

The London School of Economics and Political Science

*Vietnam's North-South Gap in Historical Perspective:
The Economies of Cochinchina and Tonkin, 1900-1940.*

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the London School of Economics and Political Science for the
degree of Doctor of Philosophy, London, February 2013.

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Abstract

Recent estimates of Vietnamese GDP during the colonial era show a large gap between Tonkin and Cochinchina: per capita GDP in Tonkin was less than half the per capita GDP in Cochinchina from 1900 to 1940. The aim of this thesis is to understand this gap: its origins, nature and impact.

Although most scholars of Vietnamese economic history acknowledged this gap, it has never been studied and only a few suggestions for its origin exist. In this thesis, we revisit these suggestions. Firstly, we establish that demographic differences certainly had an impact on the economic performance of the country, not only through an impact on potential yields but also through an impact on land and labour utilisation. Secondly, we show that the colonial policy did not explain the origin of the economic gap, but that it may have perpetuated circumstances that led to it.

Next, we evaluate the nature of this gap: how did the productive sectors (agrarian, industrial and commercial) of the economies of Tonkin and Cochinchina differ? We find that production patterns differed markedly between Tonkin and Cochinchina. In Tonkin, diversification and production for the home market defined its production possibilities and its economic performance. In Cochinchina, specialisation and engagement with the international economy defined its production possibilities and economic performance. The regions' different production patterns were responsible for their different engagement with the international economy.

Finally, we investigate the way in which the economic gap between the two regions affected the living standards of their populations. We find that despite a large GDP per capita gap, the living standards of the rural populations of Tonkin and Cochinchina differed only marginally. Even in the urban sectors where there was a significant gap between the two regions, it was only a fraction of the one suggested by GDP estimates.

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Symbols & Abbreviations

WW1: First World War

WW2: Second World War

GDP: Gross Domestic Product

GNP: Gross National Product

\$. Indochinese Piastre

Ff. French Franc

US\$: United States Dollar

T: Metric Tonne

Kg (or kgs): Kilogram(s)

Hl: Hectolitre

Km: Kilometre

Km²: Square Kilometre

Kw/hr: Kilowatt per Hour

Q: quintal

Ha: hectare

ANOM: Archives Nationales d'Outre Mer

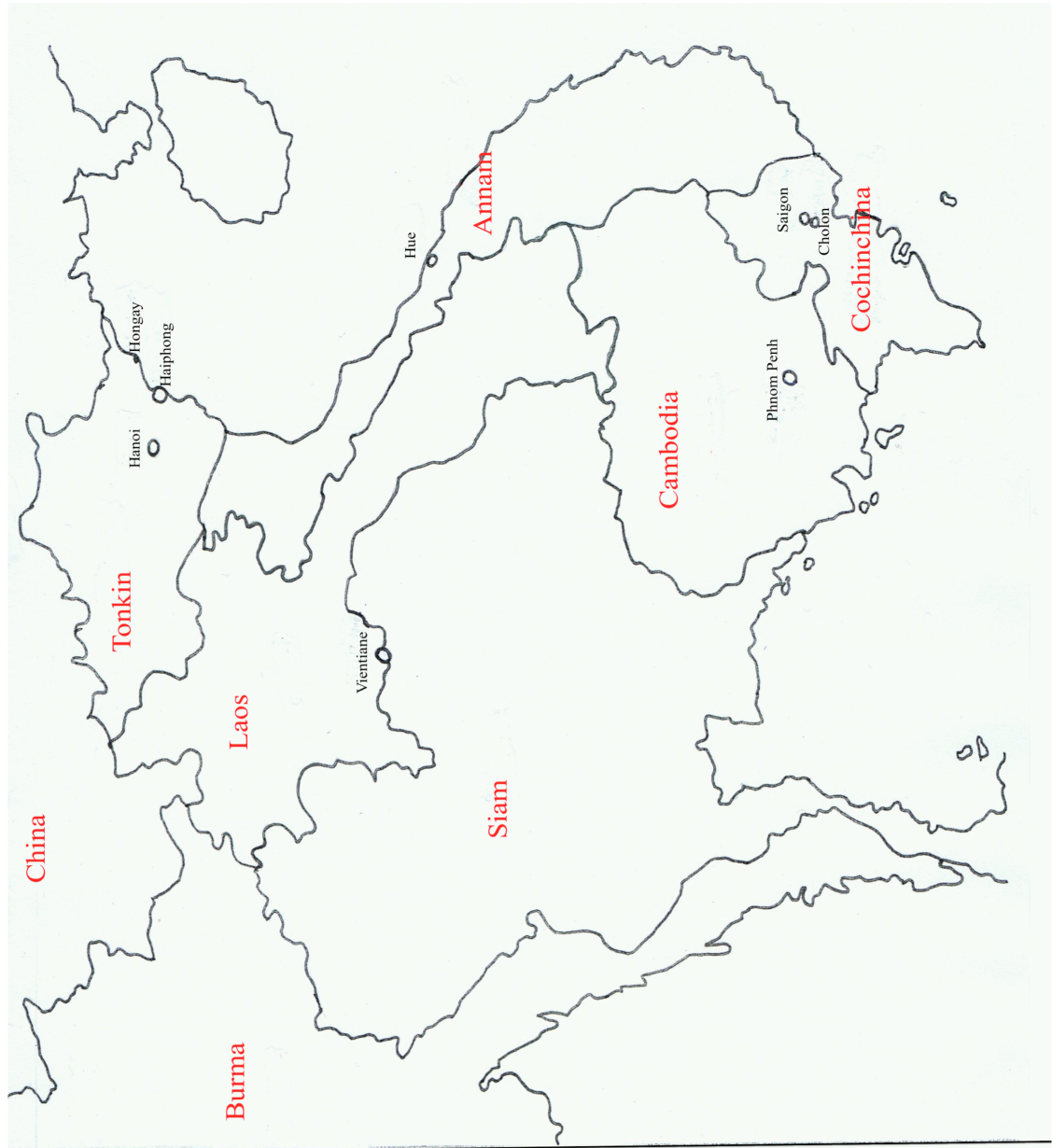
LSE: London School of Economics and Political Science

SOAS: School of Oriental and African Studies

ASI: *Annuaire Statistique de l'Indochine*

BEI: *Bulletin Economique de l'Indochine*

IPR: Institute of Pacific Relations



**French Indochina
Borders & Main Cities
Map 1**

Tonkin:
Hanoi
Haiphong
Hongay

Cochinchina:
Saigon
Cholon

Annam:
Hue

Laos:
Vientiane






Cambodia:
Phnom Penh

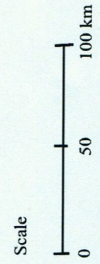
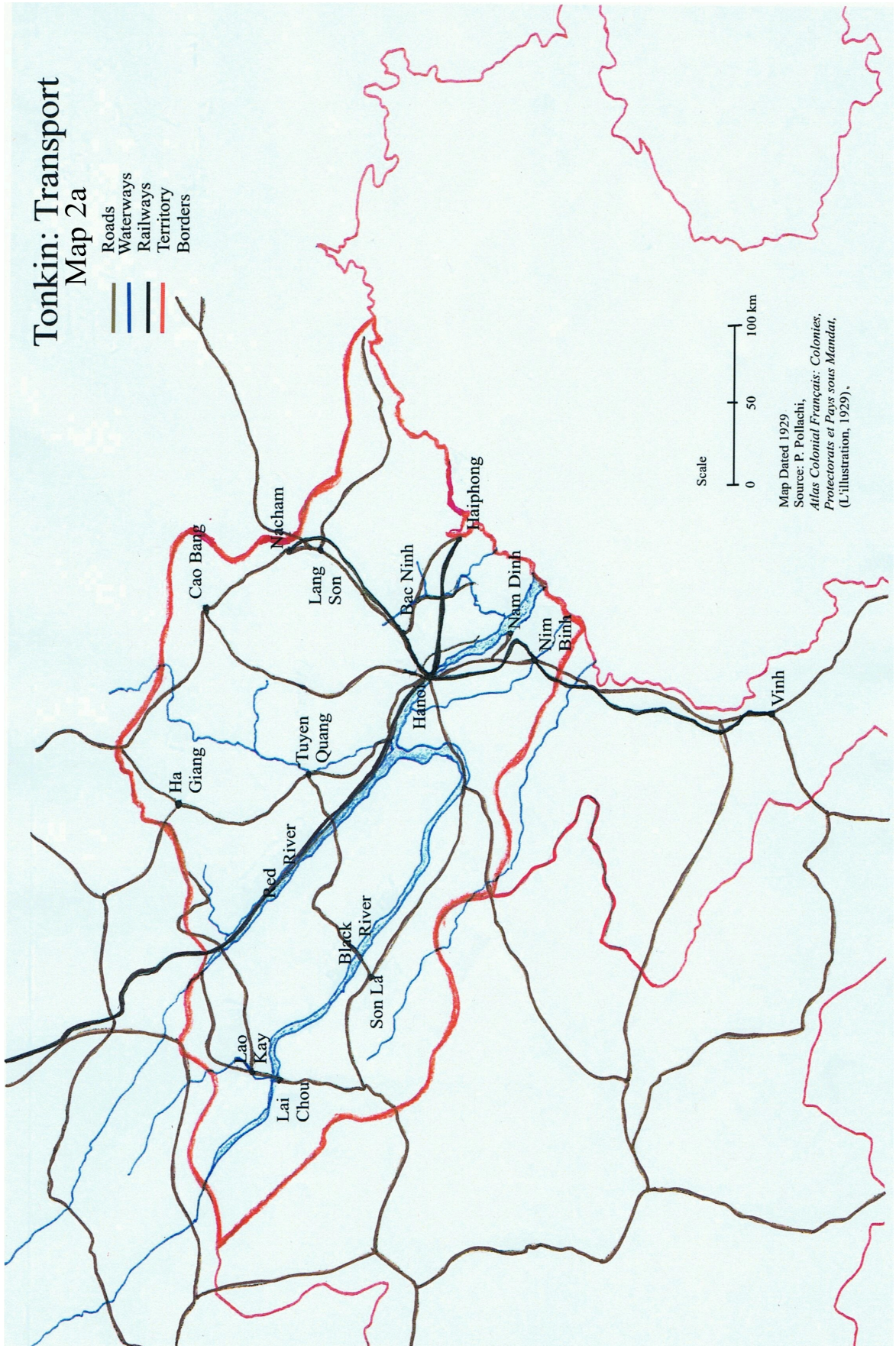
Neighbouring Countries:

China
Burma
Siam

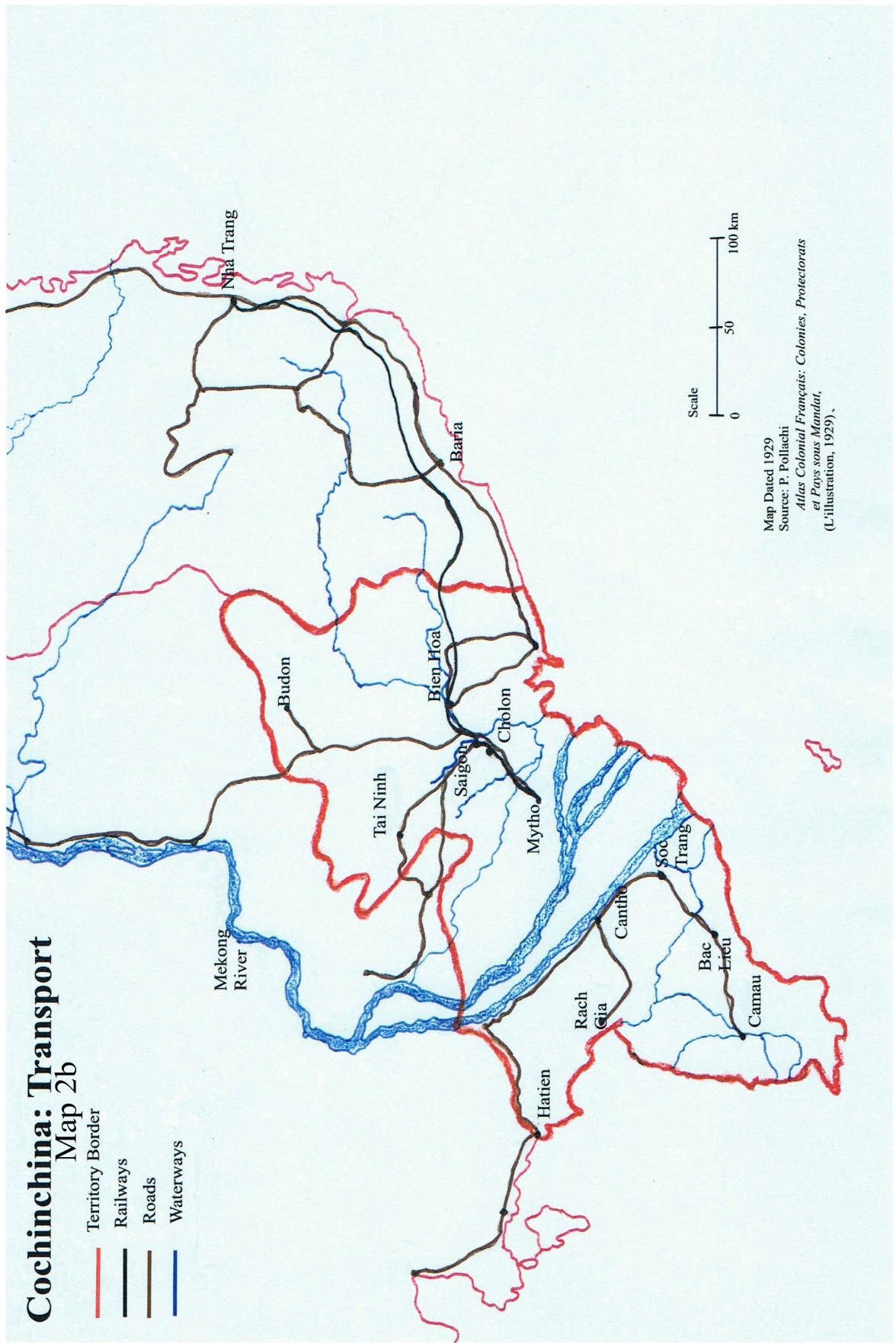
Borders accurate as of 1907,
but relatively similar to those
declared in 1887

Tonkin: Transport Map 2a

-  Roads
-  Waterways
-  Railways
-  Territory
-  Borders

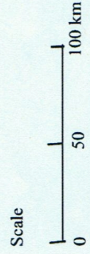
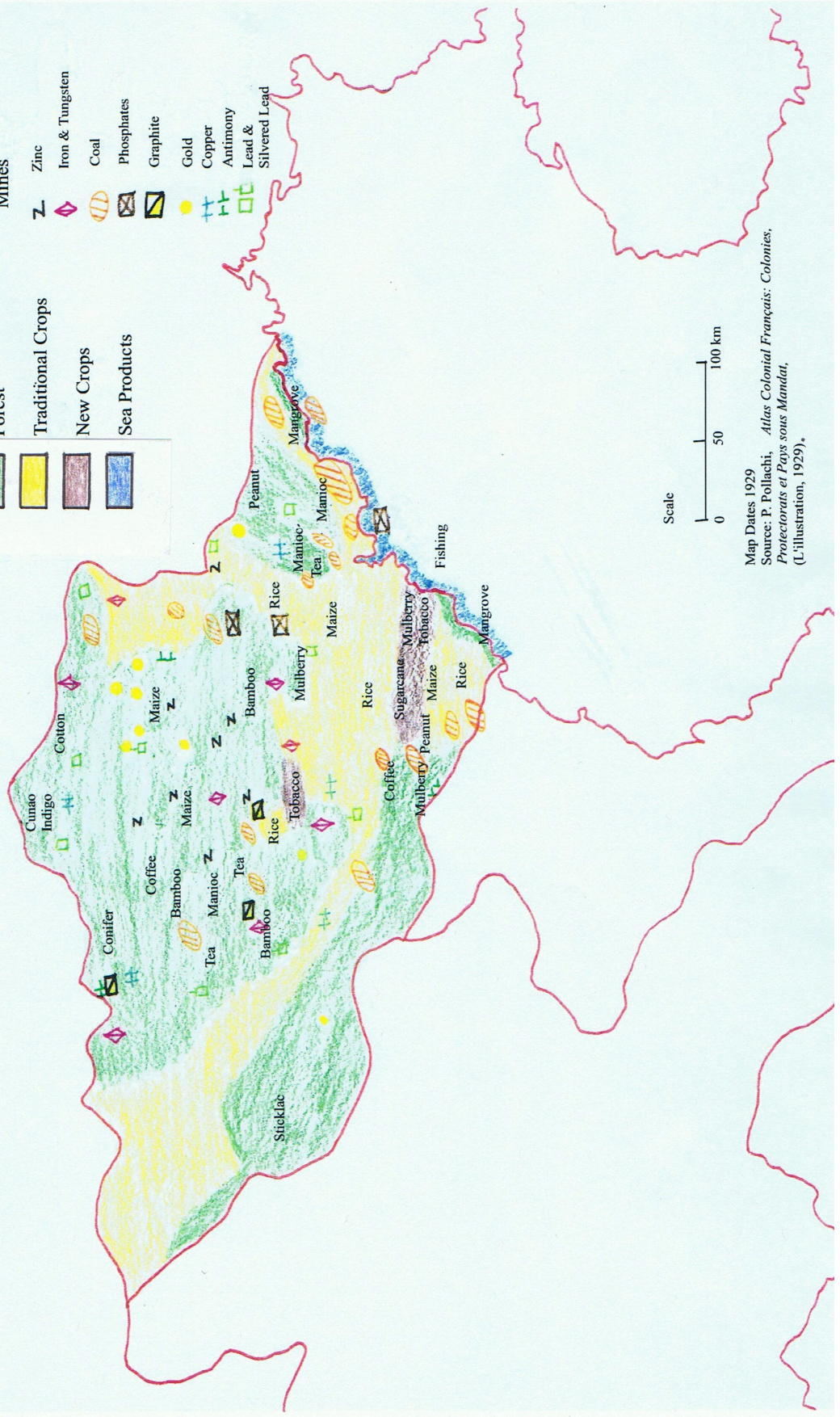
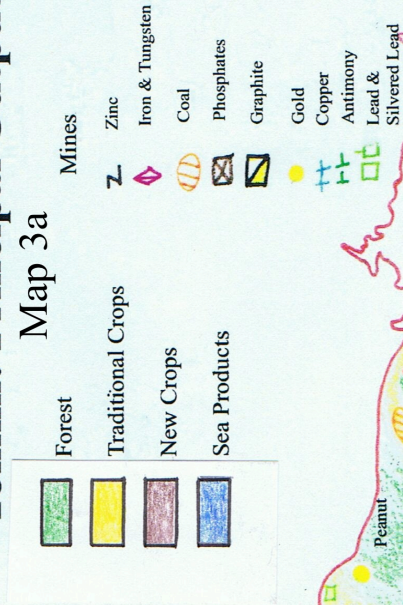


Map Dated 1929
 Source: P. Pollachi,
Atlas Colonial Français: Colonies, Protectorats et Pays sous Mandat,
 (L'illustration, 1929).



Tonkin: Principal Output







Map 3a

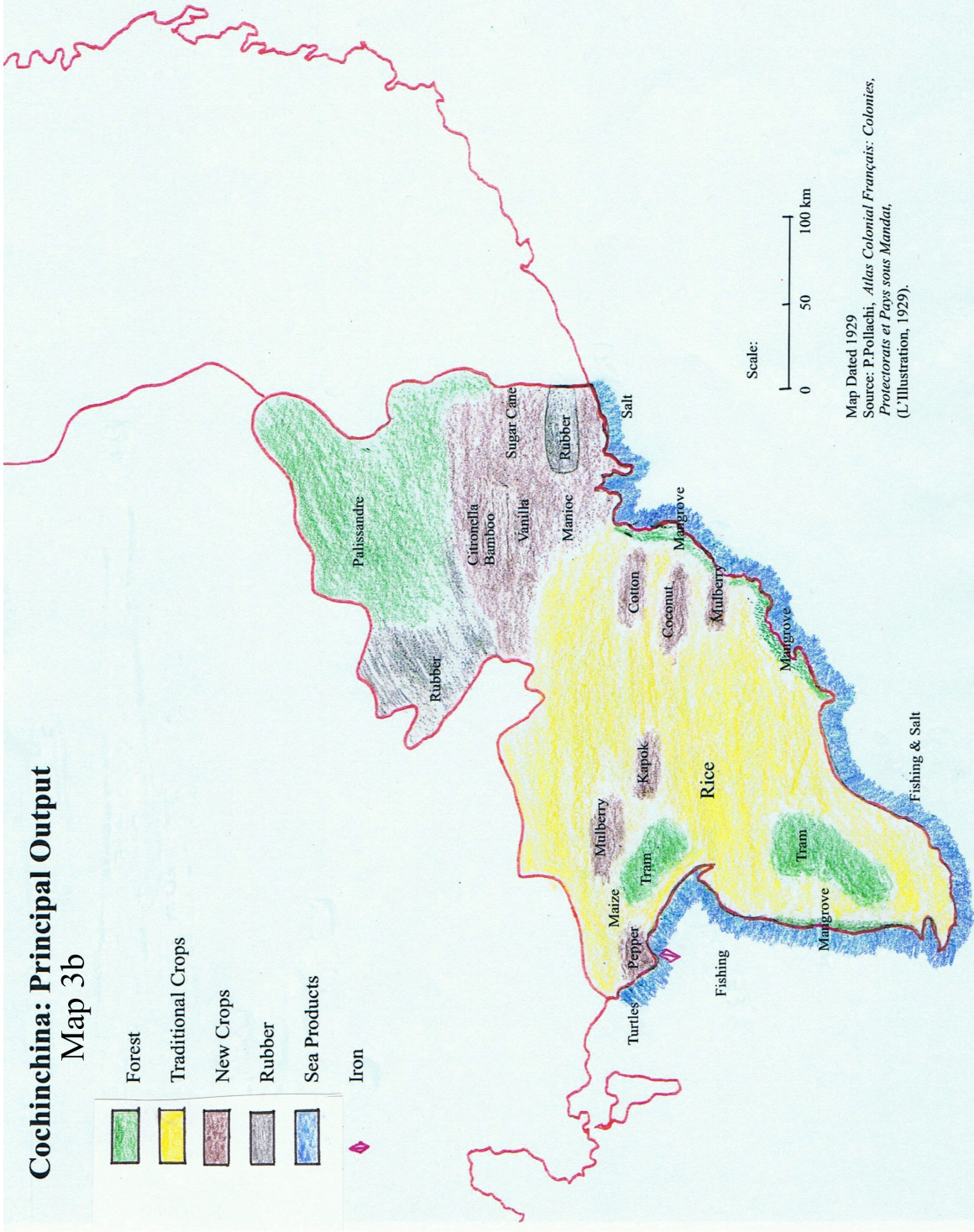


Map Dates 1929
 Source: P. Pollachi, *Atlas Colonial Français: Colonies, Protectorats et Pays sous Mandat*, (L'illustration, 1929).

Cochinchina: Principal Output

Map 3b

-  Forest
-  Traditional Crops
-  New Crops
-  Rubber
-  Sea Products
-  Iron



Map Dated 1929
 Source: P.Pollachi, *Atlas Colonial Français: Colonies, Protectorats et Pays sous Mandat*, (L'illustration, 1929).

Chapter 1: Introduction

Recent research has generated the first estimates of Vietnamese GDP during French colonial rule, separated in its three component regions of Tonkin, Annam and Cochinchina (see Map 1). These estimates show a staggering gap in the GDP per capita of Tonkin and Cochinchina, as seen in Figure 1.1, with Cochinchinese GDP per capita more than twice Tonkinese GDP per capita throughout the period 1900-1940. This gap seems to widen throughout the colonial period, even after a short convergence during the main years of the Depression.

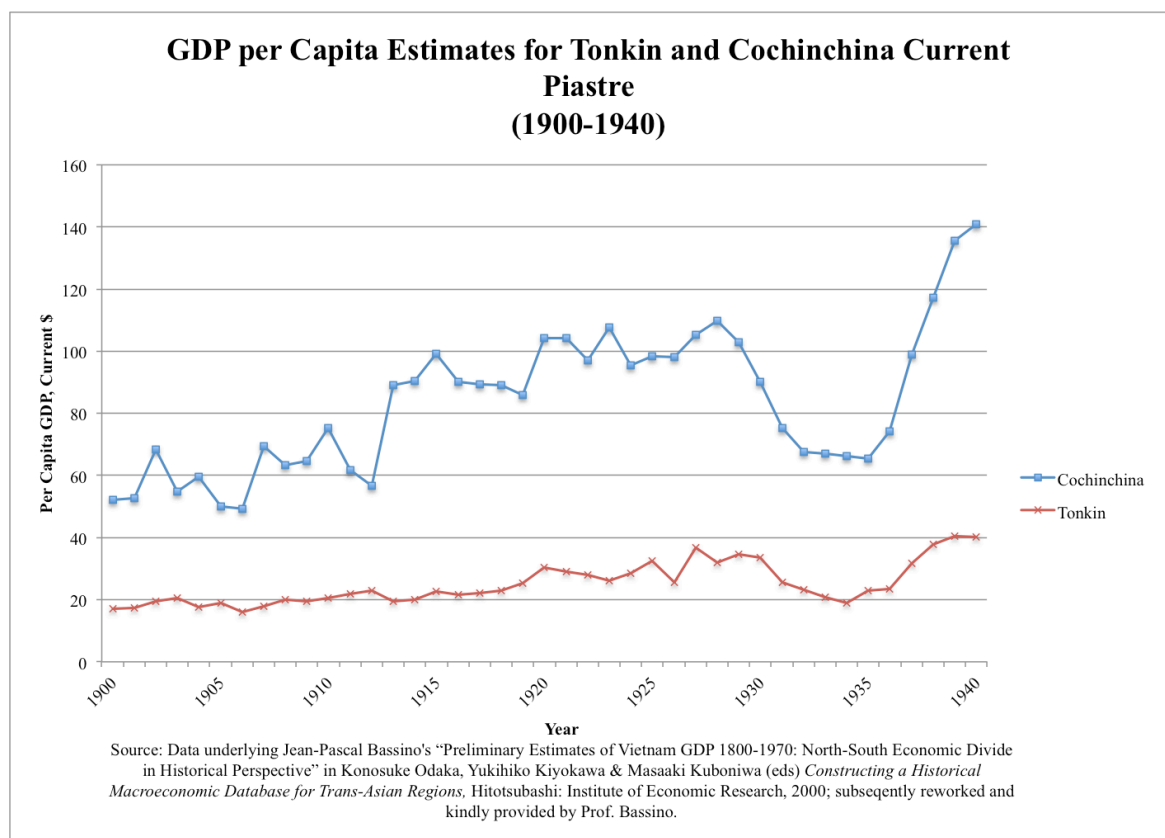


Figure 1.1¹

Certainly, these are preliminary estimates constructed using indirect methods, however they do seem to match qualitative discussions of the economic gap in Indochina during the colonial era and serve as an illustration of the context discussed in this thesis. Many scholars of Indochinese economic history have acknowledged and mentioned this

¹ Using constant prices would result in an equally significant gap.

gap before, these new estimates prompt further questions. In fact, in Chapter 2 we show that despite an apparent knowledge of such a gap between Tonkin and Cochinchina, it has never been examined in detail and evaluations of its origin, nature and impact remain superficial. This is surprising considering that number of quantitative indicators that show a distinct gap between the two regions, as well as the possible explanations for its existence. Indeed, population density in Tonkin was twice population density in Cochinchina by 1936; per capita government expenditure and revenue were, on average, twice as high in Cochinchina than in Tonkin; and wages were also, on average, twice as high in Cochinchina than in Tonkin. Each of these phenomena will be discussed in this thesis, but they clearly indicate that a significant gap between the two regions existed and needs to be further understood.

Two competing perspectives exist to explain the origin of this gap: demographics or colonial influence. However, neither side has shown conclusive evidence in support of either suggestion. Much of the literature based their evaluations not on data, but on logical rationales and knowledge of the country's history. The first part of this thesis re-evaluates the role of demographics and colonial policy in prompting Cochinchina's higher GDP. In addition, the literature has not yet shown how the gap manifested itself in the performance of the various sectors of the Vietnamese economy. This is surprising as an understanding of production possibilities, production patterns and trade activity can go a long way in explaining differing economic performances. The second part of this thesis thus looks at the agrarian, industrial and commercial sectors' performance during colonial rule. Finally, GDP per capita differentials do not necessarily result in welfare improvements for the population. Studies have yet to evaluate to what extent the gap between the economic performances of Tonkin and Cochinchina also manifested itself in a gap between the living standards of their population. This is the subject of the third and final part of this thesis. These gaps in our understanding of the economic history of Vietnam require some more research, not just for a more accurate historical narrative, but indeed for a better perspective on current developments in the Vietnamese economy.

For example, according to the Vietnamese government in 2002, the Southern region of Vietnam (mainly what used to be Cochinchina) has more potential for economic growth than the Northern regions (mainly what used to be Tonkin):

The Southeast [of Vietnam,] including the southern focal economic region has a basic advantage of infrastructure and other development potentials, the region is a key dynamic economic region and needs to be developed comprehensively; strive for the average economic growth of 1.5 times that of the national average level mainly by means of dynamic business, develop local comparative advantages, enhance the effectiveness and competitive strengths in domestic and overseas markets.²

Contemporary Vietnamese economic development is clearly led by the Southern region, as acknowledged above, but official statisticians explain this difference by a vague allusion to 'basic advantages'. These basic advantages may point to better commercial infrastructure, better climate, etc, but at no point in recent political discourse have these been clearly explained. In fact, the reference to 'basic advantages' suggests that the economic history of Vietnam has had a long-term impact on current economic trends. Considering the country's turbulent past, it is very possible that the current North-South gap has different origins and impacts than its historical counterpart, but without a clear study of the historical gap, this cannot be argued. It is thus with this in mind that our research focuses on understanding the historical North-South gap of the Vietnamese economy.

Similarly, because of Vietnam's turbulent past, much of the academic research on Vietnam has investigated the wars and their consequences on the country. Thomas Hodgkin, a historian, argued that to properly understand any revolution, a better understanding of the country's past is crucial.³ An economist would add to Hodgkin's argument that the economic discord that ravaged Vietnam in the post-war era demands a specific emphasis on the economic history of Vietnam. Sadly, such a history is rather slim and may therefore be qualified as insufficient to justify the exhaustive literature on the revolution itself. This thesis does not address the history of the revolution, but rather tries to establish a better understanding of the economic history of Vietnam during French colonial rule. As such, this thesis can also serve to provide a more detailed background to analyses of Vietnam's post-colonial history and on the rise of communism and nationalism in Vietnam.

² LSE 598(151): Vietnam, *Public Investment Program Period of 2001-2005*, (Hanoi: General Statistical Office, 2002), p.82.

³ Thomas Hodgkin (ed), *Vietnam: The Revolutionary Path*, (London: Macmillan Press, 1981), p.4.

Various historical circumstances help us contextualise the origin of the economic divergence between the regions of Tonkin and Cochinchina. The three administrative regions of French Indochina: Cochinchina in the South, Annam in the middle and Tonkin in the North were created in 1887 as part of the colonial administration. The emperor at Hue did control all three regions under a unified government for a period of time, specifically 1802-1858, but it is division, rather than unity, that historically prevailed between Vietnam's territories.⁴ There is no doubt that this division had a long lasting influence on the economic divergence between territories.

Initially, 'Vietnam' was only the area known as Tonkin. In the 17th century, the Le Dynasty, based in Hanoi, encouraged migration to the South. This migration marked the beginning of South Vietnam, although this was progressive, starting first with the populating of central Vietnam. Prior to this southward migration, there had been no official form of government but Khmer and other small ethnic minorities had populated the region. It was primarily demographic growth resulting in land pressure that encouraged the 17th century southward expansion. More land was needed to accommodate and feed the growing population. Considering this history, it comes at no surprise that many in the literature use demographic pressure when explaining the economic development of the country.

Administrative divisions, as a result of this expansion, may also have affected economic performance. Officially, the Le Dynasty was the head of the Vietnamese government. In reality, political power was divided between two big families: the Trinh and the Nguyen. Such a division of power, mixed with the prospect of new land, eventually resulted in civil war, leading to Trinh governed North Vietnam and Nguyen governed South Vietnam.⁵ The administrative division, and the resulting relative isolation of Southern Vietnam from Northern Vietnam, favoured the development of the "autonomous ambitions of the governors [of the Southern provinces]".⁶ The Trinh later attempted to conquer the Nguyen territory. Their seven attempts were, however, all unsuccessful and the country remained divided, further allowing the development of autonomous political and economic choices.

⁴ Le Thanh Khoi, *Le Viet-Nam histoire et civilisation*, (Paris: Les Editions de Minuit, 1955), p.321.

⁵ *ibid*, p.244.

⁶ *ibid*, p.242.

At the end of the 18th century, the Tay Son brothers hoped to reunite the regions of Vietnam. These three brothers, supported by an agrarian revolution, defeated both the Nguyen and the Trinh and ended the Le Dynasty.⁷ Unfortunately, discord between the brothers soon occurred and resulted in a renewed division of the territory, this time into three administrative parts, each under the command of one of the brothers. It was not until 1802 that Nguyen Anh, the last descendant of the Nguyen family who had taken refuge in Bangkok with Rama I,⁸ managed to oust the Tay Sons and to re-conquer all of Vietnam.⁹ Having regained power, Nguyen Anh styled himself Emperor and changed his name to Gia-Long. He centralised power in the hope of concretising unification.¹⁰

This proved shortlived: when Napoleon III ordered France's first intervention in the 'Orient' the precarious unification again came under pressure. Napoleon's campaign resulted in France gaining control of Cochinchina, Vietnam's most southern region, in 1859.¹¹ The Vietnamese Emperor, in the hopes of maintaining peace, tried to compromise with the French by slowly agreeing to more and more foreign control and allowing a return to the historical administrative division of Vietnam.¹² Finally, in 1884, a newly chosen emperor signed the Hue Treaties, officially recognising Indochina as a French protectorate and adding Tonkin to the French empire.¹³

To concretise colonial power, the Union of French Indochina was declared when Laos joined the other territories in 1893. In 1897, French colonial rule was strengthened in Annam and Tonkin: links to the imperial city of Hue were formally broken and the General Residents of the two provinces took over the councils that had previously made decisions in the administration of these territories.¹⁴ Indochina's borders were finalised in 1907, after negotiations with the British, Siamese and Chinese governments. French Indochina consisted of five territories: Cochinchina, Annam, Tonkin, Laos and Cambodia.¹⁵ There is no doubt that many aspects of this history affected economic development. There is never one explanation for diverging performances and scholars on

⁷ Nguyen Khac Vien, *Vietnam a Long History*, (Hanoi: The Gioi Publishers, 2002), p.100.

⁸ Le Thanh Khoi, *op.cit.*, p.313.

⁹ *ibid*, p.321.

¹⁰ *ibid*, p.325.

¹¹ *ibid*, p.366.

¹² Nguyen Khac Vien, *op.cit.*, p.136.

¹³ Le Thanh Khoi, *op.cit.*, p.366.

¹⁴ *ibid*, p.400.

¹⁵ *ibid*, p.398.

Vietnamese economic history agree that many factors together explain Cochinchina's superior economic performance in this time period.¹⁶ Consequently, this thesis does not hope to provide a unique explanation for the colonial North-South gap. Instead, this thesis' aim is to **evaluate previously made suggestions, link diverging economic performances to production patterns and commercial links and examine if these differing economic performances were also reflected in the standards of living of the populations of Tonkin and Cochinchina.**

Sources

Before the questions addressed in this thesis are fully outlined, it is crucial to understand the constraints that data quality and availability pose. Firstly, these characteristics guided our choice of 1900 to 1940 as the scope of this thesis. Although 1954 was the official end of French control over Indochina, the years between 1940 and 1954 were filled with war and inconsistent political leadership, prompting the latter bound of 1940. As early as the Second World War, French control of Indochina was beginning to falter, indeed between 1941 and 1945 the Japanese occupied Vietnam and statistics compiled by French authorities are difficult to rely on. The initial bound of 1900 is more arbitrary: it was not until 1922 that the French authorities founded the Société Générale des Statistiques in Indochina and its data only go back to 1913. Nonetheless, some arguments will go back to 1893, when French Indochina was founded and when other data sets allow. Going back any earlier might be misleading, because French control prior to the early 1900s was tenuous at best, especially in the North. Indeed the French did not gain passage to some of the main routes of Tonkin until 1888 and the final borders of Indochina were only decided in 1907.¹⁷

The main sources used in this dissertation are from the French colonial administration, which documented nearly every aspect of its 'mission' in Vietnam. These documents are mostly stored in the archives of Aix-en-Provence, but the public cannot

¹⁶ Jean-Pascal Bassino, "Indochina" in Joel Mokyr (ed.) *The Oxford Encyclopaedia of Economic History*, Vol. 3, (Oxford: Oxford University Press, 2003), p.36.

¹⁷ Nguyen Khac Vien, op.cit., p.150 & p.400.

access many of the records because they have not yet been classified.¹⁸ What is available nevertheless provides a wide variety of sources that have been underused in recent published research. Other available data from research on Vietnam's colonial economy originated from French scholars during French control of Indochina. These records comprise two types of studies: projects undertaken for the benefit of the colonial authorities and more independent research undertaken by economists and academics. The limitations, however, is that only some facets of the colonial period can be evaluated. Few records exist on industrial developments or on specific landholding patterns. The data available do provide an initial picture of how the economies of Tonkin and Cochinchina evolved, but it remains true that they can be quite scattered and are rarely available as complete time-series.

Since most of the sources are from the colonial authorities, they need to be used with caution. A possible limitation in analyses of economic trends based on these data comes from ideological biases. As primary sources, they are somewhat biased: these sources are essentially pro-colonialist. Their analyses present partly objective reasoning and partly subjective opinions. For example, judgments on native Vietnamese were considered entirely factual when today they would be considered derogatory. Furthermore, these sources are often discontinuous time series and the way much of the data were gathered is not explained. A further limitation is therefore the quality and clarity of the data: it is unlikely that the officials obtained precise data and, indeed, they even warn that this is a problem.¹⁹ Some data, such as population censuses and yields, are probably underestimates rather than precise, as peasants tended to under-report output and births in order to avoid increasing their tax burden.

Little is known of the ways in which these data were collected, or what they include and do not include. For example, in the wage data, it is difficult to know how comparable the information is: how many hours were worked in a day, how many days a year were people in these professions working, what exactly did the job consist of, how much

¹⁸ Much of the archives for French Indochina held in Aix-en-Provence and in Paris are, as of yet, unclassified, meaning unobtainable to the public. I offered to classify the archives, but not being a trained archivist, the offer was turned down.

¹⁹ LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Economiques, *Annuaire Statistique de l'Indochine, 1913-1922*, (Hanoi: Imprimerie d'Extrême-Orient, 1927).

training had previously been given, etc?²⁰ It is very possible that the answers to these questions differed between the two regions. In some cases, informed guesses are made to evaluate the method of statistical compilation, using related articles on the matter. For example, in the case of cost of living compilations, F. Laurence, a statistician of the colonial authorities, explained the method by which the indices were compiled. Such problems with sources and data are difficult to avoid in economic history. However, the main assumption in this paper is that, since this is the only information available to researchers and was compiled by the French authorities, who arguably wanted the information for strategic reasons, the information is mostly reliable and, most importantly, comparable between regions. These official data remain the basis for new estimates being constructed and are the main resource for research on the economic history of Vietnam.

The French were keen to understand the economic realities of the Indochinese colony, if only in order to maximise potential public revenue. Since they relied on these statistical reports for their colonial policy and especially for fiscal policy, these data are mostly accurate. Jean-Dominique Giacometti clearly outlines the many advantages of working with these data,²¹ even if many subsequent estimates need modification to reflect biases we can now rectify. These data are used in the recent quantitative research that constructed estimates for many aspects of the economic life of colonial Indochina. The Hitotsubashi Project is the main example of this and is an invaluable resource for further analysis of Vietnamese economic history. Despite the potential problems associated with these data, they form the crux of all research on Vietnamese economic history to date and likewise form the starting point of our analysis. While we do not construct new estimates, this thesis' contribution to the literature rests in re-evaluating previously hinted at hypotheses on the origin, nature and impact of the North-South gap in the colonial era.

Our research was in part motivated by the current Vietnamese government's acknowledgment of a North-South gap in today's Vietnam. It would have been interesting to study these regions according to their current specification. The 1954 Geneva accords

²⁰ “[In the South] tenants ate better and worked less intensively than in the rest of the North” from James Scott, *Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia*, (New Haven: Yale University Press, 1976), p.78. This quotation makes us hesitant in assuming the data collected is comparable even if leisure was valued, but it may bias the results in favour of our conclusions.

²¹ Jean-Dominique Giacometti, “Sources and Estimations for Economic Rural History of Vietnam in the First Half of the 20th Century” in Jean-Pascal Bassino, Jean-Dominique Giacometti and Konosuke Odaka (eds) *Quantitative Economic History of Vietnam 1900-1990*, (Hitotsubashi: Institute of Economic Research, 2000).

separated North and South Vietnam at the 17th parallel. Unfortunately, because this differed from the colonial administration of the Vietnamese economy, the records for that time period are not organised in the easy category of ‘North’ and ‘South’. The specificity of the geographic division would imply that in our analysis, all provinces of colonial Vietnam that were south of the 17th parallel should be taken as part of South Vietnam, and all provinces that were north of the 17th parallel should be part of North Vietnam. Unfortunately, the information available is rarely divided by provinces and such a methodology is not always possible.

In the national colonial archives of France on Indochina, although most of the data is available for the three regions of Tonkin, Annam and Cochinchina, at times the data separated Vietnam in only two parts: Cochinchina and Tonkin-Annam. Including all of Annam in the North may have resulted in a bias that would affect the scale of the economic differences between the two regions. Some of the literature has presented a solution for how to use such data when comparing North and South Vietnam. Jean-Pascal Bassino and Severine Blaise estimated links between the pre-1945 and post-1954 economic performances of Vietnam.²² To achieve their historical comparison, they made estimates for Northern and Southern Annam by using “a share of 50% corresponding to the share of population”.²³ Although this methodology is the only one in the literature that addressed our particular problem, it poses difficulties for our purposes. Previous research asserted that the different population densities between North and South, due to the fact that Southern Vietnam was populated more recently, might explain the North-South gap. Adjustments relying on demography may thus eliminate or distort the effect of demographic differences on the economic performances of North and South, even though by 1954 it was considered that Annam's population was almost equally divided between North and South. Nonetheless, the results might be biased by such a calculation. In light of this difficulty, the research questions look specifically at the economic gap between Tonkin and Cochinchina during the colonial era. As Figure 1.1 showed, these displayed clearly the colonial North-South gap.

²² Jean-Pascal Bassino & Severine Blaise, “Linking Pre-1945 and Post-1954 Series for Estimating North Vietnam and South Vietnam Long Term Economic Performances, 1935-1975” in Jean-Pascal Bassino, Jean-Dominique Giacometti and Konosuke Odaka (eds) *Quantitative Economic History of Vietnam 1900-1990*, (Hitotsubashi: Institute of Economic Research, 2000), p.410.

²³ *ibid*, p.413.

Structure

Although this chapter has alluded to the literature's relative silence on the economic gap between colonial Tonkin and Cochinchina, this will be made clearer in the next chapter. **Chapter 2 traces a historiography of the literature on the economic history of Vietnam** and highlights the contribution this thesis is making to this literature. Specifically, the chapter will show that despite a tacit acknowledgment of a North-South gap in economic performance during the colonial era, it has not been adequately studied. This thesis' contribution will therefore be to re-evaluate some of the basic suggestions made in the literature as to the origin of this gap, illustrate the nature of this gap in the agricultural, industrial and commercial sectors of Tonkin and Cochinchina, and evaluate its impact on the standards of living of these two regions' populations.

The first part of this thesis, Chapter 3 and Chapter 4, is a re-evaluation of the two suggested 'explanations' for the colonial North-South gap: demographics and colonial policy. In Chapter 3, we re-visit the hypothesis that stronger demographic pressure in Tonkin explains its more limited economic growth relative to Cochinchina. The main question of this chapter is "in what ways could demographics have influenced differing economic performances"? We show that the effect of population pressures on yields was not the only significant way in which differing demographic characteristics influenced economic performance. We suggest that land and labour utilisation would also have been influenced and that differences within these would have altered the way in which production occurred. Furthermore, we suggest that any impact demographic differences would have had on economic performance between the two regions would have continued throughout French colonial rule because migration between the two regions was limited. In Chapter 4, we re-visit the hypothesis that colonial policy explains the divergence of Tonkin and Cochinchina during colonial rule. The main question of this chapter is "to what extent did the colonial administration's actions reflect or encourage the economic divide between Tonkin and Cochinchina"? The literature on colonialism generally evaluates the costs and benefits of colonialism, or whether colonialism was a "good or bad thing",²⁴ because it is mostly accepted that "the rule under colonialism was and is that the interests of the colonialists were always satisfied first, and the interests of

²⁴ Patrick Manning, "Analysing the Costs and Benefits of Colonialism", *African Economic History Review*, Vol.1, No.2, Autumn 1974, p.18.

the [colonised people] were satisfied only insofar as it fit the needs of the colonialists”²⁵. Such an evaluation of colonialism in French Indochina is outside the scope of this thesis. Instead, we examine the way in which the French governed their territories. We argue that there is limited evidence that colonial policy was a prime mover in the differing performances of Tonkin and Cochinchina. Certainly colonial policies may have helped perpetuate the significance of differing circumstances, but we claim policy choices were mainly a reflection of these initial differences.

The second part of this thesis focuses on understanding the nature of the economic gap. Firstly, in **Chapters 5 and 6, we evaluate the way in which the North-South gap manifested itself in the production characteristics of the agricultural and industrial sectors of Tonkin and Cochinchina.** Chapter 5 addresses how the economic divide that existed between Tonkin and Cochinchina manifested itself in the output and productivity of the agrarian sector. We argue that agrarian production was more productive in Cochinchina and that the two regions had differing production patterns. Cochinchina engaged in specialisation while Tonkin engaged in diversification. By evaluating trends in land and labour productivity as well as in output, we argue that this reflected the different characteristics seen in Chapter 3 and that these would have been perpetuated by the colonial decisions outlined in Chapter 4. Chapter 6 asks the same question with respect to the industrial sector. In this chapter, we show that the Northern region was more industrial than its Southern counterpart and that this conclusion further emphasises the Northern region's tendency towards diversification. We suggest that this diversification in activities other than agriculture could in part have attenuated the perceived demographic pressures in the region's agrarian sector, but that Tonkin's industrial sector was not large enough to attenuate its economic gap relative to Cochinchina.

Secondly, **Chapter 7 is an evaluation of how the differing production patterns shown in Chapters 5 & 6 impacted the regions' commercial activity.** We analyse balance of trade, trade partners and the details of the trading activity of both regions. We show that there were no real differences in the commercial regulations Tonkin and Cochinchina faced. We argue that the key reason for differences in commercial activity resulted from Cochinchina's specialisation and consequently larger tradable output. These

²⁵ *ibid*, p.20.

tendencies explain Cochinchina's ability to have a positive balance of trade, its larger volume and value of exports as well as its more substantial commercial ties with neighbouring countries. However, Tonkin's sizeable demand of international imports also suggests that its economy was unable to achieve the self-sufficiency that seems to have guided its production patterns. This chapter provides further evidence of how the economic gap manifested itself in the economic activity of the two regions, while showing the links between production patterns and commercial activity.

In the last part of this thesis, **Chapter 8, we discuss to what extent the superior economic performance of Cochinchina (with respect to GDP) was reflected in standards of living for its population relative to Tonkin's.** Although this chapter looks at health and education provisions, it mostly evaluates income and cost of living differences between the two regions in both the rural and urban sectors. We construct indices to compare wages and prices in Hanoi relative to Saigon. Furthermore, we suggest a preliminary population distribution to show why rural incomes and expenditures have more relevance for evaluations of average standards of living in Tonkin and Cochinchina than urban data. We argue that although there was a significant gap in standard of living between the urban populations of Tonkin and Cochinchina, the larger share of the populations of both regions were engaged in agricultural production and was unlikely to experience vastly different standards of living.

Our conclusions are summarised in Chapter 9. We conclude that differing circumstances pre-dating French colonial rule are more likely to explain Cochinchina and Tonkin's differing economic performances than colonial policy. Production patterns differences in the agrarian sector were largely due to demographics and landholding patterns, which evolved from historical differences. Furthermore, although Tonkin did seem to have a head start in industrial development, the sector was too small to close the gap between the two regions' economic performances during the colonial era. The differences in the production patterns of the two regions had a significant impact on their ability to extract revenue from integrating to the world economy, with Cochinchina a much larger benefiter from this integration than Tonkin. However, despite the higher GDP per capita in Cochinchina, standards of living for much of its population were similar to those of Tonkin's population. In addition, we suggest how this thesis may fuel further research into analyses of contemporary Vietnamese economic development.

Chapter 2: Literature Review

The previous chapter stated the questions and explained how they would be answered; this chapter explains why these questions should be answered and how this thesis adds to the existing literature on both Vietnamese economic history and Southeast Asian economic history. Scholarship on colonial Vietnam is varied and at times quite rich, particularly within some topics such as colonial ideology or agricultural development. However, it has been dwarfed by scholarship on the rise of nationalism and communism and the country's post-colonial history. The literature is also scarcer than one would expect for a country that is both populous and economically significant. A striking aspect of the literature on colonial Vietnam in recent times is the recognition of the economic differences that existed within the country, particularly the north-south economic gap. Although most authors agree on the existence of such a gap, no research specifically shows the nature of the gap, how it came about, or how it may have impacted the economic life of the regions.

This chapter will look at some of the key works on colonial Vietnam. These sources have been separated in both chronologic and linguistic categories: starting with official colonial publications, pre-1950 French, pre-1950 English scholarship, post-1950 French/Vietnamese and post-1950 English language scholarship. In addition, a section on key works on Southeast Asian colonial history will be presented. Some of these works include Vietnam in their analyses of the wider Southeast Asian economic history. Other works are on specific countries within Southeast Asia, such as Burma or the Dutch Indies, and these help contextualise the research presented in this thesis. Finally, a section on contemporary writings on Vietnamese economic performance highlights why more research into the colonial economic history of Indochina is needed to understand Vietnam's current economic performance.

It will be shown that while the Vietnamese North-South gap has almost always been acknowledged, it has never been explained, nor has it been clearly defined. There are therefore a number of contributions that this thesis makes: a re-evaluation of the previously suggested origins of the North-South gap; an explanation of the nature of this gap with respect to the agrarian, industrial and commercial sectors of Tonkin and

Cochinchina; and an evaluation of the impact of this gap on the living standards of the populations of these two regions. The novelty of this thesis is not only the emphasis on comparing the two regions of Tonkin and Cochinchina, but also an emphasis on the relevance of this gap on their economies, rather than a tacit acknowledgment of its existence.

2.1) Official French colonial publications

The initial literature on Indochinese economics was that of the French administration, both in its official publications and through commissioned work from some of its administrative staff. These are crucial resources, sometimes for the statistical information that was gathered, other times for the viewpoints and analyses that were presented. Whilst Indochina was nominally a Union, its component parts were generally studied individually and they were rarely compared to one another. Instead, the administration focused on looking at foreign colonial domains (such as the Dutch Indies, Burma or the Philippines) as a basis for future policy changes.

The *Annuaire Statistique de l'Indochine* (ASI) is a necessary primary source for any research on Indochinese economic history. This work started late in the colonial period: its publishing authority, the Société des Statistiques Générale, was only instituted in 1922. The ASI mainly published statistical information and is thus a rich resource for further analytical work on French Indochina. Because of the publication's role as one of data gathering, no analysis of the data is included in its volumes. However, the ASI provides us with some interesting guidelines as to what was considered significant to the authorities. For example, daily wage rates were only recorded for the year 1929, showing the limited importance the administration placed on monitoring 'free' labour, as opposed to contracted labour, prior to this date.

While the ASI was mainly a statistical publication, the *Bulletin Economique de l'Indochine* (BEI) was a more analytical and descriptive publication and its volumes provide the first real exposure to the available literature on the economic history of colonial Indochina. It was first published in 1898 and remained an important publication until 1952. Unlike the ASI, the BEI contained more than just data. Not only were various studies on the state of rice culture or details of plants found in Indochina published in the

BEI, but evaluations of agrarian credit institutions in the Dutch Indies or reports on the state of the Philippines' economy were also frequent. Members of the administration wrote most of the works published in the BEI. The bulletins often include excerpts of speeches, policies or other official documents, as well as excerpts of other government-encouraged research, such as explanations of the ways in which cost of living indices were constructed in Indochina. The BEI's many articles show how the French studied other colonial administration's works: consistent research on Java, the Philippines, Burma... was published, although none compared these economies specifically to French Indochina's. The BEI also published attachments with vast statistical records, not just for Indochina, but for other Southeast Asian economies. For example, the *Tableau du Commerce Extérieur*, which was at times attached to the BEI, recorded data on trade. Unfortunately, limited evaluations of trends were included in this specific publication. Unlike the ASI, the BEI evaluated trends in economic development to a larger extent. However, the BEI rarely, if ever, compared development between regions in Indochina, focusing instead on specific aspects of specific regions.

The interesting aspect of these official publications is that whilst some general points are made for all of Indochina, it is clear that the authorities looked at each component part of the Union as separate and distinct, requiring its own research and records. At times, the authorities recorded statistics for the Union as a whole. However, often they tried to isolate each region, so that they collated data for Tonkin, Cochinchina, Annam, Cambodia and Laos individually. Although their data often highlighted major gaps between regions, at no point in the BEI or the ASI is any explanation made as to why the differences arose. It was clearly felt that each region had different advantages and obstacles and should thus be studied independently. An exception to this was F. Laurence's suggestion, in the BEI, that the cost of living in Saigon was higher than in Hanoi.²⁶ Even in the rare cases when such 'evaluations' were provided, there was no analysis of the reasons or consequences for such differences. Either Indochina was considered a united territory, or its component parts were evaluated in a vacuum. As shown in Chapter 1, recent estimated data show there was a GDP gap, particularly during colonial rule. Perhaps the government's neglect in comparing economic differences was

²⁶ SOAS: F. Laurence, "Les variations du coût de la vie pour les Européens à Saigon de 1910 à 1925", French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1925*, (Hanoi: 1926), p.438.

due to the fact that they did not have access to GDP data of this kind. Having this data now reinforces the need for answers to our questions: why did this gap exist, how did it manifest itself in the economy and what was its impact on the population?

2.2) Analytical studies by French scholars on Indochina during colonial rule

The administration did not limit itself to these technocratic publications. In fact, many more works were done during colonial rule on the economy, government and history of Indochina. Many of these works were done by active or retired civil servants, while others were written by academics, often with the help of the administration. In these cases, more analysis was provided than in the BEI or ASI and many of the authors noted differences between the territories of Indochina. However, as with the official publications, these differences were rarely fully evaluated. This suggests that the differences between the regions of Indochina were considered irrelevant to the research agendas of scholars at the time. Indochina was a French colony and what mattered to these writers was how to understand its colonial development as a unit. This literature further prompts us to question why a gap that is now so evident in GDP terms failed to capture the interest of the French academic sector then.

French colonialism in Indochina

Because many of the authors on Indochina in this time period were in some ways associated with the colonial regime, many focused on explaining the ways in which the colonial administration worked. For example, Colonel Albert Duboc's work on Indochina focused specifically on the necessity of improving the approach of the colonial government, away from assimilation towards association.²⁷ While his work included a very brief overview of the economics of French rule with respect to taxes and welfare investment, the work is typical of that of many writers in this time period. The focus is on the colonial concept rather than on the reality of colonial rule. It is mainly a theoretical and ideological approach in which few details specific to Indochina were used to add context to the analysis presented.

²⁷ Albert Alfred Leon Duboc (Colonel), *L'Indochine contemporaine*, (Paris: Charles-Lavauzelle & Cie, 1932), p.178.

This is equally true of Albert Sarraut's works on colonial ideology. Sarraut was the longest holding governor general of Indochina, serving two terms (1911-1914; 1916-1919). After this, he joined the ministry of colonies. He is famous for establishing the 'mise-en-valeur' ideology that shaped the economic development of French colonies in the post-WWI era. In his 1923 work, Sarraut provided both an overview of all French colonies and a discussion of what he believed French colonialism brought to these colonies. It is in this book that he first advocated France's responsibility to provide colonies with large-scale infrastructural work, if only in order to appease anti-colonial sentiment and keep the colonies part of the Empire.²⁸ In his later work, he provided a reflection on colonialism and established more clearly the way in which colonial ideology was formulated in Indochina.²⁹ Again, these works focused on an overall approach of French colonialism and on ideology rather than on the realities in each colonies.

In certain circumstances such an approach is sensible: some research clearly shows that specificity might have been irrelevant to some aspects of French colonialism. Indeed, Albert Sabes' 1931 doctoral thesis discussed the Indochinese bank, a topic that did not necessarily need to address economic differences.³⁰ Moreover, Arthur Girault's research evaluated the tariff policy of France and its empire before 1916.³¹ Many aspects of colonialism were common to all French-ruled territories, particularly trade policies: these were at the centre of the colonial ideology, as exemplified by Jules Ferry's belief that colonies were necessary for France's industrial growth.³² However, the idea of a single colonial ideology might have obscured some of the realities of colonial economics, focusing rather on colonial politics.

For example, George Maspero's work outlined the responsibility of France towards Indochina and the legacies of the many Governors General of Indochina.³³ Maspero himself had been superior resident in Indochina. Many of the other contributors were also associated with the administration: George Lamarre had previously been in charge of

²⁸ Albert Sarraut, *La mise en valeur des colonies françaises*, (Paris: Payot, 1923).

²⁹ Albert Sarraut, *Grandeur et servitude coloniales*, (Paris: Editions du Sagittaire, 1931).

³⁰ Albert Sabes, *Le renouvellement du privilège de la banque de l'Indochine*, Thèse pour le doctorat en droit, (Paris: Marcel Giard, 1931).

³¹ Arthur Girault, *The Colonial Tariff Policy of France*, (London: Humphrey Milford, 1916).

³² Raoul Girardet, *L'idée coloniale en France de 1871 à 1962*, (Paris: La Table Ronde, 1972).

³³ George Maspero, *Un empire colonial français l'Indochine, Tome I: Le pays et ses habitants – l'histoire la vie sociale & Tome II: Indochine française – l'Indochine économique l'Indochine pittoresque*, (Paris: Les Editions G. Van Oest, 1929).

economic services in Indochina and Pierre Pasquier was the current general governor of Indochina when this work was published. The first volume mentioned differing aspects of the geography within the Union, but this served a descriptive rather than an analytical purpose. Moreover, the second volume at times stopped short of evaluating some of the phenomena it highlighted. For example, the book suggests that migration from Tonkin to Cochinchina was rather scarce because of the industrial growth in Tonkin,³⁴ but does not expand on the idea. The authors suggested that economic differences were indeed significant for the economic development of the Union, but seem to have conformed to the apparent paradigm of researching Indochina in a holistic manner and not dwelling on differing circumstances.

A more significant contribution to the literature is found in Paul Bernard's two key works on what he termed the 'economic problem of Indochina'.³⁵ The first of these two works is one of the most interesting general overviews of the Indochinese economy in the 1930s. Bernard specifically looked at production, population and other aspects of the economy and explained how the French contributed to the development of the Indochinese economy. He then looked at the various crises that had come about and identified what he considered were the key problems for the Indochinese economy as a whole, specifically with respect to trade, credit and general colonial policies that did not seem to have worked. Bernard estimated the shares of contribution each region made to the national budgets in 1934. He noticed the disproportionate contribution of Cochinchina to the Indochinese budget: the region contributed forty per cent of the budget.³⁶ However, he did not question why that was: was Cochinchina richer, or was the tax burden stifling the domestic economy? Interestingly, this shows that, at least from a budgetary point of view, scholars were aware of Cochinchina's higher level of economic performance. Yet studies investigating the differences were never undertaken during the colonial period and contemporary studies still have not fully explored it.

In his second book, Bernard's approach was almost more historical: he evaluated previous public works and their sustainability and profitability. His research is an in depth analysis of the problem of under-industrialisation in the Indochinese economy. He

³⁴ *ibid* Tome II, p.213.

³⁵ Paul Bernard, *Le problème économique Indochinois*, (Paris: Nouvelles Éditions Latina, 1934) & Paul Bernard, *Nouveaux aspects du problème économique Indochinois*, (Paris: Fernand Sorlot, 1937).

³⁶ Bernard 1934, *op.cit.*, p.49.

suggested that between 1900-1930, little progress had been achieved. Whilst he again acknowledged some of the differences between the two regions, Bernard, in much the same way as others in this time period, did not question why these differences existed or, and surprisingly in light of his work, what the resultant economic impact was. This is equally noticeable in Charles Robequain's oft quoted *L'évolution économique de l'Indochine française*.³⁷ Robequain made clear points on what France did to develop the economy, however his general overview of the economy is not extensively analytical or comparative. He made a number of allusions to differences between the two regions, whether in agriculture or industry, that were not subsequently discussed.

This tendency to gloss over differential economic performance is perhaps best exemplified in André Touzet's key work *L'économie Indochinoise et la grande crise universelle*.³⁸ By 1934, Touzet was the ex-governor of the colonies and an adjunct director of Indochinese finances. His political career and close association with colonial affairs and Indochinese finances is clear in his work: his analysis is well informed. However, it is also biased by the need to not only brush over policy mistakes, but also defend them. This is particularly clear in Touzet's defence of the stabilisation of the piastre in 1930. He argued that no nation that dropped the gold standard saw improvements in its economic situation.³⁹ In 1934, it may have been too early to see the inaccuracy of this statement, but it clearly displays some of the problems of this literature. Hindsight and distance from colonial actions may help clarify developments in the Indochinese economy.

Nonetheless, Touzet's seminal work showed the development of agrarian colonisation, market movements and colonial policies to do with economic development, particularly tariffs. Touzet highlighted differences between the regions in terms of what crops were favoured. However each aspect of the economy was evaluated for the Indochinese Union as a whole and differences between the Union's territories were not considered relevant. It may be that these differences did not have a real impact on how the colonial government worked or how the economy progressed during the Great Depression, which would justify this holistic approach. Indeed, Touzet argued that a key

³⁷ Charles Robequain, *L'évolution économique de l'Indochine française*, (Paris: Typographie Firmin-Didot, 1939).

³⁸ André Touzet, *L'économie Indochinoise et la grande crise universelle*, (Paris: Marcel Giard, 1934).

³⁹ *ibid*, p.103-105.

finding of his work was that French colonisation did not seem to have provided a huge amount of help to a predominantly agrarian nation.⁴⁰ Since national accounting was not yet prevalent, the gap between Tonkin and Cochinchina might not have been noted. However, considering what new estimates reveal, it seems clear that work on understanding and evaluating the economic gap between Tonkin and Cochinchina needs to be done.

Touzet's lesser known work on the governance of Indochina is, in a way, far more informative than some of the previous work on colonial ideology: he focused on separating the 'theory' from the reality of federalism in Indochina.⁴¹ His work quite rightly points out that Indochina was probably federal only with respect to its finances. He suggested that in 1887, an administrative union had been designed, but that by 1911, it was moulded into a federation of countries.⁴² Touzet was one of the first to recognise that such a federation was not necessarily possible because of *the variations within each country*. Essentially in his view, Indochina was simply a group of neighbouring countries administered together by a foreign power.⁴³ This work is unique, particularly in light of the previously cited works, insofar as it is one of the only works to highlight that the countries of the Indochinese Unions differed and therefore that it was not necessarily possible, or advisable, to lump them together.

Other works further evaluated this financial federation through analyses of the Indochinese budgets. Henry Marc and Pierre Cony's work focused in more detail on the historic formation of the Indochinese Union and the ways in which the various budgets were organised.⁴⁴ Roger Pinto's legislative work on the political system and how it was devised is crucial in understanding the differences in the administration of each region.⁴⁵ Pinto's work reflects his academic background in law, but it remains a useful marker in the literature, as it highlights the need to look at the administration of Indochina in a more country-specific perspective. These contemporary French authors seemed to have been keen on looking at Indochina as simply another part of their colonial domain and their

⁴⁰ *ibid*, p.231.

⁴¹ André Touzet, *Fédéralisme financier et finances indochinoises*, (Paris: Recueil Sirey, 1935).

⁴² *ibid*, p.100.

⁴³ *ibid*, p.101-102.

⁴⁴ Henry Marc & Pierre Cony, *Indochine française*, (Paris: Editions France-Empire, 1946).

⁴⁵ Roger Pinto, *Aspects de l'évolution gouvernementale de l'Indochine française*, (Paris: Etudes Indochinoises & Extrême-Orientales, 1946).

research topics imply limited desire to look into the distinctiveness of Indochina's member states in a comparative light. These works contain data and information that point to existing differences between the two regions. That an analysis of this was not done is almost shocking considering that the prevalent mind-set in France, after Sarraut's work, was on encouraging the economic 'development' of the colonies. If administrative decisions differed and the colonial administration was supposed to be the key mover in encouraging development, why were no evaluations of economic differences undertaken?

Specific aspects of French colonialism

The limited effort of colonial contemporary writers in evaluating the economic differences that existed within the Union becomes particularly puzzling when looking at the research on more specific aspects of the colonial administration. For example, Henri Guermeur studied the establishment of the taxation system in Indochina in the early 1900s. His work very clearly showed that the tax system initiated under Doumer's governorship (1897-1902) differed markedly between the regions of Indochina.⁴⁶ However, even he did not further look into the reasons why, or the implications this may have had on economic development. Similarly, the research that was done for the government's potential use in designing new administrative ways tended to be concentrated on general recommendations for Indochina as a whole. Indeed, A. Boudillon's work as inspector of the land registry to the Minister of Colonies focused on evaluating taxation on land and making recommendations for how to increase public revenue,⁴⁷ without recognition that this may have differed depending on the region.

H. Simoni's work on capital in the Indochinese economy provided some further material for evaluations of differences within Indochina.⁴⁸ His work provided an overview of general conditions within the Union. Whilst at times he included evidence on specific circumstances, his comparisons tend to be with other French colonies and, for the most part, his work seems more descriptive than analytical. He showed what public works were done and gave estimates on investment made in key sectors, but he did not

⁴⁶ Henri Guermeur, *Le régime fiscal de l'Indochine*, (Paris: L'Harmattan, 1990 – First published in 1909).

⁴⁷ A. Boudillon, Rapport présenté à Monsieur le Ministre des Colonies, *Le régime de la propriété foncière en Indochine: ce qui a été fait – ce qu'il faudra faire*, (Paris: Emile Larose, libraire-éditeur, 1915).

⁴⁸ H. Simoni, *Le rôle du capital dans la mise en valeur de l'Indochine*, (Paris: Helms, 1929).

evaluate how each region's economy responded to these circumstances. In fact, research on how each colony fared with investors is scarce, despite the recognition that there were different economic activities undertaken in each region.

Demographic differences seem to have been a key source of concern for the administration. There was much discussion as to how to enable the lands of Cochinchina, and of Cambodia to a smaller extent, to be fully utilised. Many believed in the necessity of displacing labour from 'overpopulated' Tonkin to the southern regions. E. Delamarre's report for the colonial exposition of 1931 in Paris highlighted the various regulations and processes that were put in place by the administration to 'solve' the labour issue.⁴⁹ Jean Goudal's work on labour conditions went farther than Delamarre's.⁵⁰ Rather than simply looking at the legislation, Goudal looked at the wider implications of labour movements: from undernourishment to the need for cooperation between the administration and the peasant. However, neither of these works looked into how the labour market impacted the economic development of the Union, or indeed vice versa.

However, a separate strand of research used demographic differences to suggest these might have explained the presence of an economic gap between Tonkin and Cochinchina, at least with respect to the agricultural sector's performance. The two key works of French scholars on the subject are those of Pierre Gourou and Yves Henry.⁵¹ Both observed that differences in the population density of the different administrative territories probably impacted soil productivity and, by extension, economic performance. Gourou was a scholar interested in the rural economy of Tonkin and his fieldwork on the region remains one of the most influential books written on the subject.⁵² Gourou also saw the need to understand Indochina as a whole and he gathered evidence amassed by other scholars and researchers for the French authorities for the other four component

⁴⁹ E. Delamarre, *L'émigration et l'immigration ouvrière en Indochine*, (Hanoi: Imprimerie d'Extrême-Orient, 1931).

⁵⁰ Jean Goudal, *Labour Conditions in Indo-China*, (Geneva: International Labour Office, 1938).

⁵¹ Yves Henry, *Economie agricole de l'Indochine*, (Hanoi: Gouvernement Général de l'Indochine, Publié à l'occasion de l'Exposition Coloniale Internationale de Paris, 1932) & Pierre Gourou, *Land Utilization in French Indochina*, (New York: Institute of Pacific Relations, 1945). Although the original copy of this manuscript is in French, the manuscript used in this submission is the English version. The translation was made partly by S. Haden Guest and partly by Elisabeth Allerton Clark. Nonetheless, Gourou assisted in the revision of the English manuscript so that the translation is quite close to the original. Many of the sources used in this submission are French. The author translated the quotations that appear in the text, unless otherwise mentioned.

⁵² Pierre Gourou, *Les paysans du delta Tonkinois: étude de géographie humaine*, (Paris: Moutou, 1965 – First published in 1936).

regions of French Indochina. Conversely, Henry's role was more one of compiling statistics. Indeed, Yves Henry was a researcher for the colonial authorities in the 1920s and 1930s and, in part because of this, argued that his 1932 publication "would have gained from not being strictly documentary; critical analysis and hints on the principal problems of the economy and agricultural policy would have given it more life".⁵³ Nonetheless, these two researchers were the only contemporary scholars to provide a suggestion as to the origin of the economic gap, even if neither further expanded on the subject.

Gourou's writing is considered more objective than Henry's, in part because he was an academic not associated with the government and was therefore considered more of an impartial observer, and in part because he analysed his data to a greater extent. For example, he briefly compared the regions to one another, mainly with respect to land distribution. Despite the difference in the scale of their analysis, both scholars believed that because the South was much less populated, it had not yet achieved its full production potential.⁵⁴ To both Gourou and Henry, this consequence of demographic differences alone explained the fact that the South could produce more per capita. Gourou stated that western and central Cochinchina "produce[d] a large surplus of rice which supplie[d] a large export trade [greater than] those carried on by the peasants of Annam and of Tongking".⁵⁵ Henry and Gourou both reached similar conclusions: regional differences between North and South originated from the fact that the man to land ratio was much higher in the North than in the South. For example, Cochinchina not only had more alluvial plains than Tonkin, but these were also less populated.⁵⁶ In other words, per hectare, there were many more labourers in Tonkin than there were in Cochinchina.

Moreover, Henry believed that apart from its mining industries, Tonkin had no dominant high value output.⁵⁷ Because of this significant difference in the value potential of production between North and South, Henry explained that "the study of crops shows South-Indochina as the true centre of great colonisation, be it by size, variety and quality of the land [and production]".⁵⁸ Surprisingly, although it is clear that Cochinchina was the

⁵³ Henry, *op.cit.*, p.8.

⁵⁴ *ibid*, p.8.

⁵⁵ Gourou 1945, *op.cit.*, p.258.

⁵⁶ *ibid*, p.89-90.

⁵⁷ Henry, *op.cit.*, p.225.

⁵⁸ *ibid*, p.226.

rice basket of Indochina, research during this time period tended to focus on Tonkinese agricultural methods. Indeed, both R. Dumont and Pierre Gourou investigated the Tonkinese delta, while research on Cochinchinese rice production was scarcer.⁵⁹ To Gourou, demographics were the source of all other economic differences between the two regions. He compared the soil fertility of Tonkin and Cochinchina, and argued that the latter's lands "[we]re immature soils that ha[d] not had time to become exhausted", because the area was populated much later than Tonkin.⁶⁰ It seems to have been an agreed belief considering the significant effort that the colonial government of Indochina placed on trying to establish some type of balance in the population densities of the Union through labour movement. However, although that is suggested, it remains that no further evaluation was done. Was the gap really only due to the man-to-land ratio difference and their impact on soil productivity? Can we really simply use the agricultural sector to understand how this gap was formed? Finally, did this gap have an impact on the standard of living of the population? French researchers during the colonial time period did not address these questions.

2.3) Works on Indochina by foreign scholars during colonial rule

Research on Indochina was also undertaken during the colonial time period by non-French scholars. At times this was as part of wider research on French colonialism, whilst at other times it tended to be as part of the wider Southeast Asian context. This is particularly true of the works that were done under the auspices of the Institute of Pacific Relations (IPR).

French colonialism

Although the previous section suggests that the French were rather proud of the evolution of their colonial ideology and used it as the basis for any evaluation of economic progress, foreign scholars were rather less enthusiastic. An evaluation of the role of French policy

⁵⁹ R. Dumont, *La culture du riz dans le delta du Tonkin*, (Paris: Société d'éditions géographiques, maritimes et coloniales, 1935) & Gourou 1965, op.cit.

⁶⁰ Gourou 1945, op.cit, p.79.

in terms of economic development in Indochina was attempted by Thomas Ennis.⁶¹ Ennis' work is a qualitative analysis of the political situation and its impact on education and health. Ennis did not look into variations within the territories, rather he compared Indochina to Dutch and English colonial territories, to the detriment of the French. While this work presents interesting arguments, it does not address the North-South gap and it remains unclear how colonialism would have affected, or been affected by, a GDP gap between Tonkin and Cochinchina.

A much more significant contribution to the literature on the economic history of Indochina is Virginia Thompson's *French Indochina*.⁶² This work provides an incredibly broad overview of Indochina under colonial rule. Thompson included a history of the Vietnamese empire and discussed various aspects of the colonial period from political organisation to native representation and responses to colonialism. Her work was an attempt to put, in English, "a background for the general problems in French Indo-China to day"⁶³ and she stressed many of the economic, administrative and geographic differences that existed within Indochina. However, she did not evaluate why these differences existed or how they would have affected economic performance.

Stephen Roberts wrote a detailed history of the origins of French colonialism and highlighted its many problems.⁶⁴ Interestingly, Roberts argued that "it could almost be said that Indo-China saw the emergence of a rich country, despite everything that the French could do to hinder it".⁶⁵ Roberts did not provide an evaluation of why that would be, but if he was right and the colonial administration was, at best, a neutral influence on economic development, could it be that Henry and Gourou were right and the man-to-land ratio alone was the reason behind the economic gap? Such questions have not been satisfactorily addressed and it seems clear that further work on the link between the colonial administration and the perceived economic gap between Tonkin and Cochinchina is required.

⁶¹ Thomas E. Ennis, *French Policy and Developments in Indochina*, (Chicago: University of Chicago Press, 1936).

⁶² Virginia Thompson, *French Indochina*, (London: Unwin Brothers LTD, 1937).

⁶³ *ibid*, p.ii.

⁶⁴ Stephen R. Roberts, *History of French Colonial Policy (1870-1925)*, (London: P.S. King & Son, 1929).

⁶⁵ *ibid*, p.983.

Southeast Asian comparative studies

Many of the works written by non-French scholars on Indochina were part of wider Southeast Asian research, generally under the auspices of the IPR. The Institute was created in 1929 and grouped members from various countries, mainly government officials and scholars interested in Pacific affairs. Its many conferences and publications provide a large resource for current academic work on the economic history Pacific countries. Authors such as John Furnivall, Philip Wright, Virginia Thompson, Kate Mitchell and Jack Shepherd were some of the key contributors to English language scholarly research on Indochina and Southeast Asia. Some of the work done by the IPR on Southeast Asian economic history often includes sections on Indochina that were eerily similar to French research. For example, Thompson's book on labour problems in Southeast Asia includes a section on Indochina that appears very similar to Goudal's work for the ILO, although she added the responses of the labour market to the Great Depression.⁶⁶ In this respect, some of these works are useful to provide comparable context on other Southeast Asian economies, but not necessarily to improve the available literature on colonial Indochina.

Furnivall, a scholar of the Dutch Indies and Burma predominantly, researched colonial policy, welfare and education in Southeast Asia. Some of his works were ground-breaking at the time and remain some of the best sources for understanding many under-studied aspects of colonial rule.⁶⁷ Furnivall's research allowed him to contrast Dutch, English and French colonial governance. Colonial governments, regardless of policies, very often did what they wanted, rather than what the population might have needed and so differences in culture and ideology of colonial power might have affected the evolution of economic performance.⁶⁸ For example, Furnivall's research on the role of education, whilst much of it targets pre-1900 educational patterns, is a useful tool in evaluating how living standards might have changed during colonial rule. These types of comparative studies help refine our analysis of the extent to which differing economic performances had an impact on living standards. Likewise, Wright's evaluation of the

⁶⁶ Virginia Thompson, *Labor Problems in Southeast Asia*, (London: Oxford University Press, 1947).

⁶⁷ J.S. Furnivall, *Educational Progress in Southeast Asia*, (New York: Institute of Pacific Relations, 1943) & J.S. Furnivall, *Progress and Welfare in Southeast Asia: A Comparison of Colonial Policy and Practice*, (New York: Institute of Pacific Relations, 1941).

⁶⁸ Furnivall 1941, op.cit., p.42.

trade barriers of Southeast Asia allows a better understanding of the ways in which colonial policies might have had an impact on the economic growth of the different regions and thus allow a better evaluation of the origin of the GDP gap.⁶⁹

The works of Kate Mitchell and Jack Shepherd on industrialisation in Southeast Asia are almost the only works that assess the rise of industrial movements in Southeast Asia.⁷⁰ Generally, research on these countries focused on agriculture. This is particularly true for Indochina: as we saw, the French almost exclusively wrote on colonial ideology or agricultural developments. Mitchell and Shepherd's works provide an independent survey of industrial growth. However, these two works say essentially the same things, to the extent that the wording is the same at some point. This is probably because both worked together for the IPR. Shepherd's book advances the theory that industrialisation in the region was partly a response to the depression and to the advance of Japanese manufacturing.⁷¹ The key finding from these works, however, is that Indochinese industrial growth was predominantly associated with Tonkin, not Cochinchina. This is very significant for our research: the French researchers at the time associated the economic gap with agriculture and with the man to land ratio, all this in favour of Cochinchina. If Tonkinese industry was much more significant, how can we reconcile it to the existence of a gap and how does it affect the role of the man-to-land ratio?

2.4) Post-1950 studies on various aspects of French Indochina by French and Vietnamese scholars

Following in the footsteps of previous research on Indochina, post-1950 French and Vietnamese research has focused on much the same topics as pre-1950 research. There has been a particularly large focus in this literature on the nature of French colonialism. For example, Raoul Girardet's work provides an interesting analysis of colonialism throughout its history, from 1871 to 1962.⁷² Specifically, he looked at the evolution of the ideology of colonialism for the government and the population. His work stressed how

⁶⁹ Philip G. Wright, *Trade and Trade Barriers in the Pacific*, (Honolulu, Hawaii: Institute of Pacific Relations, 1935).

⁷⁰ Kate L. Mitchell, *Industrialization of the Western Pacific*, (New York: Institute of Pacific Relations, 1942 (2)) & Jack Shepherd, *Industry in Southeast Asia*, (New York: Institute of Pacific Relations, 1941).

⁷¹ Shepherd 1941, op.cit., p.4-5.

⁷² Girardet, op.cit.

ideology varied over time within the mind-set of France itself. What he did not provide however, is evidence of what that meant in the colonies. Moreover, he assumed that because ideology was uniform, its impact on various colonial economies might have been homogenous.

Others scholars have considered the impact of colonialism in colonial economies. For example, Jacques Marseille's influential work is key in examining the relationship of the colonies to France, with respect to capitalism, through trade and capital flows.⁷³ He looked into the impact of the Depression on the French empire and compared it, in some ways, to what happened in other empires. He suggested that "whilst elsewhere it was agrarian products that were the first victims of the depression, in the case of the French empire, it was raw materials necessary to industry".⁷⁴ His research provided new arguments for how to look at the impact of the Depression and how to separate it by sectors.

Other writers have focused on evaluating colonialism specifically in Indochina. Most notably, Daniel Hémery, Pierre Brocheux and Jean Chesneaux are preeminent scholars of French colonialism in Indochina. In one of his more historical works, Chesneaux focused on evaluating how the French put the 'mise-en-valeur' policies to work and he argued that their implementation was detrimental to the economic activities of the country.⁷⁵ However, he did not explain how and seems to have assumed this to have been equally true for all parts of Vietnam. This is in part due to Chesneaux' time period, his initial writings came in the immediate aftermath of Dien Bien Phu and his research has generally been oriented toward the rise of nationalism in the economy. Conversely, Brocheux and Hémery's joint work provides a more nuanced evaluation of French colonialism, in part because it was written much later. They suggested "the relative uniformity of the pre-colonial systems of production and exchange ceded the place to a distinct differentiation in economic and social spaces that were unequally distributed".⁷⁶ Their work evaluated various aspects of colonialism and focused on some

⁷³ Jacques Marseille, *Empire colonial et capitalisme français*, (Paris: Albin Michel, 1984).

⁷⁴ *ibid*, p.56.

⁷⁵ Jean Chesneaux, "L'implantation géographique des intérêts coloniaux au Vietnam et ses rapports avec l'économie traditionnelle" in Jean Chesneaux, Georges Boudarel & Daniel Hémery's *Tradition et Révolution au Vietnam*, (Paris: Editions Anthropos, 1971), p.74-88.

⁷⁶ Pierre Brocheux & Daniel Hémery, *Indochine: La colonisation ambiguë 1858-1954*, (Paris: Editions La Découverte, 2001), p.129.

of the contradictions and problems associated with colonialism. Perhaps because they are historians, their work does not analyse the economic gap. Instead, their arguments emphasised the historical developments of colonialism rather than the relative economic development of Indochina.

Other writers have looked at even more specific aspects of government organisation during French rule in Indochina. Nguyen The Anh studied the Vietnamese monarchy during the period 1884-1945.⁷⁷ He concluded that there was a clear dispossession of the emperor's power, but that this was not replaced by a unified governing approach on the part of the French. There were clear differences in the organisation of the colonial government depending on the nature of the territory, whether protectorate or colony. Other research focused on understanding the personality of the French governors. Amaury Lorin's work on Paul Doumer's term as governor general of Indochina also shows this.⁷⁸ Because his work is a biography of Doumer, the main argument of this work rests on a description the way in which Doumer instituted his reforms in Indochina. No evidence is provided of the ways in which the colonial mechanisms differed between the territories of the Union. In fact, it seems that the social, rather than economic, aspects or impacts of colonialism have been the main concern of recent research on Indochina's colonial legacies.

Even more specific aspects of French colonialism such as property rights have also strayed away from economic evaluations. For example, Alexandre Deroche's recent research looked at the legislative aspect of the concessionary system. He focused exclusively on concessions and how they were allocated. In part because this was a reworked PhD thesis in law, this work does not explain what concession allocation meant for economic activity and growth.⁷⁹

Research on financial flows such as Alain Mantex and Fall Mamadou's PhD theses did investigate how private investments impacted the economic development of

⁷⁷ Nguyen The Anh, "The Vietnamese Monarchy under French Colonial Rule 1884-1945", *Modern Asian Studies*, Vol. 19, No.1. 1985, p.147-162.

⁷⁸ Amaury Lorin, *Paul Doumer, gouverneur général de l'Indochine (1897-1902)*, (Paris: L'Harmattan, 2004).

⁷⁹ Alexandre Deroche, *France coloniale et droit de propriété: Les concessions en Indochine*, (Paris: L'Harmattan, 2004).

Indochina.⁸⁰ However, the data problems associated with their research limited the scope of their analysis. In particular, Mamadou's thesis made very few distinctions between the communes of Tonkin and of Cochinchina in his analysis of investment. Likewise, other works tend to steer clear of evaluating the impact of variations in financial context. For example, Jacques Despuech's work on the evolution of the government's regulation of currency in Indochina,⁸¹ tends to be self-contained and does not provide any indication of the impact of finances on regional development divergence. This is also true of Marc Meuleau and Yasuo Gonjo's works on the Indochinese Bank.⁸² Both works investigated the roles and actions of the Bank of Indochina. Meuleau's work was more extensive than Gonjo's in term of historical reach, whilst Gonjo's was broader in its analysis of the many roles of the Indochinese bank. These works showed that the financial context of Indochina was regulated in some ways by the role of the Indochinese Bank and by the colonial government, but neither showed if there were differences in the financial contexts of Tonkin and Cochinchina. Their focus was on defining roles, rather than linking financial evolution to economic development. However, obtaining data on financial flows has not been fully satisfactory, so our contribution on this will be quite minimal, focusing instead on providing evidence to suggest how the gap might have been formed and what it meant for sector-specific growth.

Sector specific research on agriculture or industry by French authors was rather scarcer in this time period than in the previous, or than such research by non-French speaking authors. The main relevant work on agriculture is André Angladette's work on rice production.⁸³ Angladette provided some analysis and comparison between Vietnam and other Southeast Asian rice growers, mainly Burma and Thailand, but the work is a technical ecological study and once again fails to engage with the role of rice production in the economic performance of Indochina. Moreover, it focused on South Vietnam, preventing any comparison within Indochina. With respect to research on the commercial

⁸⁰ ANOM: TH758: Alain Mantex, *La présence économique française en Indochine, La question des investissements privés (1897-1931)*, (Paris: Pantheon-Sorbonne, 1993-1994) & TH462: Fall Mamadou, *Investissements publics et politique économique en Indochine 1898-1930 (La commune Vietnamienne dans la mise en valeur de l'Indochine)*, (Paris: UER Géographie Histoire Sciences de la Société, 1984-1985).

⁸¹ Jacques Despuech, *Le trafic des piastres*, (Paris: La Table Ronde, 1974).

⁸² Marc Meuleau, *Des pionniers en extrême-orient: Histoire de la banque de l'Indochine, 1875-1975*, (Paris: Fayard, 1990) & Yasuo Gonjo, *Banque coloniale ou banque d'affaires. La banque de l'Indochine sous la IIIe république*, (Paris: Comité pour l'histoire économique et financière, Ministère de l'Economie, 1993).

⁸³ André Angladette, *Le Riz*, (Paris: Presses Universitaires de France, 1967).

sector, Kham Vorapheth's work is central to understanding the organisation of commercial activity in the European side of Indochina's commercial sector during colonial rule.⁸⁴ Although Vorapheth did highlight some of the key differences between Tonkin and Cochinchina, it is rather unclear what these differences meant, how they arose or what their economic influence was, because Vorapheth's orientation was on understanding the development of French trading houses, not their role in the economic performance of Indochina.

Re-orientation of the research agenda: Welfare concerns

Two new research agendas became important after the end of colonial rule: living conditions and the rise of nationalism, suggesting a clear re-orientation in the ways in which research on the colonial time period was undertaken. Much new research has been driven by welfare concerns and evaluations of the morality of colonialism. For example, Trinh Van Thao's work on Indochinese education provides a very clear evaluation of the various ways in which each governor approached the education question.⁸⁵ The bulk of his research is on the intellectual classes in support of Ho Chi Minh's nationalist movements and on the sociological processes involved.⁸⁶ His interest is very much guided by a nationalistic response to colonial rule, in addition to very strong research on the sociological impact of colonialism and nationalism. Trinh Van Thao's 1995 book evaluated the pervasive influence of colonial rule on the welfare of the native population. Although he acknowledged there were differences between the southern and northern approaches to French versus native education, it was not the predominant focus on his work. Despite the re-orientation of the research agenda towards better evaluations in the welfare of the colonial populations, no real analysis that differentiates between the two regions' colonial educational systems and achievements has been done.

Instead, research has focused on evaluating the living conditions of minorities and peasants, either as homogenous groups in Indochina in the case of Ngo Vinh Long or

⁸⁴ Kham Vorapheth, *Commerce et colonisation en Indochine, 1860-1945*, (Paris: Les Indes Savantes, 2004).

⁸⁵ Trinh Van Thao, *L'école française en Indochine*, (Paris: Karthala, 1995).

⁸⁶ Trinh Van Thao, *Vietnam du confucianisme au communisme*, (Paris: L'Harmattan, 1990) & Trinh Van Thao, *Les compagnons de route de Ho Chi Minh: Histoire d'un engagement intellectuel au Viet-nam*, (Paris: Editions Karthala, 2004).

Chesneaux, or specifically in Cochinchina, in the case of Brocheux's numerous works on the Mekong Delta.⁸⁷ These works are very useful insofar as they provide clear descriptions of, and arguments about, how specific parts of the Indochinese peasantry lived. However, they do not permit comparisons between the regions and leave significant space for new contributions to be made. Brocheux suggests that "history has provided Southern Vietnam with economic, social and cultural peculiarities that have since not ceased to influence the evolution of the Vietnamese nation".⁸⁸ Unfortunately, he does not explain why or how, and does not compare the region to Tonkin, thus limiting the reliability of his argument. In Ngo Vinh Long's case, we see a much more nationalistic evaluation, an attempt at disproving some of the generally held beliefs of the life of the peasantry under French rule. Whilst interesting and new, this book glosses over the fact that Vietnam was too fragmented to take these case-studies as representative of the entire territory.

Long's work is representative of a significant increase in research on the economic and historical realities of Vietnam. As French colonial rule over Indochina came to an end in 1954, a few studies looked into the history of Vietnam as a way of understanding the rise of communism and nationalism. For Long, this meant questioning the realities of living conditions and showing how dreadful they were. For Chesneaux, this was an attempt at explaining that unity during the colonial period was generally not achievable.⁸⁹ For Le Thanh Khoi and Nguyen Khac Vien, two Vietnamese scholars, it was a much broader attempt at documenting the history of Vietnam and in understanding the origins of the country and its civilisation.⁹⁰ Le Thanh Khoi, as Henry and Gourou before him, argued that the North was populated under an organised government much earlier than the South, and its land was therefore used more intensively, and over a longer period of

⁸⁷ Pierre Brocheux, "Vietnamiens et minorités en Cochinchine pendant la période coloniale", *Modern Asian Studies*, Vol. 6, No.4, 1972, p.443-457; Pierre Brocheux, "Moral Economy of Political Economy? The Peasants are Always Rational", *The Journal of Asian Studies*, Vol. 42, No.4, August 1983, p.791-803; Pierre Brocheux, *The Mekong Delta Ecology, Economy and Revolution, 1860-1960*, (Madison: Centre for Southeast Asian Studies University of Wisconsin-Madison, 1995), Jean Chesneaux, "Stages in the Development of the Vietnam National Movement 1862-1940", *Past and Present*, No.7, 1955(1) & Ngo Vinh Long, *Before the Revolution: The Vietnamese Peasants under the French*, (London: The M.I.T. Press, 1973).

⁸⁸ Brocheux 1972, op.cit., p.443.

⁸⁹ Jean Chesneaux, *Contribution à l'Histoire de la nation Vietnamienne*, (Paris: Editions Sociales, 1955(2)).

⁹⁰ Le Thanh Khoi, *Le Viet-Nam histoire et civilisation*, (Paris: Les Editions de Minuit, 1955) & Nguyen Khac Vien, *Vietnam: A Long History*, (Hanoi: Thế Giới Publishers, 2002).

time, than Southern Vietnam's land.⁹¹ Apart from some brief allusions to the economic impact of historical circumstances, much of the recent literature deals with social concerns. When an economic analysis is included, it tends to be based on secondary sources, rather than on extensive statistical research. This further reinforces our belief that research needs to be done on evaluating the origins of the economic gap between Tonkin and Cochinchina, its nature and its economic impact on the populations of the two regions.

2.5) Post-1950 studies on various aspects of French Indochina by other scholars

The involvement of the United States in the Indochinese conflict after 1954, as well as the more recent growth performance of post-Doi Moi Vietnam has resulted in a much richer literature on Indochina than was previously available. This being said, the work has been very much guided by the approach of the scholars involved. For example, similarly to what was happening with French or Vietnamese authors, a large body of work was done on the social realities of French colonial rule, which was guided by the realisation that colonialism was, in many ways, immoral. These works often look at some of the same topics that were studied during colonial rule but take a different analytical approach. Other works have been influenced by the growing Marxist academic perspective and thus focused on evaluating class struggle and the problems of colonialism. Yet another strand of the literature has researched the origins of the rise of nationalism and used their perspective on the nature of the national movements to better understand the past. More recent works have focused on understanding the sources of research for economic history, in order to obtain conclusions that are backed by solid data and well-constructed estimates. In addition, works on understanding Vietnamese economic history in light of the Southeast Asian region have also resurfaced.

Evaluations of French colonialism

Some non-French writers looked at the general ideology behind French colonial policies. For example, Raymond Betts' work looked into how the colonial policy came to change

⁹¹ Le Thanh Khoi, *op.cit.*, p.422.

during the period 1890-1914 from assimilation to association.⁹² His research used French political discourse to examine the whole French empire. Betts highlighted the tendency of the French administration to compare itself to other colonial regimes, like the British and the Dutch, as was already exemplified in the BEI. He specifically showed what the French believed to be useful lessons they could draw from looking at the British Empire.⁹³ French colonial rule in Indochina was often decided by the views of prominent members of the colonial elite and some research on this has been done. At times this was the governor general, as we saw with Lorin's work on Doumer and as we see with Thomas Martin's work on Albert Sarraut.⁹⁴ Other times, research focused on other influential persons, such as Andrew Hardy's work on Paul Bernard, a financier and economic advisor in Indochina.⁹⁵ Martin suggested that much of the way in which Indochina was ruled during Sarraut's long tenure was based on his fear of the rise of communism. As such, Martin's evaluation of the evolution of economic policies is very much based on the way in which ideology impacted the colonial discourse. Interestingly, this is very similar to some of the ways in which colonial contemporaries wrote about French rule: focusing on surrounding ideology rather than economic realities. Hardy's work, despite its title suggesting that the analysis would focus on economics, remains grounded in the perspective that individual influences on the colonial policy were the main mover in the development of the economy. Indeed, Hardy argued that it was Bernard's ability to convince the colonial government of the need for industrialisation that led to the beginnings of an industrial policy in Indochina. While this may well be partly true, the fact that industrialisation had started much earlier than 1938, especially in Tonkin, is not discussed in Hardy's work. These types of writing, while very useful for evaluations of the colonial policy and its evolution, do not address why there were differences between Tonkin and Cochinchina or how these were reflected in the sectoral development and living standards of the Indochinese economy.

It is difficult to reconcile these grand writings on colonial ideology with some of the more specific writings on aspects of the colonial policy. For example, Erica Peters'

⁹² Raymond F. Betts, *Assimilation and Association in French Colonial Theory 1890-1914*, (London: Columbia University Press, 1961).

⁹³ *ibid*, 51.

⁹⁴ Thomas Martin, "Albert Sarraut, French Colonial Development, and the Communist Threat, 1919-1930", *The Journal of Modern History*, Vol.77, No.4, December 2005, p.917-955.

⁹⁵ Andrew Hardy, "The Economics of French Rule in Indochina: A Biography of Paul Bernard (1892-1960)", *Modern Asian Studies*, Vol.32, No.4, 1998, p.807-848.

evaluation of the rice alcohol excise board in Tonkin highlighted the problems that resulted from the establishment of this excise board. Peters' research also hinted at differences in the regulation of the excise board between Tonkin and Cochinchina,⁹⁶ but she did not use this to refine her analysis of the excise board's impact. Similarly, Irene Nørlund's work on the textile industry in Indochina between 1880-1940 is a very clear evaluation of the evolution of this sector and of investments into the wider Indochinese economy. Though she presents a substantially improved understanding of the interaction of political and economic processes in the colonial economy of Indochina,⁹⁷ at no point did she evaluate the impact of differences in the evolution of industrial development between the various parts of Indochina. Her work is therefore a great source for understanding the development of the textile industry, but does not address what industrial development might have meant for the economic gap between Tonkin and Cochinchina. Nørlund's work hinted at differences in the realities of French rule depending on which territory one was in, but because her work was specifically on the textile industry, which was primarily located in Tonkin, her conclusions cannot necessarily be extrapolated to the entire Indochinese economy. She suggested that Tonkin was more autarkic in its attitude than the rest of Indochina, and certainly than Cochinchina,⁹⁸ but more research is needed to establish this. Indeed, if despite being in the 'Indochinese Union' and thus under the oft researched French colonial policy, attitudes to trade differed, then was the gap between the two regions based on these differing attitudes to production and consumption? Even if the answer is no, or only to some extent, it would help make sense of the generally ignored gap between the two regions and would help evaluate Henry and Gourou's suggestion that the gap was due to population density differences.

Other researchers than Nørlund have argued that North Vietnam was a subsistence economy, while South Vietnam was a commercial economy.⁹⁹ For example, Samuel Popkin argued that there was an important "distinction between commercial agriculture in

⁹⁶ Erica J. Peters, "Taste, Taxes, and Technologies: Industrializing Rice Alcohol in Northern Vietnam", *French Historical Studies*, Vol.27, No.3, Summer 2004, p.569-600.

⁹⁷ Irene Nørlund, *Textile Production in Vietnam 1880-1940: Handicraft and Industry in a Colonial Economy*, (Københavns Universitet: Institut for Historie, 15 March 1994).

⁹⁸ Irene Nørlund, "The French Empire, the Colonial State in Vietnam and Economic Policy: 1885-1940", *Australian Economic History Review*, Vol.31, No.1, March 1991, p.73.

⁹⁹ Samuel L. Popkin, "Corporatism and Colonialism: The Political Economy of Rural Change in Vietnam", *Comparative Politics*, Vol.8, No.3, 1976, p.454.

Cochin-China and subsistence agriculture in Tonkin and Annam”, but he did not analyse these two types of agriculture in his research.¹⁰⁰ This may partly have been due to this point being secondary to his research agenda, which was to focus on the political differences of North and South Vietnam. Popkin’s basic suggestion of an economic difference mirrors his political economy arguments, which show significant differences in the authority of village-level institutions between regions. In fact, Popkin’s research seems to indicate that: “the village level public sector was a much more important part of local economic life in Annam and Tonkin than in Cochin-China”.¹⁰¹ Popkin’s research showed that “there was very little communal land and almost no communal irrigation or flood control in Cochin-china”.¹⁰² Despite his suggestion of an economic gap, Popkin provided no evidence, seeming, instead, to take for granted that there was a gap between the economies of Tonkin and Cochinchina. This is strange considering that few writings had been done on the existence of a gap before his work. Consequently, more research is needed to conclusively agree with his suggestion that there were differences in the orientation of economic activity between the two regions and that these were linked with differing production preferences. Popkin's work is, in a way, typical of post-1950 writings on colonial Vietnam: there is no evaluation of the North-South gap, just a recognition that it existed. Research instead focused on the socio-political concerns or case studies of specific issues.

Melanie Beresford’s work on Vietnam is somewhat different. Although much of her work is on post-1940 Vietnam, she did provide an overview of the colonial economy in which she specifically addressed the fact that economic activity differed between Tonkin and Cochinchina.¹⁰³ Also, she is part of the group of scholars suggesting that the colonial authorities may well have had an impact on the diverging economic paths of those two regions. She argued that a crucial difference between Tonkin and Cochinchina was that most of the land used for cultivation in Cochinchina “had been opened up only since the French occupation” and was in fact used primarily for export-crop production.¹⁰⁴ Her central argument was that, since the French hoped to encourage exports of primary commodities, their ability to open up more land to cultivation in Cochinchina permitted

¹⁰⁰ *ibid*, p.454.

¹⁰¹ *ibid*, p.435.

¹⁰² *ibid*, p.434.

¹⁰³ Melanie Beresford, *Vietnam: Politics, Economics and Society*, (London: Pinter, 1988), p.18.

¹⁰⁴ *ibid*, p.18.

higher value export-crops to be planted.¹⁰⁵ Beresford argued that colonial intervention in Cochinchina fostered the development of a more market-based society: “in Cochinchina, market relations were more highly developed than in Annam and Tonkin”.¹⁰⁶ Beresford often used theory, rather than extensive data, to argue that Cochinchina’s foreign trade and market relations were stronger than Tonkin’s. Therefore, although her analysis re-emphasises some of the previously made point, it is less than fully satisfying or conclusive.

The role of the colonial government in influencing diverging economic paths, particularly with respect to agricultural development, may not be incorrect. In fact, according to Michitake Aso, the French authorities encouraged agricultural projects such as rubber.¹⁰⁷ Considering that the GDP gap was in favour of Cochinchina, and considering that industry was by all accounts more significant in Tonkin than Cochinchina, then a much stronger agricultural sector in Cochinchina would be needed to explain the diverging trends of Tonkin and Cochinchina during French rule. However, was this because of the French authorities or was it because of the man to land ratio as previous French scholars believed? This question has yet to be answered in the literature and is part of the general questions of this thesis.

Although the specific issue of the wider impact of demographic differences on the diverging economic performances of Tonkin and Cochinchina has not been extensively studied, other aspects of the agricultural sector such as landownership have been. For example, Mark Cleary discussed once more the regulations surrounding concessions and their impact on investment decisions,¹⁰⁸ while Edward Mitchell and Jeffery Paige’s response to Mitchell’s argument both suggest that communal land ownership was much more prevalent in Northern Vietnam than it was in Southern Vietnam.¹⁰⁹ Although it is possible that cultivation patterns were similar across the Union of Indochina, ownership patterns were substantially different and these may well have also been part of the

¹⁰⁵ *ibid*, p.45 & William Duiker, *Vietnam Nation in Revolution*, (Boulder, Co: Westview Press, 1983), p.100.

¹⁰⁶ Beresford, *op.cit.*, p.20.

¹⁰⁷ Michitake Aso, “The Scientist, the Governor, and the Planter: The Political Economy of Agricultural Knowledge in Indochina During the Creation of a Science of Rubber, 1900-1940”, *East Asian Science, Technology and Society: An International Journal*, Vol. 3, 2009, p.231-256.

¹⁰⁸ Mark Cleary, “Land Codes and the State in French Cochinchina, c. 1900-1940”, *Journal of Historical Geography*, Vol. 29, No. 3, 2003, p.356-375.

¹⁰⁹ Edward J. Mitchell, “Inequality and Insurgency: A Statistical Study of South Vietnam”, *World Politics*, Vol.20, No.3, April 1968, p.421-438 & Jeffery M. Paige, “Inequality and Insurgency in Vietnam: A Re-Analysis”, *World Politics*, Vol. 23, No.1, October 1970.

diverging economic performances of the two regions. Cochinchina had a very low percentage of communal land: only 3% as opposed to over 40% of used land in Northern Annam.¹¹⁰ Paige argued that one of the main reasons agriculture in the South was more productive was that “it [was in the Mekong Delta] that proprietary interests [were] strongest, tenancy [and land ownership] most widespread”.¹¹¹ This is different from Henry and Gourou's argument of population density and suggests the need for a more careful re-evaluation of the role of demographics in economic performance.

Such literature on land ownership patterns fits into the wider debate on the economics of capitalism. As previously mentioned, this literature has been influenced by the rise of the Marxist perspective when looking at colonial territories. This literature is exemplified in Martin Murray's work on colonial Indochina, which looked intently at class struggles and the obstacles to sustainable growth during the colonial time period.¹¹² Murray's substantial work asserts that differences in the

colonial state's economic policies not only transformed the inner dynamics and processes of social differentiation among rural inhabitants [...], but also produced a differential impact on the internal class structure and village organization within the two principal regions of Indochina: the northern Red River delta of Tonkin and the coastal lowlands of Annam, on the one hand, and the southern Mekong Delta on the other.¹¹³

However, Murray provided no evidence for these different class structures. Although his work, like much other research, is biased by his ideology, it remains a clear contribution to the literature and further re-emphasises the need for a better understanding of how the regions differed and why they did.

The literature that more closely looks into the living standards of the Vietnamese population during French colonial rule is also rather quiet on issues of regional differences. For example, both Webby Silupya Kalikiti's PhD thesis and Murray's other research on rubber plantations focus on the rise of the rubber industry, whilst Geoffrey

¹¹⁰ Paige, op.cit., p.30.

¹¹¹ *ibid*, p.29.

¹¹² Martin J. Murray, *The Development of Capitalism in Colonial Indochina*, (London: University of California Press, 1980).

¹¹³ *ibid*, p.8.

Gunn looks specifically at the 1944-1945 famine.¹¹⁴ However, Charles Fisher's work on the Vietnamese economy is much more aware of the geographical context, as the title of his article suggests.¹¹⁵ Fisher provides one of the few geographical reviews of the variations within Vietnam and of how colonial rule led to an intensification of the differences between the two regions of Tonkin and Cochinchina. Fisher argued that the conflict "[was] deeply rooted in major geographical and historical differences between the northern and the southern halves of the country" and that these differences were merely 'intensified' by French rule.¹¹⁶ He further argued that "living standards [in the South] were markedly above those of the North, as was shown by both a skilled wage level and a per capita rice consumption approximately double those of Tonkin".¹¹⁷ The interesting part of this work however, is that Fisher does not prove that this was the case, nor does he explain why French rule would have had such an effect. In fact, Fisher's assumptions are representative of much of the research on Indochinese history that has been done post-1950. Documentation on the existence of an economic gap is scarce and yet scholars still make such statements without establishing their veracity. For example, some scholars argued that the North depended on the South's surplus production. G. Nguyen Tien Hung and Jean Lacouture both believed that the differences in the type of agriculture practiced in the different regions of Vietnam reflected the 'economic complementarities' of the North and the South.¹¹⁸ Indeed, they argued that there was, primarily, a dependency of the North on the South, as seen by rice exports. However, the data does not necessarily substantiate these claims. Some of these issues we hope to rectify in this thesis, both by evaluating whether French rule really had an impact on the economic gap or if it was more a story of the man-to-land ratio differences as the French scholars believed; whether the differences in economic activity led to some

¹¹⁴ Webby Silupya Kalikiti, *Plantation labour: rubber planters and the colonial state in French Indochina, 1890-1939*, PhD University of London, School of Oriental and African Studies, 2000; Geoffrey Gunn, "The Great Vietnamese Famine of 1944-45 Revisited", *The Asia-Pacific Journal*, Vol. 9, Issue 5, No.4, January 31, 2011 & Martin J. Murray, " 'White Gold' or 'White Blood'? The Rubber Plantations of Colonial Indochina, 1910-1940", *Journal of Peasant Studies*, Vol.19, No.3-4, 1992, p.41-67.

¹¹⁵ Charles A. Fisher, "The Vietnamese Problem in its Geographical Context", *The Geographical Journal*, Vol.131, No.4, 1965, p.502-504.

¹¹⁶ *ibid*, p.506.

¹¹⁷ *ibid*, p.504.

¹¹⁸ G. Nguyen Tien Hung, *Economic Development of Socialist Vietnam, 1955-1980*, (New York: Praeger Publishers, 1977), p.6 & Jean Lacouture, *Vietnam between two truces*, (London: Secker & Warburg, 1966), p.36-37.

complementarities between regions; and whether the economic gap really did mean that living standards were that much higher in the South.

The study of nationalism

Because of Vietnam's struggle for independence and its unique circumstances, many of the post-colonial writings, particularly from American scholars such as William Duiker, Alexander Woodside and Thomas Hodgkin, have focused on the rise of nationalism and communism. These works, while not necessarily directly relevant to this thesis, are crucial to the literature on Vietnam. In fact, these works tend to better highlight the need for our particular research. Many of these writers tended to use economic rationales in explaining the rise of nationalism. While this is certainly logical, it seems strange to build such a narrative when it has been demonstrated that the economic history of Vietnam, particularly with respect to regional disparities, has not been extensively studied.

Nonetheless, some of these works, particularly those of Duiker, a former American foreign service officer, have acknowledged the regional differences between North and South.¹¹⁹ Duiker postulated that North and South formed two "separate and mutually antagonistic regions" due to historical political rivalries.¹²⁰ His observation was not purely political, it was also linked to economic and cultural differences. Indeed, he made the case that "there [we]re indications that rural standards of living, at least in Cochin-china, may have risen between 1900 and 1930 but then declined during and after the World Depression in the 1930s".¹²¹ Just as Fisher before him, Duiker's research did not explain why this occurred, how extensive it was or what it meant in a wider regional comparison. Hodgkin, also writing on the rise of nationalism, recognised the significance of the variations within the Vietnamese economy.¹²² According to Hodgkin, the Vietnamese economy suffered tremendous turmoil because of climactic conditions, but many of the problems were localised, because of Vietnam's varied geography.¹²³ Hodgkin also argued

¹¹⁹ William J. Duiker, *The Rise of Nationalism in Vietnam, 1900-1941*, (London: Cornell University Press, 1976); William J. Duiker, *The Communist Road to Power in Vietnam*, (Boulder, CO: Westview Press, 1981) & William J. Duiker, "The Revolutionary Youth League: Cradle of Communism in Vietnam", *The China Quarterly*, No. 51, 1972, p.475-499.

¹²⁰ Duiker 1983, op.cit., p.27.

¹²¹ *ibid*, p.32.

¹²² Thomas Hodgkin, *Vietnam: The Revolutionary Path*, (London: Macmillan Press LTD, 1981).

¹²³ *ibid*, p.232.

that there were certain continuing themes in the country's history, predominantly the role of the Vietnamese commune.¹²⁴ While some aspects of life were certainly widespread themes throughout Vietnam, Hodgkin provided limited evidence to prove his point. It is equally possible that there were substantial differences in the spread of such themes across the country during colonial rule, especially considering that the country was split in three administrative regions. In fact, Paige and Mitchell's previously cited works provided some evidence to suggest that the commune was not as prevalent in the South as it was in the North.¹²⁵ It is thus clear that a better understanding of the variations in the economic circumstances of Indochina would improve existing research on the origins of nationalism.

The few studies that use regional variation in evaluations of the rise of nationalism justify this. For example, Robert Sansom's work on the Mekong Delta provided a review of Cochinchina's colonisation and how institutional development is key to understanding the cost benefit analysis of the peasant reality.¹²⁶ Similarly, R. B. Smith's extensive study of opposition to French rule in Southern Vietnam has highlighted the variety of conflicts that existed during French rule.¹²⁷ The fact that nationalism in the south was so powerful suggests the need to better understand the economic realities of French rule: if despite a higher GDP, Cochinchinese peasants and elite members alike were in opposition to French rule, was the gap truly reflected in living standard? Such a literature suggests that previous assumptions in the literature on the rise of nationalism may in fact be based on inadequate representations of the economic conditions of colonial Vietnam.

New quantitative work

One of the more recent developments in the economic history of colonial Vietnam is work done to improve the quality and quantity of statistical data. A significant resource that provides both raw data and estimated data to complement the available archives is

¹²⁴ *ibid*, p.5.

¹²⁵ Paige, *op.cit.*, p.30.

¹²⁶ Robert L. Sansom, *The Economics of Insurgency in the Mekong Delta of Vietnam*, (London: The M.I.T. Press, 1970).

¹²⁷ R.B. Smith, "The Development of Opposition to French Rule in Southern Vietnam 1880-1940", *Past and Present*, No.54. 1972, p.94-129; R.B. Smith, "The Vietnamese Elite of French Cochinchina, 1943", *Modern Asian Studies*, Vol. 6, No.4, 1972, p.459-482 & R.B. Smith, *Pre-Communist Indochina*, (London: Routledge, 2009).

the Hitotsubashi Project *Quantitative Economic History of Vietnam 1900-1990*. The work was done as part of a conference on the economic history of Vietnam at Hitotsubashi University in 2000. This project has resulted in a large number of topics crucial to the economic history of Vietnam being surveyed. In addition, where possible, new estimates were derived from varied official and non-official sources. This project included research on population, public finances, agrarian development, the role of the Chinese minorities, wages and prices, etc. As well as offering more readily available data to the literature, it opened up the debate on the available analytical sources and offered a number of clues on what type of research can be done, based on the available data. An associated work, *Constructing a Historical Macroeconomic Database for Trans-Asian Regions*, provides scholars with some estimates of Vietnamese GDP, broken down into regions and sectors when possible. This work was the first to quantify the GDP gap between Tonkin and Cochinchina during French colonial rule.¹²⁸ Based on these estimates, and based on the previously highlighted literature, it seems clear that much more research needs to be done to understand the what, why and how of the economic gap, as well as its implications on living standards. Despite the wealth of information in the more recent Hitotsubashi Project, these questions remain largely unanswered.

Although many of the articles and estimates in the Hitotsubashi project are used in this thesis, we will highlight some of the key works that contextualise this thesis' contribution. Jean-Pascal Bassino's and Jean-Dominique Giacometti's works on various aspects of the colonial economy are key in understanding what has been done, what needs more work and what evidence can be used. Bassino's other work on rice cultivation in Southern Vietnam and his joint publication with Bui Thi Lan Huong on trade provide some interesting quantitative points to keep in mind. For example, Bassino highlights the problems associated with the colonial government's estimation of rice yields in Southern Vietnam.¹²⁹ On a more analytical side, Bassino's work on the budgets of Indochina shed

¹²⁸ Jean-Pascal Bassino, "Preliminary Estimates of Vietnam GDP 1800-1970: North-South Economic Divide in Historical Perspective" in Konosuke Odaka, Yukihiro Kiyokawa & Masaaki Kuboniwa (eds) *Constructing a Historical Macroeconomic Database for Trans-Asian Regions*, (Hitotsubashi: Institute of Economic Research, 2000).

¹²⁹ Jean-Pascal Bassino, "Rice Cultivation in Southern Vietnam (1880-1954): A Re-evaluation of Land Productivity in Asian Perspective" Festschrift Volume in Honor of Professor Konosuke Odaka, special issue of *Keizai Shirin Hosei University Economic Review*, Vol.73, No.1(4), 2006, p. 3-38.

light on significant trends in the ways in which local budgets worked.¹³⁰ Moreover, his joint work with Severine Blaise evaluated the long-term economic performance of north and south Vietnam during and after colonisation. They suggested that

the North-South gap remained a structural feature between the 1930s and the 1970s although political and military conditions between 1945 and 1954 may have resulted in a relative convergence in terms of per capita income.¹³¹

It seems clear that for Bassino much of the economic gap was a structural feature of the economy, based on a number of factors that were not necessarily associated with the colonial policies of the French administration.¹³² This remains to be evaluated. Indeed, for some scholars such as Fisher, this is not so clear. Moreover, these works do not provide a link between the performance of the regional economies and the works of the colonial authorities, via an evaluation of the local budgets. As such, the purpose of this thesis is to better understand the origin of the economic gap, by evaluating the role of the colonial government, but also by exploring the belief of French scholars on the responsibility of varying man-to-land ratio in explaining diverging economic patterns.

Giacometti's research has also been quite varied, exploring various aspects of Vietnamese economic history: from the rural sector to the general situation of wages and prices in colonial Vietnam. His research is particularly relevant to the current study with respect to his analysis of agricultural development:¹³³ Giacometti showed that even within a region, Annam for example, differences in soil, due to extensive mountainous terrains, adversely affected the economic development of particular areas, with a noted difference between north and south Annam.¹³⁴ If this was true for Annam, then some similar aspects

¹³⁰ Jean-Pascal Bassino, "Public Finance in Vietnam under French Rule 1895-1954" in Jean-Pascal Bassino, Jean-Dominique Giacometti and Konosuke Odaka (eds), *Quantitative Economic History of Vietnam 1900-1990*, (Hitotsubashi: Institute of Economic Research, 2000), p.269.

¹³¹ Jean Pascal Bassino & Severine Blaise, "Linking Pre-1945 and Post-1954 Series for Estimating North Vietnam and South Vietnam Long Term Economic Performances, 1935-1975" in Jean-Pascal Bassino, Jean-Dominique Giacometti and Konosuke Odaka (eds), *Quantitative Economic History of Vietnam 1900-1990*, (Hitotsubashi: Institute of Economic Research, 2000), p. 410.

¹³² Jean-Pascal Bassino, "Indochina" in Joel Mokyr (ed.) *The Oxford Encyclopaedia of Economic History*, Vol. 3, (Oxford: Oxford University Press, 2003).

¹³³ Jean-Dominique Giacometti, "Sources and Estimations for Economic Rural History of Vietnam in the First Half of the 20th Century" & "Wholesale and Raw Material Prices in Vietnam under French Rule (1895-1954)" in Jean-Pascal Bassino, Jean-Dominique Giacometti and Konosuke Odaka (eds) *Quantitative Economic History of Vietnam 1900-1990*, (Hitotsubashi: Institute of Economic Research, 2000), p.41-80 & p.215-236.

¹³⁴ Jean-Dominique Giacometti, "Bases for Estimation of Agriculture in Central Vietnam before 1954, the Examples of Thanh Hoa and Nghe An Provinces" in Jean-Pascal Bassino, Jean-Dominique Giacometti and

must be true for Tonkin and Cochinchina. Moreover, his belief that much of the economic gap was due to geographical differences suggests a refined perception of Gourou and Henry's argument that population densities explain economic differences, perhaps geography in general did. Giacometti's work on estimation of prices and wages in Tonkin and Cochinchina helps further the resources available for evaluations of the standards of living.¹³⁵ Whilst Giacometti included some hint of what these data meant in the living standard of the population, he did not extend his analysis to understanding the gap between the two regions' living standards. The new estimates and suggestions from the Hitotsubashi Project and associated works allow a more nuanced and informed analysis of the North-South gap than what has previously been done.

2.6) Studies on colonial Southeast Asia

As section 2.3 showed, many of the works written under the auspices of the Institute of Pacific Relations included Indochina in larger research projects on Southeast Asia. More recent works also do this and we consider it helpful to provide some of this wider Southeast Asian context to our analysis, to better support the conclusions and to add nuances to our analysis. Some of the more recent research on Southeast Asia help show that research on colonial Vietnam has, at times, suffered from scarcity compared to other countries in the region and suggest new ways of comparing the regions within Indochina.

Southeast Asia histories

The aftermath of decolonisation, or at least of the escalation of active nationalist movements in Southeast Asia, gave rise to a separate type of Southeast Asian scholarship, specifically on the changes in these economies. Indeed, Virginia Thompson and Richard Adloff's joint works on the changes in this time period seek to interpret the rise of

Konosuke Odaka (eds), *Quantitative Economic History of Vietnam 1900-1990*, (Hitotsubashi: Institute of Economic Research, 2000), p.105.

¹³⁵ Jean-Dominique Giacometti, "Wages and Consumer Price for Urban and Industrial Workers in Vietnam under French Rule (1910-1954)" in Jean-Pascal Bassino, Jean-Dominique Giacometti and Konosuke Odaka (eds) *Quantitative Economic History of Vietnam 1900-1990*, (Hitotsubashi: Institute of Economic Research, 2000), p.163-214.

nationalism across the region.¹³⁶ Although their work treated each colony separately, the response to the end of the war and the subsequent clash between colonial and native authorities was seen as homogenous. For other writers, the main concept to evaluate was communism and its impact on Southeast Asia as a whole. Writings on understanding the variations within each colonies were abandoned for broader studies on the region, whether they be research on pre-modern times, colonial times or post-colonial times.¹³⁷

Some influential books have been written about pre-modern Southeast Asia, foremost of these is Anthony Reid's work on *Southeast Asia in the Age of Commerce*.¹³⁸ Other works specifically focused on the relations between China, as the historical regional superpower, and Southeast Asia.¹³⁹ Yet more works evaluate both the pre-modern era and the colonial period. For example, D.R. SarDesai described the Southeast Asian colonies and Thailand in both time periods.¹⁴⁰ These varied works provide some good evidence of the various circumstances these countries faced in this time period. However, they remain almost purely historical and offer little by way of comparisons between the economies of the region.¹⁴¹ Some of the later studies done for conferences of the Institute of Pacific Relations post-WW2 looked in more detail at ways to compare both the colonial policies of the various colonies and their economic development.¹⁴² More recent works, such as David Steinberg's and Harry Benda's, also provide some ways of comparing various aspects of colonial rule in different colonies.¹⁴³ For example, Benda suggests ways of looking at direct and indirect rule in Southeast Asia, specifically

¹³⁶ Virginia Thompson & Richard Adloff, "Empire's End in Southeast Asia", *Foreign Policy Association*, 35c, Number 78, November-December 1949 & Virginia Thompson & Richard Adloff, *Cultural Institutions and Educational Policy in Southeast Asia*, (New York: Institute of Pacific Relations, 1948).

¹³⁷ J.H. Brimmel, Communism in Southeast Asia, 13th Conference Institute of Pacific Relations, Lahore, Pakistan, February 1958 & John Bresnan, *From Dominoes to Dynamos The Transformation of Southeast Asia*, (New York: Council of Foreign Relations Press, 1994).

¹³⁸ Anthony Reid, *Southeast Asia in the Age of Commerce 1450-1680*, (London: Yale University Press, 1988).

¹³⁹ Takeshi Hamashita, "Tribute and treaties: maritime Asia and treaty port networks in the era of negotiation" in Arrighi, Giovanni, Takeshi Hamashita & Mark Selden (eds) *The Resurgence of East Asia 500, 150 and 50 year perspectives*, (London: Routledge, 2003).

¹⁴⁰ D.R. SarDesai, *Southeast Asia Past & Present*, 5th Edition, (Boulder, CO: Westview Press, 2003).

¹⁴¹ Lea E. Williams, *Southeast Asia: A History*, (New York: Oxford University Press, 1976).

¹⁴² Victor Purcell, "The Colonial Period in Southeast Asia", Pamphlet, (New York: Institute of Pacific Relations, 1953) & Members of the IPR International Secretariat, A Brief Political and Economic Handbook of Eastern and Southern Asia, 12th Conference, Institute of Pacific Relations, Kyoto, Japan, September-October 1954.

¹⁴³ David Joel Steinberg (ed), *In Search of Southeast Asia: A Modern History*, (Honolulu: University of Hawaii Press, 1987).

through evaluating the nature of the political elites in the colonial societies.¹⁴⁴ Throughout this literature, evidence from Vietnam seems uncertain and scattered. This thesis will help increase awareness of the variations within Vietnam's economic development during colonialism.

Many scholars of Southeast Asian history have looked at various aspects of living conditions during the colonial period, rather than looking at the colonial system. These writings provide some good suggestions on how to interpret the economic gap between Tonkin and Cochinchina. For example, Peter Boomgaard's suggested explanation for low levels of development in the region point to institutional problems and factor market obstacles.¹⁴⁵ Similarly, James Scott's influential work on the peasant economy suggested the need to look into the differences in production capacity.¹⁴⁶ These suggestions hint at potentially different explanations on the origins of the North South gap: institutional differences on the one hand and geographical differences on the other. Furthermore, Bruno Lasker's work on living conditions in the Far East suggests that to understand the GDP gap, more needs to be done on understanding the distributional aspects of income,¹⁴⁷ while Ian Brown's work suggests more attention be spent on understanding the effect of the Great Depression on rural income.¹⁴⁸ These works further stress the contribution of this paper, not only with respect to colonial Vietnam's economic history, but also with respect to general understandings of the colonial history of Southeast Asia. Certainly, this thesis cannot address all of these concerns, but it will provide specific comparisons between various aspects of the Tonkinese and Cochinchinese economies.

A significant body of literature has looked into the economic growth of Southeast Asia. Although much of this literature has focused on the post-war record of agricultural and industrial growth, like Francesca Bray's seminal work on the rice economies of Asia, Harry Oshima's work on monsoon Asia and Randolph Barker, Robert Herdt and Beth

¹⁴⁴ Harry J. Benda, "Political Elites in Colonial Southeast Asia: An Historical Analysis", *Comparative Studies in Society and History*, Vol. 7, No.3, 1965, p.233-251.

¹⁴⁵ Peter Boomgaard, "Labour, Land, and Capital in Pre-Modern and Early-Modern Southeast Asia", *The Rise, Organization and Institutional Framework of Factor Markets*, Global Economic History Network Workshop on Factor Markets, Utrecht 23-25 June 2005, p.1-24.

¹⁴⁶ Scott, op.cit., p.36.

¹⁴⁷ Bruno Lasker, *Standards and Planes of Living in the Far East*, Preliminary draft for the use of the 12th Conference of the Institute of Pacific Relations, (New York: Institute of Pacific Relations, 1953).

¹⁴⁸ Ian Brown, "Rural Distress in Southeast Asia During the World Depression of the Early 1930s: A Preliminary Reexamination", *The Journal of Asian Studies*, Vol.45, No.5, November 1986, p.995-1025.

Rose's work on rice economies,¹⁴⁹ others have looked at general trends in agricultural developments. Vernon Wickizer's many works on the agricultural developments of Southeast Asia in the post-war context offer good understandings of the institutional aspect of rice production, as well as the position of rice in the economies of Southeast Asia.¹⁵⁰ Lucien Hanks' work shows the general problems of labour in the development of Southeast Asian economies.¹⁵¹ These works propose links between agricultural developments and institutional constraints and highlight the need to look at the relationship between the origin of the gap and its nature.¹⁵² Indeed, Yujiro Hayami and Vernon Ruttan's work suggests that agricultural output explains economic development.¹⁵³ Since French authors argued the impact of demographics on the agricultural sector was the main explanation for differences in economic development, it makes sense to use this literature to further evaluate Indochina's economy.

The lack of literature on the evolution of the economic gap in French colonial Vietnam is strange, but at times representative of the emphasis that some scholars have placed on establishing a path of development that is specific to East Asian development. For example, Kaoru Sugihara's work on such a path favours looking at labour intensity and 'Asian' style industrialisation.¹⁵⁴ This perspective has come under attack, often because of the need to understand how different parts of Asia are from one another. This is specifically argued in Anne Booth's many works on Southeast Asian development. For

¹⁴⁹ Francesca Bray, *The Rice Economies: Technology and Development in Asian Societies*, (Oxford: Basil Blackwell, 1986); Harry T. Oshima, *Economic Growth in Monsoon Asia: A Comparative Survey*, (Tokyo: University of Tokyo Press, 1987) & Randolph Barker, Robert W. Herdt & Beth Rose, *The Rice Economy of Asia*, (Washington D.C.: Resources for the Future, 1985).

¹⁵⁰ V.D. Wickizer, "Plantation Crops in Tropical Agriculture", *Tropical Agriculture*, Vol.35, No.3, July 1958, p.171-180; V.D. Wickizer & M.K. Bennett, *The Rice Economy of Monsoon Asia*, (Stanford, CA: Stanford University Press, 1941) & V.D. Wickizer, "Rice in the Western Hemisphere: Wartime Developments and Postwar Problems", *War-Peace Pamphlets*, No.7, 1945.

¹⁵¹ Lucien M. Hanks, *Rice and Man: Agricultural Ecology in Southeast Asia*, (Chicago: Aldine Atherton Inc, 1972).

¹⁵² Asian Employment Programme – Asian Regional Team for Employment Promotion, *Labour Absorption in Agriculture: The East Asian Experience*, (Geneva: International Labour Organisation, 1980).

¹⁵³ Yujiro Hayami & Vernon W. Ruttan, *Agricultural Development: An International Perspective*, (London: Johns Hopkins Press, 1971).

¹⁵⁴ Kaoru Sugihara, "The East Asian Path of Economic Development: a Long-Term Perspective" in Arrighi, Giovanni, Takeshi Hamashita & Mark Selden (eds) *The Resurgence of East Asia 500, 150 and 50 year perspectives*, (London: Routledge, 2003) & Kaoru Sugihara, "Labour-Intensive Industrialisation in Global History", *Kyoto Working Papers on Area Studies* No. 1, 2007.

example, she looks into the idea of land reforms and agricultural policies and how these have differed in post-war Southeast Asia.¹⁵⁵

Although this specific work looked at the post-colonial period, Booth has published various works on the countries of Southeast Asia during colonial rule, investigating how aspects of economic history should be better understood in Southeast Asia. For example, she researched and documented the different ways in which globalisation in the colonial era affected the economies of Southeast Asia compared to those of the Western developed world.¹⁵⁶ The crux of Booth's work has focused on analysing and evaluating the lasting impact colonial policies have had on the development of the region. She has not only studied the varied responses of the region to the Great Depression, but she has also produced some of the more helpful evaluations of colonial public policies.¹⁵⁷ In her analysis of the Southeast Asian response to the Depression, Booth has highlighted that it affected parts of Southeast Asia differently, depending on the colonial power (Indochina under French rule suffered differently from Burma under British rule).¹⁵⁸ This argument is pushed further in her book on colonial legacies, which explained more rigorously why countries with seemingly similar endowments performed so differently. Although she warns against historical determinism, she provided some significant evidence that suggest the need to better understand colonial policies to evaluate performance differences.¹⁵⁹ In addition, her work has shown how traditional understandings of the role of the colonial governments may well be flawed.¹⁶⁰ If this is true for the Southeast Asian region, then it is worth looking into potential differences in the colonial administration's influence in the economies of Tonkin and Cochinchina. If we find that colonial rule differed significantly between the two and can theoretically explain some of the economic gap during the period, then this might allow a better evaluation of previous claims on the origin of the North-South colonial gap. Moreover, Booth highlighted the fact that "it is widely

¹⁵⁵ Anne E. Booth, "Rethinking the Role of Agriculture in the 'East Asian' Model: Why is Southeast Asia Different from Northeast Asia?", *ASEAN Economic Bulletin*, Vol. 19, No.1, 2002, p.40-51.

¹⁵⁶ Anne E. Booth, "The Economic Development of Southeast Asia in the Colonial Era: c.1870-1942", *History Compass*, Vol.6, No.11, 2008, p.25-53.

¹⁵⁷ Anne E. Booth, "Four Colonies and a Kingdom: A Comparison of Fiscal, Trade and Exchange Rate Policies in Southeast Asia in the 1930s", *Modern Asian Studies*, Vol.37, No.2, 2003, p.429-460.

¹⁵⁸ *ibid*, p.432-435.

¹⁵⁹ Anne E. Booth, *Colonial Legacies: Economic and Social Development in East and Southeast Asia*, (Honolulu: University of Hawai'i Press, 2007(1)).

¹⁶⁰ Anne E. Booth, "Night Watchman, Extractive, or Developmental States? Some Evidence from Late Colonial South-East Asia", *Economic History Review*, Vol.60, No.2, 2007(2), p.241-266.

recognized that trends in per capita GDP are not reliable guides to changes in living standard”,¹⁶¹ suggesting the need for a better evaluation of how the newly measured economic gap between Tonkin and Cochinchina was reflected in the living standards of these regions.

Country specific analyses

Research on specific countries within Southeast Asia also emphasise some of the ways in which analyses of Indochinese economic history can be improved. The type of evaluation proposed in this thesis has been done for Indonesia, and Burma to a lesser extent, specifically in Clifford Geertz’ and J.S. Furnivall’s many works. For example, work on Burmese economic history, in addition to Furnivall’s previously mentioned work, highlighted the historic divide between Lower and Upper Burma during the colonial period, as well as its transition from a subsistence economy to a market-oriented economy.¹⁶² Other sources allow us to better evaluate the ways in which colonial policies were decided and provide data for comparisons to Indochina and evaluations of the role colonial policy may have had on the regional divergence in economic performance between Tonkin and Cochinchina.¹⁶³

Foremost in the study of the Dutch Indies is Geertz’ works on agricultural involution.¹⁶⁴ This book presents a conscientious study of the relationship between man and his ecosystem: it is “a social-economic history of Java, that goes far to explain the difficulties that independent Indonesia is experiencing in launching a take-off”.¹⁶⁵ Although Geertz’ evaluation is not free of criticism,¹⁶⁶ it does provide a good example of how to interpret colonial developments in a primarily agrarian society. His other works on the Javanese economy further supply researchers with ways in which to evaluate

¹⁶¹ Booth 2007(1), op.cit., p.131.

¹⁶² Aye Hlaing, “Trends of economic growth and income distribution in Burma, 1870-1940”, *Journal of the Burma Research Society*, June 1964, Vol.47, p.90.

¹⁶³ Economic and Social Board, *A Study of the Social and Economic History of Burma (British Burma)*, Part 6b, 7 & 8, (Rangoon: The National Planning Commission, 1959, 1960).

¹⁶⁴ Clifford Geertz, *Agricultural Involution: The Processes of Ecological Change in Indonesia*, (London: University of California Press, 1963(2)).

¹⁶⁵ *ibid*, p.x.

¹⁶⁶ Pierre van der Eng, *Agricultural Growth in Indonesia: Productivity Change and Policy Impact since 1880*, (London: Macmillan Press LTD, 1996), p.7.

developments in other Southeast Asian regions.¹⁶⁷ In addition to Geertz and Furnivall, numerous studies provide similar grounds for comparisons: Alex ter Braake's study on the mining industry of the Dutch Indies, Jan Luiten van Zanden's work on the colonial policies of the Dutch Indies, John Coast's work on Thailand, as well as Rupert Emerson's controversial work on direct and indirect colonial rule in Malaysia.¹⁶⁸

More recent work on the Dutch Indies' economy can be found in Pierre van der Eng's work. Specifically, van der Eng's work has looked into long-term standard of living evaluations in Indonesia and suggested links between living standards and crop diversification.¹⁶⁹ His work also looked at changes in agricultural productivity and its link to colonial policies with regards to labour markets.¹⁷⁰ Van der Eng has also provided some comparative work on the Southeast Asian rice agriculture sector with a clear evaluation of the ways in which various regions within Southeast Asia were affected by different circumstances and contexts.¹⁷¹ This type of research has not been done for Indochina.

Van der Eng's more recent joint working papers with Jean-Pascal Bassino are even more helpful in illustrating why the economic history of Indochina needs more research, not just in light of what has been written on the Dutch Indies, but also because of differences between the Dutch Indies, Indochina and other countries in the region. Indeed, in two working papers, Bassino and van der Eng show that when comparing wages, welfare and economic growth for countries within Asia, or within Asia and Europe, the

¹⁶⁷ Clifford Geertz, *The Development of the Javanese Economy: A Socio-Cultural Approach*, (Cambridge, Massachusetts: Center for International Studies Massachusetts Institute of Technology, 1956); Clifford Geertz, *The Social History of an Indonesian Town*, (Cambridge, MA: The M.I.T. Press, 1965) & Clifford Geertz (ed), *Old Societies and New States: The Quest for Modernity in Asia and Africa*, (London: Collier-Macmillan Ltd, 1963(1)).

¹⁶⁸ Alex L. ter Braake, "Mining in the Netherlands East Indies", *Bulletin 4 of the Netherlands and Netherlands Indies Council*, (New York: Institute of Pacific Relations, 1944); Jan Luiten Van Zanden, "Colonial State Formation & Patterns of Economic Development in Java, 1800-1913", [online] Available: <http://www.iisg.nl/research/jvz-colonialism.pdf>, Accessed 02/04/2010; Rupert Emerson, *Malaysia: A Study in Direct and Indirect Rule*, (Kuala Lumpur: University of Malaya Press, 1964 - First published in 1937) & John Coast, *Some Aspects of Siamese Politics*, (New York: Institute of Pacific Relations, 1953).

¹⁶⁹ Pierre van der Eng, "Food Consumption and the Standard of Living in Indonesia, 1880-1990", *Economic Division Working Papers Southeast Asia*, 93/1, (Queanbeyan, Australia: National Centre for Development Studies, 1993).

¹⁷⁰ Van der Eng 1996, op.cit.

¹⁷¹ Pierre van der Eng, "Productivity and Comparative Advantage in Rice Agriculture in South-East Asia since 1870", *Asian Economic Journal*. 2004, Vol.18, No.4, p.345-370.

performance of South and North Vietnam were very different.¹⁷² Although both remained rather poor countries, their performance was not similar, especially not during colonial rule. Bassino and van der Eng suggested that it is “likely [South Vietnam’s] success in export-oriented development at that time” was partly responsible for its better performance, but they warned against the possibility of adequately proving this.¹⁷³ Nonetheless, their papers suggest the need to look into the reasons for this diverging economic gap, as well as the need for a better evaluation of how this gap was in fact represented in the various sectors of the economy, not to mention in the living standards of the population. At this time, no works such as Geertz’ have been done on colonial Indochina. Furnivall’s many comparative works on the Dutch Indies and Burma provide further tools for evaluating a colonial economy, as well as useful data and analysis, which can be used to compare our findings on colonial Vietnam to these other two colonial economies in the future. Furthermore, Furnivall’s descriptions of colonial policies and tax systems suggest ways in which to compare not only Indochina to Burma and the Dutch Indies, but Tonkin to Cochinchina.¹⁷⁴

Although Japan's economic development is very different from development in Southeast Asia, it has often been used as a yardstick by which Asian economic performance has been measured. Kate Mitchell’s work on the industrialisation of Japan suggests the importance of understanding the development of that economy to better understand developments in the region.¹⁷⁵ This is made even more relevant considering other works into Japan’s trade and living standards, suggesting reasons for its industrialisation.¹⁷⁶ Moreover, research on Japan’s growth performance and ability to join

¹⁷² Jean-Pascal Bassino & Pierre van der Eng, *The First East Asian Economic Miracle: Wages and Welfare of Urban Workers in East Asia and Europe, 1880-1939*, Paper for XIV International Economic History Congress, Helsinki: 21-25 August 2006 & Jean-Pascal Bassino & Pierre van der Eng, *Economic Divergence in East Asia: New Benchmark Estimates of Levels of Wages and GDP, 1913-1970*, Paper for XIII Economic History Congress, Buenos Aires: 22-26 July 2002.

¹⁷³ Bassino & van der Eng 2002, *op.cit.*, p.13.

¹⁷⁴ J.S. Furnivall, *Colonial Policy and Practice: A Comparative Study of Burma and Netherlands India*, (Cambridge: Cambridge University Press, 1948); J.S. Furnivall, “An Introductory Survey, 1815-1930” & “The Land Revenue System” in *Studies in the Economic and Social Development of the Netherlands East Indies*, (Rangoon, Burma Book Club, 1933) & J.S. Furnivall, *The Governance of Modern Burma*, (New York: Institute of Pacific Relations, 1960).

¹⁷⁵ Kate L. Mitchell, *Japan’s Industrial Strength*, (New York: Alfred A Knopf, 1942 (1)) & W.L. Holland & Kate L. Mitchell (eds), *Problems of the Pacific, 1936*. Proceedings of the 6th Conference of the Institute of Pacific Relations, (London: Oxford University Press, 1937).

¹⁷⁶ Shigeru Fujii, “Japan’s trade and her level of living”. The Science Council of Japan Division of Economics & Commerce, *Economic Series*, No.6, March 1955, Preparatory paper for the 12th conference of the Institute of Pacific Relations.

the ‘convergence club’ suggest the need to better understand the endogenous developments within an economy. For this, Osamu Saito’s work on Japan provides a good way of evaluating why certain aspects of Tonkinese and Cochinchinese development may have resulted in different economic performances.¹⁷⁷ This type of research is different from what has been done on Chinese economic history, and a better use of China as a comparative can help shed light on other aspects of the Indochinese economy, particularly with respect to land distribution. Here, the vast literature on the organisation of property rights and standard of living provide some interesting ways in which to compare Tonkin and Cochinchina.¹⁷⁸ The literature on the variations within colonial Vietnam's economic history seems weak compared to that of neighbouring economies.

2.7) Studies on post-colonial Vietnam

Not only does research on colonial Vietnam seem scarce compared to that on other neighbouring colonial economies, it also pales in comparison to research on post-unification Vietnamese economic history. In this larger literature, two main aspects have been investigated: the unification itself and the post-Doi Moi era of Vietnamese success and these at times suggest the need for a better knowledge of the past.

For example, the link between the Vietnam war and the feeling of unity in the country was investigated in Philippe Devillers’s work. Although he acknowledged the fact that even before the war there had been cleavages within the society,¹⁷⁹ he did not use this to further quantify his argument. The lack of such contextualisation and qualification is a problem: Dennis Duncanson argued that the Vietnam War was a civil war: “what the fighting has been about is whether the North should in future dominate the South”.¹⁸⁰

¹⁷⁷ Osamu Saito, “Pre-Modern Economic Growth Revisited: Japan and the West”, Working Paper No.16/05, Department of Economic History, London School of Economics, June 2005, p.1-58.

¹⁷⁸ L.K. Tao, “The Standard of Living Among Chinese Workers”, Paper for the Fourth Biennial Conference of the Institute of Pacific Relations in Hangchow, October-November, 1931, (Shanghai: China Institute of Pacific Relations, 1931); Chen Han-Seng, *Frontier Land Systems in Southernmost China*, (New York: Institute of Pacific Relations, 1949) & Debin Ma, “Economic Growth in the Lower Yangzi Region of China in 1911-1937: A Quantitative and Historical Analysis”, *The Journal of Economic History*, Vol.68, No.2, 2008, p.355-392.

¹⁷⁹ Philippe Devillers, “The Struggle for the Unification of Vietnam”, *The China Quarterly*, No.9, 1962, p.2-23.

¹⁸⁰ Dennis J. Duncanson, “Vietnam as a Nation-State”, *Modern Asian Studies*, Vol.3, No.2, 1969, p.117.

Without a clear knowledge of historical differences, the argument is weak. In other words, Duncanson hints at a major misunderstanding of Vietnamese history without clarifying it: North and South were not torn apart simply by foreign powers, they were divided because of their own internal problems pre-dating the war.¹⁸¹ These authors saw the significance of political cleavage both before the war and during it.

Another aspect of the recent literature of Vietnam that could benefit from a better historical knowledge is research on the current North-South gap. One of the only works to specifically investigate the economic cleavages in post-war Vietnam is Van Thi Hong Pham in a PhD dissertation specifically evaluating regional growth differences, albeit during the period 1996-2003.¹⁸² Interestingly, research on the current economic gap between the north and the south suggests that it mirrors the regional variation of ideology, with a much more market-friendly south and a more communist oriented north.¹⁸³ The literature on Vietnam's current economic performance has either focused on particular regions in explaining the recent economic growth,¹⁸⁴ or discussed Vietnam as a whole whilst using evidence from only one region, just as much of the literature on the economic performance of colonial Vietnam. For example, Adam Fforde's discussion of Vietnam's post war economic success is based on information solely from North Vietnam.¹⁸⁵ He did not isolate where economic success originated, despite hinting that most of the boom was in the South. Most writers recognise the significance of the movement towards market friendly policy in the recent growth of the Vietnamese economy,¹⁸⁶ as well as recognising the importance of institutional changes.¹⁸⁷ The

¹⁸¹ *ibid*, p.119.

¹⁸² Van Thi Hong Pham, Regional growth disparities in Vietnam. Ph.D. dissertation, The University of Oklahoma, in *Dissertations & Theses: The Humanities and Social Sciences Collection*, 2007, [database online]; available from <http://www.proquest.com> (publication number AAT 3283846; accessed March 21, 2009).

¹⁸³ Vo Xuan Han, "Vietnam in 2007: A Profile in Economic and Socio-Political Dynamism", *Asian Survey*, Vol.48, No.1, 2008, p.33.

¹⁸⁴ Donald B. Freeman, "Doi Moi Policy and the Small-Enterprise Boom in Ho Chi Minh City, Vietnam", *Geographical Review*, Vol.86, No.2, 1996, p.178-196.

¹⁸⁵ Adam Fforde, "Economics, History and the Origins of Vietnam's Post-War Economic Success", *Asian Survey*, Vol.49, No.3, 2009, p.490.

¹⁸⁶ Giao Hoang Kim and Hoang Vu Cuong, Chapter 7 "Vietnam's Private Economy in the Process of Renovation" in Nørlund, Irene, Carolyn L. Gates & Vu Cao Dam's *Vietnam in a Changing World*, (Richmond, Surrey: Curzon Press, 1995).

¹⁸⁷ Asian Development Bank, *Rising to the Challenge in Asia: A study of Financial Market*, Volume 12: Socialist Republic of Vietnam, (Manila: Asian Development Bank, 1999) & Asian Development Bank, *Which Institutions are Critical to Sustain Long-Term Growth in Vietnam?* (Manila: Asian Development Bank, 2004).

existence of a current north-south gap is acknowledged and many attribute it to differing attitudes to economic growth. This research does raise a question over whether or not there is path dependence in the economic development of Vietnam. Was the gap during the colonial era the same as the gap that is currently present in Vietnam? We cannot address this before understanding what the colonial gap was about and therein lies our contribution to this more recent literature. Such a contribution would help contextualise some of the research on the success of Vietnam's economy following the 1986 Doi Moi reforms.

2.8) Bringing it all together: Highlighting the contribution

Although there is a large amount of research on colonial Vietnam, many aspects of its economic history remain obscure. In this thesis, we will look into the economic gap that existed between Tonkin and Cochinchina between 1900 and 1940. We will specifically tackle the questions of why a gap between the economies of Tonkin and Cochinchina existed, what its nature was, as well as what it meant for the populations of these regions. The literature on colonial Indochina published during colonial rule suggests that scholars of Indochinese matters evaluated economic development in light of ideology, almost as if colonialism was the central mover of economic progress. Even those who acknowledged that other factors might have influenced economic differences, such as Gourou, Henry, Le Thanh Khoi... did not go into any detail as to how each factor played a role, or even fully acknowledged that Tonkin and Cochinchina were experiencing different circumstances. Some scholars, both during the colonial era and after, have suggested that the gap was due to differing man-to-land ratios in the two regions. Others have suggested it was possibly to do with colonial policies. This literature review has shown that although a gap was always acknowledged, it was rarely investigated and these theories have not been evaluated and weighed one against another.

In fact, the literature consistently recognised the existence of the gap, despite the fact that no studies that we are aware of exist that explain why there was a GDP gap or the way in which this gap manifested itself in the agricultural, industrial and commercial sectors of Tonkin and Cochinchina. Furthermore, although GDP per capita was higher in Cochinchina than in Tonkin throughout this period, no evaluation of regional standard of

living have been done to see if this is an accurate representation of the population's income. We will re-evaluate the role of population densities and colonial policy in explaining the colonial North-South gap; explore in what ways Tonkin and Cochinchina's economic activities diverged during the colonial period; and assess if the GDP per capita gap presents an accurate reflection of living standard differences between Tonkin and Cochinchina.

Recent research shows that the economic performance of the Vietnamese economy post-Doi Moi has also resulted in a gap between north and south. Because little research on the historical aspect of such a gap exists, it is not possible to say whether or not this is a continuous factor in the Vietnamese economy or a new phenomenon. This research makes a start in helping historians to evaluate this. In addition, it might help make more sense of the development of nationalism in a regional perspective, although these ideas are outside the scope of the present research.

**PART 1: RE-EVALUATING THE ORIGINS OF THE NORTH-
SOUTH GAP**

Chapter 3: Demography

3.1) Introduction

French colonial researchers noticed that there were significant demographic differences between Tonkin and Cochinchina. As mentioned in the previous chapter, Yves Henry and Pierre Gourou documented that Cochinchina was much less populous than Tonkin between 1900 and 1940. They also stated that more intensive cultivation of Cochinchinese land only dated back to the 17th century. From these two facts, they conjectured that Cochinchina had not yet achieved its full production potential and that the Northern lands were increasingly losing their fertility due to over usage.¹⁸⁸ Moreover, the fact that the total cultivable land area was still growing in Cochinchina during the period meant that potential agricultural production was larger there than in Tonkin. They believed that the result of these density differences explained potential economic differences between the regions. Population pressures have generally been recognised as a major reason for the 'impoverishment' of some areas of Southeast Asia: Bruno Lasker argued this was particularly significant for colonial Java and northern Vietnam.¹⁸⁹ However, it seems unrealistic to assume this was the only impact of demographics.

Topics related to demographic characteristics such as land or labour utilisation need to be better understood, as evidence showed a certain degree of variations in these characteristics within Indochina. As suggested in Chapter 2, research on this has not yet been extensively done. In this chapter, we ask **in what ways demographic characteristics could have influenced different economic performances in Tonkin and Cochinchina**. We intend to go beyond previously made points of the impact of population pressure on land productivity. Indeed, we look at the ways in which demographic characteristics affected both land and labour utilisation in the economies of Tonkin and Cochinchina. This chapter does not *prove* that demographics are the key to understanding the North-South gap, or indeed that they were the only reason for its existence. No one reason can explain this gap. Instead, we suggest *various ways in which*

¹⁸⁸ Yves Henry, *Economie agricole de l'Indochine*, (Paris: Gouvernement Général de l'Indochine, 1932), p.8.

¹⁸⁹ Bruno Lasker, *Standards and Planes of Living in the Far East*, Preliminary draft for the use of the 12th Conference of the Institute of Pacific Relations, (New York: Institute of Pacific Relations, 1953), p. 29.

demographics contributed to the continued gap between the two regions during this time period.

This chapter first evaluates the differences in the man to land ratios of Tonkin and Cochinchina over the time period 1900-1940. We include a brief overview of land productivity in order to question Gourou and Henry's conjecture that the stronger population pressures in Tonkin meant its soil were over-used and that Cochinchina could thus be more economically successful. We then evaluate how population differences and institutional context affected the landholding patterns in the two economies and how these landholding patterns helped shaped the labour markets of Indochina. This section allows us to show that both existing demographic differences and the colonial administration's land policy shaped the way land and labour were utilised in Indochina. Finally, we will explore migratory flows and urbanisation. This section helps demonstrate why the gap persisted throughout this period and provides grounds for re-evaluating how variations in population pressures affected the relative economic performances of Tonkin and Cochinchina. This re-evaluation highlights the need to look at the various sectors of the Indochinese economy to understand the nature of the gap.

3.2) Population growth & densities

Censuses in Indochina occurred in 1911, 1921, 1926, 1931 and 1936. Data for other years are estimates, calculated by Maks Banens as part of the Hitotsubashi project. Since the local authorities that compiled the census data were also the authorities responsible for the levy of taxes and since the tax burden of any locality depended on the cooperation of the population, villages tended to under-report population. The authorities were aware of this problem and census data were modified using death and birth rate estimates from the French authorities. For his estimates Banens used mortality rates, fertility rates, population censuses, estimated population growth rates... Then, he started from the most reliable data (1989) and worked his way back by estimating population growth rates and placing bands using fertility and mortality rates. He estimated a population growth of around 43% for the period 1911-1943.¹⁹⁰ Since Banens' estimates were corrected for

¹⁹⁰ Maks Banens, "Vietnam: a Reconstitution of its 20th Century Population History" in Jean-Pascal Bassino, Jean-Dominique Giacometti and Konosuke Odaka (eds) *Quantitative Economic History of Vietnam 1900-1990*, (Hitotsubashi: Institute of Economic Research, 2000), p.18.

biases, they offer more convincing population statistics than the population censuses of the French authorities. He warned however, that his method is least reliable for population estimates before the Second World War, so in this thesis, we use both his estimates and the census data.

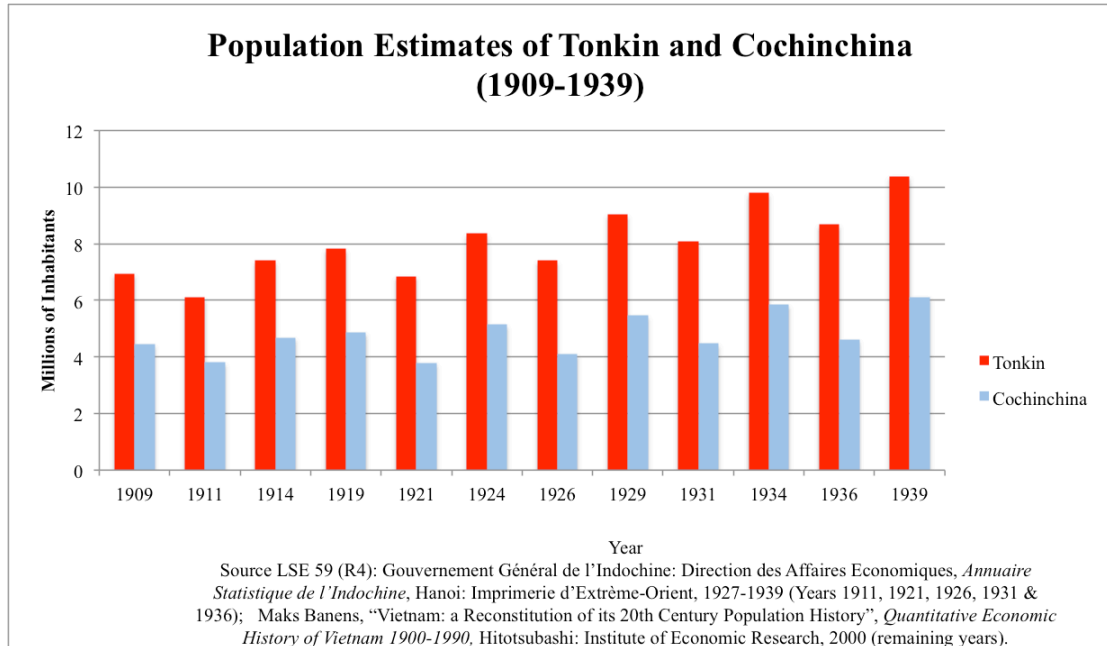


Figure 3.1

As we can see from Figure 3.1, regardless of the data used, Tonkin was about twice as populous as Cochinchina throughout the period 1909-1939. Between those dates, Tonkin's population went from just under 7 million to about 10.5 million, while Cochinchina's went from 4.5 million to about 6 million, showing both a lower absolute number and a lower growth over this time period.

As indicated in Chapter 2, Gourou, Henry and other scholars believed that one of the key reasons there were economic differences between North and South Vietnam was because of differences in the man to land ratio.¹⁹¹ Tonkin's surface area was 115 800 km², while Cochinchina's was 64 000 km², approximately.¹⁹² These data cannot necessarily be used to estimate population density: when looking at the potential impact of population densities on economic performance, total land area is not as significant as cultivable land,

¹⁹¹ Pierre Gourou, *Land Utilization in French Indochina*, (New York: Institute of Pacific Relations, 1945), p.257.

¹⁹² LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Economiques, "Territoire et Population", *Annuaire Statistique de l'Indochine Vol.I*, (Hanoi: Imprimerie d'Extrême-Orient, 1927), p.32.

especially in a mainly agrarian economy. The ASI provide some information on the area under rice cultivation for some years, however they did not provide information on the total cultivable land in each region. The only statistics available on cultivable land come from Gourou's work on land utilisation, which mainly included statistics for the early 1930s.

The cultivable land in Tonkin was, and remains, in a specific region: the Red River Delta. Indeed, only the area around the Red River was appropriate for agriculture, as the remainder of the Tonkinese territory consisted of mountainous areas not conducive to growing crops. This area accounted for about 15 000 km². Because the Tonkinese used some of this territory for double cropping, cultivable land can be adjusted upwards to 18 500 km², according to Gourou's calculations. Gourou further estimated that about 7 million people inhabited Tonkin's cultivable area in 1931, which was equivalent to 85.36% of what he estimated was Tonkin's population at the time. The mountainous area covered the remainder of the territory, about 100 000 km², and hosted 1.2 million people.¹⁹³ Table 3.1 draws on a number of sources to show the evolution of Tonkin's man-to-cultivable land, if we assume that increases in cultivable land were minimal (cultivable land assumed to remain 18 500 km²) and that the proportion of population inhabiting cultivable land (85.36% as suggested by Gourou) did not change between 1900 and 1940.

¹⁹³ Gourou 1945, op.cit., p.93.

Table 3.1: Estimates of the Evolution of Tonkin's Population Density, 1909-1939

	Population Estimate	Estimate of Population on Cultivable Land	Man-to-Cultivable Land Ratio
	1000s	1000s	Inhabitants per km ²
1909 ^e	6 943	5 927	320
1911 ^c	6 100	5 207	281
1914 ^e	7 413	6 328	342
1919 ^e	7 817	6 673	361
1921 ^c	6 854	5 851	316
1924 ^e	8 370	7 145	386
1926 ^e	7 400	6 317	341
1929 ^e	9 036	7 714	417
1931 ^c	8 075	6 893	373
1934 ^e	9 801	8 367	452
1936 ^c	8 680	7 410	401
1939 ^e	10 389	8 869	479

Method: 85.36% * Population Estimate = Population on Cultivable Land; Population on Cultivable Land / 18 500 = Man to Cultivable Land Ratio
^c : census data; ^e : estimated data.
LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Economiques, *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939 & Maks Banens, "Vietnam: a Reconstitution of its 20th Century Population History", *Quantitative Economic History of Vietnam 1900-1990*, Hitotsubashi: Institute of Economic Research, 2000.

Table 3.1 suggests an increasing population pressure on cultivable land in Tonkin. In Cochinchina, virgin land was put in cultivation and public works enabled previously unsuitable land to become cultivable so that we cannot assume an unchanging cultivable land size in this region. Fortunately, Gourou recorded an estimate of the increase in Cochinchinese *cultivated* land over the colonial time period, which is likely to be a lower bound estimate for *cultivable* land. Double cropping was a significant feature of Tonkin's agricultural sector but not of Cochinchina's, presumably because there was ample land available. Consequently, these data do not need to be further adjusted. Table 3.2 shows the evolution of the size of the cultivated land in Cochinchina, according to Gourou.

Table 3.2: Gourou's Estimates of Cochinchinese Cultivated Land, 1900-1936, (Km²)

	Area
1900	11 740
1910	15 280
1920	17 490
1925	18 810
1929	21 640
1936	21 630

Pierre Gourou, *Land Utilization in French Indochina*, New York: Institute of Pacific Relations, 1945, p.331.

While we do not know what proportion of the Cochinchinese population lived on cultivated land; assuming that the entire population did so gives us a higher bound man-to-land ratio for Cochinchina. Table 3.3 shows the evolution of the Cochinchinese man-to-cultivated land ratio. Comparing this information to Table 3.1, we can see that there was indeed a significant difference between the population densities of Tonkin and Cochinchina. Although this is certainly an over-estimate, this does not negatively bias our conclusion, as it would simply imply the real difference was even wider than these calculations suggest.

Table 3.3: Estimates of the Evolution of Cochinchina's Population Density, 1910-1936

	Population Estimate	Estimated Cultivated Land	Man-to-Cultivated Land Ratio
	1000s	km ²	Inhabitant per km ²
1910	3 800	15 280	249
1920	3 797	17 490	217
1925	5 139	18 810	273
1929	5 471	21 640	253
1936	4 616	21 630	213

Pierre Gourou, *Land Utilization in French Indochina*, New York: Institute of Pacific Relations, 1945, p.331; Census data (1911, 1921, 1931, 1936) from LSE 59 (R4): Gouvernement Général de l'Indochine: Direction des Affaires Economiques, *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939 & other Population Estimates from: Maks Banens, "Vietnam: a Reconstitution of its 20th Century Population History", *Quantitative Economic History of Vietnam 1900-1990*, Hitotsubashi: Institute of Economic Research, 2000.

After 1925, if Gourou's records are correct, the absolute cultivated area was larger in Cochinchina than the cultivable land available in Tonkin, even allowing for double cropping in Tonkin. The man to land ratio difference was probably wider than that suggested by comparing Tables 3.1 and 3.3. The population densities of both Tonkin and Cochinchina were relatively high, compared to those of neighbouring economies. Hanks has suggested that population density in Burma during this time period was only around 79 people per square kilometre and up to 200 people per square kilometre in Thailand.¹⁹⁴ These two countries were the world's top two exporters of rice during colonial rule, followed closely by Cochinchina. Comparing these numbers, Tonkin's clear overpopulation of cultivable land and significantly lower per capita production of rice (as we will see in Chapter 5) suggests that there was probably a correlation between population densities and productivity.

Surprisingly, between 1919-1922, the official French records show that Tonkin's yield in rice fields was higher than, or on par to, Cochinchina's: 14-13 quintal per hectare in Tonkin and 14-12 quintal per hectare in Cochinchina.¹⁹⁵ Certainly, some have criticised these data. Some scholars suggest the French severely underestimated yields in some regions of Cochinchina. Bassino argued the underestimate could be by as large as 34% in some regions.¹⁹⁶ Yields will be further discussed in Chapter 5, but it seems that there is little doubt that the official data was not based on accurate measurement of land productivity. There is also no reason to dismiss scholars' belief that land productivity was likely higher in Cochinchina than in Tonkin. However, there is no conclusive evidence to suggest that soil productivity differences alone explain the GDP gap. Indeed, Cochinchina's estimated GDP over this period was, on average, more than 34% higher than Tonkin. Even assuming a directly proportional, one to one, relationship between land yields and GDP, a difference in land yields alone cannot fully explain the GDP gap. We believe that population pressures affected economic performance in other ways and

¹⁹⁴ Lucien M. Hanks, *Rice and Man: Agricultural Ecology in Southeast Asia*, (Chicago: Aldine Atherton Inc, 1972), p.5.

¹⁹⁵ LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine, "Agriculture, Elevage et Forêts", *Annuaire Statistique de l'Indochine*, (Hanoi: Imprimerie d'Extrême-Orient, 1927-1931).

¹⁹⁶ Jean-Pascal Bassino, "Rice Cultivation in Southern Vietnam (1880-1954): A Re-evaluation of Land Productivity in Asian Perspective" *Festschrift Volume in Honor of Professor Konosuke Odaka*, special issue of *Keizai Shirin Hosei University Economic Review*, Vol.73, No.1(4), 2006, p.29.

that there were also other differences between these two economies that could explain the GDP gap.

3.3) Labour utilisation & landholding patterns

Population densities no doubt played a role in labour utilisation and land productivity. However, a better understanding of the labour market is necessary to assess whether population densities themselves were likely to have further influences on the economic performance of each region. Goudal suggested that out of the 23 million people living in Indochina in the late 1930s, 18 million were peasants.¹⁹⁷ Even though this figure did not represent the active labour force, there is no doubt that the agrarian sector was the main employer of labour. The strong tie of the workforce to the agricultural sector was clearly seen in the aftermath of the Depression: “the dismissed native workers apparently adapted themselves to [losing employment as a result of the situation] by returning to agricultural and other types of family work in their native villages, and unemployment affected Europeans far more acutely”.¹⁹⁸ Consequently, it is important to understand labour utilisation in the agrarian sector to adequately assess their role in the economic performance of the regions.

The majority of the population remained engaged to agricultural production, if only on a part-time basis. Banens estimated the likely size of the active labour force, aged between 15 and 64, in both Tonkin and Cochinchina, as well as Vietnam as a whole. Banens' estimates show that the active labour force in both Tonkin and Cochinchina was about 58% of each region's respective population, throughout this period. If we compare these labour force data to those from other countries in the area in the 1930s, we find that 42% of the Indian population was active, 37% of Indonesia's and 47% of Thailand,¹⁹⁹ suggesting that colonial Vietnam's labour force was unusually high, in both regions.

During this time period, there was a rather dramatic increase in the role of wage labour: between 1906 and 1931, the number of wage earners on monthly or yearly

¹⁹⁷ Jean Goudal, *Labour Conditions in Indo-China*, (Geneva: International Labour Office, 1938), p.186.

¹⁹⁸ Virginia Thompson, *Labor Problems in Southeast Asia*, (London: Oxford University Press, 1947), p.199.

¹⁹⁹ Members of the IPR International Secretariat, *A Brief Political and Economic Handbook of Eastern and Southern Asia*, 12th Conference, Institute of Pacific Relations, Kyoto, Japan, September-October 1954, p.17.

contracts in European undertakings increased from 55 000 to over 220 000.²⁰⁰ In 1929, Goudal suggested 36.8% of these contracted wage-earners were engaged in agriculture, 39.2% were in commercial or industrial ventures and 24% were engaged in the mining industry.²⁰¹

Table 3.4: Wage-Earners in the Indochinese Economy, by Sector and Region, 1929

		Number of Wage-Earners	% of Regional Active Labour Force
Agricultural Wage Earners	Tonkinese	58 069	1.09
	Cochinchinese	15 972	0.49
Commercial or Industrial Wage Earners	Tonkinese	46 317	0.87
	Cochinchinese	23 248	0.72
Mining Wage Earners	Tonkinese	45 475	0.86
	Cochinchinese	0	0
Jean Goudal, <i>Labour Conditions in Indo-China</i> , Geneva: International Labour Office, 1938, p.294.			

Goudal further explained that the wage labour sector of the Cochinchinese economy was mainly agricultural, whereas in Tonkin, it was mainly industrial.²⁰² Delamarre suggested that although in 1928-1929 there were 220 000 contracted labourers in Indochinese enterprises, only 38 000 of these workers were under yearly contracts.²⁰³ The remainder of the agrarian labour force was employed on a daily wage in both regions. It is clear that contracted labour was not a significant part of the labour force: peasants either owned their land or worked as daily labour. This will be better demonstrated in Chapters 5 and 6, but we suggest that labour utilisation may have been influenced by landholding patterns. For example, smaller plots generally mean households can work their own land (whether as owner or tenant), whereas larger estates required wage labour. Landholding patterns can thus influence the way in which labour is used, as well as the

²⁰⁰ Goudal, *op.cit.*, footnote 1, p.21.

²⁰¹ *ibid.*, p.273.

²⁰² *ibid.*, p.17.

²⁰³ E. Delamarre, *L'émigration et l'immigration ouvrière en Indochine*, (Hanoi: Imprimerie d'Extrême-Orient, 1931), p.17.

way in which land itself is used. Population pressures certainly affected the development of landholding patterns. We thus argue that this was another way in which different demographic characteristics led to different economic performances: by affecting land and labour utilisation patterns, not just soil productivity.

Table 3.5 is an illustration of land utilisation patterns, but also hints at differences in the way the labour force was employed. Some research shows that various types of tenancy agreements (fermiers, metayers...) were more common in Tonkin than in Cochinchina,²⁰⁴ thus reducing the demand for wage labour in that region's agrarian sector. We suggest this was due to characteristics of land utilisation and that these were in part influenced by existing demographic characteristics.

Table 3.5: Share of Total Regional Population, by Size of Landholding Worked, 1933, (%)

	0-5 hectares	5 to 50 hectares	More than 50 hectares	Communal
Tonkin	40	20	20	20
Cochinchina	15	37	45	3
Paul Bernard, <i>Le problème économique Indochinois</i> , Paris: Nouvelles Éditions Latina, 1934, p.7.				

Communal land was worked by the poorest peasants: those with very small landholdings or with insufficient employment as wage labour. 15% of the Cochinchinese population worked on landholdings that were between 0 and 5 hectares, compared to 40% in Tonkin. Generally, these people either owned the land they were working or rented it. Either way, this section of the population was unlikely to have been employed as wage labourers. Instead, their income was based on the use of their land plot. For landholdings between 5 and 50 hectares, the peasants were often larger tenant/farmers and the bigger the plot, the greater the demand for daily wage labour, especially during the harvest. Landholdings of more than 50 hectares employed only wage labour, on daily, monthly or yearly contracts.

The larger proportion of workforce employed in large landholdings in Cochinchina not only suggests a greater demand for daily wage labour, but also that a larger proportion of cultivable land in Cochinchina would have been large estates. It seems

²⁰⁴ Henry, op.cit.

likely that population density differences helped shape such institutional differences with respect to land utilisation. Indeed, a lower population density allows for more land per landowner, thus larger estates are formed. The interaction of population differences and of property rights is likely to have had an impact on the way in which economic activity occurred. Differences in landholding patterns, influenced by the way in which property rights were organised, would have impacted production patterns.

The large proportion of people using communal land in Tonkin suggests that there remained institutional factors that permitted peasants to cultivate some land for themselves. The relative absence of such communal land in Cochinchina suggests that labour was expected to either rent out plots or work as wage labour. This may have been accentuated by the loss of the traditional village institutions in Cochinchina during French colonial rule. 'Reliable' village authorities were deteriorating in Cochinchina during colonial rule, something highlighted numerous times in *La Tribune Indigène*, a Cochinchinese newspaper.²⁰⁵ Throughout the year 1921, for example, the newspapers were highlighting that the risk of losing property rights was increasing because village relationships in Cochinchina were breaking down. This may well have further allowed large estates to develop: traditional institutions were not in place to keep some of the land for communal use.

Bernard's estimates may be questioned. For example, Dumont believed that in the Red River delta, 90% of landowners owned less than 5 mau,²⁰⁶ roughly 7 hectares,²⁰⁷ as opposed to Bernard's suggestion that at least 20% of the population worked large estates. Dumont's estimates show that small plots were even more prevalent in Tonkin than Bernard suggested. Even when questioning the estimates, it is clear that both land and labour were unlikely to have been utilised in the same way in Tonkin and Cochinchina. Differences therein could help explain the economic gap between Tonkin and Cochinchina. The way in which land was owned impacted the way in which it could be worked. Landholding patterns, not just land productivity, are likely to have influenced the total output of the agrarian sector.

²⁰⁵ ANOM: BIB AOM/30609/1921, *La Tribune Indigène*, Saigon: June 9th 1921, June 18th 1921, July 19th 1921, September 1st 1921.

²⁰⁶ R. Dumont, *La culture du riz dans le delta du Tonkin*, (Paris: Société d'éditions géographiques, maritimes et coloniales, 1935), p.43-44.

²⁰⁷ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1930*, Section B, (Hanoi: 1931), p.249.

Considering that the population density of Cochinchina was so much lower than Tonkin's, it does seem to make sense that more of Cochinchina's population would have been engaged in working larger fields. In 1931, Tonkin had nearly 7000 communes while Cochinchina had 1284.²⁰⁸ These communes' surrounding landplots were divided in small plots. The tradition of dividing the family plot into shares for each male offspring would have resulted in more numerous and smaller parcels in Tonkin than in Cochinchina merely because of differing demographic characteristics. There is no doubt that there was more potential for larger estates to be had when the land was divided into fewer parcels and between fewer people, as it was in Cochinchina. Colonial policy may have perpetuated the possibility for formation of larger estates in Cochinchina: the large public works undertaken in the Mekong delta to expand the canal system, improve infrastructure and reclaim land were likely to have increased the land available for the establishment of large estates. In addition, the regulation of the property rights made it easier for larger landholdings to be established in Cochinchina than in Tonkin, thus further distancing the land and labour utilisation patterns of the two regions from one another.

Prior to French rule, the imperial 'dia-bo' had recorded landholdings and acted as a type of cadastral register. However, it had not always been updated since its establishment and the French authorities decided to draw up a more precise and accurate land register. This proved too difficult and tedious for the French authorities and it was never completed. Property rights, in the early decades of the Indochinese Union, were difficult to uphold.²⁰⁹ This was accentuated by the colonial government's belief that they should provide large plots of land to agrarian entrepreneurs as concessions. The concession regime is the best illustration we have to understand how property rights functioned in colonial Indochina and it helps explain how landholdings patterns continued to differ between the two regions throughout this time period.

The colonial state used the concession regime to bring about economic development. In the beginning of French rule (the late 1800s) concessions of lands that were deemed as having been vacated by their previous owners, could be granted

²⁰⁸ Gourou 1945, op.cit., p.336.

²⁰⁹ LSE 59(4): A. Boudillon, Rapport Présenté à Monsieur le Ministre des Colonies, *Le régime de la propriété foncière en Indochine: ce qui a été fait – ce qu'il faudra faire*, (Paris: Emile Larose, libraire-éditeur, 1915), p.30 & p.93.

anywhere in Indochina. The colonial administration's ambition was to develop 'rich' cultures, through these concessions, to produce goods such as rice, coffee, tea, cotton, rubber or silk worms.²¹⁰ These concessions were given away freely until 1913, after which they were sold at auctions. In addition to discounted land prices, tax concessions were also given for entrepreneurs to develop crops that took some years before becoming lucrative such as rubber.²¹¹ Initially, concessions were given out extensively throughout the Union. Despite a larger population, much of Tonkinese land was deemed 'abandoned' in the early 1900s: because of the French's progressive control of the region many peasants temporarily hid in the mountains to avoid fighting. As people returned to their land once the fighting had died out, serious problems resulted from some of it having been given out as concessions to Europeans.²¹² The difficulty in proving ownership, since the traditional 'dia-bo' was not always accurate or up to date, resulted in a number of lawsuits between new 'owners' and indigenous farmers.²¹³ To avoid further uprisings in Tonkin, much fewer concessions ended up being given out in Tonkin than in Cochinchina. Furthermore, more land was available for concessions in Cochinchina, where the population was lower and much of the land still virgin. Concessions were generally granted as large plots, which would have perpetuated the land and labour utilisation patterns previously noted. Indeed, more concessions in Cochinchina meant more large landholdings, employing more wage labour, as suggested by Table 3.5.

By 1918, Cochinchina's land register was more extensive than Tonkin's.²¹⁴ Even despite more lawsuits over concessions, Tonkin's property rights were less well established *with the colonial authorities* than Cochinchina's. This does not mean property rights did not exist in Tonkin. Tonkin and Cochinchina, whilst both belonging to the Indochinese Union, were not the same type of colonial territory: the former was indirectly ruled and the latter directly ruled (this will be further explained in Chapter 4). In Tonkin, traditional elites were separate from the colonial government and maintained some autonomy from the colonial administration. Partly because Tonkin was indirectly ruled and because its villages remained important institutions, property rights between

²¹⁰ *ibid.*, p.173.

²¹¹ *ibid.*, p.175.

²¹² *ibid.*, p.97-99.

²¹³ *ibid.*, p.101-119.

²¹⁴ SOAS: "La situation économique de l'Indochine pendant l'année 1918", French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1920*, (Hanoi: 1921), p.293-357.

indigenous owners were respected within the village bounds. However, Tonkinese property rights were not necessarily recognised by the colonial authorities, because they were outside of their control. The greater reliance on village network in Tonkin may explain the greater significance of communal land and might have allowed the subdivision of family parcels into ever-smaller plots. Goudal suggested that although large landholdings appeared very few in Tonkin, they were in fact hidden by the difficulty of understanding the property rights system in Tonkin.²¹⁵ For example, he suggested that placing various plots under different names would hide large holdings. There is no real way to verify this claim, even though it may well be true. Even if it was true however, it would not necessarily change cultivation patterns, these unofficial large land plots were divided in smaller plots, rather than farmed as estates.

Cochinchina's political organisation was entirely part of the colonial government. For this reason, by 1925, a land code was instituted in Cochinchina, whereby any land that was without owner or vacant belonged to the state domain and any of its products belonged to the colony.²¹⁶ Cochinchina's larger reliance on the colonial administration's land policy would, however, have permitted for large landholdings to become increasingly important players in its agrarian economy. Indeed, between 1921 and 1932, 942 163 hectares of land were conceded in Indochina to French colonists, of which 638 600 hectares were in Cochinchina and only 138 000 in Tonkin.²¹⁷ Although this was a large proportion of Cochinchina's cultivated land, almost a third, much of this land was not necessarily actively cultivated. Touzet argued only half of the conceded that area was put under cultivation.²¹⁸ These numbers were for concessions given out to French colonists. However, according to a number of sources, European ownership was not as high as expected and many concessions were given out to native Indochinese citizens, especially in Cochinchina.²¹⁹ Consequently, even more of Cochinchina's cultivated land may have been large estates employing wage labour than what the above data suggested.

²¹⁵ Goudal, op.cit., p.191.

²¹⁶ Alexandre Deroche, *France coloniale et droit de propriété: Les concessions en Indochine*, (Paris: L'Harmattan, 2004), p.61.

²¹⁷ André Touzet, *L'économie Indochinoise et la grande crise universelle*, (Paris: Marcel Giard, 1934), p.2-3.

²¹⁸ *ibid*, p.3.

²¹⁹ Pierre Brocheux, *The Mekong Delta Ecology, Economy and Revolution, 1860-1960*, (Madison: Centre for Southeast Asian Studies University of Wisconsin-Madison, 1995), p.210 & Robert L. Sansom, *The Economics of Insurgency in the Mekong Delta of Vietnam*, (London: The M.I.T. Press, 1970), p.51.

Judicial differences could also have had an impact in landholding patterns. The difference in direct and indirect rule resulted in a different judicial organisation between the two regions. In Indochina, when an individual was French or foreign, he was tried under the French civil code; when the individual was part of the indigenous population, he was tried under the old Annamite legislation.²²⁰ In Tonkin, all indigenous inhabitants were under indigenous law and only Europeans were tried under French jurisdiction. In Cochinchina, however, the distinction was blurred and indigenous people, depending on their association with European colonists, could either be tried under French jurisdiction or indigenous jurisdiction: some indigenous people were considered French 'protégés'. Full naturalisation was not common, but most of the indigenous population could resort to the French courts.²²¹ Moreover, if a dispute was between a French or European person (including ethnic Vietnamese who had been granted French citizenship, as mentioned above) and an indigenous person, the French courts oversaw the case. In Tonkin, mandarins, who upheld Annamite laws, oversaw indigenous trials.²²² These were not necessarily contradictory to French law, but the trials did not follow the same procedures and their rulings were not considered to be interchangeable with French rulings. This is likely to have proven a difficult obstacle for indigenous owners of small property: if they could not prove ownership, their land could be taken away and given as part of a concession, or absorbed into a larger landholding. However, the records show this was not often done after the initial start of the concession systems: much fewer concessions (and smaller) were given out in Tonkin than in Cochinchina, as seen above.

Steinberg suggested that Thailand's frontier land was opened through peasant expansion, dictated by population pressure, but that both Burma and Cochinchina's land patterns were largely dictated by concession policy.²²³ We disagree, arguing instead that the concession policy merely accentuated an already existing trend in landholding patterns. Just as in Burma, many of Cochinchina's large landholdings were owned by 'absentee landlords', particularly after 1930.²²⁴ SarDesai suggests that one of the impacts in Burma of such landholding patterns meant that there was little benefit for the wider

²²⁰ ANOM: BIB SOM C//7529, p.8.

²²¹ Virginia Thompson, *French Indochina*, (London: Unwin Brothers LTD, 1937), p.84.

²²² LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Economiques, *Annuaire Statistique de l'Indochine, 1913-1922*, (Hanoi: Imprimerie d'Extrême-Orient, 1927), p.88.

²²³ David Joel Steinberg (ed), *In Search of Southeast Asia: A Modern History*, (Honolulu: University of Hawaii Press, 1987), p.236.

²²⁴ Thompson 1937, op.cit., p. 143 & Sansom, op.cit., p.27-32.

population, since these estates were producing for export and profits went to absentee landlords.²²⁵ It stands to reason that this may also have been the case for Cochinchina and we believe this would have an impact not just on productivity patterns, but also on standard of living and wealth accumulation. This will be further evaluated in Chapters 5 and 8 respectively.

3.4) Population movements

Migration between regions

The difference in densities and landholding patterns shown earlier implied that there was relatively more demand for wage labour in the South than in the North. This would suggest that migration from the over-populated region to the under-populated region should have ensued. Certainly the cash crop plantations of Cochinchina, such as rubber, often used contracted labour from Tonkin to supplement local labour. Booth suggests that the French authorities encouraged movement from North to South.²²⁶ Indeed, the government facilitated such movement by setting wages for contractual labour higher than for local coolies.²²⁷ Although data are not available in great detail, some researchers, at the time, suggested this was because migration had not occurred in significant numbers, especially prior to such government encouragement.²²⁸

Banens' estimates held that Cochinchina's labour force, included both men and women, was 25% of Vietnam's total labour force throughout the period, while Tonkin's evolved from 39% in 1909 to 42% in 1939.²²⁹ These estimates show that the labour force, as one would expect from general population information, was much larger in Tonkin than in Cochinchina. But in addition, it also suggests that it did not vary much with time, particularly not in Cochinchina. That is surprising: despite differing population densities and government schemes, there was a continuous disequilibrium in available labour force. The government keenly felt this disequilibrium. As early as 1907, the French colonial

²²⁵ D.R. SarDesai, *Southeast Asia Past & Present*, 5th edition, (Boulder, CO: Westview Press, 2003), p.176.

²²⁶ Anne E. Booth, "The Economic Development of Southeast Asia in the Colonial Era: c.1870-1942", *History Compass*, 6/11 2008.

²²⁷ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1934*, (Hanoi: 1935), p.175.

²²⁸ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1930*, (Hanoi: 1931), p.93.

²²⁹ Banens, op.cit., p.33.

authorities felt the need to encourage population transfers from Tonkin to Cochinchina. Indeed, a group of 84 Tonkinese families were settled as a new village in Cochinchina.²³⁰ This attempt, and other subsequent ones, was unsuccessful and a different approach was taken, mainly focusing on importing single male workers. For example, Goudal suggests that as a result of the growth of the plantation economy in Cochinchina, “recruiting on a large scale began in 1919” and that between 1919 and 1922, over 9 000 coolies went from Tonkin to work in the plantations. The colonial administration believed that at least 25 000 immigrants were needed annually to staff Cochinchina's plantations.²³¹ Table 3.6 shows the migration of contracted workers from Tonkin to Cochinchina and we see that net migration from north to south was minimal and not on the scale they hoped.

²³⁰ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1909*, (Hanoi: 1910), p.565-566.

²³¹ Goudal, op.cit., p.46-47.

Table 3.6: Migration from Tonkin to Cochinchinese Plantations, 1926-1938

	Migration	Net migration	Immigration*	Net Immigration*
			as a % of Cochinchinese population	
1926	13 500	13 500	0.33	0.33
1927	15 000	13 000	0.37	0.32
1928	10 270	6 930	0.19	0.13
1929	21 840	-1 940	0.4	-0.04
1930	7 500	1 450	0.14	0.03
1931	1 650	-6 250	0.03	-0.11
1932	170	-9 830	0	-0.18
1933	3 110	-140	0.05	0
1934	3 850	2 100	0.07	0.04
1935	2 240	1 020	0.04	0.02
1937	3 770	810	0.06	0.01
1938	5 670	3 200	0.09	0.05
* flow to stock ratio LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Economiques. "Territoire et Population", <i>Annuaire Statistique de l'Indochine</i> , Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.				

Official records do not provide any information on migration of non-contracted migrants from Tonkin moving freely to Cochinchina's rural or urban areas. The French authorities recorded that it was not until 1925 that there was a substantial movement from the overpopulated North to the South,²³² as it was during that year that wage controls for migrant workers were established. It is unlikely that migration had not occurred before government schemes, but it also seems unlikely that migration to the agrarian sector of Cochinchina would have been much higher than the numbers shown in Table 3.6. If it

²³² SOAS: T. Smolski, "Note sur le mouvement de la population en Indochine", French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1929*, (Hanoi: 1930), p.93.

had, the government would probably not have had to design encouragement schemes to attract labour southwards and it would have affected population growth in a more noticeable way.

There are many possible explanations for the limited migration southwards. According to Goudal, there were three main reasons: the difficulty of communication; the variation in the climate, customs and ethnicity; and the 'Annamite mentality'.²³³ Although these are hard to measure, there are a number of ways in which 'mentality' could have influenced migration choices. The peasant attachment to farming as a way of life was regarded by Gourou as limiting the desire for urbanisation as well as for change of setting. Gourou explained that, in Tonkin, "villages [we]re highly coherent social groups, autonomous political organisms".²³⁴ Their populations felt a strong moral tie to the entity, so that leaving was a very unappealing option. Secondly, the peasant attachment to his village, and the high risks and costs associated with migrating, might have reduced the incentive to move. The distance was large and travelling over the mountainous Annamese region was difficult, particularly as the transport infrastructure was only progressively developed during French rule.²³⁵ We suggest that there was another, more pragmatic, reason for not wanting to move and that it was a consequence of the land and labour utilisation patterns described above. The land conditions of Cochinchina favoured the European entrepreneur, or the rich indigenous owner: the land, although initially cheap, would take time to provide an income and thus moving south *as a landowner* was only possible for those with the required capital.²³⁶ The alternative was to migrate south as a contractual worker. Peasants in rural Tonkin were often homeowners or tenants of small land plots. Moving to the South on a contract would have meant them becoming wage labourers, which they would have considered neither an attractive prospect nor a long-term plan. Thus *not only did landholding patterns influence land and labour utilisation, but they also helped perpetuate the economic consequences of such different utilisation by limiting migratory flows.*

²³³ Goudal, op.cit., p.7-8.

²³⁴ Gourou 1945, op.cit., p.100; James Scott, *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia*, (New Haven: Yale University Press, 1976), p.58.

²³⁵ ANOM: BIB SOM A//3437; E. Henry-Biabaud, *Deux Ans d'Indochine Notes de Voyage*, (Hanoi: Imprimerie d'Extrême-Orient: 1939).

²³⁶ Mark Cleary, "Land Codes and the State in French Cochinchina, c.1900-1940", *Journal of Historical Geography*, Vol. 29, No.3, 2003, p.368.

The contractual workforce was provided with lodging and a daily amount of 700 grams of rice, as well as a daily wage rate slightly higher than that of daily labourers from Cochinchina and substantially higher than that of daily labourer in Tonkin.²³⁷ The necessity for such a higher wage confirms that there were no substantial push factors for peasants in Tonkin. Pull factors had to be created. Moreover, as Giacometti explained, the conditions and the amount of labour expected from these contracted workers implied that, by the end of their contract, they were reluctant to extend it and tended to return to their home villages in the North.²³⁸ The reports of the conditions workers were subjected to acted as a counter-incentive for further migration south. Indeed, in Table 3.6, we saw that the first few years' migratory movements were stronger than the latter years. This suggests a limited integration of the agricultural labour markets of Tonkin and Cochinchina. Weakly integrated labour markets suggest distinct economic performances. Low migration between the two regions implies that initial demographic differences and their indirect impact on agrarian production remained significant in the development of the two economies throughout French rule.

As Table 3.6 showed, even after what the French considered the beginning of migration from north to south, the relative importance of the movement was minimal. Usually, the migrants working in plantations represented less than 1 per cent of Cochinchina's total population. We used total population rather than labour force to calculate these flow to stock ratios, because the number of migrants included family members without indication of whether they were active or inactive. Of course, it is possible that not all migrant workers were recorded in these data. There might have been a black market for contracted labour and there may have been movement of non-contractual labour. Nonetheless, this information does suggest that the perceived surplus agricultural population of Tonkin was reluctant to capitalise on the 'work' or 'land' available in Cochinchina. Work was certainly available, but it was not necessarily seen as desirable, in large part because of the landholding patterns differences that prevailed between the two regions.

²³⁷ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1934*, (Hanoi: 1935), p.175.

²³⁸ Jean-Dominique Giacometti, "Wages and consumer price for urban and industrial workers in Vietnam under French rule (1910-1954)" in Jean-Pascal Bassino, Jean-Dominique Giacometti & Konosuke Odaka (eds) *Quantitative Economic History of Vietnam, 1900-1940*, (Hitotsubashi: Institute of Economic Research Hitotsubashi University, 1999), p.184.

Other migratory movements may shed light on the differences in the perceived opportunities of migration. Sources at the time suggested that the migrants to Cochinchina from other Asian economies were more likely to engage in more lucrative commercial activities than those immigrating to Tonkin. This characteristic may help make sense of the relatively small movement of Tonkinese labourer to Cochinchinese land. Table 3.7 contains a summary of the available data on the ethnic breakdown of minorities in each region.

Table 3.7: Population, per Ethnicity, 1921-1936, (1000s)

	Tonkin						
	Muong	Thai	Man	Meo	Other ²³⁹	Chinese	Indians
1921	94	483	67	60	36	32	
1931	82	63	19	8	3	6	
1936	112	672.5	89	77	48	35	0.5
	Cochinchina						
	Muong	Thai	Man	Meo	Other ²²⁶	Chinese	Indians
1921					385	156	4
1931					875	53	2
1936		0.1			448	171	2
LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Territoire et Population", <i>Annuaire Statistique de l'Indochine</i> , Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.							

The first four categories are ethnicities that have historically been established in Indochina. The other three categories could represent more recent immigrants. From these, we can suggest that more immigrants went to Cochinchina. This is particularly true for Chinese and Indian immigrants. More precise data solely on Chinese migration is available in Table 3.8.

²³⁹ 'Other' includes Indonesians, Cambodians, Sino-Cambodians, Minh-Huang, Malay-Cham, and various other small ethnicities.

Table 3.8: Migration of Chinese Population, 1923-1937

	Net Migration of Chinese to Cochinchina	Net Migration of Chinese to Tonkin
1923	13 400	400
1924	8 600	1 500
1925	7 500	2 500
1926	11 500	800
1927	20 300	9 500
1928	21 900	4 500
1929	26 300	3 400
1930	13 000	4 500
1931	-6 200	1 600
1932	-15 000	-100
1933	-8 700	1 000
1934	5 000	0
1935	12 500	3 200
1936	15 100	700
1937	33 600	-100

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Economiques. "Territoire et Population", *Annuaire Statistique de l'Indochina*, 1922-1931: Vol.III p.249 & 1931-1937: Vol.VIII, p.251.

These numbers were still quite small compared to the receiving territory (again, we compare to total population rather than labour force because of the inclusion of families in these numbers), accounting for almost 0% in Tonkin and a maximum of 0.7% in Cochinchina. Other research corroborates that the Chinese population in Indochina was one of the smallest of Southeast Asia.²⁴⁰ Despite the small-scale, Cochinchina was a more attractive destination than Tonkin and the flow to stock ratio of Chinese migrants to Cochinchina was much higher than the flow to stock ratio of Tonkinese workers to Cochinchina.

Whereas in Tonkin, the few Chinese migrants tended to settle as farmers or were employed in the mining industry, in Cochinchina they held positions of power and

²⁴⁰ Harold C. Hinton, "China's Relations with Burma and Vietnam", Pamphlet, (New York: Institute of Pacific Relations, 1958), p.9.

controlled most of the rice commerce.²⁴¹ Chinese immigrants were generally recognised as significant assets to the Cochinchinese economy, particularly because they were mainly going to the urban centres and participated in the commercial opening of the region and because they were a significant source of revenue for the colonial government.²⁴²

It was also the case that more European colonists were migrating to Cochinchina than to Tonkin. Between 1923 and 1927, of the 9 000 Europeans migrating to Indochina about 6 000 went to Cochinchina compared to only 2 000 to Tonkin and the remainder to the other member states. Considering that the majority of these colonists were engaged in commercial ventures, these migrants too were considered an asset to the economic growth of the region.²⁴³

From these other migratory movements, two trends emerge. Firstly, there was limited migration to Tonkin, especially compared to migration to Cochinchina. Secondly, the migrants to Cochinchina were potentially more economically promising agents than simple wage-labourers. Migration from Tonkin to Cochinchina was weak because those who may have qualified as 'surplus' labour would not have benefited from a substantially improved position in the economy. Migratory movement show therefore that there were opportunities available in Cochinchina for migrants with the required capital, but that the limited flows between Cochinchina and Tonkin were representative of choices based on pre-existing differences in the economic behaviour of their respective populations.

Urbanisation

Since the man to land ratio was higher in the agrarian sector of Tonkin than it was in Cochinchina and the dependency ratio was the same in both regions, as suggested by Banens,²⁴⁴ Tonkin was more likely to experience pressure on its agricultural production than Cochinchina. Although we saw that migration to Cochinchina from Tonkin was weak, this pressure on agricultural production in Tonkin, *ceteris paribus*, could have acted as an incentive for alternative options such as movement towards cities; and/or the

²⁴¹ Goudal, *op.cit.*, p.247-248; Hinton, *op.cit.*, p.10.

²⁴² Delamarre, *op.cit.*, p.47.

²⁴³ SOAS: Smolski, *op.cit.*, p.89.

²⁴⁴ Banens, *op.cit.*, p.1-40.

development of rural manufacturing, mining or manufacturing. This last option will be evaluated in Chapter 6 and in this section we only look at urbanisation.

Data support that urban populations differed between Tonkin and Cochinchina. Although precise data on urbanisation were not recorded, there are statistics for the population in the main urban centres. The main cities of Tonkin were Hanoi, the capital of the region, and Haiphong, the main port. The main cities of Cochinchina were Saigon, the capital of the colony and its port, and the neighbouring port city of Cholon. Obtaining more data on the level of urbanisation in the rest of both provinces would allow a better comparison, but so far this has not been possible. Nonetheless, statistics for the two main centres of both regions provide a sound basis for an analysis of urbanisation. Both Hanoi-Haiphong and Saigon-Cholon were the main arteries of economic activity, as they held the political and commercial powers of their respective region. The data used to derive the relative size of each city come from the censuses. These data are limited and provide, at best, a lower bound estimate of urbanisation rates. However, it is assumed that the bias in data gathering was similar for both Tonkin and Cochinchina. Making use of the census data, we can evaluate the urban population of the four main cities. These are shown in Table 3.9.

Table 3.9: Estimates of Population in the Main Cities, Using Census Data, 1921-1936

	Population of the Region (1000s)		Urban population			
	Tonkin	Cochinchina	Hanoi	Haiphong	Saigon	Cholon
1921	6 854	3 797	75 000	118 000	83 000	94 000
1931	8 075	4 484	124 000	122 000	122 000	134 000
1936	8 680	4 616	149 000	70 000	111 000	145 000
Urban Population (% of region)						
			Hanoi	Haiphong	Saigon	Cholon
	1921		1.09	1.72	2.19	2.48
	1931		1.54	1.51	2.72	2.99
	1936		1.72	0.81	2.4	3.14
Urban Population = (number of people in the city / number of people in the region) * 100						
LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Economiques, "Territoire et Populations", <i>Annuaire Statistique de l'Indochine</i> , Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.						

To compare the urban population, we calculated a ratio of the city's population to the region's population. In Tonkin, although Hanoi's population grew much faster than Tonkin's regional population, Haiphong's population decreased. This suggests increased migration to Hanoi and a de-urbanisation of Haiphong. Some of Haiphong's departing population may have gone to Hanoi, meaning that the increase in Hanoi's size is not necessarily representative of movement from the rural sector to the urban centre. In fact, movement from rural Tonkin to urban Tonkin could not have been significant as the growth of Hanoi and Haiphong together was slower than that of the region's overall population. It is possible that rural to urban migration within Tonkin was temporary and thus not reflected in these data. During the slack season in farming, some workers could have migrated to local urban centres. According to Thompson's estimates, in Tonkin at least two thirds of the population worked for daily wages and thus had the liberty (and often the need) to circulate within the territory for additional sources of income.²⁴⁵ This potential migration was not necessarily directed to the cities, but either to different provinces within the region that had different harvest times or to alternative employment in the mining sector. Because modern manufacturing was mostly located in the cities, those working in this sector would be included in the urban data. In the case of Cochinchina, there was unambiguous growth in both the city centres. Both Saigon and Cholon grew faster than Cochinchina's regional population, suggesting that the growth in the cities was fuelled by more than natural increase, the movement was likely from rural to urban, although some was undoubtedly due to migration of European and Chinese workers, as previously discussed.

Table 3.9 also shows that the size of the urban centres, relative to the regional population, was significantly larger in Cochinchina than in Tonkin, even if in both cases urban population remained small. Haiphong's declining size is not enough to suggest that urbanisation was less important in Tonkin. Other northern 'towns', for which we have no information, could have been growing and the same could be said for Cochinchina. According to Gourou, Cochinchina was the most urbanised part of the Union, with 14% of its population living in urban centres, as opposed to Tonkin's urban population of about 4.3%.²⁴⁶ Gourou identified 'urban centres' by the presence of 'commercial activity',

²⁴⁵ Thompson 1937, *op.cit.*, p.149.

²⁴⁶ Gourou 1945, *op.cit.*, p.92 & p.141.

rather than purely by population size.²⁴⁷ A village ceased to be classified as rural when there was a significant market for goods produced outside the village boundaries; when many inhabitants were not engaged in agricultural production; and when there were ‘foreigners’ living within the village bounds. Gourou’s research on urbanisation was more precise for Tonkinese urban centres than for Cochinchinese ones and it is difficult to evaluate his claims because he does not explain his method. However, this gap in urbanisation seems to align itself with our calculations.

Indeed, if we compare the combined share of Hanoi-Haiphong and Saigon-Cholon to their respective region throughout the time period, we find that the northern city-centres were about half the size of the Southern city-centres, relative to their regional population. Although by no means were urban centres that significant in either region, it is evident that Saigon-Cholon was a much bigger urban agglomeration than both main Northern cities put together. In addition, the proximity of Saigon to Cholon made it a much bigger urban agglomeration than either Hanoi or Haiphong. Hanoi and Haiphong are quite far from one another: over 100 kilometres. Conversely, Cholon is now part of today’s Ho Chi Minh City. For all intents and purposes, Saigon-Cholon can be considered one entity, whereas Hanoi and Haiphong were two distinct centres, both in geography and in economic significance: the former being the political capital of Tonkin and the latter its trading centre.

A rather large urban centre, encompassing about 5.5% of Cochinchina’s population, therefore supported its economic performance. The main urban centres of Tonkin each accounted for only about 1.5% of its population. This finding fits with Gourou’s estimates that urban population in Cochinchina was more significant than in Tonkin. Gourou argued that these low urbanisation rates showed “the overwhelming predominance of rural activities, and above all agricultural activities, over all other forms of economic life in French Indochina”.²⁴⁸ Together, Gourou and our estimates based on census data suggest that the urbanisation rate in Cochinchina was between twice and three times the urbanisation rate in Tonkin. Considering Cochinchina's smaller labour force, the larger importance of cities suggests differences in the economic activities of the two regions. This is particularly true considering the Chinese and European migration

²⁴⁷ *ibid*, p.92-93.

²⁴⁸ *ibid*, p.141.

differences highlighted in the previous section. As such, population densities in the agrarian sector were not the only demographic differences between these two regions and it is likely that the economic activity of the urban centres had a large role in explaining the economic gap that existed, or at least the way in which wealth was distributed.

3.5) Conclusion

French officials were correct in looking at population differences as a source of the economic gap based on their impact on land productivity. Nonetheless, our re-evaluation of the evidence suggests that demographic characteristics had other impacts on relative economic performance. **We have argued that demographics also had an impact on landholding patterns and urban activity. Furthermore, land and labour utilisation patterns help explain the limited integration of the labour market of the two regions.** The limited integration of the two regions in this time period may in turn explain why the economic gap between those two regions remained significant throughout.

Population density differences may have affected the potential yields of the land and this, in turn, may have led to some differences in the output produced in the agrarian sector. However, there is also reason to believe that population differences, in addition to certain aspects of the colonial administration's land policy, had an impact on the way in which land and labour were utilised. Both of these impacts of demographic differences on the agrarian sector are likely to explain much of the economic gap between the two regions, which were after all almost exclusively agrarian. In addition, the larger urban sector of Cochinchina may have further fuelled differing economic performance.

Landholding patterns are institutions, which help guide the development of economic activity in the agrarian sector. Although data are limited and we have not been able to quantify their effect on economic activity, it is this chapter's hypothesis that they had an impact on the output potential of both regions. This will be further argued in Chapter 5's discussion of labour productivity. The hypothesis of the role of landholding patterns fits with the rise in importance of institutional approaches to explaining economic growth differences. For example, Rodrik et al suggest that “the quality of institutions trumps everything else. Once institutions are controlled for, integration has no

direct effect on incomes, while geography has at best weak direct effects”.²⁴⁹ In other words, although we do not discard Gourou and Henry's (amongst others) view that population differences had a direct impact on land productivity and thus economic performance, this chapter concludes that demographic differences' indirect impact on the institutional development of landholding patterns also played a large role.

This seems to be supported by the limited integration of the two economies' labour market. Surprisingly, despite a significantly higher population density in Tonkin than in Cochinchina, migration from one region to the other did not occur on a large scale, even when government policy sought to encourage it. There is limited doubt that such a **lack of integration in the two regions' labour market resulted in the continuing importance of the effect of population differences on economic growth, in the agrarian sector** at least. In addition, limited migration may have been due to the prevalence of large landholding in Cochinchina, which meant that the demand for migrant labour was mostly for unskilled wage labour. Wage labour was relatively unattractive to the predominantly landowning peasants of Tonkin. The limited migration may also have in part reflected that despite a larger GDP in Cochinchina, the standard of living a Tonkinese migrant could expect from relocating was not high enough to overcome initial barriers to migration, even with the colonial administration's help. This hypothesis is in part supported by the more significant migration of Chinese and European entrepreneurs to Cochinchina.

The larger significance of urban centres in Cochinchina, as well as the larger role of absentee landlordism with larger landholdings, suggests that much of the wealth that may have been extracted from the Cochinchinese economy may have been concentrated in the cities. **The limited growth of cities in Tonkin, considering the larger apparent population pressure, may further suggest that peasants found alternative employment in the domestic economy** that did not require movement to the cities. In Chapter 6, we will show that both mining and manufacturing activities were more significant in Tonkin and we believe the more limited urbanisation as well as the limited integration with Cochinchina shows that the perceived population pressures were not necessarily felt as an obstacle to economic development because of this growth.

²⁴⁹ Dani Rodrik; Arvind Subramanian & Francesco Trebbi, “Institutions Rule: The Primacy of Institutions over Integration and Geography in Economic Development”, *International Monetary Fund Working Paper*, 2002, No.189, p.6.

Furthermore, Cochinchina's larger urban sector may have been another reason for its more dynamic economy. Urbanisation rates differences are yet another overlooked role of demographics in explaining the origin of the economic gap between Tonkin and Cochinchina.

The existing debate in the literature over the role of colonial policy in explaining the North-South gap and this chapter's suggestion that some aspects of the administration's land policy resulted in the continuance of disparate landholding patterns suggests the need for a better evaluation of colonial policy in general. This will be addressed in Chapter 4. Furthermore, the possible impact of population pressures on land and labour productivity, the limited migration between the two regions, the differing urbanisation patterns and the apparent differences in the labour utilisation of the two regions suggest the need to better evaluate the performance of Tonkin and Cochinchina's agricultural, industrial and commercial sectors. These will be addressed in Chapters 5, 6 and 7, respectively. These same ideas lead to a questioning of the extent to which the GDP gap truly reflected differences in the standards of living of the populations in both regions and will be discussed in Chapter 8.

Chapter 4: Colonial Policy

4.1) Introduction

Initially, French colonial extension was fuelled by politicians' rhetoric that it would encourage industrial growth in France. They saw colonies as new markets for French industrial goods. Chapter 2 has shown that throughout the last century many works have been written on French colonial policy. Some of these works suggested that colonial policy might be responsible for the economic evolution of Indochina and may be partly responsible for the way in which Tonkin and Cochinchina diverged during this time period, although this was never demonstrated. In this chapter, we ask **to what extent did the colonial administration's actions reflect or encourage the economic divide between Tonkin and Cochinchina**. We will suggest that colonial policy, specifically with respect to taxation, **reflected** existing differences, but that it allowed for the endurance of the gap throughout this period. For example, we argued in Chapter 3 that the concession system helped perpetuate pre-existing differences in landholding patterns, although it itself was not responsible for the initial differences in land utilisation.

This chapter looks at the evolution of colonial thought, firstly in general terms and secondly specifically with respect to Indochina. We will look at some of the lasting legacies of the main Governors General and the structure of the Union. We also lay out the differing circumstances that helped shape the evolution of colonial action in Tonkin and Cochinchina. Then we look at the Indochinese government's finances and how these reflected the general rhetoric of French colonialism while still being adapted to the differing environment of the two regions of Tonkin and Cochinchina. We evaluate both the tax system and its application with respect to revenue and expenditure to show that colonial policy was derived from independent differences between the two regions, rather than being their cause.

4.2) Evolution of colonial thought

One of the aims of colonial policies was to encourage 'economic development', albeit to the benefit of the metropolis. Prior to WW1, the doctrine of 'assimilation' was central to

French colonial policy. This meant that colonial territories were fully adapted to French ways, with respect to institutions and mind-set.²⁵⁰ Purcell suggests that, in this, the French were quite different from other colonial powers: they believed in more than just economic assimilation, cultural assimilation was also crucial to their plans.²⁵¹ This was an ideological concept and there were no clear rules on how each territory was governed. Consequently, differences were wont to exist between territories. Some authors have suggested that France had no colonial policy until the eve of WW1: “the policy, such as it did exist, was one of hesitations and variations and contradictions”.²⁵² For Indochina, the inexact nature of the assimilation doctrine had meant that the various territories could be governed following different patterns. Despite the rise of the more concrete *mise-en-valeur* strategy, these patterns remained different throughout French rule. Tonkin was subjected to indirect rule, as a protectorate. Cochinchina was subjected to direct rule, as a colony. Nonetheless, in 1887, both became part of the greater Indochinese Union. The result was that affairs regarding the Union as a whole were decided through direct rules, just as in Cochinchina, but not so for matters pertaining specifically to Tonkin. There, indigenous authorities remained central to administrative decisions.²⁵³

After WW1, the colonial policy was concretised and became known as the '*mise-en-valeur*'. This traditionally implied encouraging infrastructural projects, as well as foreign investment, French imports, exports of cheap primary products and foodstuffs and the development of plantations of cash crops such as rubber, tea and coffee. Apart from supposedly stimulating economic development in the Indochinese Union, *mise-en-valeur* also sought to ensure stable state revenue to the Union.

At the same time as Albert Sarraut, a governor general of Indochina and prominent politician during this era, was arguing for the necessity of *mise-en-valeur*, or “state-controlled colonial development”,²⁵⁴ the doctrine of 'association' rather than 'assimilation' became the new paradigm of colonial policy. This allowed the rise of indirect approaches to colonial rule, mainly through a “loosening of ties between the ruling power and its

²⁵⁰ Stephen H. Roberts, *History of French Colonial Policy (1870-1925)*, Vol.1, 2 & 3, (London: P.S. King & Son, 1929), p.48.

²⁵¹ Victor Purcell, “The Colonial Period in Southeast Asia”, Pamphlet, (New York: Institute of Pacific Relations, 1953), p.44.

²⁵² Roberts, *op.cit.*, p.45.

²⁵³ ‘indigenous’ is the term used in the colonial sources for the local population.

²⁵⁴ Helmut G. Callis, *Foreign Capital in Southeast Asia*, (New York: Arno Press, 1976), p.74.

dependencies".²⁵⁵ Thomas believed that one of the main reasons for the perceived necessity of the association doctrine was found in Sarraut's fear of the rise of communism in French colonies, particularly in Indochina, where he was governor.²⁵⁶ Scholars after WW1, such as Thompson and Duboc, argued that colonial authorities should practice association policies because assimilation was felt to have brought fewer benefits, having instead resulted in resentment from the local population.²⁵⁷

Many authors have argued that French colonial policy was quite different from that of other regions: "French policy in Indo-China had little in common with that of the other powers".²⁵⁸ Furnivall presents the difference rather clearly: the British were more *laissez-faire* in their approach to governance, the Dutch more engaged in promoting growth and the French were markedly more "centralised".²⁵⁹ However, this is probably an exaggerated assessment. Although there were many differences in styles, the ever-greater emphasis towards the benefits of indirect colonial rule in both Dutch and British Asian colonies match the movement toward association policies in French Indochina, as does government involvement in economic works, albeit at different degrees.²⁶⁰ Even the assessment of British rule as being more *laissez-faire* has often been questioned, especially at the turn of the 20th century.²⁶¹ The evolution of colonial thought in Indochina was in line with that of other colonies in the region.

This is not surprising considering that the French were avidly studying colonial policy in other Southeast Asian colonies. The perceived success of the Dutch's governance in the Indies was seen as resting on "the maintenance of native institutions".²⁶² The French were also impressed by Britain's unequivocal drive towards 'colonial prosperity'.²⁶³ These assessments of other colonial power resulted in France's

²⁵⁵ J.S. Furnivall, *Progress and Welfare in Southeast Asia: A Comparison of Colonial Policy and Practice*, (New York: Institute of Pacific Relations, 1941), p.40.

²⁵⁶ Martin Thomas, "Albert Sarraut, French Colonial Development, and the Communist Threat, 1919-1930", *The Journal of Modern History*, Vol.77, No.4, December 2005, p.918.

²⁵⁷ Colonel Albert Alfred Leon Duboc, *L'Indochine contemporaine*, (Paris: Charles-Lavauzelle & Cie, 1932), p.178 & Virginia Thompson, *French Indochina*, (London: Unwin Brothers LTD, 1937), p.87.

²⁵⁸ Lennox Mills, "The Governments of Southeast Asia" in Rupert Emerson (ed) *Government and Nationalism in Southeast Asia*, (New York: Institute of Pacific Relations, 1942), p.45.

²⁵⁹ Furnivall 1941, op.cit., p.6.

²⁶⁰ Anne E. Booth, "Night Watchman, Extractive, or Developmental States? Some Evidence from Late Colonial South-East Asia", *Economic History Review*, Vol.60, No.2, 2007(2), p.241-266.

²⁶¹ Purcell, op.cit., p.38-39.

²⁶² Raymond F. Betts, *Assimilation and Association in French Colonial Theory 1890-1914*, (London: Columbia University Press, 1961), p.36.

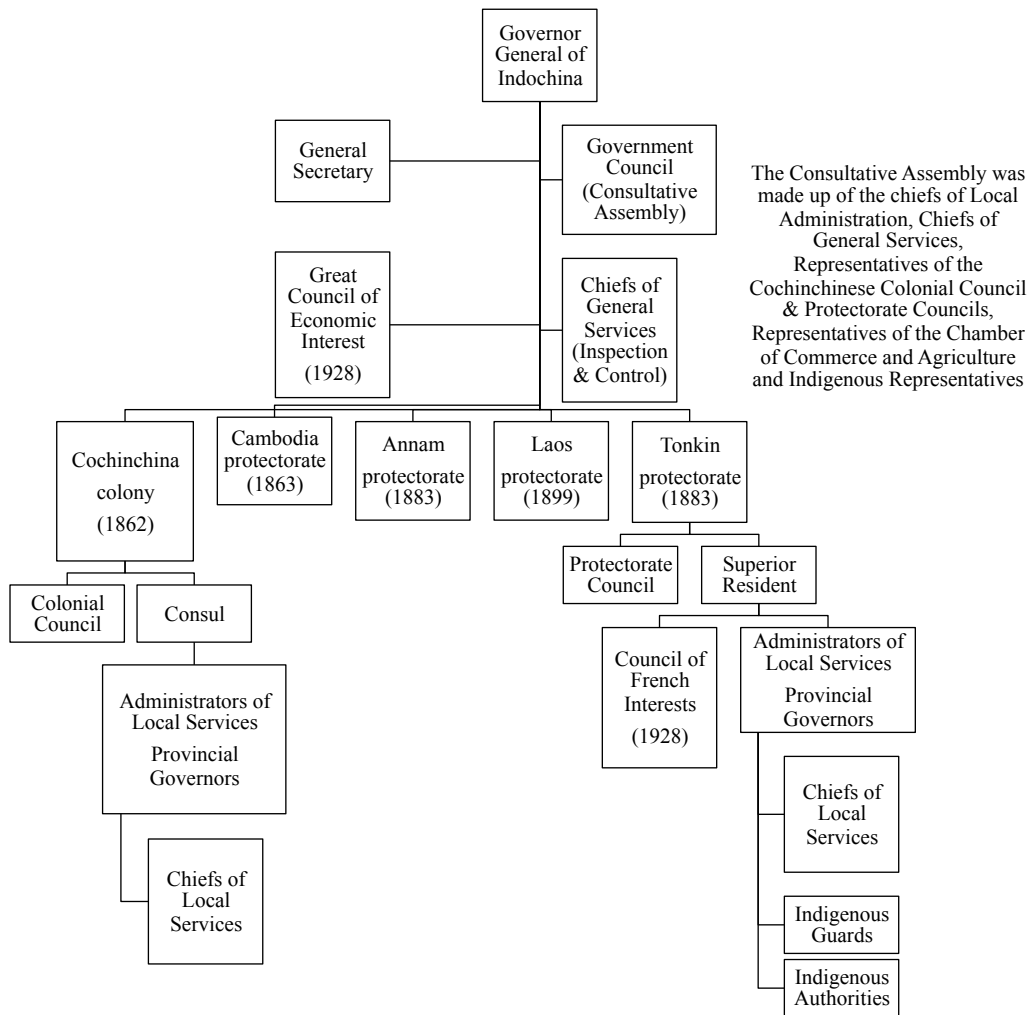
²⁶³ *ibid*, p.44.

move towards a more associationist approach to colonial rule, as well as a larger emphasis on public work expenditure and encouragement of capitalist ventures.

Designing Indochina

Ideology might have evolved over the years, but initial differences in the way the colonial governments of Indochina were organised remained in existence throughout this time period, as seen in Figure 4.1.

Figure 4.1: Structure of the Indochinese Colonial Government²⁶⁴



²⁶⁴ LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, *Annuaire Statistique de l'Indochine*, (Hanoi: Imprimerie d'Extrême-Orient, 1927-1939).

Despite Tonkin's nominally indirect rule, the traditional elite did not remain unaltered. Rather, some of its members were replaced by others working more openly for the colonial bureaucracy. To a certain extent, this was also true for Cochinchina: the French were too few to administer all services and had to rely on the native population to do so. Nonetheless, the staff in Tonkin remained more engrained in Confucian values than those in Cochinchina. Despite these similarities, the extent to which French ways were imposed on the territories differed.²⁶⁵ In Cochinchina, the provinces were administered by native functionaries, but were also overseen by French residents in each province.²⁶⁶ In Tonkin, the role of native functionaries was much more significant: there were French residents in each province, but there were also indigenous governors at the head of administrative groupings of provinces. These directly oversaw the mandarins in charge of various provinces, cantons, as well as communal and village councils.²⁶⁷ This was different than in Cochinchina, where the “early colonial administrators [...practiced policies by which] the ruling elites were solicited to create the necessary conditions for efficient exploitation of the economic resources”.²⁶⁸ This had consequences for the development of the colonial administrative apparatus. When Doumer organised the administrative apparatus of Indochina, although he reinstated many of the mandarins and original organisations in Tonkinese villages, he could not do so in Cochinchina, where the native institutions had been destroyed.²⁶⁹ This was partly to do with the French having been established in Cochinchina long before they gained formal control of Tonkin. Regardless of the ideology's evolution, association could not be practiced in the same way in both regions. Although in both cases we see that 'association policies' were put to some use through an association between French and natives,²⁷⁰ it was not done in the same manner. Tonkin kept a more significant reliance on native institutions.

The structure of the Tonkinese protectorate's administration, due to its indirect rule, in part resulted in split interests between the French and the indigenous populations, as well as in a separation of authorities. There remained a disconnect between ‘colonial’

²⁶⁵ Trinh Van Thao, *L'école française en Indochine*, (Paris: Karthala, 1995); Trinh Van Thao, *Vietnam du confucianisme au communisme*, (Paris: L'Harmattan, 1990) & Trinh Van Thao, *Les compagnons de route de Ho Chi Minh: Histoire d'un engagement intellectuel au Viet-nam*, (Paris: Editions Karthala, 2004).

²⁶⁶ Duboc, op.cit., p.78.

²⁶⁷ ibid, p.79-80.

²⁶⁸ William J. Duiker, *Vietnam Nation in Revolution*, (Boulder, CO: Westview Press, 1983), p.30.

²⁶⁹ Roberts, op.cit., p.908.

²⁷⁰ Betts, op.cit., p.120.

interests and indigenous interests in Tonkin. In Cochinchina, direct rule resulted in a simpler structure of colonial administration.

According to Geertz, the way in which the colonial system evolved in the Dutch Indies resulted in a dual system where the native subsistence sector was separate from the Dutch, or European, controlled export sector.²⁷¹ He argued this led to the impoverishment of the native population, although more recent writers have placed doubts on this conclusion.²⁷² It is possible that the greater degree of indirect rule in Tonkin resulted in a dual system similar to that of the Dutch Indies. However, as the GDP gap trends suggests, it is not that Tonkin was getting any poorer over time, but rather than Cochinchina grew much faster comparatively.

Indigenous representation in part reflects the possibilities for differing applications of colonial policy and may explain why many scholars thought colonial policy could explain diverging economic performance. As of 1880, Cochinchina had a 'Conseil Supérieur', or Colonial Council, made up of 12 Europeans and 6 indigenous members. By 1922, the number of indigenous members was increased to 10 and to 12 by 1932.²⁷³ In Tonkin, there existed an 'Assemblée du Pays', the Tonkinese Protectorate Council, which was made up of elected indigenous representatives. However, it was more consultative than Cochinchina's Colonial Council. The latter was given some responsibility in decisions on public works, land administration and budgetary concerns. The former did not have an active role in policy design.²⁷⁴ The bargaining position of the indigenous assembly in Tonkin was further diminished by the presence of a 'Conseil des intérêts français', exclusively made up of French nationals, which held more sway with the colonial government. In both regions, the indigenous representation through these councils was minimal. Although it was stronger in Cochinchina than in Tonkin, it is unlikely these differences were significant enough to lead to huge differences in policies, especially as Cochinchina's colonial council did not often exercise its right to affect policies. Such forms of indigenous representation were common to Southeast Asian

²⁷¹ Clifford Geertz, 'Colonial Period' in *Agricultural Involvement: The Processes of Ecological Change in Indonesia*, (London: University of California Press, 1963(2)).

²⁷² Pierre van der Eng, *Agricultural Growth in Indonesia: Productivity Change and Policy Impact since 1880*, (London: Macmillan Press LTD, 1996), p.7.

²⁷³ Roger Pinto, *Aspects de l'évolution gouvernementale de l'Indochine française*, (Paris: Etudes Indochinoises & Extrême-Orientales, 1946), p.43-47.

²⁷⁴ *ibid*, p.45.

colonies. In the Dutch Indies, the Volksraad had similar powers to the councils of Indochina and assured some limited representation to the indigenous population.²⁷⁵ In Burma, indigenous representation was instituted earlier than in the Dutch Indies, but later than in Cochinchina. There, indigenous representation was much larger than in either Indochina or the Dutch Indies, second only to the Philippine Commission instituted by the Americans.²⁷⁶ The wide variety of ways in which indigenous representation was included in colonial administrations suggests that differences seen between Tonkin and Cochinchina with regards to this issue were very small and unlikely to be significant: decisions were made by the colonists.

In addition, steps were taken to address potential problems resulting from variations in administrative structures, mainly through the creation of the Indochinese Union. Eugène Etienne (Governor General between 1888-1891), a former politician in the 'Chambre des Députés' in France, was put in charge of creating a general government. Annam, Tonkin, Cochinchina and Cambodia were united as French Indochina in 1887, joined later by Laos in 1893. At the time, however, each region maintained its autonomy, budget and its own administration.²⁷⁷ Later, under Governor General Paul Doumer (1897-1902), the budgets themselves were joined into a General Budget. Cochinchina, as the richest territory, saw this unification as a burden on its revenues and analyses suggest that Cochinchinese revenue was at times 'squandered' by the colonial authorities.²⁷⁸ The territories' unification meant not only that budgets were to be joined, but also that common policies would be applied throughout the Union. The gradual unification in the colonial policies of the two territories came about partly from the nature of the Indochinese Union and partly from the unification of their budgets. Indeed, Touzet suggests that although the 1887 decision to create an administrative union marked the beginning of the Indochinese Union, it was not until 1911 that Indochina truly became a federation of countries and even at that point only finances were truly federalised.²⁷⁹ Although many would agree that the main commonality for the territories of Indochina was that they were controlled by French interests, others would suggest that

²⁷⁵ D.R. SarDesai, *Southeast Asia Past & Present*, 5th Edition, (Boulder, CO: Westview Press, 2003), p.172.

²⁷⁶ Lea E. Williams, *Southeast Asia: A History*, (New York: Oxford University Press, 1976), p.154-157.

²⁷⁷ ANOM: BIB SOM.A/3786, Henry Marc & Pierre Cony, *Indochine française*, (Paris: Editions France-Empire, 1946), p.124.

²⁷⁸ *ibid*, p.126.

²⁷⁹ André Touzet, *Fédéralisme financier et finances indochinoises*, (Paris: Recueil Sirey, 1935), p. 100-102.

the distinction between direct and indirect rule in Indo-China is more legal than actual [...] the powers of the French administrative officers are much the same whether they are exercised in the colony of Cochinchina or in one of the protectorates.²⁸⁰

In other words, colonial policy did differ between Tonkin and Cochinchina, but only marginally and often only in theory. Moreover, policy seems to have depended considerably on the Governor General's ideology and was thus unlikely to vary much between members of the Union. Most new Governor General varied the approaches of the government in order to deal with specific issues they considered of particular importance in their service.²⁸¹ Table 4.1 documents these governors and highlights their orientation in government policy.

Table 4.1: The Governors General of French Indochina and the Orientation of their Administration, 1900-1940

1897-1902	Paul Doumer	Viability of Indochinese finances
1902-1908	Jean Baptiste Paul Beau	Early movement toward associationism, but constrained by poor harvests
1908-1911	Antony Klobukowski	Returned to assimilation due to political problems in the North and budgetary constraints
1911-1914	Albert Sarraut	Promoted mise-en-valeur and the containment of anti-French and communist movements
1916-1919		
1919-1922	Maurice Long	Continued mise-en-valeur
1922-1925	Martial Henri Merlin	
1925-1928	Alexandre Varenne	Encouraged association policies
1928-1934	Pierre Pasquier	Attempted to reduce the bureaucracy while dealing with the Depression
1934-1936	Eugène Jean Louis René Robin	
1936-1939	Joseph Jules Brévié	Encouraged the industrialisation of Indochina
Pierre Brocheux & Daniel Hémery, <i>Indochine La colonisation ambiguë 1858-1954</i> , Paris: Editions La Découverte, 2001, p.84, 114, 215, 313; Virginia Thompson, <i>French Indochina</i> , London: Unwin Brothers LTD, 1937, p.81-82 & George Maspero, <i>Un empire colonial français l'Indochine, Tome II</i> , Paris: Les Editions G. Van Oest, 1930, p.17-28.		

²⁸⁰ Mills, op.cit., p.111.

²⁸¹ Thompson 1937, op.cit., p.81-98.

Mills has argued that because the French Governor Generals tended to be in power for short periods of time, their orientation may not have mattered much for the country. Indeed, he suggested that this was in stark contrast to the British colonial system where governors were in power for much longer.²⁸² Although this was true of some of these governors, Table 4.1 shows that the key players were in power for at least five years, providing some stability of policy and probably unity throughout the Union.

Of these governors, the most important was Paul Doumer. He organised the structure of the government, as illustrated in Figure 4.1, and designed the fiscal regime of Indochina. Both remained relatively untouched until the end of French rule in 1954.²⁸³ Doumer was sent to Indochina to redress its financial problems. The metropolis no longer wanted to keep sending money. His programme for Indochina consisted of seven parts:²⁸⁴

- To organise a general government for the Union and local administration for each province;
- To address the financial problems of the colony and build sustainable fiscal resources;
- To improve the physical infrastructure of the Union;
- To encourage production and commerce;
- To improve Indochina's defences;
- To finish pacifying Tonkin;
- To expand French influence in the Far East.

Doumer built the Indochinese general government with its many centralised organs and established the quintessential revenue machines of the Indochinese state: the excise boards of salt (1897), opium (1899) and rice alcohol (1902).²⁸⁵ On average, the revenue from these three excise boards accounted for a quarter of total revenue for the general budget.²⁸⁶ According to Thompson, Doumer managed to “free the colony from Parisian supervision by making it economically self-sufficient”.²⁸⁷ This came at a cost: the tax

²⁸² Mills, op.cit., p.108.

²⁸³ Income tax on Europeans was added and some categories of taxes were renamed, but the general system remained the same.

²⁸⁴ Amaury Lorin, *Paul Doumer, gouverneur général de l'Indochine (1897-1902)*, (Paris: L'Harmattan, 2004), p.61.

²⁸⁵ *ibid*, p.79.

²⁸⁶ Calculation from statistics found in LSE 59(R4), Section 4.3, Table 4.5.

²⁸⁷ Thompson 1937, op.cit., p. 79.

burden on the local population nearly doubled in the five years he was in charge.²⁸⁸ Despite his theoretical success in increasing the financial autonomy of the Union, recent research has shown that loans from the metropolis remained an important contribution to the budget.²⁸⁹ Doumer's fiscal reforms cut Cochinchina's local budget by three quarters,²⁹⁰ but this allowed for some unification in colonial administration.

The heavy centralisation of the Indochinese Union proved difficult for Doumer's successors. Paul Beau and Antony Klobukowski tried to decentralise the government and to reduce the tax burden of the population by providing more education and health facilities, while reducing the excise boards' power.²⁹¹ However, the way in which Doumer had regulated the system proved to be too difficult to change and the organisation of the government remained as he had designed it throughout the Union. One of the main results of Doumer's organisation was consequently that the distinction in systems of rule, between directly and indirectly controlled regions, lessened. Although there were some differences between the two region's administrative mechanisms, it seems unlikely that the differences were so stark as to encourage major differences in the economic realities of the two regions,²⁹² suggesting a more limited role of colonial policy in explaining the economic divide.

Significant circumstances

The Residents of each province wrote regular reports (generally bi-monthly) to the Governors General of Indochina. They were expected to evaluate how easily taxes had been collected and if there had been any political trouble or economic difficulties. Any positive or negative circumstances had to be acknowledged.

Between 1900 and 1940, the Tonkinese Superior Residents' reports emphasised a number of recurring themes:

²⁸⁸ Lorin, *op.cit.*, p.81.

²⁸⁹ Irene Nørlund, "The French Empire, the Colonial State in Vietnam and Economic Policy: 1885-1940", *Australian Economic History Review*, Vol.31, No.1, March 1991.

²⁹⁰ Lorin, *op.cit.*, p.72.

²⁹¹ Henri Guerneur, *Le régime fiscal de l'Indochine*, (Paris: L'Harmattan, 1990), p.16 & p.38.

²⁹² ANOM: INDO GGI// 66695: Le Résident Supérieur au Tonkin à Monsieur le Gouverneur Général de l'Indochine, "Au sujet de l'organisation d'un Conseil administratif communal dans les provinces du Delta Tonkinois", Hanoi, 25th February 1921.

- When the crops were bountiful, the region was politically quiet; when crops were not as successful as expected, political trouble was seen to occur,²⁹³
- Rebellion against the main excise boards and black market were recurring themes that seemed to link Chinese merchants and indigenous public officials,²⁹⁴
- Weather related crop failure led to growing expenditure on public works,²⁹⁵
- Because of exchange rate difficulties (silver standard) and the Great Depression, agricultural production tended to focus on production for domestic use within Tonkin.²⁹⁶

The Cochinchinese Consuls reported some similar trends, such as resistance against the excise boards, but there were some significant differences:

- When international commercial circumstances were difficult, political resistance would occur,²⁹⁷
- The main difficulty of tax collection tended to come from European settlers, or from the expansion of cultivable land, resulting in floating agrarian workers that could avoid paying taxes,²⁹⁸
- Local market places were expanded as part of public works because of high demand,²⁹⁹
- Economic crises resulted in a diversification of crops.³⁰⁰

As we can see, in Cochinchina good international commercial conditions were a prerequisite for political stability. In Tonkin, however, political stability depended on domestic factors, such as crop success. This aligns with the conclusions of Brocheux' research. Revolts in Cochinchina were about markets; in Tonkin, revolts were about

²⁹³ ANOM: INDO GGI Série F, Gouvernement Général de l'Indochine: Résidence Supérieure au Tonkin, "Rapport Politique", 1901, 1911, 1914; 1902, 1903, 1905, 1906, 1928, 1932.

²⁹⁴ *ibid*, 1903, 1904, 1912, 1914.

²⁹⁵ *ibid*, 1905, 1909.

²⁹⁶ *ibid*, 1919, 1931.

²⁹⁷ ANOM: INDO GGI Série F, Gouvernement de la Cochinchine: Cabinet du Gouverneur, "Rapport Politique de Cochinchine", 1904, 1909.

²⁹⁸ *ibid*, 1905, 1906, 1923.

²⁹⁹ *ibid*, 1910, 1913.

³⁰⁰ *ibid*, 1912, 1937.

subsistence.³⁰¹ The two regions had clear differences in what was considered most important. For Tonkin, domestic circumstances were guided by domestic realities. In Cochinchina, domestic circumstances were dependent on international realities. In both cases, this was a reflection of their varying integration to the world economy as an outlet for goods. Indeed, the Superior Resident of Tonkin himself, in 1919 acknowledged:

The Cochinchinese, who a few years ago, were fearful of commerce, are now understanding its importance. But in Tonkin, the indigenous peoples believe that the administration should help them in their attempt to boycott Chinese commerce.³⁰²

Priorities were different between the territories because of such differing circumstances. As a result, colonial policy was adapted to the differing needs of the two regions.

One of the ways by which the colonial government ensured the success of its economic policies was through its influence on the Bank of Indochina. Before its establishment, English banks had provided most of the financial services required.³⁰³ At first, the Bank of Indochina was formed because the Government felt the need for an entity to regulate capital for investment. This capital mainly came from France and other European sources. There was a need for a big bank that could engage in operations with foreign correspondents in London, Hong Kong and France.³⁰⁴ The colonial government hoped to achieve *mise-en-valeur* through the use of French capital. This would allow the metropolis to maximise the gains of economic growth.

Another key reason for the creation of the Bank was for currency issuance. The Bank was not under the direct control of the government, but it was nonetheless strictly regulated. For example, the total number of bank notes in circulation could not exceed three times the total specie holdings of the Bank.³⁰⁵ The Bank also had more liberty than other banks, as it was expected to provide short-term loans, mainly for commerce, large

³⁰¹ Pierre Brocheux, "Moral Economy of Political Economy? The Peasants are Always Rational", *The Journal of Asian Studies*, Vol. 42, No.4, August 1983, p.798.

³⁰² ANOM: INDO GGI Série F, Gouvernement Général de l'Indochine: Résidence Supérieure au Tonkin, "Rapport Politique du 2ème trimestre", 1919.

³⁰³ Yasuo Gonjo, *Banque coloniale ou banque d'affaires. La banque de L'Indochine sous la IIIe république*, (Paris: Comité pour l'histoire économique et financière, Ministère de l'Economie, 1993), p.54.

³⁰⁴ *ibid*, p.54.

³⁰⁵ Marc Meuleau, *Des pionniers en extrême-orient: Histoire de la banque de l'Indochine, 1875-1975*, (Paris: Fayard, 1990), p.56.

agrarian projects and public infrastructural works.³⁰⁶ The Bank of Indochina was considered a key player in the *mise-en-valeur* of the Indochinese Union and was given a wide range of responsibilities.³⁰⁷ The colonial policy of *mise-en-valeur* had an indirect influence on the Bank's actions. The returns from foreign investment in Cochinchinese ventures were partly redirected towards the other regions of the Indochinese Union to encourage further *mise-en-valeur* throughout the Union and thus reduce the gap between regions. As we can see from Table 4.2, despite this directive, capital flows favoured Cochinchina over Tonkin.

Table 4.2: Invested Capital from Individuals, Civil & Commercial Societies, 1924-1928, (Million of Francs)

	Cochinchina	Tonkin	Total Indochina
1924	138	70	248
1925	179	55	277
1926	323	101	599
1927	319	43	572
1928	404	135	821

SOAS: T. Smolski, "Les investissements de capitaux privés et les émissions de valeurs mobilières en Indochine, au cours de la période quinquennale 1924-1925", in French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1929*, Hanoi: 1930, p.808.

Although the Bank's investment actions were loosely guided through government policy, the initial investment decisions were independent of the colonial policy. The discrepancy in investment between Tonkin and Cochinchina during the boom years of 1924-1928 suggests that investors were cognisant that better returns could be expected from Cochinchina. Colonial policy tried to boost investment throughout Indochina, in an effort to encourage convergence between the regions. This effort suggests the colonial administration was responding to an existing gap. Once more, the colonial administration's actions were a *response* to existing differences. It seems increasingly unlikely for colonial policies to have been a reason the initial gap between Tonkin and Cochinchina, especially as their influence on the Bank shows their intent of balancing the gap in investment between the two regions.

³⁰⁶ *ibid.*

³⁰⁷ Gonjo, *op.cit.*, p.240.

4.3) Government finances

Budgetary information provides clear evidence of the ways in which colonial governments administered their colonies. Indeed, it was by evaluating public finances that Booth highlighted the previous misconception of colonial governments as 'night watchman' and suggested their significant involvement in the economic sphere.³⁰⁸

However, some problems arise when comparing two regions within the Indochinese Union. Indeed as a result of Doumer's reforms, by October 1911, there was a general budget. The general budget was set up for expenditure on works and services common to all Indochinese regions, expenditure for the general government, debt service, contribution to the metropolis, colonial inspection, the administration of customs and excise boards, and the post and telegraph services. The budget's revenue came from customs taxes, excise boards and some indirect contributions.³⁰⁹ Unfortunately, the general budget's revenue and expenditure was not recorded by region. Consequently, our comparison of public finances in Tonkin and Cochinchina cannot use data for the general budget. Moreover, municipal budgets provide a limited basis for comparison between the two regions because they were not always in existence. The majority of this analysis consequently rests on local budgets. Local budgets obtained their funds from direct taxation and were used exclusively for local services.³¹⁰ However, we believe this is not a significant source of bias, as local budget would best highlight potential differences in the application of colonial policy between regions. Indeed, funds from the general budgets were spent on projects considered of significance for the whole of the Union.

a. Tax system

Many scholars currently look at tax policy in light of its impact on growth and welfare. For example, Cecilia Garcia-Penalosa and Stephen J. Turnovsky argued that the post-tax impact should be the most important factor in designing tax systems.³¹¹ However, colonial

³⁰⁸ Booth 2007(2), op.cit., p.242.

³⁰⁹ ANOM: TH462, Fall Mamadou, Investissements publics et politique économique en Indochine 1898-1930 (La commune vietnamienne dans la mise en valeur de l'Indochine), UER Géographie Histoire Sciences de la Société, Paris 1984-1985, p.74.

³¹⁰ *ibid*, p.75.

³¹¹ Cecilia Garcia-Penalosa & Stephen J. Turnovsky, "Growth, Income Inequality, and Fiscal Policy: What Are the Relevant Trade-Offs?" *Journal of Money, Credit and Banking*, Vol.39, No.2-3, March-April 2007,

tax policy cannot be analysed through these modern theories. Redistribution of wealth was not central to the colonial administration, unless it was done through concession granting and/or in favour of the colonial elite. Rather, the idea was to ensure that the colony could pay for the services the colonial authorities considered important. In this section, we will consider individual tax rates to understand the differences between the rules regulating the tax systems of Tonkin and of Cochinchina. We use official tax rates to illustrate how the colonial government evaluated the tax potential of the two regions. This allows us to establish what differences might have been present in the two regions during this time period. Such an evaluation illustrates that colonial revenue was guided by existing differences between the two regions. The tax system in Indochina was similar for all members of the Indochinese Union. Both in Tonkin and in Cochinchina, the ‘mandarins’, that is the traditional indigenous elite, were in charge of collecting the expected taxes.³¹² Although the tax system was the same, the tax rates were not always the same. This suggests the limited role of colonial policies in explaining the economic divide, although they may have helped to perpetuate it.

Taxes common to both regions

Doumer established the three excise boards on opium, salt and rice alcohol, to cover the Union’s general expenses. Opium trade was a monopoly and was taxed on imports, production, transport and sale. This was done throughout the Union, through the intermediary of Chinese middlemen.³¹³ In the case of salt, the entire commerce was regulated directly by the central government, insofar as all production was taken to a government entrepot and the government acted as a monopsonist for the salt trade.³¹⁴ The excise board on rice alcohol was again different: the monopoly was granted to one company in particular, the Société Française des Distilleries de l’Indochine. They were the only ones allowed to produce the alcohol, but this was very bitterly resented by the local population, as the alcohol produced by this Société did not taste good to the native

p.369-394 & Vito Tanzi & Howell H. Zee, “Fiscal Policy and Long-Run Growth”, *International Monetary Fund Staff Papers*, Vol.44, No.2, June 1997, p.184.

³¹² Tanzi & Zee, op.cit., p.114.

³¹³ Guerneur, op.cit., p.170.

³¹⁴ *ibid*, p.249-250.

population.³¹⁵ Peters suggested that, although the theory behind the official system was the same, the excise board was stricter in the North than in the South. This could have been because, in the South, a similar regulation pre-dated French rule: Chinese distillers were the traditional producers of rice alcohol.³¹⁶ The impact of those taxes would have been decided by personal choices in consumption, but these were unlikely to have differed markedly by region.

Taxes on international commerce were also identical in both regions: these were import taxes, export taxes, transit taxes, entrepot taxes, docking taxes, lighthouse taxes and navigation taxes. The revenue from these made up a large part of the general budget. France was exempt from the majority of these taxes, but all other countries had to pay various custom taxes. Commercial taxes even included export taxes: in the 1930s, to export rice to a foreign country, traders had to pay 0.13 piastres per every 100 kilograms of cargo rice containing more than 33% of unhusked rice.³¹⁷ These important taxes were taxed at the same rate throughout the Union because of the federal structure of Indochina and it is clear that in this respect there were no differences in the two regions.

Taxes that varied between regions

Despite this federal structure, some tax rates did differ between the two regions. We argue that variations in these rates were indicative of the colonial administration's responsiveness to existing differences between the regions. Table 4.3 outlines the main indigenous taxes for cultivated land and shows the variation of tax rates between the two regions. Table 4.4 shows rates for other tax categories. As we can see, the difference between the two regions was stark. No documents have yet been found to provide a clear explanation of why tax rates differed so much between the two regions. We argue that it was meant to act as incentive for investment in Cochinchina's productive agrarian sector, as well as a recognition of differences in economic activity.

³¹⁵ Erica J. Peters, "Taste, Taxes, and Technologies: Industrializing Rice Alcohol in Northern Vietnam", *French Historical Studies*, Vol.27, No.3, Summer 2004, p.569.

³¹⁶ *ibid*, p.568.

³¹⁷ Guerneur, *op.cit.*, p.296.

Table 4.3: Cultivable Land Tax Rates, 1900-1940, (\$ per hectare)

	Tonkin	Cochinchina	
Rice fields	From 2.4 to 4.5	From 0.1 to 2	
Other crops	From 0.3 to 6	Before 1921	After 1921
		From 0.48 to 2.76	From 0.6 to 3

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, *Annuaire Statistique de l'Indochine 1913-1922*, Hanoi: Imprimerie d'Extrême-Orient, 1927, p.205-208 & Henri Guerneur, *Le régime fiscal de l'Indochine*, Paris: L'Harmattan, 1990, p.90-91.

Table 4.4: Some Rates of Direct Taxes, 1900-1940

	Tonkin		Cochinchina	
Licenses	One-time fee	Yearly rate on profits	One-time fee	Yearly rate on profits
	0.24 to 1 500\$	1/30 th	1 to 4 000\$	1/30 th to 1/12 th
Indigenous peoples	Before 1920		After 1920	1\$ per year
	Registered	Non-registered	2.5\$ per year	
	2.5\$ per year	0.3\$ per year		

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, *Annuaire Statistique de l'Indochine, 1913-1922*, Hanoi: Imprimerie d'Extrême-Orient, 1927, p.205-208 & Henri Guerneur, *Le régime fiscal de l'Indochine*, Paris: L'Harmattan, 1990, p.103-107, p.108 & p.128-130.

Such large differences in tax rates for both the indigenous population and the land they cultivated is puzzling: why were the authorities less inclined to tax the Cochinchinese peasants as much as their Tonkinese counterparts? As we will show in Section b, despite lower tax rates, the tax burden per capita for local budgets was higher in Cochinchina than in Tonkin. This suggests that the authorities did not tax the peasant population as much through some taxes, but *relied on other types of taxes* to maximise revenue, such as the rice export tax.

Land use for rice cultivation was taxed at different rates depending on the expected yield of the land. In practice, the authorities estimated most of these yields, rather than measuring actual yields. Although government officials recorded slightly higher yields in Tonkin than in Cochinchina: 14 as opposed to 12 quintal per hectare

throughout this period,³¹⁸ the tax rates difference is not proportional to this estimated difference, suggesting that another motive was behind the variation in the tax rates.

The presence of both land taxes and capitation tax in Indochina is similar to what was happening in both Thailand and Burma. In the Dutch Indies, however, land taxes and some income tax instead were applied. Furnivall argued that differences in tax system were partly a response to the colonial administration's perspective on the type of agriculture practiced, whether commercial or domestic.³¹⁹ It must be understood that taxes on commercial income were generally collected through custom duties, circulation and consumption taxes, rather than through income tax or even land taxes. Tonkin and Cochinchina had a system similar to Burma on paper (land and capitation taxes), but variations in tax rates meant that the application of the tax system varied between Tonkin and Cochinchina: in the former, land and capitation were highly taxed at high rates, while in the latter, other taxes compensated for the low land and capitation tax rates. We argue that these types of taxes were higher in Tonkin because the government realised it was taxing domestic agriculture. In Cochinchina, because agriculture was more commercial, these tax rates were lower.

That some tax rates were decided based on such differences is clearly shown in the tax rates for field of other crops than rice: the tax rates were decided by the potential retail value of the crop, rather than by yield. For example in Tonkin in the 1900s, tobacco and nuts were taxed at 6 piastres per hectare per year, whereas cotton, tea and jute were only taxed at 1.5 piastres per hectare per year. Many of these crops were considered cash crops and were also given tax exemption. For example, coffee plantations were exempt from taxes for six years as of the time of planting.³²⁰ Less easily cultivable land given out as concession in the higher regions of Tonkin was exempt from taxes for a minimum of five years and discounted tax rates were applied for the 21 subsequent years. For example, still in the 1900s, tea plantations in Tonkin's mountainous regions were taxed at 0.4 piastres per hectare per year, rather than 1.5 piastres. The tax rates reflected the colonial

³¹⁸ LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine, "Agriculture, Elevage et Forêts", *Annuaire Statistique de l'Indochine*, (Hanoi: Imprimerie d'Extrême-Orient, 1927-1931).

³¹⁹ J.S. Furnivall, "The Land Revenue System" in *Studies in the Economic and Social Development of the Netherlands East Indies*, (Rangoon, Burma Book Club. 1933(2)), p.4.

³²⁰ Guerneur, op.cit., p.90-91; ANOM: BIB AOM U. 161.02, Henri Brenier, *Essai d'atlas statistique de l'Indochine française: Indochine physique, population, administration, finances, agriculture, commerce, industrie*, Gouvernement Général de l'Indochine, p.74.

policy of *mise-en-valeur* and favoured cash crops over more traditional crops, as well as the use of land previously left uncultivated. Although these tax rates were taken from the 1900s, the rates remained mostly unchanged until the 1940s.

In Cochinchina, tax rates on cash crops also varied based on the expected retail value of the final crop produced. Similarly as in Tonkin, discounts and exemption applied to Cochinchinese cash crops. Many plantations of rubber, coffee... were exempt from taxes for extended periods of time.³²¹ For example, in the 1900s, tobacco and nuts were taxed at about 2.76 piastres per hectare per year, which was just over a third of the tax rate for the same crops in Tonkin.³²² In the case of mulberry, the tax rate was even lower: 0.48 piastres per hectare per year, this time less than a third of the tax rate in Tonkin. In Cochinchina, taxes were lower on standard alternate crops such as nuts than they were in Tonkin. Possibly, this was designed as a further incentive to invest in alternate crops. As seen in Chapter 3, large landholdings with potential for cash crop plantation were more common in Cochinchina.

Land plots in Tonkin were generally smaller than they were in Cochinchina due to population pressures, as seen in the previous chapter. Tax rates might have been higher in Tonkin because of double cropping: traditionally the Red River Delta was the home of the Vietnamese population, its people had to make increasingly better use of their resources, and double cropping was initiated there. In Cochinchina, double cropping was only minimally used.³²³ Lower taxes per hectare encouraged more large-scale production. Although for both regions tax exemptions, or discounts, encouraged commercial agriculture, household ownership patterns, rather than plantation, remained more common in Tonkin. This suggests that the tax rates were established in light of existing patterns of landholding and production. Moreover, considering that these rates remained so drastically different suggests the limited way in which colonial policy could (or wanted to) affect the landholding patterns. Cochinchina's tax rates reflected, and probably stimulated, the predominance of large cash crops, but Tonkin's tax rates reflected the predominance of household production of traditional crops. It is likely that Tonkin was more prone to intensive agriculture, as a result of its population pressure,

³²¹ LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, *Annuaire Statistique de l'Indochine, 1913-1922*, (Hanoi: Imprimerie d'Extrême-Orient, 1927), p.205-207.

³²² Guerneur, op.cit., p.94-95.

³²³ Henry, op.cit., p.337 & Gourou 1945, op.cit., p.257.

while Cochinchina was engaged in more extensive agricultural production. This will be better shown in Chapter 5. The establishment of the tax system reflected existing differences, as it aimed in maximising potential revenue. Overtime, the system would have accentuated the initial differences (such as landholding patterns or commercial versus domestic agriculture), thus resulting in a widening gap between the two regions.

The personal tax rates on the indigenous populations were also different between Tonkin and Cochinchina. Income tax seems to have been a phenomenon slow in coming to Indochina: personal taxes on European incomes were only started in 1921 and despite some talks as early as 1928, it was only in 1937 that a consistent progressive income tax on the indigenous population was instituted, first in Cochinchina and then in Tonkin. Instead, personal head taxes were in use throughout this time period.³²⁴ All men, between 18 and 60 years of age, were expected to pay a personal tax. Until 1920, there were two flat tax rates in Tonkin: 2.5 piastres for registered men and 0.3 piastres per non-registered men. All men could be asked to present proof that they had paid their personal tax. The mandarins, and by extension the village authorities, were responsible for the collection of taxes in their communes. If men failed to provide adequate proof that they had paid a personal tax, the mandarin was fined for obstructing the fiscal system. It was partly to avoid political uprisings that the authorities initially had the two types of personal taxes: land owners were mainly registered tax payers, but coolies, and other such men who did not have adequate resources to pay the full personal tax, were ‘non-registered’ tax payers and were taxed at a lower rate. This distinction was abolished in 1920, when the personal tax rate in Tonkin was standardised at 2.5\$ per year for all men.³²⁵

In the case of Cochinchina, the personal tax rate was set at 1 piastre per man. The tax rate in Cochinchina was less than the registered taxpayer’s fee in Tonkin, but there was no ‘non-registered’ tax rate. It is possible that the tax rate was homogenous and lower because of Cochinchina's greater reliance on wage labour.³²⁶ Considering the mean daily wage for an agricultural worker was around 0.22 piastres in Cochinchina, these taxes seem quite low.³²⁷ However, this was but one of the taxes peasants were subjected

³²⁴ Guermeur, op.cit.

³²⁵ Pierre Brocheux & Daniel Hémerly, *Indochine: La colonisation ambiguë 1858-1954*, (Paris: Editions La Découverte, 2001), p.102.

³²⁶ Guermeur, op.cit., p.108 & ANOM: BIB AOM U. 161.02, Brenier, op.cit., p.69.

³²⁷ SOAS: French Indochina, Service de la Statistique Générale de l’Indochine, *Bulletin Economique de l’Indochine Année 1934*, (Hanoi: 1935), p.175.

to and the total tax burden was still heavy. This is equally, if not more, true in Tonkin, where the personal tax rates was much higher and wages much lower than in Cochinchina, as will be shown in Chapter 8.

Although there was a common tax system, it is likely that tax rates differed between Tonkin and Cochinchina to enable public revenue maximisation based on existing differences. The lower taxes in Cochinchina may in part have reflected its greater potential and engagement with commercial activity. The government expected that encouraging this would result in more tax revenue from other sources. This would fit with Cochinchina's recorded tendency to contribute more to the public revenue of the general budget than Tonkin, through trade related tax collection.

The government's responsiveness to differing circumstances in Tonkin and Cochinchina is clearly reflected in their tax rates on professional licenses. Information on license fees was given in Table 4.4. A first fixed fee was paid for the initial license. Professionals in the countryside only paid this fixed rate. For professionals in the cities, a further yearly tax was imposed in proportion to the profits made. In Tonkin, there were 12 classes of licenses and these were taxed depending on the zone in which they were established: from 0.24 piastres in the outer provinces, up to 1 500 piastres in the urban centres. In addition to this initial fixed fee, the proportional tax was fixed at 1/30th of the total annual profits made under the license. In Cochinchina, there were only 10 different license classes and, although these were also taxed an initial fixed fee based on the location of the license, the tax rate was overall lower in the early years of French rule: from 1 piastre in the outer regions up to 1 000 piastres in the urban centres. Nonetheless, by 1921, this fixed fee was increased to up to 4 000 piastres in the urban centres. Prior to 1921 in Cochinchina, city licenses were also subjected to a proportional right amounting to 1/30th of profits.³²⁸ After 1921, the proportional tax varied between 1/30th and 1/12th of the annual profits. Although initial tax rates may have been higher in Tonkin, an increase in the tax rates of Cochinchina suggests an increasingly important level of activity there. This complements the image of growing urban centres shown in Chapter 3 and suggests increasing economic activity, independent of colonial policy. Again, we see the administration responding to the growing economic differences between the two regions.

³²⁸ LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, *Annuaire Statistique de l'Indochine, 1913-1922*, (Hanoi: Imprimerie d'Extrême-Orient, 1927), p.206-208.

b. Revenue

General budget

The way the data were collected for the general budget makes it impossible for us to identify regional variations in revenue collection or expenditure. All revenue gathered was recorded as one value, not separated by region. Nonetheless, we will outline the two main categories of taxes that fuelled the general budget to provide an overview of the entire tax system both Tonkin and Cochinchina were facing. Table 4.5 displays the average annual revenue and share of revenue from specific categories of the general budget over the years 1929-1936.³²⁹

Table 4.5: General Budget Revenue, 1923-1936

	Average Annual Revenue (1000 \$)	Share of Total Revenue (%)
Total Revenue	71 229	100
Excise Boards	17 774	25
Customs revenue	17 032	24
Consumption & Circulation Taxes	12 748	18
General Import Taxes	3 321	5
Other Revenue from Imports or Exports	1 505	2
Mining Extraction Taxes	132	0
Mining Duties	117	0

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Finances Publiques", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.
More detailed information from Appendix 1.

A quarter of the general budget's total revenue came from customs duties; revenue from excise boards accounted for another quarter. Other significant revenue came from other taxes related to international commerce. Appendix 1 shows that the revenue over this time period peaked in 1930 and decreased thereafter. This reflects that the majority of revenue came from customs, excise boards and consumption/circulation taxes, all of which would have been negatively affected by the Great Depression. Although the

³²⁹ These years provide the most similar categories of revenues: over the years some of the categories were renamed and their composition changed. We can only compare the ones we are certain have remained constant over time.

revenue is not available per region, Bernard estimated that, on average, Cochinchina contributed about 40 per cent of total tax revenue of the General Budget, between 1900 and 1935.³³⁰ Chapter 7 will show that Cochinchina dominated Indochina's international commercial revenue. Table 4.5 thus could vindicate Bernard's claim that Cochinchina was the predominant funder of the general budget. Cochinchina's likely larger contribution to the general budget fits with our previous hypothesis that tax rates on Cochinchinese cultivated land were lower than in Tonkin because of the difference in the commercial orientation of their output.

Local budgets

Table 4.6: Annual per Capita Tax Burden, 1920-1936, (US\$³³¹ per inhabitant)

	Tonkin	Cochinchina		Dutch Indies	Thailand	Burma
1921	1	1.79	1920	5	3	5
1931	0.61	1.27	1929	5	4	6
1936	0.78	1.46	1934	4	3	6

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Territoire et Population"&"Finances Publiques", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939; Anne E. Booth, *Colonial Legacies: Economic and Social Development in East and Southeast Asia*, Honolulu: University of Hawai'i Press, 2007(1), p.73 & Anne E. Booth, "Night Watchman, Extractive, or Developmental States? Some Evidence from Late Colonial South-East Asia", *Economic History Review*, Vol.60, No.2, 2007(2), p.248.

Table 4.6 suggests that the tax burden from taxes that went towards the local budgets was significantly higher in Cochinchina than in Tonkin during this time period. When comparing these data, we see that the tax burden, at least from local budget taxes, was much lower in Indochina than in the other countries of Southeast Asia. Although estimates of the per capita tax burden including tax collection for the general budget are not available per region, Brocheux suggested that the overall tax burden in Indochina was between 1.71 US\$ and 2.38US\$ on average per person between 1913 and 1924,³³² still significantly lower than in the other colonies, though not dissimilar to Thailand's. Tonkin's per capita tax burden was even smaller than Cochinchina's and thus much lower than Burma's or the Dutch Indies'. Although it is beyond the scope of this thesis to

³³⁰ Paul Bernard, *Le problème économique indo-chinois*, (Paris: Nouvelles Editions Latina, 1934), p.49.

³³¹ Conversion done based on SOAS: French Indochina. Service de la Statistique Générale de l'Indochine. "Changes – cours moyen mensuel", *Bulletin Economique de l'Indochine*. (Hanoi: 1924-1938).

³³² Brocheux 1983, op.cit., p.800.

explain such a difference in the region (they are further discussed in Booth 2007(1) & (2)), it seems important to understand how and why the tax burden differed between the two Indochinese regions.

Table 4.7: Comparing Local Budget Revenue, 1913-1936, (Annual Averages)

Total Revenue					
		1913-1918	1919-1924	1925-1930	1931-1936
Annual Average (1000 \$)	Tonkin	9 321	13 750	18 275	11 747
	Cochinchina	8 226	11 454	18 144	11 910
Ratio	Tonkin/Cochinchina	113	120	101	99
Share of Total Revenue (%)*					
		1913-1918	1919-1924	1925-1930	1931-1936
Personal tax	Tonkin	31	29	26	37
	Cochinchina	9	7	5	8
Land tax	Tonkin	18	17	14	20
	Cochinchina	10	9	6	6
Capitation tax on immigrants	Tonkin	1	1	1	1
	Cochinchina	15	18	13	13
Licenses	Tonkin	2	3	4	4
	Cochinchina	5	11	10	12
* Only selected categories are shown. LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Finances Publiques", <i>Annuaire Statistique de l'Indochine</i> , Hanoi: Imprimerie d'Extrême-Orient, 1927-1939. Appendix 3a & 3b provide detailed local budget revenue.					

Table 4.6 shows the per capita tax burden in US\$, in order to allow a comparison to other countries in the region. However, this conversion hides the fact that, measured in Indochinese piastres, the per capita tax burden from direct taxes decreased over time and particularly so in the aftermath of the Depression: falling from 1.54\$ to 1.31\$ per annum in Tonkin and 3.69\$ to 2.47\$ per annum in Cochinchina.³³³ Tax rates during this time did not decrease, but as we can see in Table 4.7, the total revenue did decrease after the Depression. A decreasing burden, despite stable tax rates, suggests that tax revenue was

³³³ Probably due to the Indochinese piastre being pegged to the French Gold Franc in 1930.

not growing as fast as population. Based on the description of the taxation system, there are few surprises from the key categories of revenue of the local budgets of Cochinchina and Tonkin. Tonkin's main revenue was in the form of personal tax levied from the indigenous population, whereas Cochinchina's was spread over a number of other smaller categories, in each of which it far eclipsed Tonkin. One can question the wisdom of the tax system in Tonkin: high personal taxes on the indigenous population were unlikely to appease a population already known to be against French rule: the Superior Resident warned that there needed to be peace and stability in the region, as seen in Section 4.2. Table 4.7 seems to confirm that commercially oriented sources of tax revenue were more significant in Cochinchina than in Tonkin. Because this was clearly shown in the tax rates that were chosen by the colonial authorities, this does seem to confirm the suggestion that colonial policy reflected, rather than initially caused, economic differences.

The share of the revenue coming from taxes on the indigenous population decreased until the Great Depression and then rose again significantly. It is unsurprising that the share of the tax revenue from personal head tax did increase after the Depression: the global downturn had negative impacts on economic performance so the relative importance of taxes unrelated to changes in economic conditions (such as personal head tax) would have increased. Revenue from personal tax on the indigenous population was higher in Tonkin. In a way this is unsurprising considering both that Tonkin's personal tax rate was over twice that of Cochinchina and that its population was about twice that of Cochinchina's. However it is surprising that this was also the case before 1920 when a lower 'unregistered' tax rate was available. This suggests that few residents would have paid this lower tax. This may be because non-registered men were expected to give more time to public works and corvée work and had limited access to some of the public resources of the village, such as the communal land.³³⁴

Likewise, the share of revenue originating from taxes on land in Cochinchina was around 40 to 67% lower than the equivalent revenue share in Tonkin. These figures suggest that the tax burden from taxes on land was larger for Tonkinese landowners than it was for Cochinchinese landowners. Since more Tonkinese owned land than Cochinchinese, this further supports our suggestion that the tax burden affected poor

³³⁴ Guerneur, *op.cit.*, p.103-107 & R. Dumont, *La culture du riz dans le delta du Tonkin*, (Paris: Société d'éditions géographiques, maritimes et coloniales, 1935), p.76.

Tonkinese peasants more than poor Cochinchinese peasants: their personal tax was higher and small households also faced higher tax rates on land. Furthermore, this supports our hypothesis that revenue maximising strategies differed, most likely because of differences in the initial conditions of the two regions. In this case, landholding patterns guided tax policy. Indeed, more revenue from taxing large landholdings' production could be gathered in Cochinchina, through taxing their larger marketable surplus. Tax rates were thus lower on land, to encourage production. In Tonkin, less surplus production, due to production for household needs, may have led to the colonial administration's belief that revenue would be maximised by taxing land ownership rather than production.

Tax revenue in Cochinchina could be further maximised by taxing immigrants. Chapter 3 showed that immigration to Cochinchina was larger than immigration to Tonkin and that the immigrants to Cochinchina were generally wealthier than those going to Tonkin. License fees were another way in which tax revenue was maximised in Cochinchina. They brought in an increasingly large share of the local budget's total revenue in Cochinchina. This share was substantially higher than Tonkin's, almost consistently by a factor of three. Licenses were more expensive in Cochinchina, but such a large difference in revenue suggests that there were more licensed professionals in Cochinchina than in Tonkin and/or that their profits were larger. A possible implication is that demand for these types of professions was higher and growing in Cochinchina. This would explain why the tax rates on licenses were increased in 1921: the colonial authorities seem to have responded to differences in circumstances between the two regions.

Although the aggregated per capita tax burden in Cochinchina was higher than in Tonkin, the gap between various shares of revenue shows that the tax burden *from personal tax* was much lower for Cochinchina than for Tonkin. Instead, taxes on licenses and immigration of potential entrepreneurs were more significant. This is significant in understanding the potential distribution effect of the tax system. It suggests that *direct taxes affected the average cultivator in Cochinchina less than in Tonkin*. Instead, in Cochinchina direct taxes on other professionals or on immigrants with significant economic power were the more significant sources of revenue. This is in line with our suggestion that the colonial authorities' tax maximising strategies were responsive to existing differences in the circumstances of the two regions.

c. Expenditure

General budget

Table 4.8 displays the average annual expenditure and share of expenditure of the main categories of the general budget, over the period 1929-1936.

Table 4.8: General Budget Expenditures, 1929-1936

	Average Annual Expenditure (1000 \$)	Share of Total Expenditure (%) ³³⁵
Total Expenditure	77 800	100
Financial Services	16 440	21
Public Works	10 649	14
Contributions to the Metropolis	8 361	11
Economic Interests	4 906	6
Social Interests	2 978	4
General Government	1 632	2
Justice	1 828	2
Political & General Administration	505	1

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Finances Publiques", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.
More detailed information from Appendix 2.

The general budget covered the expenditure of the Governor Generals and of the administrative bodies of the Union of Indochina. It also covered expenditures on financial services (such as the cost of issuing money) and on general infrastructural work (such as the post and telegraph services). Finally, the general budget provided subsidies to some key industrial ventures (such as silk producers and rubber plantation owners). These expenditures provided the core economic infrastructure of the Indochinese Union. The majority of the general budget expenditures seems to have gone towards financial services, public works and contributions to debt servicing. Clearly, this was representative of the government's focus on the *mise-en-valeur* policy and the metropolis' pressure on Indochina to achieve financial autonomy.

³³⁵ Some minor categories are not included in this list for brevity's sake.

Local budgets

Table 4.9 shows that just as per capita revenue in Indochina was low compared to other countries in the region, per capita expenditure was also lower than in other countries, particularly the Dutch Indies.

Table 4.9: Per Capita Government Expenditure, 1920-1936, (US\$ per inhabitant)

	Tonkin	Cochinchina		Dutch Indies	Thailand	Burma
1921	1.03	1.65	1920	7	4	4
1931	0.60	1.42	1929	5	4	4
1936	0.78	1.47	1934	5	3	3

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Territoire et Population"&"Finances Publiques", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939 ; Anne E. Booth, *Colonial Legacies: Economic and Social Development in East and Southeast Asia*, Honolulu: University of Hawai'i Press, 2007(1), p.75 & Anne E. Booth, "Night Watchman, Extractive, or Developmental States? Some Evidence from Late Colonial South-East Asia", *Economic History Review*, Vol.60, No.2, 2007(2), p.249.

Again, part of the sizeable difference between Vietnam and other economies is based on the fact that general budget expenditure is not included in these calculations. However, Booth suggested that, between 1928 and 1934, per capita annual government expenditure was 3US\$ in Vietnam as a whole.³³⁶ Considering the gap between Tonkin's and Cochinchina's local budget per capita expenditure, if Booth's 3US\$ was an average between the three colonial regions of Vietnam, then Tonkin's per capita expenditure would have been low even compared with other economies in the region, while Cochinchina's would have been closer to that of the other countries. It is notable that the Dutch Indies had a higher level of government per capita expenditure than other countries in the region and that, at times, its per capita tax burden was lower than its per capita government expenditure. In Tonkin and Cochinchina, per capita government revenue and expenditure (based on local budgets) were roughly identical, aligning with the colonial administration's attempt at financial autonomy.

The local budgets were split in five main categories of expenses: political and administrative services, financial services (that largest subset of which was land register services), economic interests (the largest subset of which was public works), social interests and subsidies & reimbursements (not shown in Table 4.10).

³³⁶ Booth 2007(2), op.cit., p.249.

Table 4.10: Comparing Local Budget Expenditure, 1913-1936, (Annual Averages)

Total Expenditure					
		1913-1918	1919-1924	1925-1930	1931-1936
Annual Average (1000\$)	Tonkin	8 933	13 302	18 191	11 096
	Cochinchina	7 516	11 475	18 390	12 313
Ratio	Tonkin/Cochinchina	119	116	99	90
Share of Total Expenditure (%)					
		1913-1918	1919-1924	1925-1930	1931-1936
Political and Administrative	Tonkin	52	51	46	54
	Cochinchina	35	35	34	42
Financial Services	Tonkin	5	4	3	1
	Cochinchina	6	6	6	5
Land Register	Tonkin	1	1	1	0
	Cochinchina	2	2	2	2
Economic Interest	Tonkin	29	25	26	19
	Cochinchina	36	34	36	22
Public Works	Tonkin	8	7	7	4
	Cochinchina	10	9	10	5
Social Interest	Tonkin	12	17	21	17
	Cochinchina	11	17	19	27
LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Finances Publiques", <i>Annuaire Statistique de l'Indochine</i> , Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.					
Appendix 4a has detailed information for Cochinchina's local budget; Appendix 4b has detailed information for Tonkin's local budget.					

As seen in Table 4.10, total expenditure followed a similar pattern as total revenue. That revenue and expenditure should follow a similar trend is rational: with higher revenue, more expenditure can be made and vice versa. Overall, total expenditure increased until 1930, and then decreased. This is unsurprising: both regions had to tighten their finances as revenues decreased during the Great Depression and its aftermath. The tax system and revenue sources discussed above may have reflected the economic divide, but it is possible that the colonial government's expenditure patterns had an impact on relative economic performance.

Social Interest

Expenditures in the category of social interests ranged from education endeavours to health provisions. This category is unlikely to have had a significant role in explaining the economic divide between the two regions, mainly because total expenditure in this category was low and only truly increased after the Depression. However, expenditure for these services may well have had some impact of the gap in standard of living between the populations of Tonkin and Cochinchina. This will be further examined in Chapter 8. The share of total expenditure used for these services was marginally higher in Tonkin than in Cochinchina up until the Depression. However, during the period 1931-1936, we see a significantly higher share of expenditure on these services in Cochinchina compared to Tonkin. Possibly, this was the result of the difficult social conditions in an economically trying time and again shows the responsiveness of colonial policy to local circumstances.

Financial services

The services included in this category were treasury, land register services, property services and direct contributions to other budgets. Although in the case of both regions the share of this category was rather small, Cochinchina's expenditures in this category were consistently more substantial than those of Tonkin. Cochinchina's local authorities used twice as much of its revenue on developing a land register as Tonkin's.³³⁷ As seen in Chapter 3, the erosion of traditional village authority, as well as Cochinchina's status as a colony meant a land register was considered more necessary than in Tonkin, where the majority of the population still relied on the 'dia-bo'. Expenses on land register services were consequently lower in Tonkin. It is possible that the stronger emphasis on ensuring property rights in Cochinchina, as seen by larger government expenditure on the land register, may have had a direct impact on economic differences. However, there is an endogeneity problem in this relationship and the potential impact of this difference is unclear.

Economic Interest

For the most part, Cochinchina's expenditure on economic services was higher than Tonkin's, despite a smaller population. This may indicate that there was a greater

³³⁷ Appendices 5a and 5b.

emphasis on the *mise-en-valeur* of Cochinchina than of Tonkin and, in this, it is possible that colonial public finances did encourage differing patterns of economic performance. In Cochinchina, the average share of the total revenue of the local budget spent on economic services such as public works, agricultural expenditure, forest services and veterinary services, was over 30%; in Tonkin, the average share was 24%. These shares are in the upper average for countries in the region, reflecting the *mise-en-valeur* emphasis of colonial policies. For example, in 1920, the share of government expenditure towards public works was around 20% in Burma.³³⁸ After the Depression, expenditure on public works decreased. This was common to the region: most colonial powers reduced expenditure on public works, some shifting towards military expenditure.³³⁹ Although the Indochinese government did not spend large sums on military investments, it did decrease spending on public works and general economic interests projects. The spending itself was redirected towards social interests and administrative projects, probably in an effort to safeguard political stability.

One reason the 'economic interest' expenses may have been higher in Cochinchina than they were in Tonkin was that the former benefited from services the latter did not. For example, in Cochinchina there were special services for irrigation and industrial development. These types of services were aimed at improving infrastructure for economic development: they could stimulate existing production and were reliable sources of investment. Tonkin's status as a protectorate might have meant its indigenous authorities were responsible for such expenses, but it also could be that this was in response to Cochinchina's significant circumstances defined in Section 4.2, whereby more expenditure on these services was necessary to ensure political stability.

The way in which the public funds were spent also differed. Indochina had the most considerable network of roads of all French colonies, thanks to a 'road' policy, dating from 1911 and further encouraged post-WW1.³⁴⁰ Few of the new roads were considered to be replacing the use of commercial sea routes, which had traditionally been the main source of transport for merchandise.³⁴¹ This suggests then that the building of roads had

³³⁸ Anne E. Booth, *Colonial Legacies: Economic and Social Development in East and Southeast Asia*, (Honolulu: University of Hawai'i Press, 2007(1)), p.245.

³³⁹ *ibid*, p.79.

³⁴⁰ Albert Sarraut, *Grandeur et servitude coloniales* (Paris: Editions du Sagittaire, 1931), p.327.

³⁴¹ ANOM: BIB SOM D//1702, Serge De Labrusse, "Politique du cabotage en Indochine", *Economie maritime indochinoise*, (Saigon: Imprimerie Française d'Outre-mer, 1950), p.29.

an alternative aim: not replacing waterways, but widening the transport network of Indochina. By 1922, there was an extensive network of both colonial and local roads in Tonkin and Cochinchina. This extensive road network can be seen in maps 2a and 2b.

Table 4.11: Length of Colonial and Local Roads, by Region, 1922-1936, (Km)

	Colonial Roads*		Local Roads**	
	Tonkin	Cochinchina	Tonkin	Cochinchina
1922	2 127	834	5 406	4 149
1929	1 561	974	5 154	5 092
1930	1 739	676	5 488	4 142
1931	1 705	653	5 595	5 814
1932	1 720	649	4 117	5 514
1934	1 720	649	6 306	5 857
1935	1 792	650	2 994	5 866
1936	1 697	650	4 005	6 583

* Colonial roads maintained by the general budget; ** Local roads maintained by the local budgets.
LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Moyens de Transport et de Communication", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.

The data in Table 4.11 are not obvious in interpretation: the total length of roads seems to decrease over time in Tonkin, but not in Cochinchina. It is unlikely roads were destroyed, but it is possible that these roads changed denomination over time. In Cochinchina, some provincial roads under provincial budgets also existed. In Tonkin, although provincial budgets were not a permanent feature, local village authorities were. Possibly, some of the roads may have fallen under communal authority. It is unclear what the reasons for these fluctuations were. However, assuming this information is still reliable, we can say that there were far more colonial roads in Tonkin than there were in Cochinchina, throughout this time period.

The limited growth of local roads in Tonkin suggests that commercial activity may not have increased demand for new roads, relying instead either on alternate transportation methods or traditional village networks. This suggests that few changes in the patterns of exchange within the territory occurred in this period. Possibly, the road policy was an attempt on the part of the colonial administration to encourage better economic performance. In the case of Cochinchina, the length of local roads was far more

extensive than it was in Tonkin, suggesting a greater need for the local authorities to develop their own network of roads in order to facilitate transport and trade and open up new areas within the territory to the rest of the region. The extensive local roads network might suggest increased communications between localities, as well as increased commercial relationships. The total length of colonial roads in Cochinchina decreased and levelled off to less than half of the total length of Tonkin's. Tonkin had a larger population and a larger territory, so more colonial roads were needed to connect it to the rest of the Indochinese Union. It seems that in this respect, the public finances of Indochina might have had a direct influence in some of the region's performance, although it is hard to quantify.

The railroad was probably the main public project of the French Indochinese government. Indeed, the project had been on the table since before Doumer's time. It was also the only mode of transportation that recorded its internal transport of merchandise. The French hoped it would facilitate the movement of workers from the North to the South, as well as allow for faster movement of goods between regions.³⁴² The Trans-Indochinese railway was only completed in 1937-1938, but the Northern and Southern rail networks were in operation earlier. The Northern and Southern networks refer to the lines operating within Tonkin and the lines operating within Cochinchina, respectively.³⁴³ These networks did not necessarily correspond uniquely to Tonkin and Cochinchina: the North network included northern Annam and connections to China; the South network included southern Annam. However, the main transit points in the North were Hanoi and Haiphong (both Tonkinese centres), while Saigon and Mytho (both Cochinchinese centres) were the main hubs of the Southern network.

Table 4.12: Railway Network Information, 1913-1935

	Length Constructed (km)		Number of Stations	
	North	South	North	South
1913	493	497		
1935	1 314	583	299	94

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Moyens de Transport et de Communication", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.

³⁴² ANOM: BIB AOM 21235/1930, p.113.

³⁴³ The railways are the black lines on Maps 2a and 2b.

The information in Table 4.12 suggests the French hoped to encourage economic growth and industrialisation through new means of transportation, as indeed their road policy suggested. The Northern network was far more extensively developed than the Southern network on the eve of the opening of the Trans-Indochinese network. This larger development was mainly due to the North being a larger territory than the South and the only connection to inland China. The greater number of stations in the North suggests a greater potential for commercial links between localities and a greater demand for integration between the provinces of Tonkin. It could also be that there were more stations because the longer distances required more stops to load more coal. Either way, it seems that, in this, the colonial policy had the *potential* to impact relative economic performance.

Table 4.13: Railway Usage, Passenger and Freight, 1932-1937

	Passengers (100s)		Freight (1000 tonnes)	
	North	South	North	South
1932	4 187	1 544	277	117
1933	4 015	1 855	251	122
1934	4 804	2 433	309	120
1935	4 751	2 480	274	135
1936	5 886	2 607	344	157
1937	7 475	3 281	428	191

SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, "Statistiques de chemins de fer", *Bulletin Economique de l'Indochine*, Hanoi: 1933-1938.

The economic impact of the railroad would have been dependent on the usage of this new means of transport. Table 4.13 shows that passenger travel was much more significant in the North than in the South, by a factor of about two. This ratio is not surprising considering the population difference between the two regions was also two to one. Nonetheless, actual usage was quite low: it does not appear that a large share of the population used these networks in either region. Even in Tonkin, by 1935, only 6% of the population used the railroads, assuming each passenger only used it once in the year. With respect to transported merchandise, we also see more use being made of the Northern network than of the Southern network. By the end of the period, Cochinchina's railways only transported 40% of the weight of freight transported in Tonkin. However,

despite the increase in the size of the network, the use of railways for freight showed only a small increase over time, in both Tonkin and Cochinchina. Moreover, freight transported via the railway was insignificant compared to international trade volumes. For example, in 1937, Tonkin's international exports alone weighed 1.98 million tonnes, while only 428 000 tonnes were carried by rail. In Cochinchina, the difference was even more significant: in 1937, compared to 2.07 million tonnes exported internationally, only 191 000 tonnes of merchandise were shipped by rail.³⁴⁴ Either freight rates were too high to make this transportation option competitive, or there was only limited demand.³⁴⁵ This is valid for both Tonkin and Cochinchina.

What these data show is that the extensive public investment in the building of railroad had a rather limited impact on the movement of merchandise and people. Despite the large sums invested in these infrastructural works, there is limited evidence that they significantly changed the economic performance of either region.

Political and Administrative

These expenditures ranged from pensions for government employees to provision of justice and defence. Expenditure on political and administrative services was consistently lower in Cochinchina than in Tonkin, following generally the same trends of increase until 1930, then a steady decrease. There was a noticeable gap between the shares of these expenditures in Cochinchina and in Tonkin. As seen in Figure 4.1, the Tonkinese Superior Resident had to oversee the indigenous services, which were at least nominally provided through traditional mechanisms. Because of Cochinchina's status as a colony, there was no need for an indigenous court of justice to be funded. Tonkin's higher share of expenditure in these services might have, ironically, been due to its nature as a protectorate, requiring more oversight.

It is also likely that Tonkin consistently spent more on political and administrative services because the region was more susceptible to political troubles and the government had to ensure some degree of political placidity to achieve its *mise-en-valeur* agenda. Furthermore, it is not surprising that Tonkin spent a larger share of its revenue on these services. Its population was much larger than Cochinchina's, suggesting a greater need

³⁴⁴ data based on Chapter 7.

³⁴⁵ ANOM: BIB SOM D//1702, De Labrusse, *op.cit.*, p.27-29.

for security services. On the other hand, expenditure on police and immigration services tended to be increasingly higher in Cochinchina than in Tonkin, by at least 50%. As we saw in Chapter 3, immigration was more significant in Cochinchina, suggesting more need for immigration officers in that region.

These figures suggest that expenditures in Tonkin were in line with a more rigid attempt at controlling the political climate of the region. In Cochinchina, the growing importance of these services reflected the greater demand for such services, as the economy grew. This suggests that again government expenditure in these services was guided by factors that were independent of government policy. Once more, it seems that the small variations in the colonial policies of Cochinchina and Tonkin reflected rather than caused differences between the two regions, although they may have helped perpetuate them.

4.4) Conclusion

The argument in this chapter is that **despite differences in the way the administration governed the territories of Tonkin and Cochinchina, there is only limited evidence that colonial policy caused the economic divide seen in GDP estimates between 1900 and 1940. Instead, we have argued that colonial policy differences reflected the economic differences between Tonkin and Cochinchina.** Although there were a few ways in which the colonial administration could have had a strong influence on economic performances (such as with the development of the railway), the evidence suggests that the economic impact of these projects was quite low and insufficient to significantly impact relative economic performance between Tonkin and Cochinchina.

The general colonial policy of French Indochina was that of *mise-en-valeur*. The main reason for the colonial administration's emphasis on economic progress was that it guaranteed stable fiscal revenue and helped achieve political stability. The French government meant for Indochina to be financially autonomous. To this end, Governor General Doumer set up the general Indochinese budget, excise boards and high customs duties to provide enough funds for the maintenance of the entire Union. Unfortunately, the response to these reforms was unfavourable from Cochinchina, which felt it contributed more than it received. Nonetheless, the apparatus set in place by Doumer was

used until the end of French rule in Indochina. Even through the economic crisis of the 1930s, the aim of the Indochinese administration remained ensuring stable revenue.

Although this aim of the colonial government was common throughout the French empire, the approach of the government differed between Tonkin and Cochinchina, because these regions were facing different political circumstances. Reports by the Superior Residents of Tonkin clearly showed that the political instability of Tonkin threatened the steady intake of fiscal revenue, while adverse commercial circumstances affected that of Cochinchina. Such differing circumstances affected the approach of the colonial authorities, once more showing the responsive nature of colonial policy.

The clearest example of differences in colonial policy is associated with the tax system, both in theory and practice. Our analysis of public finances showed that the per capita tax burden was heavier in Cochinchina than in Tonkin, even though many of the key tax rates were lower in Cochinchina than in Tonkin. We have argued that the main reason for this apparent mismatch was that the differing circumstances in Tonkin and Cochinchina called for different strategies of revenue maximisation on the part of the colonial administration. In Tonkin, personal head tax rates on the indigenous population and land tax rates were high. In Cochinchina, license fees and capitation tax rates on foreign immigrants were higher than personal head tax and land tax rates. Neither system was necessarily ideal, but the two systems were different ways of achieving optimal conditions for successful collection of tax revenue. One result of this difference is that the resulting tax burden **on the poorer classes of the indigenous population** appears to have been heavier in Tonkin than in Cochinchina. Both the way in which the regions were taxed and the revenue derived from these taxes indicate that colonial tax policy reflected rather than caused economic differences between the two regions, contrary to what previous scholars had suggested, although our analysis does not rule out the fact that some of the policy choices helped perpetuate the differences that existed between Tonkin and Cochinchina. For example, lower tax rates on cultivated land helped lower the costs of investing in plantations, which likely perpetuated the dominance of large landholdings in Cochinchina's agrarian sector relative to Tonkin's.

We show this was also the case with respect to public expenditure. Most expenditure was relatively similar between the two regions. The few differences that were found, such as various expenditures in administrative services, reflected the differences in

the colonial identity of the two regions (whether protectorate or colony). The key difference that should have had an impact on the economic development of the Indochinese Union, considering the *mise-en-valeur* policy, was that of public works expenditure. Although it is true that more was spent in Cochinchina than in Tonkin, the use of these infrastructural developments seem to have been rather scarce in both regions. Consequently, it is unclear whether or not these expenditure choices had any differential impact on economic performance. This vindicated our assessment that colonial policy was unlikely to have been a cause of the economic divide between the two regions.

In Tonkin, revenue came from stable and reliable sources based, not on activity, but on endowments. Public expenditure in Tonkin focused more on keeping the peace than on stimulating the economy. It seems that *mise-en-valeur* in Tonkin meant allowing for stability in crops and political circumstances, while *mise-en-valeur* in Cochinchina meant encouraging dynamic economic activities. This chapter has suggested that **colonial policy was developed based on existing differences between the two regions**, which favoured economic development in Cochinchina rather than in Tonkin. The implications of this chapter suggests that production patterns in agriculture and industry would have differed strongly between the two regions, encouraging differing commercial activities, and resulting in diverging standards of living. These will be further evaluated in Chapters 5, 6, 7 & 8 respectively.

PART 2: UNDERSTANDING THE NATURE OF THE GAP

Chapter 5: Agriculture

5.1) Introduction

Because colonies were considered markets for industrial goods produced in the metropolis, there was little incentive for a movement towards industrialisation, at least until the Depression. It is therefore no surprise that the population of French Indochina remained predominantly engaged in agrarian production. The sectoral breakdown of the population is not precisely known, but economists and historians have provided some estimates: Hung suggested that 90% of the population was engaged in agrarian production and that the sector accounted for an average of 65% of Indochina's GNP;³⁴⁶ Gourou estimated that the urban populations of Tonkin and Cochinchina were 14% and 4% of the total populations respectively and although there was of course some non-agricultural work in the rural areas, his suggestion lends weight to Le Thanh Khoi's estimate that 70% of Indochina's labour force was agrarian during French rule.³⁴⁷ Considering that this sector was probably the most significant, at least in terms of employment if not output, this chapter aims to explain **how the economic divide that existed between Tonkin and Cochinchina manifested itself in the output and productivity of this sector.**

Using both official colonial records and reworked estimates, we evaluate output, land and labour productivity in rice cultivation. We use the cultivation of rice as the standard for evaluations of the sector's activity. To broaden this evaluation, we also analyse secondary crop production and cattle raising to find trends and patterns in the agrarian sectors of these regions. Aspects of the colonial administration's efforts are discussed within these sections, specifically with respect to credit institutions and public works, so as to better explain the evolution of patterns of production throughout this time period. Finally, industrial crops such as rubber will be examined to provide a rounded analysis of the sector.

Chapter 3 suggested that differing demographic and institutional characteristics

³⁴⁶ G. Nguyen Tien Hung, *Economic Development of Socialist Vietnam, 1955-1980*, (New York: Praeger Publishers, 1977), p.3.

³⁴⁷ Le Thanh Khoi, *Le Viet-Nam histoire et civilisation*, (Paris: Les Editions de Minuit, 1955), p.419.

would have affected agricultural productivity and output. Chapter 4 suggested that colonial policy differences between Tonkin and Cochinchina were, in many respects, rather limited, but that specific expenditures of the government budgets, mainly in terms of public works expenditure, did differ and could have affected the development/evolution of the agrarian sector's activity. This chapter will further evaluate these claims. Did productivity really differ between the regions? Did the colonial administration's activity in credit and public work affect the evolution of the agricultural sector? Of course, other factors such as geography could have influenced agricultural production. For example, French scholars at the time documented that the Cochinchinese climate was more favourable than Tonkin's: "the rainy season is long and regular [in Cochinchina], without extreme temperatures because the daily rain comes to refresh the atmosphere [...while Tonkin's rainy season is very irregular]".³⁴⁸ Apart from the significant impact of rain on agricultural productivity, geography can have an "indirect effect through its impact on distance from markets and the extent of integration or its impact on the quality of domestic institutions".³⁴⁹ This chapter does not attempt to evaluate geographical differences, rather we show that the agrarian populations of the two regions had different approaches to production. Tonkin had a much more diverse agricultural sector and much of it was small-scale production, whereas Cochinchina was mainly engaged in rice cultivation, but had a significant industrial crop sector, mainly rubber. We believe these differing approaches were due to some of the factors discussed in the previous chapters and that they helped define the economic gap between Tonkin and Cochinchina.

5.2) Rice

Gourou suggested that, in the early 1930s, almost 90% of Cochinchina's agricultural production was rice.³⁵⁰ Indochina was the third largest exporter of rice in the world during colonial rule, behind Burma and Thailand. In 1934-1938, Thailand's average annual

³⁴⁸ George Maspero, *Un empire colonial français l'Indochine, Tome I Le pays et ses habitants – l'histoire la vie sociale*, (Paris: Les Editions G. Van Oest, 1929), p.30-31.

³⁴⁹ Dani Rodrik; Arvind Subramanian & Francesco Trebbi, "Institutions Rule: The Primacy of Institutions over Integration and Geography in Economic Development", *International Monetary Fund Working Paper*, 2002, No.189, p.5.

³⁵⁰ Pierre Gourou, *Land Utilization in French Indochina*, (New York: Institute of Pacific Relations, 1945), p.356.

output of unhusked rice was over 4 million tonnes.³⁵¹ Cochinchina's output alone was over half of Thailand's and significantly higher than Tonkin's. Table 5.1 shows official statistical information on rice production in both regions. This information is the result of French enquiries and is thus vulnerable to biases, as highlighted in Chapter 1. Most likely these data are underestimates: French enquiries typically were associated with taxes and a tendency to underreport was prevalent. This bias may have been limited considering that the government in part used these studies to try to improve rice yields. They represent the administration's estimates of an 'average' year and were corroborated by Henry's research in later years. According to Henry, in the 1930s, the yield of a single harvest rice field in Tonkin was 12 quintals per hectare and a double harvest field's yield was around 20, providing an overall average yield between 14.7 and 13.3 quintals per hectare. In Cochinchina, he argued that the general average for yield was around 13.4 quintals per hectare.³⁵² To understand the implications of this table and rice cultivation as a whole, we will look at land and labour productivity and output in turn.

Table 5.1: Average Yearly Statistics on Rice Cultivation in Tonkin and Cochinchina, 1919-1930

Period	Area under rice cultivation (1000 hectares)		Output (1000s quintals ³⁵³)		Yield (q/ha)	
	Tonkin	Cochinchina	Tonkin	Cochinchina	Tonkin	Cochinchina
1919-1922	1 540	2 000	21 000	27 000	14	14
1925-1929	1 250	2 300	17 000	28 000	14	12
1926-1930	1 200	2 300	16 000	27 000	13	12

LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine, "Agriculture, Elevage et Forêts", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1931.

³⁵¹ André Angladette, *Le Riz*, (Paris: Presses Universitaires de France, 1967), p.90-91.

³⁵² Yves Henry, *Economie agricole de l'Indochine*, (Paris: Gouvernement Général de l'Indochine, 1932), p.250-272.

³⁵³ 1 quintal = 100 kilograms.

Land productivity

The French records did not explain how they generated their information on yields. It is therefore best to be cautious when evaluating them: the yields were estimates based on scattered measurements. Rice field land tax in both Tonkin and Cochinchina was based on hypothetical yields. As such it is very likely that these yields were similar due to fiscal reasons, rather than as a result of natural causes.³⁵⁴ In Table 5.1, the land yields in both areas appear to have been stable and very similar throughout this time period. Generally, each square kilometre under cultivation produced around 140 kilograms of rice. Over time the yields seem to diminish very slightly, but throughout this time period, they were lower in Cochinchina than in Tonkin. This is very surprising. As mentioned in Chapter 3, scholars believed a main cause of the economic divide between Tonkin and Cochinchina was that the higher man to land ratio in Tonkin had impoverished soils. One would therefore have expected yields to be higher in Cochinchina as a result.

The yields shown in Table 5.1 are relatively low. Low yields were common in rice growing Southeast Asia.³⁵⁵ Booth explained that this was largely due to the limited attempts at improving technology in the main rice-exporting region of Southeast Asia, in contrast to what the Japanese achieved in both Korea and Taiwan.³⁵⁶ Van der Eng estimated that yields in Thailand were about 8.8 quintal per hectare between 1930 and 1934, compared to 9.7 quintal per hectare in Burma in 1932. His calculations suggest that Tonkin's yield in the 1930s was around 13.5 quintal per hectare, compared to only 8.7 in Cochinchina in that same decade.³⁵⁷ These yields are even lower than the ones suggested in Table 5.1 and suggest that Tonkinese land had some of the highest yields in the region. Considering man to land ratio as part of the incentive structure, higher yields in Tonkin might have been due to growing population pressure. Tonkin's cultivable land was densely populated and it was therefore particularly necessary to maximise the return on land, in an effort to ensure sufficient production for the population. In the case of Cochinchina, there was not such an extensive pressure on land and there may have been

³⁵⁴ The hypothetical yields were most likely used to compute the output data.

³⁵⁵ Lucien M. Hanks, *Rice and Man: Agricultural Ecology in Southeast Asia*, (Chicago: Aldine Atherton Inc, 1972), p.54.

³⁵⁶ Anne E. Booth, *Colonial Legacies: Economic and Social Development in East and Southeast Asia*, (Honolulu: University of Hawai'i Press, 2007(1)), p.25-26 & p.47.

³⁵⁷ Pierre van der Eng, "Productivity and Comparative Advantage in Rice Agriculture in South-East Asia since 1870", *Asian Economic Journal*, 2004, Vol.18, No.4, p.355-356.

comparatively less pressure on farmers to increase yields. This was certainly a reason behind the greater preponderance of double cropping in Tonkin than in Cochinchina.³⁵⁸ Man to land ratios might have had an impact on productivity that was opposite to what Henry and Gourou thought, although these records show only a small difference in land productivity. This is in direct contradiction to the literature's suggestion that soils in Tonkin were exhausted. Unsurprisingly, other scholars such as Bassino have reasonably argued that these yield data were implausibly low.³⁵⁹

According to Bassino, “initial conditions [in Southern Vietnam] were not only characterised by high land/labour ratios, but also by comparatively high land productivity”.³⁶⁰ This would mean that the yield data for Cochinchina suffer from a serious underestimation. He suggested that this underestimation could be around 34% in some of the Southern provinces, or even higher in others.³⁶¹ Although it is possible that fields on newly reclaimed land had abnormally low yields during this period, Bassino argued that the official data are demonstrably flawed.³⁶² Yields may also have been higher in some of the larger landholdings that were used to produce exportable surplus, if only because technology might have been better. Large landholdings fields were more prevalent in Cochinchina than Tonkin, as we saw in Chapter 3 so that it is very likely that Cochinchina's rice sector was much more productive than Tonkin's.

As suggested in Chapter 4, land registering efforts in Indochina were mostly unsuccessful. It is likely that these yield estimates were based on few fields and that their yield was similar because they used a similar technology. Similar technology in both regions may explain similar yields. Brocheux suggested that peasants throughout Indochina “made use of a simple device: a basket (cai bo) mounted on a sled (cai co)” when collecting the rice harvest.³⁶³ The French did bring with them new machinery, such as ploughs and threshers, but these tended to be expensive and Vietnamese peasants did not adopt these practices en masse. According to Booth, “technological change was

³⁵⁸ Pierre Brocheux, *The Mekong Delta Ecology, Economy and Revolution, 1860-1960*, (Madison: Centre for Southeast Asian Studies University of Wisconsin-Madison, 1995), p.62.

³⁵⁹ Jean-Pascal Bassino, “Rice Cultivation in Southern Vietnam (1880-1954): A Re-evaluation of Land Productivity in Asian Perspective”, *Festschrift Volume in Honour of Professor Konosuke Odaka*, special issue of *Keizai Shirin Hosei University Economic Review*, 73, 1(4), 2006, p.5.

³⁶⁰ Bassino 2006, op.cit., p.5.

³⁶¹ *ibid*, p.29.

³⁶² *ibid*, p.16.

³⁶³ *ibid*, p.57.

mainly limited to export crops grown on large estates [during the colonial period]”.³⁶⁴ The French recognised that water buffalo tillage was the most efficient method of cultivation for the average peasant household.³⁶⁵ Buffaloes could be used to help plough the field and when the buffalo was no longer able to work, it could be sold to a butcher for a profitable price. Available data show the rather limited importance of cattle raising in Indochina. Gourou argued that “the meagreness of cattle raising in Indochina” was due more to cultural reasons, although he does not expand on what those might have been.³⁶⁶ Table 5.2 provides the official statistics for stock in Tonkin and Cochinchina, over the period 1922-1938.

Table 5.2: Plough Animals by Region, 1922-1938, (Annual Average)

	Buffaloes		Horses	
	Tonkin	Cochinchina	Tonkin	Cochinchina
1922-1938 (1000)	596	293	25	14
Per capita, 1929	0.07	0.05	0.00	0.00

LSE 59(R4): Gouvernement Général de l’Indochine: Service de la Statistique Générale de l’Indochine, “Agriculture, Elevage et Forêts”, *Annuaire Statistique de l’Indochine*, Hanoi: Imprimerie d’Extrême-Orient, 1927-1939.

From Table 5.2, we notice that in both regions the per capita number of plough animals was very low. Dumont stated that most people could not afford a buffalo or cow, the majority of peasants rented the use of these animals. Many people would have used the same animal, hence the low per capita figures.³⁶⁷ It seems that the use of field animals in agricultural production was relatively similar, and minimal, in both Tonkin and Cochinchina. This suggests that capital-intensive methods of farming, in both Tonkin and Cochinchina, were nearly absent: neither area relied extensively on much other than human labour. The cost of the inputs needed for higher yields may have been too high.³⁶⁸ Similarities in technology for rice cultivation would point to similar yield trends. Nonetheless, *because it is likely that technology would have been better in larger estates, and because larger estates were more common in Cochinchina than in Tonkin, it is likely*

³⁶⁴ Anne E. Booth, “Rethinking the Role of Agriculture in the ‘East Asian’ Model: Why is Southeast Asia Different from Northeast Asia?”, *ASEAN Economic Bulletin*, Vol. 19, No.1, 2002, p.41.

³⁶⁵ Brocheux 1995, op.cit., p.64.

³⁶⁶ Gourou 1945, op.cit., p.207.

³⁶⁷ R. Dumont, *La culture du riz dans le delta du Tonkin*, (Paris: Société d’éditions géographiques, maritimes et coloniales, 1935), p.140.

³⁶⁸ International Rice Research Institute, *Economic Consequences of the New Rice Technology*, (Los Banos, Philippines: International Rice Research Institute, 1978), p.12.

that yields may in fact have been higher in Cochinchina's plantations, where better technology and techniques may have been predominant, than in Cochinchina's smaller fields. This would suggest that the previous table did not account for such differences, further justifying Bassino's suggestion. It is thus possible that the story of yield differences was not one of overpopulation per se, but rather of landholding pattern differences, as suggested in Chapter 3.

Labour productivity

Rice cultivation is very labour intensive and many authors have explained low yields in Southeast Asia in terms of the non-availability of labour. Van der Eng calculated that one hectare of rice field required 213 days of work in Tonkin in the 1930s, compared to only 65 days in Cochinchina and even less in Thailand and Burma, hinting that Cochinchinese labour was more productive than Tonkinese labour.³⁶⁹

According to Barker, Herdt and Rose, “there are three levels of technical conditions [... that] determine the level of per hectare labor input in rice production in any area at any time”.³⁷⁰ These are related to technological differences (either with respect to soil and seeds, or with respect to mechanical improvements) and institutional differences (with respect to the labour market). The previous section suggested that yields were likely to have been higher in Cochinchina than in Tonkin and that technology in rice cultivation in both regions was likely similar for the average peasants. However, it was suggested that only the larger landholdings would have had more access to new technologies, as only they could afford them. Considering that larger landholdings were more important in Cochinchina, it is likely that per hectare labour input would have been higher than in Tonkin, if only in these fields.

Differences in labour requirements might thus have been the result of differences landholding patterns: “per hectare labour input is larger the smaller is the size of holding”,³⁷¹ as can be seen in evidence from Japan. In 1933, a small landholding of less than 1 hectare required 34.1 work days per tenth of a hectare, whereas a larger

³⁶⁹ Van der Eng 2004, op.cit., p.355-356.

³⁷⁰ Randolph Barker, Robert W. Herdt & Beth Rose, *The Rice Economy of Asia*, (Washington D.C.: Resources for the Future, 1985), p. 124.

³⁷¹ Asian Employment Programme - Asian Regional Team for Employment Promotion, *Labour Absorption in Agriculture: The East Asian Experience*, (Geneva: International Labour Organisation, 1980), p.255.

landholding would only have required 21.6 work days per tenth of a hectare.³⁷² We saw that Cochinchina's landholding were generally larger than Tonkin's. It is thus possible that the prevalence of larger landholdings explains the larger labour productivity of Cochinchinese peasants, principally because large landholdings had better access to technology.

Labour requirements in rice farming included preparing the soil for cultivation and transplanting, a process common across Indochina and requiring much work. After the harvest was collected, the various processing stages to obtain the final rice product were also highly labour intensive.³⁷³ These activities were common to both Tonkin and Cochinchina, which leads us to question why one hectare of rice field required a smaller number of workdays in Cochinchina compared to Tonkin, if not because of technology. Dumont suggested that more workdays in Tonkin were due not to more work, but rather to the oversupply of labour.³⁷⁴ The higher level of labour 'requirement' in Tonkin was indicative of disguised unemployment, not of lower labour productivity *per se*. An analysis labour productivity in Japan's rice cultivating sector confirms this assertion: in 1924 an average of 265 man-days were required per hectare in rice production, but many of the people working the fields in this manner were under-employed.³⁷⁵ The higher population pressures in Tonkin resulted in many of its peasants being underemployed, thus *artificially* increasing labour requirements estimates.

Output

Although there is still some debate over whether or not land and labour productivities were higher in Cochinchina than in Tonkin, it remains that the key difference between these two regions was in the *scale* of rice cultivation and the *output* of rice they produced. A large part of this difference is due to the area that was dedicated to rice production. The 'area under cultivation' trends differed: Tonkin's decreased over time from 1.54 million hectares to 1.2 million hectares, while Cochinchina's increased from 2 million to 2.3 million hectares. Giacometti calculated estimates for rice cultivation in both Tonkin and Cochinchina. These estimates, based on the same information used in Table 5.1, with

³⁷² *ibid*, p.45-47.

³⁷³ Dumont, *op.cit.*

³⁷⁴ *ibid*, p.39.

³⁷⁵ Asian Employment Programme – Asian Regional Team for Employment Promotion, *op.cit.*, p.250.

some modifications to allow for biases in the gathering of information, provide us with a longer-term perspective of the trends in both size of cultivation and rice output. Giacometti's estimates for rice output are presented in Figure 5.1.

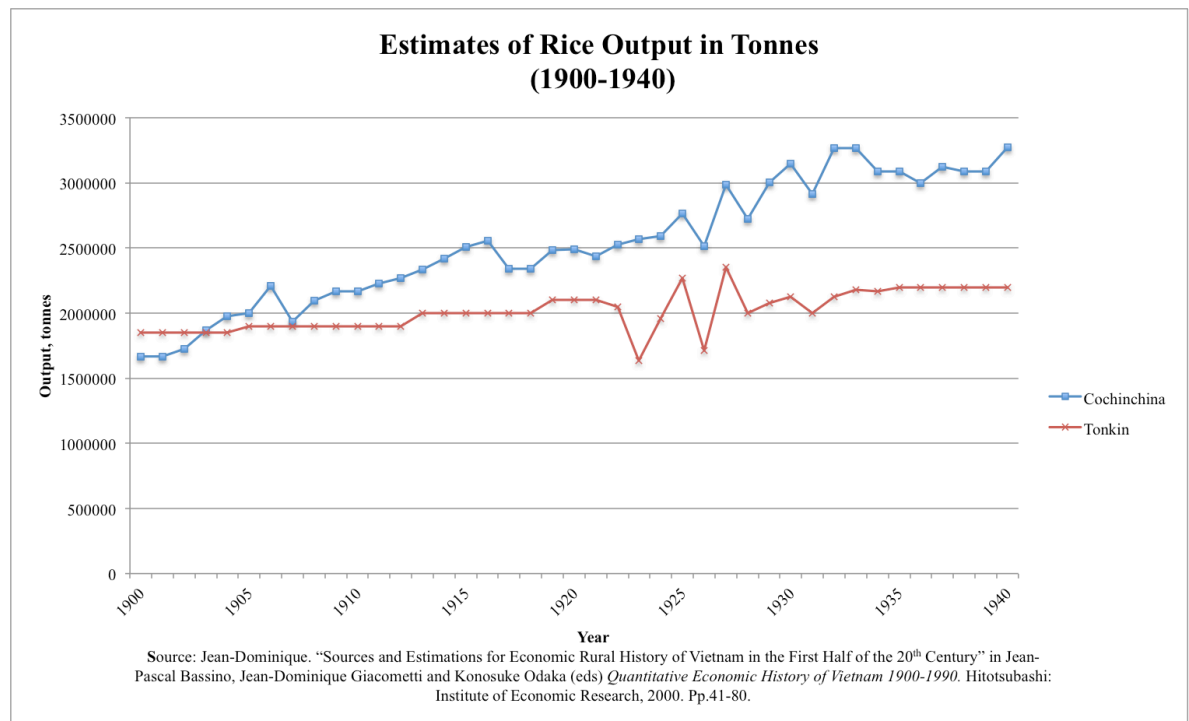


Figure 5.1

Giacometti's estimates suggests that Tonkin's decreasing area under rice cultivation noted in Table 5.1 is likely incorrect. In Tonkin, he suggested that the area under cultivation, between 1900 and 1940, grew by a factor of 1.23, while output grew by a factor of 1.18.³⁷⁶ For Cochinchina, he argued that both the area under rice cultivation and rice output doubled in the same time period. His estimates for Cochinchina show a much more significant growth in output than suggested in Table 5.1. If, as suggested above, yields were higher in Cochinchina than those reported in Table 5.1, the growth of the rice output shown in Figure 5.1 is likely an underestimation, considering that land under rice cultivation was also growing. Nonetheless, these estimates confirm that the importance of rice cultivation was stronger in Cochinchina than in Tonkin. The apparently slower rate of growth in rice production in Tonkin suggests a growing divergence between the two

³⁷⁶ Jean-Dominique Giacometti, "Sources and Estimations for Rural History of Vietnam in the First Half of the 20th Century" in Jean-Pascal Bassino, Jean-Dominique Giacometti and Konosuke Odaka (eds), *Quantitative Economic History of Vietnam 1900-1990*, (Hitotsubashi: Institute of Economic History, 2000), p.41-80.

regions, with Cochinchina clearly becoming the stronger player in rice production and dedicating more and more of its cultivable land to its cultivation.

Although Giacometti's estimates deny that Tonkin's area under rice cultivation was decreasing, the region's output growth was slower than the growth of the area under cultivation. Touzet suggested that this phenomenon could be attributed to a decrease in the price of the crop relative to the cost of producing it.³⁷⁷ However, if we look at Figure 5.2, we can see that the evolution of the retail prices for rice in the capitals of both regions was rather similar and the price was often lower in Saigon than in Hanoi.

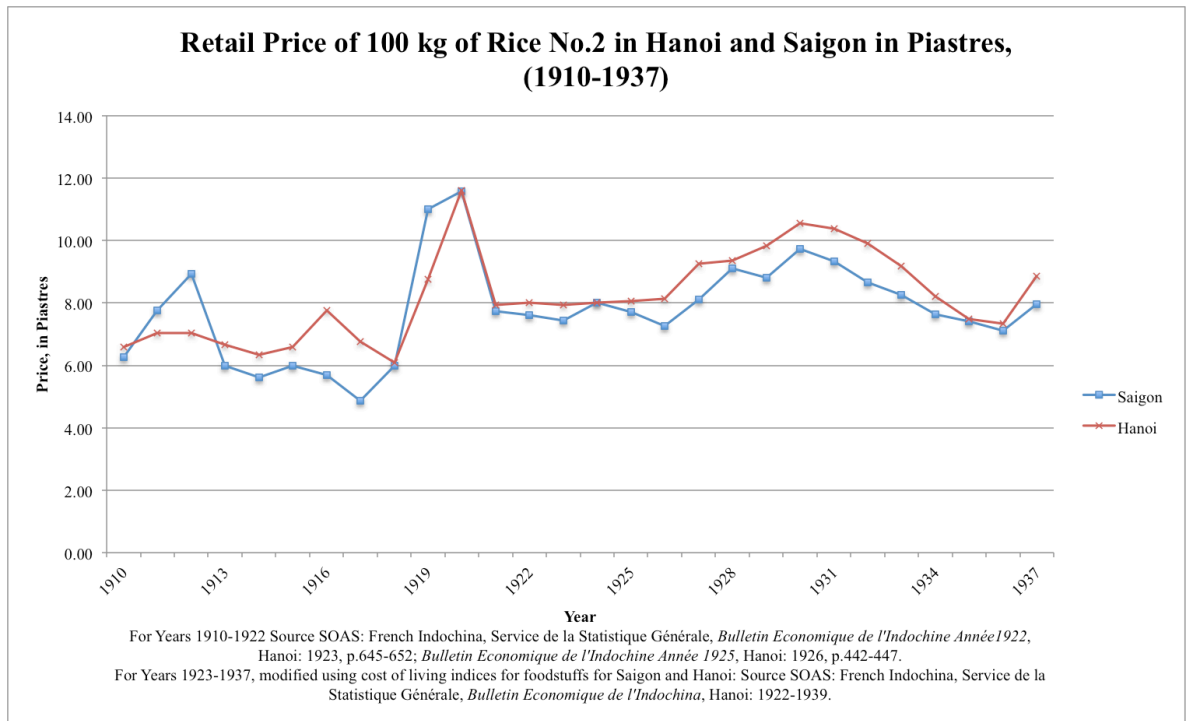


Figure 5.2

Considering these prices followed almost identical trends, this cannot be used for explaining the difference in the output trends seen in Figure 5.1. Studies indicate that fields for rice cultivation were at times used for other crops.³⁷⁸ Consequently, it is sensible for the growth in *rice output* to be slower than growth in the size of the fields on which rice was cultivated, because these same fields were also used to grow other crops. Differing trends in the agrarian sector may thus not be only a question of land or labour productivity, but rather of choices in production patterns.

³⁷⁷ André Touzet, *L'économie Indochinoise et la grande crise universelle*, (Paris: Marcel Giard, 1934), p.14.

³⁷⁸ Dumont, *op.cit.*, p.321.

These differences in the output patterns were reflected in government-sponsored public works. In Tonkin, the consensus of the Indochinese government was that the colonial administration should do work to prevent flooding and increase irrigation to help minimise the negative consequences of poor weather in the region.³⁷⁹ One of the main problems with the Tonkinese landscape was the different levels of the countryside, which made it hard to irrigate crops.³⁸⁰ For example, the Red River itself is located in a valley, while the adjoining fields, at times, are higher up on the plateau. Irrigation to these fields was thus costly and difficult. Numerous records show the constant need for more money to complete particular projects: for example, a dam welding in Tonkin in 1929 required 12 000 piastres, in addition to the initial sum of 20 000 piastres, to be completed.³⁸¹ These public works in Tonkin were very costly and it often took very long before direct benefits could actually be reaped. Peasants in Tonkin would thus have cultivated various crops on the same fields, depending on the weather. For example, potatoes need less water than rice. Pending better irrigation methods, the peasants did not have a choice but to adapt their cultivation patterns, based on the circumstances they faced. In Cochinchina, because of the extensive network of canals, flooding also occurred, but overall irrigation was less problematic. Instead, Cochinchina's relatively sizeable virgin land meant public works mainly focused on hydraulic works that allowed for the regaining of marshlands and clearing of areas that were not yet fit for cultivation.³⁸² As such, different conditions, other than just population pressure, affected choices in production patterns.

This supports our hypothesis that yield differences may not have been the main reason explaining the differences in the relative performance of the agrarian sectors of Tonkin and Cochinchina. Research suggests that despite the population pressures, particularly significant in Tonkin, “attempts to further rice yields in order to maintain per capita production became relevant [in 1950 in North Vietnam, much later] than in Japan”.³⁸³ Indeed, the government's creation of the Office Indochinois du Riz in 1930

³⁷⁹ SOAS: “La situation économique de l’Indochine”, in French Indochina, Service de la Statistique Générale de l’Indochine, *Bulletin Economique de l’Indochine Année 1910*, (Hanoi: 1910), p.611.

³⁸⁰ Dumont, *op.cit.*, p.36.

³⁸¹ ANOM: INDO GGI//65956 &65957, requests from Hanoi’s general inspector of public works, approved by the general governor.

³⁸² SOAS: A.A. Pouyanne, “Les travaux publics de l’Indochine et le développement économique du pays”, in French Indochina, Service de la Statistique Générale de l’Indochine, *Bulletin Economique de l’Indochine Année 1925*, (Hanoi: 1926), p.513-542.

³⁸³ Van der Eng 2004, *op.cit.*, p.360.

achieved very little in terms of increasing yields.³⁸⁴ One of the main reason yield improvement was not a priority until much later is because, at least in Southern Vietnam, “the comparative advantage of rice farmers lay in the fact that they could expand their farms and continue rice production with traditional low-input labor-extensive techniques”.³⁸⁵ Indeed over time, Cochinchina’s production of rice became much more significant than Tonkin’s, not because of land productivity so much as because of differences in choice of production.

Tonkin's recorded use of rice fields for other crops is in line with both Henry's and Goudal's suggestions that production of rice in Tonkin was insufficient to adequately provide for the complete diet of its producers.³⁸⁶ In Tonkin, land use was possibly maximised by planting other crops during the fallow period, in addition to double cropping. This aligns with its growing population pressures. In Cochinchina, growth of available land resulted in more of the land being used for cultivation of this particular crop and suggests that its commercial sector and consumption patterns probably differed from Tonkin's. Indeed, according to these data, per capita rice production by the 1930s was nearly four times higher in Cochinchina than in Tonkin. Either Cochinchinese peasants were only eating rice or the surplus production of rice in Cochinchina was used to trade for other items necessary to peasant life. It is likely that rice consumption was higher in Cochinchina than in Tonkin, but this would not be sufficient to explain such a large gap; instead, trade and the commercialisation of the surplus must have played a large role.³⁸⁷ Output trends in rice cultivation not only reflected the economic gap between the two regions, they also confirm the relevance of local circumstances in explaining differences in production choices. Furthermore, these differing production patterns hint at important consequences on the commercial activity of both regions.

5.3) Crop diversification

Acreage figures strongly suggested that much of Tonkinese land was not used exclusively for rice cultivation. In Cochinchina an overwhelming proportion of available land was

³⁸⁴ Touzet 1934, op.cit., p.61.

³⁸⁵ Van der Eng 2004, op.cit., p.361.

³⁸⁶ Henry, op.cit., p.334-336 & Jean Goudal, *Labour Conditions in Indo-China*, (Geneva: International Labour Office, 1938), p.7.

³⁸⁷ Booth 2007(1), op.cit., p.136.

used solely for that crop. It was more common in Tonkin to engage in crop diversification within the same fields.³⁸⁸ For example, dry crops such as cassava and maize were planted on the rice fields between harvests,³⁸⁹ thus reducing the annual average output of rice fields, as seen in Table 5.1 and Figure 5.1. Table 5.3 gives some estimates indicating the extent of crop diversification in the two regions. We argue this represents different production choices based on responses to the environment peasants were living in.

Table 5.3: Estimates of Yearly Output of Secondary Crops, 1900 & 1940, (Tonnes)

	Maize	
	Tonkin	Cochinchina
1900	22 500	4 800
1940	112 500	34 440
	Potatoes & Cassava	Haricot Beans
	Tonkin	Cochinchina
1900	138 000	750
1940	150 000	1 750

Jean-Dominique Giacometti, "Sources and Estimations for Rural History of Vietnam in the First Half of the 20th Century" in *Quantitative Economic History of Vietnam 1900-1990*, Hitotsubashi: Institute of Economic History, 2000, p.41-80.

These estimates do not give information on yields, as these formed the basis of the estimation methodology and were assumed to be similar in both regions. Table 5.3 shows only a selection of the secondary crops produced in both areas. These crops were the secondary crops of most importance according to Gourou and Henry, as well as the main crops, other than rice, mentioned in the ASI. We are therefore confident they provide a good illustration of cultivation choices. Often these other crops were not necessarily grown for marketable reasons, but for dietary complements or substitutes.³⁹⁰ The dry field crops such as maize, potatoes and cassava formed the basis of the diet of Tonkinese peasants, particularly when rice was not in season.³⁹¹ It is very likely that crop diversification's larger role in the Tonkinese agrarian sector than in the Cochinchinese agrarian sector was representative of the larger population pressures that existed. Gourou

³⁸⁸ Gourou 1945, op.cit., p.321.

³⁸⁹ Dumont, op.cit., p.125.

³⁹⁰ *ibid*, p.130.

³⁹¹ *ibid*, p.126.

argued that “the secondary crops [were] valued because they contribute[d] appreciably to the peasant’s food supply”.³⁹² Although these crops were considered important, this table illustrates how insignificant these crops were compared to rice. Cochinchina produced an annual average of 2.7 million tonnes of rice, between 1919 and 1930, but only a maximum of 4 440 tonnes of maize. For Tonkin, the average was around 1.7 million tonnes of rice annually and even output of potatoes and cassava, by far the most significant secondary crops, was only of 150 000 tonnes. That being said, rice is a heavy crop and it remains clear from this table that diversification was more significant in Tonkin than in Cochinchina. It is possible that in Cochinchina rice substitutes were not necessary, since there was a clear surplus of rice produced. The surplus rice produced could be traded for the other goods they might have needed, reducing the need for such alternative cultures. Tonkin seems to have had started diversification prior to the start of French rule, with output of these alternative crops already relatively high in 1900. It is unsurprising to see growth in these alternative crops: population pressure in both regions were growing, as seen in Chapter 3.

Another form of diversification is seen in cattle raising data. Peasants could supplement their diet with meat. Table 5.4 presents official figures of stock raising of domestic animals used to supplement diets.

Table 5.4: Annual Average Number of Domesticated Animals, 1922-1928, (1000s)

	Tonkin	Cochinchina
Pigs	1 334	610
Sheep	4	5
Goats	16	4
Cows	195	165

LSE 59(R4): Gouvernement Général de l’Indochine: Service de la Statistique Générale de l’Indochine, “Agriculture, Elevage et Forêts”, *Annuaire Statistique de l’Indochine*, Hanoi: Imprimerie d’Extrême-Orient, 1927-1939.

These animals were generally kept uniquely for food reasons, whether for their meat or their milk, and sheep were also used for wool. Although the overall numbers remained quite low in both regions, Tonkinese peasants kept more of these animals. This is consistent with population pressure and their existing tendency to diversify agricultural production. Tonkin appears to have been engaging in diversification of agrarian

³⁹² Gourou 1945, op.cit., p.322.

production both with respect to crops and cattle. It seems that Cochinchinese peasants were either unable or unwilling to produce all these various goods.

Cochinchina's obviously larger output of rice, both in absolute and per capita terms, versus Tonkin's perceived inability to produce enough rice to feed its population, according to some scholars,³⁹³ suggests the need for movement of rice from South to North. The literature suggests that Cochinchina may have exported some rice to Tonkin, but no data can be found for this. We can attempt to estimate the movement of rice for the year 1930. On average Cochinchina produced 27 million quintals of rice per year between 1926 and 1930. In Tonkin, average yearly rice production in the same period was 16 million quintals.³⁹⁴ The population of Cochinchina in 1930 was 5.471 million; in Tonkin it was 9.036 million.³⁹⁵ A high estimate for rice consumption in Cochinchina was 700 grams per person per day.³⁹⁶ In Tonkin, it was 400 grams.³⁹⁷ Exports of rice from Cochinchina amounted to 955 118 tonnes and 70 008 tonnes in Tonkin.³⁹⁸ This would suggest a surplus of rice (produced but not eaten locally or traded internationally) of about 346 084 tonnes in Cochinchina (2.7 million tonnes - 955 118 tonnes - 0.0007 tonnes * 5.471 million people) and a surplus of 209 832 tonnes in Tonkin (1.6 million tonnes - 70 0008 tonnes - 0.0004 * 9.036 million). If this estimation were representative of rice consumption and trade, then there would have been very little movement of rice from Cochinchina to Tonkin, even with minor adjustments for cattle feed and seeding.

One reason for such limited movements of rice may be that Tonkin's crop/cattle diversification completed its diet, suggesting their strategy was to ensure a degree of self-sufficiency. Tonkin's tendency towards diversification of crops, on a small scale, was potentially a form of agricultural private insurance, a means of ensuring self-reliance. Cochinchina's continued emphasis on specialisation in high-demand crops suggests reliance on commerce. A related reason may be that Tonkinese peasants could not afford

³⁹³ Henry, op.cit., p.334-336 & Goudal, op.cit., p.7.

³⁹⁴ Rice output information comes from Table 5.1.

³⁹⁵ Maks Banens, "Vietnam: a Reconstitution of its 20th Century Population History", in Jean-Pascal Bassino, Jean-Dominique Giacometti and Konosuke Odaka (eds), *Quantitative Economic History of Vietnam 1900-1990*, (Hitosubashi: Institute of Economic Research, 2000).

³⁹⁶ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1934*, (Hanoi: 1935), p.175; Henry estimated average rice consumption in Cochinchina was only 534 grams: Henry, op.cit., p.534.

³⁹⁷ Gourou 1945, op.cit., p.551; Henry estimated average rice consumption in Tonkin was only 264 grams: Henry, op.cit., p.334.

³⁹⁸ LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine, "Commerce", *Annuaire Statistique de l'Indochine*, (Hanoi: Imprimerie d'Extrême-Orient, 1932).

to buy more rice and had to rely on what they produced. Gourou's research led him to conclude that, in 1934, Tonkinese peasants "had no more than 50 francs a year to trade with the world outside of the Tonkin Delta".³⁹⁹ This sum was worth about 5 piastres at the time. According to Figure 5.2, this could fetch over 50 kg of rice in Hanoi, a rather insignificant amount for a household. He also argued, although without quantitative evidence, that Cochinchina "had much more important trade relations with the outside than those carried on by the peasants of Tonkin".⁴⁰⁰ Specialisation in Cochinchina was probably encouraged by the differing patterns in size of landholding, specifically the relatively higher proportion of large estates: wealthy landlords want profit, not sustenance. Tonkinese peasants may have diversified out of necessity. Tonkinese peasants diversified to ensure subsistence for a growing population. Chances are, however, that Tonkinese peasants needed less 'trade money' because they could mostly subsist on their own production.

Such a difference in production patterns is not unique. It is similar to what was occurring in upper and lower Burma at the time: lower Burma being more commercially oriented and upper Burma more autarchic.⁴⁰¹ In Java, the increasing movement towards diversification was representative of what Geertz termed 'agricultural involution'. He argued that because the native population was generally restricted in its ability to engage with the European/Dutch dominated capitalist sector of the economy, the native population had little choice but to turn to diversification.⁴⁰² If we look at Tonkin and Cochinchina through this wider Southeast Asian perspective, one would suggest that Cochinchina's ability to produce a large surplus of rice was similar to lower Burma's and guided its specialisation. In Tonkin population pressure may have prompted peasants towards diversification and self-insurance. The more extensive role of crop diversification in Tonkin than in Cochinchina, combined with the large divide that existed in rice production between the two regions suggests that the economic divide manifested itself through differing patterns of agricultural production in the two regions. It is not necessarily possible to say that differing patterns caused the economic divide, but it is

³⁹⁹ Gourou 1945, op.cit., p.257.

⁴⁰⁰ *ibid*, p.258.

⁴⁰¹ Aye Hlaing, "Trends of economic growth and income distribution in Burma, 1870-1940", *Journal of the Burma Research Society*, June 1964, Vol.47, p.99.

⁴⁰² Clifford Geertz, *The Development of the Javanese Economy: A Socio-Cultural Approach*, (Cambridge, Massachusetts: Center for International Studies Massachusetts Institute of Technology, 1956), p.16.

possible to suggest that institutional and geographical factors (including demography) had an impact on production patterns, which were reflected in the overall performance of these two regions.

We argue that production choices and patterns in both Tonkin and Cochinchina, at least with respect to traditional crops, were independent of the colonial authorities' so-called 'efforts' at easing access to credit for average peasants in the aim of improving production figures. In 1913, the administration created agrarian credit institutions in Cochinchina. Their perceived success prompted their establishment in the rest of the Union and, in 1926, some were opened in Tonkin.⁴⁰³ Table 5.5 summarises the available information on these institutions.

Table 5.5: Agrarian Credit Information, 1923-1937

	Agricultural Credit In Cochinchina			Popular Credit in Tonkin
	Number of Societies	Number of Members	Total Amount of Loans (1000 \$)	Total amount of loans (1000 \$)
1923	8	3 347	643	
1924	9	3 939	844	
1925	12	4 743	1 142	
1926	15	7 420	1 314	
1927	17	8 016	1 759	
1928	19	10 244	2 348	109
1929	20	12 833	3 444	916
1929	20	12 833	6 195	2 115
1930	20	14 398	3 154	3 569
1931				13
1932	20	15 517	12 077	24
1933	20	15 604	11 475	24
1935	20	15 148	10 498	
1937	20	15 152	8 531	

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Agriculture, Elevage et Forêts", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.

⁴⁰³ ANOM: BIB AOM TH//583, Sabes, op.cit., p.116.

It seems clear that these institutions were not particularly far-reaching, not even in Cochinchina were they had been considered successful. The number of members was not very high, a maximum of 15 604 members in Cochinchina in 1933, out of a population of over 4 million. The limited reach of this institution in both regions meant that for the average cultivator, whether owner or tenant of small landholding, informal money lending was endemic and so were prohibitively high interest rates. According to the newspapers in Tonkin, agrarian credit was still only going to rich villagers and the average Tonkinese had to resort to non-stop borrowing at usury rates to survive.⁴⁰⁴ Dumont suggested that the indebtedness of the Tonkinese peasants resulted in the establishment of large landlords, through default of large properties: owners in debt would have to relinquish their hold on their land.⁴⁰⁵ Although this may be camouflaged in the data on landholding,⁴⁰⁶ it does not seem to have had an impact on production patterns between 1900-1940: diversification in Tonkin increased and Cochinchina continued specialising. Consequently, it appears that pre-existing conditions controlled the development of the agricultural sector in both Tonkin and Cochinchina.

5.4) Industrial crops

Touzet explained that, until 1900, the French administration relied mostly on rice cultivation and only after did they start to encourage more 'industrial' cash crops.⁴⁰⁷ For example, in 1909, experimental agrarian stations were organised in Tonkin.⁴⁰⁸ These stations aimed to increase the profitability of the agrarian sector by either improving existing crops or introducing new ones. Although the stations were abandoned by 1913, the French administration continued to encourage the development of new exportable crops in Indochina: cotton, coffee and, most importantly, rubber.⁴⁰⁹ In the wake of the Depression, both rubber and coffee growers received subventions from the authorities.

⁴⁰⁴ ANOM: BIB AOM /30995, H. Cucherousset, "La Situation Financière du Tonkin", *Eveil Economique*, Hanoi: Sunday July 5th 1931.

⁴⁰⁵ Dumont, op.cit., p.66.

⁴⁰⁶ Goudal, op.cit., p.191.

⁴⁰⁷ Touzet 1934, op.cit.,p.2.

⁴⁰⁸ SOAS: Ch. Lemarie, "Travaux executés en 1909 dans les stations de cultures experimentales du Tonkin", in French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1910*, (Hanoi: 1911), p.307.

⁴⁰⁹ ANOM: BIB AOM A/39, *Annuaire général administratif, commercial et industriel de l'Indochine, Tome 1: Partie commerciale et industrielle, l'année 1910*, p.34.

Other industrial crops were not as successful,⁴¹⁰ although Touzet does suggest that there was “a veritable rush of tea and coffee planters” after 1928.⁴¹¹

The greater perceived profitability of Cochinchina's agrarian sector is demonstrated in financial capital movement. Table 5.6 provides some data on investment in the agrarian sector in the late 1920s, from both domestic and international investors.

Table 5.6: Investment in Agriculture and Forestry, 1924-1929, (1000\$)

	Investment from Domestic Sources		Investment from International Sources	
	Cochinchina	Tonkin	Cochinchina	Tonkin
1924			4 162	
1925	286	226	3 674	751
1926	2 158	2	4 410	882
1927	5 779	12	6 326	
1928	1 915	349	6 186	861

SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1929*, Hanoi: 1930, p.808.

There was much more investment going to Cochinchina's agricultural sector than to that of Tonkin. This is true for investment from both domestic and international sources. Of course, some of the investment may not have been directed towards the 'industrial crop' sector, but to other profitable traditional crops such as rice or mulberry, but either way, this shows the greater attractiveness of Cochinchina's agricultural sector for investment. The greater attraction of capital towards Cochinchina may be representative of comparatively better returns, but may also be representative of the differing landholding patterns: large landholdings engaged in commercial farming may have required more investment than small-scale subsistence agriculture. We believe this further illustrates the significance of institutional differences in explaining the difference in the agricultural sector and that it provides evidence to say that Cochinchina's agrarian sector's production patterns, both in traditional and industrial crops, partly explains its economic divide from Tonkin.

Although in the beginning of French rule plantations were developed in Tonkin in the hopes of establishing valuable crops such as tea, as of 1910 the majority of European

⁴¹⁰ Dumont, op.cit., p.133.

⁴¹¹ Touzet 1934, op.cit., p.2.

plantations had shifted to Cochinchina.⁴¹² The trend of establishing plantations in the South continued throughout French control of Indochina. European plantations were generally the by-products of concessions: the government would declare itself owner of particular expanses of land in the Indochinese territory and would ‘concede’ these to privileged European settlers,⁴¹³ at a certain price. As explained in Chapter 3, between 1921 and 1932, 942 163 hectares of land were awarded as concessions, of which 638 600 were in Cochinchina. Only 138 000 hectares were conceded in Tonkin,⁴¹⁴ and many of these were mining concessions rather than agricultural ones.

Tables 5.7 and 5.8 provide information on the growth of the rubber industry.

Table 5.7: Average Area Cultivated, Output of Rubber in Cochinchina, and Exports of Rubber in Indochina, 1927-1937

	Area (km ²)	Output (tonnes)	Exports (tonnes)
1927	500	8 381	9 600
1928	680	8 119	9 800
1929	840	9 296	10 300
1933	960	14 370	18 700
1935	970	23 300	29 300
1937	982	36 700	45 100

LSE 59(R4): Gouvernement Général de l’Indochine: Direction des Affaires Economiques, *Annuaire Statistique de l’Indochine*, Hanoi: Imprimerie d’Extrême-Orient, 1927-1939; Gouvernement Général de l’Indochine, Direction des Services Economiques, *Résumé statistique relatif aux années 1913-1940*, Hanoi: Imprimerie d’Extrême-Orient, 1941, p.7-45.

The development of the rubber industry was common to many Southeast Asian countries, such as the Dutch East Indies’ Java and the Malaysian peninsula. Cochinchina's rubber sector was dominated by large estates, as opposed to Malaya's, where smaller holdings were not only numerous, but often fared better in the wake of the Depression.⁴¹⁵ Takada suggested that the cost of establishing a rubber plantation in Cochinchina was quite high: in the mid-1920s it would have cost between 500 and 1 200

⁴¹² Charles Robequain, *L’Evolution économique de l’Indochine française*, (Paris: Typographie Firmin-Didot, 1939), p.207.

⁴¹³ Some concessions, especially for rice fields, were also given out to indigenous cultivators.

⁴¹⁴ Touzet 1934, op.cit., p.3.

⁴¹⁵ P.T. Bauer, *The Rubber Industry: A Study in Competition and Monopoly*, (London: London School of Economics and Political Science, 1948), p.3 & p.33-35; Webby Silupya Kalitiki, *Plantation labour: rubber planters and the colonial state in French Indochina, 1890-1939*, PhD University of London, School of Oriental and African Studies, 2000, p.49 & Helmut G. Callis, *Foreign Capital in Southeast Asia*, (New York: Arno Press, 1976), p.80.

piastres per hectare.⁴¹⁶ This need for initial capital explains the larger size of holdings for this production and its growth in Cochinchina. For example, Michelin, the tyre company, in 1927 had requested 60 000 hectares of land to start a rubber plantation.⁴¹⁷ Such land would not have been available in Tonkin, nor would the latter's climate have been appropriate for extensive cultivation.

Between 1907⁴¹⁸ and 1927, the area used for rubber cultivation grew to 500 km². Within another ten years, this area had nearly doubled in size. The output from this culture saw even more growth: Table 5.7 shows that within ten years, output increased more than four fold, while the area under cultivation only doubled. The growth can be attributed to a number of reasons: more trees being planted or coming to maturity over time in the same area; more labourers being employed thus maximising the collection of the latex; or more productive techniques of extraction.

Despite the nominally large size of plantations, the total size of the area under rubber cultivation was very small, relative to that of the area under rice cultivation. Nonetheless, rubber output growth was far more significant than growth of either rice output or secondary crops output. Rubber was a very significant economic activity. By the late 1930s, rubber was Indochina's "second most valuable export, behind rice"⁴¹⁹ and Murray shows that 18% of total export revenue came from rubber.⁴²⁰ Although some rubber plantations existed in Southern Annam and in Cambodia, they were insignificant compared to Cochinchina's. Throughout the time period, total rubber exports from Indochina were just above total output figures from Cochinchina, suggesting that Cochinchina's rubber production was almost exclusively exported. This further suggests that Cochinchina's agrarian production was influenced by trade possibilities: the demand for this product was not domestic but international.

⁴¹⁶ Yoko Takada, "Historical Agrarian Economy of Cochinchina" in Jean-Pascal Bassino, Jean-Dominique Giacometti and Konosuke Odaka (eds) *Quantitative Economic History of Vietnam 1900-1990*, (Hitotsubashi: Institute of Economic Research, 2000), p.130.

⁴¹⁷ Martin J. Murray, " 'White Gold' or 'White Blood'? The Rubber Plantations of Colonial Indochina, 1910-1940", *Journal of Peasant Studies*, Vol.19, No.3-4, 1992, p.62.

⁴¹⁸ 1907 is the suggested start of date of plantations of 'hevea brasiliensis'; before lower quality rubber was produced from local oleaginous plants. Michitake Aso, "The Scientist, the Governor, and the Planter: The Political Economy of Agricultural Knowledge in Indochina During the Creation of a Science of Rubber, 1900-1940", *East Asian Science, Technology and Society: An International Journal*, Vol 3, 2009, p.231-256; Murray 1992, op.cit., p.46.

⁴¹⁹ Murray 1992, op.cit., p.62.

⁴²⁰ *ibid*, endnote 20.

Table 5.8: Annual Average of Indochinese Rubber Exports, 1907-1940, (Tonnes)

	Export
1907-1926	2 363
1927-1937	20 145
1940	64 900

Gouvernement Général de l'Indochine, Direction des Services Economiques, *Résumé statistique relatif aux années 1913-1940*, Hanoi: Imprimerie d'Extrême-Orient, 1941, p.7-45.

As we can see in Table 5.8, exports of rubber increased significantly after 1927. By 1940, despite the Great Depression and despite the drop in rubber prices, total exports of rubber were more than six times the exports in 1927. This shows the large growth of the rubber industry in Cochinchina. The total production in Cochinchina was insignificant compared with two large neighbouring exporters: comparatively, Malaysia in 1938 exported a monthly average of 44 600 tonnes and Java exported a monthly average of 24 600 tonnes.⁴²¹ Nonetheless, by the late 1930s, Indochina was the 5th largest producer of rubber by acreage, 4th largest in total rubber output and the 1st by land productivity.⁴²²

Although rubber was the most significant industrial crop in Indochina, it is clear it was not a large part of the agricultural sector. Its contribution to the economic divide presumably rested on its commercial revenue. Because the agricultural sector in Indochina was so significant, any difference in the output of the sectors between Tonkin and Cochinchina would be closely associated with diverging economic performances. Since it appears that the main distinction between the two regions' agrarian sector rests on the extent to which specialisation existed, it seems that the role of commerce was central to explaining the economic divide between the two regions.

5.5) Conclusion

The economic divide that is acknowledged in the literature between the two regions manifested itself in the agricultural sector in the much larger output of rice cultivation in Cochinchina and in its larger industrial crop sector. We have shown that **Cochinchina's agrarian sector was characterised by specialisation, while Tonkin's was**

⁴²¹ SOAS: "Supplément de la Statistique", French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine, Année 1940*, (Hanoi: 1941), p.14.

⁴²² Murray 1992, op.cit., p.48.

characterised by diversification. It is likely that the land tenure differences and population pressures outlined in Chapter 3 had differing impacts on Tonkin and Cochinchina, further encouraging differing patterns of agricultural production. We have argued that the specialisation that occurred in Cochinchina and the diversification that occurred in Tonkin reflected choices made based on the differing environment these regions were facing and potentially choices based on commercial orientation.

Although the debate on productivity differences (for both land and labour) is not yet resolved, this chapter has argued that the main difference in this sector's performance was due to the choices in production patterns, as they affected acreage and output figures. Output differences resulting from these differing production patterns mirrored the economic divide between Tonkin and Cochinchina. These differing patterns were clear in both the evolution of the traditional crops such as rice or cassava and in the rise of industrial crops such as rubber. More varied crops existed in Tonkin, but Cochinchina's development of the rubber industry was in line with its tendency to specialise in specific crops and its orientation towards international commerce. The indication is that **Cochinchina's agricultural sector was more geared towards production for markets, while Tonkin's was engaged in more self-sufficient production.** Goudal believed that the three main problems the peasant faced in Indochina were land tenure, soil productivity and the need for agricultural credit.⁴²³ This chapter has shown that these problems were much starker in populous Tonkin and that they had an influence on the way in which the agrarian sector was organised.

Tonkin's tendency to self-insure and diversify resembles more an "industrious revolution path, due to natural resource constraints such as land scarcity".⁴²⁴ This would suggest that Tonkin's long-term economic performance revolved around its continued reliance on village authorities and full absorption of labour within the village bounds. Cochinchina's specialisation, however, was more likely to encourage integration to the world economy through trade. These two different paths reflect different choices, in many ways independent of colonial policy, as highlighted in Chapter 4. In Tonkin, diversification and double harvesting were clearly aimed at accommodating a growing

⁴²³ Goudal, *op.cit.*, p.195-209.

⁴²⁴ Kaoru Sugihara, "The East Asian path of economic development: a long-term perspective" in Giovanni Arrighi, Takeshi Hamashita & Mark Selden (eds), *The Resurgence of East Asia 500, 150 and 50 year perspectives*, (London: Routledge, 2003), p 82.

population with more limited connections to trade, as will be further shown in Chapter 7. Collaboration between the government, in light of their colonial economic policy of *mise-en-valeur*, and the Bank resulted in big property owners, plantations owners and large commercial ventures obtaining the largest share of credit. This favoured Cochinchina's economy where more of these ventures existed. Tonkin's share of credits from the Indochinese Bank was therefore lower in its impact and reach,⁴²⁵ which meant that the impact of population pressure remained significant. Indeed, Booth argued that

in both Vietnam and Java, it has been argued that the benefits of government expenditures on irrigation, and other infrastructure such as roads and railways, accrued mainly to the better-off minority of farmers that owned, or had use rights over productive land, especially irrigated rice land.⁴²⁶

It is suggested that the production patterns highlighted in this sector were not necessarily a deliberate strategy, but were in part driven by demographic characteristics and their influences in landholding patterns. In other words, this chapter supports van der Eng's suggestion that "production trends were the result of choices made by producers on the basis of the aim to optimise the use of their productive resources (labour, land, irrigation facilities and capital), given the market information available to them".⁴²⁷

These patterns had an impact on productivity, both of land and labour, and on the output possibilities of the regions. **It has been argued that Cochinchina's specialisation in rice as opposed to Tonkin's diversification explain much of the economic divide between the two regions during colonial time.** Even in 1931 when prices had started to drop, Goudal estimated that the value of agricultural production in Cochinchina was 58 piastres per head, as opposed to only 40 in the rest of Indochina,⁴²⁸ prompting an economic divide between that region and others within the Indochinese Union. It is likely these patterns would have had an impact on both the commercial orientation of the

⁴²⁵ Yasuo Gonjo, *Banque coloniale ou banque d'affaires. La banque de l'Indochine sous la IIIe République*, (Paris: Comité pour l'histoire économique et financière, Ministère de l'Economie, 1993), p.359.

⁴²⁶ Anne E. Booth, "Night Watchman, Extractive, or Developmental States? Some Evidence from Late Colonial South-East Asia", *Economic History Review*, Vol.60, No.2, 2007(2), p.256.

⁴²⁷ Pierre van der Eng, *Agricultural Growth in Indonesia: Productivity Change and Policy Impact since 1880*, (London: Macmillan Press LTD, 1996), p.165.

⁴²⁸ Goudal, *op.cit.*, p.14.

regions and on the living standards of the peasant populations, which will be evaluated in Chapters 7 and 8 respectively.

Chapter 6: Industry

6.1) Introduction

Organised industrial production, as a distinct sector, was not a significant part of the Indochinese economy. Authors have argued that the political movement for the development of modern industrial activity in Indochina did not start until the time of Jules Brévié who was Governor General of Indochina in 1936-1939.⁴²⁹ According to Robequain, by the late 1930s, a maximum of 120 000 people were engaged in modern industrial employment.⁴³⁰ Considering that in 1929 Vietnam's population was over 14 million, the industrial labour force was very small indeed, accounting for just under 1%.⁴³¹ Despite this small sector, this was larger than in other neighbouring economies: Mitchell recorded that in the Dutch East Indies there were also 120 000 workers engaged in modern industrial work in 1936,⁴³² but this only accounted for less than 0.2% of the country's population.⁴³³ Hlaing likewise recorded a smaller modern manufacturing sector in Burma,⁴³⁴ although in Korea, 3.8% of the population were already engaged in the industrial sector by 1938.⁴³⁵ Both handicraft production and mining pre-dated the rise of modern industrial development. In this chapter, we continue to evaluate **how the economic divide between Tonkin and Cochinchina manifested itself in the industrial sector.**

In the previous chapter, it seemed clear that conditions favoured Cochinchina's agrarian sector. In this chapter, we find that industrial growth was more significant in Tonkin than it was in Cochinchina. In some ways, one might wonder why, if this was so, Cochinchina's GDP appears to have been so much higher in absolute terms than Tonkin's

⁴²⁹ Andrew Hardy, "The Economics of French Rule in Indochina: A Biography of Paul Bernard (1892-1960)", *Modern Asian Studies*, Vol.32, No.4, October 1998, p.807-848 & Jack Shepherd, *Industry in Southeast Asia*. (New York: Institute of Pacific Relations, 1941), p.29.

⁴³⁰ Charles Robequain, *L'évolution économique de l'Indochine française*, (Paris: Typographie Firmin-Didot, 1939), p.303.

⁴³¹ Maks Banens, "Vietnam: a Reconstitution of its 20th Century Population History" in Jean-Pascal Bassino, Jean-Dominique Giacometti and Konosuke Odaka (eds) *Quantitative Economic History of Vietnam 1900-1990*, (Hitotsubashi: Institute of Economic Research, 2000).

⁴³² Kate L. Mitchell, *Industrialization of the Western Pacific*, (New York: Institute of Pacific Relations, 1942 (2)), p.214.

⁴³³ Members of the IPR International Secretariat, A Brief Political and Economic Handbook of Eastern and Southern Asia, 12th Conference, Institute of Pacific Relations, Kyoto, Japan, September-October 1954, p.17.

⁴³⁴ Aye Hlaing, "Trends of economic growth and income distribution in Burma, 1870-1940", *Journal of the Burma Research Society*, June 1964, Vol.47, p.106.

⁴³⁵ Kate L. Mitchell, *Japan's Industrial Strength*, (New York: Alfred A Knopf, 1942 (1)), p.13-17.

more stable GDP. In this chapter, we provide a two-part explanation to this: **the industrial sector remained small during the period 1900-1940, but its growth in Tonkin acted as a restraint for labour movements from North to South; consequently the gap in per capita output in the agrarian sector remained significant throughout this period.** In addition, **the production patterns identified in the agrarian sector were replicated in the industrial sector.** We will evaluate these arguments through an analysis of the traditional handicraft sector, the mining sector and the more modern industrial sector.

6.2) Handicraft industries

The rise of traditional industry producing various handicraft goods has been a common feature of most agrarian economies. This type of activity is generally associated with population growth, as well as the need for goods that require some processing, such as clothing, baskets, etc. In this particular sector, prior research has suggested that Tonkin was more active than the rest of Indochina.⁴³⁶ Indeed, Jack Shepherd, one of the few scholars of Southeast Asian industrialisation during colonial rule, estimated that “the proportion of persons dependent primarily on the traditional industries for living in Tonkin was about 7%, and probably 4% in the rest of Indochina”.⁴³⁷ Since previous data suggested only 1% of Vietnam's population was engaged in the modern manufacturing sector, traditional industry seems to have been a more significant activity. Moreover, these data suggest the sector was larger than that of the Dutch Indies, where Mitchell suggested only 2.5% of the population was engaged in handicraft production.⁴³⁸ In addition, many more peasants would have used employment in the sector as *an addition* to agrarian employment: Virginia Thompson argued that while 200 000 peasants “devoted the greater part of their time” to these traditional industries, at least “800 000 engaged in such activities for at least a few weeks of every year”.⁴³⁹ Furthermore, Mitchell argued that Indochina's handicraft industries persisted more than those of other Southeast Asian colonies.⁴⁴⁰

⁴³⁶ Shepherd, op.cit., p.11.

⁴³⁷ *ibid*, p.9.

⁴³⁸ Mitchell 1942(2), op.cit., p.214.

⁴³⁹ Virginia Thompson, *Labor Problems in Southeast Asia*, (London: Oxford University Press, 1947), p.178.

⁴⁴⁰ Mitchell 1942(2), op.cit., p.153.

In Chapter 3, we suggested that population pressures in Tonkin's agricultural sector resulted neither in en masse migration nor in urbanisation. We suggested that peasants, instead of migrating, might have taken an alternative option: engaging in manufacturing. According to Gourou's research on Tonkin, before the French colonised Vietnam, rural manufacturing was an integral part of village life. Very often there was "specialisation by village" and such specialisation was maintained across generations.⁴⁴¹ These villages remained rural because handicraft employment could be a seasonal activity. Peasants' ability to work in this handicraft sector would have helped alleviate perceived population pressures and this may explain the lack of integration between the two regions' labour markets.

Table 6.1: Rural Handicraft Industries, 1939

Type of Handicraft	Tonkin		Cochinchina	
	Number of Artisans	Number of Licensed Artisans	Number of Artisans	Number of Licensed Artisans
Fibre work*	15 521	66	357	59
Woodwork	1 426	244	4 347	1 146
Textile	56 850	77	303	137
Embroidery	2 315	116	81	42
Lace	2 833	2	0	0
Tannery	1 057	225	277	129
Metallurgy	1 143	414	1 554	1 075
Jewellery	471	171	843	465
Pottery	522	100	145	20
Paper	2 771	101	97	58
Nacre	232	15	0	0
Food	1 004	186	193	134
Diverse	9 525	1 156	10 837	3 583
Total	95 670	2 873	19 034	6 848

* fibre work can be done with rattan, rushes, etc. and include baskets, rugs, and various artefacts.
 SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1939*, Hanoi: 1940, p.14.

⁴⁴¹ Pierre Gourou, *Land Utilization in French Indochina*, (New York: Institute of Pacific Relations, 1945), p.397.

Gourou argued that the development of rural manufacturing was a significant component of the Tonkinese economy, even before the French took control of the country: “there is no doubt that the Tonkin delta is the most active centre of artisan industries in Indochina”.⁴⁴² These artisan industries ranged from textile production (such as silk) to food processing (including alcohol and sweets) and wood industries, paper industries, metallurgy, etc. As Table 6.1 shows, by the end of the time period 1900-1940, five times as many people were involved in rural handicraft industries in Tonkin than in Cochinchina. Unfortunately data has not been found for these same activities before 1939. Although it is consequently not possible to evaluate the changes in the scale of that industry, Gourou's and Mitchell's work suggest the relationship we see in Table 6.1 was consistent in this time period.

Gourou suggested that all these industries were not for the purposes of creating market demand or exporting goods so much as to supply the domestic demand for these goods. Often the industries were localised in particular villages: a “monopoly of one village in one craft”.⁴⁴³ The situation was different in Cochinchina where handicraft production was minimal, even for the purpose of satisfying domestic needs. One official *Annuaire Général Administratif* presented the argument that in 1910 “local industry [wa]s not important [in Cochinchina]”.⁴⁴⁴ Table 6.1 shows that even at the end of the period it remained an unimportant activity, relative to Tonkin's. This diverging pattern is reminiscent of the differing production patterns of the agrarian sector. Tonkin's industrial production was more diversified, whereas Cochinchina did not engage in such a domestic industrial effort. Presumably, agrarian specialisation was considered more important than even minimal industrialisation and peasants may have obtained these 'industrial' goods through international trade rather than domestic production.

Table 6.1's overview of the number of licensed professionals provides further evidence to make sense of the organisation of the handicraft sector. Traditional industries were more numerous in Tonkin, but proportionately far more of Cochinchina's artisans were licensed professionals. The difference between licensed and unlicensed artisan is

⁴⁴² *ibid*, p.395.

⁴⁴³ *ibid*, p.397; this specialisation is still present in today's Tonkin: villages surrounding Hanoi form a network where each village specialised either in pottery, lacquer, textiles, weaving, etc.

⁴⁴⁴ ANOM: BIB AOM A/39 *Annuaire Général Administratif, Commercial et Industriel de l'Indochine*, Tome 1, Partie Commerciale et Industrielle, l'Année 1910, p.34.

based on whether or not the artisan had to pay the government's license fees. If they did not, it was generally due to the temporary nature of their work (using it to complementary source income to agricultural work). In Chapter 4, we saw that much of Cochinchina's local budget revenue came from license fees. According to Table 6.1's information, it is very possible that the small share of license fee revenue in Tonkin was the result of many of these professionals being only temporarily employed in this sector, using it to reduce the population pressure on the agrarian sector.

The greater significance of licensed professionals in Cochinchina seems to suggest that the development of these industries differed between the two regions. The traditional sector in Tonkin remained based on historical village networks and temporary occupation in the slack season or by underemployed household members, whereas in Cochinchina it became a trade, a specific occupation, dependent on market demand. Mitchell argued that the strength of the traditional industries in Indochina was based on the fact that the "economic development that might have raised the purchasing power of the native population" did not happen.⁴⁴⁵ Rural manufacturing in Tonkin was a side-occupation necessary because population pressures meant that income earned from working on the field was insufficient to guarantee adequate purchasing power. The greater presence of licensed professionals in Cochinchina suggests that the role of rural manufacturing there was not the same: fewer peasants engaged in it but when they did, they specialised in their trade.

Detailed evidence on rural manufacturing activity is limited, but the case of sericulture can be somewhat analysed. According to Table 6.1, half of those involved in Tonkin's rural industries were engaged in textile production, such as sericulture, so that this industry can act as an illustration of this sector. Table 6.2 gives a brief indication of the scale of the silk industry, an industry in which production required many value-adding processes before obtaining the final product of silk fabric, or even simply of silk thread. The government controlled part of the silk industry in French Indochina and records exist of the distribution of silkworm eggs. These data cannot account for sericulture using non-controlled silk worms, but this table shows the way in which the colonial administration tried to influence trends in a traditional industrial activity. Sponsored sericulture was a much more prevalent activity in Tonkin than it was in

⁴⁴⁵ Mitchell 1942(2), op.cit., p.153.

Cochinchina, hinting at the prior establishment of sericulture through non-sponsored means. The rate of growth in the government-sponsored part of this industry was predictably much higher in Cochinchina than in Tonkin, but Cochinchina remained a small player.

Table 6.2: Silkworm Egg Distribution in Tonkin and Cochinchina, 1921-1936, (1000s)

	Tonkin	Cochinchina
1921	5 023	245
1922	5 365	425
1923	6 429	496
1924	2 814	644
1925	5 468	1 170
1926	4 046	1 335
1927	6 046	1 367
1928	5 944	1 221
1929	6 753	1 942
1930	9 657	1 834
1931	5 250	1 970
1932	4 746	1 829
1933	3 134	1 878
1934	4 365	1 756
1935	5 125	1 932
1936	4 498	1 448

LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine, "Agriculture, Elevage et Forêts", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1922-1939.

In 1921, it is evident that the distribution of eggs was for a small-scale attempt at sericulture in Cochinchina. This suggests that sericulture in Cochinchina, unlike in Tonkin, was probably not a traditional activity. By 1936, although the number of eggs distributed had increased six fold, it remained low especially relative to what was distributed in Tonkin. It seems that although there was some interest in this industry, it reflected Cochinchina's more limited engagement in rural manufacturing activities. Growth in government-sponsored distribution of eggs in Cochinchina may also fit with

the larger number of licensed professionals: more would have been eligible for the scheme. The stability of supply in Tonkin, where sericulture had been established for longer, could reflect stability in demand or a failed attempt by the government to replace an existing sector. We are tempted to reject the second hypothesis because the distribution would have decreased more significantly if local producers had decided to discontinue their use of government-sponsored eggs. This reinforces Chapter 4's argument that colonial policy presumably had a limited impact on the economic performance of the two regions, as policy generally followed/responded to pre-existing patterns.

Henry provided some further information on silk production. He noted that in 1930, the area occupied by mulberry trees in Tonkin covered 150 km² and average annual total output from sericulture yielded about 115 000 kilograms of silk thread. In Cochinchina there was only 4.5 km² of mulberry trees in 1920. By 1930, this had grown to 12 km² and the annual output was 12 000 kilograms of silk thread,⁴⁴⁶ but this remained much less than was produced in Tonkin. Considering that silk thread was a high value good and that prices were rising through the 1920s,⁴⁴⁷ Tonkin's sericulture production could have been a significant industry, both for the domestic and the international markets. Despite the growth in the industry and rising foreign demand, Tonkin's most likely markets for the product of sericulture were either the domestic market, or the Chinese market. In 1931, only 8 000 kilograms of threads were exported from Tonkin-Annam and this included exports of threads other than silk.⁴⁴⁸ Considering the output of Tonkin's industry alone, only a very small fraction was exported. Once more, Tonkin's diversified production was generally oriented towards satisfying domestic demand.

According to Sugihara, a large rural manufacturing sector suggests "labour absorption at the peasant household level" and is in line with an industrious path of development in Tonkin.⁴⁴⁹ According to Nørlund, however, it can also suggest a more

⁴⁴⁶ Yves Henry, *Economie agricole de l'Indochine*, (Hanoi: Gouvernement Général de l'Indochine, Publié à l'occasion de l'Exposition Coloniale Internationale de Paris, 1932) p.397-399.

⁴⁴⁷ Federico Giovanni, *An Economic History of the Silk Industry, 1830-1930*, (Cambridge: Cambridge University Press, 1997), p.32.

⁴⁴⁸ Appendix 6.

⁴⁴⁹ Kaoru Sugihara, "Labour-Intensive Industrialisation in Global History", *Kyoto Working Papers on Area Studies*, No. 1, 2007, p.6.

“autarkic colonial system”.⁴⁵⁰ It is possible that the handicraft production in Tonkin allowed full labour absorption and further encouraged diversification for self-sustenance. Unlike Mitchell who argued that Tonkin's handicraft sector had resisted the colonial era, Chesneaux argued that handicraft production declined during the colonial era “because of the gradual impoverishment of the peasantry” and the decreased importance of trade with China, due to high customs taxes.⁴⁵¹ If such a decline happened, then the figures in Table 6.1 represent a smaller gap than may have existed in the 1910s. However, because the gap between Tonkin and Cochinchina remained significant, it is clear that production pattern divergence persisted, at least until 1939.

6.3) Modern industries

The ASI did not record any data for modern industrial production until 1931, apart from the activities of the mining sector and the production of cement and salt. Although it is clear from these official records that industrial activity was not considered significant until the 1930s, other records show that many of the industries were set up in the immediate aftermath of WW1. Other industries were developed even earlier. The government did not openly encourage these ventures, but the need to develop some self-sufficiency in case of conflict meant their development was not prohibited.⁴⁵² Records show that as early as 1907, there were “85 enterprises in Tonkin, representing an investment of 41.7 million francs”.⁴⁵³ These industries were mainly 'transformation industries', transforming agricultural products into processed agricultural goods.

Modern industries were set up around the main urban centres, mainly Saigon-Cholon and Hanoi-Haiphong.⁴⁵⁴ According to contemporary French authors, the most important industrial ventures of the time were concentrated in agro-industries,

⁴⁵⁰ Irene Nørlund, “The French Empire, the Colonial State in Vietnam and Economic Policy: 1885-1940”, *Australian Economic History Review*, Vol.31, No.1, March 1991, p.72.

⁴⁵¹ Jean Chesneaux, “L’implantation géographique des intérêts coloniaux au Vietnam et ses rapports avec l’économie traditionnelle” in Jean Chesneaux, Georges Boudarel & Daniel Hémerly’s *Tradition et révolution au Vietnam*, (Paris: Editions Anthropos, 1971), p.83-84.

⁴⁵² Mitchell 1942(2), op.cit., p.199.

⁴⁵³ Pierre Brocheux & Daniel Hémerly, *Indochine: La colonisation ambiguë 1858-1954*, (Paris: Editions La Découverte, 2001), p.124.

⁴⁵⁴ Robequain, op.cit., p.169.

particularly the processing of foodstuffs in rice and saw mills.⁴⁵⁵ Since Indochina was a predominantly agrarian economy, the potential for industry rested mainly on adding value to these agricultural goods, for example through distilleries.⁴⁵⁶ Both regions were engaged in roughly similar modern industrial activities: distilleries, textile, glass, paper and matches factories, as well as shipbuilding workshops. Non-official research shows that the development of modern industrial ventures was generally more important in Tonkin than in Cochinchina. While Indochinese industrialisation in this time period may have been minor compared to that of Western economies or Japan,⁴⁵⁷ it was much more substantial than in neighbouring Southeast Asian economies, as highlighted in this chapter's introduction.⁴⁵⁸

a. Mining sector

Most colonial industrial endeavours in these other economies were oriented towards the domestic market and were dependent on the resources available.⁴⁵⁹ For example, because tin was one of Malaya's most significant exportable products, tin smelting was the main industrial undertaking of the Malay economy by the late 1920s.⁴⁶⁰ Mitchell commented that there was “virtually no modern industries other than the extractive and processing enterprises required to exploit the country’s resources and prepare them for marketing”.⁴⁶¹ Such industrial development is exemplified in Indochina's mining industry.⁴⁶² Although mines had been exploited prior to the colonial period, Goudal, Mitchell and Shepherd all argued that scientific mining operations only dated back to French involvement in the sector.⁴⁶³ There is no doubt that the booming mining industry was a significant trade-oriented sector. By 1939, Indochina was the 10th largest exporter of coal in the world; it exported over two thirds of its coal output and its entire production of metallic

⁴⁵⁵ Jean Chesneaux, *Contribution à l'histoire de la nation Vietnamienne*, (Paris: Editions Sociales, 1955(2)), p.172.

⁴⁵⁶ ANOM: BIB AOM A/39, op.cit.

⁴⁵⁷ Mitchell 1942(2), op.cit., p.160-161.

⁴⁵⁸ *ibid*, p.173.

⁴⁵⁹ *ibid*, p.173.

⁴⁶⁰ *ibid*, p.182-185.

⁴⁶¹ *ibid*, p.191.

⁴⁶² Chesneaux 1955(2), op.cit., p.171.

⁴⁶³ Jean Goudal, *Labour Conditions in Indo-China*, (Geneva: International Labour Office, 1938), p.108; Mitchell 1942(2), op.cit., p.154 & Shepherd, op.cit., p.14.

minerals.⁴⁶⁴ In fact, in 1928, most of total mining output was exported.⁴⁶⁵ Chesneaux argued that the mining sector's focus on exports was detrimental to Indochina as a whole: although coal was extracted from Northern mining concessions, trains in Cochinchina had to rely on wood since the coal was exported to European and other Asian nations first.⁴⁶⁶

Table 6.3: Mining Concessions in Indochina, 1925

Type of Mine	Number of Concessions	Area (km ²)
Coal	88	1321
Zinc & Lead	92	533
Lead & Silver	14	90
Tin & Tungsten	32	95
Tin	14	65
Gold	28	177
Copper	11	75
Iron	14	84
Antimony	4	18
Mercury	4	28
Phosphates	9	40
Graphite	1	1
SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, <i>Bulletin Economique de l'Indochine Année 1926</i> , Hanoi: 1927, p.652.		

Table 6.3 illustrates the number and scale of Indochinese mineral concessions in 1925. Out of 1 863 permits for mining concessions given out in 1925, 1 478 were for areas in Tonkin.⁴⁶⁷ These data show that there were a great many types of minerals available in Tonkinese soil, as seen in Map 3a. The majority of the mines were concessions from the colonial government to European, mainly French, companies around the mid 1920s. For example, 60% of coal production in Indochina was controlled

⁴⁶⁴ E. Willard Miller, "Mineral Resources of Indochina", *Economic Geography*, Vol.22, No.4, October 1946, p.278.

⁴⁶⁵ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1929*, (Hanoi: 1930), p.828.

⁴⁶⁶ Chesneaux 1955(2) op.cit., p.179.

⁴⁶⁷ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine, Année 1926*, (Hanoi: 1927), p.651.

by the Société Française des Charbonnages du Tonkin in 1929.⁴⁶⁸ The mines of Tonkin were generally located in the mountainous areas of the province. The French's extensive building of railroads (documented in Chapter 4) in Tonkin in part facilitated the movement of goods out of the mines. These mines were then developed and production increased rapidly. Table 6.4 shows this growth for the three main mined resources.

Table 6.4: Value of the 3 Main Mined Resources, 1913-1933, (1000\$)

	Combustible*	Zinc & Lead	Tin & Tungsten
1913	2 400	1 321	134
1914	3 120	1 300	310
1915	3 250	2 500	600
1916	3 190	4 400	600
1917	3 220	2 700	890
1918	3 470	1 300	700
1919	3 590	730	240
1920	3 900	210	290
1921	6 580	290	370
1922	6 906	670	550
1923	7 571	1 239	659
1924	8 705	1 668	894
1925	9 823	2 520	1 206
1926	9 478	3 718	1 435
1927	11 410	2 924	1 804
1928	14 202	2 082	1 843
1929	14 371	1 790	1 950
1930	13 900	575	1 673
1931	11 650	162	1 067
1932	10 400	225	1 135
1933	8 214	172	1 624

* combustible material was mostly coal.
LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Industrie", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927 -1939.

⁴⁶⁸ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine, Année 1929*, (Hanoi: 1930), p.830.

Figure 6.1 illustrates the evolution of the annual output of mined combustible material, the majority of which was coal. Coal was the main mineral resource, accounting for three quarters of the total mining output in Indochina.⁴⁶⁹ These values are for all mines in Indochina, but the vast majority of these mines were located in Tonkin. In fact, on average, between 1913 and 1922, only 1.2% of mined combustible materials came from sources outside of Tonkin.⁴⁷⁰

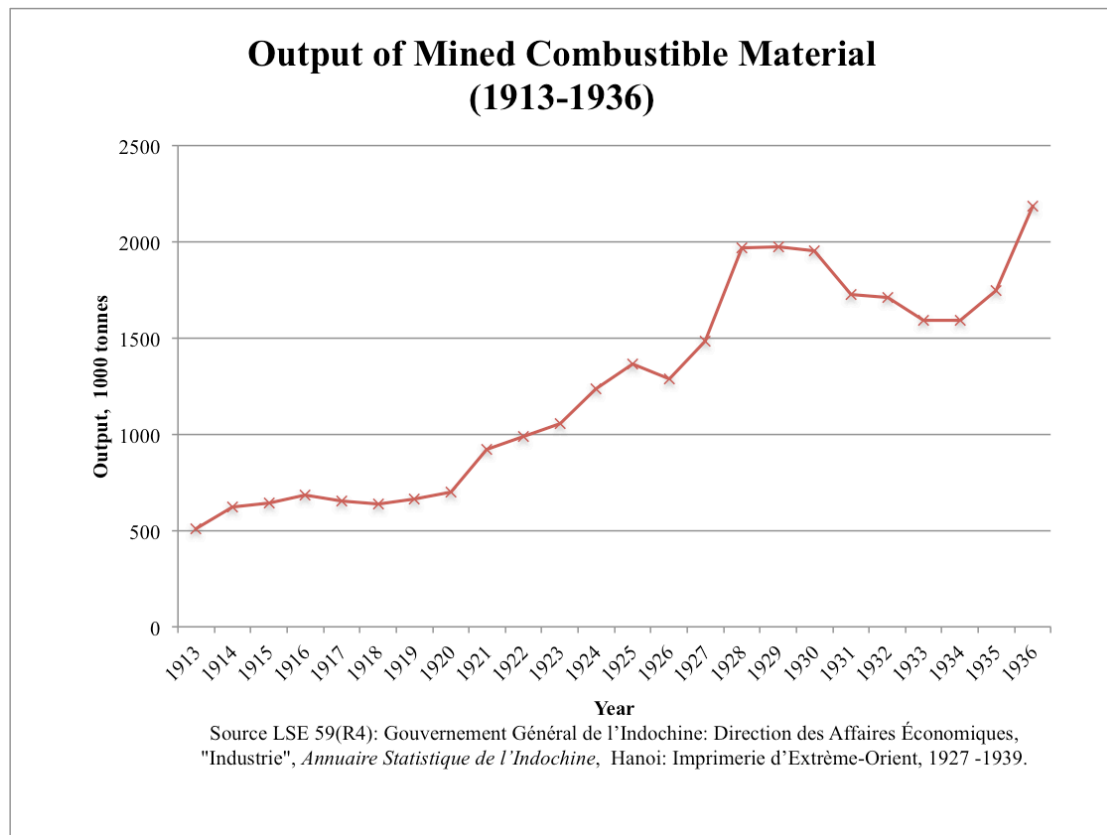


Figure 6.1

Coal production in Indochina grew at an average annual growth rate of just over 7%. This average growth is also seen in the value of this output. From Table 6.4, the value of combustible minerals grew at an average annual growth rate of just over 7.5%. However, in particular in the years after 1930, value decreased more than output, showing that prices were falling faster than production. Figure 6.1 shows it took almost 6 years to recover from the decline in coal output of 1930. Touzet argued that the

⁴⁶⁹ Miller, op.cit., p.270.

⁴⁷⁰ LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, *Annuaire Statistique de l'Indochine 1913-1922*, (Hanoi: Imprimerie d'Extrême-Orient, 1927).

Depression set the mining sector back by ten years.⁴⁷¹ Not only were prices falling (value was falling faster than output), but demand from Japan, which had previously been a significant importer, also decreased. Nonetheless, Figure 6.1 shows a recovery in coal, and Figure 6.4 shows that value of mined tin and tungsten was steadily increasing despite the Depression: the value of production of tin and tungsten grew at an annual average growth rate of 21%. Although data are not available for the output of these minerals, we assume the faster growth in the value of the production was due to increasing production rather than rising prices. Initial production of these minerals was very low and tin mines were subsequently discovered in Laos, although Indochina was a small player, especially compared to Malaya.⁴⁷² From these data, it is clear that the mining sector was significant and growing during the colonial era. It is also clear that this sector was almost uniquely Tonkinese: “Tonkin’s mineral production [was] about 82.6% of Indochina’s”.⁴⁷³

The growth of this sector throughout this time period, and its recovery after 1934, are clearly shown in the evolution of the number of staff employed in the industry, as seen in Table 6.5. We argue that the growth in this industrial sector, both in output and employment, may have reduced the pressure of high population densities in Tonkin, by providing alternative work to the underemployed peasant population.

⁴⁷¹ André Touzet, *L'économie Indochinoise et la grande crise universelle*, (Paris: Marcel Giard, 1934), p.68.

⁴⁷² Mitchell 1942(2), op.cit., p.154 & Touzet 1934, op.cit., p.74.

⁴⁷³ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1938*, (Hanoi: 1939), p.1251.

Table 6.5: European and Indigenous Workers in the Mining Sector, 1924-1937

	European Staff	Indigenous Staff
1924	314	28 340
1925	335	36 000
1926	341	34 000
1927	375	40 670
1928	437	54 955
1930	370	45 700
1931	350	36 000
1932	250	33 500
1933	220	35 400
1934	200	34 800
1935	201	39 000
1936	212	43 850
1937	271	49 200

SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine*: Année 1929, p.907 & Année 1938, p.1292.

The use of the mining sector as a complement to farming was acknowledged by colonial researchers⁴⁷⁴ and Giacometti noted that almost “75% of the workforce [in the Tonkinese mines] were half time workers, and one third at least of the workers had strong links with the rural world of their original village”.⁴⁷⁵ In other words, population pressures could be alleviated by the ability to engage in temporary work. Although, admittedly, the mining sector was rather small, employing only 1% of the active labour force, its fast growth provided an outlet for mounting population pressure in an economy that maintained strong ties to its agrarian sector. This seems to have been the case in other neighbouring economies. The Dutch Indies' policies with regards to mining were similar to those in Indochina, insofar as mining rights only existed when granted via a specific concession,⁴⁷⁶ but the dualism of the Dutch system meant that this policy did not apply to

⁴⁷⁴ Goudal, op.cit., p.112.

⁴⁷⁵ Jean-Dominique Giacometti, “Wages and Consumer Price for Urban and Industrial Workers in Vietnam under French Rule (1910-1954)” in Jean-Pascal Bassino, Jean-Dominique Giacometti and Konosuke Odaka (eds) *Quantitative Economic History of Vietnam 1900-1990*, (Hitotsubashi: Institute of Economic Research, 2000), p.186.

⁴⁷⁶ Alex L. Ter Braake, “Mining in the Netherlands East Indies”, Bulletin 4 of the Netherlands and Netherlands Indies Council, (New York: Institute of Pacific Relations, 1944), p.22.

the native population, which could carry out mining on their land, as long as it remained small scale.⁴⁷⁷ Therefore in the Dutch Indies too, mining activity could be used to supplement income from the agrarian sector.

The significance of the mining sector is also shown in the limited data available on investment. As we can see from Table 6.6, investment in the mines was very substantial in Tonkin but almost non-existent in Cochinchina, as might be expected considering the evidence showing it was almost uniquely a Tonkinese sector.

Table 6.6: Investment in the Mining Sector, 1924-1928, (1000\$)

	Investment from Domestic Sources			
	Mineral Products Processing		Mines	
	Cochinchina	Tonkin	Cochinchina	Tonkin
1924	10	36		33
1925	350			74
1926	70	264		750
1927	120	26		6
1928	1 040		18	436
	Investment from International Sources			
	Mineral Products Processing		Mines	
	Cochinchina	Tonkin	Cochinchina	Tonkin
1924		149		2 576
1925	1 419			919
1926		588		2 293
1927		117		2 734
1928	78	141		40 481

SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1929*, Hanoi: 1930, p.808.

The sector was dominated by a few very large French firms, mainly the Société Française des Charbonnages du Tonkin, which employed almost 26 000 workers and the Société des Charbonnages du Dong-Trieu, which employed almost 11 500 workers by the end of 1938.⁴⁷⁸ Both of these companies were Tonkinese and neither of them employed

⁴⁷⁷ *ibid*, p.27.

⁴⁷⁸ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1938*, (Hanoi: 1939), p.1262-1264.

any workers in Cochinchina, since no such mineral resources were found there. It is therefore unsurprising that large sums from international investors went to Tonkin.

Surprisingly, perhaps, there was a significant share of investment going to Cochinchina for the processing of mineral products. This implies that despite resources being mined in Tonkin, mining resources were imported to Cochinchina (either from Tonkin or abroad) for further processing. The data suggest that Cochinchina's industrial sector may have been active in other types of modern manufacturing, using mining inputs from Tonkin or other sources.⁴⁷⁹ In fact, according to Appendix 6, between 1930 and 1933, Cochinchina exported almost the same value of metallurgic goods as Tonkin, supporting the presence of a processing industry in the region. It is not possible to know whether or not these data fail to include information on existing processing ventures in Tonkin, but it seems there were significant flows to such processing ventures there too, especially from international sources. Tonkin's mining sector might have helped alleviate the pressure of high population densities, but its growth could not close the economic gap with Cochinchina. Firstly, it remained a small sector and secondly, Cochinchina's potential industry to add value to imported mining products would have at least partly counteracted Tonkin's growing industrial sector's ability to close the economic gap.

b. Other modern industries

In other modern industries, Tonkin was still a more significant player than Cochinchina, although again the sector's performance and size was insufficient to close the economic divide between the two regions. Rice mills, saw mills, match factories and distilleries were key industrial ventures,⁴⁸⁰ and these were also significant in Cochinchina. This type of industrial activity was common to other Southeast Asian economies. In Burma, until 1930, 90% of “industrial establishments” were rice mills, accounting for almost 70% of industrial employment.⁴⁸¹ Hlaing argued that the development of these industries was a natural consequence of the country's dependence on rice production. Table 6.7 shows investments in these types of modern industrial ventures in Indochina, from both domestic and international sources for the period 1924-1928.

⁴⁷⁹ Appendix 7 shows that Cochinchina imported far more combustibles and metals than Tonkin.

⁴⁸⁰ Colonel Albert Alfred Leon Duboc, *L'Indochine contemporaine*, (Paris: Charles-Lavauzelle & Cie, 1932), p.54.

⁴⁸¹ Hlaing, op.cit., p.106.

Compared to investment in mining seen in Table 6.6, most of these industrial activities seem to have received rather small sums of investment, explaining why these data were presented in categories that encompassed so many varied activities. In food and processing of oleaginous substances, Cochinchina seems to have had the upper hand, as one would expect, since it produced most of the rice and rubber of Indochina. However, in processing of animal products and in production of water and electricity, investment was more equal between the two regions.

Table 6.7: Investment in Modern Industries, 1924-1928, (1000\$)

	Investment from Domestic Sources							
	Food Industries		Processing of Oleaginous Substances, Textile & Other		Processing of Products from Animal Origin		Water and Electricity	
	Cochin-china	Tonkin	Cochin-china	Tonkin	Cochin-china	Tonkin	Cochin-china	Tonkin
1924	930							
1925	206					256	250	
1926	170		950		255	250		
1927			90		200			
1928			25	1 450				
	Investment from International Sources							
	Food Industries		Processing of Oleaginous Substances, Textile & Other		Processing of Products from Animal Origin		Water and Electricity	
	Cochin-china	Tonkin	Cochin-china	Tonkin	Cochin-china	Tonkin	Cochin-china	Tonkin
1924	1 685	2 279	595	99			496	743
1925	0		501				418	309
1926	764				47		59	412
1927	219		1 172		62			
1928					31			

SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1929*, Hanoi: 1930, p.808.

The short time period of these data do not allow us to capture the evolution of the industrial sector. Instead, we will look at specific industries in more detail to get a better picture. We will show that the patterns of production highlighted in the agrarian sector and handicraft production continued in the modern industrial sector. Industrial activity in Cochinchina was in fact an extension of its specialisation in rice production. In Tonkin, industry produced a number of goods that seem to have been mainly oriented towards satisfying the needs of the domestic market, suggesting an extension of its diversification production pattern. This phenomenon reinforces our hypothesis that industrial developments helped reduce the perceived population pressures in Tonkin.

Processing industries

Cochinchina's large surplus of rice made Indochina the third largest exporter of rice during this period, as we saw in Chapter 5. As with Burma, this large production of rice resulted in a large supply of rice mills. Significant growth in the number of mills in this region's industry occurred between 1900 and 1930, mainly to do with the expansion of Chinese-owned mills.⁴⁸² In Tonkin, small-scale mills were on operation in Haiphong, Hanoi, Dam-Dinh and Hai-Duong, but there were fewer mills than in Cochinchina and they were smaller.⁴⁸³ Dumont argued that the Tonkinese peasants generally processed rice for self-consumption themselves, unlike in Cochinchina, where milling was part of the process required for the export of rice.⁴⁸⁴ This aligns with the landholding patterns and labour use previously discussed: the majority of Cochinchinese peasants were day labourers. They did not need to (or were not allowed to) process their own rice; they obtained it as part of their wage or were made to purchase it from their employers. In Tonkin the greater prevalence of tenant farmers or owners would have reduced this tendency and increased self-milling. Consequently, the large-scale rice mill industry was stronger and more widespread in Cochinchina than in Tonkin.

Because Cochinchina was engaged in such extensive specialisation of rice production and the processing industry was linked to its tradable surplus output, rice milling was affected by the Depression. Touzet argued that mills reduced the quantities of

⁴⁸² George Maspero, *Un empire colonial français l'Indochine, Tome II Indochine française – l'Indochine économique l'Indochine pittoresque*, (Paris: Les Editions G. Van Oest, 1930), p.194-195.

⁴⁸³ R. Dumont, *La culture du riz dans le delta du Tonkin*, (Paris: Société d'éditions géographiques, maritimes et coloniales, 1935), p.383.

⁴⁸⁴ *ibid*, p.383.

rice the mills processed because of the economic turmoil.⁴⁸⁵ He also argued that the industries least affected by the crisis were the ones producing for self-consumption or domestic consumption.⁴⁸⁶ This would have favoured Tonkin's milling activity. However, Table 6.8 shows that the recovery of this sector in Cochinchina may have been swift. Cholon was Cochinchina's main rice processing area. The Chinese owned and operated a large part of the rice market and most mills were located in Cholon. Cholon's rice mills' operations increased rapidly between 1931 and 1936. This suggests a fast recovery in the rice-milling industry and shows the link between production and processing of rice for trade.

Table 6.8: Rice Mills, Monthly Average of Working Mills & of Working Days in Cholon, 1931-1936

	Monthly Average of Number of Rice Mills	Monthly Average of Days in Use
1931	22	383
1932	21	411
1933	23	434
1934	25	548
1935	26	517
1936	27	534

LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine, "Industrie", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1922-1939.

This link between specialisation and processing can also be seen in the production of rice alcohol in Indochina, which was the output of another processing industry. The alcohol industry had historically been important in Indochina, hence Doumer's establishment of the alcohol excise board to maximise public revenue. For example, in 1912, there were already 3 alcohol distilleries in Hanoi, Nam-Dinh and Ha-Duong, which together employed almost 500 workers and were funded by investment of nearly 8 million francs.⁴⁸⁷ Unfortunately, information on the number of these distilleries in Cochinchina has not been found. Nonetheless, Table 6.9 provides some information on the activity of distilleries, in both Tonkin and Cochinchina in the 1930s. The authorities

⁴⁸⁵ Touzet 1934, op.cit., p.84.

⁴⁸⁶ *ibid*, p.84-85.

⁴⁸⁷ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1913*, (Hanoi: 1914), p.119.

do not appear to have recorded that information for previous years and we cannot evaluate the evolution of this industry. Some authors have suggested that the main distilleries of French capital were located in Tonkin,⁴⁸⁸ but we must remember that this may have been due to the differing organisation of the rice alcohol excise board, as discussed in Chapter 4. Indeed, in Tonkin the excise boards had granted a monopoly of production to French firms, whereas in Cochinchina, rice alcohol was mainly under the dominion of the Chinese, who had historically been the main players in the processing of rice. It is unlikely that Cochinchina would have had a less significant alcohol industry, considering Table 6.9, which shows that both Tonkin and Cochinchina's alcohol industry used a relatively similar quantity of rice in the mid-1930s.

Table 6.9: Annual Average Amount of Primary Products Used in Distilleries, 1934-1936, (Tonnes)

	Rice and Derived		Molasses Sugar
	Tonkin	Cochinchina	Cochinchina
1934 - 1936	25 266	29 056	6 465
LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Economiques, "Agriculture, Elevage et Forêts", <i>Annuaire Statistique de l'Indochine</i> , Hanoi: Imprimerie d'Extrême-Orient, 1937.			

This suggests that the industrial output from these distilleries would have been similar in the two regions. In addition to rice, Cochinchina used molasses sugar for rum production. It is unlikely that the authorities failed to record the use of such products in the Tonkinese distilleries. Certainly, the amounts used were still relatively small, but their presence is of interest. Firstly, it demonstrates that Cochinchina's distilleries had flexible production possibilities. More than just rice alcohol was produced in the Cochinchinese distilleries. Secondly, it suggests that on the whole, the distillery industry in Cochinchina might have been more significant than it was in Tonkin. The distilleries could thus service a greater market. If we adjust this for the difference in the populations of the two regions, we can see that distilleries in Cochinchina used more than twice the raw material per capita than Tonkin's. It seems that rice-processing industries were more significant in

⁴⁸⁸ Maspero Tome II, op.cit., p.196.

Cochinchina than in Tonkin. This is not surprising: it was a result of Cochinchina's specialisation in rice cultivation.

Other examples of processing industries were the salt and sugar industries and an analysis of these industries add nuance to our previous conclusions. The salt industry was significant in both regions, even before the French conquest: salt was traditionally needed for dietary reasons. For example, it is a key ingredient in the production of nuoc nam (Vietnamese fish sauce) crucial to the Indochinese diet. Figure 6.2 shows the evolution of this industry in both Tonkin and Cochinchina.

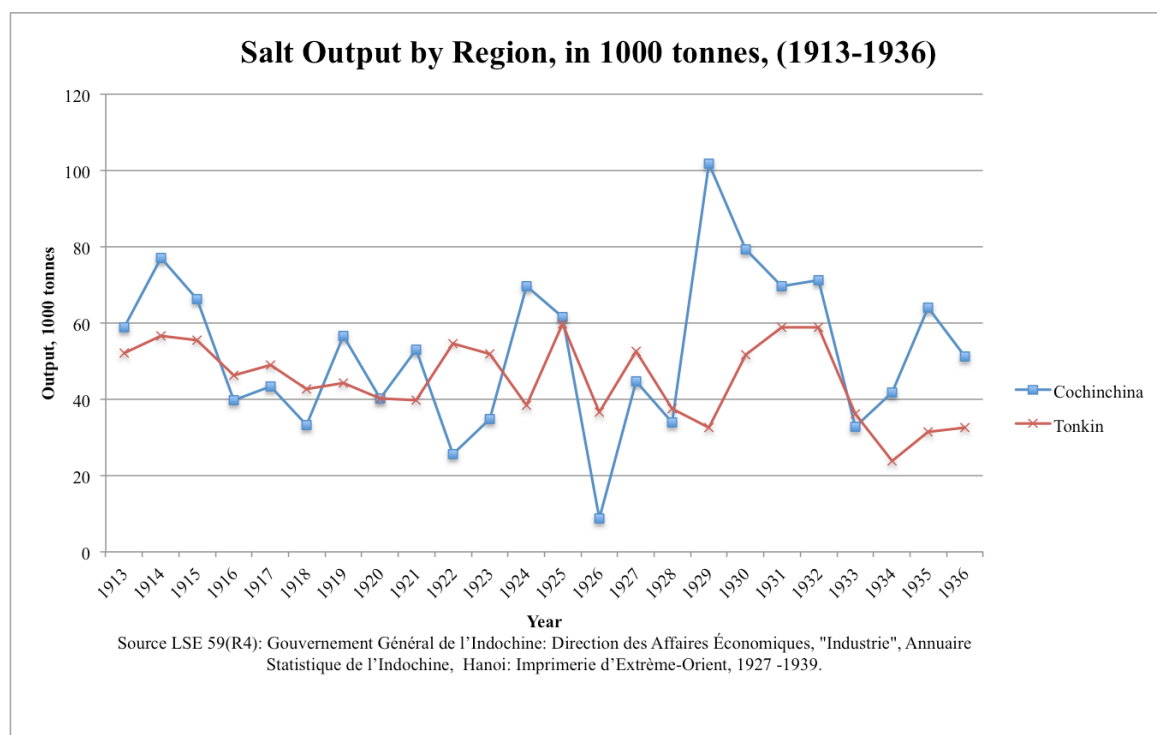


Figure 6.2

As we can see, this industry's output was very variable, but there is no clear dominance of one region over the other, nor do the regions seem to have different trade orientation for the output of this industry. Between 1930-1933, Cochinchina exported no salt.⁴⁸⁹ Tonkin-Annam exported salt, but since Annam produced more than half the total salt output of Indochina, most of the exported salt was likely to have originated there.⁴⁹⁰ We argue that it is likely that salt output was mainly aimed at both regions' domestic

⁴⁸⁹ Appendix 6.

⁴⁹⁰ LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Economiques, "Industrie", *Annuaire Statistique de l'Indochine Vol.2*, (Hanoi: Imprimerie d'Extrême-Orient, 1931), p.163.

markets. In other words, Cochinchina's processing industries were stronger than Tonkin's when they were associated with its specialisation in rice.

The sugar industry, contrary to the salt industry, was only started in the interwar era. In 1930, there were three sugar-refining plants in Saigon, the largest of which employed about 700 employees.⁴⁹¹ It was a rather small source of employment and output was low, especially compared to the Dutch East Indies' large output of sugar. This industry was predominantly located in Cochinchina, although a small amount of sugar was produced in Southern Annam. The industry did grow rather fast: starting with production of just over 3 000 tonnes of sugar in 1930 and growing to nearly 9 000 tonnes in 1936,⁴⁹² an average annual growth rate of almost 20%. We suggest that this industry was an not-so successful attempt by the government to expand Cochinchina's exportable basket of goods.

Table 6.10: Exported Quantity of Raw and Refined Sugar, 1931-1937, (Tonnes)

	Raw	Refined
1931	19	3
1932	1	5
1933	5	13
1934	3	203
1935	795	7
1936	1 682	32
1937	4 821	4

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Economiques, *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1930-1938.

Although an increasingly large share of output was exported, this industry was almost uniquely oriented towards the domestic market, as Table 6.10 shows: in 1936 9 000 tonnes of sugar were produced but only 1 682 were exported. It also seems clear that this industry's output was either severely affected by the Depression, or was rather small until 1934. 1934's tentative at exporting refined sugar was apparently unsuccessful and exports of raw sugar remained much more significant until the end of the time period. Cochinchina's sugar industry might have been an attempt at finding a new exportable good, but it is not an example that lends credence to Cochinchina's industrial strength. In

⁴⁹¹ Shepherd, op.cit., p.19-20.

⁴⁹² LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Economiques, "Industrie", *Annuaire Statistique de l'Indochine*, (Hanoi: Imprimerie d'Extrême-Orient, 1932-1939).

general, it seems that processing industries in Cochinchina, with the exception of salt, were generally aligned with its production pattern of specialisation. In Tonkin, households did their own processing or when processing industries on a larger scale existed, like salt, output was aimed at the domestic market. In both cases, this aligns itself with Tonkinese patterns of reaching for self-sufficiency in production.

Cement

The construction industry and the production of associated construction materials was also important in Indochina, even before the need for some degree of self-sufficiency in the aftermath of WW1 and the Depression was felt. For example, as early as 1913, six workshops produced construction materials and these employed 900 workers.⁴⁹³ This small-scale industry soon experienced substantial growth. As an indicator of this growing sector, we use the cement industry, which was one of the most important construction industries in Indochina. Cement was “largely monopolized by the Société des Ciments Portland Artificiels de l’Indochine”.⁴⁹⁴ This industry is quite old: it was initially founded in 1899 in Tonkin.⁴⁹⁵ By 1938, the company employed 4 000 workers and supplied “the bulk of domestic requirements”, in addition to significant exports.⁴⁹⁶ The initial reason for such an industry was to meet the needs of the substantial public works undertaken, which required large numbers of products derived from cement.⁴⁹⁷ Figure 6.3 shows the growth of the cement output in Indochina in the period 1913-1936.

⁴⁹³ SOAS: French Indochina, Service de la Statistique Générale de l’Indochine, *Bulletin Economique de l’Indochine Année 1913*, (Hanoi: 1914), p.119.

⁴⁹⁴ Mitchell 1942(2), op.cit., p.157.

⁴⁹⁵ Shepherd, op.cit., p.21.

⁴⁹⁶ Mitchell 1942(2), op.cit., p.157.

⁴⁹⁷ Shepherd, op.cit., p.20 & Maspero Tome II, op.cit., p.193.

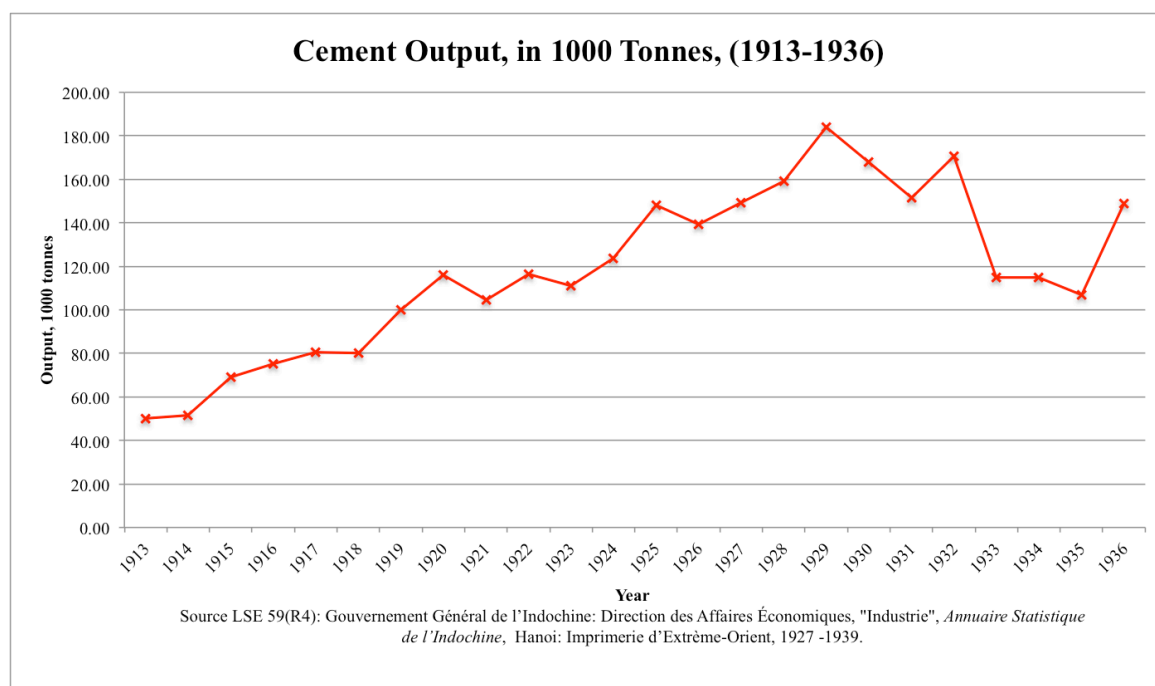


Figure 6.3

This industry grew rather rapidly, although predictably a decrease was experienced in the aftermath of the Depression. Over the whole period, there was an average annual growth rate of 6%. Although this industry was not as significant a source of employment as the mining sector, in terms of weight, its growth record was quite high and on par with that of other colonies in Southeast Asia. In 1938, Thailand produced 92 000 tonnes of cement, while Taiwan produced 148 800 and the Philippines 167 000.⁴⁹⁸ Indochina, as illustrated in Figure 6.3, was thus one of the largest producer in the region. This industry was based in Tonkin: Portland cement was uniquely located in Haiphong.⁴⁹⁹ Touzet argued that most of the output of this industry was directed at the domestic market.⁵⁰⁰

As we can see from Table 6.11, this seems to have been the case, at least during the period 1931-1936. If we relate this to data in Figure 6.3, we find that less than a third of total cement output was exported. This may have been a result of the Depression and subsequent decline in trade activity. However, Touzet believed that in fact, in the aftermath of the Depression exports *increased* (as seen in Table 6.11) and it was domestic production that decreased, suggesting that a low share of exported cement reflects the

⁴⁹⁸ Members of the IPR International Secretariat, op.cit., p.22.

⁴⁹⁹ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1938*, (Hanoi: 1939), p.1288-1289.

⁵⁰⁰ Touzet 1934, op.cit., p.83.

general trend of this industry.⁵⁰¹ This industry's apparent orientation towards domestic production is in line with the pattern of production in Tonkin established in the agrarian sector and in its processing ventures: production was foremost for domestic needs.

Table 6.11: Cement Trade Data, 1931-1936, (1000 tonnes)

	Export	Import
1931	52.3	
1932	90.8	7.4
1933	37.5	3.3
1934	38.2	11.1
1935	32.4	10.
1936	59.2	11.6

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Economiques, *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1930-1938.

Textile

Tonkin's tendency to produce for its domestic market and Cochinchina's relatively more modest industrial efforts are also clear when looking at the textile industry in colonial Indochina. Nørlund argued that the main industrial development in Indochina was that of the textile industry and she showed it was located in Tonkin.⁵⁰² Section 6.2 argued that sericulture was a more significant traditional industry in Tonkin. We find that silk processing and cotton processing were also more significant in the modern industrial sector of Tonkin than in Cochinchina. According to scholars in this field, the production patterns in this industry show a tendency towards self-sufficiency of the domestic market, rather than an opening to the export market.⁵⁰³ In terms of employment figures, available data suggest that this sector seems to have been larger than the cement industry, but still smaller than the mining sector. For example, by 1938, the Société Cotonnière was employing about 10 000 workers, more than twice the number in the cement industry, but less than a fifth of staff employed in mines.⁵⁰⁴ Nonetheless, the industry was similar to the

⁵⁰¹ *ibid.*, p.83.

⁵⁰² Nørlund 1991, *op.cit.*, p.73.

⁵⁰³ *ibid.*

⁵⁰⁴ Shepherd, *op.cit.*, p.23.

mining sector, insofar as many of its employees worked only part time.⁵⁰⁵ Nørlund's substantial work on the development of the textile industry in Indochina during this period suggests that in the 1930s, the number of weavers in Indochina was probably 43 000, based on the amount of yarn imported into the Indochinese economy.⁵⁰⁶ Certainly not all of these would have been employed in the modern industries, but it is likely this indicates that many primarily agrarian households engaged in handicraft textile production, again as a means to supplement income from farming. This industry was certainly substantial compared to that of Burma, where textiles factories only employed about 7 000 workers.⁵⁰⁷ It is thus no surprise that Nørlund considered this industry as very significant.

The cotton mills in operation were very large, with some of the larger weaving industries having between 30 000 and 54 000 looms.⁵⁰⁸ These data are hard to justify considering the debate over the number of employees in the industry and considering that China had only three times those numbers in the same time period,⁵⁰⁹ despite a much larger industry producing nearly 3% of total world output of cotton piece goods in 1935.⁵¹⁰ Nørlund's work suggests that in 1918, there were 270 functioning looms,⁵¹¹ but that in 1930 there were as many as 21 000 looms and by 1940 this had grown to 65 000.⁵¹² Notwithstanding the concerns over the size of the industry, all sources agree on the much larger presence of a textile industry in Tonkin than in the rest of Indochina.

The growth of textile factories is surprising because the industry was in direct competition with French textiles exports to Indochina. Despite the French colonial policy's belief that the colonies should remain markets for French industrial goods, the administration did not actively limit the growth of this industry. Worried by the large imports of non-French yarn, in addition to domestically produced cloth competing with French products, the colonial administration facilitated the industry's growth by

⁵⁰⁵ *ibid*, p.23.

⁵⁰⁶ Irene Nørlund, *Textile Production in Vietnam 1880-1940: Handicraft and Industry in a Colonial Economy*, Københavns Universitet: Institut for Historie, 15 March 1994, p.226.

⁵⁰⁷ Mitchell 1942(2), *op.cit.*, p.195.

⁵⁰⁸ Goudal, *op.cit.*, p.113 & Shepherd, *op.cit.*, p.22.

⁵⁰⁹ International Labour Office, *World Textile Industry: Economic and Social Problems Volume 1*, (London: P.S. King & Sons, Ltd, 1937), p.54.

⁵¹⁰ *ibid*, p.58.

⁵¹¹ Nørlund 1994, *op.cit.*, p.223.

⁵¹² *ibid*, p.261.

establishing spinning factories in Tonkin.⁵¹³ Although official records do not provide data on the evolution of the output of the textile industry, some information on textile exports is available for the years 1931-1937 and is shown in Table 6.12.

Table 6.12: Exports of the Textile Industry, 1931-1937, (Tonnes)

	Beige Cotton Fabric	Cotton Lace	Cotton Blankets	Wool Rugs	Lace	Silk Fabric	Embroidery	Clothes
1931		9	17.5	8	7.5	21	7	5
1932		14	5	6	3.7	8	4	10
1933	41	23	51	13.5	1.3	13	7	43
1934	190	19	38	7.5	0.1	9.5	4.3	34
1935	234	12	100	3.2	0	5.8	3.3	28
1936	669	27	148	9.6		9	4.2	38
1937	852	30	263	17	0	9	7.5	62

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Economiques, *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1930-1938.

Although it is surprising to see such large exports of cloth as opposed to yarn, this reflects the history of the sector, which had traditionally used imported yarn. Furthermore, locally produced yarn might have been used in the production of domestically consumed cloth and would thus not have been included in these data. Nørlund clearly shows that this sector was primarily aimed at domestic consumption.⁵¹⁴ If this is true, then the quantities shown in Table 6.12 are only a small part of total production. Cotton fabric and blankets were the most significant exported goods of this industry, by weight. These goods had a lower value added than lace, silk fabrics or embroidery. Nonetheless, the consistent growth in exports of both high- and low-value added output is indicative of the growth of this sector.

It is clear from other evidence that the majority of this activity was undertaken in Tonkin: only in 1926 was a cotton factory opened in Saigon,⁵¹⁵ whereas in 1913 there

⁵¹³ Mitchell 1942(2), op.cit., p.158 & Shepherd, op.cit., p.22.

⁵¹⁴ Nørlund 1994, op.cit., p.261.

⁵¹⁵ Maspero Tome II, op.cit., p.197.

were already 3 factories in Tonkin, employing almost 2 000 workers.⁵¹⁶ Nørlund's research likewise repeatedly highlights that attempts at establishing a textile industry in Cochinchina were unsuccessful.⁵¹⁷ If Nørlund, Mitchell and Shepherd were all correct in their assessment of the market for Tonkinese textiles, then this industry once more illustrates that Tonkin's production patterns were diversified and geared towards domestic needs. Furthermore, the fact that it was possible for much of this production to have come from agrarian households or temporary workers suggests that industrial developments acted as an alternative/supplementary sources of employment for Tonkin's underemployed agrarian population. Chapter 7 shows that textile imports were the most significant of all Indochinese imports. Although much of these imports were directed at Cochinchina, some did go to Tonkin. This confirms that despite Tonkin's industrial sector being sizeable, it remained insufficiently large to satisfy local demand, let alone to close the economic divide with Cochinchina.

Energy

Given the difficulty of gathering data on the evolution of industrial activity in Indochina, some authors have used proxy measures (such as measures of electrical power) to evaluate trends. During the 1930s, it was estimated that 85% of all electric power generated in Japan was used for industrial production,⁵¹⁸ partly justifying this tendency. Shepherd, one of the few writers on industrialisation in colonial Southeast Asia, used electricity to evaluate industrial activity in the region.⁵¹⁹ Although electricity production has been used as an indicator of industrial developments in parts of Southeast Asia and Japan, it may not be appropriate for Indochina. Touzet suggested that the majority of electricity was for domestic usage,⁵²⁰ while other authors argue that it may have been used for public lighting and tramways, rather than for industrial ventures.⁵²¹ In addition, any discrepancy between Tonkin and Cochinchina's use of electricity for industrial use may, in fact, have hidden Tonkin's easier access to coal. Mitchell suggested that almost two

⁵¹⁶ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1913*, (Hanoi: 1914), p.119-120.

⁵¹⁷ Nørlund 1994, op.cit., p.217.

⁵¹⁸ Mitchell 1942 (1), op.cit., p.39.

⁵¹⁹ Shepherd, op.cit., p.32.

⁵²⁰ Touzet 1934, op.cit., p.183.

⁵²¹ Mitchell 1942(2), op.cit., p.159.

thirds of Indochina's domestic coal consumption was used in industrial production.⁵²² Although coal's domestic consumption is not recorded by region, it would make sense to argue that it was mainly consumed in Tonkin, as it was mainly produced there. According to the BEI, 85 000 tonnes of coal were used for industrial purposes in Indochina in 1928, 30 000 of these for textile works alone. Although they do not show how much was used in each region for these purposes, they say that of the 615 000 tonnes of coal used in Indochina for all purposes in 1928, 490 000 was used in Tonkin as opposed to only 120 000 in Cochinchina.⁵²³ We believe this may have helped fuel the greater significance of industrial development already demonstrated in Tonkin. For all these reasons, it is unlikely that electricity production can be used as a clear proxy of modern industrial activity.

However, electricity production certainly can be seen as an industrial venture in itself. In terms of electricity production, Indochina was a rather small player even compared to Malaya. Malaya's generating capacity was 432 million kilowatts compared to only 96 in Vietnam and 12 in Cambodia.⁵²⁴ Even though it was a small industry, it did display a clear difference between the regions of Tonkin and Cochinchina.

Table 6.13: Electricity Production, by Province, 1929-1936, (1000 kw/hr)

	Cochinchina	Tonkin
1929	34 292	17 450
1930	41 409	19 184
1931	36 580	19 593
1932	34 487	17 630
1933	33 276	17 014
1934	31 953	16 448
1935	34 285	18 135
1936	35 588	20 219

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Economiques, "Industrie" *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1931-1938.

⁵²² *ibid*, p.160.

⁵²³ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1929*, (Hanoi: 1930), p.840.

⁵²⁴ Members of the IPR International Secretariat, *op.cit.*, p.19.

Table 6.13 shows the relative difference in the production of electricity of these regions in the first half of the 1930s. Such a low generation of electrical power in relative terms, as well as the rather slow growth of the industry, suggests there may have been rather low demand for the product. Cochinchina's demand for this form of energy was stronger, but it was likely for domestic use rather than industrial use. Cochinchina's production of electricity was nearly twice that of Tonkin's. Therefore, using electricity production as a proxy for industrial development would have biased our evaluation and resulted in questioning the previous findings, which clearly showed the superiority of Tonkin's industrial development during this time period.

6.4) Conclusion

Handicraft industries, mining and modern industrial ventures were more significant in Tonkin than in Cochinchina. We have argued that this was a result of both the larger population in Tonkin (resulting in pressure in the agrarian sector and acting as an incentive for development of alternative employment) and the region's traditional tendency to reach for self-sustenance (prompting domestic production of a variety of goods), as noted in Chapter 5. The relatively small size of that sector in Cochinchina, apart from its engagement in rice processing ventures, further emphasises that region's reliance on specialisation in the agrarian sector. However, the gap between the two regions' industrial performance was not large enough to close the economic divide in this time period. The industrial sector reflected the production patterns found in the agrarian sector (diversification in Tonkin; specialisation in Cochinchina). Tonkin's more substantial industrial sector was a source of employment to Tonkinese peasants that reduced the negative effects of population pressure on its agrarian sector and thus maintained the demographic imbalances between Tonkin and Cochinchina.

There was some handicraft production in Cochinchina and although the scale was much smaller than the handicraft industries of Tonkin, there were indications to suggest that handicraft producers were professionals, using this activity as their sole occupation. In Tonkin, instead, handicraft production was used to increase/supplement income from agrarian activity. This difference suggests that industrial development in the traditional sector may have been a consequence of population pressure. The differences in the way

industrial activity evolved were also found in the mining and other modern industrial ventures. The mining sector indeed was one of the largest industrial employers and fastest growing industry in Indochina and the majority of this industry was located in Tonkin. Although this sector exported much of its production, it remained a significant source of temporary employment for Tonkin's underemployed/overpopulated agrarian sector. In the modern sector, there was evidence that in various processing industries Cochinchina was a more significant producer (especially with respect to rice-processing industries). In Tonkin, these industries were on a smaller scale and generally their product was for domestic consumption. In fact, industrial output in Tonkin was almost uniquely (apart from mining) directed at the domestic market, suggesting that industrial activity was a different aspect of Tonkin's production pattern of diversification. Cochinchina's industrial activity was generally an extension of its specialisation in rice production.

Gourou argued that the presence of a successful handicraft sector in Tonkin became an obstacle to the diffusion of new manufacturing activity.⁵²⁵ This chapter has shown that Tonkin had a more significant modern industrial sector; therefore Gourou's argument seems an unfair assessment. Furthermore, some would say that Japan's industrialisation was enabled by its strong tradition of such handicraft production. Saito explained that the expansion of rural industry was directly linked to Tokugawa Japan's economic growth.⁵²⁶ Just as with Tokugawa Japan, rural manufacturing was an important aspect of Tonkin's rural economy and a large majority of the population of both regions was peasant families, rather than wage earners.⁵²⁷ However, other conditions within which the growth was made possible in Japan were not present in Tonkin. Indeed, there was no "increase in the level of land utilisation that enabled the ceiling of output to rise".⁵²⁸ Moreover, although we will show that Tonkin was less engaged with the world economy than Cochinchina, we find no evidence to support that in Tonkin a 'seclusion policy' incentivised a new type of merchant, who engaged in specialisation in one commodity and had large firms.⁵²⁹ In fact, this economic behaviour was more in line with Cochinchina's tendency to specialise during French colonial rule. In addition, Saito suggested that rural development in Japan

⁵²⁵ Gourou 1945, op.cit., p.397.

⁵²⁶ Osamu Saito, Pre-Modern Economic Growth Revisited: Japan and the West, Working Paper No.16/05, Department of Economic History, London School of Economics, June 2005, p.29.

⁵²⁷ *ibid*, p.30.

⁵²⁸ *ibid*, p.37.

⁵²⁹ *ibid*, p.25.

led to the “emergence of a mature urban economy [of well over 10% of the population]”.⁵³⁰ Again, this is more in line with the Cochinchinese economy than the Tonkinese. **Tonkin’s** economic characteristics were very different from Japan’s and despite a larger manufacturing sector, **conditions were not optimal to close the gap in output prompted by Cochinchina's profitable specialisation in rice and rubber, at least in this time period.**

Chapter 3's overview of contracted labour suggested that it was more significant in Tonkin than in Cochinchina. Indeed, it was clear that both in mining and in the industrial sector, more people in Tonkin were contracted workers. However, this remained a rather limited class of workers. Even within the mining sector of Tonkin, many of the workers tended to only work for a few months of the year, and then returned to the agrarian sector for the remainder of the year. The significance of this 'floating labour' meant that labour permanent movements were rare, especially seeing as labour unions were not allowed in Indochina.⁵³¹ We have suggested that it was partly the growth of this sector and the possibility of temporary employment outside the agrarian sector that might have limited migration of Tonkinese peasants towards Cochinchina. In Chapter 3, we also argued that the limited integration of the labour markets between these two regions in this time period partly explained their economic divide, as demographic differences (and their effect on landholding patterns) were partly responsible for the differing output potential of the agrarian sector. Consequently, **the stronger growth of the industrial sector in Tonkin may have helped perpetuate its economic divide from Cochinchina during this time period.**

⁵³⁰ *ibid*, p.26.

⁵³¹ Goudal, *op.cit.*, p.268.

Chapter 7: Commerce

7.1) Introduction

This chapter addresses **how the economic divide between Tonkin and Cochinchina was reflected in the economy, in this case specifically in the commercial sector.** Based on the conclusions from the previous chapters, this chapter allows us to suggest that **the economic divide between Tonkin and Cochinchina reflected existing patterns of production, which in turn resulted in differing international commercial engagement. Cochinchina's specialisation in the production of an exportable commodity is expected to have resulted in larger trade links than Tonkin's diversified production patterns, which were often aimed at the domestic market.** Furthermore, because trade was expanding in both volume and value in this time period, differences in trading activity may help defend the continuing significance of Cochinchina's larger output in the agrarian sector in explaining the economic gap between its economy and Tonkin's. Trends in commercial activity might also have further encouraged these production patterns, thus explaining the *persistence* of the economic divide between Tonkin and Cochinchina. Although Chapter 2 showed that many authors have looked at the international trade relations of Indochina, analyses have not linked the economic divide between Tonkin and Cochinchina to differing commercial activities. This is surprising considering that many authors believe that more open economies tend to see more growth. Proving causality in the relationship between growth and trade is not the main argument of this chapter. Instead, we show how the differences in production patterns outlined in the previous chapters were mirrored in trading activity.

We will first explain the tariff policy of Indochina, to highlight the costs of trade and therefore show why participation in the international economy through this medium was closely associated with existing patterns of production. Then, we will look at the way in which commerce was organised: both in terms of the actual means of transport and of the commercial houses in existence. This permits us to draw links between production patterns, institutional characteristics and subsequent trade relations. After this, we look at the balance of trade, the commercial partners and the nature of the traded goods. These sections show how Cochinchina used international commerce differently from Tonkin, as

an outlet for surplus production. In addition, it will help highlight that despite Tonkin's diversification, its domestic production was insufficient to fully isolate it from imports, suggesting a further reason for its inability to close the gap with Cochinchina, at least in this time period.

7.2) Trade regulation

Indochina's trade regulations were very prohibitive. Even Touzet, a senior government member, recognised that the customs regime was a source of difficulty for Indochina's ability to break into the world market.⁵³² Chapter 4 showed the evolution of the ideology behind France's colonial policy and suggested that, after WW1, there was a progressive movement away from 'assimilation' towards 'association'. This was strangely not true of Indochina's trade policy, which remained very much assimilationist even after changes were effected in 1928.⁵³³ Ideologically, Touzet argued that this characteristic of the trade regime was supposed to create an 'economic solidarity' with the metropolis, but that instead it created high costs for Indochinese producers and consumers alike.⁵³⁴

There were two main eras for trade policies in Indochina during the period 1900-1940: the period of the Méline tariff (1892-1928) and the period after the 1928 Kircher reforms, in which Indochina obtained more tariff autonomy. The Méline tariff was uniform across the French colonial Empire and meant that French goods entered free of duties into Indochina, while the colony's products were still subjected to tariffs upon entering France.⁵³⁵ This version of protectionism was due, in part, to the difficulties of the French economy following 1882 and to the belief that France's industrial production required a closed domestic market and preferential entrance to foreign markets.⁵³⁶ In addition to the tariff policy between France and its colonies, the Méline tariff imposed some large tariffs on specific merchandise entering Indochina. For example, Chinese tobacco before 1928 was taxed at 350 francs per hundred kilograms entering Indochina

⁵³² André Touzet, *L'économie Indochinoise et la grande crise universelle*, (Paris: Marcel Giard, 1934).

⁵³³ *ibid*, p.107-108.

⁵³⁴ *ibid*, p.108.

⁵³⁵ Virginia Thompson, *French Indochina*, (London: Unwin Brothers LTD, 1937), p.200.

⁵³⁶ J.S. Furnivall, *Progress and Welfare in Southeast Asia: A Comparison of Colonial Policy and Practice*, (New York: Institute of Pacific Relations, 1941), p.40.

and cotton fabric was taxed at 680 francs per hundred kilograms.⁵³⁷ Apart from tariffs on goods entering the Indochinese union, various other taxes existed,⁵³⁸ such as transit taxes and export taxes, particularly on rice, which was subject to a 2% export tax.⁵³⁹ In other words, the tariff level between 1892 and 1928 was prohibitively high. As early as 1906, there was recognition that “local colonial industries” were harmed by this tariff policy.⁵⁴⁰

Harmful consequences were further intensified after the Kircher reforms of 1928, whereby an Indochinese tariff policy was specially designed for the colony. The years leading to the Great Depression and its aftermath were marked by increased pressure for protectionism. For example, Sarraut believed that France and its colonies should engage in a more “autarkic strategy”.⁵⁴¹ Such a strategy was an extension of existing protection for specific industries, for example cotton or cars. Despite the ideological rhetoric becoming more associationist, Touzet believed that the Kircher reforms resulted in the tariffs becoming increasingly prohibitive: a general increase between “100% and 5 000%”.⁵⁴² For example, the tax on imports increased from 350 to 1 000 francs per hundred kilograms for Chinese tobacco and from 680 to 1 600 francs for cotton fabrics.⁵⁴³ Since French exports did not pay customs duties upon entering Indochina, increased tariffs on goods from other economies were perceived as necessary for budgetary reasons. The tariff policy was specifically designed to affect imports from Asian economies as opposed to European economies.⁵⁴⁴

Although the increase was large for most goods, some concessions were made: “the Act of April 13 1928 granted reciprocal free entry of commodities between France and Indochina” and,⁵⁴⁵ through the most favoured nation clause, some Indochinese exports to neighbouring economies were not faced with the highest tariffs brackets.⁵⁴⁶ The growing number of specific bilateral trade agreements between Indochina and other countries in Asia also helped alleviate some of these tariff increases. For example, France

⁵³⁷ Touzet 1934, op.cit., p.124.

⁵³⁸ Thompson 1937, op.cit., p.201.

⁵³⁹ Philip G. Wright, *Trade and Trade Barriers in the Pacific*, (Honolulu, Hawaii: Institute of Pacific Relations, 1935), p.419 & Arthur Girault, *The Colonial Tariff Policy of France*, (London: Humphrey Milford, 1916), p.104.

⁵⁴⁰ Furnivall 1941, op.cit., p.40.

⁵⁴¹ Jacques Marseille, *Empire colonial et capitalisme français*, (Paris: Albin Michel, 1984), p.187-188.

⁵⁴² Touzet 1934, op.cit., p.110.

⁵⁴³ *ibid*, p.124.

⁵⁴⁴ *ibid*, p.123.

⁵⁴⁵ Wright, op.cit., p.418.

⁵⁴⁶ Touzet 1934, op.cit., p.145.

and China signed an agreement limiting both tariffs and transit taxes in December 1928,⁵⁴⁷ and in 1932, a trade agreement with Japan likewise reduced tariffs on some Japanese goods.⁵⁴⁸ The reductions were rather minimal and were often compensated by increased quotas. In addition, they came at a point when Japan was undergoing a process of economic change,⁵⁴⁹ reducing its imports from non-Japanese colonies and increasing its tariffs on imports of agricultural goods.⁵⁵⁰ As we will see below, the reduced significance of Japan as a trading partner limited the impact of this agreement.

It seems that the French trade regulation for its colonies followed the general response by a number of powers as of the 1890s. There was a general movement to reduce the *laissez-faire* policies of previous decades,⁵⁵¹ but even within the region, French Indochina's custom taxes were considered high, especially before the Depression when many economies started raising tariffs. For example, while tariffs were seen as necessary sources of fiscal revenue in the Dutch East Indies, there was no discrimination between the various trade partners, not even with regards to the Netherlands,⁵⁵² until 1934 when “all duties were increased by an additional 50%”.⁵⁵³ Similarly, in British Malaya and in Burma, the general British perspective of free trade meant that tariffs were generally low and less prohibitive, although again they were raised following the Depression.⁵⁵⁴ Other colonies, mainly the Philippines, Taiwan and Korea, were assimilated into their mother countries' trade regimes,⁵⁵⁵ and their tariff regime was similar to Indochina's. The extent of protectionism in French Indochina seems to have come not so much because of the local circumstances, but because of the perceived strength or weakness of the French economy, as expected in a colonial setting. Tariff policies certainly did have an impact on producers and consumers, but the policies themselves did not differ between Tonkin and Cochinchina. It seems unlikely that trade policies would have explained the initial

⁵⁴⁷ *ibid*, p.146.

⁵⁴⁸ Wright, *op.cit.*, p.419.

⁵⁴⁹ Touzet 1934, *op.cit.*, p.150-151.

⁵⁵⁰ Wright, *op.cit.*

⁵⁵¹ Furnivall 1941, *op.cit.*, p.21-24.

⁵⁵² Wright, *op.cit.*, p.279.

⁵⁵³ *ibid*, p.279.

⁵⁵⁴ *ibid*, p.392 & Economic and Social Board, *A Study of the Social and Economic History of Burma (British Burma)*, Part 8, (Rangoon: The National Planning Commission, 1959, 1960), p.84-90.

⁵⁵⁵ Anne E. Booth, *Colonial Legacies: Economic and Social Development in East and Southeast Asia*, (Honolulu: University of Hawai'i Press, 2007(1)), p.94-95 & D.R.SarDesai, *Southeast Asia Past & Present*, 5th Edition, (Boulder, CO: Westview Press, 2003), p.163-164.

divergence in commercial activity, although again they might have helped perpetuate the trend, because depending on the level of trade activity, their cost would have differed.

7.3) Commercial organisation

International commerce was done primarily through the use of ships, although some trade between Tonkin and China was done through the use of the Northern Indochinese railway (refer to Map 2a). During colonial rule, the ports were effectively the only trading outlets for international commerce in Indochina and the French encouraged their development in a bid to foster commerce.⁵⁵⁶ The ports of use in Tonkin and Cochinchina were Haiphong and Saigon, respectively. Cochinchina's port of Saigon was a 'deep-water' port, whereas Tonkin's port of Haiphong was shallower. Because of Tonkin's rain patterns, mud tended to accumulate in the navigable areas thus reducing its depth. Haiphong was a practical port for cabotage of small and light boats, but because of its shallowness it was not practical for larger commercial vessels.⁵⁵⁷ Heavier and bigger boats would have had more difficulty exiting and entering Haiphong than Saigon. Apart from the Saigonese port's greater practicality, Cochinchina's existing canal networks and financial institutions further facilitated international commerce.⁵⁵⁸ In Haiphong however, in addition to the depth problem, it was reported that commerce was not as easily done because road access to the city needed to be improved to allow better movement of goods. Some people even argued that the neighbouring port of Hongay (Map 1) should replace Haiphong completely.⁵⁵⁹ Infrastructural circumstances seem to have favoured Cochinchina's participation in international commerce over Tonkin's. Table 7.1 suggests that even in 1926, the French continued to focus public expenditure towards Cochinchina's port to a much larger extent than towards Tonkin's or any other Indochinese port.

⁵⁵⁶ Kham Vorapheth, *Commerce et colonisation en Indochine, 1860-1945*, (Paris: Les Indes Savantes, 2004), Chapter 1.

⁵⁵⁷ ANOM: BIB SOM D//1702, Serge De Labrusse, "Politique du cabotage en Indochine", *Economie maritime indochinoise*, (Saigon: Imprimerie Française d'Outre-mer, 1950), p.38.

⁵⁵⁸ ANOM: BIB SOM A//3437, E. Henry-Biabaud, *Deux Ans d'Indochine Notes de Voyage*, (Hanoi: Imprimerie d'Extrême-Orient, 1939), p.181.

⁵⁵⁹ ANOM: BIB AOM /30995, H. Cuhebousset. "Il ne faut pas sacrifier Haiphong", *L'Eveil Economique de l'Indochine*, Hanoi: 27 décembre 1931.

Table 7.1: Public Works Expenditure on Ports, 1926

	Cochinchina	Tonkin	Indochina
Expenditure on Sea Ports (\$)	9 173	5 019	16 271
Share of infrastructural public works (%)	8	5	5
ANOM: BIB ECOL //12731, p.141.			

Haiphong's port had been established mainly for military reasons during the Sino-French war of 1884-1885. The port needed to be made more practical for commercial, rather than military, use and its facilities needed to be renovated.⁵⁶⁰ Although Table 7.1 only shows public work expenditure on ports for the year 1926, 1926 was representative of a period when trade was growing fast in both regions. Consequently we believe this year is also representative of how the administration allocated public work expenditure. Despite the more dire circumstances of Haiphong, more funds were provided for the improvement of sea ports in Cochinchina than in Tonkin. This suggests that the colonial authorities regarded the strength of Cochinchina's commercial activity as more profitable, a perception reflected in the financial environment of the regions.

Trade was considered a very profitable activity. Indeed, as seen in Chapter 4, the revenue from customs taxes accounted to a quarter of the total revenue of the general budget. Because of the significance of this activity, currency decisions were often dictated in part by trade concerns. Upon the establishment of the Indochinese Union, the Indochinese piastre was instituted as the currency, which allowed the French some control over the economy. The French chose to remain on silver to limit potential shocks in trade, at least until 1930 when it was tied to the French gold Franc. To help regulate the economy, the Bank of Indochina, also the sole issuer of the piastre, was established, and although the Bank eventually operated throughout Indochina, Cochinchina remained the centre for financial flows and trade. Table 7.2 illustrates this: in 1924-1928, years after the Bank started operating in Tonkin and during the peak of the Indochinese economic growth, Cochinchina was a larger recipient of investment than Tonkin. The early establishment of commercial activity and the importance of the international

⁵⁶⁰ Albert Sarraut, *Grandeur et servitude coloniales*, (Paris: Editions du Sagittaire, 1931), p.467.

development of Saigon was to make the Cochinchinese capital the future economic capital of the entire Indochinese Union.⁵⁶¹

Table 7.2: Invested Capital in Commerce and Related Industries, 1924-1928, (1000\$)

From International Sources						
	Commerce		Credit Institutions		Insurance Societies	
	Cochinchina	Tonkin	Cochinchina	Tonkin	Cochinchina	Tonkin
1924	1 536	178	2 874			
1925	3 766	138	1 462			
1926	2 293	71	2 058		529	
1927	539	125	2 050			
1928	4 475	900	10 708			
From Domestic Sources						
1924	635					
1925	570	15		13		
1926	1 281	163		90	82	
1927	335	101.2	700		300	
1928	2 050	341.2	1 000	50	150	
SOAS: T.Smolski, "Les investissements de capitaux privés et les émissions de valeurs mobilières en Indochine, au cours de la période quinquennale 1924-1925" in French Indochina, Service de la Statistique Générale de l'Indochine, <i>Bulletin Economique de l'Indochine</i> , Hanoi: 1929, p.814-820.						

Some of the reason for this larger investment in Cochinchinese commerce can be found in the way commerce was organised, although causation went both ways. Research on the commercial organisation of Indochina has been scarce. Vorapheth's work on French commercial houses is one of the only works that provides evidence and description of the commercial sector in Indochina. Although his work is a specific study of French trading houses, he provides contextual evidence that helps shed light on the overall system in Indochina. Furthermore, his evidence is generally divided by region, which allows comparisons in the way commerce was organised in Tonkin and Cochinchina. These comparisons are not extensively found in Vorapheth's work, as he focused on explaining the role of the French in Indochinese commerce.

⁵⁶¹ *ibid*, p.41.

The domestic clients were represented through Chinese middlemen, who had traditionally been the trading elite in both Tonkin and Cochinchina.⁵⁶² Despite the fact that Indochina was part of the French Colonial Empire, the majority of commercial agents were not French. This was particularly true of Cochinchina, where many English, German and Chinese traders had been settled for some time. Indeed, regular trading networks connected Saigon to Hong Kong and Singapore.⁵⁶³ As more and more French traders arrived, benefiting from preferential relationships with the government and the Bank of Indochina, many of the existing networks of Chinese commercial agents became partners to the French, out of necessity. The laws prevented the Chinese from obtaining concessions and they had difficult relations with the financial institutions of the Union. Because they could speak the Vietnamese language and had often been engaged in commerce within the Union for some time, many Chinese people acted as middlemen to European companies (comprador).⁵⁶⁴

Table 7.3 shows the growth of the number of commercial enterprises settled in the two regions. From these data, it seems unclear that Cochinchina was a superior trading centre: overtime, Tonkin's share of Indochina's commercial houses became as large or larger than Cochinchina's. Considering Table 7.2's clear demonstration that Cochinchina was a larger recipient of investment, there must have been a large discrepancy in the size or significance of the trading houses that existed in these regions.

Table 7.3: Number of Commercial Enterprises, 1912-1939

	1912	1921	1934	1939
Cochinchina	66	106	117	105
Tonkin	14	95	107	118
Total	103	289	329	327
Kham Vorapheth, <i>Commerce et colonisation en Indochine, 1860-1945</i> , Paris: Les Indes Savantes, 2004, p.135.				

Tonkin started off with far fewer commercial enterprises than Cochinchina, but the fast growth in its numbers is deceptive: Vorapheth suggests that enterprises were

⁵⁶² Pierre Brocheux, "Moral Economy of Political Economy? The Peasants are Always Rational", *The Journal of Asian Studies*, Vol. 42, No.4, August 1983, p.794.

⁵⁶³ Vorapheth, op.cit, p.80-81.

⁵⁶⁴ *ibid*, p.90.

generally smaller in Tonkin than in Cochinchina.⁵⁶⁵ Indeed, large trading houses, primarily European or Chinese, had the largest share of the import-export activity in Indochina, most of these large trading houses were established in the ports and the majority of them were located in Saigon or Cholon. Entrepreneurs wanting to engage in large-scale commerce favoured Cochinchina.⁵⁶⁶ In the beginning, the commercial houses of Saigon had been developed by individuals and families. By the end of the 19th century, public limited companies started setting up headquarters in Indochina, predominantly in Saigon.⁵⁶⁷ There may have been more enterprises in Tonkin by the end of the time period, but they were less substantial, which would align itself with the investment data from Table 7.2.

Commercial activity in both regions evolved in distinct ways from the onset of colonialism: big companies and commercial houses were in Saigon or Cochinchina in general, whereas small commercial and industrial enterprises were in Haiphong, Hanoi, or Tonkin more broadly.⁵⁶⁸ The distinction between the two regions was sensible: the economy of Tonkin was ‘primitive’ according to the authorities at the time. Production was for consumption, not exchange.⁵⁶⁹ In Cochinchina, however, the authorities described the economic development as following the ‘fundamental form of modern economics’: producing for exchange.⁵⁷⁰ The existence of larger scale enterprises in Cochinchina fits with previously identified patterns of production and organisation.

7.4) Balance of trade

Figure 7.1 displays the balance of trade of Tonkin and Cochinchina between 1900-1940, as well as the overall balance of trade of Indochina.

⁵⁶⁵ *ibid*, p.65-66 & p.127.

⁵⁶⁶ *ibid*, p.17-18.

⁵⁶⁷ *ibid*, p.45.

⁵⁶⁸ *ibid*, p.65-66 & p.127.

⁵⁶⁹ ANOM: BIB ECOL//12939/11/, p.13.

⁵⁷⁰ *ibid*, p.13.

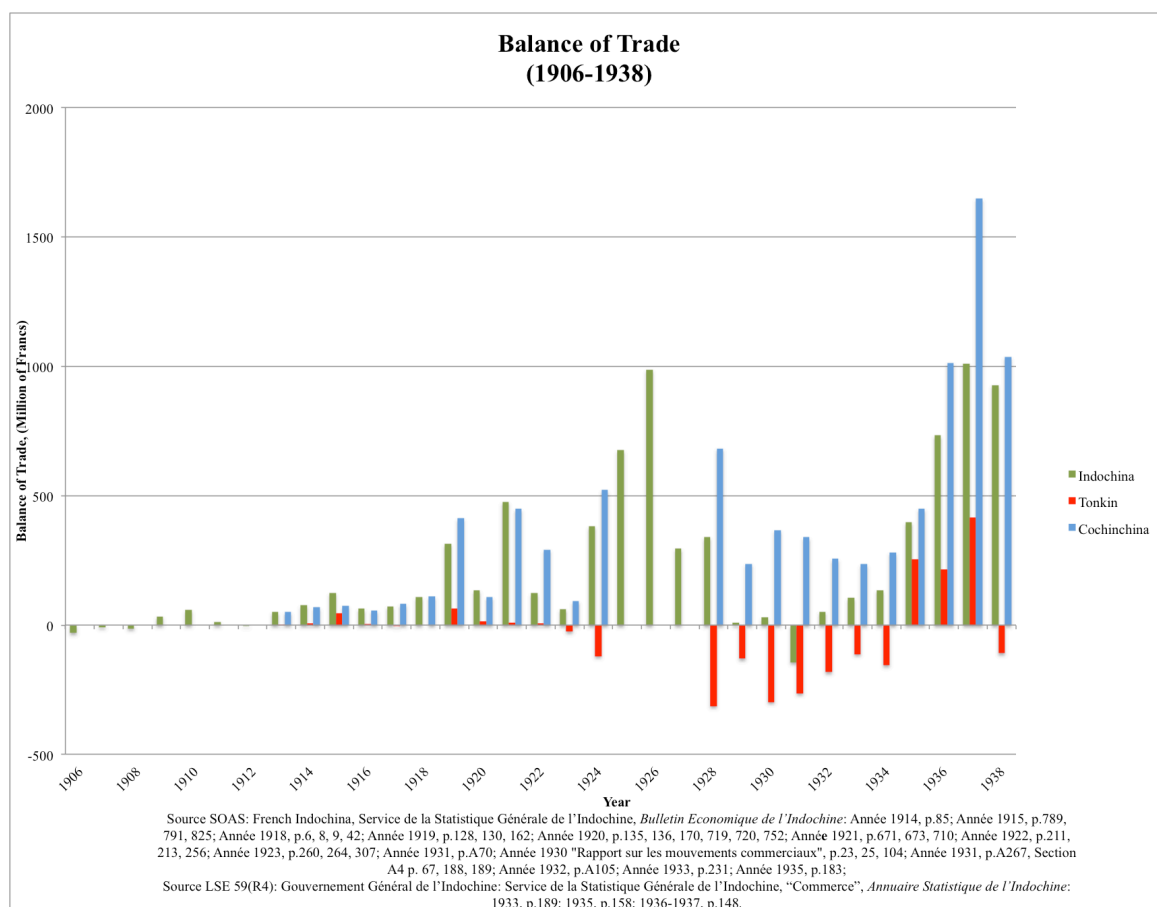


Figure 7.1

Indochina's balance of trade was positive almost throughout this period.⁵⁷¹ The exception was in 1931, when the balance of trade of Indochina experienced a strong deficit. 1931 was not, of course, a very good year for international trade anywhere and it was particularly unfavourable for primary producing countries such as Indochina. The balance of trade data can be broken down in three stages: 1906-1926 period of growth, 1927-1931 period of decline (in line with the falling prices of primary products throughout the 1920s) and 1931-1938 period of growth or recovery. Until 1918, the balance of trade reflected quite low volumes of trade for Indochina, but the subsequent strong growth was probably linked to the growth of the international economy. The Depression era and its forerunning price decrease explain the decline in the second stage, while the third stage is associated with the recovery period.

⁵⁷¹ SOAS: R. Cabanes, "L'effort agricole et la balance commerciale de l'Indochine au cours de la période 1909-1938", in French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1940*, (Hanoi: 1941), p.7-11.

Table 7.4: Value of Imports and Exports for Tonkin and Cochinchina, 1913-1938, (Million of Francs)

	Tonkin		Cochinchina	
	Imports	Exports	Imports	Exports
1913	61	62	161	212
1914	51	58	148	216
1915	40	85	114	188
1916	66	71	155	211
1917	65	61	164	245
1918	64	64	165	275
1919	143	207	169	581
1920	213	227	608	716
1921	212	221	567	1 016
1922	246	252	561	853
1923	347	322	679	772
1924	492	372	819	1 341
1928	816	503	1 669	2 352
1929	764	634	1 657	1 894
1930	596	299	1 123	1 490
1931	509	245	783	1 122
1932	362	180	553	809
1933	321	209	537	772
1934	372	217	537	817
1935	322	577	577	1 026
1936	351	567	320	1 334
1937	537	952	416	2 065
1938	730	621	1 187	2 224

SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine*: Année 1914, p.85; Année 1915, p.789, 791, 825; Année 1918, p.6, 8, 9, 42; Année 1919, p.128, 130, 162; Année 1920, p.135, 136, 170, 719, 720, 752; Année 1921, p.671, 673, 710; Année 1922, p.211, 213, 256; Année 1923, p.260, 264, 307; Année 1931, p.A70; Année 1930 "Rapport sur les mouvements commerciaux", p.23, 25, 104; Année 1931, p.A267, Section A4 p. 67, 188, 189; Année 1932, p.A105; Année 1933, p.231; Année 1935, p.183; Source LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine, "Commerce", *Annuaire Statistique de l'Indochine*: 1933, p.189; 1935, p.158; 1936-1937, p.148.

Table 7.4 shows the value of imports and exports in both Tonkin and Cochinchina. As we can see, the growth in the trade surplus was due not to declining imports, but rather to increasing exports, particularly from Cochinchina. Bassino and Bui believed a large reason for the high value of imports to Indochina was due to the import of capital goods, especially with respect to Doumer's large infrastructural plans, such as the railway.⁵⁷² As we saw in Chapter 4, expenditure on this decreased after the Depression, which may in part explain the decrease in imports seen in Table 7.4 for much of the period after 1930. Interestingly, we see a very strong trend of positive balance of trade in the case of Cochinchina throughout these three stages, but the figures suggest that Tonkinese trade was very limited even before the 1930s, after which sharp negative balances of trade were experienced. In other words, Indochina's positive balance of trade was due to Cochinchina's trade surplus, regardless of Tonkin's generally poor performance.

We previously suggested that Tonkin's diversified production was primarily geared to its own domestic market. This appears justified in Table 7.4: Tonkin's exports were a fraction of Cochinchina's. Even in 1930-1934 when there was a noticeable decline in international trade, the balance of trade remained favourable in Cochinchina. Despite falling world prices of agricultural goods, the exports of Cochinchina were still able to generate enough revenue to maintain a positive balance of trade. The strong 'recovery' shown in Table 7.4 suggests that Cochinchina's exported goods were competitive enough to remain strong on the volatile world market or that their production could be increased to compensate for the decline in prices. In the case of Tonkin, low levels of trade overall vindicate the hypothesis from Chapters 5 and 6 that the Northern region was less likely to extract revenue from international trade than the Southern region. Instead, the increasingly negative balance of trade for Tonkin suggests that, despite its diversification and lower risk production patterns, it was increasingly reliant on the international economy for some goods. These overall figures thus seem to support our hypotheses. The following sections look into more specific details of the commercial activities of the two regions, to further justify our hypothesis.

⁵⁷² Jean Pascal Bassino & Bui Thi Lan Huong. "Estimates of Indochina's and Vietnam's International Trade (1890-1946)" in Jean-Pascal Bassino, Jean-Dominique Giacometti and Konosuke Odaka (eds) *Quantitative Economic History of Vietnam 1900-1990*, (Hitotsubashi: Institute of Economic Research, 2000), p.299.

7.5) Trade partners

When Western powers started to trade with Southeast Asia, the Vietnamese Emperor allowed them extensive commercial freedom: both France and Britain were given access to all ports of Vietnam, apart from those serving Tonkin.⁵⁷³ If only because of this historical decision, it was more likely for Cochinchina to have developed more extensive relationships with Western commercial partners than for isolated Tonkin. Tonkin's trade links would have remained limited to its traditional Asian partners, mainly China. However, we will show that despite this, both regions had similar partners, the only key difference resting on the scale of their partnership.

The majority of the data available show figures for French Indochina as a single entity. However, for the years 1930 to 1933, some statistics were recorded for exports and imports by region of origin/destination within Indochina and separated in categories for its main trading partners. These can be found in Appendices 7 and 8 respectively, but the main findings from these data will be discussed below.

Table 7.5: Freight Costs from Saigon, September 1929, (\$ per tonne)

	Rice	Other goods
Singapore	2.9	4.5
Dutch Indies	4.5	7
Europe	14.7	21.1
Hong Kong	4.5	4.8
Philippines	5.5	7
Japan	7.1	12.7
San Francisco	19.8	23.3
New York	19.8	25.6
Cuba	19.8	25.6

SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1930*, Hanoi: 1931, Section A, p.A19.

In the BEI, freight rates between Saigon and some of the other main trading ports worldwide were published. These are replicated in Table 7.5. This information is not available for freight rates from Hanoi, but we consider it unlikely that they would have

⁵⁷³ SOAS: R. Cabanes, "L'effort agricole et la balance commerciale de l'Indochine au cours de la période 1909-1938", in French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1940*, (Hanoi: 1941), p.339.

differed dramatically. The lower prices for transporting rice suggest the significance of this good in relation to others and the larger quantities of this good that were likely traded. Although other goods might have had higher weight to value ratios, rice was the most significantly traded good, reinforcing the economic significance of Cochinchina's specialisation in producing this crop.

Evidently, transport to Asian economies was much cheaper than to Western nations. It seems likely that these listed destinations were Cochinchina's most significant trade partners, but these rates were not ranked by order of significance. The following tables show that France was a significant trading partner of Indochina, while the Dutch Indies hardly appears on the recorded data. Nonetheless, one trading partner is significant in its absence: China, which, according to other tables, was probably the most significant trade partner of Indochina, apart from France. The absence of freight rates from Saigon to China also suggests that much of Indochina's overseas trade with China may have gone via Hong Kong. It is also possible that other trade to China was done via Tonkin's rail network. However, we previously showed that the weight of transported merchandise via rail was insignificant compared to trade done via boat (Chapter 4, Section 4.3 c.) so that this is unlikely to bias our conclusions.

Table 7.6: Share of Tonnage of Exports by Country of Destination, 1913-1935, (%)

	1913-1920	1921-1929	1930-1935
France and colonies	16.2	19.2	17.7
Hong-Kong	37.4	31.0	19.0
China	10.2	18.4	17.6
Japan	11.4	7.1	3.9
Singapore	2.4	3.4	2.4
The Kingdom of Siam	5.1	2.9	1.9
The Philippines	7.6	7.5	14.3
Dutch Indies	5.7	4.8	3.8
United States of America	0.2	1.0	1.5
India	1.3	1.6	1.4
Other	3.3	3.2	5.0

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Commerce", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.

Table 7.6 shows the average share of total weight of Indochinese exports by country of destination; Table 7.7 shows the average share of total value of Indochinese exports by country of destination. The main trading partners, by weight and value, were thus exclusively East Asian countries, apart from France. Three quarters of the total value of exports went to only 5 trading partners: France, Hong-Kong, China, Japan and Singapore. Although the Philippines and the Dutch Indies imported some Indochinese goods, their share of total value was very low, suggesting the low value of the goods they imported.

Table 7.7: Share of Value of Exports by Country of Destination, 1913-1935, (%)

	1913-1923	1924-1929	1930-1937
France	22.2	22.4	39.9
Hong Kong	39.1	30.0	19.1
China	8.5	12.3	8.7
Japan	4.5	8.9	4.5
Singapore	9.6	9.0	8.7

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Commerce", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.

France, as the colonial power, was unsurprisingly one of the main receivers of Indochinese exports. In the three stages of Indochinese trade (identified from Figure 7.1), France was receiving between 20-16% of total exports by weight and 20-40% of the value of total exports. The Indochinese goods exported to France were therefore relatively higher value goods: their value share is higher than their weight share. The data in Appendix 6 show that France was a keen importer of Indochinese foodstuffs, medicinal goods, handicraft products such as baskets and rugs, vegetable products, metals, silk thread (exclusively exported to France), textiles, furniture, mining products and metallurgical goods. The data specifying which goods were exported to France are only available for 1930-1933. It is therefore not possible to explain how the basket of goods changed over time. After the 1928 reforms it is likely France was increasingly importing higher value goods: although the share by weight declined slightly, the share by value increased sharply, suggesting France was increasingly importing higher value goods from Indochina. This may have been a reflection of the new tariff reciprocity between the colony and France whereby Indochinese exports were no longer paying customs duties in

France, making them more competitive and driving demand upwards. Because of the variety of the goods exported to France, it seems both Tonkin and CochinChina had a relatively sizeable share of its commerce.

Hong Kong imported between 20 and 37% of the total tonnage of Indochinese exports, by weight. Hong Kong, a British colony at the time, was not the sole consumer of these imports as it often acted as an entrepot port. Some of the merchandise shipped towards Hong Kong was then redistributed elsewhere, very often to China. China itself imported 10-20% of the total tonnage of Indochinese exports, in addition to what might have been redirected from Hong Kong. Their shares of exports by value closely matched that of their shares by weight, suggesting the basket of goods they imported remained relatively stable, although demand by both decreased after the Depression. Like France, both these destinations imported some of almost all Indochinese exports, suggesting again that both regions had the same trade partners, although the scale of their relationship would have differed based on their respective trade capacity.

Singapore only commanded around 2 to 3% of Indochinese exports by weight and tended to re-export some of these goods to the rest of Malaya. Singapore was one of the main importers of Indochinese rubber and of other select goods. Singapore's role as an entrepot for goods was valid for imports of raw materials, however foodstuffs tended to be consumed locally.⁵⁷⁴ The majority of the exports going to Singapore came from CochinChina, rather than Tonkin, presumably because of proximity and because of its demand of goods that were specifically produced in CochinChina (rubber). Many of the exports originating from Tonkin, such as mining products, were very rarely exported to Singapore. In this instance, there seems to have been a clear difference in the trade link of CochinChina and Tonkin.

Indochina was a relatively small trading partner of Japan's, the larger ones being the United States and India.⁵⁷⁵ However, from Indochina's point of view, Japan was a sizeable partner, importing between 4 and 12% of the total tonnage of Indochinese exports, which accounted for a similar share of value in this time period. A significant part of Indochina's exports to Japan were raw materials produced from Tonkin's mining industry. Japan's rice

⁵⁷⁴ Wright, *op.cit.*, p.417.

⁵⁷⁵ W.L.Holland & Kate L. Mitchell (eds), *Problems of the Pacific, 1936*, Proceedings of the 6th Conference of the Institute of Pacific Relations, (London: Oxford University Press, 1937), p.61.

imports would have come from its own colonies: by 1928, Japan hoped that Taiwan and Korea would be “able to fully satisfy” its domestic demand for rice.⁵⁷⁶ Despite this change over time, Tonkin had a larger relationship with Japan than Cochinchina did.

Most of these relationships remained the same over time, at least in weight term, apart from the fact that in the aftermath of the Depression export to the Philippines increased while exports to Hong Kong and Japan decreased. The first change may reflect the increasing importance of American commercial interests in the Pacific and the growing industrialisation push in small developing economies, while the second change may be reflective of the increasing tendency of some larger countries to rely on their own production possibilities. For example, Japan's declining share of Indochinese exports is in line with its post 1930s strategy of sourcing its imports from its own colonies. Trade with Asian neighbours suffered at the expense of trade with France, with the latter commanding more higher value goods in the aftermath of the Depression than it previously had. Much of this was probably due to the changes made to the tariff regime as discussed in Section 7.2. Indeed, more protectionism in neighbouring countries, together with the reduced tariffs on Indochinese goods entering France meant there was a greater push to sell on French markets. Apart from differences with respect to Japan and Singapore, it seems that the two regions generally traded with the same partners.

Trade partners did not change when we look at imports, either with respect to the share of tonnage (Table 7.8) or the share of value (Table 7.9): the main trading importers of Indochinese goods were the main exporters of goods to Indochina. The same five partners together accounted for more than three quarters of imports throughout this time period.

⁵⁷⁶ V.D. Wickizer & M.K. Bennett, *The Rice Economy of Monsoon Asia*, (Stanford, CA: Stanford University Press, 1941), p.91.

Table 7.8: Share of Tonnage of Imports by Country of Origin, 1913-1935, (%)

	1913-1920	1921-1929	1930-1935
France and colonies	12.5	16.3	11.3
Hong-Kong	44.2	39.3	29.5
China	10.0	17.8	16.7
Japan	3.9	5.1	13.4
Singapore	15.0	6.0	4.5
The Kingdom of Siam	1.7	3.0	2.8
The Philippines	6.0	4.2	2.9
Dutch Indies	3.7	3.5	4.4
United States of America	1.4	2.7	2.7
India	1.0	1.4	0.7
Other	0.8	0.9	3.9

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Commerce", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.

Table 7.9: Share of Value of Imports by Country of Origin, 1913-1935, (%)

	1913-1923	1924-1929	1930-1937
France	46.8	50.2	53.4
Hong Kong	24.4	17.3	9.3
China	8.1	8.6	5.4
Japan	1.5	2.3	2.4
Singapore	6.3	3.9	3.9

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Commerce", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.

In the case of imports, only 11-16% of the total tonnage of imports originated from France, although this accounted for around 50%, by value. It seems that France's exports to Indochina were also increasingly valuable relative to their weight: after 1930, per tonne, French exports to Indochina were worth more than France's imports from Indochina. As seen in Appendix 7, France was the dominant exporter to Indochina of oil and vegetable saps, drinks such as wine, metals, chemicals, dyestuffs, various chemical compounds, pottery, glass and glasswork, threads and textiles, as well as furniture, musical instruments and weapons. These goods went to both Tonkin and Cochinchina

and a strong commercial relationship between France and those two regions existed. Indochina's increasingly strong ties to France, especially in the aftermath of the Depression, differed from the situation in other Southeast Asian economies. Even before the Depression, most colonies were growing more integrated to the Asian economy, at the expense of trade with their metropolis.⁵⁷⁷ For example, in Burma, trade was increasingly directed towards India: in 1913, 40% of exports by value went to India; by 1940, this share had increased to 60%.⁵⁷⁸ On the imports side, by 1937, Asian economies were importing nearly three quarters of all Burmese exports.⁵⁷⁹ Indochina's contrasting experience from its neighbours was most likely due to the trade regulations highlighted in Section 7.2.

Hong Kong's exports to Indochina decreased in this period, in both shares of weight and value, although as with its imports, they were generally lower value exports (share of weight larger than share of value). Japan's position as an exporter became increasingly favourable. Not only were tariffs on Japanese goods reduced in this period, but Japan's rapid industrialising allowed it to export rather low value manufactured goods that were competitive on the Indochinese markets.⁵⁸⁰ Consequently, Japan was increasingly benefiting from its trade with Indochina. Imports from 'other countries' to Indochina were significant with respect to animal products, minerals and combustibles. These products tended to go mostly towards Cochinchina. This confirms the preliminary suggestion that, in a number of respects, Cochinchina's commercial relationship with the rest of the world would have been more significant than Tonkin's, probably as a result of its lack of a mining industry (resulting in increased demand for mining imports) and its lesser developed handicraft and manufacturing sector. However, it remains that Tonkin generally had the same trade partners than Cochinchina, only to a smaller extent.

Although there is no doubt that Cochinchina's trade was more important than Tonkin's, it is unclear that Tonkin's trade network was necessarily less wide. In fact, it seems that both economies had few key trade partners. The difference in their commercial activity was thus unlikely to be due to commercial partner differences, but

⁵⁷⁷ Booth 2007(1), op.cit, p.91.

⁵⁷⁸ Aye Hlaing, "Trends of economic growth and income distribution in Burma, 1870-1940", *Journal of the Burma Research Society*, June 1964, Vol.47, p.113.

⁵⁷⁹ J.S. Furnivall, *Colonial Policy and Practice: A Comparative Study of Burma and Netherlands India*, (Cambridge: Cambridge University Press, 1948), p.188.

⁵⁸⁰ Booth 2007(1), op.cit., p.102.

more likely to be guided by what the regions had available to trade. In other words, it was their production patterns and resulting output that explained their differing levels of engagement with trade.

7.6) Specific trade data

Exports

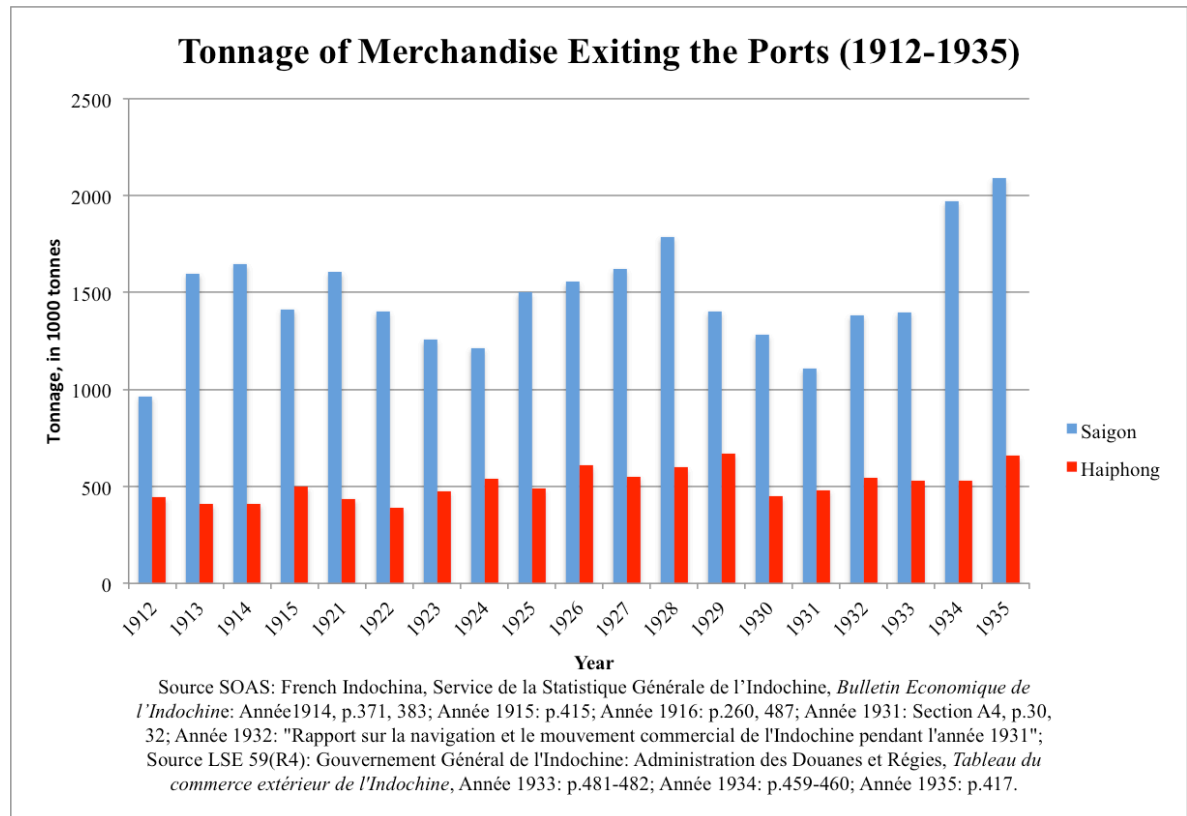


Figure 7.2

Figure 7.2 shows the merchandise exiting the ports of Saigon and Haiphong by weight, over the time period in question. The weight of the merchandise exiting Saigon was significantly higher than the weight of merchandise exiting Haiphong. The merchandise indicated in Figure 7.2 was loaded onto ships whose final destination was outside of the Indochinese Union, but some may have had stops at other ports within Indochina en route. Although this information does not provide us with an extensive understanding of the value, or nature, of the goods exported, it is certainly an indicator that the port of Saigon was far busier than the port of Haiphong. This is perhaps linked to the different geographic characteristics of the two ports: as noted earlier, Haiphong's port was much

more difficult of access than Saigon's. Given a choice, heavier ships would have had more inclination to dock at Saigon than at Haiphong. Table 7.10 shows the share by weight of particular categories of goods exported out of Indochina.

Table 7.10: Share of Main Exported Goods, 1913-1940, (% of Annual Average Tonnage of Exports)

	Foodstuffs	Minerals	Oils & Vegetable Saps	Metals	Annual Average Tonnage (tonnes)
1913-1920	65	24	0	1	2 054 070
1921-1925	57	33	0	1	2 609 309
1926-1930	52	38	0	1	3 137 402
1931-1940	49	45	1	0	3 278 549

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Commerce", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.
More detailed raw data can be found in Appendix 8.

Table 7.11 shows the share by value for these same goods.

Table 7.11: Share of Main Exported Goods, 1933-1936, (% of Annual Average Value of Exports)

	Foodstuffs	Oils & Vegetable Saps	Minerals	Metals	Fishing Product	Annual Average Value (1000 Francs)
1933-1936	62	9	6	4	5	1 270 365

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Commerce", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1932-1937.
Full dataset from Appendix 5.

Two categories of goods were the most significant: foodstuffs on the one hand and minerals and combustible materials on the other. The foodstuffs category comprised: rice, corn, beans and other such exportable grains. The minerals and combustible materials category comprised coal, sand, cement, charcoal, petrol and other such goods. The significance of the categories changes slightly when one compares Table 7.10 and 7.11: the export of foodstuffs remained the most valuable category, but mining output provided a much smaller share of revenue than of total weight.

Export statistics showing the origin and nature of the exported goods were only collected for the years 1930 to 1933. Unfortunately, these were the three years most affected by the Great Depression. Even then, detailed statistics are only weight statistics, not value statistics. However, because they were separated in specific categories of goods, and each category is the same for both regions, they provide a good snapshot of the differences in exports between Tonkin and Cochinchina at that point in time. Table 7.12 provides a summary of the relevant categories of goods.

Table 7.12: Annual Average Quantity of Main Exports, by Region of Origin, 1930-1933, (1000 tonnes)

	Annam-Tonkin	Cochinchina-Cambodia
Fish Products	1	33
Foodstuffs	83	1 215
Oils and Vegetables Saps	2	14
Minerals	1 411	0
Metals	17	1
Total Exports	1 616	1 311

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Commerce", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1932-1937. Full dataset from Appendix 6.

Table 7.12 unsurprisingly confirms that the exports of foodstuffs and oils and vegetable saps were primarily from Cochinchina, while minerals and metals such as tin and gold were mainly from Tonkin.

Table 7.13: Annual Average Weight and Annual Average Value of Exports, by Region of Origin, 1934-1937

	Tonkin	Cochinchina
Weight (1000 tonnes)	1 848	2 073
Value (1000 Francs)	286 033	1 320 549

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Commerce", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1932-1938.

In fact, both categories comprising the output of Cochinchina's specialisation (rice in foodstuffs; rubber in vegetable saps) were much more remunerable than those

comprising Tonkin's main export industry (minerals and metals). Rubber was a key industrial venture and, together with rice, was one of the most important traded items in terms of value. Tonkin's output of its main industrial venture, minerals and metals from its mining industry, accounted for only 10% of the value of exports, despite taking up 45% of total tonnage. Although metals did have a much higher value to weight ratio, they only accounted for a minor share of exports, whereas exported minerals were less valuable per tonne than white rice. Fishing products brought in a significant share of export income. Table 7.12 shows that, at least in 1930-1933, Cochinchina exported far more fishing products than Tonkin. If we refer to Maps 3a and 3b, we can see that there were 'fishing' locations in both Tonkin and Cochinchina. Both areas had substantial access to the seafront and navigable rivers and, presumably, both had similar access to supply, but Cochinchina clearly chose to export more of that supply than Tonkin. Again, this fits with the patterns of production of the two regions: Cochinchina seems to have produced for trade much more than Tonkin. In general, Cochinchina's exports were not only larger; they were also more valuable than Tonkin's.

It is clear that the quantity of Tonkinese exports rose progressively over time and so did revenue. Despite this rise, the value of goods exported from Cochinchina was significantly higher than that of the goods exported out of Tonkin. In fact, although we believe Figure 7.2 exaggerated the difference in tonnage of exports, Figure 7.3 suggests an even starker picture with respect to value.

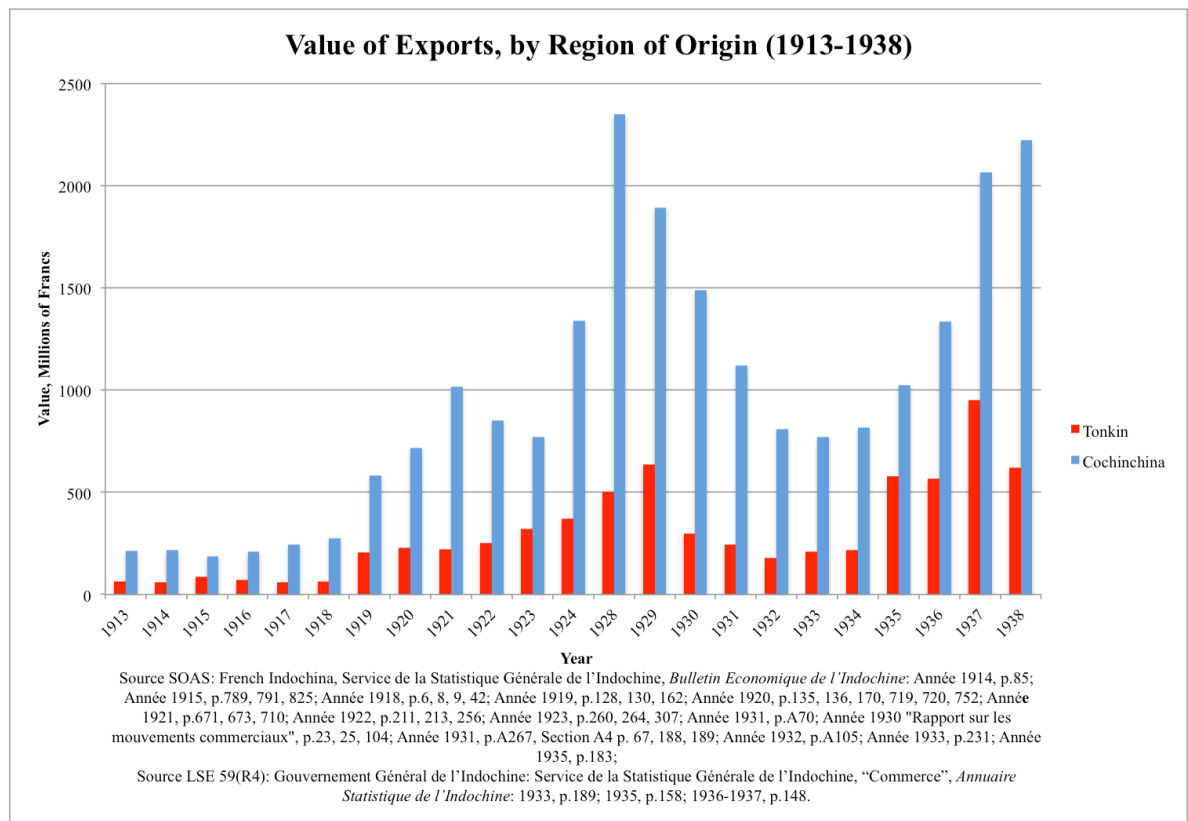


Figure 7.3

These above tables and figures suggest that the most valuable exports of French Indochina were mainly from the Cochinchinese region. The relative importance of each category of exported good did not vary much with time. Throughout this time period, the main exports remained the same: foodstuffs and mining products. As total trade increased, the categories grew somewhat proportionately. Since the industrial sector was mainly developed in Tonkin and its output was generally geared to the domestic market, such stability in exports baskets is unsurprising. The economic divide between Tonkin and Cochinchina was vividly depicted in trade data and the regions' export baskets reflected their production patterns.

The basket of goods exported out of Indochina is in line with those of other colonies: agrarian exploitation and the product of capitalist ventures in “forests, oilfields, mines and plantations”.⁵⁸¹ As previously mentioned, Burma was recognised for its exports of rice. Before WW2, Burma exported over 3 million tonnes of rice per year.⁵⁸² This is much more than Cochinchina did, as all exported foodstuffs between 1930-1933 weighed

⁵⁸¹ Furnivall 1948, op.cit., p.81.

⁵⁸² André Angladette, *Le Riz*, (Paris: Presses Universitaires de France, 1967), p.89.

just over a million tonnes, some of this accounting for significant exports of maize. Even then, Indochina's growth as a rice exporter was strong, especially before 1930.⁵⁸³ Despite the strong growth of the rice industry in Indochinese exports both in terms of weight and revenue, its quality on the international market was often considered quite low. Indeed, consumers tended to prefer Thai or Burmese rice that often was more uniform in quality. High quality Thai rice, “white garden rice”, was worth 8.7 piastres per 100 kilograms in 1931. By 1933, this had decreased to 5.1 piastres.⁵⁸⁴ By contrast, Cochinchina's white rice was sold at only 4.19 piastres in 1933.⁵⁸⁵ This price difference is very large considering that both Indochina and Thailand were such large exporters of rice. Despite a potentially low quality, there is no doubt that Cochinchina's specialisation allowed for higher trade revenue than Tonkin, even with the latter's more export-oriented mining sector.

Overall, it appears that the value of exports was on average nearly three times higher in Cochinchina than in Tonkin. The value differences suggest and support the view that Tonkin's basket of exportable goods did not increase significantly during colonial rule. The two regions show a very different level of engagement with the international economy. Cochinchina was much more engaged with the world economy than Tonkin because it 'chose' to produce for export. The latter's rather small engagement, until exports of minerals took off, confirms that its diverse production, particularly in its agrarian sector, was aimed at the domestic market rather than the international market.

Imports

Cochinchina's larger tendency to specialise and engage in mono-crop as opposed to Tonkin's more diversified agrarian and industrial productions would suggest differing degrees of import-reliance. Cochinchina's population would have had to be in part more dependent on the international market to supplement both its diet and the domestic demand for goods not produced within the region.

⁵⁸³ Pierre van der Eng, “Productivity and Comparative Advantage in Rice Agriculture in South-East Asia since 1870”, *Asian Economic Journal*, 2004, Vol.18, No.4, p.347.

⁵⁸⁴ Touzet 1934, op.cit., p.14.

⁵⁸⁵ LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Commerce", *Annuaire Statistique de l'Indochine Vol.VI*, (Hanoi: Imprimerie d'Extrême-Orient, 1937), value of white rice exports divided by quantity.

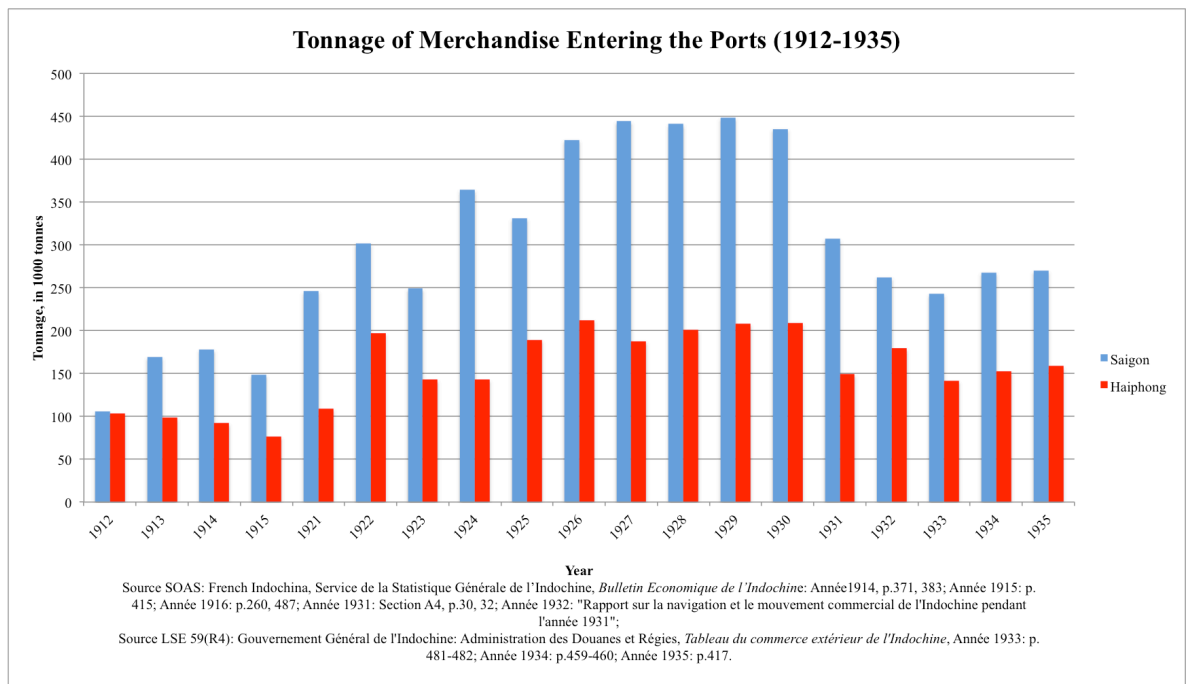


Figure 7.4

Figure 7.4 displays the weight of merchandise entering the ports of Haiphong and Saigon. The tonnage of imports entering those same ports seem to have been much more similar to one another than the tonnage of exports exiting those ports as seen in Figure 7.2. Pending analysis of the goods actually imported, this is surprising, as one would have expected Cochinchina to have imported far more than Tonkin. Table 7.14 displays the value to weight ratios for exports and imports by region. Per tonne, imports were much more valuable than exports entering both ports. It makes sense for a colony to have imported high value added goods, particularly an agrarian economy with a limited industrial sector such as Indochina. The value to weight ratios for imports tended to be quite similar between both regions, suggesting a similar basket of goods being imported.

Table 7.14: Value:Weight Ratio of Traded Goods, 1913-1935, (Ff per tonne)

	Import Value:Weight Ratio		Export Value:Weight Ratio	
	Cochinchina	Tonkin	Cochinchina	Tonkin
1913	952	619	133	152
1914	832	554	131	141
1915	767	524	133	171
1921	2 306	1 947	633	507
1922	1 857	1 247	608	649
1923	2 726	2 430	613	674
1924	2 248	3 446	1 103	687
1928	3 785	4 061	1 315	839
1929	3 694	3 674	1 349	948
1930	2 580	2 851	1 162	667
1931	2 550	3 410	1 013	509
1932	2 109	2 018	584	329
1933	2 213	2 271	552	395
1934	2 005	2 443	414	408
1935	2 139	2 027	491	875
Calculation made with Data from Table 7.4, Figure 7.2 & Figure 7.4				

Table 7.15 displays the share of the main categories of imports as a per cent of the annual average weight of imports. The trend of total tonnage imported into Indochina, during this time period, was one of rapid increase until the onset of the Depression, after which import tonnage decreased. This confirms the trend seen in Figure 7.4 and may represent efforts to lessen dependence on imports, a normal response in times of economic difficulty. Unlike with exports, there is no clear dominance of any one import: Table 7.15 shows that imports of drinks, metals and textiles all seem to have been significant. As we previously suggested, the export data emphasised the significance of the specialisation of Cochinchina in production of rice. Imports, on the other hand, were for a variety of goods necessary for the economy as a whole and would have been, by default, more varied.

Table 7.15: Share of Main Imported Goods, 1913-1940, (% of Annual Average Tonnage of Imports)

	1913-1920	1921-1925	1926-1930	1931-1935
Foodstuffs	5	6	6	8
Fruit & Grains	3	3	2	3
Perishable Colonial Goods	4	3	4	2
Vegetable Products	4	3	3	5
Drinks	25	22	23	9
Minerals	22	22	27	34
Metals	4	8	10	10
Metallurgical Goods	2	6	6	7
Textiles	9	4	3	6
Annual Average Tonnage (tonnes)	277 334	452 150	635 107	400 999
LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Commerce", <i>Annuaire Statistique de l'Indochine</i> , Hanoi: Imprimerie d'Extrême-Orient, 1927-1939. Full dataset from Appendix 9.				

Table 7.16: Share of Main Imported Goods, 1933-1936, (% of Annual Average Value of Imports)

	1933-1936
Foodstuffs	3
Fruit & Grains	2
Perishable Goods (pepper, sugar...)	5
Vegetable Products	2
Drinks	4
Minerals	9
Metals	7
Textiles	26
Metallurgical Goods	10
Annual Average Value (1000 Francs)	925 266
LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Commerce", <i>Annuaire Statistique de l'Indochine</i> , Hanoi: Imprimerie d'Extrême-Orient, 1932-1937. Full dataset in Appendix 10.	

Table 7.16 shows that the most important categories of imported goods by value were textiles and metallurgical goods, including some machinery. Because modern industrialising efforts were late in coming to Indochina, imports of these goods are not surprising. French Indochina was in the process of modernising and industrialising, particularly towards the latter part of the French colonial period. Interestingly, the share of the various imported goods hardly changed over time. Moreover, the relative share of capital goods and raw material, as opposed to finished products, was quite low. This differs in some ways from the situation in Burma, where there was “a notable increase in the value of capital goods imported”.⁵⁸⁶ The stability in relative shares suggests limited developments and changes in the patterns of consumption of the colony and thus further emphasises the significance of previously highlighted patterns of production.

The most significant imports were textiles. The textile category included ‘jute bags’, bags used to store foodstuffs. Jute bags were not produced within Indochina, but rather were imported, often from India. Moreover, cotton and silk were only small industries in Indochina, and therefore the import of such textiles was necessary. The import of foodstuffs and vegetable products in small amounts is also of interest. These goods were likely to have supplemented the domestic market.

As with exports, some information on imports is available for the years 1930-1937, by region of destination, and the key findings are summarised in Table 7.17 and Table 7.18.

⁵⁸⁶ Furnivall 1948, *op.cit.*, p.101.

Table 7.17: Annual Average Quantity of Main Imports, by Region of Destination, 1930-1933, (1000 tonnes) *

	Annam-Tonkin	Cochinchina-Cambodia
Foodstuffs	10	25
Fruit & Grains	2	9
Perishables	4	9
Vegetable Products	3	16
Drinks	46	46
Minerals & Combustibles	50	96
Metals	21	25
Textiles	4	11
Metallurgical Goods	14	19
Total Weight*	131	240
<p>*excluding drinks, which were recorded in 1000 hectolitres. LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Commerce", <i>Annuaire Statistique de l'Indochine</i>, Hanoi: Imprimerie d'Extrême-Orient, 1932-1937. Full dataset from electronic Appendix 7.</p>		

Table 7.18: Annual Average Weight and Annual Average Value of Imports, by Region of Destination, 1934-1937

	Tonkin	Cochinchina
Weight (1000 tonnes)	133	261
Value (1000 Francs)	371 287	651 640
<p>LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Commerce", <i>Annuaire Statistique de l'Indochine</i>, Hanoi: Imprimerie d'Extrême-Orient, 1932-1938.</p>		

Both regions imported textiles. Despite a growing textile industry, Tonkin was still dependent on imports for its domestic market, although it is possible some of this was yarn used for further processing. Cochinchina imported more foodstuffs, fruit and grains, perishable colonial goods (such as sugar) and vegetable products than Tonkin during this time period. These are all categories of goods that would have supplemented the population's diet. Tonkin's lower imports of such goods suggests that it was better able to satisfy local demands through its own domestic production, or that people purchased less, either because they were poorer or needed less. This further lends support

to our hypothesis that Tonkin was a more self-sufficient economy due to its diversification than Cochinchina, which relied on the international market through its specialisation.

In other categories, both regions seem to have imported similar quantities of goods, for example minerals, metallurgical goods and metals. These goods would have been important for the economic development of both regions. Cochinchina imported more of these goods than Tonkin. Presumably, there was less demand for these goods in Tonkin than in Cochinchina because the region already produced some of those goods. As we suggested, it appears that the basket of imported goods for Cochinchina and Tonkin was composed in a similar manner but that, as expected, the quantities imported were higher in Cochinchina. This is even more significant considering the lower population in Cochinchina, meaning that per capita imports were quite high. This confirms that Cochinchina was more reliant on the international economy and conversely that Tonkin was more self-sufficient than Cochinchina.

Because the basket of imports was similar in both regions and because the gap in the quantity they exported was not as high as the gap in what they imported, Figure 7.5 is unsurprising.

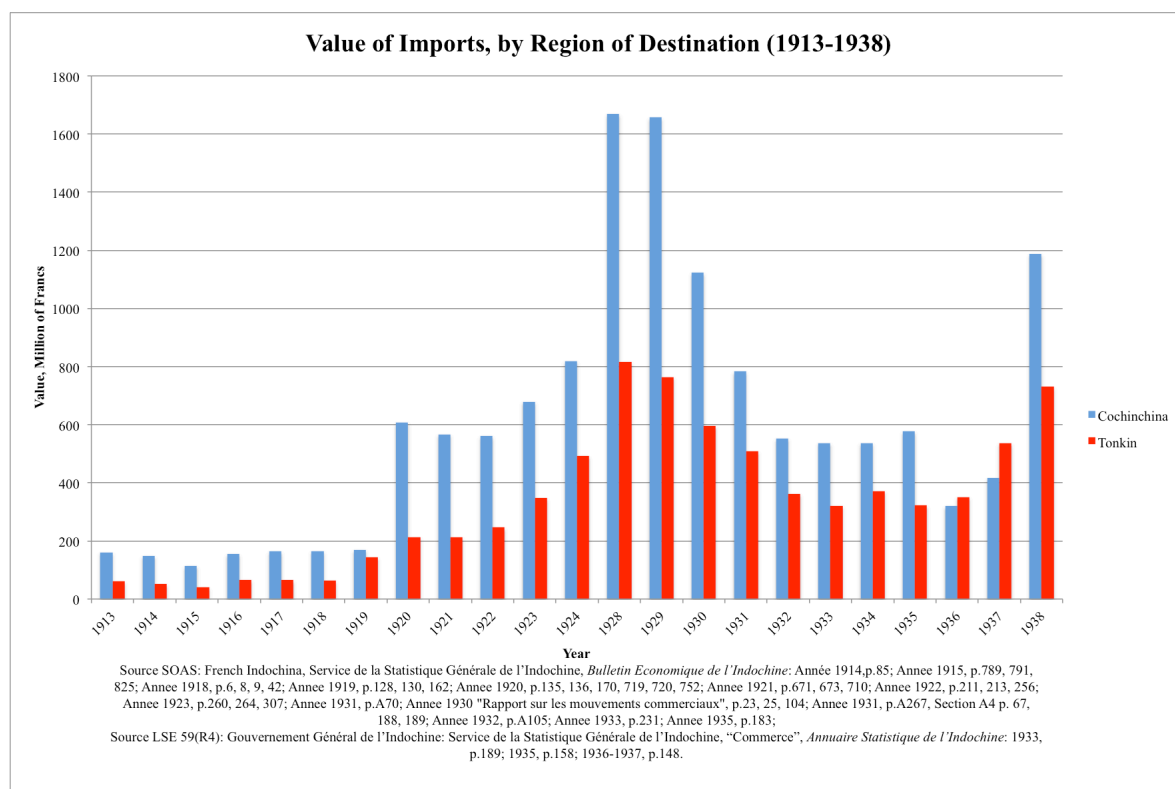


Figure 7.5

These tables and figures show that both Tonkin and Cochinchina imported significant quantities of goods of relatively high value, compared to what they exported. These trends were in line with other colonial and developing economies. As expected, Cochinchina's share of imports was more substantial. Cochinchina's commercial patterns appear to have been aligned with its specialisation: more imports were necessary as fewer goods were produced domestically. Tonkin's share of import was perhaps surprisingly high considering it was a more diverse economy both in its agrarian and its industrial production. This suggests that its domestic production was insufficient, thus partly explaining why the region was unable to close the economic divide during colonial rule.

7.7) Conclusion

According to Nørlund, the Vietnamese “autarkic concept of self-sufficiency prevailed from the introduction of the Méline tariff system in 1892 up to the Second World War”.⁵⁸⁷ The Indochinese Union certainly had a high degree of tariffs and trading regulations but self-sufficiency is too strong a word to use to describe either of the two

⁵⁸⁷ Irene Nørlund, “The French Empire, the Colonial State in Vietnam and Economic Policy: 1885-1940”, *Australian Economic History Review*, Vol.31, No.1, March 1991, p.73.

regions. Despite these Union-wide barriers, international trade was significant for both regions, although it was particularly so for Cochinchina. Cochinchina and Tonkin both engaged mostly with the East Asian world. Nonetheless, **the trading network of Tonkin certainly appears to have been less extensive and dynamic than Cochinchina's.** Tonkin's behaviour was more cautious with regards to international trade than Cochinchina's, whose specialisation in key crops appears to have ensured the region maximised potential advantages from the international market.

Both Tonkin and Cochinchina were subjected to the same general colonial tariff and various trade related taxes. The tariff regime of Indochina was considered more protectionist than most of its colonial neighbours. These trade barriers might have had a different impact on the two regions because they did not produce the same basket of exportable goods or import the same quantities. Although it is almost impossible to truly estimate the relative openness of the two regions,⁵⁸⁸ we have argued that the trade relations of Tonkin and Cochinchina were **not necessarily influenced by these various taxes, but rather by their pre-existing patterns of production, which either provided output for trade or not.**

Cochinchina's access to large trading houses, numerous credit institutions and infrastructure for trade seems to have been superior than Tonkin's. In addition, there is no doubt that, in financial terms, the trade balance of Cochinchina was much more favourable than Tonkin's. In the Tonkin case, trade overall implied an outflow of financial capital, whereas in the Cochinchinese case, there was a clear and large inflow. Furthermore, since the Cochinchinese surplus was the main reason for an Indochinese trade surplus, it is safe to suggest that Cochinchina was the primary exporting region of Indochina. As we suggested in Chapter 4, actions by the colonial government were generally a reflection of existing differences in the economic performances of the regions. We have argued this was also the case with respect to infrastructural investment. In addition, we believe that **investors and trading agents' greater attraction to Cochinchina's commercial sector reflected the greater profitability of that region's commercial sector.**

⁵⁸⁸ Dani Rodrik, "Trade and Industrial Policy Reform in Developing Countries: A Review of Recent Theory and Evidence", National Bureau of Economic Research, Working Paper No.4417, August 1993, p.14.

We have also argued that **production patterns and the production possibility frontiers they resulted in** were more significant in determining the strength of the commercial activity of Tonkin and Cochinchina than any differences in trading partners these regions had. Indeed, it seems that both regions were trading with the same countries. **The only key differences in their trade relationships were in the composition of their trade baskets and the quantities traded.** In total, the majority of the value from Indochinese exports came from Cochinchinese exports: around 75%. Tonkinese exports tended to bring in roughly 15% of total revenue. Crop specialisation was clearly demonstrated in the commercial statistics for Cochinchina as rice and rubber together accounted for the largest share of exports in both tonnage and value. In Tonkin, the mining industry was the most significant exportable activity but even exports from that sector were relatively insignificant, in revenue terms.

With respect to imports, both regions seem to have been dependent on a large influx of high value goods. Surprisingly, it was found that Tonkin's imports were closer to Cochinchina's than their exports had been, insofar as both imported similar baskets and quantities. Cochinchina imported more, as one would expect from a more specialised economy. **Tonkin's substantial share of the import market, however, may be representative of an economy that was struggling.** Despite its diversification and seemingly varied domestic supply of goods, sizeable imports were brought into the region.

Myint explained that “international trade overcomes the narrowness of the home market and provides an outlet for the surplus product” and allows for a general “rise in the level of productivity of the country”.⁵⁸⁹ This suggests that Cochinchina's production patterns might, in turn, have been affected by its greater reliance on international trade. The theory of the trade multiplier suggests that “exports stimulate production for export purposes and increase the national wealth”.⁵⁹⁰ It is outside the scope of this project to demonstrate that Cochinchina's greater integration to the world economy may, in part, have driven its superior economic performance. Instead, the initial causality was the scope of this chapter: **the economic performance of Cochinchina was clearly driven**

⁵⁸⁹ H. Myint, “The ‘Classical Theory’ of International Trade and the Underdeveloped Countries”, *The Economic Journal*, Vol. 68, No.270, 1958, p.318.

⁵⁹⁰ Shigeru Fujii, “Japan’s trade and her level of living”, The Science Council of Japan Division of Economics & Commerce, *Economic Series*, No.6, March 1955, Preparatory paper for the 12th conference of the Institute of Pacific Relations, p.9.

by its ability to produce more per capita and there is no doubt that this ability was central in explaining its larger role in the international market.

PART 3: EVALUATING THE IMPACT OF THE GAP

Chapter 8: Standards of Living

8.1) Introduction

The first part of this thesis was a re-assessment of the two key explanations provided in the literature for the origins of the economic divide between Tonkin and Cochinchina. The second part established how this economic divide manifested itself in the agricultural, industrial and commercial sectors of the two regions. However, it is still unclear how far the economic divide was evident in the everyday life of the population. While GDP per capita estimates show a significant gap in favour of Cochinchina, this is hardly a sufficient indicator of the relative standards of living. This chapter addresses the question of **how the economic divide between Tonkin and Cochinchina was reflected in the standards of living of their population**. Research on this subject has been limited and we use the available evidence to evaluate standard of living via health, education, wages and prices in both the urban and rural parts of Indochina. In addition, we calculate new quantitative evidence to show **to what extent some people were clearly better off in Cochinchina's urban centres** than in Tonkin's and to show that **the majority of the rural population of both regions were living in bleak circumstances**.

This chapter is separated in three main sections: health and education evaluations, urban standard of living comparisons and rural standard of living comparisons. Some commonly used measures of standard of living such as the Human Development Index cannot be constructed given insufficient data on the regions' literacy and life expectancy. The information available for these aspects of the standard of living is weak, at best, because it did not include indigenous investment in these programs. The data mainly allow evaluations of 'inputs' rather than 'outputs', but some scattered data points to similar improvements in health and education indicators in both regions. Preliminary evaluations suggest that both the Tonkinese and Cochinchinese populations probably had access to similar resources in health and education.

The majority of this chapter's evidence and arguments rests on data for wages and prices in the cities and income and expenditure in the countryside. Our analysis for urban standards of living focuses on comparing trends in wage and price differentials between the two regions' main city centres. Our analysis for rural standards of living specifically

compares landholding sizes, incomes and expenditure for various classes of peasants. We calculate a suggested breakdown of the rural society to help illustrate why rural standards of living for the majority of the population was similar in both regions. These comparisons allow us to say that the GDP per capita gap overestimates the actual differences in standard of living, which were much less extensive.

8.2) Health & education

Health and education are considered important indicators of standard of living: they are two of the three indicators included in the Human Development Index. Unfortunately, gathering comparable data for Tonkin and Cochinchina is not always easy. For example, although Maks Banens' work evaluates Indochina's demographic characteristics in general, his indicators for infant mortality are only for Tonkin. For Cochinchina, he calculates stillbirths in the Asian population, instead of general infant mortality.⁵⁹¹ With respect to education, the issue with the available data is a general lack of clarity and consistency. Such data problems limit our ability to evaluate this aspect of living standards.

The available data relevant to our study are mainly for the inputs the government was providing to improve these social conditions, rather than the outputs generated. Although some estimates have been produced to better understand the resulting output, they have generally focused on specific regions and are rarely comparable. My approach, given the data constraint, uses the indirect measure based on “input” rather than final outcomes such as life-expectancy or literacy rates. It is nonetheless possible to evaluate the colonial administration's impact on the two aspects, to a certain extent. The French colonial budget did have significant expenditure towards these two categories of public goods. Colonial projects may provide a good indication of conditions, although not necessarily of improvements, in health and education indicators.

⁵⁹¹ Maks Banens, “Vietnam: a Reconstitution of its 20th Century Population History” in Jean-Pascal Bassino, Jean-Dominique Giacometti and Konosuke Odaka (eds) *Quantitative Economic History of Vietnam 1900-1990*, Hitotsubashi: Institute of Economic Research, 2000, p.1-40.

Health

Some have suggested that improvements in hygiene and available medication during colonial rule had the negative result of growing population pressure without equivalent increases in employment opportunities.⁵⁹² Booth highlighted that the efforts of colonial governments in Southeast Asia were increasingly developmental, but she argued that “the colonial governments did too little with the resources at their disposal, and that too many opportunities were missed”.⁵⁹³ The French colonial government became increasingly aware of the need for medical attendance and regulations emphasised the need for adequate living quarters for workers, although this was rarely enforced.⁵⁹⁴ Overtime, regulations were also extended to ensure contractual workers received appropriate daily rations “corresponding to at least 3 200 calories, and including a certain proportion of fresh foodstuffs”.⁵⁹⁵ This is far higher than van der Eng's suggestion that calorie consumption in the Dutch Indies between 1880-1920 was 1 900,⁵⁹⁶ or of Tao's suggestion that Chinese urban workers' daily intake was between 2 600 and 2 900 calories in the late 1920s,⁵⁹⁷ and there is no doubt these regulations were not enforced. However, this rhetoric highlight the growing importance of health in the discourse and implementation of French colonial policy, which was particularly clear with respect to regulations of contract employment in the aftermath of WW1.

Table 8.1 shows that annual public expenditure for health was low in Tonkin: about 0.1 piastres per person on average in selected interwar years, which was equivalent to a third of the daily wage of an unskilled male worker (Section 8.3). In Cochinchina, the annual expenditure was more than in Tonkin, but it remained a similarly small fraction of the unskilled worker's daily wage. Table 8.1 shows that expenditure on public works from local budgets alone was more substantial than expenditure on health and this does not include substantial investments made through funds from the general budget. This is

⁵⁹² Bruno Lasker, *Standards and Planes of Living in the Far East*, Preliminary draft for the use of the 12th Conference of the Institute of Pacific Relations, (New York: Institute of Pacific Relations, 1953), p.29.

⁵⁹³ Anne E. Booth, “Night Watchman, Extractive, or Developmental States? Some Evidence from Late Colonial South-East Asia”. *Economic History Review*, Vol.60, No.2, 2007(2), p.262.

⁵⁹⁴ Jean Goudal, *Labour Conditions in Indo-China*, (Geneva: International Labour Office, 1938), p.18 & p.51.

⁵⁹⁵ *ibid*, p.142.

⁵⁹⁶ Pierre van der Eng, “Food Consumption and the Standard of Living in Indonesia, 1880-1990”, *Economic Division Working Papers Southeast Asia*, 93/1, p.15.

⁵⁹⁷ L.K.Tao, “The Standard of Living Among Chinese Workers”, Paper for the Fourth Biennial Conference of the Institute of Pacific Relations in Hangchow, October-November, 1931, (Shanghai: China Institute of Pacific Relations, 1931), p.14.

clearly in line with the French colonial policy of *mise-en-valeur*, but shows that, for improvements on health, the colonial administration's actions were not as extensive as their rhetoric suggested. Nonetheless, between 1921 and 1936, the share of per capita expenditure on public health did increase relative to that of public works: from less than a fifth to over half, showing it was becoming a bigger priority even if both types of public expenditure decreased in the aftermath of the Depression. Table 8.1 suggests that public expenditure on health was more significant in Cochinchina than in Tonkin. This may be misleading: Tonkin, as a protectorate, might have relied on investment done through traditional authority structures; Cochinchina, as a colony, would not have relied on these as much.

Table 8.1: Per Capita Expenditure in Public Health, Compared to Per Capita Expenditure on Public Works,⁵⁹⁸ 1921-1936, (\$ per inhabitant)

	Public Expenditure for Health		Public Expenditure from Local Budgets for Public Works*	
	Tonkin	Cochinchina	Tonkin	Cochinchina
1921	0.11	0.20	0.14	0.99
1931	0.12	0.40	0.22	0.68
1936	0.10	0.27	0.16	0.41

* actual expenditure on public works was much higher than what this table shows but it is not possible to show the share of the general budget's expenditure on public works per region.
 LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Population et Territoire", "Finances Publiques", "Santé Publique", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.

The information contained in Table 8.2 highlights expenditure for medical assistance, as well as the number of medical establishments in both provinces. Medical assistance was the financial resources given by the general government to publicly run establishments.

⁵⁹⁸ Public works were part of the 'economic interest' section of the public budgets and included the infrastructural projects discussed in Chapter 4.

Table 8.2: Medical Assistance and Establishments, 1913-1936

	Annual Average Medical Assistance (1000 \$)		Medical Establishments	
	Tonkin	Cochinchina	Tonkin	Cochinchina
1913-1920	600	876		
1921-1930	1 088	1 259	133	214
1931-1936	1 113	1 586	208	236

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Santé Publique", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.

These establishments included hospitals, rural infirmaries, maternity units... The expenditure on medical assistance was considerably higher in Cochinchina than in Tonkin, on average, and the trends are similar to those seen in Table 8.1. Initial differences in political status mean that we should expect a more significant investment of public funds in these programs in Cochinchina rather than in Tonkin. The latter region might have been expected to rely on traditional structures of assistance, which remained part of its institutional structure. In Cochinchina the colonial government had official control over such mechanisms.

The official records used to construct Table 8.2 included some privately run establishments, but the majority were state-funded. For example, in Tonkin only 8 of the 96 establishments were privately run in Tonkin: 7 care homes for the elderly and 1 orphanage. During the same year in Cochinchina, 15 out of the 157 recorded establishments were private: 5 day care centres, 5 orphanages and 5 care homes for the elderly.⁵⁹⁹ These were included in the official list of establishments because they were run by European religious organisations, but private indigenous facilities were not included. These privately run establishments have been retained in Table 8.2 because they help provide a wider picture of available facilities.

In terms of the number of medical establishments, we see that the initial higher public expenditure in Cochinchina might have contributed to an initially higher number of establishments, but despite the more limited public funds invested in Tonkin, a faster growth of medical establishments occurred in the later time period. In per capita terms, it

⁵⁹⁹ LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Santé Publique", *Annuaire Statistique de l'Indochine*, (Hanoi: Imprimerie d'Extrême-Orient, 1927-1939).

is clear that Cochinchina seems to have had both more facilities and larger volumes of public investment.

Table 8.3: Number of Medical Establishments, by Type, in Tonkin and Cochinchina, 1929-1935

	1929		1930		1933		1935	
	Tonkin	Cochin- china	Tonkin	Cochin- china	Tonkin	Cochin- china	Tonkin	Cochin- china
Hospitals	3	3	3	3	3	3	4	2
Special Institutes	1	3	1	3	3	4	1	4
Provincial Hospitals	29	21	29	20	29	20	29	20
Municipal Dispensaries			1	4	2	4	2	5
Rural Infirmaries	82	186	91	179	98	172	104	165
Specialist Maternity Units	11	25	12	29	9	29	10	27
Orphanages & Care Homes (Private)	10		12		13		13	1
Asylum	1	1	1	1	1	1	1	1
Leprosy Units	5	1	6	1	6	1	1	1
Quarantine Station	1	1	1	1	1	1	1	1
Isolation Hospitals	1	1	1	1	1	1	1	1

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Santé Publique", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.

As Table 8.3 shows, it is also clear that both regions had the same types of facilities, further suggesting the various available 'inputs' for health facilities were likely similar. Although some of these facilities' services might also have been provided by traditional facilities, it seems unlikely that village level health establishments would have had the

necessary budgets to provide modern health facilities and medication. This would explain the large number of state-funded dispensaries.

Worker regulations also required private medical centres in establishments employing large numbers of contracted workers such as mines and plantations. Similar health facilities on Malayan rubber estates show a large decrease in the death rates: from 232 per 1 000 in 1911 to 1.1 in 1932.⁶⁰⁰ This information is not available for Cochinchina, but it does align with Banens' records, which show a decline in crude death rate after 1920,⁶⁰¹ in line with the colonial administration's growing discourse on the importance of health provisions for contracted workers. It is very likely that there were other informal caring networks, but this information is not available. The larger importance of village authorities in Tonkin would suggest that there would have been more of these informal caring networks there than in Cochinchina, but no data can be found. It is therefore hard to justify the view that health provisions were necessarily better in either region.

Banens clearly states that no consistent conclusions can be drawn for mortality levels before 1975,⁶⁰² however his indicators suggest that in Hanoi, infant mortality for children under the age of 1 was 440 per 1 000 in 1925; by 1938, this had decreased to 190 per 1 000,⁶⁰³ a much more substantial decline than experienced in the Straits Settlement between 1901-1937 (from 230.86 to 155.80).⁶⁰⁴ This information is not available for Cochinchina, but it seems unlikely that improvements in health would have been less impressive in Cochinchina, considering the data in this section. Despite some improvements in health indicators, life expectancy at birth for Indochina as a whole shows little to no improvement between 1880-1940,⁶⁰⁵ confirming that it is unlikely for huge differential changes to have occurred in either region during this time period.

Education

Education in colonial Southeast Asia was extensively studied in Furnivall's 1943 *Educational Progress in Southeast Asia*. In this work, he suggested that school

⁶⁰⁰ Lenore Manderson, *Sickness & the State: Health and Illness in Colonial Malaya 1870-1940*, (Cambridge: Cambridge University Press, 1996), p.146.

⁶⁰¹ Banens, op.cit., p.20.

⁶⁰² Banens, op.cit., p.9.

⁶⁰³ *ibid*, p.36.

⁶⁰⁴ Manderson, op.cit., p.44.

⁶⁰⁵ Banens, op.cit., p.19.

enrolments in Indochina grew during French colonial rule, but that they were low in comparison to other countries in the region. This is also acknowledged in Virginia Thompson and Richard Adloff's 1948 *Cultural Institutions and Educational Policy in Southeast Asia*. Thompson and Adloff argued that secondary schools were few in numbers and universities were limited to very few students.⁶⁰⁶ Education above primary school was limited: in 1930-1931, only 145 students were reported as graduating with a French Baccalaureate in Tonkin and only 44 in Cochinchina.⁶⁰⁷ These data seem incredibly low, but they are confirmed in the other studies mentioned.

The primary school information available for Indochina is mainly for 'first degree' franco-indigenous education taught in French. There is some information available on 'free' education, but as it is unclear what this refers to and how comprehensive the authorities' survey was, the data are difficult to use. Before 1932, primary school was in French. Following 1932, primary education reverted back to being taught in Vietnamese. Secondary schooling was also taught in French and, to achieve higher education, students were expected either to go to France or to study at the University of Hanoi. Table 8.4 give some basic data for primary schooling in Tonkin and Cochinchina during French rule. Included in this data set are only schools that were recognised and followed the accepted curriculum. The key requirement to be 'recognised' was for these schools to provide degrees to their students. It is quite clear thus that there could be any number of other education facilities that did not fit this profile but still operated within Indochina independently of the colonial authorities.⁶⁰⁸ Trinh van Thao's work shows that the Confucian schools remained a significant part of traditional rural life, especially in Tonkin, at least until Sarraut's policies sought to eliminate them officially.⁶⁰⁹ This was common to other colonies. For example, Burma's monastic schools remained important throughout this period, even after reforms in 1921 'un-recognised' monastic schools from state records,⁶¹⁰ as did Koranic schools in the Dutch Indies.⁶¹¹

⁶⁰⁶ Virginia Thompson & Richard Adloff, *Cultural Institutions and Educational Policy in Southeast Asia*, (New York: Institute of Pacific Relations, 1948), p.57-60.

⁶⁰⁷ LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Instruction", *Annuaire Statistique de l'Indochine*, (Hanoi: Imprimerie d'Extrême-Orient, 1932), p.68.

⁶⁰⁸ J.S. Furnivall, *Educational Progress in Southeast Asia*, (New York: Institute of Pacific Relations, 1943), p.84.

⁶⁰⁹ Trinh van Thao, *L'école française en Indochine*, (Paris: Karthala, 1995).

⁶¹⁰ Furnivall 1943, op.cit., p.55.

⁶¹¹ *ibid*, p.76.

Table 8.4: Number of Public Franco-Indigenous Primary Schools and Number of Attending Students, 1918-1932

	Number of Schools		Number of Students	
	Cochinchina	Tonkin	Cochinchina	Tonkin
1918-1921	1 027	1 045	71 950	49 900
1924-1930	1 550	2 221	135 657	109 673
1930-1931	1 571	2 156	137 805	111 458
1931-1932	1 521	2 085	131 985	108 425

LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, "Instruction", *Annuaire Statistique de l'Indochine*, Hanoi: Imprimerie d'Extrême-Orient, 1927-1939.

Table 8.4 shows that there was a nearly equal number of schools awarding completion degrees in Cochinchina and Tonkin, before 1921. Considering population differences alone, this may be surprising: one would expect more schools in the more populated area of Tonkin. However, the French had been in Cochinchina longer and school establishment would have started earlier. As the autonomy of the Tonkinese protectorate was gradually eroded and after Sarraut's official termination of alternative schools, a greater activity from the French administration ensued. By 1934, the level of schools remained stable, with Tonkin having an average of 30% more school than Cochinchina. The number of students attending these schools remained quite small in both regions: in Cochinchina, between 2 and 3% of the total population was in public primary school; in Tonkin, only between 0.75 and 1.4% of the total population was in public primary school. The reach of the primary education was smaller in Tonkin than in Cochinchina, but it was weak in both. This is in line with students attending recognised public schools in Burma: in 1900, 1.72% of the population attended school and by 1940 this had only increased to 3.64%.⁶¹² Access to education was thus weak in both regions, but in line with the situation in other neighbouring colonies.

Despite a larger number of public schools in Tonkin than in Cochinchina, Furnivall argued that preference was for private education rather than attending public schools in Tonkin.⁶¹³ Trinh Van Thao's research also showed that the strength of the Confucian school was significant, particularly in Tonkin. The presence of such non-state supervised schools would inevitably have had an impact on the educational output of both regions.

⁶¹² *ibid*, p.56.

⁶¹³ *ibid*, p.83.

Trinh Van Thao argued that, there was over 15 000 Confucian schools in Tonkin and Annam as opposed to only 487 in Cochinchina, prior to 1918.⁶¹⁴ Sarraut formally ended the Confucian schools in 1918, in what Thomas Martin would call his attempt to control the development of communist ideals.⁶¹⁵ Despite their official end, the impact of the large body of educated students from these schools had an enduring legacy of literacy, specifically in Chinese and non-quoc ngu written Vietnamese.⁶¹⁶ Tonkinese preference for such alternative schools might explain why a larger proportion of the Cochinchinese population was attending French public schools. Nonetheless, because only these schools were able to award recognised degrees, public education (in French) was necessary for employment in the government. Although this should have favoured Cochinchinese students' chance at social mobility, in reality academic evaluations of the education system in French Indochina suggest there were very high barriers to social progression. Chesneaux explained that, despite investment in primary education, only a few secondary institutions existed.⁶¹⁷ Those that did exist tended to be difficult to enter, as they required “competitive examination in French”.⁶¹⁸ In other words, despite an apparent favourable condition for input in Cochinchina, the economic output were likely to have been the same in both regions. The less than spectacular output of colonial education system was also seen in Malaya: by 1930, only 6.4% of the native population was considered literate,⁶¹⁹ so that the situation in both regions was common to the experiences of other Southeast Asian colonies.

8.3) Urban standard of living

Specific data on prices and wages found in the administration's ASI and BEI relate specifically to the urban centres: Saigon-Cholon in the South,⁶²⁰ and Hanoi-Haiphong in

⁶¹⁴ Trinh van Thao 1995, op.cit., p.33.

⁶¹⁵ ibid, p.35.

⁶¹⁶ ibid, p.38.

⁶¹⁷ Jean Chesneaux, *Contribution à l'histoire de la nation vietnamienne*, (Paris: Editions Sociales, 1955(2)), p.198.

⁶¹⁸ Thompson & Adloff 1948, op.cit., p.55.

⁶¹⁹ Furnivall 1943, op.cit., p.76.

⁶²⁰ Saigon-Cholon is an agglomeration: Cholon being the mainly Chinese suburb of Saigon. Today both areas are part of Ho Chi Minh City, but at the time they were two distinct, if nearby, urban centres.

the North.⁶²¹ Further information on the wages and cost of living in Indochina is available from Giacometti's research. His research extends the available data on wages for Tonkin: official sources only recorded data for 1925 or 1931 onwards whereas Giacometti's estimates go back to 1912 in Tonkin.⁶²² For Cochinchina, no new estimates were possible: the earliest wage information for this region is 1925 and the bulk of it only starts in 1931. It is possible that the trend noticed for wages during the period 1925-1940 was consistent throughout the colonial era: as Booth highlights, "labor markets in several parts of Southeast Asia [showed apparent signs of] nominal wage rigidity: as employment declined in the early 1930s, money wages stayed constant or declined quite slowly in Java, Sumatra, Thailand and Vietnam".⁶²³

Retail price data for Hanoi exists from 1910-1922 and for Saigon from 1910-1925. Cost of living indices in both cities were constructed for Europeans as of 1910 and for the indigenous population in 1912. The weights used to design those cost of living indices were calculated based on responses to a questionnaire. The number of respondents was rather small, but the resulting indices are central to evaluations of price trends. Considering the available indices, it should have been possible to obtain retail prices for the goods included in the basket used for constructing the European cost of living indices from 1910-1937 in both Hanoi and Saigon and retail prices for the goods included in the basket used to construct the indigenous population's cost of living indices from 1912-1937 in Hanoi and Saigon. However, retail price data recorded in available archives are: retail prices for the European basket of goods in Saigon and Hanoi between 1910-1922 and retail prices for the indigenous basket of goods in Hanoi between 1912-1923.⁶²⁴ Nonetheless, these various sources provide enough data and information to estimate conclusively the discrepancies between wages and prices in both Saigon and Hanoi.

⁶²¹ Hanoi and Haiphong are the two main urban centres of Tonkin. In the statistics, the French authorities recorded wage data under the category of "North Indochina", but this essentially qualified as an average between Hanoi and Haiphong.

⁶²² Jean-Dominique Giacometti, "Wages and Consumer Price for Urban and Industrial Workers in Vietnam under French Rule (1910-1954)" in Jean-Pascal Bassino, Jean-Dominique Giacometti and Konosuke Odaka (eds) *Quantitative Economic History of Vietnam 1900-1990*, (Hitotsubashi: Institute of Economic Research, 2000), p.163-214.

⁶²³ Anne E. Booth, *Colonial Legacies: Economic and Social Development in East and Southeast Asia*, (Honolulu: University of Hawai'i Press, 2007(1)), p.63.

⁶²⁴ The list of retail prices for Saigon's European basket of goods extends from 1910 to 1925; however Hanoi's are only available from 1910-1922 because the index was constructed in 1923.

Wages

Using wage data to evaluate income trends is difficult. There is no doubt that “real wages do not reveal information on hours worked or how many people were deprived of regular income from wage labour”.⁶²⁵ However, the official data on wages are the most comparable indicators, as they were the result of actual enquiries in the economies of Tonkin and Cochinchina. Wage analysis is a necessary step in evaluations of living conditions. Wage surveys were conducted for the years 1931, 1932, 1933, 1934 and 1936, in both Northern enterprises and Southern ones.

Table 8.5: Number of Surveyed Enterprises, 1931-1936

	Saigon Enterprises	Northern Enterprises*
1931	66	24
1932	53	24
1933	36	36
1934	36	48
1936	37	56

* includes ‘other Tonkinese centres’ as well as centres from Annam but these responses were negligible
SOAS: French Indochina, Service de la Statistique Générale de l’Indochine. *Bulletin Economique de l’Indochine Année 1936*. Hanoi: 1937. p.1034-1053.

The variability of these numbers and our inability to know the total number of enterprises in either city makes it difficult to judge how representative a sample these respondents were. Counting the number of surveyed workers as a proportion of their respective city's population, the survey only covered about 3% of the urban population. Nonetheless, these are the only available data and they form the basis for new estimates such as Giacometti's.

These surveys recorded the wages for six categories of indigenous (non-European) workers. Specialised workers were skilled workers, such as trained carpenters and metallurgical workers. Specialised coolies were also skilled workers: they were on fixed contracts with a guaranteed number of workdays but lower daily wages. Unskilled male and female workers were essentially manual workers hired for unskilled jobs on a daily basis. Managers supervised the various classes of workers, while apprentices were training to become specialised workers. Most of the workers examined in these surveys were engaged in industrial trades. There is no information on wages in the service sector,

⁶²⁵ van der Eng 1993, op.cit., p.1.

such as those of doctors. Retail prices do show the cost of a house call, but there is no further information on how many house calls were made and what other sources of income would have made up an average doctor's wages. As we can see from Table 8.6, the average daily wages, for all categories, were nearly twice as high in Saigon-Cholon as they were in Hanoi-Haiphong.

Table 8.6: Average Daily Wages of Surveyed Workers, 1931-1936, (\$)*

	Hanoi-Haiphong	Saigon-Cholon
Specialised Workers	0.62	1.28
Specialised Coolies	0.41	0.72
Unskilled Male Workers	0.32	0.62
Unskilled Female Workers	0.23	0.42
Managers	1.01	1.94
Apprentices	0.19	0.41
<p>* there is a bias in using averages (the wages did fall during this time period); since we are looking at the comparison between the two regions rather than the evolution at this point, this is not a problem, especially since the rate of decrease in both regions was similar. SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, <i>Bulletin Economique de l'Indochine Année 1936</i>, Hanoi: 1937, p.1036, 1041.</p>		

To further compare these wages, we turn to skill and gender premiums. Table 8.7 shows the skill premium, calculated as the ratio of the daily wage of an unskilled male worker to that of a specialised worker and the gender premium, calculated as the ratio of the daily wage of an unskilled male worker to that of an unskilled female worker.

Table 8.7: Skill and Gender Premiums, Average 1931-1936

	Hanoi-Haiphong	Saigon-Cholon
Skill Premium*	1.96	2.07
Gender Premium**	1.41	1.45
<p>*Skill Premium: specialised worker daily wage/ unskilled male daily wage **Gender Premium: unskilled male daily wage/ unskilled female daily wage SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, <i>Bulletin Economique de l'Indochine Année 1936</i>, Hanoi: 1936, p.1036-1054.</p>		

It is evident that women were discriminated against in both regions. Banens' estimates for the size of the labour force in Vietnam suggests that women in both Tonkin and Cochinchina were equally important to the active labour force.⁶²⁶ However, in the

⁶²⁶ Banens, op.cit., p.33.

firms surveyed, very few women were employed: in Hanoi 6-7% of the surveyed workforce was female and in Saigon, although female workforce grew between 1931-1936, it remained quite a small share of the surveyed workers (a maximum of 8%).⁶²⁷ It is likely that more men were employed in industrial employment than women and this preference would in part explain the gender premium seen in Table 8.7.

The skill premium in Hanoi-Haiphong was consistently higher than in Saigon-Cholon, although the difference was quite small. In both regions, skills were rewarded with nearly double the salary. Consequently, it seems that wage differences were consistent across categories of workers. According to research by Bassino and Van der Eng, Saigon and Hanoi both had skill premium higher than other cities in Asia in the aftermath of the Depression.⁶²⁸ Interestingly, according to their research, the skill premiums in Hanoi and Saigon did not decrease as it did in other Asian cities during the Depression. This is in line with Booth's suggestion of wage rigidity as a phenomenon unique to a few Southeast Asian economies.

The presence of such wage rigidity in the economies of Cochinchina and Tonkin provides a basis for extrapolating our conclusions from analyses of wage data collected during the Depression to the longer time period of this thesis. Furthermore, the gap in wages between the two cities can be confirmed in other data sources for a more extensive time period. As previously explained, Giacometti traced back wages for various types of workers to 1925 in Cochinchina and 1912 in Tonkin.⁶²⁹ Figure 8.1 clearly shows that the wage gap was apparent even before the years of the Depression, although it did increase slightly after 1929. Hanoi urban wages were between 41% and 64% lower than Saigonese urban wages between 1925 and 1940. The consistency of the wage gap between 1929 and 1940 is a further indication of wage rigidity in both regions. Even though this gap in the wages of the two regions seems large, the gap between their GDP per capita was even larger: Figure 1.1 showed that GDP per capita in Tonkin was a mere 30% of GDP per capita in Cochinchina, on average between 1900-1940.

⁶²⁷ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1936*, (Hanoi:1937), p.1036-1054.

⁶²⁸ Jean-Pascal Bassino & Pierre van der Eng, "The First East Asian Economic Miracle: Wages and Welfare of Urban Workers in East Asia and Europe, 1880-1939", Paper for XIV International Economic History Congress, Helsinki: 21-25 August 2006, p.5.

⁶²⁹ Giacometti 2000 "Wages and Consumer Prices", op.cit., p.163-214.

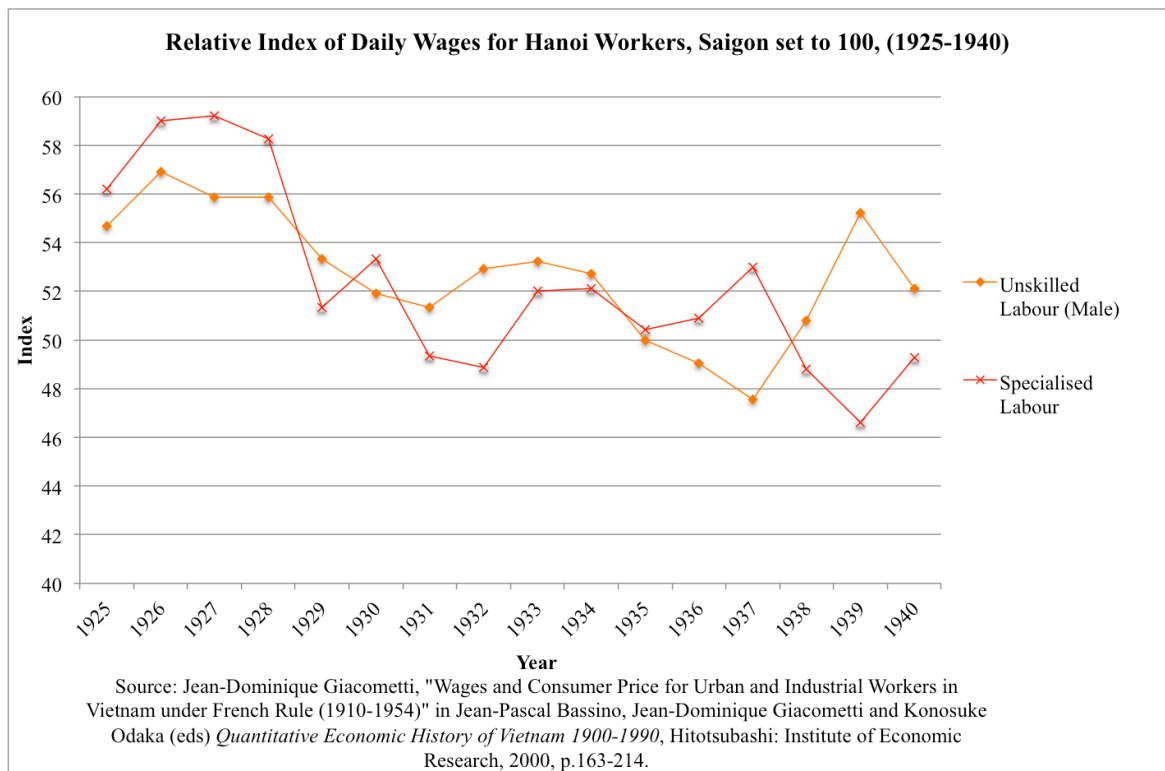


Figure 8.1

There was a consistent trend showing that workers in urban Cochinchina received twice the wages received by their counterparts in urban Tonkin. Using wages is tricky: although their nominal value may have been rather rigid, they were not necessarily representative of income levels in the urban centres. As the Depression reached their economies, there were lay-offs in most industries.⁶³⁰ The economic impact of the Great Depression on unemployment would certainly mean that regardless of wage differentials, both cities likely had a large part of their population experiencing difficult living conditions. Nonetheless, the previous data do confirm that a wage gap between Saigon and Hanoi for the employed share of the urban population was a constant feature of the Indochinese economy, at least between 1925 and 1940.

Research by Bassino and van der Eng on wages in Asia helps evaluate wage trends in Saigon and Hanoi. Figure 8.2 shows the evolution of wages in 6 Asian cities, including Saigon and Hanoi. From this illustration of wage levels in other countries, we see that Hanoi's wages in money terms were low by any standards, but that Saigon's were not that

⁶³⁰ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1936*, (Hanoi: 1937), p.1054.

high. In fact, the wage gap between Saigon and Hanoi seems somewhat less significant when placed in a wider context.

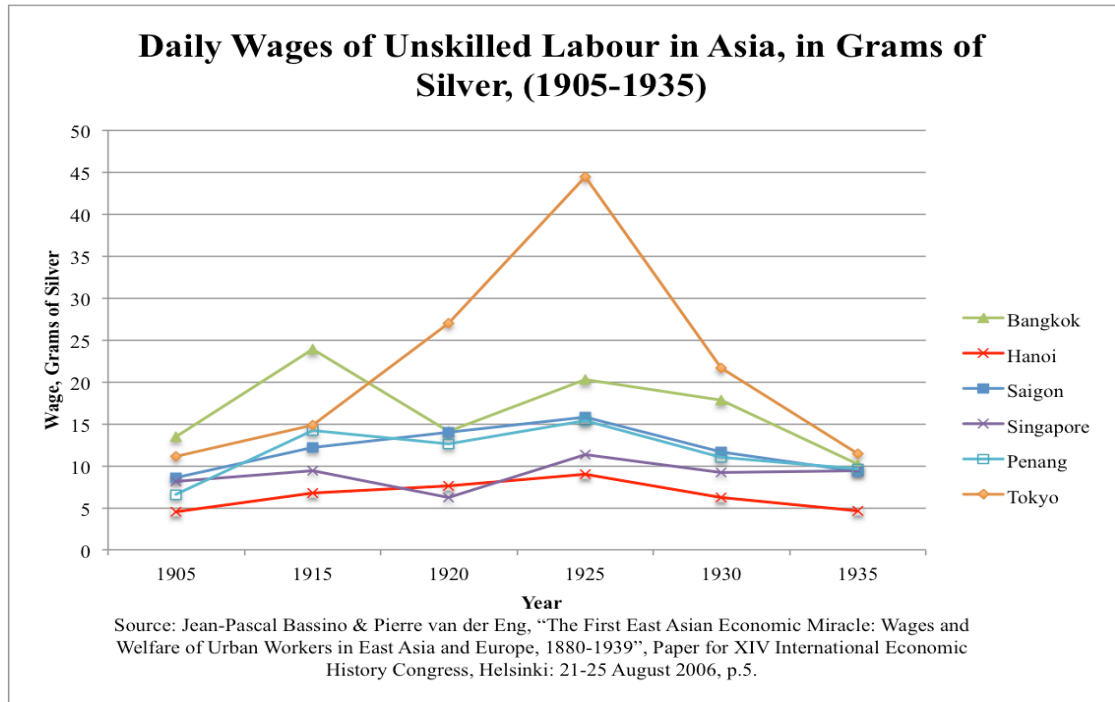


Figure 8.2

Mitchell provides further information on similar wages in Japan in 1939. These were converted to piastres, as shown in Table 8.8, and allow a closer evaluation of the significance of the Hanoi/Saigon wage gap. The wages in urban Japan were far higher than the wages in either Tonkin or Cochinchina's urban centres, suggesting that the wage differential between Tonkin and Cochinchina may not have been that significant.

Table 8.8: Daily Wages in Urban Japan, Taiwan and Indochina, 1939, (Piastres)

	Tokyo (Japan)	Nagoya (Japan)	Taihoku (Taiwan)	Taichu (Taiwan)	Tonkin	Cochin- china
Cement workers	2.46	2.69	-	0.99	0.62	1.33
Millers	3.06	2.56	1.20	0.73		
Dyers	3.20	1.86	1.14	-		
Printers	3.47	2.21	1.88	1.04		
Male Unskilled	2.19	2.29	0.89	0.77	0.37	0.67
Female Unskilled	1.29	1.36	0.63	0.57	0.3	0.41

Japan/Taiwan: Kate L. Mitchell, *Japan's Industrial Strength*, (New York: Alfred A Knopf, 1942 (1)), p.72; Currency conversion SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1939*, (Hanoi: 1940), p.1278; Indochina: Jean-Dominique Giacometti, "Wages and Consumer Price for Urban and Industrial Workers in Vietnam under French Rule (1910-1954)" in Jean-Pascal Bassino, Jean-Dominique Giacometti and Konosuke Odaka (eds) *Quantitative Economic History of Vietnam 1900-1990*, (Hitotsubashi: Institute of Economic Research, 2000), p.163-214.

This is a precarious evaluation. Previous studies calculated that the higher wages in Cochinchina resulted in comparatively higher welfare ratios for Saigon than Hanoi in 1935, as seen in Table 8.9.⁶³¹

Table 8.9: Welfare Ratios of Hanoi, Saigon and Tokyo, 1915-1938

	Hanoi	Saigon	Tokyo
1915	0.71	1.09	1.04
1922	0.62	1.14	1.57
1938	0.43	0.92	1.11

Jean-Pascal Bassino & Pierre van der Eng, "The First East Asian Economic Miracle: Wages and Welfare of Urban Workers in East Asia and Europe, 1880-1939", Paper for XIV International Economic History Congress, Helsinki: 21-25 August 2006, p.21.

Welfare ratios are the ratio of daily wages to the price of a basket of commodities. Interestingly, despite Saigonese wages being far lower than Tokyo's or Nagoya's, the gap between the welfare ratios of those two cities was quite small: in 1915, Saigon's welfare ratio was higher than Tokyo's although by 1938, Tokyo's were slightly higher. Thus prices in Japanese urban centres would have matched the gap in wages. This does not appear to have been the case with respect to Hanoi. Hanoi's welfare ratio was consistently

⁶³¹ Bassino & van der Eng 2006, op.cit., p.1.

lower than both Saigon's and Tokyo's, suggesting that the wage differential noticed in the previous paragraphs was quite significant throughout this time period.

Calculations of welfare ratios showed that Hanoi was consistently one of the cities with the lowest welfare ratios in Asia between 1880-1940,⁶³² meaning that the wages paid Hanoi urban workers did not provide them with as high an access to goods as those of other Asian urban workers. This indicates that more research needs to be done to better understand the impact of Saigon's higher wages on its population's standard of living, specifically with respect to prices. Indeed, the French authorities held that cost of living was higher in Saigon.⁶³³ The next section will test this claim, using retail price data, to better understand the implications of wage differences.

Rice prices

In Table 8.10, we calculated the value of the purchasing power of the daily wage of unskilled workers in Hanoi and Saigon, in terms of the price of second quality rice. This was the rice included in the basket of goods purchased by indigenous unskilled workers in both cities. The nominal wages used are for unskilled workers, for whom rice was the cornerstone of diet. When constructing the cost of living indices, the colonial authorities estimated that 32% of the income of an indigenous household was spent on rice alone.⁶³⁴ For Hanoi the latest price of rice dated back to 1923 and to 1925 for Saigon. Using the cost of living indices calculated by the French authorities, the prices of rice for 1925-1936 were calculated.

⁶³² *ibid*, p.21.

⁶³³ SOAS: F. Leurence, "Les variations du coût de la vie pour les Européens à Saigon de 1910 à 1925", French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1925*, (Hanoi: 1926), p.438.

⁶³⁴ SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1923*, (Hanoi: 1924), p.551.

Table 8.10: Purchasing Power of Daily Wages, in Terms of Rice in Saigon and Hanoi, 1925-1936

	Nominal Daily Wage (\$)		Price of 1 kg of Rice (\$)		Rice Wages*	
	Saigon	Hanoi	Saigon	Hanoi	Saigon	Hanoi
1925	0.59	0.34	0.094	0.092	6.28	3.68
1926	0.6	0.36	0.091	0.096	6.59	3.75
1927	0.61	0.38	0.097	0.104	6.31	3.64
1928	0.67	0.36	0.103	0.106	6.49	3.39
1929	0.73	0.41	0.106	0.114	6.88	3.61
1930	0.74	0.43	0.115	0.122	6.46	3.53
1931	0.74	0.38	0.112	0.117	6.63	3.24
1932	0.68	0.36	0.104	0.109	6.53	3.30
1933	0.62	0.35	0.092	0.099	6.74	3.54
1934	0.55	0.385	0.086	0.092	6.37	4.21
1936	0.53	0.26	0.081	0.083	6.56	3.13

*Method: Nominal Daily Wage of Unskilled Male Worker/Price of 1 kg Rice

Wages from: Jean-Dominique Giacometti, "Wages and Consumer Price for Urban and Industrial Workers in Vietnam under French Rule (1910-1954)" in Jean-Pascal Bassino, Jean-Dominique Giacometti and Konosuke Odaka (eds) *Quantitative Economic History of Vietnam 1900-1990*, (Hitotsubashi: Institute of Economic Research, 2000), p.163-214; Prices from: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1922*: p.645-652; *Année 1925*: p.442-447, Hanoi: 1923, 1926.

A striking aspect of this table is the stability of the purchasing power in both cities, at least in terms of rice, even during the years of the Depression. Of course, this was dependent on still having a source of employment. The previous section discussed the relative rigidity of wages throughout this time period and this rigidity seems to have extended to rice wages. Further evidence on prices of rice during this time period in Asia shows that other countries experienced much more volatility than Indochina.⁶³⁵ The lack of flexibility in wages, compounded with a less volatile market for rice, explains the stability for rice wages shown in Table 8.10. The stability in the price of rice may in part be explained by the stability in the output of rice in the two regions. Indeed, Chapter 5 showed that despite the Depression, both the area in cultivation and the output of rice remained stable, especially in Cochinchina. When comparing these rice wages to those from other cities in Asia (Figure 8.3), it is clear that the North-South gap in purchasing power was quite significant, as Saigon's rice wage was on par with Bangkok's and the

⁶³⁵ Bassino & van der Eng 2006, op.cit., p.6.

highest in this grouping of countries. This is largely dependent on the fact that both Bangkok and Saigon were cities located in two of the three largest exporters of rice during this time period, allowing for lower prices of rice.

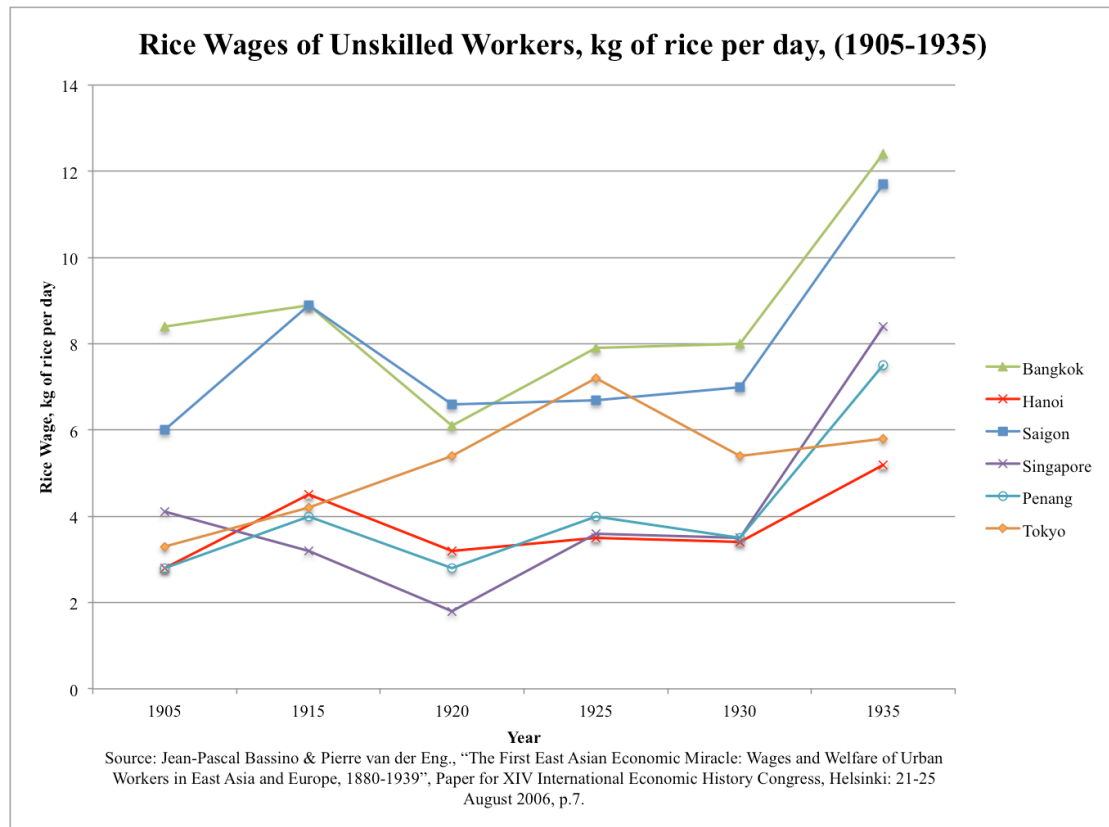


Figure 8.3

Based on rice prices alone, it seems that a worker in Saigon was able to purchase twice as much rice with his daily wages as his counterpart in Hanoi. If this calculation is representative of price differences between the two cities, Saigon's wages provided twice the purchasing power of Hanoi's wages and really does show a significant North-South gap, in line with previous research on welfare ratios, although still lower than the gap suggested in GDP per capita estimates. Tonkinese wages did not provide as much access to rice as Cochinchina's: the price of rice was higher, further accentuating the impact of the wage differential on relative standards of living.

Cost of living

It is unclear if rice wages provide a representative illustration of price differences between the two cities. To get a clearer idea of the differences in actual cost of living

between the two cities, we must include other prices. It is clear that to understand the impact of Saigon's higher wages on its population's standards of living, we must investigate price differences in a basket of goods typical to the cities urban populations.

The wages previously observed were for the working indigenous class. The French constructed cost of living indices for the indigenous middle-class of Hanoi and Saigon. Because we cannot find information for the breakdown of the basket of goods for Saigon's indigenous middle-class, we use that of Hanoi's as a common basket for both cities. It is unlikely that there would have been a great deal of difference in the weights associated with various categories of goods included in a typical basket in both cities. Table 8.11 shows the weights French authorities associated with various goods included in this basket.

Table 8.11: Weights for Hanoi's Indigenous Middle-Class's Basket of Goods

Food	Rice	32.1	Lodging expenses	Rent	8.3
	Fresh vegetables	6.4		Water	0.4
	Chinese vermicelli	1.4		Wood	1.3
	Bean paste	2.4		Petrol	2.6
	Eggs	0.8	Clothing	Calico fabric	7.5
	Beef	3.5		Silk	0.4
	Pork	2.8	Other	Soap	0.3
	Chicken	2		Train	1.4
	Grease	0.3		Rickshaw	0.6
	Various fishing products	5.2		Theatre	1.5
	Brine	2.5			
	Fresh fruit	4.9			
	Tea	2			
	Rice alcohol	9.4			

SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1923*, (Hanoi: 1924), p.551.

Clearly rice was the most significant expense, but it seems rational to expect a more complete basket of goods to temper the conclusions we reached when looking solely at rice wages. Unfortunately, as previously mentioned, matched prices are only available for the goods found in the European basket of goods. Table 8.12 shows, however, that the price differential between the same goods purchased in Hanoi by Europeans and indigenous people alike were rather similar. Price differential were likely the result of the greater bargaining power of the indigenous population, as well as the cheaper options of seats in either the theatre or the trains.

Table 8.12: Annual Average of Retail Prices of Goods in Hanoi for Europeans and Indigenous People, 1912-1922, (\$)

	Indigenous Hanoi	European Hanoi
Rice 2nd quality (100 kg)	7.18	7.59
Eggs (100)	1.50	1.85
Fish (kg)	0.31	0.59
Railway (ticket)	0.64	3.09
Rickshaw (ride)	0.05	0.10
Theatre (ticket)	0.18	0.57

SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1925*: p.442-447; *Année 1922*: p.645-652; *Année 1923*, p.556, Hanoi: 1923-1926.

Considering this, we will assume that the prices for goods included in the European basket of goods were representative of urban prices and that the differential between European and indigenous people in Saigon would have been rather similar to that in Hanoi. Consequently, the ratio of prices in Saigon and Hanoi were probably similar when using goods purchased by Europeans or by indigenous people. Problematically, not all the goods included in the indigenous basket of goods shown in Table 8.11 were included in the European basket of goods. We therefore need to use a smaller basket. Table 8.13 shows the goods that were included in the basket of goods of the indigenous populations for which we can find matched prices and the weights associated to these goods in our new basket. The weights provided are based on Table 8.11's, with some modifications due to either unavailability of prices or incomparable units.

Table 8.13: Suggested Basket of Goods for the Indigenous Populations of Saigon and Hanoi

	Weight
Rice (2nd quality)	52
Egg	0.8
Beef	3.5
Pork	2.8
Chicken	2
Fish	5.2
Beer	9.4
Heating Wood	12.6
Calico	7.9
Soap	0.3
Rickshaw	2
Cinema Ticket	1.5

Prices for these goods were recorded for the years 1910-1922 in Hanoi and 1910-1925 in Saigon. Using the cost of living indices the French published, prices can be extrapolated until the end of the time period. Because we want to know how the price of this basket of goods evolved in Hanoi relative to in Saigon, we compiled a ratio of the price in Hanoi relative to the price in Saigon for each good. Table 8.14 shows an example year for this calculation.

Table 8.14: Prices in Saigon and Hanoi for Goods Included in Typical Basket of Goods, 1910*

Good	Quantity	Saigon Prices (\$)	Hanoi Prices (\$)	Hanoi/Saigon (ratio)
Rice	100 kg	6.26	6.6	1.05
Eggs	1	0.02	0.01	0.67
Beef	kg	0.26	0.25	0.96
Pork	kg	0.49	0.43	0.88
Chicken	couple	0.6	0.7	1.17
Fish	kg	0.26	0.55	2.12
Beer	48 bottles	12	0.27	0.02
Heating wood	100 kg	5	2.43	0.49
Calico	meter	00.32	0.25	0.78
Soap	kg	0.3	2.12	7.07
Rickshaw	per ride	0.25	0.1	0.4
Cinema	seat	0.8	0.5	0.63

*Extended Time Series in Appendices 12a & 12b.
SOAS: French Indochina, Service de la Statistique Générale de l'Indochine, *Bulletin Economique de l'Indochine Année 1925*: p.442-447; *Année 1922*: p.645-652; *Année 1923*, p.556, Hanoi: 1923-1926.

Using these ratios and the respective weights associated to each goods, it is now possible to track the movement of the price of this basket of goods in Hanoi relative to Saigon. Figure 8.4 displays this trend and includes the trend in relative wages displayed in Figure 8.1.

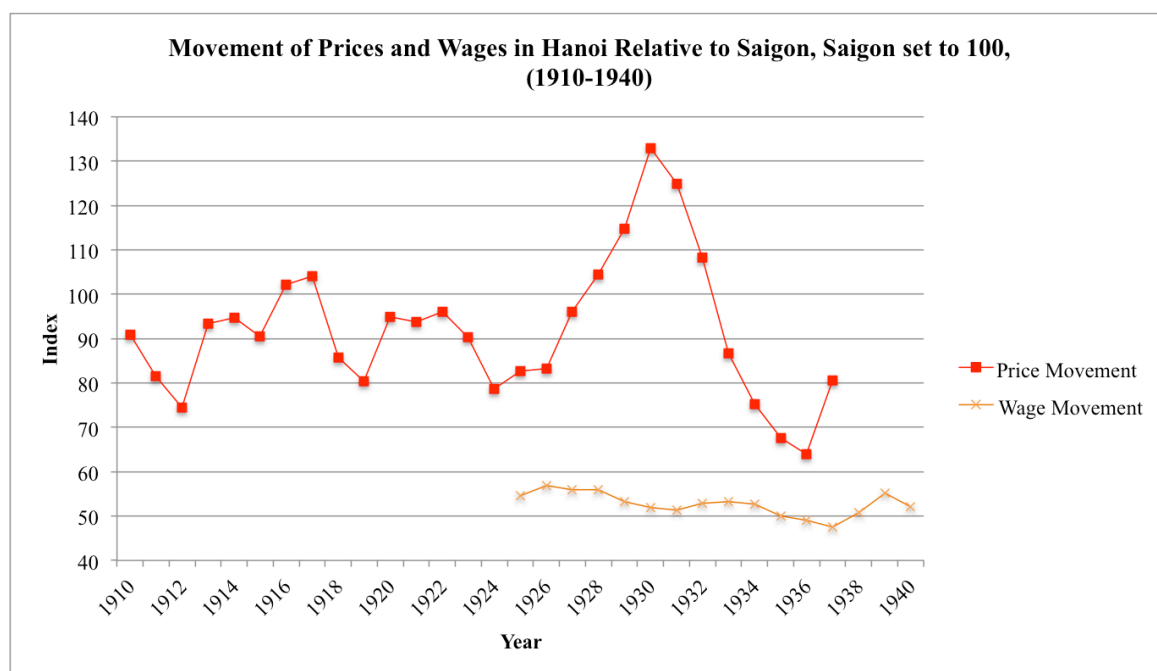


Figure 8.4

The previous section showed that Hanoi urban wages were between 41% and 64% lower than Saigonese urban wages between 1925 and 1940. On average, a basket of goods in Hanoi was only 8% lower than in Saigon. It seems clear that the lower wages in Hanoi were not compensated by proportionately lower prices. Figure 8.4 highlights this discrepancy. Although in 1936 the price of the basket of goods in Hanoi was almost 31% lower than in Saigon, this was the lowest differential. Furthermore, between 1928 and 1932, the price of a basket of goods in Hanoi was higher than in Saigon, presumably due to the turmoil associated with the Depression. Figure 8.4 very clearly shows that Saigon's urban workers would have had a larger access to marketable goods than their counterparts in Hanoi. Bassino and Van der Eng have constructed baskets of goods for the urban households of Asia, including those in Hanoi and Saigon from 1915 to 1938. They concluded that Saigonese workers, either unskilled or skilled, were generally better off than others in the region, with the possible exception of those in Bangkok. Hanoi workers tended to be on a par with other cities that had lower welfare ratios, such as Singapore or Penang.⁶³⁶ Chapter 7 highlighted the greater integration of the Cochinchinese economy to the world economy via Saigon. It is possible that this integration resulted in competition in prices, driving the price of many commodities down.

⁶³⁶ Bassino & van der Eng 2006, op.cit., p.15.

The basket of goods presented does not include data for rent. Although this category only accounted for 8.3% of the total basket, prices presents an interesting anomaly compared to the information in Figure 8.4. In both cities, monthly rental prices were separated in three potential levels of rent: a modest European rental price, an average rental price and a high-end rental. In 1910, the prices for these three levels of rent were 10\$, 40\$ and 50\$, respectively in Saigon & 35\$, 45\$ and 60\$ in Hanoi. In all three categories, rent was more expensive in Hanoi then it was in Saigon, clearly going against the trend of Figure 8.4. The anomaly may in part have been due to government intervention. The Loucheur Act of 1928 provided some Europeans with discounted prices for housing in Saigon.⁶³⁷ The original gradation of rent prices pre-dates the Loucheur Act, meaning that even without this government intervention rents tended to be higher in Hanoi. Chapter 3 showed that Hanoi was growing faster than Saigon, which could partly explain higher rent prices. In terms of rent for the indigenous population, it was certainly much lower than for Europeans: in Hanoi, top rental prices for the indigenous population were recorded as 7\$ a month. There is no information for such prices in Saigon, but it is possible that rents would have been cheaper considering the trends in prices for European lodging. Consequently, even when looking at other retail price evidence, it does not seem that the higher wages of Saigonese workers were matched by a proportionately higher cost of living. Standards of living in the urban centres of Saigon and Hanoi clearly show that the better economic performance of Cochinchina was reflected in its urban population's standards of living.

However, even accounting for cost of living differential, the wage gap between the two regions is not nearly as large as the GDP per capita gap between those regions. Wages in Hanoi were between 41% and 64% lower than those in Saigon. Prices in Hanoi were only 8% lower than those in Saigon, on average. GDP per capita in Tonkin was only 30% of GDP per capita in Cochinchina. Clearly the economic divide suggested in GDP per capita data far over-estimates the actual differences between the standards of living of the urban populations of Tonkin and Cochinchina.

⁶³⁷ Goudal, *op.cit.*, p.255.

8.4) Rural standard of living

Analysis of the economic evolution of Indochina during French rule has said that “the French regime has had virtually no effect upon the peasant craftsmen, who have continued to build the same type of primitive house, weave the traditional cotton or silk clothing...”.⁶³⁸ Although changes in the economy during French rule did result in higher standards of living in urban Cochinchina than urban Tonkin, they may not have had any impact on the wider rural population. Scholars have argued that many of the benefits of economic works during the colonial era only accrued to the elites.⁶³⁹ In this section, we will therefore look into the standard of living of the average peasant in both Tonkin and Cochinchina. Unfortunately, the data are very scarce on the subject, due to the difficulty of collecting accurate and extensive information at the time. For example, the *Bulletin Economique de l’Indochine* included some information on agrarian wages in Cochinchina for local and Tonkinese migrant workers, but only for the year 1933.

Table 8.15: Cochinchina Agrarian Daily Wages, 1933, (\$)

	Mean	Harvest time
*Male	0.22	0.27
*Female	0.16	0.2
**Male migrant from the North	0.3	0.3
**Female migrant from the North	0.1 - 0.23	0.1-0.23
* Including 2 daily meals; ** including housing and 700 grams of rice SOAS: French Indochina, Service de la Statistique Générale de l’Indochine, <i>Bulletin Economique de l’Indochine Année 1934</i> , Hanoi: 1935, p.175.		

Table 8.15 shows available data on the wages for Cochinchinese labour in agricultural production. The French administration was responsible for deciding the wages immigrant labour received. Wages and benefits were set ‘high’, so as to induce movement towards Cochinchina.⁶⁴⁰ Furthermore, as of 1927, the French administration introduced 5% of retained earnings to be given to the workers upon the end of their

⁶³⁸ Virginia Thompson, *Labor Problems in Southeast Asia*, (London: Oxford University Press, 1947), p.178.

⁶³⁹ Booth 2007(2), op.cit., p.256.

⁶⁴⁰ SOAS: French Indochina, Service de la Statistique Générale de l’Indochine, *Bulletin Economique de l’Indochine Année 1936*, (Hanoi: 1937), p.1053.

contracts.⁶⁴¹ Despite these apparent benefits, as we saw in Chapter 3, migration was short-lived and limited. It seems therefore that the higher wages were not enough to draw in immigrants. These workers were either coolies from the area or contracted migrants from Tonkin or Annam. Male contractual workers imported from the Northern provinces generally were paid higher wages than their local equivalents, although the difference shrunk during the peak harvest period. Surprisingly, female contractual labour at times received lower wages than those of their local counterparts. These lower wages may have been due to workers being encouraged to move in families, so that the higher wages for men were the main compensation. Like other contracted workers, these migrant workers received a daily allowance of 700 grams of rice and free lodging. More importantly, since these workers were hired on a 3 years contract guaranteeing work for at least 25 days of each month,⁶⁴² the immigrant worker, in total, earned a more substantial income than the local labourer. This may have been mitigated by the non-contracted worker's ability to seek alternative employment during the slack season.

Demand for agricultural labour was often only for seven out of twelve months. This would mean that for the other five months of the year, non-contracted workers were free to be employed in the cities or alternate activities. In Tonkin many rice fields had two harvests creating a longer demand for labour during the year. During the slack season, Tonkinese non-contracted workers also could engage in alternative employment in the agrarian sector (not all provinces had harvests at the same time) or rural manufacturing. Rural wages in both regions were therefore likely to underreport a peasant's total income. The presence of alternative employment may partly explain limited migration between Tonkin and Cochinchina. Alternatively, peasants in Tonkin might have been reluctant to relocate because a higher cost of living may have reduced the perceived gains of the more attractive wages seen in Table 8.15.

Gourou, through his own field research in Tonkin and with the help of the French colonial administration in Cochinchina recorded primary data on the rural income and expenses of peasant households. His data are only for Cochinchina in 1937 and Tonkin in 1936-1938. From these scattered data, standard of living can be partly evaluated. In each region, Gourou recorded information on household income and expenditure. Households

⁶⁴¹ LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Économiques, *Annuaire Statistique de l'Indochine*, Vol.3, (Hanoi: Imprimerie d'Extrême-Orient, 1931), p.234.

⁶⁴² Thompson 1947, op.cit., p.193.

were distinguished based on the size of their landholding. Table 8.16 shows the classifications he used.

Table 8.16: Gourou's Categories of Household, by Size of Landholding, 1936-1938

Cochinchina	Coolies	Small Tenants (< 5 hectares)	Middle Tenants (5-10 hectares)	Large Tenants (>10 hectares)	Middling Landowners (8 hectares)
Tonkin	Poor Peasants (few hundred square meters)		Small Landowners (1 hectare)	Well to do rural Landowners (1 - 5 hectares)	Wealthy Rural Landowners (>5 hectares)
Pierre Gourou, <i>Land Utilization in French Indochina</i> , New York: Institute of Pacific Relations, 1945, p.531; p.538-543.					

The first noticeable difference in Gourou's classification is the prevalence of ownership in Tonkin as opposed to tenantry in Cochinchina. As was discussed in Chapter 3, this was a clear difference in the agrarian sectors of both regions. However, it is also clear that the size of the land farmed by households, whether owners or tenants, was much higher in Cochinchina than in Tonkin. According to Gourou, adjusting for double cropping in Tonkin increased cultivable land area from 15 000 km² to 18 500 km², as seen in Chapter 5.⁶⁴³ This is an adjustment factor of 1.23 and is insufficient to fully explain the landholding size differences. Assuming a small landowner in Tonkin engaged in double cropping, his property size would have increased from 1 hectare to 1.23 hectares, still much smaller than the landholding small tenants in Cochinchina farmed. From Chapter 3, we also know that plantations and concessions to agrarian entrepreneurs were more important in Cochinchina than in Tonkin. Such plantations are not considered in Gourou's data, the largest estates in Cochinchina for which Gourou recorded income were those of middling landowners so Gourou's data do not permit comparisons of rural elites. A further problem with Gourou's data is that they do not include information on how the rural population was spread across these landholding categories.

In Table 8.17, we provide a preliminary estimate of the breakdown of population by occupation in both Tonkin and Cochinchina. To obtain estimates of how the rural population might have been broken down, it was necessary to look at all the main groups

⁶⁴³ Pierre Gourou, *Land Utilization in French Indochina*, (New York: Institute of Pacific Relations, 1945), p.55.

of social classes in the economies of Tonkin and Cochinchina for which data could be found.

Table 8.17: Estimated Distribution of the Population in Cochinchina and Tonkin, by Occupation, 1929, (%)

	Cochinchina	Tonkin
Europeans	0.282	0.190
Urban Population	14.000	4.300
Commercial/Industrial Contracted Labour	0.724	0.873
Mining Contracted Labour	0.000	0.857
Agricultural Contracted Labour	0.497	1.095
Daily Wage Labour (Rural)	38.023	36.330
Tenant/Farmer/Small Landowner	45.890	55.611
Large Landowner	0.583	0.744
These data are the author's own calculations, as described in the text		

It is understood that Table 8.17 provide only preliminary estimations based on various assumptions. This data is for the year 1929. In 1929, the total population of Tonkin was 9 036 million people and that of Cochinchina was 5 471 million people.⁶⁴⁴ The ASI recorded the total number of Europeans in each region in 1921 and 1931. By assuming constant growth in this group's population, we derived that there were about 17 111 Europeans in Tonkin in 1929 and 15 444 Europeans in Cochinchina in 1929.⁶⁴⁵ Dividing these numbers by the total regional population gave the percentage share of the European population in these regions. The share of the urban population is taken from Gourou's work as 4.3% in Tonkin and 14% in Cochinchina.⁶⁴⁶ Goudal's work showed the number of workers that were engaged in contracted labour either in agriculture, mining or industrial/commercial employment in 1929.⁶⁴⁷ We used these data as the number of active workers in this category of workers. Banens' estimated share of the population that was active was used to calculate the total number of people that would have been part of this

⁶⁴⁴ Banens, op.cit.

⁶⁴⁵ LSE 59(R4): Gouvernement Général de l'Indochine: Direction des Affaires Economiques, *Annuaire Statistique de l'Indochine*, (Hanoi: Imprimerie d'Extrême-Orient, 1927-1939).

⁶⁴⁵ Gourou 1945, op.cit., p.538-543.

⁶⁴⁶ ibid, p.92, 141.

⁶⁴⁷ Goudal, op.cit., p.294.

class of society (i.e. including dependents).⁶⁴⁸ Adding up these various shares provided us with a basis to estimate how the rural sector was broken down.

To calculate the share of the population that owned large estates, we used the number of parcels as indicators. In 1931, Tonkin had nearly 7000 communes while Cochinchina had 1284.⁶⁴⁹ We used the number of communes in Tonkin as the number of households that owned large landholdings (assuming one large landholder per commune). We did not do so for Cochinchina, because Gourou argued that 2.5% of Cochinchina's rural population owned more than 50 hectares.⁶⁵⁰ He also suggests that in Cochinchina there were 255 000 rural proprietors.⁶⁵¹ This would result in 6 375 households with more than 50 hectares, classifying as 'large landowners', about 5 times the number of communes. In Tonkin, Gourou argued that large landholding households had on average 9.6 members.⁶⁵² In Cochinchina, all of Gourou's households were assumed to have 5 members.⁶⁵³ Using this, we derived the number of people that might belong to this class in each region. Although this would seem to favour Tonkin as there would have been more 'large landowners', the next section will clearly show that the size of land these 'large landowners' owned was much smaller in Tonkin than in Cochinchina, as befits description of the agrarian economies of the regions at the time. It is very likely that it was in this share of the population that large differences in income were experienced. Unfortunately, no data on their income has been found. However, considering its small size in both regions, this would have affected incomes for only an elite part of the populations of Tonkin or Cochinchina and would not necessarily affect our hypothesis that the largest shares of the populations of both regions experienced similar living standards.

Bernard argued that 45% of Cochinchina's rural population was engaged in work on landholdings larger than 50 hectares.⁶⁵⁴ Certainly, many of the people working in these large holdings may have been engaged in sharecropping, however, it is also likely that the people employed on these lands would have been at the bottom of the socio-economic

⁶⁴⁸ Banens, op.cit., p.33.

⁶⁴⁹ Gourou 1945, op.cit., p.336.

⁶⁵⁰ *ibid*, p.340.

⁶⁵¹ *ibid*, p.338-339.

⁶⁵² *ibid*, p.538-543.

⁶⁵³ *ibid*, p.538-543.

⁶⁵⁴ Paul Bernard, *Le problème économique Indochinois*, (Paris: Nouvelles Editions Latina, 1934), p.7.

ladder, not being owners of the land they farmed. We assumed that this meant that 45% of the remaining population was daily wage labour or coolies. This share represents 38.023% of Cochinchina's total population. The remaining part (45.890%) was thus assumed to be tenants/farmers/small to middling landowners.

For Tonkin, Popkin estimated that by 1930, 60% of all rural families were either landless or cultivated less than 0.36 hectares.⁶⁵⁵ This equated to 55.611% of the total population. The remaining share of the population (36.330%) thus became part of the tenant/farmer/small landowner share of the population. These shares seemed unlikely given the generally held belief that the majority of the peasants in Tonkin owned their own land. Popkin footnotes Yves Henry's seminal work on the breakdown of the agrarian population to justify his assertion, however we argue this is a misinterpretation: not only landless peasants worked communal lands. Instead, both Henry and Bernard argue that this 60% of the population were in fact small tenants,⁶⁵⁶ while the remainder of the population might have been considered poorer. Consequently, we switched the resulting population shares in Table 8.17. This switch seemed to fit Bernard's view that 60% of the rural population worked on communal lands or on landholdings smaller than 5 hectares.⁶⁵⁷ Considering this breakdown, it is clear that a comparison between Tonkin and Cochinchina's rural standard of living can be drawn by evaluating income and expenditure differences between the lower classes of rural households.

Because of the small sizes of landholdings in Tonkin, the poorer households would have had to either rent out additional land or work as hired labour. This places the poor Tonkinese peasant between the financial situations of a coolie and of a small tenant in Cochinchina. For both regions, Gourou recorded that the majority of total income came from wages earned collecting the harvests and from jobs tending to the collected harvest such as husking rice. In addition, some secondary crops and stock raising supplemented the income. Gourou's research prompted him to suggest that "in Cochinchina there does not seem to be a class at so miserable a level as in Tonkin".⁶⁵⁸ Certainly a preliminary glance at Table 8.18 shows a relatively large gap in the income of the Tonkinese 'poor peasant' compared to the Cochinchinese coolie/small tenant. Poor Tonkinese peasants

⁶⁵⁵ Samuel L. Popkin, "Corporatism and Colonialism: The Political Economy of Rural Change in Vietnam", *Comparative Politics*, Vol.8, No.3, 1976, p.156.

⁶⁵⁶ Bernard, op.cit., p.7.

⁶⁵⁷ *ibid*, p.7.

⁶⁵⁸ Gourou 1945, op.cit., p.552.

earned 30-40% less than the coolies or small tenant of Cochinchina, respectively. This is less than the wage gap that existed between the urban centres, but remains quite substantial. It is likely that the price differential seen in the urban centres also existed in the rural sector. This would have reduced the gap slightly between the living standards of Tonkin and Cochinchina, although there would have remained a gap of 20-30%.

Table 8.18: Income Per Person, in Various Categories of Households, 1936-1938, (\$)

Cochinchina				
Coolies	Small Tenants* (< 5 hectares)	Middle Tenants* (5-10 hectares)	Large Tenants* (>10 hectares)	Middling Landowners* (8 hectares)
27	30.2	40.6	107.6	107.6
Tonkin				
Poor Peasants* (few hundred square meters)		Small Landowners* (1 hectare)	Well to do rural Landowners* (1 - 5 hectares)	Wealthy Rural Landowners** (>5 hectares)
18.4		36.2	104.2	167.4
* households size of 5; ** household size of 9.6. Pierre Gourou, <i>Land Utilization in French Indochina</i> , New York: Institute of Pacific Relations, 1945, p.531; p.538-543.				

However, this preliminary evaluation may be misleading. In Tonkin, even the lowest income households owned some land, allowing them access to some home-grown products and potentially reducing the needs for monetary income. Moreover, Chapter 6 established that more peasants in Tonkin also engaged in some rural manufacturing such as textile spinning or weaving to supplement their income than in Cochinchina. It is unclear if Gourou's data fully accounted for this extra income, but it seems likely that Tonkinese peasants would have needed less monetary income than their Cochinchinese counterparts. It is therefore not necessarily true that the Tonkinese peasant was significantly more miserable than the Cochinchinese peasants. Furthermore, the income patterns of the other classes of peasants in both regions show much more similarity. Considering that in both regions a large share of the population would have fallen within these categories, the judgment that Tonkinese peasants experienced worse living standards than Cochinchinese peasants seems an exaggeration.

Table 8.19: Share of Food in Total Expenditure, per Categories of Households, 1936-1938, (%)

Cochinchina				
Coolies	Small Tenants* (< 5 hectares)	Middle Tenants* (5-10 hectares)	Large Tenants* (>10 hectares)	Middling Landowners* (8 hectares)
71	60	60	43	36
Tonkin				
Poor Peasants* (few hundred square meters)	Small Landowners* (1 hectare)	Well to do rural Landowners* (1 - 5 hectares)	Wealthy Rural Landowners** (>5 hectares)	
79	63	63	N/a	
* household size of 5; ** household size of 9.6. Pierre Gourou, <i>Land Utilization in French Indochina</i> , New York: Institute of Pacific Relations, 1945, p.531; p.538-543.				

Table 8.19 shows the share of total expenditure going towards the purchase of food. The share of total income spent on food decreased substantially more in Cochinchina than in Tonkin as the rural household's income increased. This would suggest that the Engel coefficient in Cochinchina was lower than in Tonkin. A lower Engel coefficient is often associated with a higher standard of living. We cannot further assess the Engel coefficient because we only have a snapshot in time and thus cannot follow these households' progress over time. Nonetheless, the information suggests that the poorer classes of peasants may have experienced larger hardships in Tonkin than in Cochinchina.

Previous scholars have often highlighted that peasants in Tonkin were undernourished,⁶⁵⁹ some suggesting that every year before the harvest, peasants could only afford one meal.⁶⁶⁰ Gourou estimated that an average Tonkinese peasant's meal would cost around 0.64 francs, or 0.064 piastres, per person in the late 1930s. This meal would have included rice, various tubers, sesame, salt and some fish.⁶⁶¹ Assuming one person ate only one such meal a day for a year, expenditure on food would require ($\$0.064 * 365 =$) \$23.36. Clearly, this amount is larger than the income available for the poor landowner in Tonkin, but it is also a significantly larger share of the Cochinchinese coolie's income than Table 8.19 suggests they spent on food. This suggests that the

⁶⁵⁹ Thompson 1947, op.cit., p.173 & Goudal, op.cit., p.218-219.

⁶⁶⁰ Ellen J. Hammer, *The Struggle for Indochina*, (Stanford, CA: Stanford University Press, 1954), p.70.

⁶⁶¹ Gourou 1945, op.cit., p.547.

peasants either had to have even less to eat than this basic meal suggested in Gourou, or that they had to supplement their meal with their own production of goods, or with extra income.

It further suggests that the poorer peasants in both regions, assuming prices and meal contents were similar, would have had difficulty reaching adequate nutrition based on these data, as did other peasants in Asia. The existence of non marketed and home produced goods makes it difficult to be categorical on this, but it is not impossible that the poorer households in both Tonkin and Cochinchina lived in rather bleak conditions. This was the case in other neighbouring economies. For example, in his surveys of Chinese living standards, Tao explains that the standard diet was “inadequate for health and wellbeing”.⁶⁶² Scholars have suggested this was also the case in the colonial economies of Burma and the Philippines.⁶⁶³ Indeed, Furnivall argued that there was a “racial division of labour” which resulted in Burmans having no choice but to engage in agricultural production and earning low incomes as a result of the dominance of the sector by moneylenders or large landholders.⁶⁶⁴ The majority of the population in both regions continued to have low standards of living. In fact, international comparisons suggest that living standards in Indochina were very low, based on consumption. Bruno Lasker suggests that, if one takes the USA's living standards as 100 in 1934-1938, Indochina stood at 17.7, on par with the Dutch East Indies, but lower than the Philippines at 25.7.⁶⁶⁵

Certainly living conditions in Tonkin, at least in monetary terms, seem to have been worse than in Cochinchina for the poorest classes of peasants. However, scattered information suggests that these poor peasants in Tonkin had access to alternative sources of food and that their employment in rural manufacturing may have limited the actual impact of lower income on their standard of living. Moreover, the difference in potential standard of living for other categories of rural households does not suggest such a large gap in income. Considering the suggested breakdown of the rural population in Table

⁶⁶² Tao, op.cit., p.17.

⁶⁶³ D.R. SarDesai, *Southeast Asia Past & Present*, 5th Edition, (Boulder, CO: Westview Press, 2003), p.176 & Aye Hlaing, “Trends of economic growth and income distribution in Burma, 1870-1940”, *Journal of the Burma Research Society*, June 1964, Vol.47, p.122.

⁶⁶⁴ J.S. Furnivall, *Colonial Policy and Practice: A Comparative Study of Burma and Netherlands India*, (Cambridge: Cambridge University Press, 1948), p.123.

⁶⁶⁵ Bruno Lasker, *Standards and Planes of Living in the Far East*, Preliminary draft for the use of the 12th Conference of the Institute of Pacific Relations, (New York: Institute of Pacific Relations, 1953), p.7.

8.17, it is likely that on average standards of living in the rural populations of Tonkin and Cochinchina were much closer than standards of living in the regions' urban populations. If living standards were equally low for the majority of the population in Tonkin and Cochinchina, this may help explain the limited migration between the two regions, and thus the continuation of the economic divide during colonial rule. Therefore, once more the gap suggested in GDP per capita estimates vastly overestimates the standard of living differences between the rural populations of Tonkin and Cochinchina.

8.5) Conclusion

The findings do show **that urban wages were much higher in Saigon than they were in Hanoi, while prices were only marginally higher in Saigon than in Hanoi.** In rural areas however, home to the vast majority of the population, the data and other research suggests that standards of living in both regions was dismal for most. Although some of the larger landholders would have experienced much higher standards of living in Cochinchina than in Tonkin, **the average peasants experienced similar standards of living, bleak for the most part.** Booth argued that “it is widely recognized that trends in per capita GDP are not reliable guides to changes in living standard: economic growth often confers much greater benefits on some groups in society”,⁶⁶⁶ profits increase more rapidly than wages. Our previous analysis is in line with this assessment: the living standards for the majority of the population in both Tonkin and Cochinchina were likely to have been relatively similar, contrary to what GDP per capita estimates suggest. This may help explain why migration was so limited: the prospects of better living standards were illusionary for peasants. It may have been possible in the urban centres, but it was not guaranteed. In addition, considering that Tonkin had alternatives to help supplement income from agricultural work, reluctance to move was doubled.

The colonial administration's contribution to *mise-en-valeur* through expenditure on social services, such as health and education, provided inconclusive evidence on other improvements to standards of living. More public expenditure to these projects did go to Cochinchina, but in both cases it is very likely that traditional facilities supplemented colonial projects in health and education, albeit to differing degrees. Moreover, the

⁶⁶⁶ Booth 2007(1), op.cit., p.131.

scattered data on the 'output' of these two indicators show only limited and slow improvements in both Tonkin and Cochinchina during French rule. **The data available do not suggest a great difference in improvements of indicators of health and education over time for either region.**

Overall, supply of labour in Tonkin was higher than in Cochinchina, as Chapter 3 showed. Saigon-Cholon, during this time period, was a much more significant urban centre than either Hanoi or Haiphong, or even than the two of those together. The population of Saigon-Cholon was about twice that of Hanoi-Haiphong, relative to their respective total population. The economic life of Saigon-Cholon was probably more dynamic: a more concentrated urban setting gives rise to an ever-increasing cycle of consumption and production. This has a number of possible implications: the already important urban centres of Saigon and Cholon were growing, which may have increased the demand for goods and services. Considering that Tonkin was more populous than Cochinchina in absolute terms, one would assume that the labour market was more competitive and that wages would have been lower in Tonkin than in Cochinchina. Looking at the wages of particular groups of workers we saw this to be the case: wages in Hanoi and Haiphong were generally half of wages in Saigon and Cholon.

The greater commercial activity of Cochinchina might explain why living standards in urban centres seem to have better reflected the economic divide. Cochinchinese port cities' booming commercial activity would have attracted labour, and indeed Chapter 3 showed urban centres near ports were of growing importance. The lesser importance of international commerce by the port city of Haiphong and of city life in Tonkin might partly explain the lower wages: demand for labour was more limited while the supply was very high. Standards of living with respect to wages and prices in the urban centres however do show a significant gap between Tonkin and Cochinchina that was not fully explained by cost of living differences.

Although urban standards of living do show significant differences between Tonkin and Cochinchina, the analysis of rural standards of living does not. Income for the majority of Cochinchinese peasants was only marginally higher than income for the majority of Tonkinese peasants. Furthermore, Tonkinese peasants could supplement their monetary income more significantly: they owned at least some land whereas Cochinchinese peasants were mostly landless and depended entirely on wages or income

through tenancy/farming agreements or as wage labour. While average standards of living in the two regions were low, Cochinchinese peasants tended to be slightly better off than their Tonkinese counterparts, although not nearly to the extent one would expect from the economic divide GDP estimates suggested.

We have argued that living standards did differ between Tonkin and Cochinchina but that this was mainly felt by the elite classes of the two regions. **The vast majority of the population struggled with rather low standards of living, mainly in the rural sector of both the Tonkinese and Cochinchinese economies.** We suggest that the similarity in living standards for Tonkin and Cochinchina may partly explain the limited migratory flows between the two regions, which perpetuated the existing differences in production and commercial patterns of each region. These patterns themselves influenced colonial policy and domestic preferences, thus further limiting integration between the regions. This may explain why the economic divide between Tonkin and Cochinchina remained significant throughout this time period.

Chapter 9: Conclusion

In 1954, the Geneva Accords split Vietnam into two territories: North Vietnam under Ho Chi Minh's Viet Minh administration and South Vietnam under President Diem's administration and, by extension, America's. Although at times this has been assumed as the origin of the political North-South divide in Vietnam, the country had already been divided under French colonial rule: Tonkin in the north, Annam in the middle, and Cochinchina in the south. The 1954 division did mark the start of the ideological divide between North and South: communism in the former, and capitalism in the latter. **Recent GDP estimates on colonial Indochina show that an economic divide already existed between those two economies between 1900 and 1940. Tonkin's GDP per capita was, on average, 70% lower than Cochinchina's. This thesis has shown that the economies of Tonkin and Cochinchina displayed markedly different circumstances and production patterns during French colonial rule, which explain this economic gap. This thesis has also presented evidence that the GDP per capita gap far overstates the gap in the standard of living of the majority of the population of both regions.**

The literature on the economic history of Vietnam is relatively silent on the origin, nature and impact of the economic gap that existed between Tonkin and Cochinchina during the colonial period. A review of the literature on colonial Indochina published during colonial rule suggests that scholars of the Indochinese economy or history evaluated economic development in light of colonial ideology, using colonialism as the central mover of economic progress. This belief may in part explain why few other studies suggested alternative reasons for a divergence between Tonkin and Cochinchina. Even though much of the literature recognised the existence of an economic gap, few of these authors generally presented any evidence of significant differences between the colonial administration and policies of the two regions. Despite the obvious problem in this, no studies, that we are aware of, exist that explain why there was a GDP gap, how the economies actually differed in their production patterns or what the gap meant for the living standard of the Indochinese populations. The recent literature's relative silence on such issues is especially surprising considering that a gap between North and South

Vietnam since Doi Moi has emerged. Because little research on the historical aspect of such a gap exists, it is not possible to say whether or not the current gap is a continuation of the colonial gap a new phenomenon. This research makes a start in helping historians to assess this. In addition, the conclusions of this research may help shed light on the development of nationalism in the country, through a better understanding of potential differences in economic motivations between the various areas.

Main conclusions

The first part of this thesis, Chapters 3 & 4, re-evaluated the two suggestions found in the literature for the origin of the economic gap between Tonkin and Cochinchina: demographics and colonial policy.

With respect to demographics, the argument was that Tonkin's greater population pressures and longer history of such population pressure resulted in less fertile soils. The populations of the two regions were certainly very different: Tonkin was twice as populous as Cochinchina throughout this time period and density in the cultivable areas was consequently much higher in Tonkin than in Cochinchina. The average population density in Tonkin was over 370 inhabitants per square kilometre, whereas in Cochinchina the most densely populated region only held about 170 inhabitants per square kilometre. There is no doubt this would have resulted in productivity differences considering that Indochina was a primarily agrarian country. Indeed, recent research suggested that Cochinchina's rice fields' yields were much higher than Tonkin's. French officials were correct in looking at population differences as a source of the economic gap based on their impact on land productivity.

However, we have also suggested that demographics would have had another impact, specifically on land and labour utilisation patterns. The differences in population density and the fact that Cochinchina was populated much later than Tonkin would have had an impact on the way in which land was both divided and worked. Indeed, Cochinchina's land was divided in much larger estates than Tonkin's, where most households owned small plots of land. These differences, pre-dating French colonialism, would have been perpetuated by the colonial administration' land policy of concessions: more virgin land was available in Cochinchina and these were generally given out as

large estates for plantations thus continuing differences in landholding pattern. Landholding patterns acted as institutional constraints and guided the development of economic activity in the agrarian sector. Although data are limited and we have not been able to quantify their effect on economic activity, we argued that they had an impact on the output potential of both regions. In other words, although we do not discard Gourou and Henry's (amongst others) view that **population differences had a direct impact on land productivity and thus economic performance, we further argued that demography and history had an indirect impact on the institutional organisation of agrarian production.**

Surprisingly, despite a significantly higher population density in Tonkin than in Cochinchina, migration from one region to the other did not occur on a large scale, even when government policy sought to encourage it through higher wages and retained earnings. After an initial boost in migration, flows decreased substantially. There is limited doubt that such a lack of integration in the two regions' labour market resulted in the continuing importance of the effect of population differences on economic growth, in the agrarian sector at least. In addition, the limited migration may have been due to the prevalence of large landholdings in Cochinchina. The demand for migrant labour was mostly for unskilled wage workers, which was relatively unattractive to the predominantly landowning peasants of Tonkin. The limited migration may also have, in part, reflected that despite a larger GDP in Cochinchina, the standard of living a Tonkinese migrant could expect from relocating was not high enough to overcome initial barriers to migration, even with the colonial administration's help.

Furthermore, the larger significance of urban centres in Cochinchina relative to Tonkin, as well as the larger role of absentee landlords with larger landholdings, suggests that much of the wealth that may have been extracted from the Cochinchinese economy may have been concentrated in the cities. The limited growth of cities in Tonkin, considering the larger apparent population pressure, suggests that there were more alternative activities available for the Tonkinese peasant, which limited the need for movement of underemployed peasants to the cities. Indeed, we showed that both mining and manufacturing activities were more significant in Tonkin and we argued that the more limited urbanisation of Tonkin, as well as limited migration to Cochinchina, shows

that the population pressures were not necessarily perceived as an obstacle to employment.

The literature's second suggestion for the origin of the economic gap between Tonkin and Cochinchina was the role of colonial policy. Certainly there were some clear political differences between the two regions. Tonkin was a protectorate and was indirectly ruled. Cochinchina on the other hand was a colony and subject to direct rule. This meant that, politically, Tonkin still relied on traditional governance structures, especially at the village level. This was not the case in Cochinchina, where the colonial administration was the only governance structure. In addition, political rule was less secure in Tonkin than in Cochinchina: Tonkin had been colonised later than Cochinchina and political unrest remained a serious matter throughout French occupation. Despite these differences, the ideology guiding colonial policy was the same for both regions: the French colonial policy in Indochina was one of *mise-en-valeur*, or economic development to the benefit of the metropolis: the Indochinese Union should be able to support itself financially and for this it needed better infrastructure.

The application of the colonial policy could not be the same between the two regions because it had to address and respond to existing differences in the circumstances of both regions. In other words, colonial policy differed in response to differences between the regions and was not the cause for these differences. In Tonkin, the administration's main duty was to ensure political stability to avoid uprisings. When political trouble arose, economic conditions deteriorated: tax revenue was not gathered and production tended to suffer. In Cochinchina, the administration's main responsibility was to ensure stable trade conditions, otherwise political trouble would arise. In Tonkin, political realities seem to have had a strong effect on economic realities; in Cochinchina, economic activity seems to have affected politics. These different social climates had an impact on the way in which policies could be applied; in other words, colonial policy differences were a reflection of existing differences between the two regions.

One of the main examples of how colonial policy differed to reflect existing differences was found in the tax system that was designed for Indochina. On the one hand, the general budget showed the colonial administration's desire for a unified policy towards Indochina. The general budget of Indochina was designed to cover the expenditures that would benefit the Union as a whole. Its revenue came primarily from

customs taxes and the excise boards on opium, salt and rice alcohol. The tax rates for these were the same in both Tonkin and Cochinchina. On the other hand, the local budgets differed because these were aimed at region specific effects. Consequently, the tax rates differed as a reflection of differences between these regions.

The key differences in rates were for the head tax on the indigenous population and the land tax. In Tonkin, both these taxes were higher than they were in Cochinchina. Despite this, Cochinchina's per capita tax burden was higher than Tonkin's. Cochinchina's revenue, therefore, was mostly made up of taxes that would *not* have been paid by the poor peasants: revenue was mainly extracted from large landowners, immigrants and license fees for professional employment. It seems clear that *mise-en-valeur* in Cochinchina was not seen to come from the average peasant, but rather from large-scale plantations or alternative professional ventures. In Tonkin however, the tax revenue was mainly made up from the revenue on the personal tax on the indigenous population and taxes on land, which affected the majority of peasants. One result of this difference is that the tax burden on the poorer classes of the indigenous population appears to have been heavier in Tonkin than in Cochinchina. It seems that the administration found it easier or more lucrative to collect revenue in Tonkin from taxes from which revenue was constant whether in an economic boom or bust. In Cochinchina, revenue was dependent on economic performance. This was possibly a reflection of Cochinchina's more impressive growth record and shows that the colonial administration was guided by pre-existing patterns of economic performance in designing their tax policy.

We show this was also the case with respect to public expenditure. Most expenditure was relatively similar between the two regions. The few differences that were found, such as various expenditures in administrative services, reflected the differences in the colonial identity of the two regions (whether protectorate or colony). One difference that should have had an impact on the economic development of the Indochinese Union, considering the *mise-en-valeur* policy, was that of public works expenditure. Although it is true that more was spent in Cochinchina than in Tonkin, in neither region was there a clear difference in how these infrastructural projects were used and it is also unclear whether or not they had any differential impact on economic performance. This chapter

has suggested that colonial policy was developed based on existing differences between the two regions.

Our analysis does not rule out the fact that some of the policy choices helped perpetuate the differences that existed between Tonkin and Cochinchina. For example, lower tax rates on cultivated land helped lower the costs of investing in plantations and perpetuate the dominance of large landholdings in Cochinchina's agrarian sector. Despite differences in the way the administration governed the territories of Tonkin and Cochinchina, there is only limited evidence that colonial policy caused the economic divide seen in GDP estimates between 1900 and 1940. Instead, we have argued that colonial policy differences reflected the economic differences between Tonkin and Cochinchina.

The second part of this thesis, Chapters 5, 6 & 7, addressed the nature of the economic divide. This was done in two parts. Firstly, an analysis of the characteristics of the agrarian and industrial sectors permitted an identification of differences in the production patterns of the two regions. Secondly, an evaluation of the commercial activity of the two regions showed that these production patterns explained differences in the level of engagement of both regions with the international economy.

The economic divide was clearly seen in the agricultural sector through Cochinchina's much larger output of rice relative to Tonkin and in the rise of industrial crops such as rubber, which were much more prevalent in Cochinchina than Tonkin. Conversely, more varied crops existed in Tonkin. These differences illustrated that Cochinchina's agrarian sector was characterised by specialisation in a few crops, while Tonkin's was characterised by diversification. These production patterns had an impact on productivity, both of land and labour, and on the output possibilities of the regions. Larger landholdings in Cochinchina probably resulted in significant land inequality, but it is clear from the data that the output was larger and labour requirements lower in Cochinchina than in Tonkin, allowing for a larger per capita output. We have argued that this characteristic of the agrarian sector in Cochinchina was partly responsible for its better overall GDP performance, as opposed to the diversification and lower output of Tonkin. Output differences in the agrarian sector resulting from these differing production patterns mirrored the economic divide between Tonkin and Cochinchina.

These patterns were also found in the industrial sectors of Tonkin and Cochinchina. Handicraft industries, mining and modern industrial ventures were more significant in Tonkin than in Cochinchina. We have argued that this was a result of both the larger population pressures and the traditional tendency to be self-sufficient within the domestic economy. Both in mining and in the industrial sector, more people in Tonkin were contracted workers. However, this remained a rather limited class of workers. Even within the mining sector of Tonkin, many of the workers tended to only work for a few months of the year and then returned to the agrarian sector. We have argued that it was partly the growth of this sector and the possibility of temporary employment outside the agrarian sector that might have limited migration of Tonkinese peasants towards Cochinchina. We have also argued that the limited integration of the labour markets between these two regions in this time period partly explain their economic divide, as demographic differences partly accounted for the differing output potential of the agrarian sector. Consequently, the stronger growth of the industrial sector in Tonkin may have helped perpetuate its economic gap with Cochinchina. The relatively small size of that sector in Cochinchina further emphasised that region's reliance on specialisation in the agrarian sector. Despite Tonkin's larger manufacturing sector, conditions were not optimal to close the gap in output prompted by Cochinchina's profitable specialisation in rice and rubber, at least in this time period.

It has been argued that Cochinchina's specialisation in rice as opposed to Tonkin's diversification explain much of the economic divide between the two regions during colonial time. It is suggested that the production patterns highlighted in this sector were not necessarily a deliberate strategy, but were in part driven by demographic characteristics and their influences in landholding patterns as well as geographic characteristic and other circumstantial characteristics. It is likely these patterns would have had an impact on both the commercial orientation of the regions and on the living standards of the peasant populations. Cochinchina's reliance on specialisation, as well as its more favourable man to land ratio had long-term implications: it would have encouraged a greater integration to the world economy. Tonkin's tendency to self-insure and diversify resembled more an "industrious revolution path, due to natural resource

constraints such as land scarcity".⁶⁶⁷ This would suggest that Tonkin's long-term economic performance revolved around its continued reliance on village authorities and full absorption of labour within the village bounds. In Tonkin, diversification in both the agrarian and industrial sectors was clearly aimed at accommodating a growing population with more limited connections to trade. This was examined in the last Chapter of this second part of the thesis.

The Indochinese Union certainly had a high degree of tariffs and trading regulations and its tariff regime was considered more protectionist than most of its colonial neighbours. These trade barriers might have had a different impact on the two regions because they did not produce the same basket of exportable goods, or import the same quantities. We have argued that differences in the relative engagement of Tonkin and Cochinchina in the commercial sector were not necessarily influenced by these various taxes, but rather by their pre-existing patterns of production that either provided output for trade or not. Indeed, despite these Union-wide barriers, international trade was significant for both regions, although it was particularly so for Cochinchina. The trading network of Tonkin certainly appears to have been less extensive and dynamic than Cochinchina's. Tonkin's behaviour was more cautious with regards to international trade than Cochinchina's whose specialisation in key crops appears to have ensured the region maximised potential advantages from the international market, but we argue this was a result of their production patterns, not because of regulations.

Cochinchina's access to large trading houses, numerous credit institutions and infrastructure for trade seems to have been superior than Tonkin's. In addition, there was no doubt that, in financial terms, the trade balance of Cochinchina was much more favourable than Tonkin's. Cochinchina was the primary exporting region of Indochina. We have argued that investors and trading agents' greater attraction to Cochinchina's commercial sector reflected the greater profitability of that region's commercial sector. Tonkin's apparently lesser attractiveness again was a reflection of the more limited potential for trade that its production patterns allowed (less surplus was produced). We have also argued that production patterns and the production possibility frontiers they resulted in were more significant in determining the strength of their commercial activity

⁶⁶⁷ Kaoru Sugihara, "The East Asian path of economic development: a long-term perspective" in Giovanni Arrighi, Takeshi Hamashita & Mark Selden (eds), *The Resurgence of East Asia 500, 150 and 50 year perspectives*, (London: Routledge, 2003), p 82.

than any differences in trading partners. Indeed, it seems that both regions were trading with the same countries. The only key differences in their trade relationships were in the composition of their trade baskets and the quantities traded, which were a direct consequence of their production patterns and choices. In total, the majority of the value from Indochinese exports came from Cochinchinese exports: around 75%. Tonkinese exports tended to bring in roughly 15% of total revenue.

Cochinchina imported more, as one would expect from a more specialised economy. Tonkin's substantial share of the import market however may be representative of an economy that was insufficiently productive to be self-sufficient. Despite its diversification and seemingly varied domestic supply of goods, sizeable imports were brought into the region. It is outside the scope of this project to demonstrate that Cochinchina's greater integration to the world economy in part drove its superior economic performance, but we suggested that the economic performance of Cochinchina was clearly driven by its ability to produce more per capita and there is no doubt that this ability was central in explaining its larger role in the international market.

The last part of this thesis evaluated the impact of the economic divide on standard of living. This allowed a comparison of the gap suggested by GDP per capita figures to the gap found when comparing wages and prices in various classes of the populations of Tonkin and Cochinchina.

Booth argued that “it is widely recognized that trends in per capita GDP are not reliable guides to changes in living standard: economic growth often confers much greater benefits on some groups in society”.⁶⁶⁸ Consequently, Cochinchina's higher GDP per capita did not mean its population was necessarily better off. Our analysis showed that the living standards for the majority of the populations in both Tonkin and Cochinchina were likely to have been relatively similar and even in the case when there was a gap, it was not as large as the one suggested by GDP estimates.

Apart from the economic aspect of standard of living, other indicators also suggest that the developmental aspect of standard of living may have been similar in both regions.

⁶⁶⁸ Anne E. Booth, *Colonial Legacies: Economic and Social Development in East and Southeast Asia*, (Honolulu: University of Hawai'i Press, 2007(1)), p.131.

More public expenditure to health and education projects did go to Cochinchina, but it is very likely that traditional facilities for health and education may have closed the gap between the provisions of the two regions. Moreover, the scattered data on the 'output' of these two indicators show only limited and slow improvements in both Tonkin and Cochinchina during French rule. The data available do not suggest a great difference in improvements of indicators of health and education over time for either region.

The findings showed that urban wages were much higher in Saigon than they were in Hanoi, while prices were only marginally higher in Saigon than in Hanoi, but that this gap was only half of the gap suggested in GDP per capita estimates. The price-adjusted wage gap between the two regions' urban centres was about 50% whereas the per capita GDP data suggested a gap of 70%. In rural areas however, home to the vast majority of the population, the data and other research suggests that standards of living in both regions were dismal for most. Although some of the larger landholders would have experienced much higher standards of living in Cochinchina than in Tonkin, the average peasants experienced similar standards of living. This may help explain why migration was so limited: the prospects of better living standards were illusionary for peasants. In addition, Tonkin's more numerous alternative sources of employment in mining, handicraft or manufacturing activities, further lessened the need for migration. The temporary nature of this work allowed peasants in Tonkin to reach similar income levels as peasants in Cochinchina.

In the rural areas, it is harder to establish this gap. Income figures show as high a gap as 20-30%, adjusting for price differences on the same scale as in the urban areas. However, even this figure is deceptive since Tonkinese peasants' need for money might have been less than their Cochinchinese counterpart because, by owning their land and engaging in part-time manufacturing, most of them were able to produce much of what they needed. Consequently, we argue that standards of living for the majority of the rural population was much closer together than income data suggest and thus even closer than what GDP per capita estimates suggest. In other words, Cochinchina's more impressive GDP performance did not result in a proportionately higher standard of living for the majority of its population. This finding highlights the need for future research to investigate inequality in the region.

We suggest that the similarity in living standards for Tonkin and Cochinchina may partly explain the limited migratory flows between the two regions, which perpetuated the existing differences in production and commercial patterns of each region. These patterns themselves influenced colonial policy and domestic preferences, thus further limiting integration between the regions. This may explain why the economic divide between Tonkin and Cochinchina remained significant throughout this time period.

Implications for further research

Vietnam today remains a rural and agrarian economy: in 1999-2009, 70.4% of the population was living in the countryside.⁶⁶⁹ While agriculture is no longer the most significant sector: accounting for about 20% of GDP, compared to industry's 41% share,⁶⁷⁰ government policy with regards to the sector has been central to Vietnam's post-colonial administration. Post-reunification, the government hoped that applying the same policies of co-operatisation in the agrarian sectors of both economies would help the economic performance of both regions. The communist government's intention to apply a unified agrarian economic policy for both former Tonkin and former Cochinchina proved flawed: such a policy was unlikely to result in either surplus output or economic development. Presumably, much of this policy was guided by political philosophies, rather than economic rationale.

Despite the government's efforts to ensure northern production patterns in southern Vietnam,⁶⁷¹ former Cochinchina did not seem particularly adept at engaging in self-sufficient production. Interestingly, the current economic policies in Vietnam favour a move from "diversification towards production for exports".⁶⁷² This is not in line with the North's previous agricultural policy of co-operatisation and self-sufficiency.⁶⁷³ The economic policies associated with a continuation of the North's agrarian production patterns, including communal farming, resulted in a crisis in the agricultural sector:

⁶⁶⁹ Ramses Amer, "Vietnam in 2010", *Asian Survey*, Vol. 51, No.1, 2011, p.199.

⁶⁷⁰ Vo X. Han, "Vietnam in 2007: A Profile in Economic and Socio-Political Dynamism", *Asian Survey*, Vol.48, No.1, 2008, p.30.

⁶⁷¹ LSE 598(122): Nong Nghiep, Director of Department of Agriculture, Forestry and Fishery, *Agriculture of Viet Nam 1945-1995*, (Hanoi: Statistical Publishing House, 1995), p.118.

⁶⁷² LSE 598(150): *Vietnam 2001-2002*, Proceedings and commentary on the 10th session of the 10th National Assembly of Vietnam, held in Hanoi from 20 November to 25 December 2001, (Hanoi : Thế Giới Publishers, 2002), p.24.

⁶⁷³ LSE 598(122): Nong Nghiep, op.cit., p.66.

while agricultural production cooperatives in the North were subject to a serious and comprehensive crisis, agricultural reforms were further conducted in the South in the same model contents, steps and methods as those practiced in the North⁶⁷⁴

In other words, applying the North's economic strategy to southern land proved problematic. Indeed, this was likely because, in the South, the traditional farming methods focused on production of commodities for export.⁶⁷⁵ The result is that despite population differences remaining similar to the ones noticed during colonial rule, current production patterns show that total food production in the South is far higher than in the North. This displays a continued tendency towards a more productive agrarian sector in the South, even if any surplus is redistributed towards the North.

Table 9.1: Food Production by Region, 1993-1995, (Annual Average)

Paddy Production (million tonnes)		Food per Capita, per Year (kg)	
North	South	North	South
10.4	15.8	287	452
LSE 598(122): Nong Nghiep, Director of Department of Agriculture, Forestry and Fishery. Agriculture of Viet Nam 1945-1995, Hanoi: Statistical Publishing House, 1995, p.104.			

Industrial production also displays similar characteristics today as it did during French colonial times. The government recognises that Tonkin is still most proficient in handicraft production than Cochinchina.⁶⁷⁶ This tendency for diversification and production for the domestic market still seems to very much characterise the Tonkinese economy. The politicians of contemporary Vietnam expect that growth will come from South Vietnam, that is former Cochinchina, rather than from former Tonkin.⁶⁷⁷ In other words, they recognise that Tonkin's production patterns will probably not lead to economic growth. Current international trade also still displays significant differences between the two regions. Currently, international trade revenue and foreign investments

⁶⁷⁴ *ibid*, p.81.

⁶⁷⁵ *ibid*, p.82.

⁶⁷⁶ LSE 598(151): Vietnam, *Public Investment Program Period of 2001-2005*, (Hanoi: General Statistical Office, 2002), p.75.

⁶⁷⁷ *ibid*, p.82.

is a very large part of GDP.⁶⁷⁸ International economic links are still key to the overall economic health of the country. The South is still the centre of commerce and exports.⁶⁷⁹ The government is aware that the South already has better trading links.

The government policies, since the introduction of Doi Moi in 1985, have “aimed to reform the economy completely and to lead Vietnam rapidly toward market capitalism”.⁶⁸⁰ Indeed, the government has recognised that the most rapid rates of urbanisation, industrial growth and service sector development were in the South Eastern region and the Mekong river delta, both areas located in former Cochinchina.⁶⁸¹ Just like the French, the current government’s economic policies focus on developing the productive capacity of the economy. The Vietnamese government wants to bring into play the advantages of the major economic regions, through a “restructuring of the key Northern economic regions, and through further development in the Southern economic sector”.⁶⁸² The language in this is very clear: development is spurred from the South and to achieve global development, the North needs to restructure and adapt. It is clear that the Vietnamese government’s current policies are an attempt to close the gap between the two regions and they show an awareness of existing differences.

Unlike the Red River Delta, the Southeastern region and the Mekong Delta have significant market infrastructure, market institutions and incentives structures,⁶⁸³ just as they did during French colonial rule. Research shows that the number of private enterprises is much higher in Ho Chi Minh City and in southern provinces in general.⁶⁸⁴ The government’s economic policy to encourage growth, the Doi Moi, encouraged a transition to the market.⁶⁸⁵ As Fforde point out, the “[development in Vietnam] did not originate from changes in policy, but from adaptation of policy to pre-existing use of

⁶⁷⁸ LSE 598(150): op.cit., p.19.

⁶⁷⁹ LSE 598(153): Mạnh Hùng Nguyễn, *Strategies, Plans, Programs of Vietnam Socio-Economic Development Investment to the Year 2010*, (Hanoi: Statistical Publishing House, 2004), p.31-32.

⁶⁸⁰ Donald B. Freeman, “Doi Moi Policy and the Small-Enterprise Boom in Ho Chi Minh City, Vietnam”, *Geographical Review*, Vol.86, No.2, 1996, p.178.

⁶⁸¹ LSE 598(122): Nong Nghiep 1995, op.cit. p.114.

⁶⁸² LSE 598(150): op.cit., p.28.

⁶⁸³ LSE 598(ADB): Asian Development Bank, *Which Institutions are Critical to Sustain Long-Term Growth in Vietnam?* (Manila: Asian Development Bank, 2004), p.55.

⁶⁸⁴ Hoang Kim & Hoang Vu Cuong, Chapter 7 “Vietnam’s Private Economy in the Process of Renovation” in Irene Nørlund, Carolyn L. Gates & Vu Cao Dam (eds), *Vietnam in a Changing World*, (Richmond, Surrey: Curzon Press, 1995), p.152.

⁶⁸⁵ LSE 598(ADB): Asian Development Bank 2004, op.cit., p.52.

markets in the economy”.⁶⁸⁶ Clearly, government policy still has to address the differences that exist between the two regions. These differences do not seem hugely different from what they were during the colonial era. This re-emphasises why a better understanding of the colonial economic divide between North and South was necessary for analyses of current Vietnamese economic performance.

The similarity between the colonial era and today are seen in government policies. The government believes that pro-growth policies can best be applied in former Tonkin through “developing infrastructure, increasing domestic and international trade, seeking investment in existing industrial zones, developing labour-intensive industries, developing agriculture through the production of commodity products”...⁶⁸⁷ These policies are similar to the policies the French attempted to introduce in Tonkin through *mise-en-valeur*. As seen earlier, however, the contextual differences between the two regions were significant enough for some of these policies to be impractical, particularly in relation to international trade and commodity production.

The current government’s economic policies with respect to the South are more ambitious: “to strengthen and develop industry, push up production of fertilizers and chemicals, to push up investment and infrastructure, to make full use of soil for industrial crops and consolidate intensive growing, promote commerce, finance and banking and promote economic strengths”.⁶⁸⁸ Again, the expectations for Southern development are in line with the French’s expectations and show the continuation of what we defined as Cochinchina’s outward-oriented economic trajectory. Finally, although the government recognises that foreign investment is still an engine of growth,⁶⁸⁹ it has still not acknowledged that most of the FDI coming into Vietnam go to South Vietnam. Instead, the current government, just like the French colonial government, tries to equal out the flow of investment by encouraging domestic development in the North.⁶⁹⁰ The fact that the economic trajectories today reflect those of the regions’ colonial past is significant: there is a large degree of path dependency in the two regions’ development.

⁶⁸⁶ Adam Fforde, “Economics, History and the Origins of Vietnam’s Post-War Economic Success”, *Asian Survey*, Vol.49, No.3, 2009, p.489.

⁶⁸⁷ LSE 598(153): Mạnh Hùng Nguyễn, *op.cit.*, p.102.

⁶⁸⁸ *ibid.*, p.104-106.

⁶⁸⁹ LSE ADB(277): Asian Development Bank, *Rising to the Challenge in Asia: A study of Financial Market*, Volume 12: Socialist Republic of Vietnam, (Manila: Asian Development Bank, 1999), p.9.

⁶⁹⁰ LSE 598(ADB): Asian Development Bank 2004, *op.cit.*, p.56.

The results of the new government policies have centred on Ho Chi Minh City, rather than Hanoi. Certainly, this is partly explained through communist rule in the North over a longer time period. However, it is interesting that this appears to be a continuation of the North-South divide seen during French colonial rule. This suggests that the characteristics of the colonial gap between Tonkin and Cochinchina explored in this thesis may still be very relevant to the current political and economic developments in Vietnam.⁶⁹¹ There are still two clear economic trajectories existing in today's Vietnam. However, to maintain its image of a unified country, the government seems unwilling to admit to it. More importantly, the North-South gap is an under discussed subject in contemporary policies, despite the fact most rhetoric hint at its existence.

This brief discussion of current trends in the Vietnamese economy suggests that many of the circumstances that make sense of the economic divide between Tonkin and Cochinchina in the colonial era remain significant in today's Vietnam. It is unlikely that the long-term effects of the trends outlined in this thesis fully explain the current economic divide. Indeed, the ravaging effects of the war had severe repercussions on the economies of both North and South Vietnam. The ideological switch to communism would also have changed the economic context of the country. However, it is not unrealistic that there is a measure of path dependence in the economic performances of both regions. Further research relating the colonial economic divide to the current divide would go a long way in evaluating the relevance of path dependence in Vietnam's economy and in evaluating the nature of the challenges policy-makers in Vietnam face.

Certainly, regional differences have always existed within a county and these are not usually a problem for long-term development. However, in this case, the government rhetoric might be problematic: it refuses to acknowledge the importance these differences have. According to Taylor “those who strive to rule all Vietnamese people will insist upon a single Vietnamese history and culture, with a single origin and a single driving force throughout time and space”.⁶⁹² Indeed, the government is still intent on upholding and demonstrating the fact that Vietnam is a single entity: “the Vietnamese are used to

⁶⁹¹ Freeman, op.cit., p.178-181.

⁶⁹² K.W. Taylor, “Surface Orientations in Vietnam: Beyond Histories of Nation and Region”, *The Journal of Asian Studies*, Vol.57, No.4, 1998, p.970.

call themselves ‘Dong Bao’ [meaning compatriot that came from the same foetus]”.⁶⁹³ Possibly, the balance between Northern and Southern influences in policy making can ensure a gradual integration of the two regions. For some years, the top leadership has been split between Northerners and Southerners: “the top political positions in 2007 appear to be a stable combination of northern party loyalty and reform-mindedness on the one hand, and southern entrepreneurial spirit on the other”.⁶⁹⁴ Presumably, the balance between these two forces allows for the government to balance its policies. The government is willing to recognise that “the formulation of economic plans must be marked by bureaucratic centralism”, however, the government is unwilling to admit that there are significant differences between North and South Vietnam, particularly in the private sector, the key contributor to growth.⁶⁹⁵ Therefore, although the key economic policy of today’s Vietnamese government is to “narrow the gap between different regions,”⁶⁹⁶ “the disparity between the North and South has continued to increase”.⁶⁹⁷

⁶⁹³ LSE 598(128): Dr. Tran Hoang Kim, *Vietnam’s Economy: The Period 1945-1995 and its Perspective by the Year 2020*, (Hanoi: Statistical Publishing House, 1996), p.148.

⁶⁹⁴ Vo Xuan Han, “Vietnam in 2007: A Profile in Economic and Socio-Political Dynamism”, *Asian Survey*, Vol.48, No.1, 2008, p.33.

⁶⁹⁵ LSE 598(153): Mạnh Hùng Nguyễn, *op.cit.*, p.204, 219.

⁶⁹⁶ *ibid.*, p.259.

⁶⁹⁷ Alan De Brauw & Tomoko Harigaya, “Seasonal Migration & Improving Living Standards in Vietnam”, *American Journal of Agricultural Economics*, Vol.89, No.2, 2007, p.5.

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Appendix 1) Selected Revenue of the Indochinese General Budget, 1923-1936, (1000 \$)								
	1929	1930	1931	1932	1933	1934	1935	1936
Customs revenue	22032	24651	18957	14953	14055	15078	13369	13164
General Import Taxes	4239	4099	2782	2271	3046	3216	3353	3562
Other Revenue from Imports or Exports	587	727	732	695	677	754	3671	4194
Mining Extraction Taxes	3	203	190					
Consumption & Circulation Taxes	17301	17570	14222	11658	9643	10614	9403	11572
Excise Boards	30965	28399	21822	16877	12787	9470	10689	11185
Mining Duties				141	134	103	107	101
Total Revenue	93793	94745	76703	65245	62420	57802	56718	62403

Source LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine. "Finances Publiques" in *Annuaire Statistique de l'Indochine*. Vol. I-VIII. Hanoi: Imprimerie de l'Extrême-Orient, 1927-1939.

Appendix 2) Selected Expenditure of the Indochinese General Budget, 1923-1936, (1000 \$)								
	1929	1930	1931	1932	1933	1934	1935	1936
Debts	4255	4033	3355	5923	9476	13225	14022	13415
Contributions to the Metropolis	11568	10896	11517	10562	7210	7064	3941	4131
Political & General Administration	288	382	494	733	703	594	521	321
General Government	2040	2236	2047	1937	1477	1136	1076	1108
Justice	890	962	2423	2265	2058	2060	1901	2064
Financial Services	24777	20213	19551	17573	16719	10786	10395	11504
Economic Interests	3841	6942	9662	7759	4302	2316	2178	2250
Public Works	16537	23520	15158	9090	5091	4397	4545	6850
Industrial Exploitations	7426	8428	8946	7322	6219	5681	5373	6052
Social Interests	2941	3514	3581	3381	2803	2532	2471	2602
Common Expenditure	4452	4443	4316	3292	2575	4429	2453	1755
Extraordinary	1980	2479	3194	2911	1313	338	257	928
Contributions	13462	16193	10762	10559	7877	8255	6316	5995
Total Expenditure	94457	104241	95006	82847	67743	62843	55449	59814

Source LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine. "Finances Publiques" in *Annuaire Statistique de l'Indochine*. Vol. I-VIII. Hanoi: Imprimerie de l'Extrême-Orient, 1927-1939.

Appendix 3a) Local Budget Revenue for Cochinchina, 1913-1936, (1000 \$)																									
		1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Direct Contributions																									
Head Tax on Europeans									16	56	65	69	66	65	61	65	70	89	84	87	83	75	70	65	66
Head Tax on Indigenous Population		710	732	748	765	779	798	802	852	844	852	866	872	902	904	943	965	1098	990	925	880	818	851	950	948
Head Tax on Workers from Annam or Tonkin																			56	48	30				
Capitation Tax for Asian Foreigners		1184	1204	1187	1119	1326	1388	1500	1963	2377	2284	2270	2232	2226	2315	2355	2479	2661	2452	2074	1638	1377	1393	1339	1407
Exceptional Contribution on Revenue Exceeding 8000 piastres																								75	172
Tax on Rice fields	Total	1855	1886	1893	1914	1926	1942	1933	2081	2473	2416	2446	2392	2452	2430	2491	2571	2907						2115	2213
	Indigenous																			2357	2242	2065	1864	1984	
Tax on Other Crops	Total	324	325	330	332	336	344	350	362	448	475	446	429	445	485	536	548	630						587	621
	Indigenous																			388	380	364	352	348	
Tax on Urban Centres	Total	113	112	111	110	1114	114	112	112	425	527	525	537	553	619	671	737	833						763	688
	Indigenous																			496	504	486	431	422	
Additional Tax for Chamber of Agriculture																						25	27	27	21
Licenses		293	315	314	457	500	499	488	574	1595	1521	1529	1510	1560	1650	1809	1956	2285	2115	1975	1669	1473	1340	1272	1191
Additional Tax for Chamber of Commerce																							19	18	16
Court Fees																			36	44	41				
Extraordinary Additions																			780	617					

<i>Total Direct Contributions</i>	4479	4574	4583	4697	5981	5085	5185	5960	8218	8140	8151	8038	8203	8464	8870	9326	10503	10395	9618	7969	7114	7121	7211	7343
Assimilated Taxes																								
Tax on Weight Checks	10	9	12	13	12	12	11	13	15	16	16	16	18	17	17	18	27	25	23	21	20	20	22	23
Tax on Barges	157	165	231	238	237	239	240	243	248	252	250	242	242	243	246	255	270	267	252	221	202	203	208	212
Tax on Cars									60	75	85	106	135	166	215	249	319	167						
Tax on Entertainment																				17	23	3	34	35
Income from Domain	135	86	23	53	221	83	209	147	185	155	71	388	532	822	777	1061	1216	552	136	87	35	31	84	49
Income from Forests	186	318	324	330	308	336	383	426	522	637	687	665	717	812	803	767	889	828	484	510	468	541	615	636
Income from Rented Out Land	96	103	103	102	195	110	109	106	113	116	116	118	122	109	108	105	109	118	123	129	136	136	98	89
Income from Industry	179	173	168	183	206	221	230	252	263	266	251	228	230	139	258	315	393	411	375	194	175	152	176	196
Various	113	111	115	94	96	101	105	173	193	160	168	199	183	266	327	374	402	400	280	209	174	156	228	206
Fines	43	64	66	71	59	59	20	45	43	42	117	53	68	36	46	87	84	39						
Interest from Reserves	8	14	14	30	46	81	59	75	95	91	72	62	51	27	9									
From Expenditure Reduction	115	105	127	127	143	154	215	228	289	332	348	394	426	428	453	627	838	1028	1080	917	820	985	936	1097
From Various Sources	38	41	49	37	36	35	38	61	89	142	115	152	142	259	276	294	397	355	481	561	577	387	438	373
From End of Fiscal Exercise	88	101	67	65	56	78	78	129	195	274	29	6	126	184	239	98	243	232	229	559	557	819	785	557
<i>Total Assimilated Taxes</i>	<i>1168</i>	<i>1290</i>	<i>1299</i>	<i>1343</i>	<i>1615</i>	<i>1509</i>	<i>1697</i>	<i>1898</i>	<i>2310</i>	<i>2558</i>	<i>2325</i>	<i>2629</i>	<i>2992</i>	<i>3508</i>	<i>3774</i>	<i>4250</i>	<i>5187</i>	<i>4422</i>	<i>3463</i>	<i>3425</i>	<i>3187</i>	<i>3433</i>	<i>3624</i>	<i>3473</i>
Subventions from Other Sources																								

Cochinchina's Share of Indochinese Lottery																								21	53	
Refund from General Budget for Road Work																								214	161	179
Subsidies from General Budget	1465	1959	1656	2212	1869	999	928	1853	1441	1220	280	569	1127	3704	3612	4064	3814	3830	12	7	7					
Bonus from Increased Exit Fees on Rice								255	668	542	325	231	285													
Bonus from Mineral Oil Consumption Tax																		137	273	273	274					
Other	223	228	244	205	201	471	312	425	479	688																
Reimbursement from Colonial Budget																							21	11	3	5
Reimbursement from General Budget																								9	3	
Reimbursement from Other Countries											737	662	776	118	95	239	118	228	184	112	155	131	125	147		
Reimbursement from Other Provinces														193	232	684	841	98	86	26	56	51	83	87		
Reimbursement from Municipalities														758	780	863	887	1300	1072	130	95	78	75	46		
Reimbursement from Port														38	36	37	41	37	38	38	36	34	34	34		
<i>Total Subventions</i>	<i>1688</i>	<i>2187</i>	<i>1900</i>	<i>2417</i>	<i>2070</i>	<i>1470</i>	<i>1240</i>	<i>2533</i>	<i>2588</i>	<i>2450</i>	<i>1342</i>	<i>1462</i>	<i>2188</i>	<i>4811</i>	<i>4755</i>	<i>5887</i>	<i>5701</i>	<i>5630</i>	<i>1665</i>	<i>586</i>	<i>644</i>	<i>519</i>	<i>511</i>	<i>554</i>		
<i>Total Revenue</i>	<i>7335</i>	<i>8051</i>	<i>7782</i>	<i>8457</i>	<i>9666</i>	<i>8064</i>	<i>8122</i>	<i>10391</i>	<i>13116</i>	<i>13148</i>	<i>11818</i>	<i>12129</i>	<i>13383</i>	<i>16783</i>	<i>17399</i>	<i>19463</i>	<i>21391</i>	<i>20447</i>	<i>14746</i>	<i>11980</i>	<i>10945</i>	<i>11073</i>	<i>11346</i>	<i>11370</i>		

Source LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine. "Finances Publiques" in *Annuaire Statistique de l'Indochine*. Vol. I-VIII. Hanoi: Imprimerie de l'Extrême-Orient, 1927-1939.

Appendix 3b) Local Budget Revenue for Tonkin, 1913-1936, (1000 \$)																									
	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	
Direct Contributions																									
Head Tax on Europeans								16	47	58	64	63	66	65	69	75	78	90	105	100	90	80	71	64	
Head Tax on Indigenous Population	2842	2883	2910	2917	2940	2953	3211	3519	4091	4204	4353	4452	4551	4641	4714	4763	4864	4774	4491	4591	4154	4191	4205	4277	
Personal Tax on Indigenous People in Urban Areas																		48	37	38	34	37	37		
Tax (per family) in the High Regions																		182	164	151	156	108	135	135	
Capitation Tax from Asian Foreigners	86	90	138	141	146	144	143	152	231	228	220	222	226	257	254	265	265	289	274	245	79	92	86	84	
Landed Property Tax	Europeans & Foreign Asians	16	29	64	95	88	87	99	101	102	104	104	115	151	123	154	160	162	234	234	169	56	58	54	59
	Indigenous	3206	3342	3412	3409	3416	3435	3438	3458	3630	3756	4020	4088	4144	4692	5014	5027	5069	5109	4742	4831	4591	4599	4550	4588
Exceptional Contribution from Revenues above 8000s piastres																							24	63	
Additional Tax for Chamber of Agriculture																		2	2	1	1	2	1	2	
Additional Tax on Indigenous & Foreign Asians																		20	20	20	20	20	20	20	
Urban Landed Tax	34	35	35	36	36	37	36	37	38	28	33	31	31	34	35	35	37	89	69	75	79	82	68	68	
Licenses	All	77	83	294	310	313	315	154	368	526	552	573	623	666	666	718	729	772	961	872	793	213	214	205	204
	Indigenous	40	45	120	126	127	125	135	156	226	235	251	286	303	300	316	326	342	448	69					

<i>Total Direct Contributions</i>	6301	6507	6973	7034	7066	7096	7216	7807	8891	9165	9618	9880	10138	10778	11274	11380	11589	12246	11079	11014	9473	9483	9456	9564	
Assimilated Taxes																									
Tax on Barges	12	12	13	13	13	12	10	11	11	12	13	13	14	15	16	16	17	18							
Tax on Cars													5	12	13	15	19	20							
Tax on Other Vehicles															90	85	97	103							
Additional on Rental of Markets and Ferries	862	878	885	890	898	908	910	921	662	686	695	699	698					103							
Income from Domain	2	4	10	5	3	2	8	14	15	19	26	28	40	47	36	76	57	28	43	95	71	64	125	128	
Dues from Mines							23	17	44	56	42	39	64	80	103	107	152	110	59	98	70	152	136	93	
Income from Forests	258	262	273	297	257	275	309	363	378	414	533	588	556	546	544	585	695	620	516	443	320	390	392	426	
Income from Rented Out Land	249	243	229	244	230	245	261	277	274	301	313	335	376	395	385	444	472	465							
Receipts from Industry	2	2	2	3	3	2	3	2	3	2	2	3	3	54	32	51	59	57	10	2					
Various	109	101	95	105	108	108	130	143	161	154	196	223	238	250	204	251	349	316	194	131	101	114	106	142	
Fines	45	45	43	46	48	31	27	31	43	44	58	76	63	51	56	90	102	94	74	3	2	12	7	4	
Interest from Reserves	11	12	10	9	7	28	20	19	25	25	19	17	14	10	13	11	12	1							
From Expenditure Reduction	27	29	29	41	84	76	77	71	92	95	110	110	163	154	186	212	247	351	487	440	439	390	352	371	
From Various Sources	11	34	82	33	29	127	73	140	394	933	361	111	77	82	45	25	89	289	120	95	125	176	44	175	

From End of Fiscal Exercise	11	130	13	32	11	26	35	17	53	27	29	17	24	23	395	46	55	45	32	71	110	66	44	127		
<i>Total Assimilated Taxes</i>	<i>1599</i>	<i>1752</i>	<i>1684</i>	<i>1718</i>	<i>1691</i>	<i>1840</i>	<i>1886</i>	<i>2026</i>	<i>2155</i>	<i>2768</i>	<i>2397</i>	<i>2259</i>	<i>2335</i>	<i>1719</i>	<i>2118</i>	<i>2014</i>	<i>2422</i>	<i>2620</i>	<i>1535</i>	<i>1378</i>	<i>1238</i>	<i>1364</i>	<i>1206</i>	<i>1466</i>		
Subventions from Other Sources																										
Tonkin's Share of Indochinese Lottery																								19		
Reimbursement from Loan Fund																									46	
Subsidies from General Budget	178	305	304	656	644	498	800	1200	932	1900	2595	2582	1782	3593	3231	3736	3170	5493	3	50	50	34	42	109		
Refund from General Budget for Road Work																		50	180	180	141	141	106	168		
Bonus from Rice Exit Fees											78	38	47													
Reimbursements	55	145	198	201	190	173	313	332	365	467	516	482	492	904	1057	1142	1340	1625	245	186	182	143	90	105		
Other	137	157	158	203	225	235	255	280	867	840	809	779	612	213	88	25	145	271	2		1					
<i>Total Subventions</i>	<i>370</i>	<i>607</i>	<i>660</i>	<i>1060</i>	<i>1059</i>	<i>906</i>	<i>1368</i>	<i>1812</i>	<i>2164</i>	<i>3207</i>	<i>3998</i>	<i>3881</i>	<i>2933</i>	<i>4710</i>	<i>4376</i>	<i>4903</i>	<i>4655</i>	<i>7439</i>	<i>430</i>	<i>416</i>	<i>374</i>	<i>318</i>	<i>303</i>	<i>382</i>		
<i>Total Revenue</i>	<i>8270</i>	<i>8866</i>	<i>9317</i>	<i>9812</i>	<i>9816</i>	<i>9842</i>	<i>10470</i>	<i>11645</i>	<i>13210</i>	<i>15140</i>	<i>16013</i>	<i>16020</i>	<i>15406</i>	<i>17207</i>	<i>17768</i>	<i>18297</i>	<i>18666</i>	<i>22305</i>	<i>13044</i>	<i>12808</i>	<i>11085</i>	<i>11165</i>	<i>10965</i>	<i>11412</i>		
Source LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine. "Finances Publiques" in <i>Annuaire Statistique de l'Indochine</i> . Vol. I-VIII. Hanoi: Imprimerie de l'Extrême-Orient, 1927-1939.																										

Appendix 4a) Local Budget Expenditure for Cochinchina, 1913-1936, (1000 \$)																									
		1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Political & General Administrative Expenditure																									
Pensions												70	76	75	125	150	113	230	177	70	97	156	38	27	34
Government Offices	Personnel	197	188	171	169	159	159	169	223	286	339	407	434	472	469	494	542	628	620	612	689	544	545	505	546
	Material	20	32	26	29	28	32	32	33	54	83	77	86	91	103	126	92	134	180	136	100	91	70	73	78
Provincial Administration		696	686	638	633	612	496	490	676	662	626	584	549	556	595	602	634	718	417	412	445	422	450	383	366
Judicial Services	Personnel	370	389	379	338	296	300	315	452	629	583	635	663	635	622	810	714	818	855						
	Material	33	42	44	38	45	48	57	58	70	66	71	74	68	64	76	77	84	82						
Police and Immigration (joined in 1922)	Personnel	249	259	253	246	237	250	262	308	351	330	1183	1141	1255	1271	1352	1521	1701	1944	2008	1041	841	845	810	909
	Material	32	31	33	33	32	35	35	33	38	47	35	55	62	97	90	83	92	162	157	100	75	67	79	86
Penitentiary	Personnel	134	129	132	143	143	157	157	245	281	289	296	277	315	321	337	328	348	395	410	452	353	325	290	313
	Material	160	151	176	170	166	157	173	207	173	232	214	207	230	256	274	256	284	405	390	375	249	243	281	269
Gendarmerie	Personnel	48	85	75	98	101	125	140	154	173	247	238	215	212	236	265	313	290	368	487	519	401	378	326	329
	Material	4	8	5	7	5	4	5	6	6	6	11	13	14	16	15	17	20	13	59	27	24	25	22	23
Indigenous Justice (Saigon-Cholon)																							2		
Transports		318	319	321	325	322	327	337	326	329	334	648	765	317	463	708	359	813	1319	633	721	697	1118	814	111
Flotilla	Personnel	18	18	18	24	29	36	42	55	66	73	72	76	75	93	93	101	108	133	140	121	99	95	88	94
	Material	32	33	35	46	42	62	64	82	80	108	113	123	129	93	144	167	190	174	172	114	71	84	88	76
Various		297	250	462	396	330	354	553	590	765	592														
Subsidies to Private Ventures												76	82	100	140	169	242	258	584	544	528	326	330	408	313
Unpredicted		17	35	25	16	32	20	25	42	17	42	177	191	220	398	407	292	583	354	292	381	270	283	662	740
Surveillance Fund																							24	30	29

Secret Fund	11	12	14	12	12	13	17	14	15	15	22	22	30	30	29	29	20	20	30	24	24				
<i>Total General and Administrative</i>	2636	2667	2807	2723	2591	2575	2873	3504	3995	4012	4929	5049	4856	5392	6141	5880	7319	8202	6552	5734	4643	4922	4886	4316	
Financial Services																									
Treasury	Personnel	191	196	183	186	169	177	182	226	331	348	324	330	319	340	383	364	458	437						
	Material	5	4	5	9	8	8	9	30	19	31	21	25	34	24	26	32	31	42						
Direct Contributions	Personnel	8	9	9	8	9	8	10	13	44	44														
	Material						1	1	1	2	5														
Land Register	Personnel	241	221	186	170	146	175	197	295	308	314	288	291	341	349	338	330	371	383	413	396	337	306	285	301
	Material	66	70	60	59	49	61	83	57	89	125	82	125	153	143	121	448	491	331	231	181	115	104	111	111
Landed Property Service (in Financial Services after 1930)	Personnel																		89	87	106	114	112	125	
	Material																		30	24	20	20	20	22	
<i>Total Financial Services</i>	<i>511</i>	<i>500</i>	<i>443</i>	<i>432</i>	<i>381</i>	<i>430</i>	<i>482</i>	<i>622</i>	<i>793</i>	<i>867</i>	<i>715</i>	<i>771</i>	<i>847</i>	<i>856</i>	<i>868</i>	<i>1174</i>	<i>1351</i>	<i>1193</i>	<i>763</i>	<i>688</i>	<i>578</i>	<i>544</i>	<i>528</i>	<i>559</i>	
Economic Interest																									
Public Works	Personnel	567	591	516	483	463	495	510	705	812	817	751	763	818	924	995	1124	1171	1110	781	745	479	389	316	361
	Maintenance	378	399	336	303	361	453	412	480	612	673	639	705	755	938	1368	1907	2040	1790	1454	860	567	587	666	621
	New	926	1656	1226	1625	1359	1757	1701	1639	2327	2030	1260	1696	1701	3983	3587	3604	3211	2692	804	311	186	283	351	911
Industry	Personnel	84	85	71	82	68	85	32	73	80	104	39	53	52	2										
	Material											69	50	52	5										
Agrarian Hydraulic & Navigation Improvements	Personnel																						53	58	79
	Material																						95	168	175
Agriculture	Personnel	45	45	46	55	55	60	89	88	105	112	145	139	144	137	175	188	190	215	191	167	123	115	103	98
	Material	90	97	85	83	110	120	160	182	200	230	256	239	254	278	346	293	274	205	148	99	87	78	81	70

Fairs & Exhibits																				80			5	1	4
Forest Development	Personnel	139	150	130	119	104	131	152	219	242	270	287	277	280	286	307	323	357	373	413	482	366	345	320	344
	Material	25	29	25	24	18	18	26	40	20	44	51	47	52	57	59	43	64	46	30	14	15	15	15	10
Veterinary Services	Personnel	7	6	9	8	6	12	13	29	45	59	59	69	76	77	95	108	124	132	150	159	119	106	106	124
	Material		7	9	9	14	19	11	58	35	25	34	65	39	64	71	68	55	40	26	89	93	47	24	34
Landed Property Services (in Economic Interests 1927-1930)	Personnel															9	32	49	75						
	Material															15	15	19	30						
<i>Total Economic Interest</i>		2261	3065	2453	2791	2558	3150	3106	3513	4478	4364	3590	4103	4223	6751	7027	7705	7554	6708	4077	2926	2035	2118	2209	2831
Social Interest																									
Health	Personnel	149	168	161	152	140	165	274	408	417	461	493	481	510	562	592	646	809	767	840	800	674	672	651	709
	Material	122	171	156	186	184	227	282	299	352	455	407	418	417	509	622	677	1215	1139	971	1035	634	638	474	517
Education	Personnel	351	372	354	165	344	440	527	770	891	980	1113	1194	1340	1280	1482	1793	1856	1716	1837	1791	1467	1385	1203	1276
	Material	135	139	133	144	188	270	268	257	300	303	334	353	408	456	461	611	573	571	616	523	368	274	248	267
Subsidies to Charitable Societies																							86	100	120
Extraordinary																			20	15					
<i>Total Social Interest</i>		757	850	804	647	856	1102	1351	1734	1960	2199	2347	2446	2675	2807	3157	3727	4453	4213	4279	4149	3143	3055	2676	2889
Subventions and Reimbursements																									
Reimbursement to Colonial Budget																			36	47		2	4	3	4
Reimbursement to General Budget												19	10	3	7	5	2	9	2	1			36	35	
Subvention to Cambodian Budget																						2	2	2	2

Subventions to Saigon-Cholon Region	606	785	802	659	797	716	835	858	424	379	41	68	134	477	663	644	354	347	347	42	42	32	27	11
Reimbursement of Police Fines to Originating Cities	24	34	31	36	29	32	24	19	33	35	75													
Reimbursement to Provincial Budget	35	52	47	61	53	243	288	266	406	378	437	310	244	529	352	355	230	388	367	317	274	326	334	313
Reimbursement of Product from Timber sales to Originating Provinces	1	4	5	6	7	6	10	9	14	23	24	31	28		28	35	56	65	45	42	38			3
Refunds to Local Budgets												9		30	57	31	91	58	48	15				
Other	5	5	6	5	4	10	6	5	4	4														
Subvention to Saigon Port																		2	2	3		3	3	3
<i>Total Subventions & Reimbursements</i>	<i>671</i>	<i>880</i>	<i>891</i>	<i>767</i>	<i>890</i>	<i>1007</i>	<i>1163</i>	<i>1157</i>	<i>881</i>	<i>819</i>	<i>596</i>	<i>428</i>	<i>409</i>	<i>1043</i>	<i>1105</i>	<i>1067</i>	<i>740</i>	<i>898</i>	<i>857</i>	<i>419</i>	<i>358</i>	<i>403</i>	<i>404</i>	<i>336</i>
<i>Total Expenditure</i>	<i>6836</i>	<i>7962</i>	<i>7398</i>	<i>7360</i>	<i>7276</i>	<i>8264</i>	<i>8975</i>	<i>10530</i>	<i>12107</i>	<i>12261</i>	<i>12177</i>	<i>12797</i>	<i>13010</i>	<i>16849</i>	<i>18298</i>	<i>19553</i>	<i>21417</i>	<i>21214</i>	<i>16528</i>	<i>13916</i>	<i>10757</i>	<i>11042</i>	<i>10703</i>	<i>10931</i>

Source LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine. "Finances Publiques" in *Annuaire Statistique de l'Indochine*. Vol. I-VIII. Hanoi: Imprimerie de l'Extrême-Orient, 1927-1939.

Appendix 4b) Local Budget Expenditure for Tonkin, 1913-1936, (1000 \$)

		1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Political & General Administrative Expenditure																									
Pensions												60	73	85	106	105	170	86	186	164	338	229	201	207	209
Government Offices	Personnel	185	169	175	175	182	180	211	256	296	307	313	290	290	345	370	438	475	516	530	512	466	391	369	384
	Material	26	31	27	29	28	25	25	37	46	38	35	42	42	48	64	56	66	65	86	71	76	62	63	77
Provincial Administration	Personnel	818	832	761	673	636	698	651	934	1009	1010	963	947	993	970	991	986	1028	1184	836	825	760	670	561	576
	Material	175	183	174	222	225	227	204	240	255	258	214	198	216	197	241	255	236	249	161	182	117	83	90	100
Indigenous Administration	Personnel	471	462	436	427	441	434	481	540	645	600	591	604	600	767	808	874	884	905		24	7	5	13	16
	Material	17	16	15	19	29	32	32	43	27	27	25	29	27	30	32	27	31	32	1	5	3	3	3	3
French Justice	Personnel	87	85	93	79	69	94	90	122	167	176	182	208	180	170	223	197	216	279						
	Material	10	8	9	11	12	29	12	11	16	17	19	21	18	18	22	25	33	34						
Indigenous Justice	Personnel							78	88	93	86	99	106	132	140	146	154	156	178		2				
	Material							16	18	19	22	27	31	26	24	31	28	29	34						
Police & Immigration	Personnel	133	139	137	135	137	142	145	156	161	333	753	728	781	790	846	921	1046	1227	583	543	425	419	393	510
	Material	17	17	20	21	21	22	23	22	23	24	27	28	29	29	34	41	55	55	56	53	58	43	45	50
Penitentiary	Personnel	32	30	38	37	38	50	58	93	96	104	111	105	111	114	133	151	147	169	168	168	152	154	152	176
	Material	191	199	186	197	194	184	202	244	293	292	296	331	338	321	361	359	393	401	294	408	234	119	104	83
Gendarmerie	Personnel	114	177	156	167	150	194	280	209	311	413	353	293	256	280	314	345	350	409	417	454	398	254	205	204
	Material	3	3	3	2	5	2	3	3	3	4	4	3	5	3	3	3	4	3	5	4	3	4	4	6
Indigenous Guard	Personnel	1007	972	964	979	1032	1121	1312	1457	2201	1931	1747	1623	1695	1671	1791	1904	1980	2030	2224	2214	1879	1875	1870	2107
	Material	164	213	138	168	140	207	135	153	281	278	166	178	191	418	328	276	341	316	198	147	130	137	117	149
Flotilla		200	204	196	163	148	111	110	115	122	105	59	100	45	109	125	119	159	158	65	53	39	24	28	48
Transport		389	380	386	389	377	387	374	378	390	414	972	703	596	911	949	586	607	1069	838	688	865	838	360	363
Various		529	556	379	979	562	427	1420	519	787	1175														
Subsidies to Private Ventures												144	144	174	136	151	128	170	186	166	152	115	173	203	153

Unpredicted		22	43	47	34	27	26	77	85	61	61	172	153	240	175	164	394	120	348	118	107	287	184	143	96
Surveillance Fund																					52	48	47	49	50
Secret Fund		19	21	22	21	26	22	23	22	25	22	24	24	30	35	38	45	46	46	48					
<i>Total Political & Administrative</i>		<i>4609</i>	<i>4740</i>	<i>4362</i>	<i>4927</i>	<i>4479</i>	<i>4614</i>	<i>5962</i>	<i>5745</i>	<i>7327</i>	<i>7697</i>	<i>7356</i>	<i>6962</i>	<i>7100</i>	<i>7807</i>	<i>8270</i>	<i>8482</i>	<i>8658</i>	<i>10079</i>	<i>6958</i>	<i>7002</i>	<i>6291</i>	<i>5686</i>	<i>4979</i>	<i>5360</i>
Financial Services																									
Treasury	Personnel	175	162	169	162	163	173	166	215	234	284	277	265	274	297	332	323	347	308						
	Material	29	29	34	28	31	32	23	34	21	21	19	18	20	17	17	17	19	98						
Land Register	Personnel	64	101	79	95	97	106	113	126	160	181	208	197	225	260	255	246		422	85	92	64	64	50	51
	Material	7	20	164	282	283	205	245	198	16	12	11	11	17	49	26	26		16	15	11	11	10	16	9
Landed Property Service	Personnel																			8	12	16	17	17	19
	Material																			3	3	3	3	3	3
<i>Total Financial Services</i>		<i>275</i>	<i>312</i>	<i>446</i>	<i>567</i>	<i>574</i>	<i>516</i>	<i>547</i>	<i>573</i>	<i>431</i>	<i>498</i>	<i>515</i>	<i>491</i>	<i>536</i>	<i>623</i>	<i>630</i>	<i>612</i>	<i>366</i>	<i>844</i>	<i>111</i>	<i>118</i>	<i>94</i>	<i>94</i>	<i>86</i>	<i>82</i>
Economic Interest																									
Public Works	Personnel	622	662	648	629	631	709	712	850	967	886	810	788	823	775	782	793	755	857	682	584	450	448	400	461
	Upkeep	864	1164	894	568	676	776	1022	1052	1024	1017	1007	1092	1133	1625	1883	1945	1909	1893	585	523	495	463	455	566
	New	478	408	528	859	781	850	640	583	723	548	793	935	1343	1797	1277	1027	1181	1191	479	88	245	312	204	328
Rural Post		19	20	21	29	31	34	35	43	49	56	75	143	77											
Agriculture	Personnel	80	80	68	61	63	66	62	92	105	114	108	116	119	127	146	150	151	176	103	132	97	94	103	130
	Material	79	101	106	98	80	92	96	107	113	118	134	125	146	124	132	125	121	126	69	82	77	70	64	69
Fairs & Exhibits																							5	8	3
Forest Development	Personnel	110	129	128	128	128	150	163	287	277	273	276	288	312	289	322	351	392	426	411	409	330	320	287	328
	Material	22	42	23	29	23	21	30	14	18	19	37	27	51	49	52	47	54	50	51	46	48	45	41	43
Veterinary	Personnel	59	64	56	54	53	51	60	92	132	160	161	157	178	172	201	203	217	228	223	217	199	180	169	203
	Material	22	27	23	25	23	26	32	42	33	59	49	46	59	46	41	42	49	63	58	49	40	41	30	40
<i>Total Economic Interest</i>		<i>2355</i>	<i>2697</i>	<i>2495</i>	<i>2480</i>	<i>2489</i>	<i>2775</i>	<i>2852</i>	<i>3162</i>	<i>3441</i>	<i>3250</i>	<i>3450</i>	<i>3717</i>	<i>4241</i>	<i>5004</i>	<i>4836</i>	<i>4683</i>	<i>4829</i>	<i>5010</i>	<i>2661</i>	<i>2130</i>	<i>1981</i>	<i>1978</i>	<i>1761</i>	<i>2171</i>

Social Interest																										
Sanitary and Medical	Personnel	201	221	198	181	172	175	186	284	366	402	450	481	506	590	655	696	798	792	344	413	305	309	303	340	
	Material	212	253	237	254	297	307	303	331	366	499	429	459	452	502	637	625	682	708	636	661	651	548	507	548	
Public Instruction	Personnel	383	392	415	418	456	463	461	679	858	1032	1762	1447	1634	1820	1987	2181	2312	2710	852	970	765	687	660	736	
	Material	46	62	58	59	111	93	115	113	132	158		324	326	320	341	345	407	358	208	169	140	76	73	89	
	Other	109	111	118	121	127	126	147	155	219	337												41	35	37	
Extraordinary												469	262	34	566	239	94	111	33	19	19				94	
<i>Total Social Interest</i>		<i>951</i>	<i>1039</i>	<i>1026</i>	<i>1033</i>	<i>1163</i>	<i>1164</i>	<i>1212</i>	<i>1562</i>	<i>1941</i>	<i>2428</i>	<i>3110</i>	<i>2973</i>	<i>2952</i>	<i>3798</i>	<i>3859</i>	<i>3941</i>	<i>4310</i>	<i>4601</i>	<i>2059</i>	<i>2232</i>	<i>1861</i>	<i>1661</i>	<i>1578</i>	<i>1844</i>	
Subventions and Reimbursements																										
Reimbursement to Provincial Budget																								543	1116	1660
Reimbursement to Colonial and General Budget												25	25	61	3			35	27	19	433				98	
Reimbursement to Cochinchinese Budget																		51					96	88	108	
Reimbursement to Municipal Budget (Hanoi & Haiphong)		70	64	349	267	348	379	423	378	447	422	379	366	323	410	445	446	477	555	613	741	43	20	20	77	
Reimbursement of Tribunal Fines to Originating Communes			8	7		7	9	11	3	22	21	27	58	36	28	32	53	61	57	46	52					
<i>Total Subventions & Reimbursement</i>		<i>70</i>	<i>72</i>	<i>356</i>	<i>267</i>	<i>355</i>	<i>388</i>	<i>434</i>	<i>381</i>	<i>469</i>	<i>443</i>	<i>431</i>	<i>449</i>	<i>420</i>	<i>441</i>	<i>477</i>	<i>499</i>	<i>538</i>	<i>698</i>	<i>686</i>	<i>812</i>	<i>476</i>	<i>659</i>	<i>1224</i>	<i>1943</i>	
<i>Total Expenditure</i>		<i>8260</i>	<i>8860</i>	<i>8685</i>	<i>9274</i>	<i>9060</i>	<i>9457</i>	<i>11007</i>	<i>11423</i>	<i>13609</i>	<i>14316</i>	<i>14862</i>	<i>14592</i>	<i>15249</i>	<i>17673</i>	<i>18072</i>	<i>18217</i>	<i>18701</i>	<i>21232</i>	<i>12475</i>	<i>12294</i>	<i>10703</i>	<i>10078</i>	<i>9628</i>	<i>11400</i>	
Source LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine. "Finances Publiques" in <i>Annuaire Statistique de l'Indochine</i> . Vol. I-VIII. Hanoi: Imprimerie de l'Extrême-Orient, 1927-1939.																										

Appendix 5) Export Revenue, by Category of Goods, 1933-1936, (1000 Francs)					
	1933	1934	1935	1936	
Live Animals	3889	2680	11003	4683	
Animal Products	27888	20049	26005	23329	
Fishing Products	71103	59406	59706	62980	
Medicinal Products	250	376	545	426	
Material (Difficult to Cut)	519	352	536	626	
Foodstuffs	632553	644247	794038	1060900	
Fruit & Grains	9114	5085	11219	13992	
Perishable Goods (pepper, sugar...)	25541	34221	33644	34905	
Oils & Vegetable Saps	69300	110627	149349	259027	
Medicine	1939	2309	1946	3303	
Timber	15233	16060	12575	11767	
Fibres	9486	7359	7633	8206	
Dyes	1945	1164	1344	1283	
Vegetable Products	402	378	518	1120	
Drinks	6209	4568	3791	3337	
Minerals & Combustible Materials	70645	63685	75683	91841	
Metals	33350	42197	48856	54182	
Chemical Products	3001	320	946	2197	
Prepared Dyes	8	9	2	2	
Dyestuffs	212	108	81	99	
Various Chemical Compounds	554	493	462	820	
Pottery, Glass & Crystals	1853	657	483	278	
Threads	440	361	96	81	
Textiles	4993	24717	31138	37104	
Embroidery	1042	650	431	476	
Clothing	1421	1116	878	863	
Paper & Paper Products	1617	1271	710	1233	
Hides	639	412	303	447	
Metallurgical Goods	4598	3479	4565	7023	
Arms, Powder & Munitions	452	93	140	201	
Furniture & Woodwork	3615	3724	4164	5189	
Musical Instruments	116	82	42	19	
Rope work & Fibre work	7676	4545	12118	9223	
Other	4098	3793	3329	6888	

Source LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine. "Commerce" in *Annuaire Statistique de l'Indochine*. Vol. I-VIII. Hanoi: Imprimerie de l'Extrême-Orient, 1927-1939.

Appendix 6) Quantity of Various Indochinese Exports, by Country of Destination and Indochinese Region of Origin, 1930-1933

Export	Unit	1930								1931								1932								1933							
		Coming From				Going to				Coming From				Going to				Coming From				Going to				Coming From				Going to			
		Annam-Tonkin	Cochinchina-Cambodia	France	Hong Kong	Singapore	China	Others	Annam-Tonkin	Cochinchina-Cambodia	France	Hong Kong	Singapore	China	Others	Annam-Tonkin	Cochinchina-Cambodia	France	Hong Kong	Singapore	China	Others	Annam-Tonkin	Cochinchina-Cambodia	France	Hong Kong	Singapore	China	Others				
Live Animals	Heads	6482	28275	35	3364	29374	20	1964	1564	18282	33	847	18930	0	36	4303	7405	29	3994	7126	74	486	6193	1360	6	5389	1036	412	710				
Animal Products	Tonnes	2480	3387	439	2215	1769	1	1143	1794	2169	279	1939	1040	7	698	1729	2345	316	2694	570	7	487	1914	3700	887	3086	912	8	721				
Fishing Products	Tonnes	663	37863	3811	6106	25587	670	2352	882	35115	1637	8804	21783	721	2942	697	27921	1058	7308	16999	426	2827	422	28814	337	7217	17145	334	4195				
Material (Difficult to cut)	Tonnes	876	638	32	656	0	826	0	378	559	0	601	0	336	0	341	1037	0	1050	0	325	3	235	811	0	821	0	232	3				
Foodstuffs	1000 tonnes	74	1085	345	376	90	192	243	34	1017	394	363	42	48	210	74	1318	612	485	11	66	218	149	1440	904	521	20	23	122				
Fruit & Grains	Tonnes	2368	10162	10321	1696	113	41	359	2898	8542	8395	2605	70	63	307	1337	8033	4389	3806	152	26	997	1399	11755	7805	3468	148	85	1648				
Perishable Goods	Tonnes	1514	2216	3848	1207	45	29	601	2158	4494	4375	1497	13	10	757	2036	3320	3579	1311	0	8	458	1860	3813	4286	1122	0	14	254				
Oil & Vegetable Saps	Tonnes	2521	10485	5176	975	5895	4	956	2034	12009	5397	944	5506	53	2123	2416	14652	6354	518	5449	140	4607	1639	18864	7658	665	4490	220	7470				
Medicinal Products	Tonnes	554	709	630	492	16	27	98	509	915	465	469	4	7	479	841	412	544	455	2	8	244	398	732	324	244	23	14	524				
Timber	Tonnes	2091	25893	2553	7915	960	3457	13109	4217	24005	2447	6463	731	3049	15532	2398	18532	1269	7841	101	2494	9225	696	22202	3043	8520	44	817	10474				
Fibre, Stalk & Hard Fruit	Tonnes	2575	1791	135	2254	0	414	1563	2804	2133	322	2197	0	771	1283	1494	1575	466	838	19	590	1156	1686	2354	658	1015	86	500	1780				
Dyes	Tonnes	6582	676	0	6515	0	66	677	4855	648	0	4800	0	55	648	3673	593	0	3499	0	174	593	2774	166	0	2615	0	159	166				
Vegetable Products	Tonnes	0	0	0	0	0	0	0	226	251	227	58	0	116	76	159	443	277	4	0	21	300	104	550	345	3	5	26	275				
Drinks	HI	228	12523	9936	30	5	2488	292	223	13442	9824	477	8	3239	217	282	12408	9607	233	0	2606	244	204	2648	1012	152	0	1681	7				
Combustibles	1000 tonnes	1358	0	40	207	12	638	451	1401	0	97	268	17	532	487	1460	0	114	369	5	563	410	1425	0	185	186	6	451	598				
Metals	1000 tonnes	33	1	16	0	1	0	17	20	1	15	0	2	0	5	5	1	2	0	2	0	2	9	1	6	0	2	0	2				
Chemicals	1000 tonnes	42	0	0	38	0	0	4	33	0	0	29	0	0	4	29	0	0	18	0	0	11	69	0	0	6	0	1	63				
Chemical Compounds	Tonnes	203	58	10	38	2	210	1	132	36	0	67	0	97	4	92	49	1	37	0	91	12	61	31	14	34	0	42	2				
Glass	Tonnes	2196	256	19	852	634	688	259	1289	49	20	154	362	764	38	1171	5	0	459	103	439	175	2515	52	23	911	64	1386	183				
Threads	Kgs								8597		8594				3	599	9	600				8	3193	1780	3100				1800				
Textiles	1000 tonnes	46	5	49	1	0	0	1	38	6	42	1	0	0	1	25	4	28	0	0	0	1	40	3	43	0	0	0	1				
Paper & Paper Products	Tonnes	150	0	0	143	0	6	1	84	0	0	83	0	0	1	46	0	0	45	0	0	1	128	30	27	10	14	104	5				
Hides	Tonnes	166	0	2	122	0	41	1	177	14	14	162	0	15	0	86	0	0	63	0	23	0	57	0	0	36	0	21	0				
Metallurgical Goods	Kgs	0	0	0	0	0	0	0	299	424	619	94	0	3	7	165	28	44	1	0	0	4	331	335	581	0	0	49	36				

Furniture & Woodwork	Tonnes	41	7	45	0	0	0	3	265	10	180	4	0	88	3	227	2391	1964	114	0	183	336	10	1	9	0	0	0	2
Rope work & Fibre work	Tonnes	7	46	12	1	17	23	0	8	56	8	27	0	28	1	80	6	80	0	2	3	1	10	23	17	0	7	5	4
Total	1000 tonnes	1582	1186	479	654	139	837	738	1553	1115	573	692	90	586	732	1615	1405	779	903	42	634	663	1712	1539	1164	742	51	479	814

Does not include categories in heads, hl.;

Source LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine. "Commerce" in *Annuaire Statistique de l'Indochine*. Vol. I-VIII. Hanoi: Imprimerie de l'Extrême-Orient, 1927-1939.

Appendix 7) Quantity of Indochinese Imports, by Country of Origin and Indochinese Region of Destination, 1930-1933

Import	Unit	1930							1931							1932						1933							
		Going to			Coming From				Going to			Coming From				Going to			Coming From			Going to			Coming From				
		Annam-Tonkin	Cochinchina-Cambodia	France	Hong Kong	Singapore	China	Other	Annam-Tonkin	Cochinchina-Cambodia	France	Hong Kong	Singapore	China	Other	Annam-Tonkin	Cochinchina-Cambodia	France	Hong Kong	Singapore	China	Other	Annam-Tonkin	Cochinchina-Cambodia	France	Hong Kong	Singapore	China	Other
Live Animals	Heads	3359	4507	27	7835	0	4	0	3299	4452	30	7706	0	15	0	3507	4490	205	7642	0	0	80	3412	3231	125	6367	0	116	35
Animal Products	Tonnes	1347	3258	871	140	97	13	3437	1327	2968	806	139	61	14	3275	1439	2756	1186	123	34	10	2842	1153	2716	875	140	41	2	2832
Fishing Products	Tonnes	142	919	171	554	4	35	344	154	531	140	365	9	39	132	153	371	221	228	2	17	66	167	655	170	281	0	16	221
Material (Difficult to cut)	Tonnes	8	3	0	11	0	0	0	0	0	0	0	0	0	0	142	10	0	147	0	0	5	113	6	0	117	0	0	0
Foodstuffs	1000 tonnes	11	30	0	37	1	1	2	10	25	0	32	1	2	1	11	22	0	28	1	2	2	9	23	0	23	1	1	3
Fruit & Grain	1000 tonnes	2	10	0	6	3	1	0	2	11	0	6	4	2	1	2	9	0	5	3	1	1	2	7	0	5	1	1	2
Perishable Goods	1000 tonnes	6	16	4	11	1	1	6	5	10	3	9	1	1	2	3	6	2	4	1	0	1	2	4	2	3	1	0	1
Oils & Vegetable Saps	Tonnes	328	654	767	45	22	3	145	260	591	616	73	21	18	123	261	503	616	51	18	1	108	291	1262	643	62	10	5	833
Medicinal Products	Tonnes	1662	1277	10	2700		149	80	1876	1054	8	2746	47	123	6	1361	1047	7	2203	35	156	8	1112	1170	7	1994	38	224	19
Fibres, Stalks & Hard Fruit	Tonnes	5074	39	0	438	0	8	4667	2359	899	0	1136	364	376	1386	3779	1018	47	1383	378	456	2533	4240	1059	60	924	319	536	3455
Vegetable Products	Tonnes	3	17	1	11	2	5	1	4	15	1	11	2	4	1	3	15	2	9	3	3	0	3	16	2	10	2	4	1
Drinks	1000 hl	51	69	109	0	0	1	8	46	40	80	0	0	1	6	45	40	83	0	0	0	3	42	36	73	0	0	0	4
Combustibles	1000 tonnes	52	123	4	1	5	0	164	50	88	3	2	0	5	129	52	95	8	2	4	0	133	45	77	4	3	44	2	109
Metals	1000 tonnes	27	38	50	4	0	6	11	25	31	29	7	0	0	21	18	15	23	5	0	0	5	15	15	20	2	0	1	6
Chemicals	1000 tonnes	5	14	14	1	0	0	3	3	6	8	0	0	0	1	2	4	5	1	0	0	1	9	4	5	0	0	0	8
Prepared Dyes	Tonnes	179	383	172	71	299	0	20	234	418	230	72	302	0	48	215	612	256	6	530	0	35	81	515	196	7	337	0	56
Dyestuffs	Tonnes	104	290	313	3	0	0	78	197	183	337	0	0	0	43	257	515	722	14	0	1	35	363	506	801	18	0	0	50
Chemical Compounds	Tonnes	895	3415	1766	1803	5	710	26	788	2761	1198	1625	2	699	25	876	2645	1449	121	1419	509	19	834	2206	1048	1504	16	415	57
Potteries	Tonnes	462	1739	963	515	33	324	366	647	1046	1155	115	29	10	384	1172	1044	939	407	59	168	643	548	1176	668	352	3	158	543
Glass	Tonnes	1131	2687	3103	43	11	3	658	761	1384	1776	66	2	2	299	1081	1537	2327	31	4	0	256	812	1081	1513	29	1	2	348

Threads	Tonnes	1372	1248	1209	721	416	100	168	750	1093	1046	200	323	90	183	793	977	1170	136	236	48	181	971	783	1039	238	228	63	185
Textiles	1000 tonnes	6	9	11	2	1	0	1	3	5	7	1	0	0	0	3	6	8	0	0	0	0	4	24	8	5	13	2	0
Paper & Paper Products	1000 tonnes	5	7	5	2	0	2	2	5	5	5	2	0	1	1	4	5	5	1	0	1	1	4	7	8	1	0	0	1
Hides	Tonnes	129	115	228	0	0	8	8	57	62	108	2	0	6	3	102	48	138	2	0	6	4	71	52	108	1	0	6	9
Metallurgical Goods	1000 tonnes	14	23	21	0	0	0	14	26	28	17	0	0	0	36	7	13	18	0	0	0	3	7	11	16	0	0	0	2
Arms, Powder & Fireworks	Tonnes	508	264	740	24	1	2	5	247	350	404	92	0	2	5	300	388	632	35	0	17	3	187	85	98	37	1	1	136
Furniture & Woodwork	Tonnes	1	52	41	1	0	0	11	40	45	36	26	0	4	9	24	12	11	18	0	0	0	25	1259	73	17	0	12	1171
Musical Instruments	Tonnes	24	56	54	5	1	3	17	30	25	48	0	0	0	7	19	17	30	0	0	0	6	16	18	25	1	0	0	8
Other	Tonnes	2074	5671	4888	2	19	3	2734	1381	4551	3306	23	19	1	3433	1019	1754	2383	5	6	2	377	1271	2124	2953	10	3	2	422
Total	1000 tonnes	145	309	126	82	16	17	218	145	241	84	78	9	17	202	119	204	86	59	16	8	155	113	204	74	59	62	13	144

*This does not include goods in hectolitres, thousands, numbers, pairs, etc....

Source LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine. "Commerce" in *Annuaire Statistique de l'Indochine*. Vol. I-VIII. Hanoi: Imprimerie de l'Extrême-Orient, 1927-1939.

Appendix 8) Tonnage of Main Exports, 1913-1935, (Tonnes, unless specified)																							
	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Live Animals (in 1000 heads)	44	26	99	61	61	60	63	45	77	40	81	112	55	88	112	62	68	35	20	12	2	2	7
Animal Products	5807	3125	2712	3157	2989	3262	3588	2518	2385	3773	5135	4254	4398	5397	6071	6405	7198	5576	3973	4074	6153	7354	10718
Fishing Products (1000 tonnes)	37	38	38	30	27	24	35	36	37	32	34	47	40	38	37	38	37	39	37	29	29	27	27
Medicinal Products																					16	17	26
Material (Difficult to Cut)	227	1513	1222	1126	1307	774	1215	1350	1610	1086	1394	900	779	947	827	823	1361	1514	1240	1398	803	995	1569
Foodstuffs (1000 tonnes)	1422	1521	1438	1288	1261	1619	961	1180	1751	1475	1381	1273	1578	1665	1727	1930	1621	1245	1056	1392	1589	1986	2163
Fruit & Grains (1000 tonnes)	7	11	9	7	4	6	4	6	12	10	16	14	16	16	14	17	16	13	15	9	14	9	16
Perishable Goods (1000 tonnes)	9	8	13	13	4	6	15	14	13	14	20	21	10	14	12	8	8	6	7	5	6	7	8
Oils & Vegetable Saps (1000 tonnes)	3	2	3	2	2	3	7	7	6	8	9	11	12	12	13	13	14	13	15	17	21	24	33
Medicine	280	536	660	427	495	580	548	506	836	1554	2541	1323	1388	1982	1388	2696	1683	1263	1509	1253	1132	1315	1335
Timber (1000 tonnes)	7	7	6	6	6	11	9	7	6	11	16	19	27	33	32	25	25	28	29	21	23	24	19
Fibres (1000 tonnes)	12	7	6	6	5	6	3	7	8	7	7	6	5	3	6	4	5	4	5	3	4	4	4
Dyes	6708	8011	7334	4437	4453	4487	4420	4955	7334	7150	8237	7256	5241	7179	5861	5092	6483	7258	5502	4266	2941	2015	2377
Vegetable Products																			602	602	725	998	1512
Drinks (1000 hl)	0	0	0	33	106	3	13	40	38	7	8	10	12	14	15	14	13	13	14	13	1	1	1
Minerals & Combustible Materials (1000 tonnes)	366	482	556	575	471	362	468	664	786	755	845	1047	847	952	1046	1244	1396	1359	1401	1460	1426	1299	1663
Metals (1000 tonnes)	28	19	34	40	26	14	9	42	29	28	33	37	52	50	61	45	43	34	21	7	12	11	11
Chemical Products (1000 tonnes)	27	20	24	15	16	3	116	36	20	56	11	4	6	20	28	36	26	26	33	29	70	1	33
Prepared Dyes			56	139	76	302	469	394	225	93											46	15	5

Dyestuffs																					42	27	24	
Chemical Compounds		46	74	392	533	443	964	964	545	585	457	414	518	424	464	452	293	261	165	141	132	110	174	
Pottery, Glass & Crystals											380	362	264	502	963	806	1582	2452	1338	1176	2654	444	327	
Threads	1712	2155	1791	2241	1111	341	796	468	693	564	702	663	183	711	724	246	29		9	1	14	16	8	
Textiles	38	113	5	5	8	14	165	27	37	113	186	149	174	209	191	199	116	51415	1015	1451	622	20285	26596	
Embroidery																						71	43	33
Clothing																						74	63	80
Paper & Paper Products			58	447	146	205	171	174	80	100	100	116	152	108	110	133	148	150	84	46	142	70	61	
Hides	993	985	1074	447	938	886	918	848	887	787	577	459	379	386	358	255	197	166	191	87	68	22	48	
Metallurgical Goods																			1	0	850	594	878	
Arms, Powder & Munitions																						24	5	5
Furniture & Woodwork		1841	856	1149	259	973	1443	1056	503	396	61	75	75	83	101	121	61	48	1552	2588	2424	4303	4914	
Musical Instruments																						36	43	26
Rope work & Fibre work	4096	2798	882	2142	1347	413	1926	2383	1358	3709	3921	3460	3726	3630	3156	4314	3685	3086	3506	2331	3616	4153	6232	
Other			185	43	217	396	434	430	104	61	23	24	30	7	16	22	15	53	83	86	322	252	2838	

Source LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine. "Commerce" in *Annuaire Statistique de l'Indochine*. Vol. I-VIII. Hanoi: Imprimerie de l'Extrême-Orient, 1927-1939.

Appendix 9) Tonnage of Main Imports, 1913-1935, (Tonnes, unless specified)																							
	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Live Animals (heads)	270	17290	20595	15455	16976	34700	66950	60650	60408	47079	48985	46471	52943	42530	16818	8869	9193	7866	8257	7997	394	451	438
Animal Products	1801	1589	1381	1492	822	993	1259	2086	1422	2076	2863	3270	2988	4246	4183	4737	5650	4605	4401	4195	1527	1425	1720
Fishing Products	855	594	484	584	448	379	268	713	407	440	678	1133	1195	2199	1857	2039	2224	1058	685	524	837	1453	1425
Medicinal Products																					6	15	28
Material (Difficult to Cut)	15	10	22	13	9	4	31	39	144	76	18	15	19	21	26	28	15	14	96	152	47	37	45
Foodstuffs (1000 tonnes)	15	14	12	11	14	13	17	23	19	20	27	31	30	38	42	43	41	41	36	33	30	29	34
Fruit & Grains (1000 tonnes)	8	9	9	10	8	9	8	13	12	14	12	12	10	12	14	16	13	14	13	11	9	10	11
Perishable Goods (1000 tonnes)	14	10	9	10	10	12	4	8	14	12	12	16	20	28	28	34	29	22	15	9	8	7	8
Oils & Vegetable Saps	188	120	98	175	261	112	250	1024	588	553	771	755	819	1613	907	1905	1230	982	919	794	1021	907	948
Medicine	2745	2313	2130	2316	2039	2182	2845	2870	1988	2140	2217	1923	2093	2893	2453	2476	1657	2939	2930	2408	2282	2565	2608
Timber																					2554	1590	14334
Fibres	6470	4748	3775	5128	3287	4878	5588	6037	4984	6280	7439	7012	8061	8461	6646	6392	3210	5113	3377	4797	5771	9908	9941
Dyes																					139	199	148
Vegetable Products (1000 tonnes)	10	7	11	10	10	10	10	13	8	9	11	15	14	18	19	23	25	20	19	18	21	23	25
Drinks (1000 hl)	88	80	72	59	42	53	60	107	72	74	116	120	118	170	131	167	153	119	85	85	9	10	10
Minerals & Combustible Materials (1000 tonnes)	76	70	51	61	57	61	49	53	57	77	105	133	136	159	151	185	186	175	136	147	124	132	129
Metals (1000 tonnes)	10	12	9	10	7	9	7	22	21	30	43	43	46	47	67	50	79	61	51	29	28	51	40
Chemical Products	66	1256	905	776	711	979	1047	1246	1324	1446	3034	3680	7408	7977	11488	10041	13474	18355	9483	6132	15538	9097	14443

Prepared Dyes	67	430	309	513	796	834	846	622	598	497	745	927	911	1047	1062	878	810	562	724	827	621	597	1762
Dyestuffs		612	241	244	203	116	223	657	470	607	207	216	230	340	270	390	559	394	756	772	1179	1319	1364
Chemical Compounds (1000 tonnes)	1	3	3	3	3	2	3	5	5	4	4	4	4	6	5	6	6	4	4	4	3	3	3
Pottery, Glass & Crystals (1000 tonnes)	4	7	4	5	5	5	7	11	8	10	12	22	22	25	31	22	14	21	9	8	4	4	7
Threads (1000 tonnes)	2	3	4	4	3	3	3	4	8	5	4	4	4	5	5	4	3	3	2	2	2	2	2
Textiles (1000 tonnes)	27	32	18	27	23	28	20	32	34	20	13	12	11	27	21	11	15	15	8	10	27	35	44
Embroidery																					10	3	13
Clothing																					239	194	308
Paper & Paper Products	6210	6211	6809	6717	5599	6136	7137	9580	11606	11150	9065	11063	9500	12199	12667	12532	13351	11519	10290	8261	8835	9027	9189
Hides	85	89	26	56	44	18	99	149	106	147	205	207	230	322	227	201	292	244	110	150	158	149	207
Metallurgical Goods (1000 tonnes)	3	4	3	5	4	4	5	9	19	20	24	34	37	29	39	35	49	37	53	21	18	30	20
Arms, Powder & Munitions	1046	801	899	923	576	830	840	1370	1157	1407	1434	1686	1311	1762	1928	1519	369	772	539	688	302	302	357
Furniture & Woodwork					319		40	89	174	106	613	786	508	793	857	711	681	53	75	36	1738	1960	2341
Musical Instruments																		80	55	36	41	45	53
Rope work & Fibre work	2362	1404	1446	1141	1797	543	898	1078	726	781	740	736	447	626	992	920	661				297	337	870
Other (1000 tonnes)	1	1	1	1	1	1	1	2	2	2	5	6	10	7	9	8	9	8	7	3	5	5	6

Source LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine. "Commerce" in *Annuaire Statistique de l'Indochine*. Vol. I-VIII. Hanoi: Imprimerie de l'Extrême-Orient, 1927-1939.

Appendix 10) Import Revenue, by Category of Goods, 1933-1936, (1000 Francs)				
	1933	1934	1935	1936
Live Animals	1933	1793	1404	2104
Animal Products	13256	12282	14211	13536
Fishing Products	3269	4087	4917	3976
Medicinal Products	42	61	77	80
Material (Difficult to Cut)	112	89	83	201
Foodstuffs	25114	20222	24283	23200
Fruit & Grains	16957	17457	19072	21929
Perishable Goods	48434	41356	43984	52931
Oils & Vegetable Saps	28823	23608	4469	4771
Medicine	8049	8610	9483	10019
Timber	384	381	8648	8166
Fibres	20546	28956	31521	38391
Dyes	130	198	146	166
Vegetable Products	17170	16725	16238	18359
Drinks	36487	33819	28747	32408
Minerals & Combustible Materials	98001	87782	73308	80720
Metals	49113	68786	65207	79809
Chemical Products	18694	13677	18242	24474
Prepared Dyes	4125	4811	5821	5716
Dyestuffs	5761	6503	6728	7371
Chemical Compounds	22206	22989	20143	27522
Pottery, Glass & Crystals	12064	12332	16721	17989
Threads	28582	33475	30503	35005
Textiles	230868	246700	246743	223933
Embroidery	96	37	80	155
Clothing	4731	3287	5613	3846
Paper & Paper Products	34741	35509	31808	36502
Hides	4856	4023	3950	4805
Metallurgical Goods	104135	86238	84629	90824
Arms, Powder & Munitions	5312	4228	4259	4651
Furniture & Woodwork	2352	2299	3086	4105
Musical Instruments	1424	1310	1257	1753
Rope work & Fibre work	562	493	1129	1095
Other	67368	70135	74848	88215

Source LSE 59(R4): Gouvernement Général de l'Indochine: Service de la Statistique Générale de l'Indochine. "Commerce" in *Annuaire Statistique de l'Indochine*. Vol. I-VIII. Hanoi: Imprimerie de l'Extrême-Orient, 1927-1939.

Appendix 11) Comparative Characteristics of Daily Wages, for the Main Categories of Employees in Saigon-Cholon and Northern Cities (mainly Hanoi & Haiphong), 1931-1936, (\$)

Specialised Worker								
	Mean		Median		Most frequent		Deviation	
	Saigon-Cholon	North	Saigon-Cholon	North	Saigon-Cholon	North	Saigon-Cholon	North
1931	1.42	0.74	1.36	0.62	1.3	0.6	0.15	0.35
1932	1.4	0.68	1.38	0.57	1.4	0.4	0.17	0.34
1933	1.29	0.68	1.26	0.58	1.4	0.6	0.07	0.34
1934	1.185	0.62	1.15	0.53	1.2	0.4	0.2	0.32
1936	1.1	0.56	1.09	0.475	1.1	0.4	0.23	0.32
Male Unskilled Labour								
	Mean		Median		Most frequent		Deviation	
	Saigon-Cholon	North	Saigon-Cholon	North	Saigon-Cholon	North	Saigon-Cholon	North
1931	0.74	0.38	0.705	0.36	0.7	0.3	0.1	0.17
1932	0.68	0.36	0.62	0.34	0.6	0.3	0.11	0.15
1933	0.62	0.35	0.59	0.33	0.6	0.3	0.11	0.17
1934	0.55	0.285	0.54	0.28	0.5	0.25	0.06	0.14
1936	0.53	0.26	0.51	0.255	0.5	0.25	0.07	0.11
Female Unskilled Labour								
	Mean		Median		Most frequent		Deviation	
	Saigon-Cholon	North	Saigon-Cholon	North	Saigon-Cholon	North	Saigon-Cholon	North
1931	0.45	0.22	0.44	0.22	0.45	0.2	0.14	0.16
1932	0.45	0.24	0.46	0.21	0.5	0.25	0.15	0.08
1933	0.41	0.21	0.39	0.21	0.45	0.2	0.18	0.14
1934	0.43	0.19	0.42	0.19	0.45	0.2	0.14	0.17
1936	0.38	0.175	0.39	0.175	0.4	0.2	0.09	0.14

Source SOAS: French Indochina. Service de la Statistique Générale de l'Indochine. *Bulletin Economique de l'Indochine Année 1936*. Hanoi: 1937. p.1050

Appendix 12a) Retail Prices in Hanoi, for Goods Included in the European Cost of Living Index, 1910-1922, (\$)														
Article	Unit of Measurement	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922
Bread	<i>Kg</i>	0.2	0.2	0.2	0.2	0.28	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Beefsteak	<i>Kg</i>	0.25	0.25	0.25	0.25	0.25	0.35	0.35	0.35	0.4	0.4	0.4	0.4	0.4
Veal breast	<i>Kg</i>	0.6	0.6	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.9	0.9	0.9	0.9
Lamb shoulder	<i>Kg</i>	1	1	1	1	1	1	1	1	1	1.1	1.1	1.1	1.1
Pork	<i>Kg</i>	0.43	0.38	0.38	0.41	0.39	0.4	0.4	0.45	0.45	0.45	0.62	0.6	0.6
Sugar	<i>Kg</i>	0.34	0.35	0.32	0.31	0.33	0.49	0.6	0.8	0.42	0.76	0.61	0.51	0.43
Coffee	<i>Kg</i>	1.26	1.29	1.18	1.17	1.23	1.17	1	0.97	0.82	1.45	0.86	0.63	0.65
Chocolate	<i>Kg</i>	1.41	1.44	1.32	1.31	1.38	1.42	1.36	2.17	1.4	1.07	0.93	1.14	1.04
Oil	<i>Lt</i>	1.6	1.64	1.5	1.49	1.57	1.91	1.7	2.15	1.78	3.37	2.33	2.5	2.23
Butter	<i>Box</i>	0.7	0.72	0.66	0.65	0.69	0.82	0.76	1.18	1.05	1.38	0.73	1.06	1.04
Noodles	<i>Kg</i>	0.53	0.54	0.5	0.49	0.52	0.81	0.85	0.69	0.58	1.15	0.75	0.36	0.5
Nestié milk	<i>Case</i>	12.87	13.15	12.04	11.95	13.44	13	17	17.27	17.6	28.41	18.18	20.58	17.68
Cakes	<i>Piece</i>	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.08	0.08	0.08
Fish	<i>Kg</i>	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.65	0.7	0.7
Chicken	<i>Couple</i>	0.7	0.9	0.9	0.9	0.85	0.8	0.92	0.9	0.9	0.9	1	1.1	1.2
Eggs	<i>Per 100</i>	1.4	1.45	1.45	1.7	1.6	1.5	1.7	1.8	1.85	1.85	2.37	2.2	2.3
No2 rice	<i>Quintal</i>	6.6	7.05	7.05	6.66	6.33	6.6	7.75	6.76	6.08	8.75	11.6	7.93	8
Potatoes	<i>Kg</i>	0.07	0.07	0.08	0.09	0.09	0.1	0.1	0.11	0.12	0.11	0.11	0.14	0.13
Haricot beans	<i>500 g</i>	0.15	0.15	0.15	0.15	0.18	0.25	0.3	0.32	0.4	0.4	0.35	0.3	0.33
Table wine	<i>Container</i>	77.25	78.94	64.25	65.73	69.32	67.07	105.44	100.27	136.15	153.6	69.28	95.58	92.53
Beer	<i>48 bottles</i>	0.27	0.28	0.26	0.25	0.27	0.26	0.25	0.23	0.25	0.23	0.22	0.27	0.3
Rent of 35\$	<i>Month</i>	35	35	35	35	35	35	35	35	35	40	45	50	50
Rent of 45\$	<i>Month</i>	45	45	45	45	45	45	45	45	45	50	55	60	60
Rent of 60\$	<i>Month</i>	60	60	60	60	60	60	60	60	60	70	80	90	90
Electricity	<i>Kw-hr</i>	0.34	0.35	0.29	0.28	0.29	0.28	0.24	0.2	0.16	0.1	0.08	0.16	0.16

Coal	100 kg	0.65	0.56	0.56	0.57	0.58	0.6	0.68	0.63	0.7	0.7	0.8	1	1.05
Firewood	100 kg	2.43	2.1	2.1	2.2	2.2	2.2	2.3	2.43	2.32	3	2.7	3.07	3.15
Water	Cube meter	0.17	0.17	0.16	0.15	0.16	0.16	0.13	0.11	0.09	0.06	0.06	0.08	0.08
Dining room	Monthly use	60	60	60	60	60	60	60	60	60	80	80	95	95
English salon	Monthly use	40	40	40	40	40	40	40	40	40	50	50	50	50
Bedroom	Monthly use	162	162	162	162	162	162	162	162	162	284	284	284	284
Glasswork	12 glasses & 1 carafe	25.75	26.31	24.09	23.9	25.21	24.39	20.4	16.71	14.08	23.04	25.97	52.94	55.75
Domestic help	Monthly use	8	8	8	8	8	8	8	8	8	12	12	12	12
Congaie (maid)	Monthly use	7	7	7	7	7	7	7	7	7	10	10	10	10
Dry cleaning	Piece	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04
White shoes	Pair	8	8	8	8	10	15	15	14	13	12	12	12	12
Men's hat		10.72	10.96	10.03	9.96	10.5	16.26	13.6	22.28	18.77	15.26	8.65	13.23	11.49
Hairdresser	Service	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.2	1.2	1	1	1	1.2
Soap	Kg	2.12	2.21	1.98	1.97	2.08	2.13	1.78	1.74	2.01	4.54	3.24	2.59	2.53
Doctor	House call	4	4	4	4	4	4	4	4	4	44	5	5	5
Paper		21	22	20	21	24	28	57	47	63	40	40	58	37
Class books		2.14	2.19	2	1.99	2.1	2.03	2.04	1.67	1.99	1.3	1.21	2.05	2.05
Second class railway ticket	100 km	4	3.85	3.5	3.75	3.85	3.7	3.72	2.75	2.6	1.93	1.15	3.5	3.5
Rickshaw	Hour/per ride	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Journal	Per number	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Piano	Monthly rent	13	13	13	13	13	13	13	13	13	13	13	15	15
Cinema	Seat	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.7	0.7

Source SOAS: French Indochina. Service de la Statistique Générale de l'Indochine. *Bulletin Economique de l'Indochine Année 1922*. Hanoi: 1923. p.645-652.

Appendix 12b) Retail Prices in Saigon, for Goods Included in the European Cost of Living Index, 1910-1922, (\$)														
Article	Unit of Measurement	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922
Bread	<i>Kg</i>	0.3	0.3	0.3	0.3	0.3	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Beefsteak	<i>Kg</i>	0.26	0.28	0.3	0.35	0.31	0.3	0.3	0.3	0.3	0.29	0.31	0.39	0.45
Veal breast	<i>Kg</i>	0.4	0.36	0.35	0.45	0.45	0.46	0.59	0.67	0.51	0.46	0.47	0.59	0.7
Lamb shoulder	<i>Kg</i>	0.69	0.69	0.7	0.72	1.14	1.47	1.22	0.91	0.89	0.9	1.05	1.18	1.32
Pork	<i>Kg</i>	0.49	0.45	0.47	0.59	0.56	0.46	0.51	0.47	0.45	0.46	0.59	0.7	0.65
Sugar	<i>Kg</i>	0.2	0.2	0.2	0.2	0.2	0.22	0.22	0.22	0.22	0.28	0.3	0.35	0.3
Coffee	<i>Kg</i>	1.29	1.1	1.41	1.16	0.84	1.2	1.3	1.3	1	1.1	1	0.7	1
Chocolate	<i>Kg</i>	0.99	1.54	1.41	0.92	0.97	1.63	2.4	2.4	2.4	2.4	1.5	0.9	1
Oil	<i>Lt</i>	1.6	1.6	1.5	1.5	1.6	1.9	2	2	2	2	1.6	1.3	1
Butter	<i>Box</i>	0.77	0.77	0.72	0.64	0.67	0.73	0.95	0.95	1	1.1	1	0.9	0.85
Noodles	<i>Kg</i>	0.5	0.5	0.5	0.5	0.65	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5
Nestlé milk	<i>Case</i>	12.65	12.65	12.65	12.65	13.49	13.5	15.25	16.15	16.83	16.25	15.04	18.75	18.33
Cakes	<i>Piece</i>	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03
Fish	<i>Kg</i>	0.26	0.27	0.27	0.25	0.3	0.35	0.4	0.4	0.4	0.4	0.3	0.3	0.3
Chicken	<i>Couple</i>	0.6	0.62	0.68	0.9	0.74	0.68	0.76	0.8	0.82	0.88	1.1	1.06	0.96
Eggs	<i>Dozen</i>	0.25	0.27	0.31	0.31	0.25	0.25	0.27	0.26	0.25	0.3	0.4	0.36	0.37
Vegetables	<i>Mean</i>	0.21	0.23	0.26	0.21	0.24	0.27	0.25	0.33	0.3	0.31	0.36	0.35	0.335
No2 rice	<i>Quintal</i>	6.26	7.75	8.94	5.98	5.61	5.98	5.69	4.86	5.98	11	11.58	7.74	7.61
Potatoes	<i>Kg</i>	0.09	0.09	0.09	0.08	0.09	0.09	0.09	0.11	0.12	0.13	0.13	0.13	0.15
Table wine	<i>Container</i>	60	60	60	60	60	60	60	80	100	100	60	100	100
Beer	<i>48 bottles</i>	12	12	12	12	12	12	12	13	13	13.5	13.5	14	14
Rent of 50 \$ in 1910	<i>Month</i>	50	52	54	55	55	54	48	45	45	50	50	62	75
Rent of 40 \$	<i>Month</i>	40	42	44	40	40	38	34	28	28	34	34	44	50
Rent of 10\$	<i>Month</i>	20	20	20	20	19	19	19	19	19	19	19	25	26
Electricity	<i>Kw-hr</i>	0.281	0.285	0.261	0.26	0.274	0.263	0.219	0.18	0.152	0.096	0.163	0.188	0.186
Charcoal	<i>100 kg</i>	3.5	4	3.5	1.9	3.2	3	3	2.5	2.4	2.5	2.5	3	4.36
Heating wood	<i>100 kg</i>	5	6.95	7.4	4.6	3.31	4.84	4.38	4.57	4.57	4.5	4.2	4.2	3.85
Water	<i>Monthly use</i>	24	24	24	24	24	24	24	24	24	24	24	24	24
Dining room	<i>Monthly use</i>	265	265	265	265	275	275	275	275	275	275	308	308	308

English salon	<i>Monthly use</i>	150	150	150	150	150	150	167	167	167	167	167	167	167
Bedroom	<i>Monthly use</i>	565	565	565	565	565	565	565	625	625	625	625	625	625
Glasswork	<i>12 glasses & 1 carafe</i>	5.6	6	6	6	6.4	6.4	6.4	5.24	6.44	4.4	4.06	7.66	7.6
Linen	<i>Service</i>	8.58	8.77	8.84	9.6	10.08	12.19	13.6	12.53	10.56	9.97	16.01	23.35	22.39
Bep (cook)	<i>Monthly use</i>	20	20	20	22	22	22	25	25	25	25	30	30	30
Boy (servant)	<i>Monthly use</i>	15	15	15	18	18	18	20	20	20	20	22	22	25
Congaie (maid)	<i>Monthly use</i>	10	10	10	12	12	12	15	15	15	15	15	15	15
Sais (gardener)	<i>Monthly use</i>	18	18	18	20	20	20	20	20	20	20	20	20	20
Driver	<i>Monthly use</i>	35	35	35	35	35	40	40	40	40	40	40	40	40
Dry cleaning	<i>Piece</i>	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05
White shoes	<i>Pair</i>	1.3	1.3	1.3	1.3	1.4	1.5	1.5	17	1.9	1.9	2	2.2	2.2
Men's hat		3.15	3.95	3.61	3.6	3.78	4.88	5.1	4.18	3.99	3.32	3.56	4.38	4.48
Women's hat		9	9	9	9	9	9	9	9	9	9	14	14	14
Men's suit	<i>Suit</i>	6.44	6.58	6.002	6	6.3	7.32	8.5	8.36	9.39	9.97	7.12	10.95	11.19
Calico	<i>Meter</i>	0.32	0.33	0.32	0.32	0.38	0.51	0.68	0.67	0.7	0.66	0.53	0.73	0.75
Percale	<i>Meter</i>	0.64	0.66	0.6	0.6	0.84	0.91	0.85	0.84	0.82	1	0.76	1.17	1.04
Woven cloth	<i>Meter</i>	2.04	2.08	1.93	1.92	2.02	2.44			9.39	8.31	8	11.68	8.96
Hairdresser	<i>Service</i>	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Soap	<i>Kg</i>	0.3	0.29	0.3	0.31	0.28	0.21	0.2	0.22	0.2	0.2	0.2	0.22	0.22
Doctor	<i>House call</i>	5	5	5	5	5	5	5	5	5	5	5	5	5
Paper		0.43	0.44	0.4	0.4	0.5	0.49	0.41	0.56	0.47	0.4	0.26	0.29	0.3
Class books		0.43	0.44	0.4	0.4	0.52	0.51	0.42	0.39	0.33	0.23	0.17	0.2	0.21
Second class railroad	<i>100 km</i>	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.9	2.9	3.2
Rickshaw	<i>Hour</i>	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.3
Master car		325	325	325	325	325	325	325	325	325	325	300	300	300
Car		76	76	76	76	76	76	76	76	76	76	76	76	76
Journal	<i>Per number</i>	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Piano	<i>Monthly rent</i>	13.5	13.5	13.5	13.5	13.5	13.5	13.5	17	17	17	17	17	17
Cinema	<i>Seat</i>	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9

Source SOAS: French Indochina. Service de la Statistique Générale de l'Indochine. *Bulletin Economique de l'Indochine Année 1925*. Hanoi: 1926. p.442-447.

