Accelerations in Java Sea trade. Foreign and domestic trade and shipping in late colonial Indonesia, 1870-1940.

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Jeroen Touwen
Leiden University

DRAFT

In the past decade, the relationship between trade and economic development in the Indonesian archipelago has often been subject of study (e.g. Booth 1990, Lindblad 1994, Thee 1989). Indonesian exports formed a high percentage of GDP: they reached almost 30% in 1925. This percentage fell during the Depression but rose again to about 25% in 1937 (Booth 1998: 204). Ever since economists and economic historians started analysing the effects of trade on growth, advantages and disadvantages of export expansion have been analysed. Views have shifted from the classical paradigms of comparative advantage, via the critical politically-oriented dependency theories to the more recent acknowledgement of the coexistence of economic gains and institutional weaknesses or risks that accompany globalising trade-flows. The impact of trade on economic development has been studied for the national economy and for specific sectors of the economy (e.g. Bulbeck et al. 1998; Lindblad 1988b, 1989). Time series of the trade in various key commodities have been collected and the trade flows have been analysed by origin and destination for specific regions (e.g. Clemens et al. 1992; Korthals Altes 1991). Several studies in trade and economic development in late colonial Indonesia concluded that the distinction between the European and the indigenous sectors of the economy was useful or even essential. The analysis of economic dualism brought to light the differences in growth effects, marginal profits, entrepreneurial strategies, and investment strategies (e.g. Lindblad 1988a; Touwen 2001a). In short, the Asian sector of the economy was dynamic and quick to cash in on new opportunities but often suffered from a short-term perspective and unfavourable institutions such as poor credit facilities. The Chinese trading network facilitated the expansion of export trade but also forced many producers to continue their output at unfavourable prices due to their debts to creditors.

This contribution will concentrate on traded *volumes* in late colonial Indonesia. I will temporarily disregard the emerging national economy and the macroeconomic perspective, and compare five individual ports in the dynamic trading region of the Java Sea (Batavia, Surabaya, Palembang, Banjarmasin, Macassar). Moreover, I will only concentrate on these ports without much attention for the specific provenance and destination of traded commodities. The aim is to examine the role of each port in the trading economy and observe when the accelerations in trade took place. After comparing arrivals and departures in each port, both for international and coastal shipping, I will attempt to relate the expansion of the shipping volumes to the growth of foreign trade. Finally, I will examine the imports of machinery and tex-

tiles, which can be viewed as investment and consumer expenditures resulting from earnings by trading activities.

Aggregate volumes of shipped cargo as a 'black box'

By focusing on volumes we reduce the attention for price changes, which naturally influences the representation of trade in terms of *value* (when trade flows are drawn up in current prices). The assumption is, of course, that price changes will take effect in the composition and volume of exports and imports within a number of years. When the market price of export commodities falls, the income earned by exports may decrease, but this decrease can be offset by deflation, by a simultaneous fall in import prices and food prices, or even by an increase in volume. An analysis in terms of volume focuses on the trading activities of merchants and only in a more indirect manner on the macroeconomic effects of trade, which by definition should be expressed in value. We may assume that, if traders decided to export or import goods, there may have been a comparative advantage in doing so – whatever was traded at whatever price.

The trade and shipping statistics of colonial Indonesia offer good opportunities to study specific provinces or ports. This contribution draws upon the source publication *Shipping and trade in the Java Sea region, 1870-1940* which was published in 2001 as part of the project 'The Java Sea Region in an Age of Transition, ca 1870-1970' (Touwen 2001b). The database which was constructed contains data on the twelve major ports around the Java Sea – six located on the northern coast of Java, six located in the Outer Islands. It contains data both on shipping (number of shipping movements, the aggregate cargo transported, the types of ships, the nationalities of the ships) and on trade (using a selection of products, including both foreign trade and interregional trade). The twelve ports around the Java Sea constitute a selected sample of all ports scattered along the coastlines of the Java Sea. Within the network of domestic and international trade they display a wide range of characteristics, typical of the diversity of the Indonesian archipelago.

The time series in this data collection can be analysed to compare the volume of overseas and inter-island (coastal) trade. In addition, specific commodities or categories of goods can be traced. The shipping statistics add an extra dimension to the analysis of trade statistics. The period 1870-1940 consists of several sub-periods during which coastal and international trade expanded and contracted, and specific types of exports and imports dominated trade. Also, regional differences within the Indonesian archipelago can be outlined, in types of trade, in dominant nationalities of ships, in local growth rates, and so on.[1]

The analysis of shipping statistics turns out to display specific characteristics of the economic development in individual ports, even though the shipping data do not contain information on types and prices of goods traded. In a way, the shipping data provide a view on input and output of a 'black box' without showing the inside of the box. But we may safely assume that traders would not put cargo into a black box if there was no gain to be made.

[1] The data are distributed through the website of the Netherlands Historical Data Archive (at NIWI): http://www.niwi.knaw.nl/ or can be obtained directly from the author.

Colonial statistics on shipping and trade

The shipping and trade statistics of the Netherlands Indies were compiled by the 'Centraal Kantoor voor de Statistiek' (CKS, Central Bureau of Statistics).[2] The trade statistics were expressed in current prices, but to analyse the trade flows in real terms, the aggregated values can be deflated using a price index figure (Korthals Altes 1991:12; Touwen 1997:298; Ark 1988; Dick et al. 2002: 123-126, 148). Exports in real terms for late colonial Indonesia show a slightly downward trend since 1913 (Appendix, Figure 1).

The data on shipping provide a complementing way to examine trade flows in real terms. In the shipping statistics, the net cargo volumes are listed of the annual number of ships arriving and departing from each port. Small ships, such as river vessels, fishing boats and ships with a gross capacity of less than 10 m3 were not listed in the shipping statistics. The extra burden (or *ballast*) taken aboard is also listed in the source, but in a separate column. Passengers and firearms for military use were not included.

Before 1912, the coastal shipping statistics concerned interisland or interregional traffic (that is, between the different provinces), added to the data on the steamship network, of which only ports of first embarkation and final destinations were stated. From 1912, shipping movements within the provinces were included in the coastal shipping statistics, as well as the ports of call en route. Thus, all intermediate stops of the packet boats were now registered (Knaap 1989:56). After this improvement in registration, both numbers of ships and total volumes in coastal (domestic) shipping increased enormously (Appendix, Figure 2). The big leap in 1912 should not be taken as a sudden increase in trade, it merely reflects a sudden improvement (or increase) of registration. In international (overseas) shipping, registration also changed in 1912. From 1912, foreign ships were not only registered when they first arrived in the Netherlands Indies, but also every time they called at ports at which they discharged cargo (Knaap 1989:54). This difference, however, did not result in a discontinuity in the data series.

When plotted against a logarithmic scale, it can be observed that growth rates in coastal shipping were slightly larger than in international shipping. Also, the growth rates in the six Outer Islands ports were larger for both international and coastal shipping as compared with the six Javanese ports (Appendix, Figure 2). This demonstrates that the Outer Islands formed an area where a dynamic economic expansion took place. Moreover, international shipping in the Outer Islands seems hardly to have suffered from the depression of the 1930s. Sometimes, contemporary observers write about a decline in trade due to the crisis. However, it has been demonstrated before, that supply was inelastic and that many smallholder export producers tended to increase their output in order to maximize their income during the depression. This is consistent with the continued increase in aggregate shipping data of the six major Outer Island ports (Touwen 2001a:184-5).[3]

As far as coastal shipping (between provinces or within one island or province) is concerned, there is no equivalent of these domestic trade flows in the trade statistics. The interregional trade statistics only list the trade of each province in the Outer Islands with Java, starting

[2] The printed sources are *Jaaroverzicht* 1925-1940; *Statistiek intergewestelijke handel* 1922-1940; *Statistiek handel* 1909-1923; *Statistiek handel, scheepvaart* 1877-1909; *Statistiek handelsbeweging* 1921; *Statistiek scheepvaart* 1910-1939; *Statistisch jaaroverzicht* 1929-40.

[3] It is interesting to note that Dick concludes from the KPM cargo figures that 'there was little growth in tonnage of the interisland trade either during the 1920s or over the entire period to 1937' (Dick 1990:307) (cf. Appendix, Figures 1 and 2).

in 1917, as well as the sum of exports to all other Outer Islands (under one aggregate heading). Therefore, in the analysis of the domestic economy and the level of economic integration, coastal shipping provides new insights.

For example, Palembang in 1927 had total interregional exports to Java of about 18 million guilders, total imports from Java of 15 million guilders and total exports to other Outer Islands of 7 million guilders. Foreign exports amounted to more than 99 million guilders, so that interregional exports added up to roughly 20% of total exports. Likewise, interregional imports from Java added up to 30% of total imports (which included 35 million guilders of foreign imports). By analysing the shipping volumes of the port Palembang, we find that most of the foreign exports left Palembang through coastal shipping (for example KPM ships with domestic destination). Of all arriving ships in 1927, 83% of the aggregated shipping volume was coastal (domestic) shipping. In turn, of all departing ships, 79% had domestic destinations. (In 1925, these percentages were 89% and 83%.) Thus, some ships arriving from elsewhere in the archipelago (domestic arrivals) must have left for overseas destination (overseas departures).

Since the percentage of coastal trade is much higher than the 20% interregional trade (although it should be kept in mind that the latter is in value terms), coastal shipping may have included a certain amount of foreign export trade which had to be transhipped somewhere along the way. Also, coastal trade may have concerned cheaper goods, for example coal, timber, or foodstuffs traded on the indigenous market.

Nevertheless, the percentage of coastal shipping gives an impression of the domestic shipping infrastructure. Indonesian ports were no 'export enclave economies' where a small number of large ocean-going vessels took away all commodities and where the local spin-off was tiny. On the contrary, the late colonial Indonesian export economy was based upon a large fleet of smaller and larger ships, serving the various smaller ports and shipping goods to the large trading centres (such as Batavia and Macassar). During the Depression, these trading activities did not dwindle as would happen in export economies that were entirely dependent on foreign trade, vulnerable to a slump in the world market. Of course, many traders suffered a loss of income. But trade did not come to a standstill. In several Outer Islands ports trading activities expanded almost continuously during the 1930s.

Departures versus arrivals

Until 1929, both arrivals and departures were registered. In 1930, because of budgetary cuts, the CKS decided only to register inward-bound (arriving) ships in the statistics, assuming that numbers of incoming and outgoing ships would match, at least theoretically. Therefore, from 1930 until 1938, no statistics on departures in shipping are available. The official explanation given by the CKS was that, because of the improved methods of registration, the statistics were now more precise so that numbers of arrivals and departures were identical (Mansvelt 1937: xiv). By judging the preceding years, there is little reason to believe that this was exactly the case. Aggregate arrivals and aggregate departures for the twelve selected ports do indeed show only a slight divergence, particularly in coastal shipping where the two lines almost entirely match. Yet when analysed by individual port, the difference between arrivals and departures becomes significantly larger. This may be explained by the fact that some ships arrived from overseas but continued their journey for coastal destinations elsewhere in the archipelago. Likewise, small steamships or *prahu* active in coastal trade may occasionally have set off for international destinations nearby, such as Singapore. In addition, of course, old ships may have been discarded

whereas new ships were put in service. This may explain the difference between arrivals and departures within each aggregate category in the data.

More essential, of course, in this regard is the fact that sometimes a ship would arrive from foreign provenance and continue its journey with a domestic (coastal) destination. By comparing the coastal arrivals and departures and overseas arrivals and departures by port, one can get an impression of the 'overseas surplus' and the 'coastal surplus' on the balance of incoming and outgoing ships. Thus, Batavia and Surabaya had an import surplus in overseas shipping and an export surplus in coastal shipping, indicating that on balance, goods (a larger aggregate volume of net shipped capacity) came into Batavia from overseas origin and were sent to domestic destinations. Batavia and Surabaya served the domestic economy with imports. On the other hand, Palembang, and Banjarmasin were typical 'export earners', which had more outgoing than incoming overseas shipping and more incoming than outgoing coastal shipping. In turn, Macassar, in its role of trading centre of the eastern archipelago, resembled Surabaya and Batavia in having a coastal export surplus and an overseas import surplus.

This imbalance between arrivals and departures is not surprising when one realizes that in most Outer Islands exports were much larger than imports (and that exports also preceded imports) (Clemens et al 1992: 45, Touwen 2001a: 43). Of course, CKS officials could not be serious when they stated in 1929 that the numbers of incoming and departing ships would be equal and that therefore registration of departing ships was not necessary anymore. However, the trade statistics were published by the same CKS as the shipping statistics, so anyone who wanted to find out more about export trade could look into the trade statistics (which, by the way, were also subject to budget cuts in 1930-1934).

As I pointed out, focusing on the shipping movements has a merit of its own since it provides us with a comparative view on economic activity in volume terms, not bothered by price fluctuations. In late colonial Indonesia, the customs officials in each port had quite a systematic view on all incoming and outgoing trade. However, undeniably, some trade escaped the eye of the official, and it can well be defended that the informal sector expanded during the Depression. Barter trade became more important since many Indonesians could cultivate some food crops but the market price was hardly worth harvesting cash crops, let alone its transportation to the port. My guess is that on the whole, during the depression many trading activities took place with very little money value involved and a small margin of profits, still generating considerable cargo volumes. This may be one of the explanations for the continued shipping activities during the Depression.

A complicating factor in disaggregating overseas and coastal trade flows (interregional and foreign trade) was the fact that export trade was sometimes carried out using a system named 'through bills of lading'. In this system one price was paid for the transport to overseas destination. The domestic carrier then took care of transhipment onto an ocean steamer at one of the intermediate ports. These exports were registered as foreign exports but left the port by coastal ships. However, not all goods meant for foreign destination were exported using such a system. For example, Chinese intermediary traders would sell their export goods to European trading houses at the larger ports, thereby converting coastal trade into overseas trade (e.g. Colombijn 1994: 79-84). These different types of trade make it difficult to evaluate the differences between coastal and overseas shipping between ports.

Batavia, Surabaya, Palembang, Banjarmasin, Macassar

In order to compare growth rates of shipping and trade, I selected five ports for further analysis: Batavia, Surabaya, Palembang, Banjarmasin, Macassar. Batavia and Surabaya, the two largest ports of Indonesia, rivalled each other as the largest Indonesian trading centres. In terms of internationally shipped volumes, Batavia was larger than Surabaya, but in coastal (domestic) shipping the two ports were of roughly equal importance since the 1880s (and surpassed by Semerang) (Touwen 2001b: 25-35). Exports from the port of Batavia, Tanjung Priok, consisted not only of West Javanese agricultural products, but also of re-exports of various raw materials from the Outer Islands, for example tin from Bangka, coffee from Palembang, and crude oil from Sumatra and Kalimantan (Clemens et al. 1992:23). In addition, Tanjung Priok served as a major distribution centre for imports of industrial and consumer goods of international origin.

Surabaya was the largest port for sugar exports (followed by Semarang), also surpassing Batavia in the exports of coffee (Touwen 2001b: 121). Most rubber exported from Java was also shipped from Surabaya, but compared to rubber exports from the Outer Islands (notably from Sumatra and Kalimantan) this was relatively little. Surabaya imported larger amounts of textiles, rice, and machines than did Batavia. In the case of rice, this may be explained by the productivity of Krawang, which supplied Priangan and the hinterland of Batavia with rice. The high percentages of Surabaya in total exports fell somewhat in the 1930s, following the collapse of the sugar industry (Clemens et al. 1992:30). Machine imports, for example, decreased from almost 30% in 1920/25 to 22% in 1930/35. It should be realized that these are percentage shares in total imports, which declined throughout the entire colony.

Palembang, Banjarmasin, Macassar were the major ports in the Outer Islands, next to Belawan in East Sumatra and not considering the export centres of oil production (Pangkalan Brandan, Balikpapan, Pulau Sambu) which had a very specific role in the export economy. Palembang had been an important trading centre in southern Sumatra for centuries. Palembang's exports consisted of a variety of agricultural products as well as oil and coal. Rubber and coffee, originating both from smallholders and from European estates, held prominent positions in the local economy. Palembang was an important producer of these commodities, and counted among the provinces with the largest export volumes in the Outer Islands (Touwen 2001a: 73-75). As a proportion of the Outer Islands, exports from Palembang were not impressive because of the large number of smaller ports in Sumatra and the competition from the large rubber estates in East Sumatra. In general, Outer Islands exports of oil, rubber, and tobacco, plus imports of rice were the largest in East Sumatra, particularly in Belawan. However, comparing Palembang with Banjarmasin and Macassar, the oil exports stand out and also explain why Palembang's overseas exports were continuously large. Also the share of its machinery imports was remarkably high compared with the other ports (see below).

As in Palembang, oil and rubber formed the major impetus for the expansion of Banjarmasin. The port of Banjarmasin was originally located on the Martapura River, despite its many bends, and not on the Barito River, the larger river into which the Martapura flows (Lindblad 1988a:163). In the first decades of the twentieth century, the Banjarmasin port was not accessible for larger ships. By contrast, the natural harbour of Balikpapan Bay, the large oil port on the east coast of Kalimantan, enjoyed a more favourable position. Another competing port in Southeast Kalimantan was Samarinda, about 80 km to the north of Balikpapan.

Moving further eastwards in the archipelago, port infrastructure tended to become more primitive. Nevertheless, Macassar developed into the foremost trading centre in the eastern archipelago and many goods from Batavia were first shipped to this port before being distributed

to inland South Sulawesi, Maluku, or New Guinea. Likewise, copra and other export commodities were often shipped to Macassar before being transported to Java or an international destination. Coastal traffic in Macassar was even more voluminous than in Palembang (Touwen 2001b: 34-35). Macassar alone exported up to 56% (in 1919) of all copra from the Outer Islands.

Coal and Singapore

A special commodity in the interisland shipping is coal, which seemed to have been quite dominant in interregional trade and served to facilitate a lot of further economic expansion (Dick 1990:309). The shipping of coal may account for part of the impressive volumes of coastal shipping, but it is unlikely that coal alone fuelled the unbridled expansion of shipping which can be observed in several ports. It seems to be an exaggeration to state, as Dick does, that 'in the case of private (non-coal) interisland cargo, there was […] virtual stagnation over the entire period [1920 to 1937].' (Dick 1990:307). The shipping statistics show a very different picture. Also, by examining the proportion of coal exported in value terms, it is unlikely that this would constitute such an important place in interregional exports. The sum of all coal exports to Java of the three coal exporting provinces (Palembang, West Sumatra and Southeast Kalimantan) amounted only to an average of 3.6% of total exported value from the Outer Islands to Java in the period 1927/37.

Average coal exports to Java during 1927/29 (these were among the peak years of coal exports), were 123 million kg from the province Palembang, 217 million kg from West Sumatra and 207 million kg from Southeast Kalimantan. (Foreign exports were of roughly the same order of magnitude; coal exports to other Outer Islands are not in our data set.) The average volume of departing ships with coastal destination from the port of Palembang in 1927/29 was 2,420 thousand m3 and from the port of Banjarmasin 543 thousand m3. Assuming a specific gravity of 1.2 for coal, Palembang's coal exports to Java constituted about 150 thousand m3, whereas coal exports from Southeast Kalimantan added up to about 250 thousand m3. These volumes, exported from the entire province, were still considerably less than the total net volume of coastal departures from the ports Palembang and Banjarmasin – in Palembang only 6 %, in Banjarmasin 46%.

Table 1: Average annual arrivals in Indonesia and Singapore (including both coastal and overseas shipping)

	Numbers of ships			*Net volume*		
	Singapore	Batavia	Palembang	Singapore (1000 tons)	Batavia (1000 m3)	Palembang (1000 m3)
1904/05	5,326	969	669	6,269	2,412	313
1912/13	6,034	4,774	1,035	8,430	8,190	1,061
1928/29	9,737	6,014	1,476	15,138	19,270	3,369

Note: Singapore: Merchant vessels over 50 tons net register (Huff 1994:123). Netherlands Indies: Merchant vessels over 10 m3 gross capacity. The comparison of volumes is distorted by the fact that the Singapore volumes are in tons of 1000 kg, while in the Netherlands Indies shipping statistics volumes are listed in cubic metres (a cubic metre of water weighs 1000 kg but most cargo has a different specific gravity). The volume data should therefore be regarded in combination with the numbers and sizes of ships (Touwen 2001b:20; Huff 1994:xix).

Specific mention should be made of the importance of the nearby trading centre of Singapore. The role of Singapore as a trading centre had steadily risen from its establishment in 1819 to the 1880s, and neither the establishment by the Netherlands Indies government of

freeports such as Riau (1929), Pontianak (1834) and Macassar (1847), nor its tariff policy, did revert the tide. However, the KPM, established in 1888, systematically expanded its regular shipping routes throughout the archipelago and by doing so served both imperialism and economic integration. This did reduce the role of Singapore, particularly in the eastern part of the Indonesian archipelago (Dick 1990:300-1; A Campo 1992). Singapore remained very important as a trading centre for Sumatra and West Kalimantan, where the rubber trade focused on Singapore and import flows came in return. After about 1920, hardly any ships from Singapore went further than Banjarmasin or Surabaya, leaving the eastern archipelago to the Dutch and Indonesian vessels (Dick 1990:302). In 1904/05, Singapore alone seems to have been called upon by a considerably higher number of ships than Batavia, which is not surprising, but may also have been due to different systems of (coastal) registration. In 1912/13 and 1928/29 the numbers of ships in Batavia rose enormously due to the improved counting of coastal shipping. As a consequence, the comparison with Singapore seems to be more equal but it is not clear from these data whether this was due to better registration or economic catching up (Table 1).

In terms of tonnage, the Koninklijke Paketvaart Maatschappij (KPM), which had a virtual monopoly in steam shipping in the archipelago, transported roughly 43% of all goods in coastal trading in 1938 (Knaap 1989:22-4, Campo 1992:215-20, 526-7). The rest of the enormous amount of coastal shipping consisted of a broad variety of small and medium-sized ships owned by traders of all population groups (Chinese, Dutch, Buginese, Banjarese, etc).

Accelerations compared

Growth rates in shipped volumes were at times impressive and much larger than average growth of national income. For example, in the period 1900-1930 the growth of real GDP is estimated to have been 2.7% per annum (Van der Eng 1992). The growth of aggregate volumes shipped (disregarding the money value of these shipments) grew much more quickly during this period. For example, the total volume of international arrivals in Batavia grew with an average 4.6% in the period 1900-1930, in Surabaya 5.1%. In Macassar the average growth rate per annum in 1900-1930 was 9.5% and in Palembang 10.6%. Coastal shipping grew even more quickly, but these growth rates are inflated by the 1912 improvement of registration (Batavia 11.7%, Surabaya 11.4 %, Macassar 7.9 % and Palembang 12.0 %). For the period 1912-1930, the average growth rates per annum of coastal shipping were only almost identical with the growth rates in overseas shipping for the Javanese ports and slightly lower in Macassar and Palembang (Batavia 5.2%, Surabaya 5.6%, Macassar 5.3% and Palembang 7.1%).

The time series of overseas (international) and coastal (domestic) shipping as plotted in a graph together with foreign exports, both in current prices and in real terms, shows that export expansion did not account for the growth in shipping. In real terms, the trend of export earnings is downward, particularly from 1920 onward (Appendix, Figure 1) (Dick et al. 2002: 124, 148). The shipping activities therefore also reflect a component of autonomous domestic economic growth.

In order to get a better view on the increase and acceleration in trade in various ports and provinces, I have combined the data on shipping and several indicators on trade (Appen-

dix, Figures 3-7).[4] Thus, we can observe whether the unbridled expansion of shipping may have had a counterpart in synchronous expansion of exports or imports, in current (nominal) or in real terms. Surveying the respective growth rates by computing index numbers, the differences between the ports are substantial. Batavia and Surabaya were obviously hit by the Depression much more than the Outer Islands ports (see also Touwen 2000). In Batavia, the total foreign export value started to decrease in 1927. In Surabaya, foreign exports experienced a remarkable peak in the post-war boom of 1919-1920. Foreign exports in real terms expressed as index figures in the same graph show resemblance with the indexed volumes of overseas shipping – in fact, mirroring the sugar exports. Coastal shipping, by contrast, performed remarkably well in the 1930s, profiting from the protectionist measures after 1933 (the Crisis Invoer Ordonnantie).

Comparing the three ports in the Outer Islands, Banjarmasin was less dynamic than Macassar and Palembang. Apart from the lower absolute levels of the trade in Banjarmasin, we observe no spectacular growth in export earnings and shipped volumes either (Figure 6). During the Depression, international came to a virtual stop, even though in real terms, foreign exports expanded and, significantly, consumer imports of textiles was also fairly stable. Obviously Banjarmasin did not participate very actively in foreign trade but held a healthy position in domestic trade.

By contrast, the steep expansion of foreign shipping in Palembang can be explained be corresponding growth rates in foreign exports (in real terms). As mentioned before, the presence of oil exports from Palembang benefited the performance of the port, whereas in Southeast Kalimantan the oil exports were even higher, but did not pass the port of Banjarmasin – oil was shipped straight from Balikpapan.

In Macassar, finally, the volume of international shipping increased manifold since 1913, after having suffered a decline during the First World War. The volume of coastal shipping, which was larger in absolute terms, did not expand nearly as much as foreign shipping. A possible explanation is that in earlier years, export goods were transported to Surabaya by coastal ships, while overseas shipping increased when port facilities were improved and transhipment could increasingly be avoided. Thus a relatively modest (but steady) expansion of export trade led to a much larger expansion of the aggregate capacity of international ships in Macassar.

The trading characteristics of each port vary widely. The shipped volumes were highest in the Javanese ports, but these were also hit rather hard by the economic slump during the 1930s (in Surabaya, the collapse of the sugar industry is reflected in the foreign exports but also in the overseas shipping volumes). The shipped volumes in Macassar and Palembang were less vulnerable to the world economic situation and were propelled by an increasing volume of exports.

Textiles and machines

When shipping activities expanded during times of diminished export earnings, the domestic economy must have fared relatively well or the level of economic integration was rising to such an extent that internal comparative advantages within the national economy accounted for the

[4] To account for the differences between arrivals and departures, it would have been better to concentrate on departing ships. However, since these data are only available until 1929, I chose to plot the arrivals. The difference between total arrivals and total departures is relatively small, but it should be kept in mind that there could have been a coastal surplus or an overseas surplus, as pointed out above.

expansion of shipping activities. For this reason I included Palembang and Macassar in the selection, since these were local trading centres in the Outer Islands. Remarkably, Palembang displays more increase in coastal shipping than Macassar. Taking another angle, one may analyse indicators of consumer spending and investments, to examine whether local income rose as a consequence of domestic economic activity. I compiled statistics on foreign imports of textiles and machinery (in current prices) to trace such expenditure (Figure 8 and 9).

The expenditure on machinery imports was much smaller than on textiles, but displayed approximately corresponding dynamics. While in Batavia, the machinery imports fluctuated between 5% and 10% of the value of textile imports, in Palembang this was sometimes up to 50%. All five ports show peaks of textile and machinery imports in the early 1920s, and a severe reduction (in value terms) after 1930. Notably, Surabaya imported up to twice as much in these categories as Batavia – roughly speaking, Batavia imported about 20-25% of all Indonesian textile imports and Surabaya about 30-35 % (Touwen 2001b: 123-125). For a comparison between ports of the entire category of machine imports, one should ideally survey all ports including the oil production centres. In the case of textile imports, which reflect consumer spending, it can be observed that Macassar and Palembang shared a roughly equivalent proportion of the national textile imports of about 3-5 % – very little compared with the Javanese ports. Notwithstanding the fact that these data are in current values, it is clear from Figures 8 and 9 that machinery imports suffered more from the Depression than textile imports. Industrialisation was nipped in the bud, whereas enough income was earned in more traditional sectors to continue the imports of textiles (presenting imports in real terms would make this more obvious).

Conclusion

This paper focused on the comparison of trade statistics and shipping statistics of specific Indonesian ports. Analysing shipping volumes, we get an impression of the trading activity going on in these ports. In the late colonial period strong fluctuations occurred in price levels. Particularly the deflation during the 1930s, which was a result of the world depression and the strong guilder, may distort our view of economic activity. Export revenues in current prices dwindled, but exports in real terms did not do so badly in several ports and provinces (this is equivalent to more purchasing power per guilder earned, as a result of cheaper consumer prices). The net capacities exported or imported as listed by the shipping statistics provide us with another view on economic activity in the ports, in volume terms.

In general, coastal or domestic trade has been either neglected or underestimated in the literature. For the national economy, it does not really matter whether the booming raw materials exports were shipped directly to overseas destinations or through a range of coastal intermediary stops, being transhipped or not, being billed as ‘through trade’ or not. However, when one focuses on the regional differences in the late colonial economy, by examining trading centres and trading zones, one should acknowledge that a large proportion of coastal shipping indirectly served the overseas market. Indonesia’s export economy was not an ‘export enclave’ economy, where only export industries were present. There was an increasing economic integration in the archipelago, a network that was in part constructed by the colonizer (through the regular KPM shipping lines), and in part had developed autonomously (indicated by the large numbers of small indigenous ships).

The trading profiles of each port vary widely, some ports being more active in the domestic trading network, others playing a distributing role in imports or serving the export trade. The

shipped volumes were highest in the Javanese ports, but also reflect the economic slump during the 1930s. The world economic situation disturbed the shipped volumes in Macassar and Palembang only to a lesser extent.

The shipping statistics facilitate the analysis of the volume of coastal and overseas trade, but do not allow fro a breakdown into commodities traded. Taking the point of view of individual ports, it is useful to include the shipping statistics in the analysis because shipping activities steadily expanded, or remained remarkably constant during periods of economic recession. Their stable character indicated that a spin-off of trade existed that was not wiped out by a recession and facilitated a quick recovery. Moreover, they reflect a part of autonomous domestic economic growth which in value terms may have been less impressive, but in volume terms seems to have been quite considerable. Here we find the roots of integration into a national economy and a late colonial state.

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APPENDIX

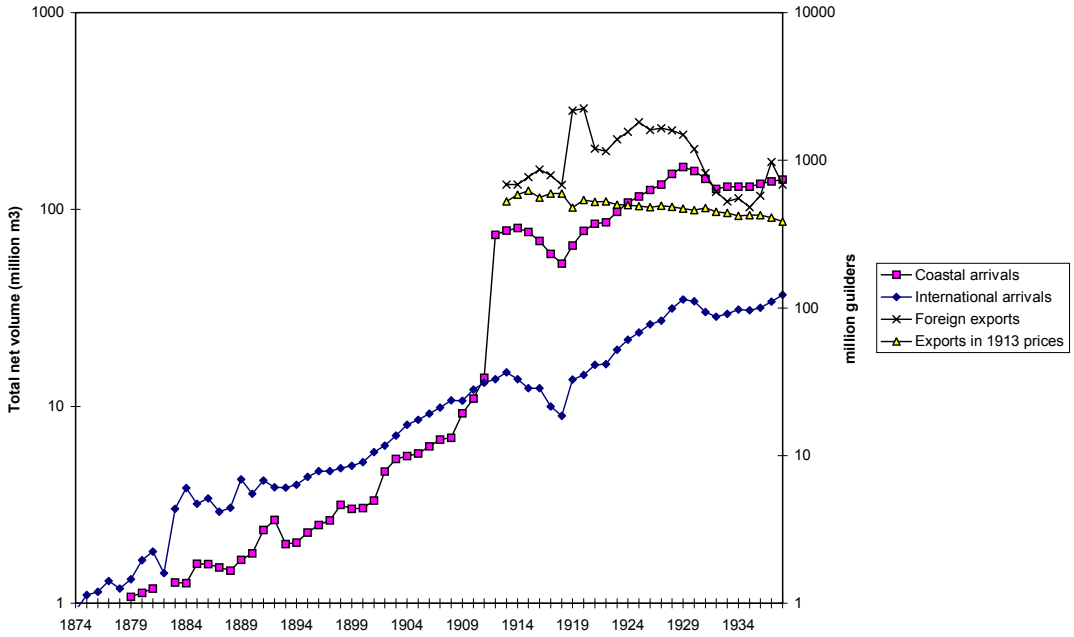

Figure 1: Total capacity of overseas and coastal arrivals in the Netherlands Indies, 1874-1939 (million m3, logarithmic scale).

Note: Foreign exports are plotted against the second y-axis.

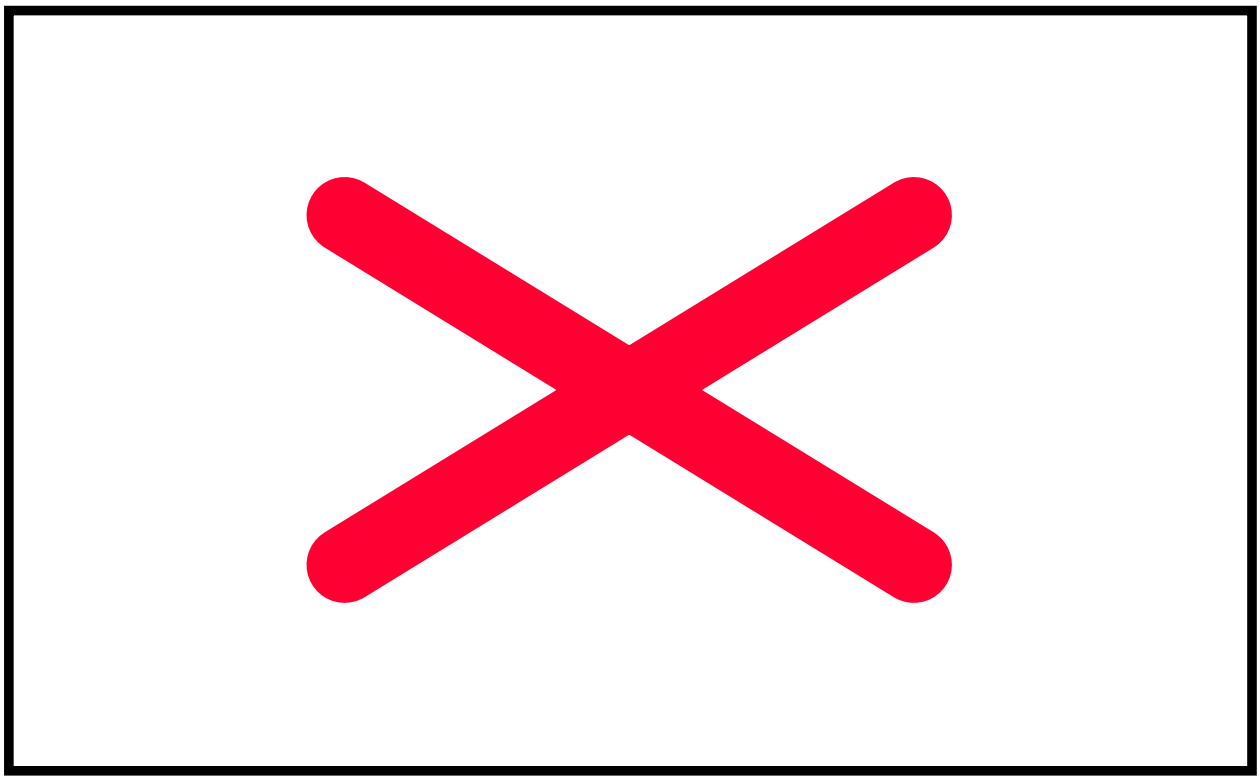

Figure 2: International and coastal arrivals in the twelve selected ports in Java and the Outer Islands, 1879-1938 (semi-logarithmic scale) (1000 m3).

Note: The data in this figure concern only the Javanese ports Batavia, Cirebon, Semarang, Surabaya, Panarukan, Banyuwangi and the Outer Islands ports Palembang, Mentok, Pontianak, Banjarmasin, Macassar, Singaraja.

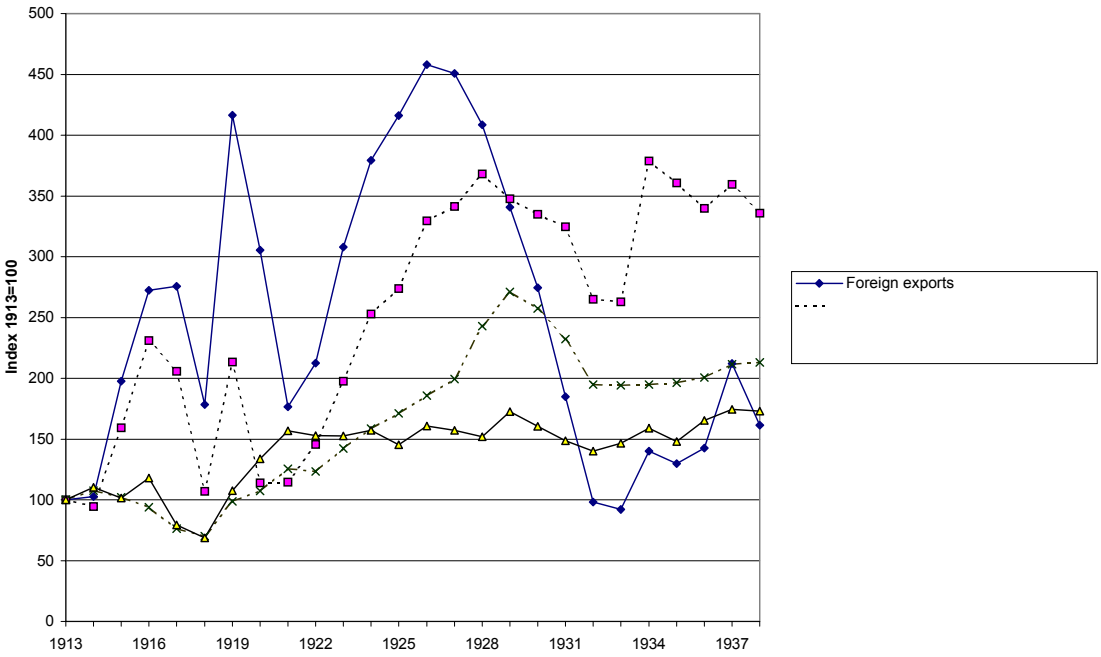

Figure 3: Exports from Batavia and total volume of ships arriving in Batavia compared, 1913-1938 (index 1913=100).

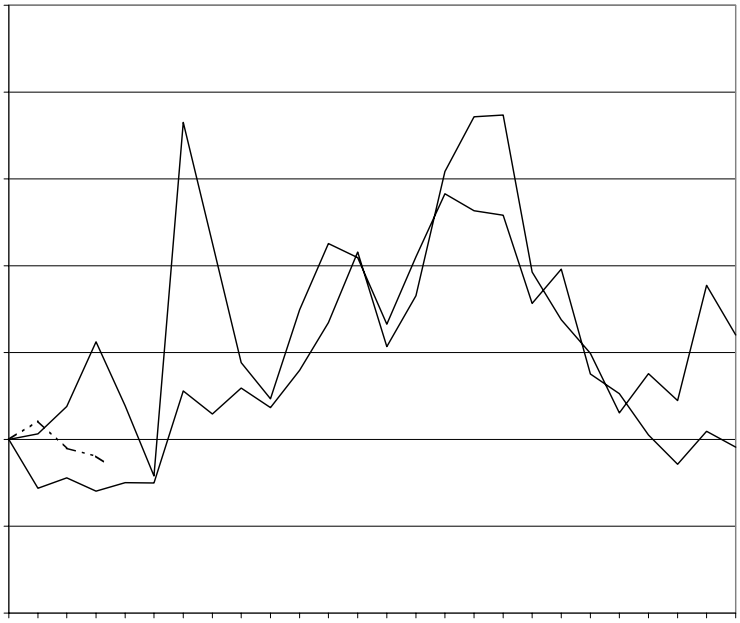

Figure 4: Exports from Surabaya and total volume of ships arriving in Surabaya compared, 1913-1938 (index 1913=100).

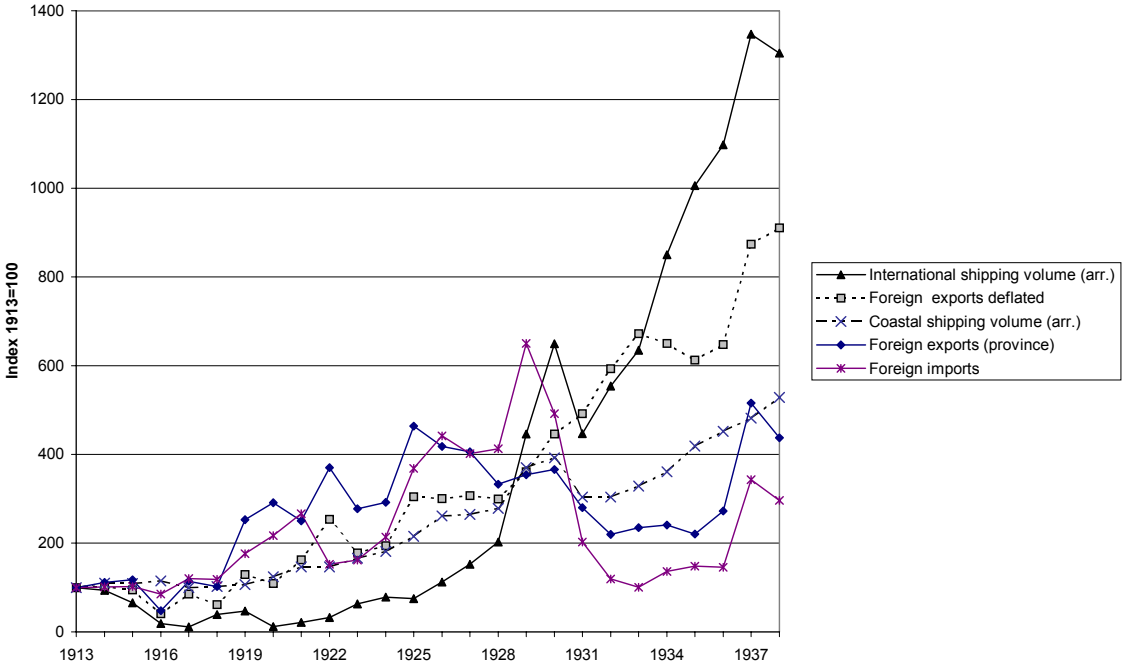

Figure 5: Exports from Palembang, imports into Palembang and total volume of ships arriving in Palembang compared, 1913-1938 (index 1913=100).

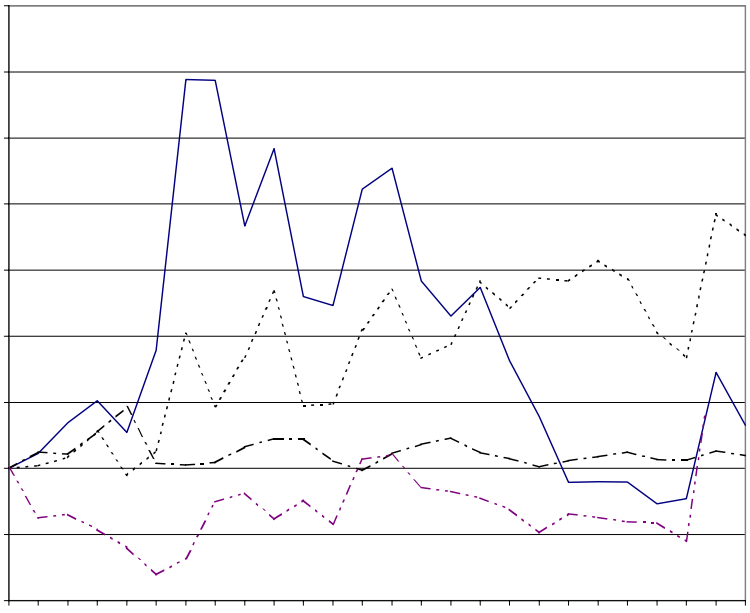

Figure 6: Exports from Banjarmasin, imports into Banjarmasin and total volume of ships arriving in Banjarmasin compared, 1913-1938 (index 1913=100).

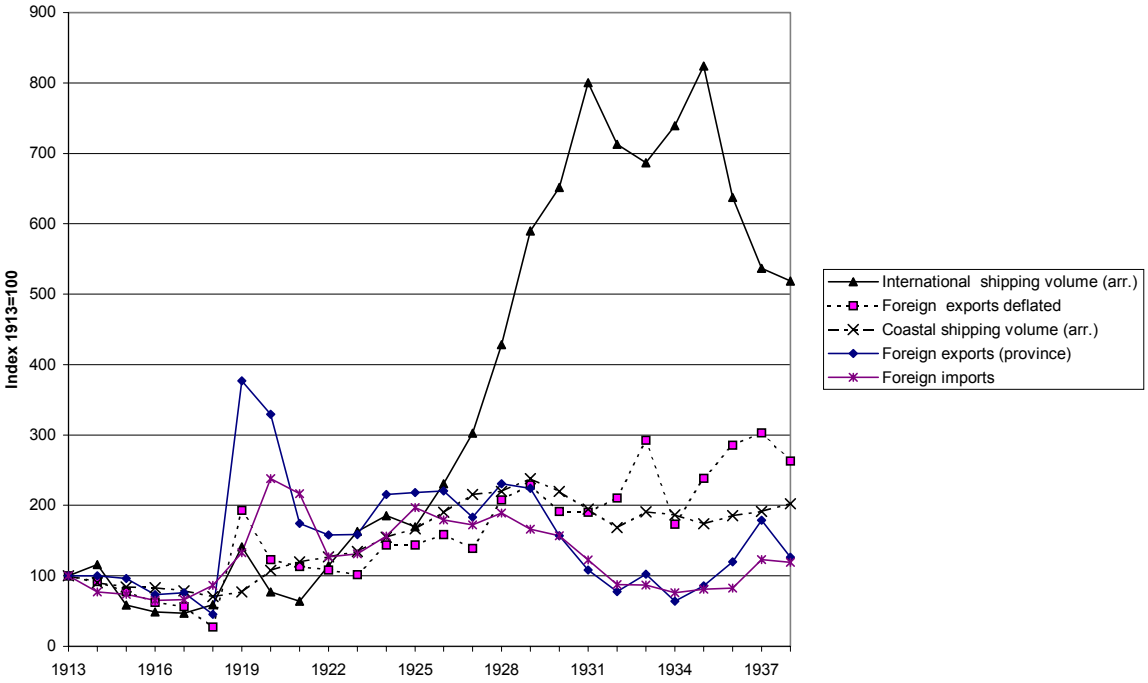

Figure 7: Exports from Macassar, imports into Macassar and total volume of ships arriving in Macassar compared, 1913-1938 (index 1913=100).

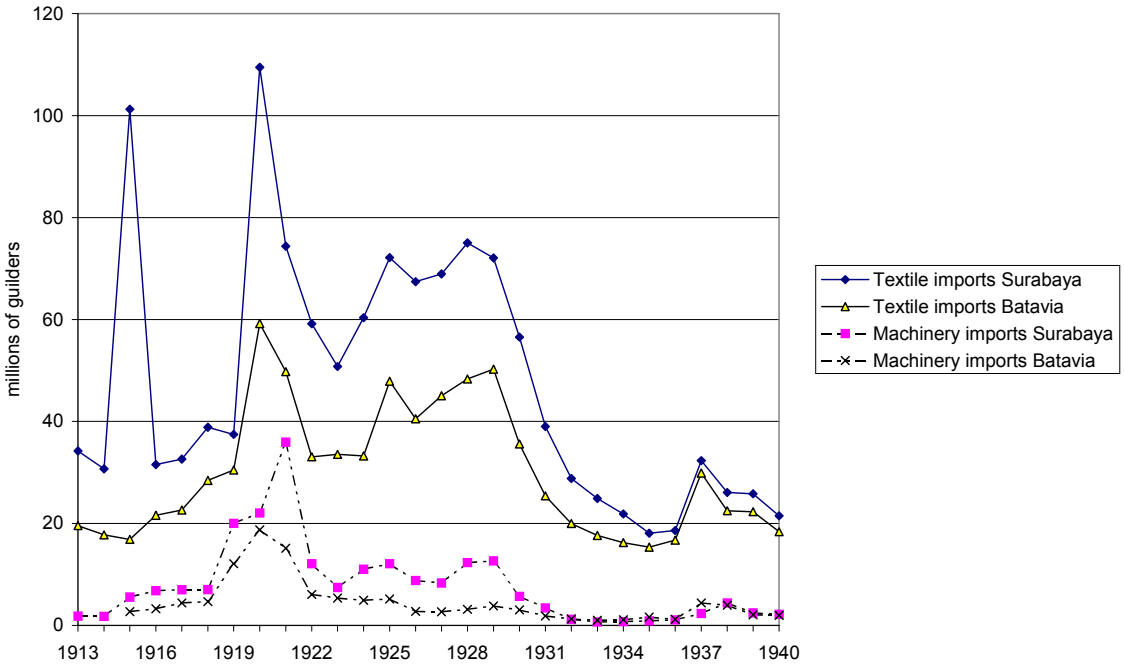

Figure 8: Textile and machinery imports into Batavia and Surabaya, 1913-1940 (millions of guilders).

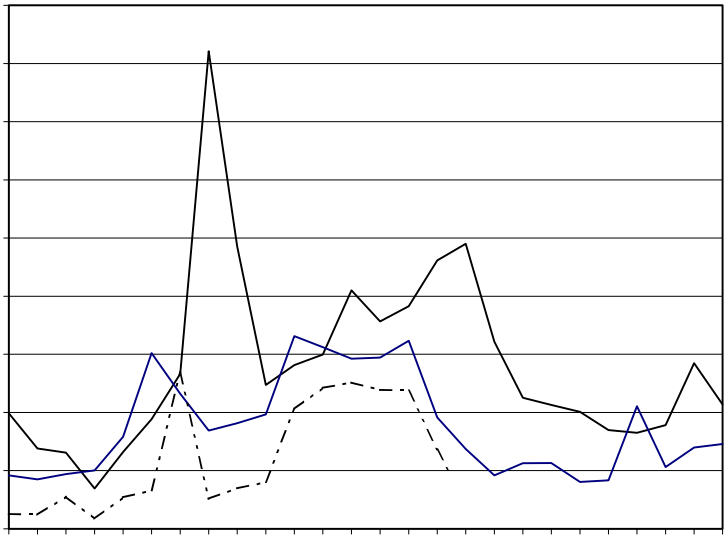

Figure 9: Textile and machinery imports into Palembang and Macassar, 1913-1940 (millions of guilders).