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Shipping and Trade in Java, c. *1775: A Quantitative Analysis*

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Since the 1930s shipping and trade in Southeast Asia during the early modern period have attracted much attention from historians. The pioneer in this field was the Dutch scholar, J. C. van Leur, whose original work was translated into English during the 1950s (Van Leur 1955). Van Leur's interest was heavily weighted toward what he labelled 'old Asian trade,' and as such he was one of the first who called for an Asia-centric perspective. He drew attention to the fact that the maritime sector of Southeast Asia had its own dynamics. In the 1960s, M. A. P. Meilink-Roelofsz carried on the work of analyzing the indigenous maritime sector as well as the effects of the Portuguese and Dutch onslaughts on it up to the 1630s (Meilink-Roelofsz 1962). Limiting our perspective to the Malayo-Indonesian Archipelago, in the last decade several regional case studies have further enhanced our knowledge of the subject, such as those on Sulu (Warren 1981), Batavia (Blussé 1986), Amboina (Knaap 1987), Central and East Java (Nagtegaal 1988), and the Straits of Malacca (Vos 1993). Furthermore, Anthony Reid has recently tried to create a synthesis for the entire region of Southeast Asia up to 1680 (Reid 1993).

Besides the scholars who focus on the indigenous role in Southeast Asian trade and shipping, there are also historians studying European colonial activities in this field. Very useful, indeed indispensable, work has been done in this respect by Glamann (1958), Magelhaes-Godinho (1969), and, recently, by Gaastra (1989). These Euro-centric studies are able to draw on fairly rich archival sources, in particular on the correspondence and financial administration of the Portuguese Estado da India and the Dutch Vereenigde Oost-Indische Compagnie, hereafter abbreviated to VOC. Unfortunately, their Asia-centric colleagues usually have to make do with sources which are less profuse in information. This is especially true of the sources on the sixteenth and early seventeenth centuries. For this

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period, our knowledge relies heavily on a rather limited set of documents. Documents, moreover, which tend to give only general observations for a limited number of years. Quantifications on the basis of these observations are often problematic. In the course of the seventeenth century, the information on indigenous shipping and trade for those areas which were occupied by the Europeans seems more promising. The most well-known example is the monthly summary of incoming and outgoing non-VOC vessels kept in the Dagh-register of Batavia, which so far have been published up to 1682. These summaries have recently been the subject of thorough analysis by G. Rantroado (1988).

The Batavian monthly summaries are taken from the day-to-day records of the *syahbandar*, i.e. the harbormasters. Unfortunately, the records themselves have been lost. However, it seems Batavia was not the only place where such records were kept. A short survey, inspired by Heather Sutherland and carried out by the present author in 1986, brought to light that there were still several of these records hidden in the archives. However, it was also clear that the analysis and interpretation of these records would be quite difficult and time-consuming. On the basis of the original survey, it was decided to give priority to the analysis of two areas: Macassar and Java. Eighteenth-century Macassar was one of the two or three ports for which a day-to-day registration was still available for a relatively long period, more than 50 years in fact. The north coast of Java was not chosen because a day-to-day registration was available over a long period of time, as in fact the reverse was true, sources for this area only being still extant for a few years during the 1760s and 1770s. The choice of Java was mainly inspired by the fact that it was the only area for which there were sources for more than just one port. Hence, it would be possible to study the interaction, specialization, and hierarchy between a number of ports located close together. The results of the Java research are presented in a recently published monograph (Knaap 1996). Some of the findings will be discussed in this article.

Sources and Analysis

The Java research is basically a statistical, computerized, in-depth analysis of the so-called VOC harbormasters' specifications for the period between September 1774 and September 1777. Most of the

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ports, in fact twelve out of fourteen, for which such sources are available were located in the VOC province of Java's northeast coast. This province consisted of the northern part of Central and East Java, including the island of Madura. The ports concerned are:

Banyuwangi	Pasuruan	Sumenep
Bangkalan	Surabaya	Gresik
Rembang	Juwana	Jepara
Semarang	Pekalongan	Tegal

Besides these twelve, there are harbormasters' specifications for the main ports of two smaller political entities under VOC control in West Java: Cirebon and Banten.

A harbormaster's specification gives information on every individual incoming and outgoing shipmove in the private sector. The VOC's own shipping along the coast is not included. The information generally consists of the following elements:

– The date of arrival or departure
– The port of departure or the port of destination
– The name, ethnicity, and place of residence of the skipper
– The type of vessel and, occasionally, its tonnage
– The number of the crew and, occasionally, their ethnicity
– The armaments carried on board
– The cargo specified according to product and quantity.

Although the information mentioned above was already very copious, more than 20,000 one-way journeys for fourteen ports, it was felt that a true insight into the conditions of private shipping and trade in Java could not be realized for two reasons. The first was that information about the biggest port in Java, i.e. Batavia, was not available. This shortcoming was tackled in the following way. To get an idea about the performance of the private sector in the VOC capital, it was decided to use the monthly summaries of the as yet unpublished Batavia Daghregister. This presented a problem because these summaries were rather imperfect. For instance, one group of private ships which was not registered in the Daghregister were those of the so-called 'foreign Europeans'. Fortunately, there was yet another specific registration on the basis of individual one-way journeys for these English, Portuguese, and Spanish ships available. The second reason which handicapped our insight was that it was absolutely necessary to know what the VOC itself was doing in the field of shipping and trade at that time. After all, the VOC itself was a

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trader. This indispensable reconstruction of the VOC's activities was built up from a number of sources: the source publication on Dutch Asiatic shipping (Bruijn *et al*. 1979–87), the list of incoming and outgoing VOC ships in Batavia, the administration of the Bookkeeper-General in Batavia, and, finally, the correspondence between the headquarters of the VOC in Batavia and its local administrations on Java.

All this produced a great wealth in statistical data, which in itself already has an intrinsic information value. Nevertheless, it must be remembered that there was still one specific category of maritime activity which was not registered: short-distance shipping. Short-distance shipping is used to refer to the shipping inside the home district or region of a port. For instance, in Batavia all ships coming in or heading for nearby Karawang were not registered. The same is true for the contacts of Rembang with Paradesi or those of Semarang with Demak. Moreover, a closer examination of the material revealed that the registrations of several ports had their own shortcomings, resulting in varying degrees of under-registration, in particular as far as incoming traffic was concerned. In the case of the shipping, it was more or less possible to correct the figures of each port for under-registration, but this proved impossible in the case of trade, i.e. the circulation of commodities. Hence, figures about the volume of trade have to be used very carefully. At best they should be seen as a lower limit of trade. In the case of shipping it was possible to arrive at a certain standardization of the data, in particular with reference to tonnage. When dealing with cargo, the standardization of the units of measurement was much more complicated. In the end it proved impossible to find a common standard for the three remaining sub-standards: dry commodities measured by weight, liquid materials measured by volume, and individual piece-goods. Information about prices of products was so scarce that it was impossible to work with the alternative of money values for the cargoes.

Ports and Politics

The ports of Java in the early modern period were very different from what we call a 'port' today. Except for a few jetties, there were no 'harborworks' or 'docks.' A port was actually the mouth of a river and/or an open roadstead. Bigger vessels were obliged to anchor in

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the roadstead and their passengers and cargoes had to be rowed ashore on small barges or tenders. In Java this situation was aggravated by the fact that the coastal zone was an area of shallow waters. In addition to this, it seems that most of the ports under discussion were constantly confronted with problems of the silting up of rivers. The port-cities which lay on this shallow coast were usually clusters of unwalled village-like settlements. Many of these settlements were reserved exclusively for non-Javanese communities of seafarers and traders, such as Chinese, Indians, Malays, Sulawesians, and so forth. Most of the ports had a relatively small population: less than 10,000. In the 1700s Batavia, Semarang, and Surabaya were the only places which had populations of between 10,000 and 30,000. The port-cities were usually the hub of the economy in their region, in which they functioned as an inlet for imports or an outlet for exports for remote hinterlands, to which they were connected by networks of small roads and/or rivers.

In 1619 the VOC conquered Jayakarta and on the ruins founded its own capital: Batavia. From about 1680 onwards the VOC started to expand its grip on the areas along the north coast of Java. By 1750, it had taken over sovereignty from Java's indigenous rulers (Ricklefs 1981:91–4, 101–2). Consequently, our skippers of the 1770s had to contend with two sorts of bureaucrats when they were about to set sail from or to berth at a port: the European harbormaster and the, usually non-European, guardian of the customs. The former was in charge of controlling and of issuing the sea passes or safe conducts as well as the collection of some harbor-dues. He also had to ensure that there were no forbidden products either imported or exported. The latter was the representative of the tax-farmer who had leased the right to collect the customs duties from the VOC. At the time the VOC assumed sovereignty in the area, most of the tax-farms were leased to the Javanese rulers of the regencies, who used to sub-lease them to a local Chinese. However, during the 1770s most of these tax-farms came directly into the hands of a few conglomerates of very wealthy Chinese businessmen from the big ports. One subject which is difficult to elucidate is whether or not individual skippers were the victims of bureaucratic procedures and exhorbitant payments. The general impression is that the nominal tariffs were not excessive, but we do not know to what extent the skippers were liable to 'unofficial' taxation.

One factor which affected activities in the private sector more drastically was the general economic policy of the VOC. In Java, the

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VOC was simultaneously both a state and a wholesale trader. One might say that it was a state-capitalist organization. The principal element in the VOC economic policy was the exclusive reservation of the right to trade in certain products for itself. This was done in order to maximize its profit, in particular where this was derived from Europe-oriented exports. Consequently, the private sector in Java was not allowed to play any role in the transit trade in Moluccan spices. The VOC also held monopolies on imports and exports of certain valuable commodities. A second element of VOC economic policy was that for the convenience of the monopolies the freedom of movement allowed to private maritime traffic was curtailed, leading to a certain restructuring of trade networks. The principal instrument for implementing this policy was restrictive issuing of sea passes. For instance, in most of the fifteen ports under consideration one could only obtain a pass to a destination in Java. There were only four places—Surabaya, Gresik, Semarang, and Cirebon—where one could obtain passes for overseas destinations located roughly between the Straits of Malacca and the island of Sulawesi. If a skipper wanted a pass to sail to a much more distant location, he could only obtain such a pass in Batavia, which brings us to the third element in the VOC's economic policy: the protection of the interests of its capital. As the well-being of Batavia very much depended on its relations with the rest of Java, in particular where its supplies of rice and timber were concerned, the VOC demanded a certain quota of these products from Central and East Java as tribute. Furthermore, the VOC tended to protect Batavia's cane-sugar and arrack industries against competition from other areas in Java.

Vessels and Arms

The basic unit of analysis chosen is the one-way journey of a ship. In the period of our study there appear to have been a great variety of types of ships, which can be classified according to the area or route in which they were supposed to operate. Four categories can be distinguished: global, intra-Asian, interinsular, and local shipping. The latter, i.e. local shipping, did not venture beyond the coastal waters of North Java. Interinsular refers to those journeys which traversed the Java Sea but did not leave the confines of the Malayo-Indonesian Archipelago. Intra-Asian and global shipping are the labels applied

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to Asian connections outside the Archipelago and to connections with Europe, respectively. The main types in these categories were:

Global	*Spiegelschip* (square-stern ship)
Intra-Asian	*Scheepje* (small ship), *Wangkang* (junk)
Interinsular	*Brigantijn* (brigantine), *Chialoup* (shallop), *Gonting*
Local	*Pencalang*, *Cunea*, *Mayang*.

There was a great deal of overlap between these categories in view of the fact that the bigger ships were also used on the shorter haul. The square-stern ships which sailed to Java were all owned by the VOC, their average capacity was about 1,000 tons. The small ships were sailed by English country-traders from India and the junks by Chinese skippers from Fukien Province. Their average size varied from between 200 and 600 tons. The interinsular connections were served by vessels under the command of a multitude of private skippers with various backgrounds. The European-style brigantine and shallop shared these routes with indigenous Southeast Asian types, such as the Javanese *gonting*. The interinsular ships varied in size from between 20 and 200 tons. Whether or not these ships were constructed in European or Southeast Asian style, they were all produced in Java, usually in the area of Rembang, where the greatest teak forest reserves of the island were located. Local shipping contacts were carried out by fairly small vessels varying between 8 and 20 tons. Because the latter had to operate in fairly shallow waters, quite a few flat-bottomed ships were active here, the most common of all being the indigenous Javanese *mayang*, actually a type of fishing boat.

Almost all ships were armed. The biggest vessels, the square-stern ships, carried the heaviest armament: 22 iron cannon, 8 to 10 swivel-guns, and about 40 snaphaunces. Shallops were armed on average with 4 cannon, 1 swivel-gun, and 7 snaphaunces. The *mayang* carried no cannon, but had 1 swivel-gun and 2 snaphaunces on board. It is estimated that the total number of fire-arms on board vessels in the private sector in Java must have amounted to about 5,000 cannon and 20,000 snaphaunces, which is quite astonishing. Although there is evidence that a part of these arms were manufactured locally, it is also known that the inhabitants of the Archipelago bought substantial supplies of fire-arms from English country-traders. The research has also revealed that even the VOC used to sell significant numbers of fire-arms to private persons.

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A glance at the types of arms reveals that the eighteenth-century Southeast Asian skipper had a preference for European-style weapons. The snaphaunce, a flintlock musket, was just such a European introduction, but, as already indicated above, this was not the only evidence of the diffusion of European technology. The sixteenth- and seventeenth-century private skipper had sailed the Southeast Asian trade routes in a *jung*. During the seventeenth century this ship type vanished from the seas and, in the eighteenth century, its role had been taken over by the shallop and, to a lesser extent, by the brigantine. It is still difficult to establish the comparative advantage of the new European-style vessel over its Southeast Asian predecessor. Rigging was certainly an important element and there are indications that stern rudders and the construction of the hull had an impact as well. Finally, it seems as if the European types provided a better ratio of burthen to crew.

Crews and Skippers

The VOC's square-stern ships usually carried a European crew of a little over 100 men on board. The average number of the crew mustered on board vessels active in the intra-Asian networks was about 80, while that in the interinsular category varied between 10 and 40. The types of ships which were exclusively employed for local journeys had crews of between 4 and 10. The ethnicity of the majority of the sailors on the intra-Asian routes was either Indian or Chinese. In the case of the interinsular and local routes, the great majority of the ordinary sailors was Javanese. Only in the vicinity of Batavia or on some other specific interinsular routes did quite a number of other Southeast Asian ethnicities appear to be involved, including Malays, Sulawesians, and Balinese. There is a distinct impression that in order to man their vessels the shipowners could draw on a considerable 'itinerant,' almost 'vagabond-like,' labour force in or around the ports of Java. Furthermore, there must have been quite an overlap between the sectors of maritime transport and of fishing. In fact, the sheer prominence of the *mayang* as a cargo-carrier-cum-fishing-boat already provides proof of this. Another, albeit less obvious, indication for such an overlap may be adduced from the fairly low frequency of trips in the cargo-carrying sector.

The estimated total number of persons involved in the private maritime sector of Java was at least 65,000 to 70,000. The number

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of skippers has been established at some 8,000. These skippers had learned their profession through the daily routine experience of a sailor's life. This was somewhat different from their colleagues of the VOC, who had learned both through practical seamanship as well as through theoretical instruction. There is no lack of information about the ethnic background of the private sector skippers in the ports under consideration, Batavia excluded. About 45% of the skippers were Javanese, 30% Chinese, and almost 10% Malay. In Batavia, most of the skippers active in interinsular contacts must have been Chinese. On the other hand, Batavian skippers active on the shorter haul, for instance to Banten, were quite often Sulawesians or Balinese, who may have been former slaves. Generally, one might say that the role of the Chinese and of the non-Javanese Southeast Asian ethnicities, like Malays, tended to become more important in a port whenever interinsular contacts were involved. Turning to the skippers' places of residence one can distinguish three sorts of concentrations. First, not unsurprisingly, many of them lived in the ports with interinsular or wider networks, such as Batavia, Semarang, and Surabaya. The second and the third concentrations were to be found in relatively infertile coastal areas, like the eastern part of Central Java and the island of Madura. Both these areas had a strong boat-building and seafaring tradition. In the former, large communities of skippers were found in Juwana and Rembang; in the latter in Sumenep and Bangkalan.

Relating the ethnicity of the skippers in the private sector to the types of ships they sailed produces the following picture. No ethnicity was exclusively bound to the use of the type(s) of ship of its mother country. This is not only true for the non-Javanese migrant ethnicities but also, to a certain extent, for the Javanese themselves, because one-seventh of them sailed on non-Javanese types of vessels. The most numerous ethnicities, i.e. the Javanese and the Chinese, had a more than average score in sailing on the *mayang*. The average ship's tonnage for the entire private sector, Batavia excluded, was 21 tons. However, Javanese skippers appeared to have had a considerably lower average tonnage, just over 12 tons. By contrast, the Malays and Chinese had a score of between 25 and 30 tons. Both the Chinese and the Malays proved to be more active on interinsular routes than the Javanese, which explains their relative preference for bigger types, such as *gonting* and shallop. Consequently, it was the Chinese skippers who took the biggest share in the total volume of shipping in the private sector, a fact which coincided with their

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TABLE 1
Annual Average Volume of Shipping (measured in tons)

Banyuwangi	2,200	Pasuruan	2,400	Sumenep	13,600
Bangkalan	7,200	Surabaya	35,800	Gresik	35,800
Rembang	38,800	Juwana	30,400	Jepara	19,000
Semarang	108,800	Pekalongan	19,200	Tegal	14,400
Cirebon	20,800	Batavia	>254,800	Banten	19,400

dominant role in the economy of Java. They were responsible for handling about 40% of all volume of shipping, whereas the Javanese handled only some 30%, and the Malays a little over 10%.

Volumes and Directions

For the estimated annual average volume of shipping, i.e. of arrivals and departures, measured in tons, in the ports under consideration, see Table 1. The annual volume of all the ports together was a little over 622,600 tons. Batavia was by far the biggest port with about 40% of the total turnover, trailed at a great distance by Semarang. The timber exporting port of Rembang was third. The share of the VOC in the volume of shipping of all the ports together was 321,200 tons, or almost 52%, which is very considerable indeed. Nevertheless, between particular ports there were great fluctuations in the share of the VOC, which usually varied between 25 and 60%. Exceptions to this rule were the two ports on Madura, i.e. Sumenep and Bangkalan, where the VOC's role was negligible. The reason for this was that the local rulers on Madura were obliged to employ their own vessels for exporting their tribute, whereas in the other ports the VOC's square-stern ships themselves came in to collect the quotas. On the other hand, there were a few ports where the role of the VOC exceeded the 60% level. Batavia, the Asian headquarters of the Dutch, was the most prominent of them, showing a percentage of 62.

Between 60 and 90% of all one-way journeys in the private sector in the five ports open for journeys to overseas destinations—Batavia, Cirebon, Semarang, Gresik, and Surabaya—still concerned traffic to and from Java. In the private sector of Batavia the most numerous interinsular journeys were those with Sulawesi, Nusa Tenggara, and Kalimantan. However, none of these areas reached the level of 10% of the total number of one-way journeys. The most important interin-

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sular journeys in the other ports were the area of the Straits of Malacca, with 10 to 15% of the journeys, and Kalimantan, with a share of 10 to 12%. Yet here again there were variations. Cirebon played no role at all in the Kalimantan connections. In the Straits area the most frequent contacts were with Palembang and Malacca. In Kalimantan, Banjarmasin was the most prominent destination. It is important to note that in the case of the overseas contacts just referred to, Batavia was often outnumbered in frequency of contact as well as in volume by the other four ports. Studying the journeys within Java itself, it is clear that there was a Batavia-centered network which stretched as far east as Rembang. However, this network did not entirely overshadow the other rival and partly overlapping networks, like that of Semarang and that of Gresik/Surabaya.

Whether VOC or private shipping, it is clear that on the longer haul, especially in interinsular, intra-Asian, and global journeys, the rhythm of the shipping was largely decided by the monsoons. However, this 'iron law' did not apply to local shipping along the coast of Java. The difference between the activity in so-called minimum-months and maximum-months was not really significant. This situation was caused by the different wind pattern close to the coast of Java. During the day, cool breezes blew from the sea, while at night the opposite pattern occurred. Although small vessels had no difficulty in using these breezes to be able to keep sailing almost the entire year, this did not mean that the average skipper engaged in local traffic was at sea all the time. As stated earlier, the frequency of trips among the private skippers in Java was fairly low. It is estimated that a skipper was only about one-sixth of his time at sea on a trading venture. The rest of the time his vessel was used for fishing or just lay idle in the roadstead or on the beach. However, because of the rhythm of the monsoons as well as the long time required to load and unload their huge vessels, the performance of VOC skippers was not much different.

The Flow of Goods

The VOC capital in Asia, Batavia, was the main emporium on the coast of Java. It was a major importer of all kinds of consumer goods. In this respect the other ports in Java often fulfilled the role of suppliers, for instance of rice, salt, and timber. On the other hand, Batavia also added its own products to the local and international

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networks, for instance, fine-grain sugar and arrack. Moreover, it was the gateway to the global market for the export of coffee of West Java. Batavia was also a transit port, through which the VOC put some of its monopoly commodities, such as Indian textiles and opium, into circulation. Furthermore, it was here the VOC landed most of its bullion and money which was shipped all the way from the Netherlands to pay for the return cargoes, such as black pepper, coffee, tin, and Moluccan spices. It was also the harbor to which the Chinese junks brought their valuable merchandise, including porcelain, plates, and iron pans, which were then distributed to Java and other islands in the Archipelago. Although Batavia's China trade was on the decline in the second half of the eighteenth century, it was still an important element in the trade networks of the VOC capital.

The economy of the ports to the east of Batavia can be best characterized as mainly export-oriented. As such these ports were important gateways through which a whole variety of products were shipped. These products generally found their way to Batavia and/or several overseas interinsular destinations, for instance, ports in the Straits of Malacca and in Kalimantan. The exports of Central Java tended to be agricultural in the proper sense of the word and included rice, tobacco, and fruits. In East Java export commodities often involved items collected from the natural environment, such as sea and forest products. Both Central and East Java had substantial exports of salt and of locally produced cloth. Imports into Java seem to be fairly unspectacular. In eighteenth-century Java Indian textiles were no longer in great demand, while opium did not yet occupy the prominent place it held in the nineteenth century. The only items which were imported in bulk were gambeer from the Straits and rattan from Kalimantan. The former was a consumer commodity; the latter partly a transit item. Consequently, we may assume that Java's trade balance must have shown a considerable inflow of money and bullion.

Because of our lack of information about the value of the commodities on board, it is almost impossible to estimate how much of the trade was actually in the hands of the VOC and how much was still retained by the private sector. We are dealing here with literally hundreds of commodities, some of which had a fairly limited turnover, while others were traded in bulk. Many of these products, for instance, rice and salt, had already been traded in Java for a very long time; while other items, such as coffee and Javanese cloth, had grown in importance only during the last century. In a few particular

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TABLE 2
Registered Annual Seaborne Turnover of Export Products

Commodity	Quantity	Percentage by the VOC
Black pepper	23,000 picol	100
Coffee	43,500 picol	100
Fine-grain sugar	57,000 picol	80
Rice	472,000 picol	41
Planks	126,000 pieces	40
Arrack	15,000 cellarets	20
Logs	56,000 pieces	10
Salt	142,000 picol	8
Javanese tobacco	17,000 picol	0
Javanese cloth	146,000 pieces	0
Palm sugar	22,000 picol	0

but important instances the VOC kept a tight grip on the trade. To illustrate this I give some examples of the registered annual seaborne turnover of export products in Table 2. These figures, however important they may be, do not say anything about the division in the total turnover of commodities. Previously it has been stated that about 52% of the tonnage of shipping was VOC-controlled, but as under-registration of trade items was much higher in the private than in the VOC sector, we must assume that the share of the former in the handling of the trade must have been greater than 50%, possibly even up to 60%.

Conclusions

The quantitative analysis of the harbormasters' specifications in Java in the 1770s, however complicated it may be, is giving us opportunities to reach a deeper understanding of the circulation both of maritime traffic and of trade goods in an important part of Southeast Asia in the last stage of the early modern period. A few conclusions are clear.

First, there was the widespread adoption by most ethnicities, including the Javanese, of certain elements of European naval technology, both in the field of armaments and of types of ships in the private sector.

Second, although a substantial share of the maritime activities was in the hands of the Europeans, more in particular the colonial state-cum-capitalist VOC, with about 50% of the shipping and at

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least an estimated 40% of the trade, the private sector was not entirely wiped out.

Third, within the private sector the role of the indigenous Javanese community of skippers, although numerically a majority, tended to be overshadowed by the Chinese, a process which ran parallel to their growing role in the economy of Java.

In 1940 Van Leur refuted the idea that European colonial powers were already dominating Asia during the eighteenth century. This domination was only realized in the nineteenth century, aided by the achievements of the industrial revolution. However, as far as the Malayo-Indonesian Archipelago was concerned, he did allow the possibility that the VOC was the most dominant power in the area. In Java he could observe a clear growth of Dutch control, especially after the mid-eighteenth century. Yet, Van Leur would not commit himself to speaking of a Javanese society in decay. He still held a high opinion of the military capabilities as well as the economic power of Javanese society *vis-à-vis* colonial rule. Even in Java the gap between Europe and Asia was not very pronounced (Van Leur 1955: 271–80). Others have been less optimistic. As early as the seventeenth century, the role of the Javanese is thought to have been reduced to mere coastal shipping, because at that time they were being driven off the path of intense international trade. Reid argues that the 1680s had already witnessed the 'final death-throes' of the age of commerce of Southeast Asia. The ethnic Chinese businessmen, who were not integrated into local society, started to take over (Meilink-Roelofsz 1962:11; Reid, 1993:270, 312–13, 319). Two factors were responsible: naval blockades and outright destruction of the port-cities, actions of which both the VOC and the empire of Mataram in the interior of Java were culpable. Reid has recently drawn attention to a third factor: the global crisis in climatical and hence economic conditions (Reid 1993:291–4).

The results of the present research justify certain elements of both an optimistic as well as a pessimistic approach to the development of the shipping and trade of Java in the eighteenth century. Without questioning the severe crisis Java suffered, especially in the seventeenth century, as well as the tight grip of the VOC on its maritime economy, it is clear that the private, i.e. non-VOC, sector was by no means dead after the 1680s. The idea that the private sector had been entirely eliminated is the product of a narrow focus on a few long-distance trade items, such as spices, Indian textiles, and pepper. Such a focus fails to take into account the fact that the market of

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the maritime trader was subject to a tremendous fluctuation in commodities. Moreover, it seems to deny the inherent flexibility of the non-VOC sector. The innovation in naval technology and, although this is more difficult to sustain, adjustments in the traders' product-mix on board are proof of such a flexibility. Conversely, an important element which does not justify an optimistic approach is the share of the Javanese in shipping and trade. Although their role was still substantial, it is obvious that they were no longer the protagonist in the maritime economy of the 1770s. As such, they were being surpassed by the VOC and the Chinese. Consequently, this had already happened well before the heyday of European colonialism in the nineteenth and early twentieth centuries.

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