reasons why the census of population was not easily implemented. The colonial administration was de facto bilingual, with serious difficulties in communication between the French civil servants who were usually unable to speak or read the Vietnamese language, and the lower rank natives employees who performed their task as usual, and were generally unable to read French, at least not before 1910.
- (2) Despite the French colonial administration's efforts to establish and publish statistics, we find few comprehensive collections of published data. If we compare them with data available on Taiwan or Korea under Japanese rule, or India under British rule, it seems that the colonial administration had almost no knowledge of the economic conditions of the country. It is true that the concern of the colonial administration focused on legal and strategic issues rather than economy. In addition, they were very few French civil servants in Vietnam. The lack of manpower trained for establishing and publishing statistical data was the main obstacle preventing the publishing of comprehensive yearbooks. This notwithstanding a tremendous amount of data was collected at the local level by lower

or medium rank Vietnamese civil servants and made available and translated at the request of the top rank civil administrators. We can therefore find in different files, from the General Government archives, extremely accurate data regarding issues such as wages, prices and non-agricultural production or trade in specific provinces.

In addition, the researchers are confronted with problems resulting from both the political biases and the voluntary or involuntary imperfection of the statistical system. The competition among colonial powers implies that French high rank civil servants were reluctant to publish statistical data before WWI. German territorial and commercial ambitions in East Asia especially Indochina and South China, an area of French influence recognised by the other powers of the time (UK, the US and Japan). In addition, the failures of colonial economic development policy, especially on monetary issues, could explain that several data were kept secret by the Banque de l'Indochine and the General Government During the late 1920s and 1930s, the French Indochina. administration became aware of Japan's ambition in East Asia and its implication for Vietnam, a context which was not propitious for increasing transparency and diffusion of data on performances and policy. The same situation prevailed during WWII, in the context of a unique 'gentleman's agreement' on economic cooperation between the French administration and the Japanese military authorities in Vietnam.

It seems possible, nevertheless to correct these imperfections through a systematic critique of the sources and a comparison of extant quantitative and qualitative data. These limitations and problems should be acknowledged but, on the other hand, the late 1930s were actually the last normal years, as far as economic conditions and statistical system are concerned, before the substantial improvement of the late 1980s. After 1945, due to the Indochina War (1945-1954) and later the Vietnam War (until 1975), it was almost impossible to develop a system of national accounts, except during the late 1950s and early 1960s in Southern Vietnam. Post 1975 statistical data following the Soviet model are thought of as extremely unreliable, even by the Material Product System standard.

Another reason for investigating Vietnam's economic statistics under French rule is that, if we compare it with the post WWII

situation, the 1920s and even the 1930s were probably a relatively golden age for the Vietnamese people. According to post WWII French official reports, the living standard in Vietnam, especially Cochinchina, was one the highest in Southeast Asia. We should remain cautious because these statements were part of the propaganda used against communism during the Cold War. The size of French resident population in Vietnam, was very small, and many of them were actually wealthy Vietnamese or Chinese who had obtained full citizenship. Thus, although unequal in income and wealth distribution, Cochinchina was certainly one the most affluent Asian societies of the time, on average much more so than contemporary Thailand or Malaysia.

If this view corresponds to reality, it could be interpreted as good news assuming that the 35 years of war (1941-1975) are, from a very long-term economic perspective, a terrible exogenous shock. Given the historical trend in human capital accumulation in Vietnam before and during French rule, recent economic growth may be considered in terms of 'catch up' given Vietnam's previous economic level. This phenomenon could be compared with China's recent performances having endured more than a century of economic recession and an absolute and relative decline in living standards. In any case, Vietnam's economic conditions and performances during the 1920s and 1930s constitute indispensable benchmarks for estimating Vietnam's present growth potential.

The task of estimating Vietnam's national accounts under French rule, during the 1895-1954 period, is currently undertaken within the framework of The Asian Historical Statistics COE Project and with the financial support of Japan's Ministry of Education, and other institutions, by a team of Vietnamese, Japanese and European researchers. The co-operative work results in the possibility of sharing expertise and improving the availability of data. We can also expect that it will contribute to further discussions with specialists from other Asian countries and therefore to a better understanding of Vietnam's economic history.

The past experience of Japanese economists in the estimation of national accounts (Japan, but also Taiwan and Korea) is essential for the success of the project. One of the main methodological aspects of this research on Vietnam is the use of time series methodology reporting the dynamics and economic structure of other Asian Confucian or Southeast Asian countries, mainly Taiwan, Japan and Korea, as benchmarks for performing extrapolations of Vietnam's

prevalent time series (for example on the structure of the labour force).

On the other hand, European and Vietnamese researchers, many of them historians and anthropologists, associated with several Japanese historians, economic historians and anthropologists, have a good knowledge of the French and Vietnamese archives, the social and historical framework of the French colonial administration, the statistical system in Vietnam, and the social or anthropological environment. They can therefore evaluate the reliability of the available data and identify complementary information by for example using reports on the lifestyle of ethnic minorities or Vietnamese villagers at the turn of the Century.

In this paper, we first present a survey of the different statistical sources and previous works on these data. We then discuss various methods to be implemented for estimating Vietnam's national accounts under French rule.

- I. A survey of statistical sources and previous works
- 1. The geographic dispersal of public and private sources, offsetting their abundance and accessibility.

Precise numbers are easily available in large quantities concerning Vietnam's demographic and economic evolution during the modern period (we are here using the term employed by Vietnamese scholars to designate the colonial period). We can distinguish four types of sources:

- 1) Collections of statistics which were produced by the colonial administration, either on regular basis, such as the statistical reports, or at specific moments, such as the series of studies each administrative service in Indochina produced for the French colonial Exposition in Vincennes in 1931. The statistics which appear in such annual reports can be considered as reliable. The statistical apparatus in place in Indochina was comparable to the one in France in the same period, especially after 1914.
- 2) The extant bibliography of the colonial period, which is rich and often dependable. These texts should not be neglected since they were often the work of dedicated and extremely well trained administrators. Such was the case for Henri Brenier director of

economic services before 1914, or for Paul Bernard, or for Charles Robequain. In contrast to the African colonies, Indochina was seen as an important and relevant field of experience for ambitious French civil servants, politicians or even scholars.

- 3) Many private sources can also be consulted regarding banking, insurance plantations, mining, manufacturing, transportation, trading companies, insurance. The access to these data is not always easily granted, especially in the case of the former Banque de l'Indochine. In such a conservative banking institution, the records concerning administrators who were in Vietnam during the Japanese occupation was until recently considered a sensitive issue due to the positions held in the management of the bank of several of these persons right up until the 1980s.
- 4) The archives of the local administration constitute a fundamental resource for the study of Vietnam's economic and demographic evolution during the colonial period. Those archives often supplied the two first categories of sources with their information, either directly or through the use of extrapolation; it is often useful, therefore, for researchers to return to the original source rather than to rely exclusively upon yearbooks. In this paper, we emphasise the administrative archives, which are precise, numerous and readily available. For the most part, the large volume of sources from the public administration are well classified. But one's early optimism should be mitigated by several realisations that come from the practical experience of the archives as much as from the analysis so far conducted.

Unfortunately, the archives are scattered between Vietnam (Hanoi and Ho Chi Minh City) and France (Aix-en-Provence, Toulon and Paris). The French archivists and those in Vietnam have made considerable efforts to classify the archives and to make them Aix-en-Provence has recently opened up a available to the public. new collection, the archives of the Etat-Major, which shed some light on the frontier with China around the turn of the century, and the alphabetical railroads of Indochina. Similarly, classification of the Governor General's files has been made available to the public, along with the analytical classification. Several books offer comprehensive presentations of these sources, such as Descours-Gatin and Villiers (1983), Lieu and Cadier (1986) or Devos, Nicot and Schillinger (1990). Other monographs indicate accurately the references of archives' files used for research on particular issues, such as trade and tariff policy (Marseille, 1986) or banking and monetary policy (Gonjo, 1994), or other topics (Brocheux and Hemery (1995); Murray (1980). Part of the resources to be found in French National Archives are presented in a catalogue (sources de l'histoire de l'Asie...; 1981). The National Archives of Vietnam recently published a catalogue of Hanoi's collections from the colonial period (Guide des sources du Vietnam moderne..., 1995), which presents a number of neglected collections, such as the archives of the Flotte Indochinoise (Indochina Shipping Company) or that of the Société Cotonnière du Tonkin (Tonkin Spinning Company). This catalogue is an example of collaborative work between Vietnamese and French librarians.

Despite these efforts, the researcher's work is hampered by the splitting of certain collections. Thus the archives of the Governor General of Indochina which ought to be grouped together in Aix-en-Provence (France), are in fact dispersed across several collections and several locations. A considerable number of files seem to have been left behind in Hanoi and without them it is impossible to correctly evaluate the realities of this period of Vietnam's history, particularly in terms of economic issues. In addition to this split between France and Vietnam, the collection is sometimes divided even within administrative jurisdictions: the archives of the Flotte Indochinoise stayed in Hanoi, despite the fact that the service was part of the Department of Douanes et Regies. Conversely, the archives of the Department of Economic Affairs, addressing a wide variety of topics, are in Aix-en-Provence. The researcher must keep this scattering of collections constantly in mind, because the archives which were kept in Vietnam are generally of great interest and their consultation can no longer be neglected, given that latterly the opening of Vietnam has made such consultation possible.

One should pay special attention to the papers of the Department of Finance, which remained in Hanoi. This sizable collection is in the process of being reclassified and seems thus far never to have been utilised by researchers, despite the obvious interest the files hold and the importance of the Department of Finance in the colonial system in situ in Indochina. In particular, one could look here for files on the piastre and monetary movements, on the Banque Industrielle de Chine - the Banque de l'Indochine's great rival from the 1920s- and on the establishment of Japanese organisations in Indochina during World War II. This collection would be very useful for the proposed study.

Complementary information could be found at different public libraries: in Vietnam, the National Library (Hanoi), the Library of Vietnam's Institute of Social and Human Sciences (Hanoi), Ho Chi Minh City University. In France, the main libraries on Vietnam are those of the Archives of former French colonies, of the University of Provence (Aix en Provence), especially the CADIST, of the IHCC Research Center (also in Aix-en-Provence), of the IRSEA-CNRS Research Center (in Marseilles St Charles from autumn 1998), and of the Chamber of Commerce of Marseilles. One should also note the library of the ASEMI (University of Nice) and the National Library in Paris (Bibliothèque Nationale).

Apart from France and Vietnam, one should also mention the the University of Leiden libraries of (Netherlands), (Universität Humbolt) the United States (the Library of Congress, the Library of Cornell University, inter alia) and in Japan (The Institute of Economic Research at Hitotsubashi University; The University of Tokyo; The Institute of Developing Economies). far in this research project, the library and archives of the Ministry of Foreign Affairs in Japan have not been consulted systematically. Theses sources, and more generally Japanese official reports, may well be essential to adequately compensate for the lack of information in the French archives on economic policy in Vietnam under the Japanese military occupation and indirect rule (1940-1945).

# 2.Imprecisions and lacunae linked to Vietnam's institutional and economic characteristics

Geographical inequalities present the first stumbling block in researching historical statistics on Vietnam. The numbers are easier to find, more precise, and more plentiful for the regions which were more thoroughly controlled by the colonial administration. The series on population not only indicate with precision the sex and age of the individuals surveyed, but also their ethnic group. But in the large cities, Hanoi, Saigon and Cholon, the French administration relied upon data supplied by the leaders of the Chinese official communities for estimating their ethnic group, with considerable uncertainty in the case of Cholon. In several rural regions, however, especially in regions populated largely by ethnic minorities, the information clearly relates to the denser population of the towns, which is the only geographical area with which the colonial administration were familiar, thus one must therefore multiply by a coefficient to

correct the data. The works of historical anthropology directed largely by the EFEO (Ecole Française d'Extrême Orient) allow the estimation of these coefficients for the different periods and regions. One may thus be able to determine that the low population estimates for the southern part of Cochinchina, if still valid, were exaggerated, at least for the late nineteenth century.

Moreover, since the administrative reality dealt with Indochina as a unit, research on present-day Vietnam must often treat the archive series selectively. For public receipts and expenditures, for instance, one must evaluate the part of the Governor General's budget which applied to Vietnam, by separating out the part corresponding to Cambodia and Laos, or else one must simply estimate their share of public finance where the archives do not provide the appropriate answers. The situation is the same for foreign trade. The categories we know today did not exist; Vietnam was divided into three regions: Tonkin, Annam and Cochinchina. This is a well-known the political arena, but it also had commercial in ramifications. Thus, the rice exported from Cochinchina to Hong Kong, Singapore, Japan or France could have originated in Cambodia, and would only have passed briefly through southern Vietnam.

One must also realise that the factors which influenced economic conditions were badly understood, or even unknown to the The issue of inflation offers a good colonial administration. example. Inflation was seen as a purely monetary phenomenon: a poor currency led to goods becoming expensive ; consequently, maintenance of a healthy currency, ensuring the high quality of coinage and a strict policy for reserve rate, presented the solution all cyclical problems. But the complex distribution did not prerogatives facilitate the management of aggregates. The Banque de l'Indochine, a private institution, held the monopoly on issuing coins and notes, but the right to mint coins belonged to the Hotel des Monnaies, in France, and remained bound by the Governor General's authorisation. Even the vocabulary was uncertain. The administrators from the beginning of the century did not always distinguish between forced currency and inconvertibility of notes. Their rigid rules for the circulation of currency also explain the differing exchange rates which were observable between Hanoi and Saigon, and even more so between Vietnam and Hong Kong.

The search for macro-economic indicators such as wholesale and consumer prices, salaries and interest rates also confronts one with the normal difficulties linked to the heterogeneity of the economic situation. These numbers varied from one region to another because the economic realities differed from the town to the countryside, and especially from the north to the south of the country. In other words, the economic unification of the country was far from realised. It is known that several salaries were about twice as high in Saigon as in Hanoi in the 1920s. No doubt prices followed the same trends, but to what degree? Were price structures comparable? Which regions had the higher purchasing power? Salaries and market prices, inflation, transportation costs by road, rail and canal, land prices, are issues that remain less studied than the impact of the modern production sector on the traditional sector, or than the creation of a proletariat, within the colonial setting of southern plantations and northern mines.

The same kind of gaps can be observed for the service sector. If researchers have easy access to the series which cover modern inland transport, such as the railroads, there is still little appraisal of the importance of shipping, which was largely in the hands of Vietnamese and Chinese ship owners. Yet, it contributed importantly to the unification of the internal market, demonstrating a micro-economic efficiency which partially explains the low levels of freight transport on the Hanoi-Saigon railroad. Again, it seems indispensable to evaluate the importance of porters, servants, prostitutes, and peddlers in the different periods, which will require an investigation of diverse and complementary sources: police reports, fiscal documents, travelogues, journals, inter alia.

In a more general sense, researchers need to evaluate the contribution of the traditional sector to natives' income and thus to the monetization of the economy. Certainly, the standard of living for the rural population at the end of the nineteenth century was not very high. The crucial task, however, is to use works of historical anthropology to evaluate as precisely as possible the importance of personal consumption and its evolution in the first half of the twentieth century. For this rural income, statistics on foreign trade allow one to sense the importance of the production related to regional specialisation, such as Indochinese basketry and other related labour-intensive rural industries.

In a parallel manner, the contribution of local capital to the development of the national economy seems to have been underestimated. Researchers have tended to have more interest in capital which originated in France, whether that capital was being invested in manufacturing, mining, transportation or agriculture.

Investment by Vietnamese and Chinese economic agents has remained occluded. But, by using the official listing on mining concessions, we find that several of these French investors had in actual fact a Vietnamese or Chinese name. Private investment was indeed a very complicated story. We know that before WWI, several German investors used the names of French and Chinese local partners as official shareholders or managers of their businesses in order to make their activity more acceptable to the French administration. Foreign (non-Chinese) investment should not be neglected and this may shed new light on the appraisal of Vietnam's comparative advantages in non-agricultural production.

This lacuna to be found within the usual sources, results from the weakness of the colonial administration's overall control and from the absence of a fiscal stake; the explicit goal of the opium monopoly was to extract more revenue from the Chinese population than would have been possible with a tax on capital or on a commercial transaction. Nevertheless, there are indirect ways to evaluate domestic private capital formation. Whether one is looking at the Vietnamese, the Chinese or even the French in Indochina, it is absolutely necessary to research capital formation, research which has more hope of success than has been claimed up to now. In the archives of Ho Chi Minh City, for example, one can find valuable information on the investment capability of rich Vietnamese and Chinese, estimated by the General Government, in terms of the direct issuance of shares from the proposed Indochinese Shipping Company.

Balance of payments should also be the object of particular As regards Indochina, one knows that the measurement of invisibles was almost impossible. It is even quite difficult to estimate the actual amount of French capital invested in Vietnam. There can be a large difference between the 'nominal capital', the 'called capital' and the 'real capital' of an enterprise, through manipulations of the founders' shares, the offered stock, or through only partially mobilising the nominal capital. Only through meticulous work might one obtain a realistic estimate of French capital actually invested. Similarly, contemporaries rarely tracked the flow of profits from Indochina to France, or even the savings which civil servants may have repatriated to metropolitan France or other colonies. Under these circumstances, it would be worth reexamining the hypothesis that Vietnam was an overall net exporter of capital during the period.

Much unexpected information lies in archives both in France and in Vietnam. Only a few files refer directly to salaries. But one can find the salaries for plantation workers in the South, scribbled on a scrap of paper in a file on the stabilisation of the piastre, thus illustrating a possible concern for the implications of exchange rates policy on wages, purchasing power and competitiveness. Likewise, we have lost many of the prices of public works carried out by businesses on contract to the General Government. But price comparisons for different tasks submitted by competing companies turn up in unexpected files, such as the reparation of the offices Fleet. Systematic exploration managing the Indochinese utilisation of this kind of information for direct and indirect estimates of missing values in time series will certainly be the task of the next generation of researchers on Vietnam's economic history; but it would be advisable to begin this job as soon as possible.

### 3. Imperfections of the statistical system and political biases.

The archives which have been preserved are plentiful and voluminous, but they suffer from many limitations. It is a commonplace to say that the statistics were constituted by an administration which, though largely competent, was driven by its own inherent logic, a logic uninterested in the collection of statistics which might meet the needs of historians or economists. Despite a rigorous, even finicky, administration, the information still presents an imperfect image of the real situation.

First, the administration wanted to appear to have mastered the situation completely, and wanted that no one might ever suspect that its grasp on the colony and the protectorates was less than firm. The administrative framework was never sufficient in Indochina in the outlying zones or in regions where the authorities had little invested, all of which can lead one to think that some numbers were estimated, or even invented, in order to fill in the corresponding box. This statistical imprecision reached at times even into spheres the authorities seemed to actually control, such as the opium trade, where contraband still played a large role.

The observed biases have several points of origin. The administrators could never arrive at real numbers for fraud and contraband, which they nevertheless often invoked in their reports. It is also difficult to get the numbers given by the administration to match up with those given by its commercial partners. Moreover,

it is difficult to estimate the trade which went through Hong Kong, and the actual amount of goods. When these products entered Indochina, they were counted officially as products of Hong Kong, even though in reality they came from all over the world. Another example is offered by the large differences between Japanese and French statistics with regard to trade between Indochina and Japan. When the administration of Indochina was called before the French legislature, it could not explain the differences, and had to limit itself to observing that its arithmetic methods were those commonly used in Europe (Inquiry by the MP Labroue; CAOM SOM NF B4 915-2).

Even if they were identical to those used in Europe, the methods of calculation and the administrative practices of the Douanes et Regies (Customs and Public Monopolies) are still remarkable; such practices hamper the use of customs' statistics for the establishment today of continuous archive series and for the evaluation of economic activity. Thus, when prices are mentioned by administrations, they are often not speaking of the real value of the commodity, but of an estimated value, or even worse, one arbitrated by a commission assigned the task of fixing a moderate price to satisfy both the administration and the chambers of commerce, a price used for a given period of time. This procedure relieved the customs administration of the need to determine the actual value. Similarly, when statistics are provided for the quantities of products, the numbers seem not to have been known directly but only estimated through knowledge of the weight of the commodities.

One must also realise that there were no ad valorem taxes at the time. The duties paid on merchandise were amounts fixed in francs, according to the weight of the products. The effects of that practice on the statistics proved numerous and perverse. For one thing, the currency used for foreign trade before 1914 was not the franc, but Asian currencies based on silver: the Indochinese piastre itself, the Shanghai tael, or even the Hong Kong dollar. But currencies using the silver standard varied greatly compared to currencies adopting the gold standard: they dropped in the years approaching 1910, then rose, sharply, with the war, but started to fall again around 1920. Without an evaluation of the real exchange rate, it is hard to comprehend the variations in price of different products, purchased with currency on the silver standard, given that only the customs duties were assessed in a gold standard currency.

A second source of distortion in the data resides in the inflation differential between France and its colony and, once again,

the use of the franc as the monetary unit of reference, even though there was no fixed parity between the franc and the piastre until 1931. The increase in foreign trade in terms of the French franc did not always correspond to a developments in trade, but sometimes simply to the French currency's drop in value, which was offset by a rise in prices. Inversely, this franc inflation caused the erosion of tariff barriers in the colony, disrupting or facilitating commercial relations between Indochina and the countries on the South China Sea. The development of trade with commercial partners, whether France or other nations, often had nothing to do with governmental intentions.

# 4. Brief presentation of previous works on Vietnam's economic statistics and quantitative history

A non-negligible part of the economic, demographic and social data has already been collected by different researchers for various monographs. First and foremost, one must mention the works of Marseille (1986), most notably with regard to foreign trade, tariffs, of Gonjo (1994) on finance, especially on the activity of the Banque de l'Indochine, and also of Aumiphin (1996) on the activity of French private enterprises in mining, manufacturing and services. Important attempts to provide a synthesis were presented by Murray (1980) and more recently by Brocheux and Hemery (1995), but it can be said that the most interesting aspects of these works were on political and social history even if only several important aspects of quantitative economic history were explored.

Other studies provided an overview and a critical analysis of long term series regarding other, more specific, economic questions: the opium monopoly (Descours-Gatin,1992) which allows one to evaluate contraband, the port activity and urban development of Haiphong (Raffi, 1993), the diffusion of the French education system (Trinh Van Thao, 1996) and the customs tariffs (Giacometti, 1997). One must also keep track of the many comparable works by Vietnamese researchers, for example on the role of French companies in capital formation (Ho Hai Quang, 1982 and 1985), or on agriculture in Tonkin (Ta Thi Thyu, 1993)). Current doctoral research will place other series at the disposal of scholars interested in quantitative economic history; for example, various series on rubber plantations, internal trade and rice trading, and on Viet Minh's underground economic system during the Indochina War (1945-1954) (Loscha, 1995).

In spite of the importance of Vietnam in Southeast Asia, in terms of population and political importance after WWII, quantitative or even institutional economic history of this country remains relatively unknown, and studies are still few. What is most surprising is the small number of works published in English on these issues with Murray (1980) being the main significant exception. Most of the books and articles were published in French or in Vietnamese, with a recent trend towards translation in French or Vietnamese, or simultaneous editions in both languages (for example, Aumiphin, 1996 and Ta Thi Thuy, 1993). This is explained by the cultural legacy in the sense that French speaking scholars have obviously a comparative advantage. Most of the data and the previous works were accessible exclusively in this language, a situation which had permicious implications since the research on Vietnam's economic history were excessively influenced by these references. The studies on Vietnam were not exposed to comments or suggestions by scholars specialised in other Asian countries. It seems that Vietnam's specialists were not really involved in international comparisons from an historical perspective.

This situation is currently changing, mainly as a consequence of the interest of other European scholars, in Britain, Denmark, Germany, the Netherlands and Italy, in this issue. Most of them have a working knowledge of French and easy access to French Archives. But very few of these studies rely upon estimation and analysis of continuous quantitative indicators. On international trade, Norlund (1993) constitutes one exception. Until now, the most important impulse in this field was the Australia National University's Echosea project, which involved co-operation between Australian economic historians working on Southeast Asian countries, among others, Malcolm Falkus and Pierre van der Eng, and French specialists of Vietnam's history such as Pierre Brocheux. On Vietnam, the final results of this research are to be published by the end of the century. But, in contrast to the current Asian Historical Statistics COE Project, the focus was not exclusively on quantitative economic history and National Accounts estimate per se.

The historical period in which they have been written notwithstanding, the studies on Vietnam economic history exhibit two common features. On the one hand, the sectors that were well monitored by the colonial administration were extensively explored while all the rest remained more or less neglected. On the other

hand, approaches adopted for these studies are directly connected with the political and social agenda of the time.

Various studies explored sectors such as international trade because custom offices of the great harbours were among the most efficient administrators in producing voluminous amounts of data but were not always accurate. Despite this, the aggregate and easily available series of the General Government yearbooks (Annuaire de l'Indochine) were preferred to the comprehensive and extremely disaggregate yearly or monthly data of the Tableau du Commerce de l'Indochine (including in recent works, for example Norlund (1993)). More broadly, the economic life of Vietnam has been seen from the viewpoint of great sectors in which the colonial administration or Europeans had vested interests. But village economy, subsistence farming, fishing, short range water transport, all the things which provide substantial income to the general population and contributed decisively to the national economy, remain unexamined. sectors, prices, costs and incomes lie undiscovered; estimations remain qualitative, rarely quantitative. In the course of the century, researchers tend to consider and use the books published before WWII as reliable sources, as a consequence of their anteriority. But one must note that these works utilised data or estimates provided by the colonial administration with little critical investigation.

During the entire century, studies on Vietnam are directly connected with political and social agenda of the time in the sense that in many cases the Vietnamese economy is only an auxiliary explanation: French domination and national involvement in Asia, and the individual interests of particular groups, are obviously the core issues prior to 1940. After WWII, scholars adopting the Leninist theory of imperialism as the ultimate stage of Capitalism considered Vietnam as a ideal illustration of this theory without much concern to evince such a perspective. For reasons good and bad, Vietnam was a very sentimental issue for French Marxist scholars and their counterparts in other countries, including of course Japan and the US. Murray (1980) is an example of this tendency to consider Vietnamese economic history from unique ideological viewpoints, excluding therefore any non-Marxist approaches or critiques.

For these two reasons, sources and ideology, it might be useful to adopt a diachronic approach in the presentation of previous works. One important point to be observed is that the concepts used in these books are ambiguous. Before WWII, numerous works seem to be dealing with economics, but they are actually describing the "mise en valeur". This colonial concept might be understood in two ways, one is retrospective, the other prospective. The first was a way to legitimise domination, the second was an attempt to orient future economic choices. In its retrospective sense, mise en valeur is everything that had been done since the initiation of the territory as a French colony and the sum of all investments, of all works, public or private. It is a detailed list of all productions, made by the indigenous people and European colonialists, "l'oeuvre de la France" in the colony.

this kind of work consists of a descriptive In sum, enumeration, close to panegyric, of everything done or at work. But it presents no order, neither distinction between what was expected or asked a priori and what happened and was created in a natural way, or unexpected and unplanned; the economic and political failure of the main colonial project, the Yunnan railway, and the unexpected rubber production success are good examples. In the prospective sense, the expression mise en valeur offers a different vista. It elaborates on what is possible and desirable to achieve; and that often means a rational plan in which State (General Government) intervention will quide and support public and private investments. Retrospectively, we find in these reports, articles and books a set of disorganized investments, but prospectively a coherent plan... never financed. This diachronic opposition must be taken into account if one wants to utilise the colonial bibliography effectively.

As sources, the ancient bibliography presented another kind of problem, given the strong line it adopts in favour of one colonial policy or another: it is especially the case in the debate on international trade: "pacte colonial "(colonial agreement, colonial integration) versus economic integration in the Asia-Pacific economic area. The term of the time "mise en valeur "(economic development), remains an empty box in which each author, a politician, a banker or a former high rank civil servant placed their own subjective interpretation. Their books are in essence real theses, by which they expose a conception of the economic organisation of Vietnam vis à vis the French imperial system.

Followers of the pacte colonial found before them authors arguing for an alternative free-trade policy, mostly carried out by representatives of the Indochinese colonial administration, and first

the General Government, and local entrepreneurs, backed by French interests. In Indochina, free traders found their best arguments in the arena of real commercial relations: before 1929, up to 70% of exports went to the Asia-Pacific Region (mainly Hong Kong and Singapore) and only 30% to metropolitan France and Europe; proportions for importation were almost exactly the reverse.

Authors such as Pierre Gourou, Charles Robequain or Paul Bernard's proposals might be understood in the context of debates on Vietnam's industrialisation and the need to feed foreign trade with high value-added products. Their books, often seen as major sources of reference on Vietnam's economy must be read also in the light of this trial of economic and commercial orientation given to colonial Vietnam. This orientation was not decided in advance as a result of colonial domination, real exchange rates, or political decisions.

Take the case of Paul Bernard, who argued ardently for the industrialisation of Indochina. That meant per force granting complete autonomy to Indochina with regard to customs and tariffs, in order to allow it to defend local small-scale production against competition from industrialised countries, including France, whose products entered Indochina free of any duties. P. Bernard was, always pushed by the company he managed, the Société Financière Française et Coloniale (the French and Colonial Finance Company) into opposing negotiations between France and Japan, aimed at giving the latter a special tariff status in the colony. And yet, by creating a special status for Japan, which would be only the prelude to other special tariffs for other countries including France, those negotiations had as their ultimate goal the eventual destruction of the customs system which bound the colony to the metropolitan market. By opposing those negotiations in 1924, Paul Bernard worked against what he would subsequently propose himself in the 1930s, the industrialization of the colony.

The case of Charles Robequain leads to an similar general conclusion, regarding the existence of a political thesis defended by various sources which seemed to deal only with economic issues. His book on the economic transformation of Indochina is used by all writers who take an interest in the economic conditions in Vietnam before WWII and the evolution of capitalism in colonial Indochina. But that leaves aside the first calling of Robequain's work, which appears on page 4 of the foreword. It reads: "This work was prepared by the request and with the help of the 'Institute of Pacific Relations'. It is published by the Centre d'Etudes de Politique

Etrangère (CEPE), under the auspices of the Comité d'Etudes des Problèmes du Pacifique (CEPP), which is one of its permanent committees. Immediately one understands what Robequain has done, presenting the question of the inclusion of Indochina's economy in the context of the Pacific, and thus the question of Indochina's autonomy with regard to France, even while he apparently dealt only with economic questions.

After WWII, we observe among researchers specialised on Vietnam an increasing tendency to focus on international trade, and mostly with France, and French capital investment in Vietnam. Foreign trade fashioned by imperial protectionism was at this time the general explanatory schema for the economic evolution of Vietnam. Thus, the economic question may have appeared resolved in advance, by using Marxist-Leninist concepts and tools in order to explain prevailing imperialist relations. Many works attempted therefore to find precise and accurate illustrations of this domination, rather With analvsis. the furnish an economic administration's data facilitation, the goal was reached, as well as the demonstration that foreign trade and other economic relations with metropolitan France were the most important issues, because the colonialist administration was devoted to its supervision.

The Marxist approach also favoured some important studies on the social and demographic development of a certain part of the population - for example research devoted to the coolies working on South Vietnam rubber plantations. Some essays dealt with mining and manufacturing or attempted to describe the formation of social classes, the working class, of course, but also concepts such as "medium low peasantry", "city medium native bourgeoisie", and so one. But behind the economic side of such questions studied, it was rather the formation of the political and nationalist consciousness which attracted attention, in trying to have a better understanding of successive uprisings and wars in Vietnam. Here again, political questions imposed certain subjects for discussion and analyses.

Nowadays however the fact that attempts have been made by Vietnamese scholars to study specialised production villages (i.e. pottery villages, basket makers' villages, special market places, inter alia) must be underlined, as well as studies undertaken to deal with Tonkin rural trade. Regarding recent works, we must recall the statement made by David Marr (Marr, 1992): 'The pre-eminent economic objective of the French was to develop a modern export sector. They

focused particularly on rice and mining, then later rubber as well'. With this point strongly emphasised, studies must now look into some questions: who were the 'French'?; did they achieve their 'modern' objectives?; did they ultimately decide anything?; how did they manage relations with pre-colonial finance and trade networks, for example the Chinese ones?; why did the French focus on these specific products, when at the same time industries were established in Vietnam, not only by European but also by Vietnamese and Chinese entrepreneurs - for example, chemistry, textile, soap, glass?; and how competitive were these products and where was their effective demand located, - in Indochina, metropolitan France, or on the Asian and international market in general, which was an important issue for a colonial domination?

The economic history of colonial Vietnam remains largely in the shadow, because the larger economic sectors still remain unexplored and unresearched and also because the links between the basic economic realities, the geographical context, the relevant political decisions and economic evolution has never been studied over the long-term, in a pragmatic way, utilising extant statistical series.

# II. Methods to be implemented for estimating Vietnam's national accounts

### 1. The purpose and scope of the research

The research will focus on relatively recent data from the modern period (circa 1895-1954) and on the macroeconomic series which are essential for the Asian Historical Statistics COE Project. As far as possible, the researchers are performing a critical evaluation of the statistics produced by the French administration and published in the form of Yearbooks and other official papers. This screening seems especially important for the following data: population, production, investment, consumption, public finance, prices and wages, and international trade. The essential objective remains however to achieve a comprehensive collection of data in order to propose to the researchers interested in Vietnam's economic history something close to a first estimation of Vietnam's national accounts before 1954.

Following this collection of relatively available data, the main task should be to produce, using indirect methods, comprehensive and acceptable estimates of missing time series which are however

essential: on production (including services), investment (including investment by Vietnamese and Chinese agents and international capital flows), and consumption (including rural self-consumption). It seems also highly desirable to estimate macroeconomic conditions before the commencement of colonisation or during the conquest (circa 1850-1890), in order to evaluate the impact of French colonisation on Vietnam's economic dynamics. Annam Imperial archives and private Chinese sources written by traders living in Vietnam at the time, both in Chinese characters, might provide the necessary figures that may be used for this purpose but this task would certainly involve a time scale of much more than two or three years.

Therefore, this study supported by the COE project should be seen as a first step with the coda that further improvements are necessary and would be extremely welcomed. It is the feeling of the researchers involved in this project that their findings will be extensively criticised as a consequence of comparatively easier access during the coming decade, to new private and public sources and extensive collections of data on specific issues. They would be delighted to collaborate with all those who are involved in improving the reliability of the data and providing information from their related field. Accordingly, the philosophy of this research will be to articulate the files used for obtaining times series, to specify in detail the methodology used for estimating or extrapolating missing values and to propose both original and estimated series.

Finally, it should be kept in mind that Cambodia's and Laos' economic statistics are equally interesting for a comprehensive study of Southeast Asian quantitative economic history. The comparison between these two countries and Thailand would be certainly a fruitful task for understanding the integration of the Mekong area into the World economy at the end of the nineteenth century. As it will be necessary, for the collection of several data on Vietnam, to identify data concerning Cambodia and Laos, and also Kwang Tcheou Wan (leased territory in mainland China, Canton Province, close to Hainan Island), this may permit, as a by product, the obtainment of the same kind of results for the other parts of former Indochina.

For various series, for example population, the data indicated in the official yearbook seems more accurate for Cambodia than for Vietnam. In this specific case, the implementation of the census was easier in Cambodia where reports by the local administration on the effective population numbers living in each family was not seen as an offensive intrusion into a field of Confucian authority as it was

perceived in Vietnam. Differences in cultural tradition implied in Cambodia a weaker traditional administrative framework but not necessarily inferior data. We may assume that Vietnam's strong administrative traditions made it easier for the lower rank Vietnamese civil servants to keep the French administration at bay or uninformed with regard to part of the data, according to their own economic or political interest.

Regarding Vietnam's statistics, the scope of the research should be consistent with the COE project general framework. The following list indicates the series to be estimated:

- 1. Population, labour force and employment
- Agricultural production (rice and other essential products; volume and value)
- 3. Mining (volume and value), manufacturing and cottage industries (French and other foreign companies; Chinese and Vietnamese companies, including the informal sector).
- 4. Services (railways, tramways, trucks; shipping; electric power; mail, telegraph and telephone; banking and insurance; internal trade, education health, civil administration, misc.)
- 5. Consumption (private, including self-consumption)
- 6. Public and private capital formation (including construction)
- 7. Prices and wages (Hanoi and Saigon)
- 8. Public Finance (general government, regions, provinces, cities and towns).
- 9. International trade (by country, especially Hong Kong, China, and Singapore; other Asian countries (including Japan and colonies), metropolitan France, French colonies, other European countries, the US, etc.).
- 10. Exchange rates, capital flows and balance of payments
- 2 Evaluation of the availability and reliability of data and proposed procedures allowed to overcome the imperfections and lacunae

As already indicated in the first part of this paper, the huge amount of statistics produced or monitored by the administration constitutes a heterogeneous mass, regarding both their availability and reliability. A global evaluation of the data corresponding to the different series to be collected or estimated within the framework of the project is proposed using the following codes:

- A : excellent or good ;

- B : medium; and
- C : poor or very poor.

In addition, several complementary explanations are presented along with proposals for specific alternative and indirect methods for estimating different missing or unreliable series. For this purpose, the classification indicated above shall be used.

### 1. Population

- a) Total population: B
- b) Labour force and employment: C
- c) Migration : B
- d) Population of the different ethnic groups : A

It is difficult to get a good grasp of Vietnam's demographic trends before 1945. In 1901, the first "test" census took place in Cochinchina, a French colony. Thereafter, a population-estimation was implemented in 1906 for all Indochina. A new census took place in 1921 based on the one from 1901. The population of the different ethnic groups was reported. In the case of the Chinese population, we have also figures on yearly migration flows from different sources (Chinese communities self-administration under the supervision of the French police).

This census of 1921 did not concern only Cochinchina, but also the protectorates of Tonkin and Annam. In order to provide correct figures and explain various inconsistencies, the administrations used more or less arbitrary coefficients based on variables such as salt consumption per capita.

These coefficients were abandoned in 1931 and an estimation "as precise as possible" was performed in all French possessions, and again later in 1936, 1943, 1946 (for the Cochinchina). These estimates were not more satisfactory despite the effort for homogenising results. In 1951, other population estimates were made for Vietnam, but only for the "controlled "provinces.

While the census administration performed quite well in Cochinchina, there was no generalised use of reports to count the population of each house or each boat, in Tonkin and Annam. Most of the time it was ultimately the chief of the village who attempted to measure the population of the village. Besides the approximate nature of these accounts, many problems appeared, such as the preferential

registration of a good number of Natives in their original village rather than in the place where they actually used resided.

Regarding employment, acceptable estimates might be obtained for a several sectors: mining, manufacturing in French companies, public utilities, education and, in a broader sense, administration. On the other hand, we have almost no idea of the population engaged in agriculture, fishing, cottage industries or traditional services.

For these reasons, it appears it would be extremely difficult to utilise effectively the official data both on total and urban (or rural) population. A reconstruction of Vietnam's population using an inverse projection method could be the more acceptable solution. If a hypothetical population age structure fits the observed data, we might use the time series and estimate of age structure before WWII for other purposes. It seems safe to assume that in the case of Vietnam, an East Asia agrarian society with a general cultural context of strong emphasis on education, the population between 15 and 60 or 65 years is an acceptable proxy for the labour force, both for male and female.

A comparative approach could be adopted regarding employment in services, given that Vietnam's social and cultural setting was very close to that of North-East Asian countries: Japan, Korea, Taiwan (and of course China but data are usually unreliable). We may also assume that the Industrial structure of Vietnam was similar to those countries, with an important time lag when compared with Japan, but probably with a shorter time lag in the cases of Taiwan and Korea. Employment in education, in civil administration, in railways and in mining should be used as benchmarks for extrapolating employment in other sectors or sub-sectors.

- 2. Primary sector: agriculture, fishing, forestry and hunting
- a) agriculture :
- planted areas : A
- rice production in quantity : B
- other cash crops: B
- livestock: C
- fruits and vegetables: C
- b) fishing: C
- c) forestry: A
- d) hunting: C

We have not got comprehensive data on production but it seems safe to assume that official estimates are quite accurate since they were essential for the evaluation of rural income and therefore the enforcement of part of the colonial tax system. We can find official sources reporting on each province or even prefecture but in a very qualitative way "good harvest/ poor harvest" rather than quantitative "yield"). As far as rice is concerned, several irregular reports included not only estimates on production, but also on seeds, alcohol, export, personal consumption (one of the first reports of this kind was released in 1902).

For other products, we have the same kind of documents but with a local specialisation, which allows us to use reports of the local administration. Product areas such as cotton, maize, sugar, coconuts, rubber, pepper, tea, potatoes and taros, beans, tea, coffee, pepper, silk, we may use, in addition to the official production estimates, an indirect method relying upon the export data and consumption estimates to obtain production. But one needs to be very cautious since part of the production originated in Cambodia. When figures are missing, one could assume that local per capita consumption was stable (this point should be checked carefully however), and consider that the variation of exports was a good indicator for production fluctuations.

Official data on buffaloes were very important for the colonial administration, because it was one of the main areas of private capital formation in agriculture. These are thus essential statistics for the purposes of this research. However, we have no comprehensive data but only various reports particularly during plague infestations of animals. Other livestock, pigs, poultry, goats, sheep, dogs, etc., were not carefully monitored, with the exception perhaps of elephants, which were an export item from central Vietnam, Laos or Cambodia to Thailand before WWII.

Vegetables and fruits were usually neglected but they are essential in estimating the evolution of an effective living standard for the Vietnamese population given their important role in the Vietnamese diet; the quality of the estimate will depend on the work done or nearing conclusion by anthropologists. One finds the same problem with fishing. Sea products, nuoc mam and river fish played an equally important part in the Vietnamese diet. Export statistics are an indication of the activity of Chinese fishermen who were the main source for the exportation of dry or salted fish. Vietnamese fishermen used to sell the fish in the villages and towns close to

the shore for immediate consumption or transformation in the food industry. The same applies for hunting, a activity in which several ethnic minorities specialised. Using studies by anthropologists and international trade data we could estimate the share of the export items (fur and others) actually paid to the hunters and consider the value of the meat eaten as a measurement of personal consumption.

Regarding forestry, the quality of the data is a consequence of direct control and management by public authorities of part of the production. The rest was strictly investigated as an element of fiscal policy, except perhaps charcoal production, another essential item in rural and even urban consumption. In a similar way, salt production data are extremely accurate as a consequence of the public monopoly on distribution.

### 3. Mining and manufacturing

- a) Mining: A (both quantity and declared value)
- b) European Manufacturing: B
- c) Chinese and Vietnamese manufacturing: C
- d) Cottage industry : C

In relation to the control of the concessions, mining activities in Vietnam were carefully monitored by the administration. Various reports indicate the name, production (in volume and value) and employment (blue and white collars) in each coal mine. The same kind of details are usually available for other mines. However, we can not find similar surveys on the production of clay and kaolin and other construction materials (sand, stones, marble, etc.) before the late 1930s. This means we can not use these series for estimating the activity in construction and public works by indirect methods, and also the important traditional production of pottery (as well as bricks and tiles).

French companies form the only part of manufacturing in which relatively abundant sources are existing. But reports to shareholders and other private data of these kind should be treated with caution. For the most important companies, whose shares were quoted on the Paris stock exchange market, we can find a summary of these reports in French yearbooks (Annuaire Desfossé) already studied by Jacques Marseille. But the Paris stock market neglected the small and medium-sized European firms. In addition, Chinese and Vietnamese-owned firms, which constituted a growing share of the manufacturing modern

sector in the 1920s and 1930s, relied on other financial sources. We have no other choice but to use fiscal data or economic policy reports (subsidies to Vietnamese entrepreneurs producing strategic components, for example in the electric or telephone equipment sector, in the late 1930s). The Vietnamese cottage industry (basketry, silk reeling, textile cottage industry, pottery, nuoc mam, etc.) was an essential part of manufacturing, if not the most important part. The French administration reported occasionally on several areas or highly specialised villages.

Depending on the products, we may use export series and try to extrapolate but we need also to estimate domestic demand. Using various sources, we could obtain indications on production of intermediate goods for which there is no indication in other official reports. For example, in the international trade yearbooks, we find that cement was exported from Haiphong in 128 kg barrels (and we know from other sources the volume corresponding to the domestic demand). That means that the production of barrels was ongoing in the manufacturing sense in North Vietnam, certainly as subcontractors. We can expect a production equivalent to at least the barrels exported. Assuming a level of price and labour productivity comparable to that prevailing in Taiwan, Hong Kong or Singapore (or in France) and in Vietnam, we could even propose a proxy for the added value in this activity and of wages paid to the workers.

### 4. Services

- a) Inland transportation : B
- b) Shipping: B
- c) Electric power: A
- d) Telecommunications: A
- e) Banking and insurance: A
- f) Chinese (or Indian) informal finance: C
- g) Domestic trade: C
- h) Education and health: B
- i) Civil and military administration: A
- j) Others: C

In all the services, we observe a sharp contrast between the modern sector controlled by public or private French companies (railways, tramways, international shipping, electric power, telegraph and telephone) in which it is possible to obtain precise

figures in the yearbooks and archives (in the final case, data collection implies case studies and therefore a time-consuming process), and the traditional sector data in which the only choice is to estimate broadly the activity using very indirect methods.

Official reports related to fiscal policy and tax on boats and junks provide interesting sources including a breakdown of the fiscal receipts by region and size of shipments. The same kind of source could be of great interest for domestic trade: the shop owners or managers paid a tax depending of occupation. But this does not include peddlers, informal activities, and side-business by peasants or other workers. It seems very difficult to speculate on local trade and traditional road transportation. Furthermore, we have very few data on servants, leisure, restaurants, hotels, etc.. It is clear that the demand was segmented and that tremendous differences existed according to income level. Anthropologist may have some light to shed on these issues. We may also assume that in both Vietnam and Taiwan were similar in this regard, and rely on the structure of the labour force, including secondary occupation in the latter country.

On finance, we are fortunate enough that a comprehensive study was done by Gonjo (1994) on the Banque de l'Indochine, a private institution which was the main Bank in Vietnam and had the monopoly of issuing piastre notes and coins. While Gonjo had no direct access to the Banque's Archives, his work is clearly superior to the study of Meuleau (1990) who was granted financial support by the Banque and almost free access to the private archives of this institution.

But the collection of time series on interest rates, money supply, deposits and lending in Vietnam was not the main aim of Gonjo's research. We have however discontinuous data, mainly on Indochina as a whole, and in several cases charts without the corresponding tables. Nevertheless, using the references of the French public archives indicated in his book, it is possible to collect the original figures in the annual reports of the Bank. Regarding the other French banks and other financial institutions in Vietnam, including service, we could also rely on official reports and Indochina's statistical yearbooks.

We will confront however two major difficulties. Firstly, Gonjo's study, and the official reports, are not on Vietnam but on the activities of different financial institutions in all Indochina (including Cambodia and Laos), and also Polynesia, New Caledonia, French territories of India, Djibouti, and even part of China (Yunnan). Vietnam's currency, the piastre, circulated in all this

area and was the official one (except in Yunnan). Our aim is to obtain data on Vietnam's money supply, and we will therefore have to estimate those of Cambodia, Laos, etc. The same applies for deposits, loans, and savings by public and private agents and insurance contracts. Secondly, and this is the main problem, we have almost no idea of formal and informal finance by non-European, especially Chinese (or Sino-Vietnamese and Vietnamese) merchants and bankers. The same is true for the French citizens from the territories of India (Pondichery) who were specialised in high-risk short-term loans, an unattractive niche in the view of Chinese bankers, but an important one nonetheless.

Finally, let us consider public services and administration: education, health, and also civil and military administration. These sectors present a different kind of difficulty. We have abundant data on employment, enrolment in schools, expenditures, usually on Indochina as a whole but it is not impossible to disaggregate these data to obtain estimates for the three Vietnamese regions, Cambodia and Laos. The main problem is that public services which existed before French rule were gradually incorporated into the framework of the colonial administration and education system. The General Government and other local authorities created substitutes previous education or administrative institutions but only the activities and employment in the new ones were reported. In addition, many traditional primary schools were privately funded and managed, and the literacy rate, in Chinese characters, was incredibly high in several parts of Tonkin and Annam before the development of the French education system (Trinh, 1995). An efficient traditional health system relying upon private market mechanisms existed in Vietnam like in other East Asian countries of Chinese cultural and scientific tradition. Once again, if no other source exists, it would be advisable to use Taiwan's data, in the first period of Japanese rule, as a proxy for Vietnam.

### 5. Consumption

- a) goods and services: B
- b) self-consumption: C

When production is unknown, estimating consumption data can not be other than an impressionistic guess. For reasons already indicated above in the presentation of production data, the tax system and public monopolies provide reliable information on the consumption of several items: alcohol, tobacco, salt, matches, and for example opium. In addition, we can use international trade data for imported and exported goods allowing us to obtain an acceptable proxy for the consumption of goods such as cement or coal, and even clothes (but it is not easy to estimate traditional production in villages, using local cotton).

Food is obviously the most important share of the consumption, in value, but also the most difficult part to estimate. The cases studied by Gourou (1940; 1945) are certainly acceptable for an extrapolation but only on Tonkin during the late 1930s. It would be inappropriate to assume that food consumption or self-consumption was similar in Cochinchina, or constant during French rule. Even if it is a difficult task, our feeling is that we should take responsibility for proposing an estimate of time series for food consumption in the three Vietnamese regions.

### 6. Capital Formation

- a) Public infrastructure: A
- b) Private infrastructure: C
- c) Machinery: A
- d) Construction : B
- e) Rural non-infrastructure private productive capital formation: B

The colonial administration had a problem with capital formation as a concept defined for the purpose of national accounting. Data collection was performed on public infrastructure but not on the private side. Private construction and investment in machinery was not systematically recorded. Investment by the agriculture, in indigenous and Chinese entrepreneurs, either transportation equipment or manufacturing and the cottage industry, was not a matter of much interest, although it was not absolutely neglected. Given the importance of capital formation series for analysing Vietnam's long-term economic dynamics, and industrial structure, it is however essential to address different issues and to collect the available data in order to estimate the various components, using indirect methods.

Public investment in infrastructure, public works, railways, telecommunication networks, etc., is precisely recorded in the yearly reports on public finance, but usually, the figures are for Indochina

as a whole and not for Vietnam. Behind this problem, we have to consider that several natives did not receive wages but contributed to these projects as forced workers or as a way to pay tax (corvée). The actual amount of the investment should be corrected to take into account the value of the labour factor. In addition to public investment, an enormous part of capital formation in infrastructure was the result of private local initiatives and investment. Public works aimed at controlling and improving dykes along the medium-sized and small rivers, and irrigation canals, were traditionally the responsibility of local communities. In Cochinchina, only the general scheme of irrigation was funded by public sources. Landowners invested heavily in secondary canals and other forms of land development (sea walls).

Capital formation in machinery could be estimated using machinery imported from France, the UK, the US, Germany, or Japan, as a proxy. We should however verify that domestic equipment production was non-existent, which is a common assumption; but it is likely that modern manufacturing companies, railways, tramways and electric power companies produced part of the equipment in-house. In order to improve the accuracy of the capital formation estimate. complementary task could be to confront Vietnamese imports series and the export data in the country of origin, concerning the prices of export commodities, for estimating the effective figures machinery imports. Since we are mainly interested in civil capital formation, public finance documents on expenditures by the French Army and Navy in Indochina could provide indications on military capital formation, and by contrast, the civilian part.

non-residential estimating residential and construction (public construction is included in the budget) the most reliable sources are certainly, once again, the reports of the fiscal administration. Indirect methods using the variation in the size of the French population are likely to induce an underestimation given that affluent Natives and Chinese had a living standard equivalent to the average European residents, at least in Cochinchina. In Tonkin, official restrictions existed on the size of Vietnamese houses, especially in Hanoi and other cities. Traditional construction in villages or towns is very difficult to estimate, and the same is true for the small buildings leased out to Vietnamese or Chinese middle class households. The average amount of the rents, monitored by the administration, could be an acceptable proxy if we can measure the pace of urban development (new constructions in square meters or,

using maps of the main cities, the yearly increase of the size of the urban area).

Finally, it is better not to neglect rural private productive capital formation. Official reports investigated the amount of labour factor inputs corresponding to the investment in non-annual crops (pepper, tea, coffee, rubber etc.). These kinds of surveys were essential to determine, in relation to world market prices, whether the development of such export crops was profitable for the native farmers or for French or Chinese investors. It was an interesting issue for the administration: land was often granted as a concession to these investors who paid a rent to the General Government. We may assume that something like an equilibrium level for rent was considered by the civil servants.

## 7. Prices and Wages

a) wholesale prices: A

b) retail prices: B

c) land prices: C

d) wages: A

On prices and wages, researchers interested in Vietnam economic history are lucky enough to have a comprehensive set of data, at least after WWI (however we have the problem of missing values during WWII, which was a period of hyper inflation in the whole of Asia). Wholesale and retail prices in Saigon and Hanoi were recorded by different institutions. The most reliable series are probably the commodity list of wholesale prices recorded on the markets. It is unclear if all the retail prices were actually recorded or calculated using wholesale price series and ad hoc hypotheses regarding the margin of the traders.

Different indices were published on food and housing rent and on living costs for three categories of residents: European, Asian White Collar, Asian Blue Collar. The original series are certainly daily, but the most easily available ones are monthly and of course yearly average data. A rapid survey on monthly variation indicates significant volatility, especially for rice and other basic food products. In addition, huge differences existed between the different regions of Vietnam and also between the countryside and the main cities.

Despite this positive news, we have to acknowledge we were unable to find land prices series, until now. They are certainly somewhere in the archives, where we will find reliable data to be used for fiscal polices; the Bank of Indochina certainly used to monitor this evolution. We have also several problems relating to export (and import) prices, which are presented in detail in section 9 on international trade.

In comparison, we have a good knowledge of wages in various sectors in terms of different categories of worker engaged in the public sector, including the opium monopoly and railways. Wages paid to the coolies in rubber plantations, to the day labourers in different parts of Vietnam, and to servants are also quite easy to find. Using these series as benchmarks, it might be possible to estimate the wages in other private activities, such as mining, manufacturing and above all for services in the traditional sector.

#### 8. Public Finance

- a) General Government: B
- b) local administration: A

As far as public finance is concerned, the situation is extremely clear: we have very good sources and comprehensive data after 1895, and almost nothing prior to that. The end of WWII and the outbreak of the Indochina war constitute an obviously difficult period but, with the exception of 1945, there should be complementary unpublished sources available in the archives.

Local administration is the easiest part of the research. For the central government (Indochina General Government) it is necessary to operate a geographical distribution of the receipts and expenditures. This implies a need to reconstitute the effective allocation of funding dedicated to public works, military expenses, construction, civil servants, etc. to Annam, Cochinchina, Tonkin, Laos, Cambodia (including the sale of public assets, land concessions, etc.). Part of Cochinchina's budget surplus was routinely transfered to Vietnamese budgets, or to Laos, or even Cambodia.

## 9. International trade

## a) Volume: A

b) Value: Cc) Prices: B

We need to be very cautious about international trade data because the colonial administration used different procedures to compensate for the lack of trained customs officers and other lower rank workers. The first problem is the result of a proxy volume = weight for estimating the value of exported or imported goods. Machinery or other manufacturing goods were measured in cubic meters and then converted into weight. If we neglect this problem, volume data can be considered and are reliable.

Another proxy used by the custom officer was that import or export prices of several goods were constant over the time. For several products, huge differences are observed between effective market prices and administrative prices. In order to avoid this kind of inconstancy in time series, we suggest that one calculate the implicit export price or import price of the main traded items. When necessary, one might use an estimate of the effective export price: an appropriate margin (of the representative export company) would be added to the local wholesale price. The same kind of procedure could be used for imported goods.

We will also have to remember that custom officials considered the international trade of Indochina as a whole and not of Vietnam. However, by chance, the administration used to also monitor transit trade between Cambodia and Cochinchina, or between Yunnan and Tonkin. Assuming that trade between Indochina and Thailand at the Cambodian or Lao border was negligible, we could estimate directly Vietnam's trade. But it seems useful to check the amount and volume of Cambodian international trade on the basis of the amount controlled by custom officers at different places on the border or in the ports on the Gulf of Siam. Another problem results from the concept of exports by private companies. It was not uncommon for a firm producing in Tonkin, for example a big French-owned spinning company, to declare as export the amount of the goods sold not only in Cambodia and Laos, but also in Cochinchina.

- 10. Exchange rates, capital flows and balance of payments
- a) Exchange rates: A
- b) Capital flows: C
- c) Balance of payments: B

Relatively abundant data are available on exchange rates, capital flows and balance of payments, but mostly concerning exchange rates in Saigon and public flows.

Both the French franc and the piastre were used for local transactions in Indochina; the French franc was the most important currency for public contracts (bonds issued on Paris stock market for public investment in Indochina and their repayment by the colonial administration, payment to local firms for public works for the General Government, wages of French civil servants, etc.) or international trade, even if several figures were published in piastre. The colonial administration used to display amounts in local currency while calculating in French francs, especially in the case of public finance. Besides the official exchange rate of the piastre vis à vis the franc, a market rate was monitored, in Saigon, by the Banque de l'Indochine. We have yearly and monthly averages for sterling, the US dollar and most Asian currencies between 1913 (or 1923) and 1940.

Differences in standard (silver versus gold) before 1914 and financial turmoil between 1914 and 1940 explained the instability of the piastre-franc exchange rate and the lag of the official rate behind the market rate. As a silver currency, the piastre followed the trend of depreciation of its main trading partners (Hong Kong and China), who were also on the silver standard. After 1930, the French franc peg changed the rules and amplified the volatility of the piastre vis-à-vis other Asian currencies. Due to the shortage of silver coins, a ban on its export was decided on in 1905, and this induced a dual circulation of the piastre, in Indochina on the one hand, and in Hong Kong and Singapore on the other hand. It would be interesting to check the differences between exchange rates in Indochina and Hong Kong or Singapore during this period. In addition, collecting data on market exchange rates in Hanoi (Banque de l'Indochine's data are on Saigon's exchange market) would allow one to estimate average rates for Vietnam.

On capital flows and balance of payments in Indochina, first estimates are found in the official report of the colonial administration as early as 1907. But the authors used to neglect a large fraction of private capital flows. More precisely, they had absolutely no idea about the transfers by Chinese merchants into Indochina of gold or foreign currencies. The implicit assumption is that Indochina's trade surplus, mostly the export of paddy and rice

by Chinese firms, was sufficient to finance further expansion, either in agriculture, food processing, trade or private construction. Regarding French companies, the monitoring of real investment into Vietnam, and profit repatriation, was a difficult task. France was probably the main source of direct investment or portfolio investment, but other European countries should not be neglected. During WWII, many French-Japanese joint-ventures were established in mining, trade and forestry which corresponded to real business agreements and effective capital flows, at least at the beginning.

Before 1945, all these data are for Indochina as a whole and we have therefore to estimate capital flows between Vietnam and Cambodia or Laos. The most important part corresponds certainly to transfers by the General Government to Cambodia, but essentially to Laos. French (or other foreign) private investment in Cambodia and Laos was concentrated in rubber plantations, forestry and mining and for a limited number of cases. For the 1945-54 period, the balance of payments concerns Vietnam but the documents can not be considered reliable. Part of the country was under control of the Viet Minh whose administration exported both goods and services, and in addition received grants in kind from the Chinese Communist Party, and also through China or France, from USSR.

### Conclusion

The constitution of a corpus of long-term economic statistics for Vietnam is a long and arduous task, but one that is possible and likely to be fruitful, especially if the investigations avoid limiting themselves to the compilation of statistics from annual reports but also examine the different public and private sources in the plethora of extant archives. It is indispensable to compare the macro-economic series which come from annual reports and the microeconomic or regional information which come from monographs, from anthropological or sociological studies, and from reports by local colonial administrators or by managers of companies or consulates. Only in this manner can one extract original information which would permit acceptable estimations of series which are missing or manifest lacunae. Thus, the agricultural production and rural population can not be evaluated except by a compilation of information adjusted by province or prefecture. Under those conditions, it would be possible to take into account the underestimation(s and discontinuities in the series, caused by politico-military or natural disasters, and even

the imperfections and ruptures in the working of the statistical apparatus.

Diversifying the sources offers a token of reliability for series which will emerge from a retrospective estimation. However, this method is made shakier by the absence of reasonable references, due to the impact of the Japanese occupation and especially of the Indochina War and then the Vietnam War. One would have to proceed with a double extrapolation. The South was less troubled by the war until 1954 and the statistical apparatus was a little less influenced by political considerations between 1954 and 1975. Researchers should correct the series for certain regions not under the control of the colonial administration between 1946 and 1954. This concerns especially the North where administrative control was weak. These resulting numbers could then be compared to the numbers collected during the 1930s, the last years of the modern era when the information remained fairly homogenous. Building on this groundwork, one could attempt to reconstitute series with gaps through retrospective extrapolation or interpolation.

This implies, over and above international co-operation between researchers, an effort to create a dialogue between archivists, historians, anthropologists and economists who will see results pertinent to their respective fields materialise from their mutual efforts: identification of different archives dispersed by political and military events, the knowledge of the quantitative economic environment surrounding economic, political and social facts, the comprehension of long-term economic dynamics and the possibility of international comparisons which could lead to new considerations regarding Vietnam's ability to catch up in a changing Southeast Asia at the end of the twentieth century.

## References

### General references

- ADAM Jean-Henri L'argent métal et la question monétaire indochinoise. La vie universitaire, 1922, 269p.
- AGERON Charles-Robert L'anticolonialisme en France.
- AGERON Ch. R. Les colonies devant l'opinion publique française (1919-1939). RFHOM, N°286, t. LXXVII, 1° trimestre 1990
- AGERON Ch. R. Le "Parti colonial". L'Histoire, Nº69, 1984. pp. 72-81.
- phot., bib.
- AGERON Ch. R. France coloniale ou parti colonial. PUF, Paris, 1978. ALGLAVE Paul La question monétaire en Extrême-Orient. Sirey, Paris, 1905. 120p.
- ANDREW Ch. KANIA-FORSTER A.-S. The French Colonial Party, its Aims and Influence. 1875-1914 The Historical Journal, XIV I, 1977, pp. 99-128.
- ANDREW Ch. KANIA-FORSTER A.-S. France Overseas The climax of French Colonial Expansion, 1914-1924. Stanford U. Press, 1981, 302p.
- ANDREW C. GRUPP P. KANYA-FORSTENER A. Le mouvement colonial français et ses principales personnalités. RFHOM, t. LXII, N°229, 1975. pp. 640-673.
- ARCHIMBAUD Léon Le problème monétaire indochinois. La Revue du Pacifique, 1934, N°2. pp. 69-74.
- ARCHIMBAUD Léon La grande aventure de la piastre indochinoise. La Revue
- du Pacifique, 1930, N°8. pp. 447-452.
- ARCHIMBAUD Léon La stabilisation légale de la piastre indochinoise. La Revue du Pacifique, 1930, N°6. pp. 348-353.
- ARCHIMRAUD Léon La belle tenue économique et financière de l'Indochine française gage de sa sécurité intérieure. La Revue du Pacifique, 1930, t. 1, N°5. pp.257-263.
- ARNAUD René L'expansion économique du Japon dans les colonies françaises. UNIVERS, N°17, Août-Sept. 1936. pp. 19-20.
- ARNAUNE Aug. La monnaie, le crédit et le change. Alcan, 1902, 431p. 2° édition.
- AUMIPHIN J-P. La présence économique et financière français en Indochine, 1858-1959. thèse de 3e cycle, Université de Nice, 1981 (published in French and Vietnamese, in 1996, by Editions des Statistiques du Vietnam, Hanoi).
- AUPHELLE Camille Le Crédi agricole mutuel indigène en Indochine française. Paris, G. Petit, 1939.
- AUVADE Robert Bibliographie critique des oeuvres parues sur 1 Indochine française. Paris, Maisonneuve-Larose, 1965. 154p.
- BAFFELEUF Antoine, Les impôts en Annam, Paris, Thèse de droit, Giard & Brière, 1910
- BASDEVANT J. Traités en vigueur entre la France et les puissances étrangères. Imp. Nationale, Paris, 1918. 3 vol (t.III : Japon), 370p.
- EALDY E. Les banques d'affaires en France depuis 1900. Paris, Librairie générale de droit et de jurisprudence, 1922.
- BARBIERI M. et Al. La situation démographique du Viet-Nam. Population 1995 / 3, pp 621-652.
- BARRAL Pierre Les groupes de pression et le tarif douanier français de 1892. Revue d'histoire économique et sociale. 1974. pp. 421-426.
- BARTHEL J. Regards sur l'Indochine, l'enquête d'une délégation ouvrière. Paris, ed. La Défense, 1941.
- BAUDOIN Henri La Banque de l'Indochine. Paris, Pedone, 1903, 237p. bib.
- BAUDOIN Henri La Banque de l'Indochine. Pedone, 1903, 237p. bib.

- BAUDUIN de BELLEVAL La piastre indochinoise. La Revue du Pacifique, 1923, N°4. pp. 426-444.
- BAZIN Le régime monétaire en chine et en Indochine. Conférence faite à l'école coloniale le 22 décembre 1909. Paris 1909, 56 pages dactylographiées. et Imp. Chaix, 1910. 22p.
- BERNARD (Capitaine) Fernand, L'Indochine erreurs et dangers un programme, Bibliothèque Charpentier, Paris, Fasquelle éd., 1901
  BERNARD Fernand (col) La mise en valeur des colonies et le
- programme d'Albert Sarraut La Revue de Paris, 1922, 15 septembre - 1er octobre, pp. 365-395 et pp. 543-560.
- BERNARD Paul Le problème économique indochinois. Les Nouvelles Editions Latines, Paris, 1934.
- Paul Les nouveaux aspects du problème économique indochinois. Les Nouvelles Editions Latines, Paris, 1937.
- BERNARD Paul L'Indochine et le problème de l'industrialisation. Paris, Imprimerie Clerc, 1937.
- BIENVENUE R. Régime de la propriété foncière en Annam. Rennes Imprimerie F. Simon, 1911.
- BIGORGNE O. L'hyadraulique agricole dans le delta tonkinois. Bulletin Economique de l'Indochine, 16, 1938. pp. 486-515. BIGORGNE O. La mise en valeur de l'Indochine par le Service des
- Travaux publics. Ecrits de Paris, novembre 1952, pp.57-66.
- BINOCHE-GUERDA Jacques La représentation parlementaire coloniale, 1871-1940. Revue Historique, 1988, N° 586, pp. 521-535.
- BLONDEL Fernand La géologie et les mines de l'Indochine. Paris, Académie des Sciences coloniales, 1933.
- BLUM Alain, BONNEUIL Noël, BLANCHET Didier Ed. Modèles de la démographie historique, INED, 370 p. 1992.
- BORIE J. Le métayage et la colonisation agricole au Tonkin. Paris, Giard et Bière, 1906.
- BOUDET, P., BOURGEOIS, R. Bibliographie de l'Indochine française. Hanoi, IDEO 1929, 1943 - Paris, Maison-neuve, 1967. 1 vol. en 4 tomes, 1 vol. de tables.
- BOUDET, P., BOURGEOIS, R. Bibliographie de l'Indochine française. Hanoi, IDEO 1932.
- BOUDILLON A. La réforme du régime de la propriété foncière en Indochine. Hanoi, IDEO, 1927.
- BOUDILLON A. Le régime de la propriété foncière en Indochine : ce qui a été fait et ce qu'il faudrait faire. Paris, Laroze, 1915.
- BOUINAIS A ; PAULUS A La Cochinchine contemporaine. Paris, Chalamel ainé, 1884.
- BOUINAIS A ; PAULUS A La France en Indochine. Paris, Chalamel ainé, 1886.
- BOURBON André Le redressement économique de l'Indochine 1934-1937. Lyon, Bose, Riou, 1938.
- BOURNIER G. Etude sur la variation des frets indochinois de 1919 à 1924. Bulletin Economique de l'Indochine, N°176, 1926. pp.43-68.
- BRASS W., (1975), Methods for estimating fertility and mortality from limited and defective data, Chapel Hill.
- BREBION A., CABATON A. Dictionnaire de biobibliographie générale, ancienne et moderne, de l'Indochine française. ed. Géographiques, maritimes et coloniales, Paris, 1935. Annales de l'Académie des sciences coloniales, T. VIII. 448p.
- ERENIER Henri Essais d'atlas statistique de l'Indochine. Hanoi, IDEO, 1914.
- BRENIER Henri Les ressources de l'Indochine et leur mise en valeur après la guerre. Paris, Melun, 1916. 39p.
- BRENIER Henri Notes sur le développement économique de l'Indochine de 1897 à 1901, comparé avec la période quinquenale 1892-1898. Hanoi, Schneider, 1902.
- BRETON Maurice, Le budget général de l'Indochine, Paris, Thèse, 1907

- BROCHEUX Pierre Grands propriétaires et fermiers dans l'ouest de la Cochinchine pendant la période coloniale. Revue Historique N°246, juillet-septembre 1971, pp. 59-76.
- BROCHEUX Pierre Les grands "Dien Chu" de la Cochinchine occidentale pendant la période coloniale. dans CHENAUX et al. Tradition et révolution au Vietnam. Paris, Anthropos, 1971. pp. 45-63.
- BROCHEUX Pierre Le prolétariat des plantations d'hévéas au Vietnam méridional : aspects sociaux et politiques (19 Mouvement Social, N°90, janvier-mars 1975. pp. 54-80. (1927-1937).
- BROCHEUX Pierre HEMERY Daniel Indochine la ambiguë,1858-1954. Paris, édition la découverte, cartes, stat. pp. 115. cf. pp. 417-427. la colonisation 1995. 427p.,
- BRUNSCHWIG H. Le parti colonial français. dans RFHOM, t.XLVI, 1959, pp. 49-83.
- BUNOUT R. La main d'oeuvre et la législation du travail en Indochine. Bordeaux, Delmas, 1936.
- CADY J. F., The roots of French Imperialism in Eastern Asia, Ithaca (New York), Cornell Unversity Press, 1967.
- CALLIS Helmut Foreign Capital in South East Asia. New York, International Secretariat, Institute of Pacific Relations, 1942.
- CAMUS Jean-Jacques Les plantations de caoutchouc en Cochinchine, l'oeuvre humaine et sociale. Paris, Bibliothèque d'Afrique et d'Outre-Mer, 1949.
- CARDOT J. Les principaux produits d'exportation de l'Indochine. Agence économique de l'Indochine, Paris, 1931. 2 volumes.
- CARLE Edmond Le riz en Cochinchine. Cantho, Imprimerie de l'Ouest, 1933.
- CARLE Emile L'hévéas Brasiliensis en Indochine. Saigon, Portail, 1912.
- CARTON P. Le caoutchouc en Indochine. BEI, 1924, pp. 349-456.
- CAZAUX Lucien La piastre. Bull. de la soc. des études Indo.de Saigon, 1° sem. 1911. pp. 23-24.
- CHALILAND Gerald The Peasants of North Viet Nam. Baltimore, Maryland, Pelican, 1969.
- CHEVALIER Auguste (et al.) L'observations. Saigon, Ardin, 1918. - L'hévéa en Indochine.
- CHESNEAUX Jean Contribution à l'histoire de la nation vietnamienne. Editions Sociales, Paris, 1955.
- COLAS Raoul Les relations commerciales entre la France et l'Indochine. Lois et Faits. F. Loviton, Domat-Montchretien, 1933. 330p, bibl.
- COQUEREL Albert Paddys et riz de Cochinchine. Lyon, A. REY, 1911. DALLOZ Jacques - La guerre d'Indochine 1945-1954, Paris, Point-Seuil, 1987
- DAVID Gilbert Chroniques secrètes d'Indochine, 1928-1946. coll. Mémoires asiatiques, l'Harmattan, Paris, 1994. 2 vol., 861p.
- DECAMPS J., Développement historique de la Régie de l'opium, Bulletin
- du Comite de l'Asie française, n°96, mars 1909, p. 110 à 123 DESCOURS-GATIN C., Opium et finances coloniales: la formation de la Régie Générale de l'opium en Indochine (1860 1914), Paris, Thèse de doctorat de troisième cycle en histoire, Université Paris VII, 1987
- DESCOURS-GATIN C., Quand l'opium finançait la colonisation Indochine -l'élaboration de la régie générale de l'opium (1860 à 1914), Paris, éd. L'Harmattan, coll. Recherches Asiatiques, 1992
- DELAMARRE, E. L'émigration et l'immigration ouvrière en Indochine. Hanoi, IDEO, 1931.
- DE LANESSAN J. L., La colonisation française en Indo-Chine, Paris, Bibl. d'Histoire contemporaine, Félix Alcan éd., 1895
- DEMARTIAL G. La politique monétaire de l'Indochine. Bureau de la Revue politique et parlementaire, 1908. 15 p. Revue politique et parlementaire.

- DEMORGNY Gustave, Les principales réformes financières en Indochine, de 1897 à 1899, Paris, Thèse, 1899
- DENIZET Pierre Essai sur les banques coloniales. Paris A. Pedone, 1899.
- DEPINCE Ch. La question monétaire en Indochine. Résumé de la conférence faite à l'école coloniale le 29 mars 1905. Imprimerie
- de la Dépêche coloniale, s.d., 7 p.
  DESCAMPS J. Le développement historique de l'impot sur l'alccol. BCAF, juin 1909, pp. 244-257.
- DESCAMPS J. Le développement historique de la Régie de l'opium. BCAF, mars 1909, pp. 110-123.
- DESCAMPS J. L'impot sur le sel en Indochine. BCAF, avril 1909, pp. 155-165.
- DESCHAMPS Renée La main d'oeuvre en Indochine et l'immigration étrangère. Poitiers, M. Bousnex, 1908.
- DESCOURS-GATIN C., VILLIERS H. Guide de recherche sur le Vietnam.
- Bibliographies, archives et bibliothèques en France. L'Harmattan, Paris, 1983. 259p. DESCUBES R. Le principe de l'assimilation dans la loi de 1928.
- Domat-Monchrestien, 1934.
- DEMANGEON M. A., rapporteur. Les conséquences du développement économique du Japon pour l'Empire français. Rapport préparé par le groupe d'étude du Pacifique, sous la présidence de M. A. DEMANGEON, Professeur à la Sorbonne. Rapporteur - Roger LEVY. Hartmann, 1936. 183p., ann., bib.
- DESPUECH Jacques Le trafic de piastres. Deux Rives, 1953. 169p, ill.
- DESPUECH Jacques Missions inutiles à Saigon. La Table ronde, 1955, 286 p.
- DETIEUX Marcel La question monétaire en Indochine. Larose, 1907. 417p, bib.
- DEVOS Jean-Claude ; NICOT Jean ; SCHILLINGER Inventaire des archives de l'Indochine. Sous SERIE 10H (1867-1956). Service Historique de l'Armée de Terre. 1990. 2 Tomes. Tome 1 - Période 1865-1939, Corps Expéditionnaire du Tonkin, puis Troupes d'Indochine, pp. 9-25 et 120-143.
- DISLERE P. et DE MOUY R., Droits et devoirs des français dans les pays d'orient et d'extrême-orient, Paris, Librairie du recueil Sirey éd., 1949 et mise à jour 1951
- DOLOBARATZ A. Le change aux colonies. ed. Rasquin, Paris, 1922.
- DOUMER Paul Situation de l'Indo-chine (1897-1901), rapport par le Gouverneur général, Hanoï, Schneider éd., 1902
- DOUMER Paul L'Indochine française, souvenirs. Paris, Vuibert et Nony, 1905.
- DUBREUIL René De la condition des Chinois et de leur rôle éconmique en Indochine. Bar sur Sein, imp. C. Caillard, 1910.
- DUCHENE Albert Histoire des finances coloniales de la France. Paris, Payot, 1938.
- DUCRET Ct. L'Indochine économique. Les monnaies d'argent en Indochine et en Extrême-Orient. Bulletin de la société française des ingénieurs coloniaux, N°35, 1905. pp. 1-21.
- DUMAREST André La formation des classes sociales en pays annamite. Lyon, Ferreol, 1935.
- DUMAREST André, Les monopoles de l'opium et du sel, Lyon, Thèse Bosc et Riou, 1938
- DURAND Guy Marseille, l'Indochine et la crise ; de la riziculture à l'industrialisation. - Marseille colonial face à la crise de 1929. "Histoire du commerce et de l'industrie de Marseille, XIXe-XXe siècles", Tome VI, CCIM, Marseille, 1991.
- DURAND Guy Le commerce extérieur de l'Indochine française. Etudes Indochinoises III, Etudes et Documents N°25, IHPOM, Aix en Provence, 1993. pp. 47-56.

- ECKERT L. F. La piastre indochinoise. Change, transfert et trafic. Dévaluation et répercussions économiques. France Indochine, N°99, Juillet 1953. pp. 193-194.
- ERNY René Les concessions de terres domaniales en Cochinchine. Poitiers, Blais et Roy, 1904.
- ESTEBE Paul Le problème du riz en Indochine. Toulouse, F. Boisseau, 1934.
- FAGET Jean Les deux camps indochinois. le Courrier Colonial, 7 mai 1920.
- Mémoire relatif au régime monétaire de l'Indochine. Gouvernement général de l'Indochine, Direction générale des finances. E Larose, 1914. 64p. 1 graph.
- FERAY Pierre-Richard Le Viêt-nam au XXe siècle. P.U.F., Paris, 1979. Carte, index, bib., 272p.
- FERRY René Etude sur le régime douanier de l'Indochine. Larose, Paris, 1912. 304p.
- FEYSSAL Paul, de L'endettement agraire en Cochinchine. Hanoi, IDEO, 1931.
- FEYSSAL Paul, de La réforme foncière en Indochine. Hanoi, IDEO, 1931.
- FIDEL Camille L'utilisation par la France de son domaine d'outremer. Paris, Société d'Etudes et d'Informations Economiques, 1926. 16p.
- FOURNIAU Charles Politique coloniale ou "politique mondiale" : Doumer et le Yunnan. Histoires d'Outre-Mer, mélanges en l'honneur de Jean-Louis Miège. Aix en Provence, IHPOM, Université de Provence, 1992. 720p., 2t.
- FOURNIER WAILLY Charles La propriété annamite et le Crédit foncier indigène. BCAF, mai 1909, pp. 204-211
- FRANCHINI Ph. (dir.) Saigon 1925-1945; De la "Belle colonie" à l'éclosion révolutionnaire ou la fin des dieux blancs. Série Mémoire, coll. Autrement, N°17, Paris, septembre 1992. 260p. Articles de P. Brocheux, Bui Xuan Quang, D. Hemery, K. Lefèvre, Nguyen Trong Thuy, J.-L. Pretini.
- FREEMAN Margorie F. Industry in French Indochina. Washington D.C.US Government Printing Office. Office of Economic Warfare, 1943.
- FUKUI Haruhiro ed. Politicals parties of Asia and the Pacific. Historical
- Encyclopedia of the world's Political Parties. Greenwood Press, Connecticut, 1985. 2 vol. Kampuchea pp. 633-647, Laos pp. 701-789, Vietnam pp. 1091-1197.
- GANTES Gilles (de) Coloniaux, Gouverneurs et Ministres. L'influence des Français du Vietnam sur l'évolution du pays à l'époque coloniale, 1902-1914. Doctorat, Université de Paris VII-Diderot, 1994.
- GAY-LUGNY Louis Du commerce extérieur de l'Indochine. Paris, E. Larose, 1910
- GENDREAU F., FAUVEREAU V., DANG Thu.- Démographie de la péninsule indochinoise.- Paris, ESTEM.- 1997. 132 p.
- GEOFFROY M. Les grandes plantations de caoutchouc. Extrème-Asie, 7, janvier 1927, pp. 235-238.
- GERARD Emile Les plantations d'hévéas en Indochine. Paris, Société des Editions Maritimes et Coloniales, 1924.
- GERVAIS R.- Statistiques, langage et pouvoir dans la société coloniale.- Annales de démographie historique, 1987, pp 57-65.
- GERVILLE-REACHE La stabilisation de la piastre indochinoise. Enquête faite auprès de MM. O. Homberg, col. F. Bernard, Pasquier, A. Sarraut, J. Van Vollenhoven, François-Marsal, Carrère, L. Pommery, M. Merlin, Audap, F. Piétri, Thion de la Chaume. ed. de la Dépêche Coloniale, Paris, (1928).
- GIACOMETTI J-D. La question de l'autonomie de l'Indochine et les milieux coloniaux français, 1915-1928. Thèse de de Doctorat,

- Universite de Provence, Institut d'Histoire Comparée des Civilisations, 1997.
- GINOUX C.-J. L'affaire de la piastre. La Revue des Deux Mondes,  $1^{\circ}$  août 1953, pp. 554-562.
- GIRARD E. Académie des sciences coloniales, extraits des Comptes rendues du tome II. Les plantations d'hévéas en Cochinchine. Paris, Augustin Challamel, 1924.
- GIRARD E. La main d'oeuvre en indochine. Paris, Expostion coloniale, 1931.
- GITTINGER J. Price Communist Land Policy in North Viet Nam. Far Eastern Survey 28-8, august 1959, pp 113-126.
- GLAISE Pierre Le commerce de l'Indochine avec l'Extrême-Orient. Mémoire de l'ENFOM, 1937-1938.
- GONJO Yasuo La Banque de l'Indochine, 1875-1940. Publications du Ministère des Finances, Paris, 1994. 425p., index, stat. biblio. pp. 390-410.
- GONJO Yasuo La banque coloniale et l'Etat : la Banque de l'Indochine devant l'interventionnisme (1917-1931). Le Mouvement Social, №142, janvier-mars 1988, pp.45-74.
- GOUDAL Jean Labour Problems in Indochina. Asiatic Review 24, july 1928, 361-368.
- GOUDAL Jean The Question of Forced Labour Before the International Labour Conference. International Labour Review 19, may 1929, 631-633
- GOUDAL Jean Labour Legislation in Indochina. Asiatic Review 30, january 1934, 136-145.
- GOUDAL Jean Labour conditions in Indo-china. Geneva, League of Nations, International Labour Office, Studies and Repots, Series B,  $N^\circ$  26, 1938
- GOUDAL Jean Problèmes du travail en Indochine, Genève, BIT, 1937.
- GOUROU Pierre L'utilisation du sol en Indochine. Paris, Centre d'étude de politique étrangère, 1940.
- GOUROU Pierre Land Utilisation in French Indochina. New York, Institute of Pacific Relations, 1945.
- GOUROU Pierre The Standart of Living in the Delta of Tonkin. Hot Springs, Virginia, Institute for Pacific Relations, French paper #4, 1945.
- Guide des sources sur l'histoire du Vietnam moderne du Centre des Archives N°1 de la République Socialiste du Vietnam. Hanoi, 1995.
- Guide des fonds d'archives d'epoque coloniale, conserves au Centre n°1 des Archives Nationales du Vietnam, Hanoi. Cuc Luu Tru Mha Nuoc, Hanoi, 1995.
- GUILLEN P. Milieux d'affaire et impérialisme colonial. Relations Internationales, 1974  $N^{\circ}1$ , pp. 65-79.
- GRANDEL Auguste Le développement économique de l'Indochine française. Saigon, C. Ardin, 1936.
- GRENARD A. F., Etude sur l'organisation budgétaire de l'Indochine française, Paris, Thèse en Droit, Arthur Rousseau éd., 1904
- GRUVEL A. L'Indochine, ses richesses marines et fluviales, paris, Societe d'edition geographique, maritime et coloniale, 1925.
- GUILLAMAT Pierre L'industrie minière de l'Indochine en 1934. BEI 13, mai-juin 1935, pp. 250-260.
- GUILLAMAT Pierre L'industrie minière de l'Indochine en 1934. BEI 13, juillet-octobre 1935, pp. 455-461.
- GUILLAMAT Pierre L'industrie minérale en Indochine en 1934. BEI 16, 1938, pp. 1245-1282.
- HANWELL Norman Indo-China Coal Compete in Canada. Far Eastern Survey, 7, 19 septembre 1938, p228.
- HARDY A. Les opinions de Paul Bernard (1892-1960) sur l'économie de l'Indochine coloniale et leur actualité. Revue Française d'Histoire de l'Outre Mer, 82-308, pp 297-338.
- HAUTEFEUILLE L. Table générale des matières contenues dans le "bulletin économique de l'Indochine" depuis sa fondation en 1898

- jusqu'à 1922, suivit de Table par noms d'auteur. Grenoble, J. Baratier, 1924.
- HEMERY D. L'Indochine au temps des Français : colonisateurs et colonisés, 1858-1954. La Découverte, coll. Textes à l'appui, Paris. 1994. 400p.
- HEMERY D. Ho Chi Minh, de l'Indochine au Vietnam. Gallimard, coll. La Découverte, Paris, 1990. 190p., index. ill., chrono.
- HENRY Yves Economie agricole de l'Indochine. Gouvernement général de l'Indochine, Hanoi, IDEO, 1932.
- HENRY Yves ; de VISME, M. Documents de démographie et de riziculture. Gouvernement général de l'Indochine, Hanoi, IDEO, 1928.
- HEROULY Lucien La crise monétaire en Indochine Piastre ou Franc; l'introduction du franc s'impose en Indochine. Imp. moderne Hérouly et Montégout, Saigon, 13 04 1920. 13p.
- HESNARD Dr. A., la fabrication, de l'opium à Saïgon, La clinique Organe du praticien, nouvelle série, n°140, fév. 1930 (B), Variétés, p. 77 et 78 (avec 6 reproductions de la Manufacture de Saïgon)
- HO Hai Quang Le rôle des investissements français dans la création du secteur de production capitaliste au Vietnam méridional. Thèse pour le doctorat d'Etat es-sciences économiques, Université de Reims, 1982. 598ff. ronéot., cartes, bib., annexes.
- HO Hai Quang La formation du secteur de production capitaliste au Vietnam méridional. 1859-1918. La théorie des capitaux importés à 1 épreuve des faits. RFHOM, 1985, N°267, pp. 223-244.
- HOMBERG Octave Rapport au Gouverneur général, sur l'organisation et le recrutement de la main d'oeuvre agricole en Indochine. Bulletin des Planteurs de Caoutchouc, 8 juin 1927.
- JAUJON Paul Comité régional de Marseille et région sud des Conseillers du Commerce Extérieur ; rapport sur la Mise en Valeur. Marseille, Lecomte imp., 1927. 14p.
- KHERIAN Georges La querelle de l'industrialisation de l'Indochine. Revue indochinoise juridique et économique, 4 1938, pp. 629-667.
- KHERIAN Georges Les méfaits de la surpopulation deltaique. Revue indochinoise juridique et économique, 3 1938, pp. 467-505. KOLSKY Maurice, MUSZINSKI M. Les billets de la Banque de
- KOLSKY Maurice, MUSZINSKI M. Les billets de la Banque de l'Indochine, avec la participation de M. David August. Préf. de D. Deloi. Courson, Ed. Le Bandit, 1985. 256p.
- LE FAILLER P. Le mouvement international anti-opium et l'Indochine, 1906-1940. These de Doctorat, Universite de Provence, Institut d'Histoire Comparee des Civilisations, 1993.
- LEE R. D.- Inverse projection and back projection: a critical appraisal, and comparative results for England, Population Studies, pp. 233-248, 1985.
- LA MACHE Ch. La stabilisation de la piastre en Indochine. Bull. de la Société de géographie commerciale de Paris, 1906. pp. 718-724.
- LABUSSIERE M. Etude sur la propriété foncière rurale en Cochinchine et particulièrement dans l'inspection de Soctrang. Excursions et Reconnaissances, 3 1880, pp. 331-341.
- LAFARGUE Jean-André L'immigration chinoise de l'Indochine ; sa réglementation ; ses conséquences économiques et politiques. H. Jouve ed., Paris, 1909. 382p.
- LAFFEY John Roots of French Imperialism, à propos des thèses de John Cady. Revue d'histoire moderne et contemporaine, avril-juin 1969.
- LAFFEY John Municipale Imperialism in Decline; the Lyon Chamber of Commerce, 1925-1938. French Historical Studies, N°9, 1975, pp. 329-353.
- LAFFEY John Land, Labor, and Law in Colonial Tonkin before 1914. Historical Reflexions, 2 winter 1975, pp. 223-263.
- LAGANA Marc Eugène Etienne and the économie of empire. in Proceeding of the third meeting of the french colonial historical

- society. 5-7 mai 1977. Concordia U., Montréal, Canada. Heggoy ed. Athens Georgia. FCHS, 1978. 180p. pp. 138-150.
- LAGANA Marc Le Parti colonial français. Eléments d'Histoire, P.U. du Quebec, Quebec, 1990. 190p. bib.
- LAGANA Marc A propos de l'interdépendance des milieux d'affaires et des milieux politiques : le cas des Tréfileries et Laminoirs du Havres, de 1901 à 1918. RFHOM, 1979, N°242-243, pp. 59-71.
- LANESSAN Jean-Louis L'Indochine française. Paris, F. Alcan, 1889.
- LANESSAN Jean-Louis La colonisation française en Indo-Chine. Paris, F. Alcan, 1895.
- LANTENOIS Henri Production minière au Tonkin. BEI, 1909, pp. 375-379
- LANTENOIS Henri Situation minière en 1903-1904. BEI, 1904, pp. 353-359.
- LASSERRE Fernand Cochinchine française, recueuil de jurisprudence en matière indigène, années 1880-1885. Saigon, Guilland et Martinon, 1886.
- LAURENT André La Banque de l'Indochine et la piastre. Paris, Deux-Rives, 1954.
- LAURENT Arthur la Banque de l'Indochine et la piastre. Deux Rives, 1954. 250p.
- LAVROV S. E. Indo-China and its Mineral Wealth. Engeneering and Mining Journal 142, January 141, pp. 51-63.
- LE Quy Hong-Duc La baisse mondiale de l'argent-métal et les problèmes monétaires de l'Indochine coloniale avant 1914. Etudes Indochinoises I.
- IHPOM, Université de Provence, 1987. pp. 74-114.
- LE Quy Hong-Duc Incidences économiques et sociales des fluctuations de la piastre avant et après la première guerre mondiale. Thèse de troisième cycle, 1971. IHPOM, Université de Pce, Aix-en-Provence.
- LE Quy Hong-Duc Problèmes de la piastre indochinoise. Diplôme d'Etudes Supérieures, 1967. Institut d'Histoire des Pays d'Outre-Mer, Université de Provence, Aix-en-Provence.
- LE FAILLER Ph. et MANCINI J-M., Vietnam, Sources et Approches. Actes du Colloque Euro-Viet 2, (Aix-en-Provence, 4-5-6 mai 1994). Presses Universitaires de Provence, Aix-en-Provence, 1995.
- LE MYRE DE VILLIERS, Charles Les institutions civiles de Cochinchine, 1879-1881 ; recueil des princiaux documents officiels. Paris, E. Paul, 1908.
- LEGENDRE A. F. Un programme d'action économique en Indochine. la Revue de Paris, 1° mai 1917, pp. 186-203.
- LEGENDRE A. F. Problèmes d'Indochine. la Revue de Paris, 1 septembre 1924, pp. 183-200.
- LEONARDI C. H. L'usure en Cochinchine. Extrême-Asie 6, mai 1926, pp. 220-231.
- LEONARDI C. H. L'usure en Cochinchine. Extrême-Asie 6, juin 1926, pp. 281-288.
- LESAULCE Adolf La commune annamite et l'organisation administrative. Paris, Sirey, 1912.
- LEURENCE F. Etudes statistiques sur le développement économique de l'Indochine de 1899 à 1923. BEI 2 1925, pp. 127-161.
- LEURENCE F. Les variations du coût de la vie pour les européens à Saigon de 1910 à 1925. Bulletin économique de l'Indochine, N°174, 1925. pp. 435-448.
- LIEU Cao Thi ; CADIER Sylvie Asie du sud-est continentale et espaces voisins, catalogue bibliographique. Valbonne, CNRS, CeDRASEMI, 1986. 483p.
- LINDHOLM Richard (ed.) Viet Nam, the First Five Years. East Lansing, Michigan State University Press, 1959.
- LOCHARD A. Le système monétaire indochinois et sa transformation probable. L'Avenir du Tonkin, N°9927, 21 mai 1929.
- LOSCHA C. Vietnam or Indochina ?. Copenhagen, NIAS Books, 1995.

- LOYE E. Historique du crédit agricole mutuel indigène de Cochinchine. Conférence faites le 4 février 1929. Imp. Testelin, Saigon, 1929. 55p.
- LU Van Vi La propriété foncière en Cochinchine. Paris, Loviton, 1939.
- LUCHAIRE F., Manuel de droit d'outre-mer Union française, Afrique du nord, Territoires d'outre-mer, Indochine, Paris, Paul Dupont éd., 1893; et nouvelle édition 1949
- LY Binh Hue Le régime des concessions domaniales en Indochine. Paris, Domat-Monchrétien. 1931.
- MACEY Paul Deux ans d'exploration commerciale en Indo-Chine, 1889-1891. Paris, Bulletin de la Société de Géographie, 1892.
- MADDISON Angus L'économie mondiale 1820-1992. Analyse et statistiques. Paris, OCDE, Etude du Centre de Développement, 1995. 274p., stat.
- MAILLARD J. Navigation fluviale en Indochine. Encyclopédie Mensuelle d'Outre-Mer, 44 avril 1954, pp. 132-134.
- MAILLARD J. Hydraulique agricole en Indochine. Encyclopédie Mensuelle d'Outre-Mer, 45 mai 1954, pp. 169-172.
- MARCILLE Georges L'extension à l'Indochine de la législation métropolitaine des accidents du travail. Paris, Les Presses Modernes, 1936.
- MARTINEAU, ROUSSIER, TRAMOND Bibliographie d'histoire coloniale, 1900-1930. Paris, Société d'Histoire des Colonies Françaises, 1932. 660p.
- MARR David Vietnam, World Bibliographical Series vol. 147. Oxford S. Denver, Clio P., 1992. 394p.
- MARR David G. Vietnam 1945, the quest for power, Berleley, Univ. of California Press, 1995.
- MARSEILLE Jacques Empire colonial et capitalisme français, histoire d'un divorce. coll. Point Seuil, 1986. 460p., bib, index.
- MASPERO Georges (ed.) Un empire colonial français : l'Indochine. Paris, Van Oest, 1929.
- MASSON André Histoire de l'Indochine. PUF., Paris, 1950, coll. QSJ, 128p.
- MATHIEU Edgard Le prêt usuraire et le crédit agricole en Cochinchine. Paris, Sirey, 1912.
- MATHIEU Edgard La propriété foncière et ses modalités en droit annamite. Paris, Larose, 1909.
- MAURETTE F. Le caoutchouc, éude de géographie économique. Annales de géographie, septembre 1924, pp. 409-429.
- MAW Kuey Tsai Les Chinois du Sud-Vietnam. Paris, Bibliothèque Nationale, 1968.
- MAYBON Albert L'Indochine. Paris, 1931. 197p., carte.
- MEULEAU Marc Des pionniers en Extrême-Orient, Histoire de la Banque de l'Indochine. Arthème, Fayard, Paris, 1990. 650p., cartes, index.
- MIDDLETON W. L. French Colonial Policy. Contemporary Review, August 1934, 194-203.
- MILLER E. Willard Industrial Ressources of Indochina. Far Eastern Quarterly 6, august 1947, pp. 396-408.
- MILLER E. Willard Mineral Ressources of Indochina. Economic Geography, 22 1946, pp. 268-279.
- Ministère des Relations Extérieures Archives du Ministère des Relations
- Extérieures ; depuis les origines. Imprimerie Nationale, Paris, 1985. 2 Tomes, 480 et 523p., index géogr. et des noms.
- MITCHELL B.R. International Historical Statistics, Africa, Asia & Oceania 1750-1988 (second revised edition), London, MacMillan, 1995.
- MONET P. Les jauniers. Gallimard, Paris, 1930
- MONIER René La question du monopole de l'alccol au Tonkin et dans le nord-Annam. Paris, Larose, 1913.

- MONNIER A.- Données récentes sur la population du Viet-Nam.-Population 1981/3, pp 609-619.
- MORDAING J. Le monopole des alccols indigènes au Tonkin et dans le Nord Annam. Hanoi-Haiphong, IDEO, 1913.
- MOREL J. Les concessions de terres au Tonkin, These pour le doctorat, Paris, A. Pedone, 1912.
- MORICE, J. Les accords commerciaux entre l'Indochine et le Japon. Thèse de droit, 1933.
- MORICE, J. Conséquences du développement économique du Japon sur les colonies franciases, 1936.
- MORON Henri La lutte contre le paludisme dans les collectivités ouvrières. Hanoi, IDEO, 1931.
- MORRISSON Lawrence Industrial Development Efforts. dans LINDHOLM Richard (ed.) Viet Nam, the First Five Years. East Lansing, Michigan State University Press, 1959, pp. 214-234.
- MOSCAT Henri Un echec, 50 ans de colonialisme économique en Indochine. Les Temps modernes, 9, aout-septembre 1953, pp.388-400.
- MURRAY Martin J. The development of capitalism in colonial Indochina 1870-1940. Berkeley, California U.P., 1980 XII-685p.
- MUS Paul Viêt-nam, sociologie d'une guerre. Seuil, Paris, 1952.
- NETON Alberic L'Indochine et son avenir économique. Paris, Perrin, 1904.
- NGO Vinh Long Before the Revolution; Vietnamese Peasants under the French. Cambridge, Mass. MIT Press, 1973.
- NGO Van (1996), Vietnam 1920-1945, revolution et contre-revolution sous la domination coloniale, Paris, l'Insomniaque.
- NGUYEN Duc Nhuan Contraintes démographiques et politiques de développement au Viet-Nam 1975-1980. Population 1984 / 2, pp 313-337.
- NGUYEN Quoc Dinh Les congrégations chinoises en Indochine française. Paris, Sirey, 1941.
- NGUYEN Tan Loi L'économie commerciale du riz en Indochine. Paris, Loviton, 1938.
- NGUYEN Thanh Mha Tableaux économiques du Vietnam aux XVIIe et XVIIIe siècles. Paris, Cujas, 1970.
- NGUYEN Van Phong.- La société vietnamienne de 1882-1902.- Paris, PUF.- 1971. 388 p.
- NGUYEN Van Vinh Les réformes agraires au Vietnam. Université de Louvain, Faculté des Sciences Economiques, 1961.
- NICOT Jean WAKSMAN Pierre de MENDITTE BODINIER Inventaire des archives de la Guerre, Série N, 1920-1940. Ministère de la Défense, SHAT. 1981. 5 Tome. Tome I : E.M.A. et attachés militaires : 7 N.
- NOGARO Le problème monétaire indochinois. Revue Economique Internationale, 04-1922.
- NORLUMD Trène Rice production in Colonial Vietnam 1900-1930. in Norlund, Cederroth and Gerdin eds: Rice Production, Asian Problems and Prospects, Curzon Press, 1986.
- NORLUND Irène The French Empire, the Colonial State in Vietnam and Economic Policy, 1885-1940. Australian Economic History Review, mars 1991,
- NORLUND, Irène Foreign Trade of French Indochina: 1885-1940; Between France and the East. Copenhagen, European Vietnam Studies Conference, 1993.
- Nº XXXI Exploring Southeast-Asia Economic Past.
- O.N.U. Les mouvements internationaux de capitaux entre les deux guerres. 1949.
- ORY Pierre La commune annamite au Tonkin. Paris, Challamel, 1894.
- OSBORNE Milton The French Presence in Cochinchina and Cambodia; Rule and Response. Ithaca, New-York, Cornell U.P. 1969.
- OUALID William Le privilège de la Banque de l'Indochine et la question des banques coloniales. Paris, Marcel Girard, 1932.

- PARGOIRE L. Le problème monétaire en Indochine. Larose ed., Paris, 1933. 159p. ann.
- PAULIN Henri Le régime minier des colonies françaises. Paris, Larose, 1920.
- PEGOURIER Yves Le marché du riz d'Indochine. Paris, librairie technique et économique, 1936.
- PERROT Marguerite La monnaie et l'opinion publique en France et en Grande-Bretagne de 1924 à 1936. Paris, Colin, Cahiers de la FNSP, N°65, 1955. 255p., ill.
- PERSELL S., Michael The Role of the Union Coloniale Française and Fédération Intercoloniale in the Colonial Tariff Reform, 1893-1925. Historical reflexions/Réflexions historiques, vol. 8, N°1, printemps 1981, 77-91.
- PERSELL M. Chailley-Bert and the importance of the "Union coloniale française". dans Historical Journal, vol XVII, N°1, 1974. pp. 176-184
- PERSELL M. The French Colonial Lobby, 1889-1939. Stanford, C. A. Hoover Institution Press, 1983.
- Hoover Institution Press, 1983.

  PEYROUTON Bernard Etude sur les monopoles en Indochine. Paris Larose, 1913.
- PIERROT A., Les premiers rapports financiers entre les gouvernements français et annamites, Thèse de droit, Paris, Presse modernes éd., 1933
- PILA J. J., Le trafic des stupéfiants et la Société des Nations, Paris, Rec. Sirey éd., 1925
- PINTO Roger, Aspects de l'évolution de l'Indochine française accès aux fonctions publiques, institutions représentatives, libertés individuelles, constitution, lois, règlements, coll. "études indochinoises & extrême-orientales", Saïgon, S.I.LI. éd., Paris, Lib. du recueil Sirey éd., 1946
- POUYANNE A. L'hydraulique agricole au Tonkin. Paris, IDEO, 1931.
- POUYANNE A. The Mining Industry of French Indochina. The American Consulate, Saigon, June 1, 1937.
- PRESSAT R.- Quelques données sur la population du Viet-Nam du Sud.-Population 1974 / 3, pp 633-641.
- PRETINI Jean-Louis Saigon-Cyrnos. Les Corses à Saigon. Saigon 1925-1945
- Série Mémoire, coll. Autrement, N°17, Paris, septembre 1992. pp. 92-103.
- PUAUX Henri La stabilisation de la piastre indo-chinoise. Bosc et Riou, Lyon, 1929. 131p, bib.
- RAFFI G. Haiphong : origines, conditions et modalites du developpement jusqu'en 1921. These de de Doctorat, Universite de Provence, Institut d'Histoire Comparee des Civilisations, 1994.
- REGISMANSET Charles L'exposition nationale coloniale de Marseille, 1922. Paris, Imp. Réunies, 1921. 79p., plan, photos.
- REGISMANSET Charles Huit jours à l'exposition coloniale de Marseille. Paris, Grès et Cie, 1922. 150p., ill. photos.
- REGISMANSET Charles Le Miracle français en Asie. Paris, Crès ed. 1922. 358p.
- RENY Paul Le problème des relations commerciales entre l'Indochine et la France. Nancy, imp. Georges Thomas, 1938.
- RESTANY Paul Les placements de capitaux français dans les colonies françaises, Thèse pour le doctorat en droit (Université de Paris), Paris, Jouve et Cie éditeurs, 1924.
- RESTANY Paul Le problème des capitaux dans les colonies françaises. Daloz, Paris, 1925.
- ROBEQUAIN Charles Le Thanh Hoa. Paris, Van Oest, 1929.
- ROBEQUAIN Charles L'évolution économique de l'Indochine française. Centre d'étude de politique étrangère. Paris, Hartmann, 1939. 297p., ill.
- ROLLAND et alii, Législation et finances coloniales, Paris, Sirey éd., 1933, 784 p.

- SACKS Alexander Report on the Banque de l'Indochine. Washington D.C. Economic Section, War division, Department of Justice, January 8, 1944.
- SADAO Asada ed. Japan and the world, 1852-1953. A Bibliographic guide to Japanese Scholarship in Foreign Relations. Columbia U.P., NY., 1989.
- SARRAUT Albert Instructions relatives à l'emprunt national 4% 1918. Saigon, imp. Portail, 1918. 19p.
- SARRAUT Albert La mise en valeur des colonies françaises. Payot et Cie, Paris, 1923, 560 pages.
- SCOTT James The Moral Eonomy or the Peasants : Rebellion and Subsistance in Southeast Asia. New Haven and London : Yale University, Press, 1976.
- SHEPHARD Jack Industries in Southeast Asia. New-York, International Secretariat, Intitute of Pacific Relations, 1942.
- SIMONI H. Le rôle du capital dans la mise en valeur de l'Indochine. Paris, Helms, 1929, 190p. bib.
- SMITH Ralph Vietnam from the 1890s to the 1990s : continuity and changes in the long perspective. South East Asian Research, 4, 2, 1996. pp197-224. Vietnam, Sources et Approches. Actes du Colloque EUROViet-2, Aix en Provence, 4-5-6 mai 1994. Textes réunis par Philippe Le Failler et Jean-Marie Mancini. P.U.P, Aix en Provence 1995.
- SMOLSKI T. Plaidoyer pour la piastre. L'Eveil économique de l'Indochine.
- Nº 647, 10 novembre 1929.
- SMOLSKI T. SOURDILLE Roger La baisse du métal-argent et ses répercussions sur le système monétaire indochinois. Marcel Rivière, 1932. 145p. bib.
- Sources de l'histoire de l'Asie et de l'Océanie dans les archives et bibliothèques françaises. Paris, Archives Nationales, 1981. 2 tomes, 590 et 320p.
- TA Thi Tuy Les concessions agricoles françaises au Tonkin de 1884 à 1918. These de doctorat EHESS (Paris), 1993.
- TAKADA Yoko Land Concession and the Development of Rice Culture in the Mekong Delta in the Early Twentieth Century. Southeast Asian Studies, Vol. 22, N°3, décembre 1984. pp. 241-260.
- TAKADA Yoko Rice and Colonial Rule. A Study on Tariff Policy of French Indochina. Insitute of Environmental Studies, N°3, 04-1995, Bangkok, Thailande. 36p., stat.
- TALON Vital Le régime douanier en Indochine. ed. Domat-Montchrestien, 1932. 208p.
- TERTRAIS Hugues Un état des recherches sur l'histoire du Vietnam. XX° Siècle, 1993. p.97-113.
- TESSAN François de. L'éducation financière des annamites. l'Opinion, 11 mars 1922.
- THIOLLIER Lucien-Auguste La grande aventure de la piastre indochinoise. Imprimerie commerciale J. Bruyère, St. Etienne, 1930. 315p. bib.
- THOBIE J., MEYNIER G., COQUERY-VIDROVITCH C., AGERON Ch., Histoire de la France coloniale, 1914-1990. Paris, A. Colin, 1990. 600p, index, bib., cartes.
- THOMPSON Virginia French Indochina. New-York, Octagon Books, 1968. TIRANT, SANMARCO Le régime monétaire indochinois. Exposé de M.
- Tirant. L'exercice de l'activité bancaire aux colonies. Exposé de M. Sammarco. Ecole sup. coloniale, 1944. 33 p. ronéot.
- M. Sanmarco. Ecole sup. coloniale, 1944. 33 p. ronéot.

  TIRANT Le système monétaire indochinois. Exposé. (Ecole supérieure coloniale. Finances privées. 12 mai 1944) Ecole supérieure coloniale, 1944. 21 p. ronéot.
- TTRARD Henri En Indochine : La question monétaire ; le problème financier. La Revue du "Colon français", N°7, janvier-mars 1935. 21p.

- TOURNAN I. Le nouveau régime douanier colonial. Texte de la loi du 13 avril 1928; accord commercial franco-allemand du 17 août 1927. Société d'Etude Géographique et Coloniale, 1928. 103p.
- TOUZET André L'emprunt national de 1918 en Indochine. Hanoï-Haïphong, IDEO, 1919. 62p., ill. Gouvernement général l'Indochine. Quatrième emprunt national du 20 octobre au dе novembre 1918Saigon, imp. Portail, 1918. 32p.
- TOUZET André - L'économie indochinoise la grande universelle. Paris, Girard, 1934.
- TOUZET André Fédéralisme financier et finances indochinoises. Sirey, 1935, 190p.
- TOUZET André Le régime monétaire indochinois. Sirey, 1939, 398p.
- TO Van Qua Les impots directs en Cochinchine. Saigon, Nguyen Van Cua, 1930.
- TRAN Tu Binh The red earth A Vietnamese Memoir of Life on a Colonial Rubber Plantation. Spragens, 1985. Monographs International Studies, Southeast Asia - N°66 XII, 98p.
- TRAN Van Trai Les chemins de fer de l'Indochine. Paris, Rodstein,
- TRINH Van Thao L'école Française en Indochine. Paris, Karthala, 1995.
- TRUONG Chinh; VO Nguyen Giap The Peasant Question, 1937-1938. Translated by CH. Pelzer White. Data paper N°94, Southeast Asia Program, Department of Asian Studies, Cornell Univ., Ithaca, New-York, 1974.
- Union Coloniale Française Annuaire des entreprises coloniales. Paris, Publications de l'Union Coloniale Française, 1938.
- Union Coloniale Française Les problèmes posés par le developpement industriel de l'Indochine. Paris, Union Coloniale Française, 1938.
- U.S. Department of commerce American Direct Investments in Foreign Countries. Washington D.C. US Government printing Office, 1936.
- U.S. Department of commerce French Indochina's Economic Position in 1940. International Reference Service, Vol. Washington D.C. US Department of Commerce, 9/41. N°1,
- VALDANT Pierre ; ARNAUD Georges La politique commerciale de l'Union Française. Revue de politique économique, 62 septembre-octobre 1952, pp. 889-906.
- VALLET Auguste Un nouvel aperçu du problème colonial Berger-Levrault, Paris, 1925.
- VAN DE WALLE E. De l'emploi des modèles en démographie historique, Annales de Démographie Historique, pp. 153-177.1972.
- VAN DER ENG Pierre The Silver Standard and Asia's Integration into
- the World Economy, 1850-1914. ANU Discussion Paper, 1997. VELLA Walter F. (ed) Aspect of Vietnamese History. Honolulu, Asian Studies of Hawaii, Hawaii U.P., 1973. 269p.
- VIENOT H. Monopole des alcools en Cochinchine. Saigon, Guillot et Marnon, 1883.
- VIVIER de STREEL Edmond (du) Le rôle de nos Colonies dans l'après guerre. Chalamelle, 1916. 38p.
- VIVIER de STREEL Edmond (du) Comment orienter l'effort économique de la France. Revue politique et parlementaire. et A. Dary imp., 1917. 28p.
- VIVIER de STREEL Edmond (du) La production coloniale. Son avenir. Conférence faite à Paris le 4 mars 1917. Association française pour l'avancement des sciences, 1917. 18p.
- VIVIER de STREEL Edmond (du) Le développement de la production coloniale. Rapport présenté au nom de la Section générale de la conférence coloniale instituée par A. Maginot, ministre des Colonies (juillet 1917). Larose, 1917, 32p.
- VIVIER de STREEL Edmond (du) Matières premières et colonies. Conférence d'inauguration de la Quinzaine Coloniale de Bordeaux (15-29 septembre 1918). Bordeaux, Inst. Colonial, 1919, 23p.

- VIVIER de STREEL Edmond (du) Il nous faut une flotte coloniale. Payot et Cie., 1919, 160p.
- VIVIER de STREEL Edmond (du) L'outillage public et les communications avec la métropole. Conférence faite à l'Ecole des Sciences Politiques le 25 janvier 1924. Coulommiers, Dessaint, 1924, 42p.
- VOGÜE Arnaud de Ainsi vint au monde la SIPH. Vichère, ed. de l'Association des Anciens Planteurs d'Hévéa, 1993. 410p. ill.
- VU Do Thin Evolution économique du Vietnam : monnaie est salaires. Paris, Librairie générale de droit et de jurisprudence, 1954.
- VU Quoc Thuc L'économie communaliste du Viet-Nam. Presse Universitaires du Viet-Nam, 1951.
- VU Quoc Thuc The Influence of Western Civilisation on Economic Behavior on the Vietnamese. Asian Culture, 1 2 Spring 1958, pp. 42-53.
- VU Van Hien Les institutions annamites depuis l'arrivée des Français : l'impot personnel et les corvées de 1862 à 1936. Revue Indochinoise juridique et économique, 13, 1940, pp. 84-107.
- Indochinoise juridique et économique, 13, 1940, pp. 84-107.
  WALSWORTH Kinny, Henry Le rôle du Japon dans la restauration du commerce français. Soc. franco-japonaise de Paris, Paris, 1921., 10p.
- WALKER III W. O., Opium and foreign policy the anglo-american search for order in Asia (1912-1954), 1991, Chapel hill and London, The University of North Carolina Press
- WANG Wen Yuan Les relations entre l'Indochine française et la Chine. Paris, Pierre Boussuet, 1937.
- WATERMAN Henry Rubber situation in French Indochina. Washington D.C., Department of commerce, Bureau of Foreign and Domesctic Commerce, January 2, 1930.
- WATERMAN Henry La culture de la canne et l'industrie sucrière en Indochine. BEI, 17, 1939. pp. 207-215.
- WATERMAN Henry L'industrie de l'alcool en Indochine. BEI, 16, 1938. pp. 937-965.
- WATERMAN Henry Labour conditions in French Indo-China. Monthly Labour Review 41, 1 (January 1940) pp. 78-87.WATERMAN Henry Wages in French Indo-China in 1930. Monthly Labour Review 33, 8 (August 1931) pp. 393.
- WRIGHT Hamilton, The international opium commission, American Journal of International Law, 1909, vol. 3 (II), p. 648 à 673 (part.I) 828 à 868 (part. II)

## Anonymous articles published in journals and reviews

- XXX Le problème monétaire indochinois. Le Rapport de la commission. Le rapport spécial de M. Outrey. La Revue du Pacifique, 1934, t. 1,  $N^2$ 2. pp. 331-355.
- L. M. Les Sociétés de Crédit Agricole Mutuel en Cochinchine (SICAM), de 1913 à 1938. BEI, 4 1938, pp. 780-800.
- XXX Le régime monétaire en Indochine. Réponse au Journal Le Temps. Moniteur d'Indochine, N°249, 17 novembre 1923.
- XXX A propos de l'abaque de la piastre. La Revue du Pacifique, 1923, N°5. pp. 601-602.
- XXX Le Pittman Act et la piastre. La Revue du Pacifique, 1923, t. 1,  $N^{\circ}5$ . pp. 603-606.
- XXX Note sur la baisse de la piastre en Indochine. Etude d'une réforme monétaire. L'Opinion, 1902. 35p.
- R. R. Aperçus sur la vie économique de Cholon. BEI, 44, mai-juin 1950, pp. 169-181.

# Official reports and reports by semi-official committees

- Administration centrale des colonies Banques coloniales : Banque de l'Indochine. Paris, Imprimerie Nationale, 1888.
- Conférence Coloniale, instituée par M. A. Maginot, Ministre des Colonies.
- Juin 1917. ed. Emile Larose, juillet 1917. 172 pages. Conférence économique de la France métropolitaine et d'Outre-Mer, décembre 1934-avril 1935. Rapports généraux et d'ensemble. Paris, Laroze, 1935.
- Union française et Parlement Les vraies incidences dévaluation de la piastre. Etude sur la stabilisation de la piastre Indochinoise.  $N^\circ$  38, pp. 18-19. Société centrale d'imprimerie, Sceaux, s.d. 32p., 1953.
- Conseil National économique Les relations entre la France et ses colonies. (Rapport présenté par M. Georges Dayras, Maitre des requêtes au Conseil d'Etat et adopté par le Conseil National econmque dans sa sessiondu 30 novembre 1934) Paris, Imprimerie Nationale, 1934.
- Commission monétaire Indochinoise, Rapport du Gouverneur général. Saigon, août 1920. Gouvernement général de l'Indochine. Hanoï-Haiphong, IDEO, 1920. 112p. et Bulletin Economique de l'Indochine, 1921, pp. 517-623.
- Comité de l'Indochine Réforme du système monétaire indochinois.
- Publications du Comité de l'Indochine, 96 Bd. Haussmann, Paris, 1920. Rapport présenté à la commission d'étude du régime monétaire de l'Indochine. s.l. 17 07 1907. 22p. dact.
- Gouvernement général de l'Indochine. Le riz et le maïs en Indochine. Paris, Agence Economique de l'Indochine, 1922. 25p.
- Gouvernement général de l'Indochine Régime douanier colonial ;
- Législation et tarifs, 1º janvier 1922. (Tableau des droits de douane percus en Indochine par dérogation au tarif minimum) Publications de l'Agindo. 24 pages.
- Gouvernement général de l'Indochine Régime douanier colonial ; Législation et tarifs, Législation et tarifs, 1° octobre 1923. (Tableau des droits de douane perçus en Indochine par dérogation au tarif métropolitain) - Publications de l'Agindo. 24 pages.
- Comité de l'Indochine L'accord commercial entre l'Indochine et le Japon. CIc, Paris, 1931. 66p.
- La révision du régime douanier colonial ; rapport au supérieur des colonies. Ministère des Colonies. Toulouse, Camilli et Fournié, 1926. 85p.
- Gouvernement général de l'Indochine Cochinchine 1931. Exposition coloniale Internationale de 1931.
- Gouvernement général de l'Indochine Direction des Finances, Recueil des décrets, arrêtés, et circulaires relatifs aux regime de la propriété foncière en Cochinchine et françaises en Annam. Hanoi, IDEO, 1931. dans les concessions
- Gouvernement général de l'Indochine Direction des services économiques, service de la statistique. Annuaire économique de l'Indochine. Hanoi, IDEO, diverses années entre 1913 et 1953.
- Gouvernement général de l'Indochine Premier rapport de la souscommission de modernisation de l'Indochine. Paris, Commission de modernisaion des territoires d'Outre-Mer, 1948.
- Gouvernement général de l'Indochine Direction de l'administration de la justice, La justice en Indochine, organisation générale de la justice indigène. Hanoi, IDEO, 1931.
- Gouvernement général de l'Indochine Direction des Finances, Histoire budgétaire de l'Indochine. Hanoi, IDEO, 1930.
- Gouvernement général de l'Indochine Direction des Finances, Les impots directs en Indochine. Hanoi, IDEO, 1930.

  Gouvernement général de l'Indochine Section d'administration
- générale. Recueil général des actes relatifs à l'organisation et à la rèlementation de l'Indochine. Hanoi, IDEO, 1919.

- Gouvernement général de l'Indochine Inspection générale des mines et de l'Industrie. L'Indochine économique. Hanoi, IDEO, 1931.
- Gouvernement général de l'Indochine Inspection générale des mines et de l'Industrie. L'industrie minérale en Indochine. Hanoi, IDEO, 1931.
- Gouvernement général de l'Indochine Inspection générale de l'agriculture, de l'élevage et des forêts. Le crédit populaire agricole en Indochine. Hanoi, IDEO, 1931.
- Gouvernement général de l'Indochine Inspection générale de l'agriculture, de l'élevage et des forêts. La riziculture en Indochine. Hanoi, IDEO, 1931.
- Gouvernement général de l'Indochine Inspection générale du travail. Réglementation du travail en Indochine. Hanoi, IDEO, 1931. 182p.
- Gouvernement général de l'Indochine Inspection générale du travail. Réglementation générale du travail en Indochine. Hanoi, IDEO, 1937. 514p.
- Gouvernement général de l'Indochine Inspection générale du travail. Réglementation du travail en Indochine ; 1° supplément. Hanoi, IDEO, 1939. 69p.
- Gouvernement général de l'Indochine Inspection générale travaux publics. Aménagement des ports, éclairage et balisage des cotes de l'Indochine. Hanoi, IDEO, 1930.
- Gouvernement général de l'Indochine Inspection générale travaux publics. Construction des grands ponts en béton armé sur la route mandarine en Annam entre Tourane et Mhatrang. Hanoi, IDEO, 1929.
- Gouvernement général de l'Indochine Inspection générale travaux publics. Dragages de cochinchine : canal de Rachgia-Hatien. Saigon, IDEO, 1930.
- Gouvernement général de l'Indochine Inspection générale travaux publics. Les travaux publics de l'Indochine et le dévelopement économique du pays. Hanoi, IDEO, 1926. (Rapport Pouyanne).
- Gouvernement général de l'Indochine Inspection générale travaux publics. L'hydraulique agricole en Indochine : inauguration des canaux de Vinh Yen (Tonkin), 24 février 1923. Hanoi, IDEO, 1923.
- Gouvernement général de l'Indochine L'administration des Douanes et Régies de l'Indochine. Hanoi, IDEO, 1930.
- Les ports de l'Indochine -Exposition coloniale internationale, Paris, 1931. 59p.
- Rapport du Service des Mines L'industrie minière en Indochine en 1925. BEI 1926, pp. 651-690.
- Union Coloniale Française Les problèmes posés par le développement industriel de l'Indochine. 1938, 139p.

# Economic statistics, administrative vearbooks or other official publications

Annuaire de l'Indochine

Annuaire Statistique de l'Indochine

BRENIER Henri - Essais d'atlas statistique de l'Indochine. Hanoi, IDEO, 1914.

Bulletin Economique de l'Indochine (Quarterly: 1898-1945)

Bulletin de l'Indochine française

Bulletin Officiel de la Cochinchine française

Bulletin Officiel des Colonies

Journal Officiel de l'Indochine Française

Journal Officiel de la République Française

Moniteur des Protectorats de l'Annam et du Tonkin

Statistiques du commerce des colonies françaises, Paris, Ministère des Colonies, Office Colonial, (Yearbook 1908-1913).

Statistiques de l'industries minière dans les colonies françaises. Paris, Ministère des Colonies, Office Colonial, (Yearbook: 1911-1913).

Statistiques des finances des colonies françaises. Paris, Ministère des Colonies, Office Colonial (Yearbook 1895-1911)

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