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The Emergence of a National Economy, 1808–1990s

Abstract

The emergence of an integrated national economy was a slow process. Its foundations were laid in Java during the nineteenth century but the economic incorporation of the rest of the archipelago was long retarded by the exchange rate effects of the export boom in the Outer Islands. Rapid growth of interisland trade according to internal comparative advantage awaited the rapid industrialization of Java under the New Order and preceeded the non-oil export boom of the late-1980s onwards.

1. Introduction

The modern nation of Indonesia is now the fourth most populous in the world. As a political unit it has clearly defined boundaries within which effective political control is exercised from the centre of government in Jakarta. Unity in diversity is no longer a challenge but an achievement. Yet political integration is not the same thing as economic integration. The economy is much more diffuse than the state. Economic activity that takes place within the boundaries of Indonesia can be measured by a variety of economic indicators, which reveal interesting trends in terms of growth and sectoral distribution. But does this plasma of economic activity form the *structure* of a national economy. Here the dimension of space must also be taken into account. It tends to be forgotten that about 80 per cent of Indonesia's claimed Exclusive Economic Zone is in fact sea (Statistik, 1992). The archipelago is equivalent in size to the United States of America but consequently with a very different economic geography.[1] Are the separate islands of Indonesian parts of some cohesive national economy or are they still separate fragments? Are they more closely integrated with each other and/or with Java than with foreign countries, including Singapore and Malaysia? If such a national economy has now emerged, by what process has it emerged and over what period of time? Such questions should be the starting-point for any economic history of modern Indonesia.

[1] In an age when people are so used to flying over long distances the great difference between land and sea has perhaps ceased to be part of people's mental maps.

The lively interest of historians in the formation of the modern nation-state has been accompanied by a curious lack of interest on the part of economic historians and development economists in the formation of the modern national economy. Amidst all the attention to economic aggregates and the many sectoral studies of agriculture and manufacturing, the national economy has simply been taken for granted. This paper will argue that the emergence of an integrated national economy was a slow evolutionary process, very little affected by the transition from colonial to national state, and that the structure of a national economy has come into being only during the recent New Order period. After briefly considering some of the methodological issues involved in studying the national economy, it will present an overview of the spatial structure of the Indonesian economy in 1990 and then provide a chronological survey of how that national economy has evolved since the early nineteenth century, focusing on the economic relationship between Java and the rest of the archipelago. It is argued that the foundations of the national economy were laid on Java during the nineteenth century in virtual isolation from the rest of the archipelago, that political and economic control over the foreign trade of the 'Outer' Islands was consolidated in the early decades of the twentieth century but that little substantive economic integration had been achieved by the end of the colonial era or indeed after two decades of independence. The spatial integration of production, consumption and interisland trade according to internal comparative advantage has become apparent only since the 1970s in consequence of the rapid industrialization of Java, a long delayed second wave to the intensification of cultivation in the nineteenth century.

2. National economy and spatial distribution[2]

The concept of 'national economy' is a fairly recent one. Emergence of the modern nation state gave rise to the need to define the economic space within which it governed. This economic space was delineated most readily by its frontiers. Goods and people were counted–and taxed–as they moved from one jurisdiction to the next. The need to measure the level of economic activity within those frontiers did not arise until the world depression of the 1930s, which was the catalyst both for the formulation and rapid acceptance of interventionist Keynesian macroeconomic policy and the development of the techniques of national income accounting.

In Indonesia the first comprehensive attempt to calculate national income was Götzen (1933) for the years 1926–1933. Earlier estimates had been only partial, for example for Java and Madura only, the indigenous population only or the agricultural sector only (Creutzberg, 1979). Ten years later Polak produced an unpublished series for the years 1921–1939 that was more sophisticated but still idiosyncratic by modern standards because of data limitations. Indonesia's first

[2] This section draws heavily on Dick (1993b).

modern set of national accounts was prepared in 1948 by the Central Statistical Bureau of the Netherlands and applied to the Netherlands Indies for the year 1948 (Creutzberg, 1979).[3] When the Indonesian nation gained international recognition in 1949, the national economy had therefore been invented, statistically at least, even if the only reliable national income estimate was already ten years out of date. Whether the national economy yet existed as an autonomous economic system with a recognisable structure is another matter.

National income statistics are aspatial. They imply that economic activity is either concentrated at a single point or uniformly distributed. In a city state such as Singapore, the former approximates reality. In a large nation such as Indonesia, however, neither implication is valid. Economic activity is spread very unevenly. Only in the case of the agricultural sector is production fairly diffuse. Non-agricultural value added tends to cluster. This is most apparent in the case of Large and Medium-scale manufacturing, corresponding with the modern sector of manufacturing, which is heavily concentrated in and around the main cities. It is therefore necessary to go behind the national income estimates to determine the spatial structure of economic activity. One way of doing this is by maps. Conventional geographic maps are no guide to the distribution of economic activity because they are scaled according to physical land mass. We need maps which are scaled according to level of economic activity. Figure 1 is such a schematic economic map of Indonesia. Provincial gross regional domestic product data for 1990 are aggregated into percentage shares by main island or island group, whose economic 'area' is then scaled in proportion to that of Java, though location still approximates the more familiar geographic map.

This schematic map shows the spatial distribution of economic activity across the Indonesian archipelago. Java and Bali, which are logically combined, naturally stand out as the largest block of economic activity, with more than half of the nation's economic activity. Sumatra follows with another quarter of the total. The huge island of Kalimantan, however, contributes only 9 per cent, somewhat less than the Jakarta Special Region that is incorporated in Java/Bali. And all the rest of Indonesia, that vast eastern region (*Groote Oost*) of Sulawesi, Maluku, Nusa Tenggara and Irian Jaya that represents about half of the nation's surface of land and sea, contributes just 7 per cent. The Indonesian economy is therefore not evenly balanced around Java/Bali. It tilts very heavily towards the west of the archipelago. Java/Bali and Sumatra together account for over four-fifths of all economic activity.

This western bias of the Indonesian economy has much to do with its place in the wider regional economy. Adjacent to the island of Sumatra lies another huge block of economic activity represented by the city state of Singapore. By converting its national product at the market exchange rate and scaling in proportion to Java/Bali, Singapore can be incorporated into Figure 1. This shows up some interesting relativities. The urban economy of Singapore is four

[3] These early compilations for the late colonial period have recently been revisited and revised by Van der Eng (1992).

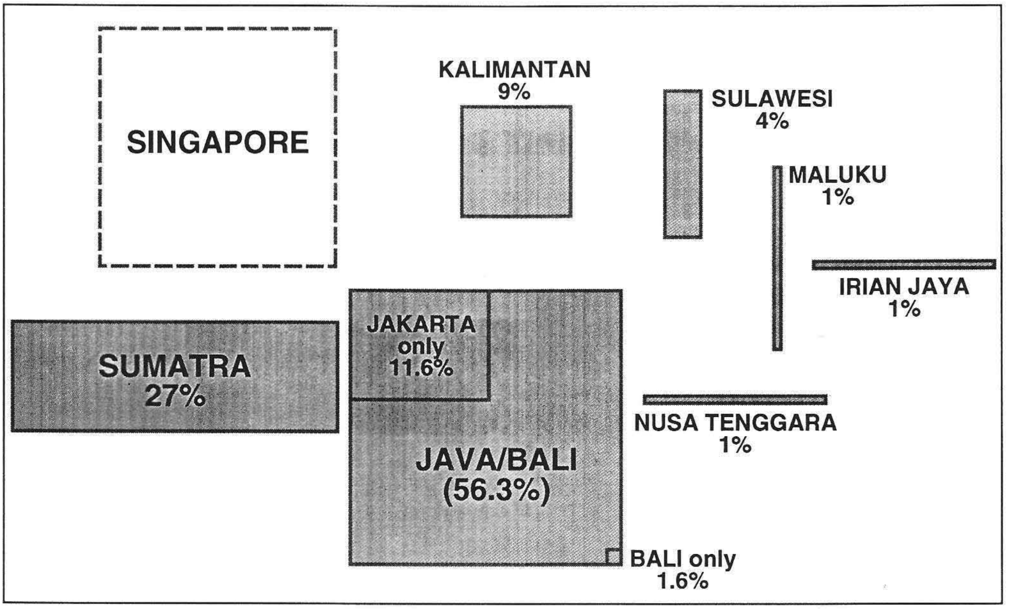


Figure 1. *Economies of the main islands of Indonesia scaled in proportion to Java/Bali by Gross Real Domestic Product in 1990.*

times larger than the province of Jakarta, about four-fifths the size of Java/Bali and equivalent in economic weight to all the 'Outer' Islands of Indonesia. Its location in the west of the archipelago gives rise to a huge 'growth triangle', not the trivial one of Singapore/Batam Island/Johore, which is just an extended metropolitan area, but an inland sea uniting Sumatra, Singapore and Java/Bali. Together with the opposite shore of the Straits of Malacca, namely the western side of the Malay Peninsula of what the Dutch used to refer to as the *Overwal*, this inland sea encompasses the economic heartland of Southeast Asia.

Eastern Indonesia, by contrast, floats in what is almost an economic vacuum. To the south lies Australia, still a much larger national economy than Indonesia but with only the most remote, barren and economically insignificant part facing Indonesia, like the dark side of the moon. At prevailing market exchange rates, the state of the Northern Territory is equivalent to another island of eastern Indonesia about the same size as Sulawesi (Rimmer & Dick, 1992). The whole state of Western Australia is equivalent in economic size to the island of Sumatra but most of its economic activity is located not in the northwest facing Indonesia but in the distant southwestern corner. Other economies adjacent to eastern Indonesia, notably Papua-New Guinea, the Philippine island of Mindanao and the Malaysian state of Sabah are all too small to tip the scales back towards eastern Indonesia, even if they did trade with each other.

These blocks of economic activity give a picture of a highly polarized 'national economy' but do not show the patterns of interaction. What needs to be added are the flows of goods and services (*i.e.* trade), of mobile factors of production (*i.e.* capital and labour) and of information. These flows together articulate a *substantive economy* as a dynamic economic system, within which can be distinguished local sub-systems built up of cities and their hinterlands, which together constitute a region. In static terms these regions are most readily identified by networks of transport and communications, of which towns and cities are the main nodes. These networks and the revealed patterns of trade and communications which flow through them articulate an economic structure which may or may not accord with official images of the 'national economy'.

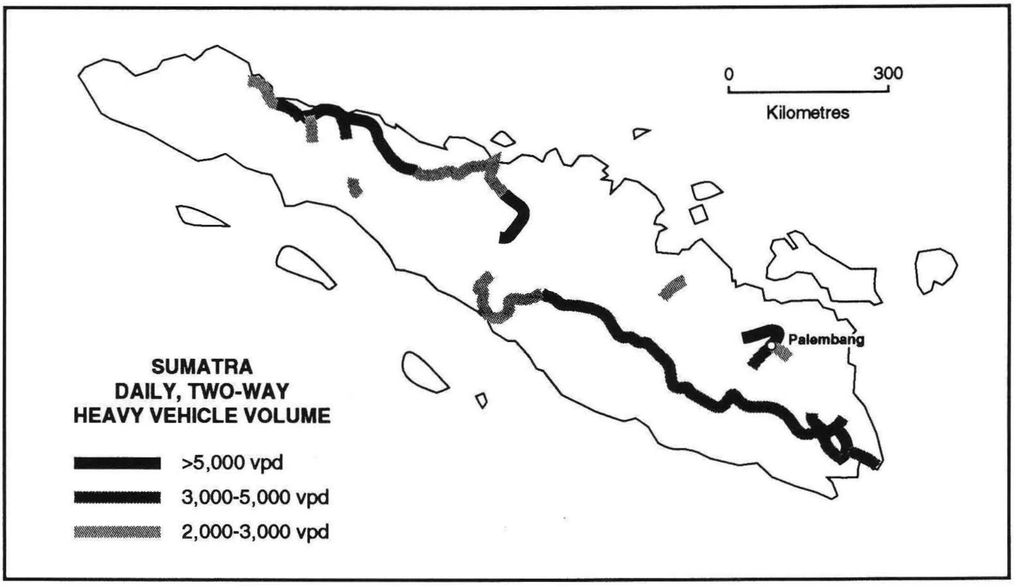
In the absence of any recent interisland trade figures, the structure of the Indonesian economy is best seen from transport networks. First of all, traffic volumes, even projected ten years ahead, show vividly that the main islands are themselves not yet articulated economies (Figures 2a–d). Java/Bali with its high population density is the notable exception, having a very dense highway (and railway) network and a great deal of intra-island trade. But this is true of no other large island. Despite the grandly named Trans-Sumatra highway, Sumatra still consists of virtually independent fragments. Sulawesi and Kalimantan still have only the most rudimentary road networks that carry little traffic beyond provincial centres. This pattern is reinforced by the river systems, especially in Sumatra and Kalimantan, which flow from the interior to the sea and more clearly than highways define the main economic hinterlands. Thus most trade flows from hinterlands to the coastal ports and from there is carried on by sea.

Interisland movements of goods and people are biased very heavily in favour of Java and Bali. There are some bulk movements of oil products and fertilisers from Sumatra and Kalimantan to other islands. For the most part, however, raw materials flow into Java and manufactures back to the rest of the archipelago, reflecting the underlying pattern of comparative advantage. The other main flow is the movement of goods to and from all islands to Singapore. Of this, the main component is between Java/Bali and Singapore. If the economy is thought of in topographical terms, there is, in effect, a deep valley that runs downhill from north Sumatra through the Straits of Malacca to Singapore, meeting there with a shallower and broader valley that is fed from many small streams in eastern Indonesia and flows via the Flores Sea and Macassar Strait into the Java Sea, collecting tributaries from Kalimantan and thence via the north coast of Java through the Riau archipelago. The structure of this substantive economy turns out to be bi-polar, with the second pole, Singapore, lying just across the boundary of what would be recognized as the national economy. The main axis of this economy lies between Java and Singapore, or even more precisely between Jakarta and Singapore.

If economic geography enables us to identify the structure of this substantive economy, economic history requires us to explain how it came about. Several questions already suggest themselves:

(1) How were the boundaries of modern Indonesia determined and to what extent did they recognize existing economic systems?

(2) By what process did Java/Bali become the core of the emerging national economy of Indonesia?



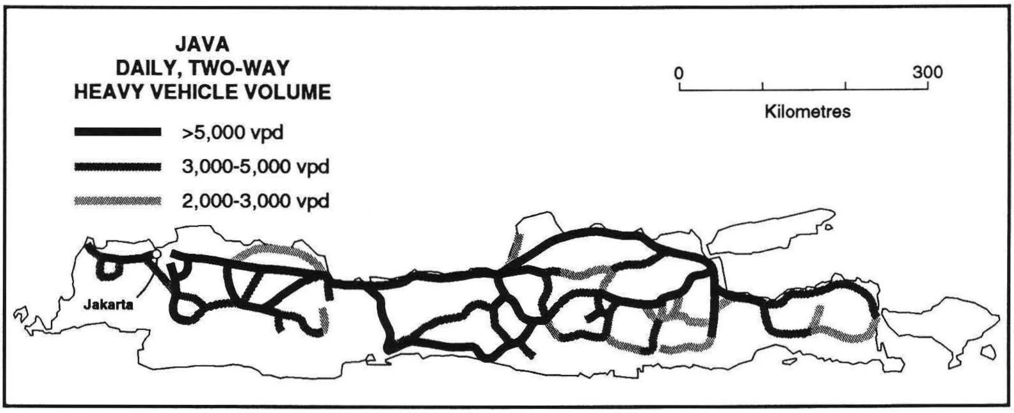


Figure 2A/B. *Estimated two-way heavy vehicle traffic in Sumatra and Java by 2003.*

Data for Figure 2 from: *The consulting services for heavy loaded road improvement project*; *Interim report* III (1993). Jakarta: Ministry of Public Works.

(3) What has been the economic relationship between Singapore and the Indonesian archipelago, especially the western part?
(4) How does one account for the economic backwardness of eastern Indonesia as the periphery of the emerging national economy?

Within the confines of this paper it is impossible to give comprehensive answers to these questions but an overview can be provided.

The essential argument is as follows. The core of both the modern state and the modern economy was moulded on Java during the course of the nineteenth century, with the development of the plantation economy under the Cultivation System being the formative experience. Regular communications between Java and the rest of the archipelago did not exist before the middle of that century and it took until almost the eve of World War I to impose Dutch control over the entire country and to bring all parts into a transport and communications system focused upon Java. The interwar years saw the culmination of efforts by the colonial government and private interests to divert the foreign trade of the rest of the archipelago away from Singapore and Penang to Dutch ports. By the end of the colonial era, however, interisland trade was still very modest and

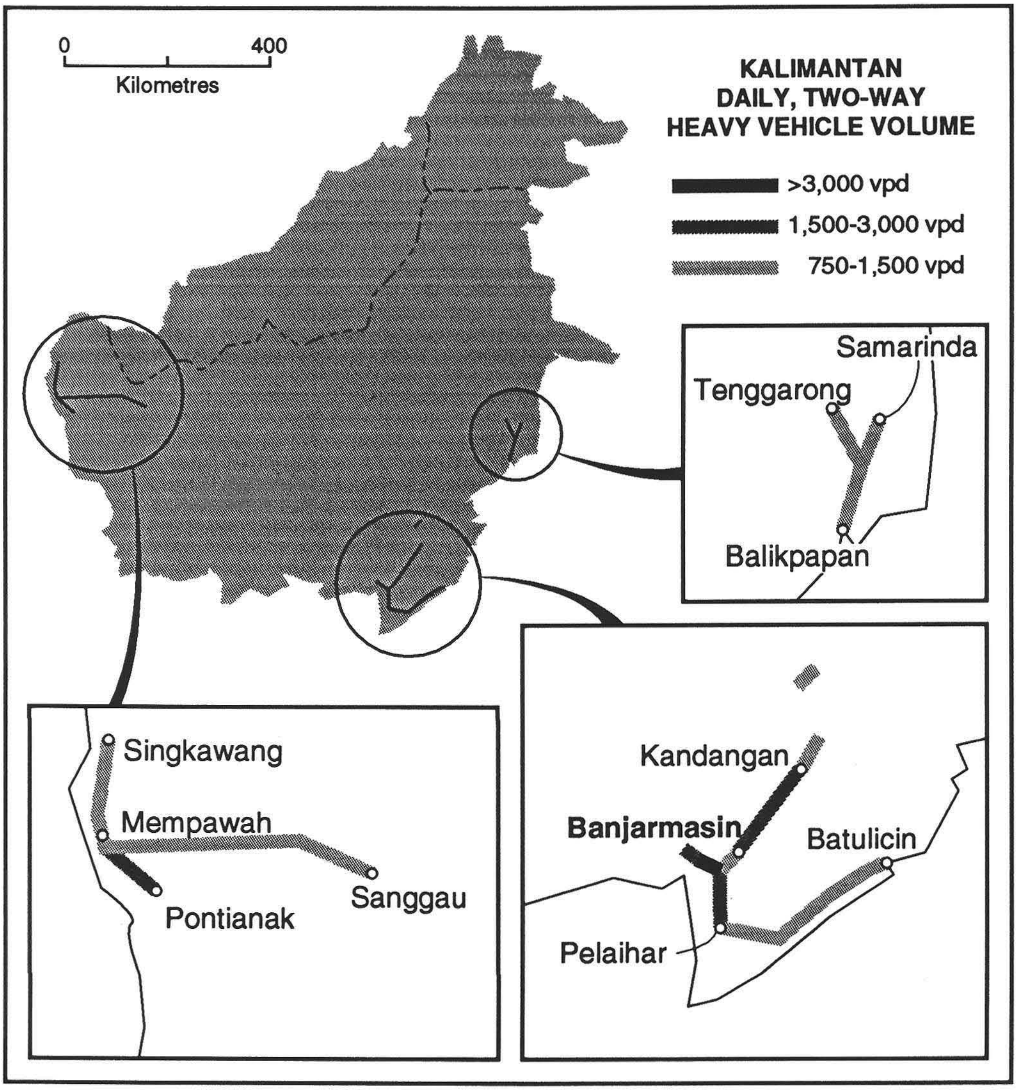


Figure 2C/D. *Estimated two-way heavy vehicle traffic in Kalimantan and Sulawesi by 2003.*

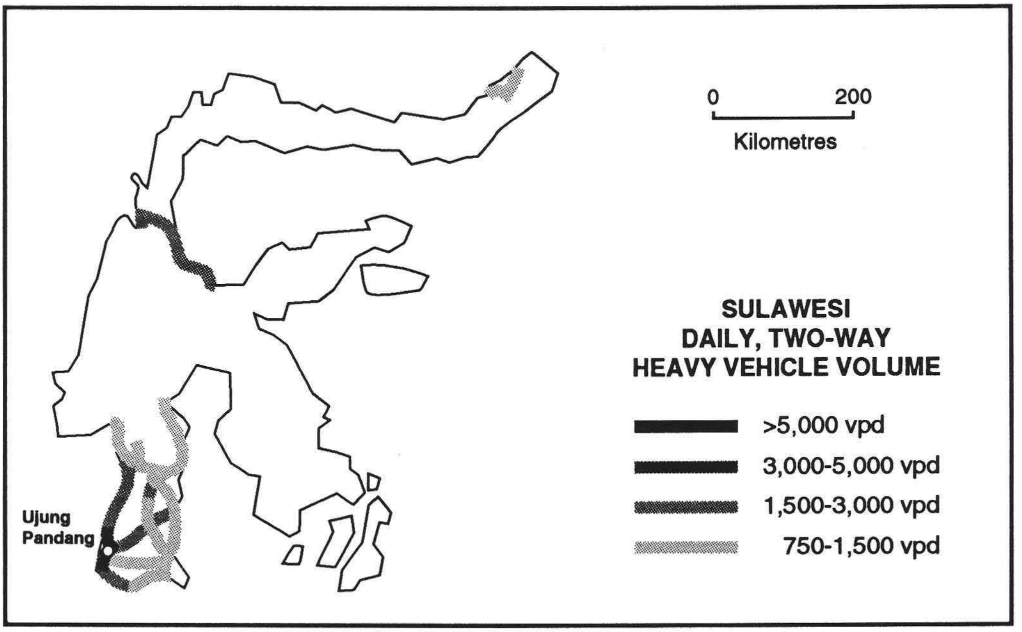


Figure 2C/D—*Continued.*

economic integration still a dream for the future. The first three decades of independence saw a continued efforts to direct Indonesia's foreign trade through Indonesian ports but, at least until the 1970s, little development of interisland trade. Progress towards economic integration awaited the second main phase in the modern economic development of Java, namely industrialization, which built up self-sustaining momentum during the 1970s and in the 1980s turned outwards to international markets. This successful, albeit belated, exploitation of comparative advantage, accompanied by economic specialization between Java and the rest of the archipelago, has for the first time provided the basis for integration of a substantive national economy. It has also transformed the economic relationship with Singapore from one of competition to complementarity, so that this emergent national economy is outward- rather than inward-looking.

3. Origins of the national economy

The formation of a national economy, like the formation of a national state, is a process of almost organic growth. Its starting point is the delineation of national boundaries. Without national boundaries there is certainly economic activity but nothing that could be defined as a national economy. The maritime world of Southeast Asia in the sixteenth and seventeenth centuries, as described so well by Reid, is an example of a vigorous, clearly articulated economy that was not partitioned by political boundaries. It was international by tradition and by default, as were the seas that unified the many kingdoms throughout the archipelago (Reid, 1988–1993). Within Southeast Asia, British free trade orthodoxy of the nineteenth century reinforced a much older local tradition and was actually subversive of the ambitious territorial claims of other European powers. In that sense Singapore was a centre of economic revolution, as the Dutch colonial government both recognized and feared.

National economies emerged not as a natural evolution but as an unnatural distortion that was imposed from the nineteenth century by the force of arms of European powers. The often violent transition from a loosely integrated maritime trading world to distinct colonial economies marked out by territorial boundaries and the tensions and conflicts which this created are the stuff of the past 150 years of Southeast Asian economic history. Hitherto the Dutch, the British, the Spaniards and the Portuguese had maintained fortified trading posts but, except for Java and Luzon, had not sought to rule over extensive landed territories. Being naval powers, their main objective was to trade on privileged terms. As their powers to monopolise trade had waned, they had sought increasingly to profit merely from taxing the trade of others, most notably the Chinese. In the nineteenth century, there began a scramble among the European powers to mark out spheres of influence by precise boundaries acknowledged by international treaties. At first these claims were merely preemptive but once the boundaries had been established, they led inexorably to direct colonial rule. Thus the Anglo-Dutch Treaty of 1824 swapped British settlements in Sumatra (Bencoolen) for Dutch settlements on the Malay Peninsula (Malacca), for the first time establishing the Straits of Malacca as the boundary between Dutch and British spheres. Marking out a perimeter around a territorial sphere did not of itself, however, transform the pattern of economic activity inside it. In fact it is doubtful whether at first the intent was to establish anything more than prior international claim to foreign trade and resources within those boundaries. Until the 'pacification' of the 1900s, many indigenous rulers still regarded themselves as sovereign and were prepared to fight stubbornly to defend their autonomy from colonial encroachment. The Netherlands Indies, like British India, therefore resembled a patchwork rather than a unitary state. That heritage was reflected in the irregular pattern of direct and indirect rule right up to Independence. In terms of economy, the pattern of trade flows mocked colonial boundaries. Forceful intervention was needed to establish infrastructure, relocate production and refocus trade. A prerequisite was therefore the consolidation of a political centre and economic core from which control could be exercised.

4. The core

In the Netherlands Indies, the Dutch first consolidated their rule on Java and developed the economic base of the island almost in isolation from the rest of the archipelago. That the East India Company (VOC) had established its headquarters at Jakarta (Batavia) in 1619 was due more to strategic convenience than to the economic value of Java's trade at that time. For ships rounding the Cape of Good Hope and sailing due east until picking up the northwesterly trade winds, Sunda Strait was the passage into Asia and West Java the first Asian landfall. Jakarta was then a small enclave on the edge of the jungle without any productive hinterland. Indeed, culturally and economically, it was not yet part of Java at all. Over the course of the next two centuries, the Company gradually became involved in local production, at first through 'forced deliveries' of trade goods but by the eighteenth century through the supervision of coffee cultivation in the Priangan. Cattle-driven sugar mills were also set up by Chinese in the lowlands of West and Central Java. Nevertheless, until the demise of the Company at the end of the eighteenth century, Dutch control over Java was tenuous except in the narrow strip along the North Coast. Indeed, during the Java War (1825–1830) the Dutch were almost overwhelmed in central Java and hung on only at great human and financial cost. After 1830 under the Cultivation System Java was transformed into a plantation economy, while the Nederlandsche Handel Maatschappij enabled the Dutch to reestablish tight control over the island's foreign trade. In effect, Java became a much more ambitious version of the spice monopoly which the VOC had established in the Moluccas in the early seventeenth century.[4]

Apart from territory, an essential requirement of a modern state is an effective administration. This was certainly not true of the VOC, which as a government relied heavily on the talents of a few officials and delegated most of the actual tasks of government to the indigenous aristocracy. The modernizing republican Governor-General Daendels (1808–1811) laid the foundations for a modern bureaucracy by formalizing the European civil service hierarchy and allocating 'prefects' (later known as 'residents') to defined territorial districts; he also restricted the powers and privileges of the Javanese aristocrats, who were demoted to the status of salaried civil servants (Sutherland, 1979: 7–8). These reforms were carried through by Raffles during the British interregnum (1811–1816). After 1830 under the Cultivation System, the authority of European civil servants extended into every district outside the now much truncated Princely States (Vorstenlanden). Controleurs not only supervised the cultivation of export crops but also became involved in mobilizing labour for the improvement of transport and communications. Nevertheless, as late as 1865 the territorial administration (Binnenlands Bestuur) still consisted only of 175 Europeans (Fasseur, 1992: 22). Towards the end of the nineteenth century the colonial civil service began to grow quite rapidly. By 1890 it consisted of just over 6,000 officials, of whom three-quarters were based in Java and one-quarter in the rest of the archipelago (Diehl, 1993: 201). One cause was the shift in local revenue collection from tax farming in mainly Chinese hands to direct taxation. This process was begun by Raffles, who replaced the customs revenue farm, and

[4] There is no need to go into the familiar details of the Cultivation System, on which there is now a large and growing literature. Elson (1994) is a recent and authoritative account.

was completed in the 1900s with the closure of the last opium farms and the transfer of pawnshops to government control (Diehl, 1993). Another cause was the increasing burden of technical services in health, education, public works and other 'welfare' activities that were promoted after 1901 as part of the 'Ethical Policy' (Sutherland, 1979).

Along with the development of plantation crops and food output, the nineteenth century was a time of great improvement in Java's land-based communications. At the beginning of the century, communications along the coast of Java were almost entirely by ship. Daendels, as part of his program of strengthening the defences of Java, mobilized labour to build a wide Post Road along the north coast of Java from Sunda Strait to Bali Strait. Under the Cultivation System, much labour was also used to improve roads and build bridges for the conveyance of export crops by wheeled cart, usually to the nearest landing place by river or coast. Especially in eastern Java, the Solo and Brantas rivers were still the main arteries of communication with the interior. The first section of railway was opened in 1867 and by 1880 lines had been completed into the interior from the north coast ports of Jakarta, Semarang and Surabaya. By the mid-1890s, these three networks had been linked up. Rail then supplanted river transport for shipments to the coast and cut heavily into the shipping business along the north coast. Meanwhile telegraphs had greatly hastened the speed of official communications. The first telegraph line had been laid out in 1856 from Jakarta to the Governor-General's palace at Bogor. In 1871 Java was joined to the international network via Singapore, and a network of lines was gradually extended to all main towns throughout the island. In the 1880s telephones systems were also installed in Jakarta, Semarang and Surabaya. And in 1899 Jakarta became one of the first cities in the world to be provided with the new technology of an electric tramway (Encyclopaedie, 1918; Reitsma, 1928).

The crucial aspect of these modern technologies is that it slashed the cost of transport and communications over *land*. Until the invention of railways in the mid-nineteenth century the ton-mile costs of transport over land were many times that over water. The cost contours over land therefore lay close together, implying a very steep economic gradient. These high transport costs could be avoided only where there were valleys with navigable rivers or, as in the Netherlands, flood plains transected by canals. Otherwise export production had to be located close to safe coastlines. Such an economic situation clearly favoured islands, which for any given land area enjoyed the maximum circumference of sea. This readily explains why island Southeast Asia had long been so favoured by international commerce. It also underlies the more than casual connection between the West Indies, where European capitalism first sank roots overseas, and the Netherlands Indies, where the Dutch sought by ingenious means to transplant plantation agriculture. Coffee in the highlands, because it could bear the high cost of overland transport, and sugar in the plains along the coast or the great rivers. Java was probably the only feasible location for plantation economy in the Netherlands Indies, not only because it was a fertile and accessible island but also because it had a large enough population to be exploited as corvee labour for 'cut- price' land transport to the points of shipment. Technology closed the cost gap. By the end of the ninteenth century cane could be shipped by tramways from field to mill and raw sugar from mill to railhead, from where it was carried by main line to the great export sheds in the ports of the north coast. The spread of the railway and narrow-gauge tramway network also allowed plantations to be located almost anywhere in the lowlands or highlands where terrain was suitable for cultivation.

While modern technology integrated Java as a land-based economy, it did not, of course, change its status as an island. It is helpful to have in mind some idea of relativities. Java is much larger than Jamaica or Taiwan, about the same size as Cuba, its long-standing rival as a sugar producer, or either island of New Zealand, but much smaller than Britain (England, Wales and Scotland) or Honshu (Japan). In terms of geographic area, it is therefore large enough to be a small country in its own right, much larger than the Netherlands and about the same size as Portugal. As an island, however, Java faces the acute dilemma of identity, torn between isolation and the need to become part of some larger entity.

The significance of the first three hundred years of the Dutch presence in the Netherlands Indies is that, apart from the Moluccas, it bore disproportionately on Java and with particular intensity in the nineteenth century. Thus politically, economically, socially and even culturally, Java was tugged farther away from island Southeast Asia of which it had once been an integral part. In 1871 the first mail steamers to sail direct to Java through the Suez Canal closed the gap between Holland and Java from around four months by sailing ship around the Cape of Good Hope (Fasseur, 1992: 16) to a precise timetable of about six weeks by sea for passengers, mails and cargo. The telegraph line that connected through in the same year reduced the transfer time for brief messages to an extraordinary 24 hours. That closure of economic distance led to a quickening inflow of Dutch capital into Java. The transfer of funds was facilitated by monetary reforms: the Netherlands guilder had been legal tender in Java since 1854 and after 1877 was tied to the international gold standard (Potting, 1989). There was also a surge in European migration to Java. By the end of the nineteenth century urban Java was no longer a mestizo society. It had acquired a European veneer. The European population was only a very small minority but it had acquired a tight hold on political and economic power. Holland in the Netherlands Indies, or more accurately Holland in Java, was now a palpable reality.

By 1900 Java was therefore the most technologically modern and integrated economy between Bengal and Japan (Dick, 1992). The technology of the Industrial Revolution had been applied to a network of transport and communications, to an export-oriented sugar milling industry with giant factories commanding most of the best land on the island, to irrigation systems, to ancillary metal-working and heavy engineering industries, to the production of some urban middle class consumer goods such as bread, soft drinks and ice, to construction materials such as bricks and timber and to public utilities such as gas and power. Excluding the tiny urban islands of Singapore and Penang, there was nowhere else like it in Southeast Asia. The west coast of Malaya would in time rank alongside Java but in 1900, just four years after formation of the Federated Malay States and before the formative rubber boom had yet begun, the peninsula was still a string of rough tin mining towns whose only good transport link was by coastal steamer. In the Philippines the Americans had just established their occupation of Luzon but even the city of Manila was still fairly primitive by the standards of Java or the Straits Settlements and Luzon was almost untouched by modern land-based transport and communications. Within the Netherlands Indies the only modern enclave outside Java was the rapidly growing plantation district around Medan on what was then known as the East Coast of Sumatra. Except perhaps for a few small coastal ports, the rest of the Indonesian archipelago was not yet part of the modern world.

The formation of a modern colonial state therefore involved not the re-incorporation of Java into the Netherlands Indies but the annexation of the rest of the archipelago to Java. The achievement of Dutch colonialism was to turn the archipelago inside out, away from mainland Southeast Asia towards the small offshore island of Java. Indeed Java, which was bound ever more closely to Holland, might be envisaged by the late nineteenth century as occupying an economic location not in the middle of the Malay archipelago but in the vicinity of Ceylon, the first large island to the East of Suez.[5]

5. The periphery

In the context of an emerging national economy great care must be taken with use of the familiar terms 'Java' and 'Outer Islands'.[6] The habit of juxtaposing Java and the 'Outer Islands' is culturally and historically conditioned. It makes sense only if the standpoint is Java and there is some outer boundary that makes a set of Java and those Outer Islands. 'Outer' is necessarily 'Other', which is to say 'Other than Java', as the Indonesian term *luar Jawa* ('beyond Java') makes plain. One way to avoid this bias would be to forgo the term 'Outer Islands' and simply denote the main islands of Sumatra, Kalimantan and Sulawesi by common usage. The names of these islands imply no value judgements. However, this non-committal approach avoids the problem rather than confronting it. Because the Java/Outer Islands dichotomy is so rooted in our thinking, whether in Indonesia or outside, we should be aware of the unconscious biases which the term itself denotes. An alternative and more challenging approach would be to

[5] It is often forgotten that until 1795 the Dutch had controlled the island of Ceylon–and in the seventeenth century also Taiwan. These may be regarded as Java-like islands. Ceylon became the greatest of the spice islands. Taiwan was the VOC's pilot project for an export sugar industry. The intensive nineteenth-century development of Java as a plantation economy occurred only after the Dutch had been evicted from first Taiwan and, much later, Ceylon. In that sense, Java was perhaps Holland's third prize.

[6] In Dutch the 'Outer' Islands were known at first as the *Buitenbezittingen* ('Outer Possessions') and later as the *Buitengewesten* ('Outer Provinces').

reverse the categories and to imagine that Java is the Outer or Other Island and the rest of Indonesia is the Inner Islands (Dick, 1994a). To avoid confusion, we will continue to use the term 'Outer' Islands but with inverted commas to challenge the accepted meaning.

Reversing the categories switches the perspective from a national to an international one. The first thing that stands out is the proximity of most of Indonesia, especially the western part, to the rest of Southeast Asia. From Java the borders of Indonesia are comfortably remote. The rest of the world is at a safe distance. From Sumatra or Kalimantan, however, borders are very close. The eastern coastline of Sumatra runs parallel with the modern state of Malaysia, formerly British territory. But for the skyscrapers, Singapore is indistinguishable from any other island of the Riau archipelago. Kalimantan is divided into Indonesia and Malaysia by a border through the jungle. Far from Jakarta, North Sulawesi is the backdoor to the Philippines; West Irian is culturally part of Melanesia; Bali and Nusa Tenggara, especially Timor, are the backdoor to Australia. These boundaries, policed after a fashion, are a fact of daily life but they are porous to individuals, if not to states. Migration and trade, official and clandestine, both acknowledge and mock these lines on the map.

While the Dutch were intensifying their exploitation of Java, the 'Outer' Islands remained part of a separate and much older economic system, the maritime economy of Southeast Asia that after 1819 was refocused upon Singapore. The Dutch presence outside Java was so marginal that as late as the mid-1830s it consisted of a string of only fifteen small settlements throughout the entire archipelago: Padang, Bengkulu, Palembang, Muntok, Riau, Sambas, Pontianak, Banjarmasin, Macassar, Menado, Ternate, Ambon, Banda, Kupang and Bima, besides which the Portuguese occupied a small outpost at Dili in East Timor (Earl, 1971: 430 n.). Although the Dutch claimed sovereignty over more extensive territories (Vlekke, 1945: 304 map), they had no means of administering them. Except for the spices of Banda and the tin of Bangka, these relics of the VOC's former trading empire had become mere outposts of little commercial importance as far as Dutch trade was concerned. Virtually the entire trade of the 'Outer' Islands, as away as Macassar, was oriented towards Singapore (Wong, 1960). Nor did this situation change much during the period of the Cultivation System. The sparsely populated 'Outer' Islands offered no supply of cheap labour. Compulsory coffee cultivation was introduced to West Sumatra in 1847 (Young, 1990) and to Minahasa but most of the rest of the archipelago was seen as 'an unprofitable burden' (Furnivall, 1944: 177). Dutch presence as late as in 1870 was depicted by Colijn as 'officials planted out as animated coats of arms to warn off trespassers' (Furnivall, 1944: 178).

6. Pacification and trade diversion

In the face of growing pressure by European powers, the Dutch had perforce to make some efforts to defend their sphere of influence. Except for Aceh, Sumatra had been regarded as secure since the treaty of 1824 but Brooke's intrusion into Sarawak in 1841 and the British claim of Labuan in 1846 jolted Dutch complacency. The poor communications between Java and the 'Outer' Islands now became an urgent problem. A steamship line had been maintained along the north coast of Java since 1830. When the P&O mail was extended to Singapore in 1845, the government had provided a steamer to carry the mails and cabin passengers on to Batavia and connect with the Java line. In view of the high operating cost of steamers and the low volume of traffic, any extension to the 'Outer' Islands would also have to be by government initiative. In 1850, after three years of investigation, the colonial government let a contract for a subsidized network of regular steamship lines between Java and outposts in the 'Outer' Islands (Van der Kraan, 1995). This Cores de Vries syndicate commenced operations in 1852 with two monthly lines, one from Batavia to Bengkulu and Padang, the other from Batavia, Semarang and Surabaya to Macassar, Ambon, Ternate and Menado, with Banda being added in 1854 and Kupang in 1857; a third line from Batavia to Sambas, Singkawang and Pontianak (West Kalimantan) was opened in 1857. The benefits of this network were mainly administrative. Passengers and mail could now be transferred to a regular schedule between Java and the 'Outer' Islands. The cargo of the 'Outer' Islands, however, still flowed almost entirely to and from Singapore. This continued to be the case after 1865 when the more highly capitalized Netherlands Indies Steam Navigation Company took over the mail contract. In the absence of cargo, the contract lines to and from Java would not have been viable without subsidy. What non-contract lines were developed, were with Singapore.

The opening of the Suez Canal in December 1869 and the commencement soon afterwards of a regular direct steamship service between the Netherlands and the Netherlands Indies reinforced this pattern. Passengers for 'Outer' Island ports had no longer to transfer in Singapore to inferior local steamers but could travel in style to Java ports and then be carried on by the well fitted out steamers of the Netherlands Indies Steam Navigation Company (NISN). The impact on the flow of 'Outer' Islands cargo, however, was negligible. In fact the opening of the canal allowed Chinese in Singapore and Penang to acquire secondhand steamers which quickly replaced European-rigged sailing ships in trades to Netherlands Indies ports, improving Singapore's cost advantage as a transhipment port (Bogaars, 1955). In the 1880s, European firms such as Holts' Ocean Steamship Company and the German Norddeutscher Lloyd (NDL) also put feeder ships on the berth to collect cargo for their larger steamers in the Singapore and Far East trade (Hyde, 1957; Falkus, 1990). Improvements in the technology of transport and the consequent reduction in real transport costs therefore increased the density of shipping and trade networks based on Singapore and the volume of trade over those networks. Commanding the main artery of international commerce between between Europe and East Asia, Singapore was the necessary port of call for the shipping of all flags. Moreover, in Singapore were the merchants who dealt in 'Straits produce', the products collected from the jungle and the sea throughout the archipelago and as far afield as Thailand and southern Indo-China. These products were sorted, processed, graded and repackaged for consignment to international markets. In Java, where merchants dealt in plantation products such as sugar, coffee, tobacco and indigo, those commercial facilities were lacking. Hence there was no natural process to redirect that trade back to Java ports, which were served almost solely by ships under the Dutch flag. Disengagement of the trade of the 'Outer' Islands from Singapore required very determined intervention not only by commercial policy but also force of arms.

Consolidation of political control over the archipelago was a protracted and haphazard process. Intervention was usually to forestall perceived foreign, intrusion, mainly on the part of the British. Thus quite unjustified fears of the role in Lombok and Bali of the British trader George King led to a messy subjugation of North Bali between 1846 and 1849, securing the Dutch an outpost at Buleleng (Van der Kraan, 1976). The tin islands of Bangka and Billiton were placed under direct rule. To hold the line against British penetration beyond Sarawak, the Dutch presence was strengthened in West Kalimantan, where Chinese were working the goldfields. However there were also setbacks. In South Kalimantan Dutch coal mines were overrun and the Aceh War, which began in 1873, was not decisively ended until the 1900s. The Dutch were also defeated in 1893 in the first attempt to conquer Lombok, though a stronger force defeated the Balinese overlords in 1894. The 'high tide of Dutch expansion' occurred during the period 1896 to 1909 and was associated with Van Heutsz, the conqueror of Aceh (after 1896) and later Governor-General (1904-1909) (Locher-Scholten, 1994). Mopping up operations were carried out in the Southeast Moluccas and New Guinea until the eve of World War I.

These conquests were significant in economic terms because they gave the colonial government leverage over commercial policy of the 'Outer' Islands. Independent rulers had been able to hold the Dutch at bay by giving trade concessions or revenue farms to Singapore-based traders, mostly Chinese but also in a few cases Arab or European (Reid, 1969; Van der Kraan, 1980). These traders in turn used British-flag shipping based in Singapore. On defeat of these local rulers, the Dutch immediately abolished such concessions and reallocated them to Dutch shipping lines, trading houses and banks based on Java. Dutch commercial penetration was facilitated by the spread of Dutch currency into Sumatra, which hitherto had operated on a silver standard in a de facto common currency area with the Straits Settlements (Potting, 1989). This silver-based currency also closely linked the trading sphere of Singapore and Penang with the China Coast. British efforts in 1903 to withdraw the old Trade Dollar and Mexican Dollar in favour of a new Straits Dollar tied to the gold standard led to monetary turmoil in Sumatra and triggered the currency unification in North Sumatra in 1908. Dutch banks, in most cases incorporated in the Netherlands but with local headquarters in Jakarta, thereby strengthened their control over credit creation in the 'Outer' Islands and, in conjunction with the trading houses, gained additional leverage over export production and foreign trade.

More direct mechanisms of trade diversion were needed to reorient the trade of the 'Outer' Islands away from Singapore and Penang. Differential tariffs and export taxes or quantititive restrictions, as in fact applied during the 1970s, would have been flagrant breaches of commercial understandings with Great Britain. Instead an alternative mechanism was applied through the private sector that worked in terms of differential freight rates. The mail contract for the archipelago, held since 1865 by the British-controlled NISN, lapsed at the end of 1890. In response to a strong campaign by Dutch shipowners, it was allocated to a new company, the Koninklijke Paketvaart Maatschappij (KPM), controlled by the two Dutch lines that served the Java trade (A Campo, 1992). Their intent, speedily put into practice, was to use transhipment contracts to redirect 'Outer' Island cargo from Singapore, where it was transhipped by rival British and German companies, to Java ports, where it could be loaded onto Dutch ships. The KPM therefore served not just as a contract carrier of passengers, mails and government cargoes like the NISN but also as a feeder network for export-import cargo. The KPM and the Dutch lines determined throughshipment rates from 'Outer' Island ports to Europe that matched those of competitors via Singapore. The KPM thereby obtained lower rates per ton of cargo but an increased volume of cargo. One of the first targets was the valuable tobacco trade of North Sumatra: by 1900 almost half of the export was being transhipped through Tanjung Priok (De Boer & Westermann, 1941: 348). In this way trade was, in effect, induced to flow uphill.

This strategy of trade diversion had mixed success. Eastern Indonesia became in time a Dutch lake. By 1915, assisted by the suspension of sailings by the German NDL at the outbreak of World War I, the KPM had eliminated all Singapore-based shipping east of Banjarmasin and secured for Dutch lines the trade of the whole of the *Groote Oost*. The NDL had run steamers between Singapore and German New Guinea via North Borneo and Sulawesi; Chinese shipping had strongholds in trade with Bali, Lombok and Macassar (KPM). Most Sumatran ports, however, were still contested. British-flag feeder shipping had been driven in the early 1890s from the ports of West Sumatra, which involved a circuitous voyage from Singapore and were readily served by Dutch main line ships en route to and from Java. Recognizing the determination of the Dutch lines and the Dutch government to capture the transhipment trade, the main British rival, Ocean Steam Ship Company, in 1891 set up a Dutch-flag subsidiary, Nederlandsche Stoomvaart Maatschappij 'Oceaan' to allow it to compete on equal terms in Netherlands Indies ports.

Padang became the first direct port of call in the 'Outer' Islands. By contrast, over the shorter routes from eastern Sumatra across the Straits of Malacca, from the islands of Riau and from West and South Kalimantan, there was no cost advantage in redirecting trade to Java and Chinese commercial networks and shipping proved tenacious. The rubber boom tied these regions inseparably to Singapore, a commercial reality which in time even the KPM was forced to concede. Within western Indonesia the KPM therefore placed small, specially designed ships in the Singapore trades. In the interwar years Singapore was as busy a KPM hub as Tanjung Priok or Surabaya–any photograph of the harbour shows a KPM fleet at anchor off Clifford Pier.

The commercial tactics of the Dutch lines were underpinned by public investment in port development in the 'Outer' Islands. The initial scheme, around the turn of the century, was the construction of a deepsea harbour at Sabang on Pulau Weh off the northern tip of Sumatra. Its rationale was strategic, to become the entrepot for the foreign trade of Aceh, where the Dutch were still fighting a bitter war and perceived that British-flag shipping operating out of Penang was 'smuggling' supplies to 'the enemy' (Reid, 1969: 268–270; A Campo, 1992: 157–162). Physically well-equipped, Sabang was declared a 'free port' in 1903 and opened to deepsea shipping but, lacking the commercial networks to generate trade, never became much more than a coaling station and transfer point for mails. Nevertheless, the Colonial Government held to the conviction that modern deepsea ports were the key to success in trade diversion. Coinciding with the end of the pacification campaign, in 1909 the Dutch engineers Kraus and de Jongh were commissioned to prepare a report which investigated in great detail the design of hub ports suitable to take the largest ships and to facilitate transhipment. Tanjung Priok, where construction of a deepwater port had begun in 1877, was extended with new harbour basins. Surabaya, hitherto a roadstead port, was developed as a complex of deepwater wharves, opened in 1917 and completed in 1925. In the western part of the archipelago, a new deepsea port was opened at Belawan (a few kilometres from Medan) in 1920 to capture the valuable plantation exports from North Sumatra, hitherto transhipped through Penang and Singapore. In the east, new deepsea wharves with huge godowns for copra were opened at Macassar in 1918. The German DADG line initiated direct calls at Macassar in the early 1900s to load copra for North European oil mills. This example was soon followed by the Dutch lines and Macassar became the stapling point for the copra trade (De Boer & Westermann, 1941: 233–237). While modest facilities were developed between the wars at other ports around the archipelago, these four ports remained the pivots of Dutch trade. In addition, however, there was of course also investment, much of it private, in bulk-handling facilities in the oil ports of North Sumatra, Palembang, Balikpapan, and Tarakan and the coal ports of Emmahaven (Padang), Palembang and East Kalimantan.

By the 1920s the Dutch had therefore managed to divert a good deal of the trade of the 'Outer' Islands into Dutch hands. An integrated network of inter-island and deepsea shipping focused on the hubs of the four main deepsea ports whose infrastructure and customs procedures were designed to facilitate transhipment. This was supported by a sophisticated financial infrastructure of trading houses, banks and insurance companies. The stranglehold of Singapore over the foreign trade of the 'Outer' Islands was thereby broken for all main commodities except rubber. The trade of the *Groote Oost* was shipped almost entirely through Macassar, that of the East Coast of Sumatra mainly through Belawan.

7. Integration and interisland trade

The achievement of control over the foreign trade of the 'Outer' Islands did not mean that the Netherlands Indies were yet an integrated economy. The trade of the separate islands was still oriented towards the outside world and very little with each other. That Sumatra, Kalimantan and Sulawesi had little to trade with each other is not surprising in view of their very similar resource endowment of abundant land and natural resources and sparse population. Because their local economies were still subsistence oriented and had only small urban populations, the inwards trade was biased heavily towards essential items such as rice, sugar, salt and textiles. Between Java and the 'Outer' Islands, however, there was a good deal of scope for specialization according to comparative advantage. In Java the land frontier had been reached by the turn of the century, so that henceforth land was increasingly scarce and labour increasingly abundant. At a shadow price of labour there would appear to have been scope for development of the manufacturing base, especially in the textile industry (Dick, 1992). The interest of Dutch textile manufacturers, however, was such that tariff barriers were kept low to reserve the Netherlands Indies for European manufactures. There were no offsetting measures of industry policy to support the establishment of what would in the early years have been infant industries. Thus Java produced very little by way of manufactures that could have been exchanged for the raw materials of the 'Outer' islands.

One indicator of the low degree of integration between Java and the 'Outer' Islands is the value of interisland compared with foreign trade. The first usable interisland trade statistics date from 1914, by which time the whole of the archipelago except for Portugese Timor had been brought under Dutch control. These figures would seem to overstate the amount of real interisland trade by the inclusion of imports and exports transhipped on local bills of lading.[7] For example, tin shipped from Bangka and Belitung to Jakarta was for most of the interwar period the main item identified in interisland trade from Sumatra to Java: all of this would have been re-exported. This would also have been true of most shipments from the *Groote Oost*, including South and East Kalimantan, Bali and Lombok to the entrepot of Macassar. However, even with such overstatement, in 1914 the value of interisland trade between Java and the 'Outer' Islands was a mere 5.5 per cent of the value of the foreign trade of the Netherlands Indies (Table 1). It would have been more accurate to speak not of the Netherlands Indies economy but of the Netherlands Indies economies. Despite a common customs area (*tolgebied*) and a common currency, the former was still little more than an abstract concept.

The fragmentation of the archipelago shows up vividly from the dispersion of rail networks. Java had a particularly dense network of railways and tramways, whereas that of Sumatra was broken into three unconnected networks in South,

[7] Goods shipped from 'Outer' Islands ports via Java on through bills of lading would be counted as foreign trade from the port of origin.

Table 1. *Ratio of interisland to foreign trade in Indonesia in 1914–1939 ($ million) and 1955 (Rp. million).*

Year	Interisland trade[1]	Foreign trade	Ratio (%)
1914	62	1114	5.5
1921	247	2440	10
1929	310	2593	12
1939	211	1291	17
1955	10400	17973	58

[1] Between Java and 'Outer Islands' only.

Source: Korthals Altes, 1991; *Statistical pocketbook*.

West and North Sumatra (Reitsma, 1925). Elsewhere the only line was a short 47-kilometre section from Macassar to Takalar. Grand schemes to link together the Sumatran networks and add on spur lines to the ports of Sibolga, Tembilahan and Bengkulu came to nought because of the 1930s Depression, as also did plans to extend the Sulawesi line from Macassar north to Pare Pare and Singkang and to construct new networks in South and West Kalimantan and in Minahassa. The Macassar line was actually closed as an economy measure. Even today the all-weather highway network has scarcely developed beyond the rail networks that had been planned in the 1920s. Intra-island trade continues to rely heavily upon coastal shipping.

The initial effects of closer political integration were underpinned by the period of autarky during World War I. Although the Netherlands stayed neutral in this conflict, the trade of the Netherlands Indies was greatly disrupted. By 1915 deepsea freight costs had begun to soar and from 1917 the Allied blockade interrupted most supplies, not only from Europe but also from the new sources of North America and Japan. Shipping to Holland did not resume until February 1919 and remained irregular for the rest of the year. All this conferred a suddenly high rate of natural protection upon the Netherlands Indies and in Java gave rise to a certain amount of opportunistic industrialization. Growth was most spectacular in the processing of vegetable oil (mainly coconut oil) and the manufacture of soap and margarine as new mills were built to fill the gap left by German factories, which on the eve of the War had pressed most of the copra imported to Europe (Kamerling, 1982). The engineering industry, which for several decades had concentrated mainly upon repair work, now turned increasingly towards construction and many new firms entered the industry. Other industries to become established under wartime conditions were chemicals, packaging materials, cement, cigarettes and rubber goods (NHM, 1944). These goods were shipped from Java to the 'Outer' Islands, with a reverse flow of fuel and raw materials. By 1921 the proportion of interisland to foreign trade had almost doubled to 10 per cent (Table 1).

That momentum was not sustained after the return of normal international trading conditions. When international commodity prices and freight rates collapsed in 1920, wartime natural protection evaporated and hard-pressed manufacturers in Europe, North America and Japan competed with each other for the Netherlands Indies market. A few of the new manufacturing plants survived, especially in the chemical industry, but entire infant industries succumbed, most notably the coconut oil industry. The local textile industry failed to progress much beyond the handicraft stage. As the separate Netherlands Indies economies reverted to their usual pattern of export/import trade with the rest of the world, interisland trade grew no faster than foreign trade until the end of the 1920s.

Intensification of trade links between Java and the 'Outer Islands' awaited an industry policy that would protect Java-based manufacturing industries against international competition. In terms that would become more familiar in the late-1970s, Java enjoyed too little exchange rate protection from imports in the face of continuing rapid growth of exports, especially from the 'Outer' Islands. The exchange rate was overvalued relative to the shadow price of labour. In that sense by the 1920s Java was actually disadvantaged by its incorporation within a wider Netherlands Indies economy at a single unified exchange rate. Had the 'Outer' Islands been a separate colony or perhaps incorporated with the booming economy of British Malaysia, the slowdown in the primary export capacity of Java, a consequence of growing land shortage, would have been accommodated by an exchange rate adjustment or deflation vis-a-vis the rest of the world.[8] Java's food crops and manufacturing industries would then have become more competitive and much more of the rapid growth in the import demand of the 'Outer' Islands' would have been switched to Java. In the event there was actually a perverse effect. The 'overvalued' exchange rate also allowed the large population of Java, especially the prosperous European population, to maintain a higher rate of imports from the rest of the world. As late as 1939 Java ports accounted for two-thirds of the country's imports but only one-third of its exports (Table 2). Even allowing for some redistribution of these imports to the 'Outer' Islands, it would appear that the 'Outer' Islands were already subsidizing the imports of Java, a feature that would become more marked and more contentious after Independence.

Despite this exchange rate disadvantage, there is nevertheless some evidence of a weak trend towards closer economic integration between Java and the 'Outer' Islands during the 1920s. Although as stated above there was little gain in the size of total interisland trade relative to foreign trade, the balance of trade had begun to shift in Java's favour. In 1914 flows to and from Java were almost the same. In the early 1920s shipments into Java were much greater but the direction switched in the mid-1920s and from 1927 onwards ran heavily in favour of Java (Korthals Altes, 1991). The high level of aggregation makes it hard to determine the underlying causes but three factors may be significant. The first is just a valuation effect arising from falling world commodity prices in

[8] In the absence of exchange controls, the same outcome would have been produced had Sumatra continued to use the Straits dollar as currency instead of being intregrated with Java in 1908 upon the Netherlands Indies guilder.

Table 2. *Share of exports and imports by main region in the foreign trade of colonial Indonesia in 1939.* (percentages)

Region	Exports	Imports
Java	36	66
Outer Islands:		
Western part[1]	50	25
Eastern part[2]	14	9

[1] Sumatra, Riau and West Kalimantan
[2] Southeast Kalimantan, Sulawesi, Maluku, Irian and Nusa Tenggara

Source: Calculated from: *Indisch Verslag*, 1940.

the late-1920s. This may have affected the value of foreign trade more than inter-island trade. Secondly, a marked decline in the value of petroleum products shipped to Java from the 'Outer' Islands at a time of rapidly rising consumption probably reflects rising production on Java, leading to virtual self-sufficiency (Lindblad, 1989: 59–60). Thirdly, throughout the 1920s there was rapid growth in volume and value of cigarettes shipped from Java to the 'Outer' Islands. By the end of the decade the value of 'cigarettes and cigars' was almost as great as 'textiles'; these two categories dominated the value (but not volume) of the outward trade from Java. Cigarettes were an early success of import substitution because the Java product, especially *kretek* (clove) cigarettes, was distinctive in taste and had no close substitutes among foreign brands.

The next stage in the integration of the archipelago was delayed until the early 1930s and was a consequence of the world depression. This 'crisis of capitalism' undermined the viability of the colonial import/export economy and called into question the *laissez-faire* assumptions on which it had rested since around 1870. The production of Java's staple export, sugar, collapsed from 3 million tonnes in 1928 and 1929 to just 0.5 million tonnes in 1935 (Creutzberg, 1975). Exports from the 'Outer' Islands, especially rubber and copra, were also badly affected. At the same time, Dutch consumer goods, particularly textiles, were almost driven from the Netherlands Indies market by cheap Japanese imports. In 1929 Japanese goods had held 10 per cent of the market in 1929 but after the yen devaluation of January 1930 this share increased to almost one-third (Dick, 1989). In these circumstances Dutch manufacturers had nothing to lose from some protection of the Netherlands Indies market. The objections of the plantation and trading interests to any threat to 'cheap labour' was now muted. Immediate survival required the sugar mills to renege on long-term land rental contracts and to forgo control over much of its labour force. Alternative employment opportunities were obviously essential.

Formulated by bureaucrats in the Department of Economic Affairs, the outcome was a policy that might be described, after the Australian precedent, as 'protection all round'. To limit the penetration of Japanese imports in 1933 the colonial government introduced the Crisis Ordinance as the basis for imposing import quotas by item according to country of supply: these were imposed progressively upon cement and beer in 1933, sarongs, bleached fabrics, cooking pans and earthenware and porcelain in 1934, greys, fertilisers, lamp bulbs, cotton blankets, bath towels, sanitary ware, cotton yarns, packaging paper, manufactures and vehicle tyres in 1935 and clothing and vitriol in 1936 (Saroso, 1951: 37–41). This led to a boom in manufacturing output on Java, especially in textiles, part of which were traded to the 'Outer' Islands. At the same time, to ensure a livelihood for land and labour released by Java's sugar industry, the government imposed tight restrictions on the import of foreign rice, which caused rice shipments from Java to the 'Outer' Islands to increase from around 30,000 tons in the 1920s to almost 200,000 tons in 1939 (Indisch Verslag, 1940). Interisland sugar exports also increased to 125,000 tons in 1939. This import substitution meant that by 1939 the proportion of interisland to foreign trade had increased significantly to 17 per cent (Table 1).

More significant than the still modest degree of integration was the direction of the trend and the structural change which it denoted. Java, the plantation economy which until the 1920s had been the powerhouse of the Netherlands Indies, was now disengaging from the international economy. Reversing the process that had begun in the 1830s, resources were being shifted out of plantation industries into food crops and also, from a very small base, into modern manufacturing. This may be interpreted as belated recognition that population growth had shifted Java's underlying comparative advantage. In the 1830s labour had been the scarce resource and policy had been directed to harnessing that labour for export production through enforced corvee labour. By the 1930s the frontier had closed and land was the scarce factor. Although rents had been held down by monopsonistic pressure backed up by administrative sanctions, sustained productivity growth through technological change had been necessary to maintain Java's share of world markets. The rapid growth of 'Outer' Island exports, however, had continued to inflate the real exchange rate (which may also be seen as the comparative price level or wage rate). The collapse of Java's sugar industry in the 1930s was therefore not a cyclical phenomenon but a necessary structural adjustment, that could have been staved off only by even faster productivity growth or tighter political repression to drive down real wage rates in rural Java. Although modern economic analysis would suggest that the Department of Economic Affairs bureaucrats were unwise to give protection by the device of tariffs and quotas, they deserve recognition for applying a forward-looking developmental approach and not a backward-looking political one. As I have argued elsewhere, this marked the recognition of an economic interest of the Netherlands Indies that was separate from that of the Netherlands (Dick, 1990). The opportunity was now for Java to develop its manufacturing industries and to finance its necessary imports by trading with the 'Outer' Islands, as well of course as taxing more heavily the trade surplus of the 'Outer' Islands. Thus was Java for the first time harnessed as an engine to drive the rest of the emerging Netherlands Indies economy.

8. Independence

The trend towards economic integration probably accelerated after Independence. Wartime autarky–both before and during the Japanese occupation–was followed by continuing foreign exchange restrictions and the encouragement of import substitution. However, interisland and foreign trade data comparable with prewar figures do not become available until 1955. At face value the 1955 data throw up an interisland (*i.e.* Java/'Outer' islands) trade to foreign trade ratio of 58 per cent, which would suggest that the economy had become a good deal more integrated since 1939 (Table 1). Nevertheless, the figures must greatly overstate how far that trend had gone. By 1955 the Indonesian rupiah was already quite heavily overvalued, thereby understating the official value of foreign trade. At the same time, smuggling was becoming a serious problem from regions such as Central Sumatra and Sulawesi where the Army exercised de facto control. Foreign trade *volumes* were therefore also understated. Both problems became more serious over the following decade.

The 1957 interisland trade data give more insight because they are broken down by province. Several features stand out. First, if the archipelago is broken into the three segments of West (Sumatra, Riau and West Kalimantan), Java and East (South and East Kalimantan, Sulawesi, Maluku and Nusa Tenggara), it can be seen that virtually all interisland trade, except that within each segment, was still between Java and the 'Outer' Islands. There was minimal trade between West and East Indonesia. Second, Java now ran a huge export surplus with the 'Outer' Islands, the outwards trade in foodstuffs and manufactures being almost three times the inwards trade in fuel and raw materials. Third, Java's trade was still heavily biased towards the West, which accounted for twice as much interisland trade as the East in both directions. Fourth, as a result of civil war, greater provincial autonomy, and smuggling, Macassar had greatly declined as an entrepot for East Indonesia. Fifth, West Indonesia still had no entrepot of its own, that function being served by Singapore. The general impression is of an economy still very much 'under construction'.

From an economic perspective, the Permesta/PRRI rebellions that convulsed Indonesia in 1958 may be seen as symptomatic of a country whose political integration had been pushed much faster than the economic integration needed to sustain it. Little had changed from the colonial situation whereby the islands of Indonesia, and indeed even separate parts of those islands, were fragments connected to each other by little more than geographic proximity and regular shipping lines. Some links had atrophied. For want of shipping, the Japanese had sought each island as far as possible to be self-sufficient. During the Revolution, political links with Java had also become tenuous. And when the Dutch reestablished control over the 'Outer' Islands, they encouraged a kind of puppet federalism that promised a degree of local autonomy with a democratic facade (Yong, 1982). Meanwhile, the British Government in Singapore had surreptitiously encouraged local Chinese merchants to resume barter trade with Sumatra and Kalimantan by making available cheap ships that could slip through the Dutch blockade. Thus trade links with Singapore were reestablished much sooner than links with Java. Regularized at Independence, they flourished during the Korean War boom, when many traders and shipowners made their fortune. During the 1950s, as the central government in Jakarta sought to tax exporters in the 'Outer' Islands not only by direct export taxes but also by maintaining overvalued exchange rates, these Singapore merchants formed commercial alliances with local military leaders to turn a blind eye to smuggling in return for a share of the profits (Harvey, 1977). After 1953, as the newly formed state shipping company PELNI brought into service its new coasters, the large part of the fleet was placed in the profitable feeder trades to Singapore, leaving to the KPM the longer and less profitable routes to the east of the archipelago (Dick, 1987a: 22–23). Had the central government lacked the military forces or the will to overthrow the local military warlords, the actual political boundaries of the Republic would have contracted to Java and poorer parts of the 'Outer' Islands such as Nusa Tenggara.

Another perspective on the commercial orientation of the 'Outer' Islands was provided by the experience of Confrontation (1963–1966). It is unclear to what extent frustration with the continuing role of Singapore and Penang in Indonesia's foreign trade was a factor in President Sukarno's decision to oppose the formation of the new state of Malaysia, incorporating West Malaysia, East Malaysia (Sabah, Sarawak) and Singapore. Nevertheless, sanctions against trade with Malaysia were quickly imposed. Ships were forbidden to load cargo from Indonesian ports to Malaysia or to be admitted to Indonesian ports with cargo originating from or transhipped in Malaysia. These measures greatly disrupted the physical direction of trade. There was some increase in export cargo transhipped in Javanese ports, especially government cargo shipped by PELNI, whose ships were now rerouted. Nevertheless, with the connivance of local military commanders, other small ships continued to slip across the Straits to Singapore under cover of darkness with cargoes of rubber.[9] However most foreign-flag ships previously engaged in trade with Indonesian ports were transferred to Panamanian 'front' companies, repainted and renamed, and loaded for Hongkong or Bangkok, where their cargoes were handled by the same Chinese networks as before. The foreign trade networks of the 'Outer' Islands proved to be not only tenacious but also highly adaptable. The Indonesian government was also found to lack the means to force trade into other channels. As the Dutch had found during the Revolution, the Navy lacked the patrol craft to impose a blockade across such a vast archipelago. And in practice naval commanders, like their army counterparts, could be bought off by well-connected businessmen, often local-born Chinese. Thus, when the restrictions on trade with Malaysia were lifted in mid-1966 by the New Order government, trade quickly slipped back into its familiar groove as the old principals shed their disguises.

Over the next few years the Indonesian government, like the former colonial government, tried by various policy measures to redirect the country's foreign

[9] Confirmed by interviews in 1974 with shipowners in Singapore.

trade from Singapore to own ports. By agreement with Singapore shipowners, tacitly agreed to by the Singaporean government, shipping between Indonesia and Singapore was restricted to regular lines with ships licensed by the Directorate-General of Sea Communications within the Regular Liner Service system in such a way that the trade was evenly shared (Dick, 1987a). This was underpinned by the system of loading permits (SKU), introduced in 1964 when Ali Sadikin was Minister of Shipping, to discriminate in favour of Indonesian deepsea shipping companies (Sastrosatomo, 1994). It was now applied with increasing rigour to discourage transhipment through Singapore. In 1982 the Directorate-General of Sea Communications gave status to this *ad hoc* protectionist policy as a 'gateway policy', whereby Indonesia's non-bulk exports were to be directed through Indonesia's own deepsea ports of Tanjung Priok, Surabaya, Belawan and Ujung Pandang. The sanctions differed, but the basic policy was an echo of the 1920s (Dick, 1987a: 33–35).

By the 1980s, however, in the era of container shipping, a 'gateway policy' designed for the routing patterns of conventional break-bulk cargo ships made little sense. Since 1971 the Europe/Singapore/Far East trade had been served not by 10,000-ton geared freighters but by giant motherships of 50,000 tons. The closure of Indonesian ports to their small feeder vessels denied Indonesian shippers the benefits of much lower freight rates made possible by cargo consolidation in Singapore and consequent economies of scale. When the non-oil export drive became a national priority, these restrictions were swept away with Inpres No. 4/1985 (Dick, 1987a). The export/import trade of Indonesia to North America and Europe now moves almost entirely by transhipment via Singapore. This applies not only the trade of the 'Outer' Islands but also to that of Java. Direct calls are confined mainly to smaller ships trading shortsea to Northeast Asia or Australia (Dick, 1994b). This second attempt to eliminate Indonesia's trade dependence upon Singapore, and thereby to cut adrift from the Southeast Asian trading system, therefore ultimately became untenable because of its failure to accommodate modern transport technology. Trade could at some cost be pumped uphill but it could not in the long-run be induced to flow uphill of its own accord.

9. Conclusion

Paradoxically, the reversal with Inpres No. 4/1985 of the policy of directing foreign trade through national ports has been accompanied at last by genuine national economic integration. It has not led to the fragmentation of what had long been an artificial national economy because that economy is now beginning to assume substantive form. As in the nineteenth century, when Java was consolidated as an economic core, the driving force has been the development on Java of massive new productive capacity. Since the late-1960s, Java has undergone a belated industrial revolution. The first phase, from 1967 to the *Malari* riots of January 1974, was driven by foreign investment. The second phase, lasting about ten years over the second and third Five Year Plans, involved import substitution behind a tariff wall (Hill, 1994). During these two phases, interisland trade saw very rapid growth in the shipment of manufactures from Java to the 'Outer' Islands and of raw materials and energy from the 'Outer' Islands to Java (Dick, 1995).[10] The interisland trade channels which formerly had redistributed imported goods now handled similar local products. Thus the differing resource endowments between Java and the 'Outer' Islands were at last reflected in specialization according to comparative advantage.

In the mid-1980s when trade and shipping were liberalized and the exchange rate devalued as part of the non-oil export drive, the provinces of the 'Outer' Islands were no longer constrained from exporting via Singapore but they continued to draw manufactured goods from Java. Quite apart from residual tariff and non-tariff barriers, Java was now the least-cost producer of many of these items. At the same time, the explosive growth in the export of manufactures from Java flowed through into increasing demand for raw materials and energy from the 'Outer' Islands, further boosting their demand for Javanese manufactures. The industrial development of Java has probably become self-sustaining. Of no less importance, Java has now become the core of an integrated national economy. This national economy has still to be consolidated but the process is now cumulative and accelerating. The New Order government can now be said to have realized the goal of national economic integration, the culmination of a very long process that began in 1808 with the appointment as Governor-General of the Indies of the very determined revolutionary, Herman Daendels.

Daendels has not enjoyed a good press. Remembered as the man who forced the Javanese to plant coffee 'even on the graves of their ancestors', he alienated almost everybody in the Netherlands Indies and then had the misfortunate to end up on the losing side at home. It was Raffles (1811–1816) who reaped most of the credit for his reforms. Daendels' brief and tumultuous rule has therefore never been fairly assessed. Furnivall and Vlekke come closest to paying him his due (Furnivall, 1944; Vlekke, 1945). Just as Napoleon ushered in the modern world in Europe, so should his Dutch disciple receive his due as the founder of modern Indonesia. For Indonesia's economic history is also part of world history.

References

Boer, M.G. de and J.C. Westermann, *Een halve eeuw paketvaart, 1891–1941.* Amsterdam: De Bussy, 1941.

Bogaars, G., 'Singapore and the opening of the Suez Canal'. In: *Journal of the Malayan Branch of the Royal Asiatic Society*, 28, 1, 1955, 99–143.

[10] Since 1985 no interisland trade statistics have been published to document this trend but the growth in the volume of interisland cargo can be verified from shipowners and traders.

Butcher, J. and H.W. Dick, eds., *The rise and fall of revenue farming; Business elites and the emergence of the modern state in Southeast Asia.* London: Macmillan, 1993.
Campo, J.N.F.M. à, *Koninklijke Paketvaart Maatschappij; Stoomvaart en staatsvorming in de Indonesische archipel, 1888–1914.* Hilversum: Verloren, 1992.
Clemens, A.H.P. and J.Th. Lindblad, eds., *Het belang van de Buitengewesten; Economische expansie en koloniale staatsvorming in de Buitengewesten van Nederlands-Indië 1870–1942.* Amsterdam: NEHA, 1989.
Creutzberg, P., *Indonesia's export crops 1816–1940* [= *Changing Economy in Indonesia*, vol. 1]. The Hague: Nijhoff, 1975.
Creutzberg, P., *National income* [= *Changing Economy in Indonesia*, vol. 5]. The Hague: Nijhoff, 1979.
Dick, H.W., 'Prahu shipping in Eastern Indonesia'. In: *Bulletin of Indonesian Economic Studies*, 11, 2, 69–107; 3, 1975, 81–103.
Dick, H.W., *The Indonesian interisland shipping industry; An analysis of competition and regulation.* Singapore: Institute of Southeast Asian Studies, 1987a.
Dick, H.W., 'Prahu shipping in Eastern Indonesia in the interwar period'. In: *Bulletin of Indonesian Economic Studies*, 23, 1, 1987b, 104–121.
Dick, H.W., 'Japan's economic expansion in the Netherlands Indies between the First and Second World Wars'. In: *Journal of Southeast Asian Studies*, 20, 2, 1989, 244–72.
Dick, H.W., 'Interisland Trade, economic integration and the emergence of the national economy'. In: A. Booth, W. O'Malley & A. Weidemann, eds., *Indonesian economic history in the Dutch colonial era.* New Haven: Yale University Press, 1990, 296–321.
Dick, H.W., 'Nineteenth-century industrialization: A missed opportunity?'. In: Lindblad, J.Th., ed., *New challenges in the modern economic history of Indonesia* [= Proceedings of the First conference on Indonesia's modern economic history, Jakarta, October 1–4, 1991]. Leiden: Programme of Indonesian Studies, 1992, 123–148.
Dick, H.W., 'A fresh approach to Southeast Asian history'. In: J. Butcher & H.W. Dick, eds., *The rise and fall of revenue farming; Business elites and the emergence of the modern state in Southeast Asia.* London: Macmillan, 1993a, 3–18.
Dick, H.W., 'East Java in regional perspective'. In: H.W. Dick, J. Fox & J.A.C. Mackie, eds., *Balanced development; East Java under the New Order.* Singapore: Oxford University Press, 1993b, 1–22.
Dick, H.W., 'Indonesian economic history inside out'. In: *Review of Indonesian and Malaysian Affairs*, 1–2, 1994a, 1–12.
Dick, H.W., *Shipping services between Australia and Indonesia; The challenge of logistics.* Canberra: Department of Foreign Affairs and Trade, 1994b.
Dick, H.W., 'The transformation of comparative advantage; East Java, 1920–90'. In: *Bulletin of Indonesian Economic Studies*, 31, 1, 1995, 41–72.
Dick, H.W. and D. Forbes, 'Transport and communications: A quiet revolution'. In: A. Booth, ed., *The oil boom and after; Indonesian economic policy and per-*

formance in the Soeharto era. Kuala Lumpur: Oxford University Press, 1992, 258–279.
Dick, H.W. and P.J. Rimmer, 'The diffusion of modern transport and communication technologies in Southeast Asia'. Paper presented at the conference on 'Island Southeast Asia and the world economy, 1870s–1990s', Canberra, November 24–26, 1992.
Diehl, F.W., 'Revenue farming and colonial finances in the Netherlands East Indies, 1816–1925'. In: J. Butcher & H.W. Dick, eds., *The rise and fall of revenue farming; Business elites and the emergence of the modern state in Southeast Asia*. London: Macmillan, 1993, 196–232.
Earl, G.W., reprint, *The eastern seas*. Singapore: Oxford University Press, 1971.
Elson, R.E., *Village Java under the Cultivation System, 1830–1870*. Sydney: Allen & Unwin, 1994.
Encyclopaedie van Nederlandsch-Indië (1918²). The Hague: Nijhoff.
Eng, P. van der, 'The real domestic product of Indonesia, 1880–1989'. In: *Explorations in Entrepreneurial History*, 29, 1992, 343–373.
Falkus, M., *The blue funnel legend; A history of the Ocean Steam Ship Company, 1865–1973*. London: Macmillan, 1990.
Fasseur, C., *Kultuurstelsel en koloniale baten; De Nederlandse exploitatie van Java 1840–1860*; = *The politics of colonial exploiation in Java; The Dutch and the Cultivation System*, trans. by R.E. Elson & A. Kraal. Leiden/Ithaca: Universitaire Pers/Cornell University Press, 1975, 1992.
Furnivall, J.S., *Netherlands India; A study of plural economy*. Cambridge: Cambridge University Press, 1944.
Geertz, C., *Agricultural involution; The process of ecological change in Indonesia*. Berkeley: University of California Press, 1963.
Götzen, L., 'Volksinkomen en belasting'. In: *Koloniale Studiën*, 17, 1993, 449–484.
Harvey, B., *Permesta; Half a rebellion*. Ithaca: Cornell University Press, 1977.
Hill, H., ed., *Unity and diversity; Regional economic development in Indonesia since 1970*. Singapore: Oxford University Press, 1989.
Hill, H., 'The economy'. In: H. Hill, ed., *Indonesia's New Order; The dynamics of socio-economic transformation*. Sydney: Allen & Unwin, 1994, 54–122.
Hyde, F.E., *Blue funnel; A history of Alfred Holt and Company of Liverpool from 1865 to 1914*. Liverpool: Liverpool University Press, 1957.
Indisch Verslag (1940). Batavia: Centraal Kantoor voor de Statistiek.
Kamerling, R.N.J., *De N.V. Oliefabrieken Insulinde in Nederlands-Indië; Bedrijfsvoering in het onbekende*. Franeker: Wever, 1982.
Koninklijke Paketvaart Maatschappij [KPM], *Jaarverslag van de directie in Indië*. Batavia [published annually, now in National Archives at The Hague].
Korthals Altes, W.L., *General trade statistics, 1823–1940* [= *Changing Economy in Indonesia*, vol. 12a]. Amsterdam: Royal Tropical Institute, 1991.
Kraan, A. van der, *Lombok; Conquest, colonization and underdevelopment, 1870–1940*. Singapore: Heinemann (Asia), 1980.
Kraan, A. van der, *Bali at War: A History of the Dutch-Balinese Conflict of 1846–49*. Clayton (Australia): Monash University, 1995.

Lindblad, J.Th., *From Dayak to Dutch; The economic history of Southeast Kalimantan 1880–1942*. Dordrecht/Providence: Foris, 1988.
Lindblad, J.Th., 'The petroleum industry in Indonesia before the Second World War'. In: *Bulletin of Indonesian Economic Studies*, 25, 2, 1989, 53–78.
Lindblad, J.Th., ed., *New challenges in the modern economic history of Indonesia* [= Proceedings of the First conference on Indonesia's modern economic history, Jakarta, October 1–4, 1991]. Leiden: Programme of Indonesian Studies, 1993a.
Lindblad, J.Th., 'Economic Growth in the Outer Islands, 1910–1940'. In: Lindblad, J.Th., ed., *New Challenges in the Modern Economic History of Indonesia* [= Proceedings of the First Conference on Indonesia's Modern Economic History, Jakarta, October 1–4, 1991]. Leiden: Programme of Indonesian Studies, 1993b, 233–263.
Locher-Scholten, E.B., 'Dutch expansion in the Indonesian archipelago around 1900 and the imperialism debate'. In: *Journal of Southeast Asian Studies*, 25, 1, 1994, 91–111.
Nederlandsche Handel-Maatschappij [NHM], *De industrialisatie in Nederlandsch-Indië na 1918* [internal report]. Amsterdam: NHM, 1944.
Pelzer, K., *Planter and peasant; Colonial policy and the agrarian struggle in East Sumatra, 1863–1947*. The Hague: Nijhoff, 1978.
Polak, J.J., 'Het nationaal inkomen van Nederlands-Indië, 1921–1939'. In: *Statistische en Economische Onderzoekingen*, 2, 1943, 104–108.
Potting, C.J.M., 'De komst van Nederlandse banken naar Sumatra, 1877–1914'. In: A.H.P. Clemens & J.Th. Lindblad, eds., *Het belang van de Buitengewesten; Economische expansie en koloniale staatsvorming in de Buitengewesten van Nederlands-Indië 1870–1942*. Amsterdam: NEHA, 1989, 67–94.
Reid, A.J.S., *The contest for North Sumatra; Atjeh, the Netherlands and Britain, 1858–1898*. Kuala Lumpur: Oxford University Press, 1969.
Reid, A.J.S., *Southeast Asia in the age of commerce*. New Haven: Yale University Press [2 vols], 1988–1993.
Reitsma, S.A., ed., *Gedenkboek der Staatsspoor- en Tramwegen in Nederlandsch-Indië 1875–1925*. Weltevreden: Topografische Inrichting, 1925.
Reitsma, S.A., *Korte geschiedenis der Nederlandsch-Indische Spoor- en Tramwegen*. Batavia: Kolff, 1928.
Rimmer, P.J. and H.W. Dick, 'Analysing Southeast Asia's spatial structure'. Paper presented at the Conference on 'Island Southeast Asia and the world economy, 1870s–1990s', Canberra, November 24–26, 1992.
Saroso Wirodihardjo, R., *De contingenteeringspolitiek en hare invloed op de Indonesische bevolking*. The Hague: Nijhoff, 1951.
Sastrosatomo, S., 'Recollections of my career'. In: *Bulletin of Indonesian Economic Studies*, 30, 1, 1994, 39–58.
Segers, W.A.I.M., *Manufacturing industry, 1870–1942* [= *Changing Economy in Indonesia*, vol. 8]. Amsterdam: Royal Tropical Institute, 1987.
Simkin, C.G.F., 'Indonesia's unrecorded trade'. In: *Bulletin of Indonesian Economic Studies*, 6, 1, 1970, 17–44.

Somers Heidhues, M., *Bangka tin and Mentok pepper; Chinese settlement on an Indonesian island.* Singapore: Institute of Southeast Asian Studies, 1992.
Statistical pocketbook. Jakarta: Biro Pusat Statistik [published annually].
Statistik Indonesia 1991 (1992). Jakarta: Biro Pusat Statistik.
Stoler, A.L., *Capitalism and confrontation in Sumatra's plantation belt, 1870–1979.* New Haven: Yale University Press, 1985.
Sutherland, H.A., *The making of a bureaucratic elite; The colonial transformation of the Javanese priyayi.* Singapore: Heinemann (Asia), 1979.
Thee Kian Wie, *Plantation agriculture and export growth; An economic history of East Sumatra, 1863–1942.* Jakarta: LEKNAS-LIPI, 1977.
Vlekke, B.H.M., *Nusantara; A history of the East Indian archipelago.* Cambridge: Harvard University Press, 1945.
Warren, J.F., *The Sulu zone, 1768–1989.* Singapore: Singapore University Press, 1981.
Wong Lin Ken, 'The trade of Singapore, 1819–69'. In: *Journal of the Malayan Branch of the Royal Asiatic Society*, 23, 4, 1960, 5–315.
Yong Mun Cheong, *H.J. van Mook and Indonesian independence; A study of his role in Dutch-Indonesian relations, 1945–48.* The Hague: Nijhoff, 1982.
Young, K.R., 'The Cultivation System in West Sumatra; Economic stagnation and political stalemate'. In: A. Booth, W. O'Malley & A. Weidemann, eds., *Indonesian economic history in the Dutch colonial era.* New Haven: Yale University Press, 1990, 90–110.
Zed, M., *Kepialangan, politik dan revolusi; Palembang, 1900–1950.* Ph.D. thesis, Amsterdam: Vrije Universiteit, 1991.