

Challenging Changes: Current Themes in the Economic History of Indonesia

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In: NEHA-Bulletin
Tijdschrift voor de economische geschiedenis in Nederland
10 (1996) no. 2, 89-113

In the 1970s the perception was widely shared that much of Indonesia's economic past was a case of perpetual doom and gloom, from which the country had only managed to escape since the late-1960s. In part, this perception was caused by the demise of the study of Indonesian history in the Netherlands since the 1950s. In part, it was due to the fact that studies refuting this interpretation, such as that of Burger, were only available in Dutch at a time when academic interest in Indonesia's past was budding in the English-speaking world, in particular in the United States and Australia.¹ Consequently, perceptions of Indonesia's sustained underdevelopment were dominated by the concise explanations which a few monographs in English seemed to provide, in particular by the works of Geertz and his precursor Boeke.²

Indonesia's rapid economic transformation during recent decades has discredited interpretations that economic stagnation was inherent to the country's economy and society. It has attracted the attention of academics willing to study the past in order to understand the present and predict the future. Old issues in Indonesia's rich economic historiography have been debated at greater length and new ones have been broached. Five compilations of conference papers suggest that the economic history of Indonesia has indeed entered a state of flux.³ This article takes stock of some of the changes in the recent historiography of Indonesia's economy during the 19th and 20th centuries. It clusters research published since the 1970s by major themes, roughly in chronological order.

1. The Impact of the Cultuurstelsel in 19th Century Java

Geertz' booklet *Agricultural Involution* introduced a wide audience to a succinct explanation of perpetual economic stagnation in Java. It was based on an interpretation of the structural impact of the *Cultuurstelsel* and some perceived characteristics inherent to a cohesive and egalitarian Javanese society. The thesis of 'agricultural involution' triggered a wave of research by social scientists and historians in the 1970s who set out to uncover the actual processes of 'involution' in Java. The results indicated that such processes were actually hard to find and that Geertz' characterisation of Javanese society disregarded socio-economic differentiation in both past and present.⁴

The demise of 'involution' did not mark an end to the discussion about the lasting consequences of the *Cultuurstelsel* on the economy of 19th century Java. Generally speaking, these consequences are discussed in terms of a system nipping later economic development in the bud, either because its labour requirements and/or economic opportunities triggered high population growth, or because it prevented farm households from growing more remunerative crops for distant markets.⁵

Some authors have been more upbeat about the impact of the *Cultuurstelsel*. Fasseur drew attention to the fact that farm households were paid for the crops they were compelled to deliver. He also indicated that the system's demise was largely due to political pressure in the Netherlands, given that it continued to be economically lucrative for the Dutch government.⁶ Still, Elson maintained that it was not political developments in the Netherlands, but structural weaknesses of the colonial government in Indonesia that precipitated the *Cultuurstelsel's* collapse. Using several qualitative and quantitative indicators, Elson also suggested that the system is unlikely to have caused an economic relapse and that it may have furthered rural development.⁷

The sheer volume of Elson's follow-up study might lead one to believe that the author has conclusively ended all debate on this subject.⁸ However, his study does not strike a balance between the 'hardship' and 'opportunities' which Java's farmers endured. He is adamant about the positive effect of

the *Cultuurstelsel* on the material welfare of Javanese farmers, but does not relate returns to farmers to the opportunity cost of their land and labour. In the end he rephrases the thesis that Java's economy was 'drained' of its surplus, and concludes: 'The enhanced prosperity which the Javanese came to enjoy was one of degree and not of kind. While the patterns of their lives became more elaborate, compressed and complicated, the structural essence of village Java remained substantially unchanged.'⁹ After many pages with meticulously compiled evidence of dynamic changes wrought by the *Cultuurstelsel*, this conclusion comes as an anti-climax.

The system's impact on Java's economy and society has been studied in detail for several regions (see below). These studies confirm Elson's observations of considerable diversity across time and geographical space in the ways in which land and labour were mobilised under the *Cultuurstelsel*, which altogether suggests that it may be difficult to speak about one system. Another outcome of the debate is the understanding that it is no longer appropriate to depict Java's rural society as an amorphous mass of peasants operating their own land, and to describe economic change as the interaction between this mass and the colonial state. Rather, rural Java during the 19th century accommodated considerable social stratification and economic dynamism.

2. *Changing Economy in Indonesia: Accomplishments and Opportunities*

Further discussion of *Cultuurstelsel*'s impact will be aided by volume 13 in the series *Changing Economy in Indonesia*, which was recently completed with the 16th and last volume on Forestry. The compilation of these historical economic statistics for colonial Indonesia has taken more than 20 years of diligent work and has generated a collection of volumes that will be indispensable to further historical research.

The completion of the series will not end the task of assembling historical statistics. The volumes on Balance of Payments (Vol.7) and Foreign Trade (Vol.12a) and the volume containing estimates of Indonesia's terms of trade (Vol.15) comprise consistent data series which can easily be compared over time. The other volumes reproduce data from the original sources, albeit with corrections for mistakes and explanations of discrepancies. As a result, not all data can be compared over time, and users should be well aware of their limitations before applying them. A concerted effort to generate consistent data series with the best possible corrections for underestimation would have enhanced the value of the collection. This certainly would have benefited the key volume on Population (Vol.11), which has only one small table with the best guesses of the actual size of the indigenous population in Java, and for a few benchmark years only.

Use of the volumes is also inhibited by the fact that they are confined to the colonial era. Some data series stop in 1938 and some in 1942. This is unfortunate at a time when research is about to 'cross the divide' of the 1940s (see below). Few of the volumes in the collection attempt to take account of the continuity in statistical reporting in post-colonial Indonesia. For instance, the volume on Population entirely ignores the population count of 1944 and the population census of 1961 in estimating population size in the 1930s.

One final reason why the collection's completion does not signal an end to the need for statistical data compilation is that there are still many relevant data that can be collected from the original sources, such as those on livestock, health care, mail and telegraph services, and from the accounts of major private companies.

3. *Measuring Business Cycles*

The first volume of *Changing Economy in Indonesia* promised readers a monograph which would combine all collected indicators of business cycles in order to assess economic change in colonial Indonesia during the period 1816-1940. This promise seems to have gone astray, possibly because it is difficult to estimate long-term change in an economy with an incomplete and disparate set of indicators. Still, the discussion of the *Cultuurstelsel* indicated that quantification helps to generalise and clarify issues which more qualitative analysis leaves ambiguous.

Quantification may also help to settle a second major theme in Indonesia's historiography: *mindere welvaart* (declining welfare).¹⁰ The argument that prosperity was decreasing around 1900 was effectively used to mobilise support in the Netherlands for a concerted development effort: the *Ethische Politiek* (Ethical Policy). The argument has since led a life of its own, fuelling the perception of perpetual stagnation up to 1900, if not beyond.

Economic change can be generalised with a set of macro-economic indicators in a national accounts

framework. Unfortunately, the data from *Changing Economy in Indonesia* cannot easily be compressed into such a framework. Maddison therefore extrapolated backwards the results of Polak's estimates of national income by ethnic group (Indonesians, Chinese, Europeans) to assess economic change since 1700.¹¹ Among other things, he found 0.5 percent annual average growth of real per capita income during 1870-1913 and 1.4 percent during 1913-29. The results of his analysis depend crucially on the assumption that Polak's estimates are correct and can be linked to postwar series. Van Laanen made inventive use of monetary data to conclude that real average income increased 0.5 percent on average per year between 1850-1940.¹² But his results depend on the assumed rates of monetisation and velocity of money.

Van der Eng found that up to the 1983 revision of the Indonesian national accounts, GDP had been underestimated.¹³ The further back in time, the higher the degree of underestimation. Using estimates of real value added in agriculture and indicators of economic activity for other sectors, he extrapolated 1983 data back to 1880 to obtain revised annual estimates. These indicated that real GDP per capita increased only 0.3 percent during 1800-1900, but a considerable 1.5 percent during 1900-29. A broad periodisation of economic growth in modern Indonesia would suggest that 1900-29 and 1967-1993 were periods of expansion, while 1880-1900 and 1929-67 were characterised by stagnation, if not regression.

All these estimates implicitly assume that there has always been a national economy in Indonesia. Dick explained that the national economy was a process rather than a state of affairs; the further back in time we go, the more markets in Indonesia were geographically fragmented.¹⁴

4. Paradox of Ethical Policy

The identification of 1900-29 as a period of economic expansion seems to confirm the positive impact of the 'Ethical Policy'. Boomgaard and Cribb have indicated that the formulation of this policy around 1905 can be regarded as a turning point in Dutch colonial government in Indonesia.¹⁵ The government departed from its previous 'night-watchman' stance by initiating several 'welfare services' which aimed particularly at increasing the prosperity of the indigenous population. Van Doorn even suggested that the Dutch regarded Indonesia as a 'colonial project' in which the 'welfare services' were part of a concerted paternalistic Dutch effort to modernise Indonesian society.¹⁶

Prince has indicated that the 'welfare services' formed one of several ways in which the colonial government took economic policy initiatives.¹⁷ In fact, the 'ethical' stance was only one source of inspiration, some of the others being the growing complexity of economy and society which required the provision of public goods, and the shocks of economic down-turns following World War I and 1929. Booth even bridged the gap of the 1940s by suggesting that economic planning in postwar Indonesia had its roots in the colonial government's growing intervention in the economy, in particular during the government-orchestrated economic recovery of the late-1930s.¹⁸

Still, this unprecedented level of economic engineering was not necessarily the cause of significant economic growth during 1900-29. Indeed, indications of the actual impact of policies are diffuse. They did not yield a conspicuous improvement in general living standards, which has prompted Elson and Barlow among others, to suggest that the 'welfare services' were window dressing, mere palliatives to help peasants to cope.¹⁹ Why this paradox?

Cribb suggested that several deficiencies, such as 'technocratic spirit', explain this lack of impact. Prince underlined that the formulation of a consistent package of economic policies depended on a gradually growing awareness of the coherence of the Indonesian economy. Van der Eng confirmed this for farm agriculture, noting that the development of a profound understanding of the conditions for farming improvements took 25 years after the start of the Ethical Policy.²⁰

The underlying explanation is that the impact of economic policy cannot merely be assessed by its intentions. It should also be gauged by the resources that were mobilised, since a close focus on intentions may disregard certain dimensions. Booth surveyed the development of fiscal policy in colonial Indonesia.²¹ The forced mobilisation of land and labour under the *Cultuurstelsel* would suggest that the monetised tax base was small. The perpetuated predicaments of the land tax system and the continuation of the system of revenue farming both indicate that the government long lacked intimate knowledge of a large part of the tax base.²²

After 1870 fiscal development was characterised by a gradual expansion of the revenue base and of the extent to which this base could be tapped. Van der Eng's estimates of GDP would suggest that the government mobilised less than 10 percent of GDP up to World War I, rising to 15 percent in the late 1930s, compared to 20-25 percent of a greatly expanded GDP during the 1970s and 1980s.²³ Overseas

borrowing and different priorities in expenditure may have produced a more favourable result, as Booth noted, but these figures suggest that the ambitions of the colonial government were severely curtailed by the revenues it could muster.²⁴

5. *Impact of Colonialism: Imperialism and Foreign Trade*

Apart from flaws in government policy, other explanations for Indonesia's underdevelopment have been discussed. A protracted issue in the international literature is the impact of 'imperialism'. The Netherlands-Indonesia tandem hardly featured in that discussion, because the Netherlands has been regarded as an exception to the Hobson-Lenin model. Its small industrial base could not have warranted an imperialist search for overseas markets.²⁵ Rather than being a consequence of metropolitan pressures, the events in Indonesia itself have been identified as the engine of Dutch colonial expansion.²⁶ Several regional studies suggest that a combination of different political and economic considerations motivated the colonial government to subdue various indigenous states in Indonesia.²⁷

Another element is the extent to which the 'colonial drain' of funds sapped the Indonesian economy and benefited the Dutch economy. It is obvious that the coffers of the Dutch government gained from the *batig slot* (positive balance) which the colonial budget achieved during most of the 19th century.²⁸ Actually, the benefits to the Dutch economy from colonial rule in Java may have been more extensive. After all, the *Cultuurstelsel* was part of a set of directions defining the economic relations between Indonesia and the Netherlands. Lindblad and Van der Kraan indicated that Java was forced to import textiles from the Netherlands at prices well above those of English textiles, a situation which only ended in 1874.²⁹

Maddison quantified the extent to which the Indonesian economy was 'drained' and the Dutch economy supported since 1700, using the Indonesian trade surplus as an indication. He estimated a 'drain' of 6-11 percent of Indonesia's NDP during 1838-1938. Booth suggested that the trade surplus was an indication of the 'double drain' of Dutch and Chinese overseas remittances. Van der Eng argued that a trade surplus in itself cannot be taken as an indication of 'drain'.³⁰ An approximation of total net factor payments abroad with balance of payments data from Vol.7 of *Changing Economy in Indonesia* yields significantly lower estimates of an annual average of at most 5.7 percent of Indonesian GDP during 1914-29. Although levels of GNP are thus lower than GDP, even GNP per capita showed remarkable growth during 1900-29. Van der Eng noted that the opportunity cost of the services of foreign labour and capital productively employed in colonial Indonesia should be deducted from the overseas remittances to approximate the actual 'drain'. Given that most of the overseas payments were related to the services of foreign capital, the question then is whether company profits exceeded their opportunity cost of invested capital (see below).

Lindblad's discussion of the development of commodity trade between Indonesia and the Netherlands confirms that the Dutch-Indonesian tandem does not fit the Hobson-Lenin model.³¹ Dependence on mutual trade flows decreased significantly in both countries during 1874-1939, while the model would predict increasing dependence. One reason was that Dutch manufacturers lost preferential access to the Indonesian market in 1874.³² However, Huijts and Tils indicated that Dutch textile producers managed to face British and Japanese competition in the Indonesian market by anticipating market trends, by using their distribution network in Indonesia and the improving communications between the Netherlands and Indonesia.³³

Lindblad used foreign trade data to estimate economic change in the Indonesian economy during 1874-1914, and he observed an export-led economic expansion based on a shift in the composition of export production in Indonesia, rather than a shift in overseas demand.³⁴ Van Ark augmented the data in the volumes 1 and 12a of *Changing Economy in Indonesia* by calculating price and volume indices of Indonesian commodity exports for 1823-1938 and facilitate further analysis.³⁵ He found rapid growth of farm exports since the 1890s and noted an interaction between export production by foreign and indigenous producers, which is a significant departure from Boeke's 'dual economy' paradigm. Lindblad distinguished more explicitly between Java and the Outer Islands in the development of foreign trade at a later stage, which revealed two phenomena.³⁶ Firstly, the unbalanced integration of the Outer Islands into international commodity markets. Secondly, the integration of the Indonesian economy, more particularly a 'domestic drain' of funds from the Outer Islands to Java due to the fact that the Outer Islands contributed relatively more to government and export revenues than Java.

Booth has indicated that the ratio of commodity exports and GDP was relatively high in Indonesia, while export growth was strong.³⁷ But two factors impinged on the high potential for export-led economic growth. Firstly, the high trade surplus, which she takes as a proxy for the 'double drain'.

Secondly, the structural fall in the barter terms of trade, due to the fact that exports were dominated by primary produce, which compounded the country's economic woes during the early 1930s in particular. Booth maintained that a correction of Van der Eng's estimates of the growth of real GDP per capita for this fall in the terms of trade nullifies growth during 1913-38.³⁸

6. *Impact of Colonialism: Agricultural and Agrarian Change*

The agricultural sector not only dominated Indonesia's exports until the 1970s; it also overshadowed the country's entire economy in terms of output and employment. Recent studies on long-term agricultural development therefore provide important new foundations for the interpretation of Indonesia's long-term economic change.

Several overlapping publications of Booth discussed the development of farming and plantation agriculture.³⁹ A major theme in this work is the resilience of indigenous farmers in Indonesian agricultural history. Over time they adapted production and production technologies according to changing factor endowments and the demands for land and labour by plantation agriculture. While in the Outer Islands the growth of production was characterised by the expansion of arable land, in Java it was characterised by three broad phases: until 1920 by the extension of arable land, during 1920-60 by intensification of land use, and since the 1960s by growth of crop yields, in particular in rice production. Only the last phase was accompanied by a significant increase in labour productivity in food production, which precipitated the unprecedented economic development in recent decades. Central to Booth's explanation of Indonesian underdevelopment is the conclusion that labour productivity in agriculture had long been bridled. Firstly, the colonial government failed to spread Green Revolution technology in rice agriculture. Secondly, priority was given to plantations to the detriment of smallholder cash crops. Thirdly, plantations used coercion to mobilise land and labour, in order to generate 'monopoly profits' for remittance to the Netherlands rather than for investment in Indonesia.

Overlapping publications of Van der Eng emphasised different points.⁴⁰ A rigorous quantification of long-term productivity change in Indonesian agriculture suggests that the extension of arable land and the intensification of land use continued side by side in Java during 1890-1930. More intensified land use and the growth of land productivity characterised the situation in Java from the 1920s, albeit that the latter accelerated from the 1960s. Amongst others, Van der Eng concluded that a Green Revolution in rice cultivation would not have been feasible before 1930, given consumer preferences, available technology and funding. He drew attention to the positive role which cassava played in food supply when increasing demand for food could not be met with greater rice production until the 1970s. He also argued that plantations were not likely to have wasted productive resources. Rather than resorting to rent-seeking, the Java sugar industry met the challenge of falling international sugar prices up to the 1930s by developing innovations in production technology and marketing strategies.

Bottema specified that long-term agricultural change in Java has to be analysed primarily in the context of the developing rural economy of Java in terms of the (inter-) seasonality of production and money supply, and the formation and integration of domestic product and factor markets.⁴¹ These markets enabled farm households to react flexibly to changes in factor endowments and to development within the wider economy. Java's integration with international markets and government policies aimed at furthering agricultural production would be of secondary significance.

Bottema emphasised that the resilience of Java's farm agriculture was based on constraints on scale technologies in land use, a notion which has profound implications for the study of agrarian change in Java. In the early 19th century Java was sparsely populated and property rights were largely fuzzy, although hereditary ownership of land was not uncommon. Boomgaard noted that during the period 1830-1850, the definition of villages was changed to include communal land, in an attempt at sharing the burden of the *Cultuurstelsel*.⁴² After 1850, however, the growing population density and the falling burden of the *Cultuurstelsel* caused a steady decline in communal ownership of land. From then on, more strictly defined property rights in land emerged in Java.⁴³

Growing population density caused further fragmentation of holdings. It is often assumed that small farms were not economically viable, and that 'commodification' of farm production forced small farmers into debt and into selling their land to landlords, thus swelling the numbers of tenant farmers and/or wage labourers (or 'landless peasants').⁴⁴ Although a labour market developed (see below), there is no evidence for the period up to the 1980s that tenant farming in general expanded in proportion to population density.⁴⁵ Rather than regard agrarian change as a shift to 'landlordism' and 'proletarianisation' of the peasantry, Bottema's analysis suggests that the resilience of small-scale farm agriculture enhanced the flexibility of land use, while the growth of wage labour enhanced the mobility

of labour, both facilitating a more optimal use of productive resources.⁴⁶ This is not merely a difference in semantics, but amounts to a fundamentally different interpretation of the broad process of economic development in Java.

7. *Impact of Colonialism: Industrialisation*

The re-interpretation of agricultural change has not yet found its equivalent in the analysis of industrial development, despite the elaborate collection of data in *Changing Economy in Indonesia*, volume 8. Industrial change in the 19th century has often been described in terms of de-industrialisation due to the inflow of cheap manufactures from the metropolis. In fact, the Netherlands' main export product to Indonesia, textiles, was not cheap, given that until 1874 it could only compete with preferential access to the Indonesian market. Boomgaard and Van der Kraan have pointed out that small-scale indigenous industries did not disappear, but rather specialised production, often benefiting from imported semi-manufactures such as undyed cloth.⁴⁷

The industrial ventures which developed most rapidly involved the processing of agricultural produce for export, in particular the sugar industry. Dick postulated that, after the overhaul of the sugar industry in Java in the 1890s, no industrial sector emerged to take the lead. Prince explained that the government felt no urge to further industrialise until supplies of manufactures from Europe stalled during World War I; the issue then evaporated during the 1920s.⁴⁸ Thee described the return of the issue in the 1930s, when the colonial government chose to combat the impact of the crisis through import-substituting industrialisation.⁴⁹ Telkamp elaborated the prominent position of the textile industry in this industrialisation drive.⁵⁰ This policy of import-substitution was continued after independence in 1949, resulting in the shift of the country's industrial centre from Surabaya to Jakarta-Bandung, a move that was also reinforced by the rapid development of export-oriented, labour-intensive industries (such as textiles, clothing and foot-wear) in the 1980s.⁵¹

Hill's discussion of the disappointing experience with government-orchestrated import-replacing industrialisation during the 1950s-70s may serve as a warning against Dick's counterfactual proposition that government intervention could have decisively spurred industrial development in the late-19th century.⁵² Indonesia's domestic market may have been expanding, but was it big enough to bear the higher prices of manufactures which protection would have generated? Would the agricultural export sector have been crowded out of the thin labour and capital markets? What would the recurring effects of poorer export performance have been? And a more fundamental question is whether industrialisation has generally been the result of government choice, or the evolution of small-scale ventures.

8. *Economic Modernisation: The Role of the Informal Economy*

The role of small-scale informal ventures has received increasing attention, after research related to the *Cultuurstelsel* and 'involution' suggested the importance of off-farm activities in rural economies. Fernando has been most prolific in detailing the prevalence of both off-farm and non-agricultural employment in rural Java throughout the 19th century.⁵³

1. D.H. Burger, *Sociologisch-Economische Geschiedenis van Indonesia*, 2 volumes (The Hague 1975).

2. C. Geertz, *Agricultural Involution: The Processes of Ecological Change in Indonesia* (Berkeley 1963) and J.H. Boeke, *Economics and Economic Policy of Dual Societies as Exemplified by Indonesia* (Haarlem 1953). Reynolds summed it up in his assessment of the literature on structural economic change in Indonesia: '... there is no evidence of an appreciable improvement in living standards before 1950.' See L.G. Reynolds, *Economic Growth in the Third World, 1850-1980* (New Haven 1985) p. 357.

3. The volumes are A. Maddison and G. Prince (eds.) *Economic Growth in Indonesia 1820-1940* (Dordrecht 1989), A. Booth *et al.* (eds.) *Indonesian Economic History in the Dutch Colonial Era* (New Haven 1990), J.Th. Lindblad (ed.) *New Challenges in the Modern Economic History of Indonesia* (Leiden 1993), J.Th. Lindblad (ed.) *Historical Foundations of A National Economy in Indonesia, 1890s-1990s* (Amsterdam 1996) and H.W. Dick (ed.) 'Island Southeast Asia and the World Economy', special issue of *Review of Indonesian and Malaysian Affairs*, 27(1993). Given the proliferation of publications in recent years and the limitations of space, it is not possible to discuss all relevant work in this survey article. Literature reviews by Lindblad have highlighted several

other research findings. See J.Th. Lindblad, 'The Economic History of Colonial Indonesia: A Historiographical Survey', *Economic and Social History in the Netherlands*, 1(1989) pp.31-47, idem, 'Key Themes in the Modern Economic History of Indonesia' in J.Th. Lindblad (ed.) *New Challenges*, pp.1-36 and idem, 'Colonial Rule and Economic Development: A Review of the Recent Historiography on Indonesia' *Jahrbuch für Wirtschaftsgeschichte*, 1(1995) pp.9-22.

4. J. Alexander, and P. Alexander 'Shared Poverty as Ideology: Agrarian Relationships in Colonial Java', *Man* 17(1982) pp.597-619; F. Hüsken, 'Regional Diversity in Javanese Agrarian Development: Variations in the Pattern of Involution' in O.D. van den Muijzenberg *et al.* (eds.) *Focus on the Region in Asia* (Rotterdam 1982) pp.167-191; W.L. Collier *et al.* 'Labour Absorption in Javanese Rice Cultivation' in W. Gooneratne (ed.) *Labour Absorption in Rice-Based Agriculture. Case Studies from South-East Asia* (Bangkok 1982) pp.47-53; B. White, 'Agricultural Involution and Its Critics: Twenty Years After', *Bulletin of Concerned Asian Scholars*, 15(1983) pp.18-31 and T. Svensson, 'Contractions and Expansions: Agrarian Change in Java since 1830' in M. Mörner and Th. Svensson (eds.) *The Transformation of Rural Society in the Third World* (London 1991) pp.145-185.

5. The first position is defended by P. Alexander, 'Labor Expropriation and Fertility: Population Growth in Nineteenth Century Java' in W.P. Handwerker (ed.) *Culture and Reproduction* (Boulder 1986) pp.249-262 and by P. Boomgaard, *Children of the Colonial State: Population Growth and Economic Development in Java, 1795-1880* (Amsterdam 1989). The second position is defended by R. Van Niel, *Java under the Cultivation System. Collected Writings* (Leiden 1992) and by A. Van Schaik, *Colonial Control and Peasant Resources in Java* (Amsterdam 1986).

6. C. Fasseur, *The Politics of Colonial Exploitation: Java, the Dutch and the Cultivation System* (Ithaca 1992).

7. R.E. Elson, 'From "States" to State: The Changing Regime of Peasant Export Production in Mid-Nineteenth Century Java' in J.Th. Lindblad *et al.* (ed.) *Historical Foundations of a National Economy in Indonesia, 1890s-1990s* (Amsterdam 1996) pp.123-136 and idem, 'Peasant Poverty and Prosperity under the Cultivation System in Java' in A. Booth *et al.* (eds.) *Indonesian Economic History in the Dutch Colonial Era* (New Haven 1990) pp.49-66.

8. R.E. Elson, *Village Java under the Cultivation System, 1830-1870* (Sydney 1994).

9. Elson, *Village Java*, p.322.

10. F. Hüsken, 'Declining Welfare in Java: Government and Private Enquiries, 1903-1914' in R. Cribb (ed.) *The Late Colonial State in Indonesia* (Leiden 1994) pp.213-228.

11. A. Maddison, 'Dutch Income in and from Indonesia, 1700-1938', *Modern Asian Studies*, 23(1989) pp.645-70 and idem, 'The Colonial Burden: A Comparative Perspective' in M. Scott and D. Lal (eds.) *Public Policy and Economic Development: Essays in Honour of Ian Little* (Oxford 1990) pp.361-375.

12. J.T.M. van Laanen, 'Per Capita Income Growth in Indonesia 1850-1940' in A. Maddison and G. Prince (eds.), *Economic Growth in Indonesia 1820-1940* (Dordrecht 1989) pp.43-66.

13. P. van der Eng, 'The Real Domestic Product of Indonesia, 1880-1989', *Explorations in Economic History*, 28(1992) pp.343-373.

14. H.W. Dick, 'The Emergence of A National Economy, 1808-1990's', in: J.T. Lindblad (red.), *Historical Foundations of a National Economy in Indonesia 1890s-1990s* (Amsterdam 1996) pp.21-51.

15. P. Boomgaard, 'The Welfare Services in Indonesia, 1900-1942', *Itinerario*, 10(1986) No.1, pp.57-81 and R. Cribb, 'Development Policy in the Early 20th Century' in J.P. Dirkse *et al.* (eds.)

Development and Social Welfare. Indonesia's Experience under the New Order (Leiden 1993) pp.225-245.

16. J.A.A. van Doorn, *De Laatste Eeuw van Indië: Ontwikkeling en Ondergang van een Koloniaal Project* (Amsterdam 1994).

17. G. Prince, 'Dutch Economic Policy in Indonesia, 1870-1942' in A. Maddison and G. Prince (eds.) *Economic Growth in Indonesia 1820-1940* (Dordrecht 1989) pp.203-227; idem, 'Economic Policy in Indonesia, 1900-1942' in J.Th. Lindblad (ed.) *New Challenges in the Modern Economic History of Indonesia* (Leiden 1993) pp.161-181 and idem, 'Dutch Economic Policy in Colonial Indonesia 1900-1942: Some Key Topics', *Jahrbuch für Wirtschaftsgeschichte*, 1(1995) pp.23-44.

18. A. Booth, 'The Colonial Legacy and Its Impact on Post-Independence Planning in India and Indonesia', *Itinerario* 10(1986) No.1, pp.1-30.

19. R.E. Elson, *Javanese Peasants and the Colonial Sugar Industry: Impact and Change in an East Java Residency 1830-1940* (Singapore 1984) and C. Barlow, 'Indonesian and Malayan Agricultural Development, 1870-1940', *Bulletin of Indonesian Economic Studies*, 21(1985) pp.81-111.

20. Cribb, 'Development Policy'; Prince, 'Economic Policy in Indonesia' and P. van der Eng, *Agricultural Growth in Indonesia: Productivity Change and Policy Impact since 1880* (London 1996).

21. A. Booth, 'The Evolution of Fiscal Policy and the Role of the Government in the Colonial Economy' in A. Booth *et al.* (eds.) *Indonesian Economic History in the Dutch Colonial Era* (New Haven 1990) pp.210-243.

22. W.R. Hugenholtz, 'The Land Rent Question and Its Solution, 1850-1920' in R. Cribb (ed.) *The Late Colonial State in Indonesia* (Leiden 1994) pp.139-172 and F.W. Diehl, 'Revenue Farming and Colonial Finances in the Netherlands East Indies, 1816-1925' in J. Butcher and H. Dick (eds.) *The Rise and Fall of Revenue Farming: Business Elites and the Emergence of the Modern State in Southeast Asia* (New York 1993) pp.196-232.

23. Van der Eng, 'The Real Domestic Product'.

24. Booth, 'The Evolution of Fiscal Policy'.

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