The Portuguese Merchant Fleet at Macao in the 17th and 18th Centuries

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The inter-regional maritime trade that centered on the Portuguese-controlled colonial port city of Macao on the Guangdong coast of China was an important nexus for China's maritime trade and its economy in the seventeenth and eighteenth centuries. Portuguese involvement in shipping and maritime trading commercial activity was the primary source of their livelihood and for their survival in China. The Portuguese merchant fleet that was owned, operated and centered its activities at Macao participated in opening, developing, expanding, and maintaining markets. They were active on an annual basis in regional (South China Sea), inter-regional (Indian Ocean) and global markets (via directly and indirectly supplying Chinese goods and commodities to other European colonial port cities in Asia). Conversely, the Portuguese at Macao participated in supplying the Canton market with Southeast Asian, Indian and European goods and commodities that were in demand in China.

This article examines and discusses the Portuguese merchant fleet at Macao. It is written primarily from the perspective of the Portuguese community, the ship owners, operators and investors at Macao. A series of political, economic and commercial issues are outlined and engaged by presenting examples to the degree that the historical record and present research permit. The activities of

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the Portuguese and their merchant fleet at Macao in the eighteenth century are difficult to treat in any detail because much of the direct historical evidence has been lost. Also, in comparison to the more successful and spectacular successes of other European companies and private trading rivals, their activities have been overshadowed. The city of Macao was not outwardly prosperous in the eighteenth century, but its merchant fleet was active and contributed to China's maritime economy.

The rivalry and conflict between European traders and Asian trading networks in the sixteenth and into the eighteenth century was sea borne. Shipping, primarily designed for merchant activity and converted for protection and bellicose confrontation, was the transportation system that permitted the projection of naval power and commercial prowess. The Portuguese merchant fleet at Macao was inextricably involved at different levels in the rivalry, tensions and commercial conflicts between European traders and Asian trading networks.

The time frame that this article deals with is the last quarter of the seventeenth century and the entire eighteenth century, the long eighteenth century, from 1684 to 1792. Although the Qing dynasty began in 1644, it is accepted that it took their armies and administrators much longer to effectively establish political and administrative control over all of south China and its maritime trade. Qing administrators were firmly in control and established regulations over maritime trade, which included Portuguese activities at Macao, by the last quarter of the seventeenth century. Over this next century, China's maritime trade with Europe and Asia expanded. This long eighteenth century ended for China, as it does with this article, with the emergence of tensions in China's administration of its maritime

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trade with English private traders and the English East India and others over the illicit traffic and sale of Indian opium to China.

A series of issues concerning Macao, its ship owners and fleet are presented. The first deals with the question of Macao's typology as a port city or a colonial port city.2 The second deals with Macao's political economy. It centers on the city's raison d'etre, its internal organization and primary internal decision-making and conflict resolution processes and its influence and control over the same processes in external political and commercial relations. The third is technical in nature and asks fundamental questions relating to shipping and trading, the ship owners, operators, sailors and investors in Macao's merchant fleet, their identification, the ship types, names, numbers, tonnage, and their ports of call. The fourth is economic and outlines the general composition of the goods and commodities traded at Macao. Portuguese trade at Batavia, one of the markets in which Macao's merchant fleet was active over the entire period, will be examined in some detail. The economic relationship of Macao's shipping and maritime trading activities to the discussion of port and hinterland relationships in China's early modern economy is the historiographical context in which the above-mentioned issues are examined.3

This article is structured and divided into five sections: 1) Macao; 2) Macao's Political Economy; 3) Ship Owner, Operator and Investor Behavior; 4) The Merchant Fleet; 5) China, Macao and External Markets; and 6) Conclusions.

MACAO—A COLONIAL PORT CITY?

Prior to the arrival of the Portuguese in the early sixteenth century, Macao was not a densely populated or commercially active Chinese port city. It was by all accounts, rather, a fishing village. Located on a small peninsula which included two small islands, it did not have direct access to any substantial arable or cultivable areas of combustible production, but it did have a good harbor (though not as good as a similar location to its east which became Hong Kong in the nineteenth century). It is on the southwesterly approaches to the Pearl River and, as a result, has good fluvial access to Whampoa, the primary port, and Canton (Guangzhou), the administrative and

commercial city and market of Guangdong Province. The Portuguese people who chose to live there knew that they were dependent on the Chinese authorities at Canton for their major supplies of food and for any goods or commodities that they might purchase or market.

China's maritime activities centered on a series of port cities such as Amoy (Xiamen), Ningpo, others (including Shanghai), Canton, and one colonial port city: Macao. Asia's port cities, including Macao, "encapsulate in their evolution and transformationand, at times, their decline or even total destruction the historical vicissitudes of maritime Asia, which in themselves are a rough yardstick and, in many ways, an effective paradigm of the relative position of Asia in the world."4 China's market was in reality a series of sub-regional markets that developed from the entrepreneurial and commercial activities and, the occasional, sub-regional comparative advantages that were available or developable by investors and merchants residing in those port cities. The midtwentieth century historiography of Chinese port cities suggested that it was the provincial hinterland behind each port that provided the agricultural, textile, and metals production that was exported. Vice-versa, the goods and commodities that were imported into each port city were integrated into internal market circuits of the provincial hinterland behind each port: Amoy (Fujian Province), Ningpo and others (Zhejiang Province), and Canton and Macao (Guangdong Province).5 More recent and detailed monographs on the production and commercialization of a number of Chinese commodities that were exported, such as tea, porcelain, and sugar, show that the internal market circulation of exported and imported goods was more pervasive and extensive on account of the general availability of fluvial transportation and the internal market commercial communication network between merchants at the ports and in the interior.6

Macao was an adjunct of the Canton market on account of its commercial dependence upon that market for its supplies, its demand for goods and, to an unquantifiable degree, its finance, credit and commercial opportunities. Although constrained politically by Chinese authorities, the Portuguese at Macao were able to operate and develop commercial opportunities, such as those relating to opium, via the evasion of Chinese legal restrictions, which their

competitors in other Chinese port cities were unable and/or unwilling to risk at all or to the same level as the Europeans.

In spite of this dependence upon Chinese supplies, and political and administrative vexations by Qing authorities, in 1684, Portuguese communal and crown authority had been effectively established in the port city of Macao for over a century and a quarter. By virtue of the Portuguese crown and communal presence, Macao was a colonial port city. Defined as a gateway "through which European power and influence, economic dominance and technological modernization (to which could be added disease and health care) flowed from overseas to the furthest corners of the continent and as "primate" cities controlling their hinterlands and acting as vital lynchpins in the development of the world economic system," Macao, however, was an atypical colonial port city in Asia.8

Why? In the first instance, this definition is more appropriate for the colonial administrations of the nineteenth century, such as the English and Dutch, which successfully transformed themselves from maritime to territory-occupying colonial regimes, and the French, who were largely unsuccessful as a maritime empire in Asia but encountered some success as a colonial territory-occupying regime in Indochina. The Portuguese and the Estado da Índia did not participate in this transformation. In the case of the Portuguese in China, it was only in the age of nineteenth century European imperialism that they could re-claim diminished colonial or imperial power privileges, such as extra-territoriality. Neither Goa or Macao became primate cities such as Calcutta or Bombay, Batavia or Colombo (before British occupation) and Hanoi or Saigon. In the second instance, Macao did not control any hinterland of south China. The Portuguese intermediated in the trade that flowed between China and Japan, China and the New World, China and India, China and Europe. This trade was significant to China and to the world economic system. The existence of Macao and the Portuguese participation in and Portuguese crown support of East-West, West-East exchanges, such as the Magellan exchange (the transfer of New World foods and tobacco to China) and the Jesuit missions in China, made Macao a vital lynchpin and an agent for change in China for better or for worse.

MACAO'S POLITICAL ECONOMY

In Europe and Portugal, towns, communities and, by extension, cities "had a special identity based on political and civic privileges" where "neighborhood values predominated" and "local concerns took precedence over more distant ones."9 Portuguese urban elites "possessed a coherent pattern of values that defined their conduct and their aspirations" with "shared values and shared contexts... as property owners" in some instances bound together via kinship. $^{\rm 10}$ Cities and elites in Portugal and overseas participated in this general characterization of communal identity and aspired to holding office in their town or municipal council, the Senado da Câmara. 11 This aspiration was for these elites a key element in the process of social mobility and control. In Portugal, urban elites "had secured a firm hold on administrative posts;" "elite control of local offices created oligarchic rule, but also usually brought continuity and stability into local politics."¹² Crown-granted charters and the development of a strong legal tradition brought about a determined defense against crown interference in their affairs and sustained their administrative control over municipal financial resources.¹³ This pattern of tension and contention between urban elites and crown authority served as the template for the behavior and actions of Portuguese crown administrators and settlers in colonial cities in general and Macao in particular.

Portuguese crown authority was present at Macao, but the colonial ethos was that of the married settler or casado. The casados, as married men, were heads of households, which included servants and slaves, and their numbers depended upon their and the community's economic well being and the physical space that was available. In general, the casado was a reinol, a Portuguese-born male, who had been in crown service, retired, and sought to prosper and raise a family. Over the period in question, a migration of reinois, very small in number, semi-regular in frequency, did occur. They were incorporated into local society and took residence at Macao. With the paucity of available European women, the progeny of the casados produced an important, diverse and multi-racial demographic element within Portuguese colonial society at Macao. Office holding and voting priveleges in municipal and other local institutions, such as the Santa Casa da

Misericórdia (the Holy House of Mercy, an important charitable, lay brotherhood) were the exclusive province of the *casados*.

During this period, the municipal revenues of the city of Macao were obtained almost exclusively through the collection of customs duties on the goods and commodities that were imported into the city. The maritime customs duty rates were established on an annual basis by the Senado da Câmara. While the records of these annual deliberations do not stipulate the actual amounts of income received from the maritime customs duties, they are highly instructive and detail important aspects of the fiscal management of the city of Macao. They outline, in particular, a seemingly flexible and an adaptable method of controling the acquisition of new and the re-payment of old obligations, such as the loans from the crown of Siam, the Santa Casa da Misericórdia and the city's inhabitants, obtaining the necessary income to cover expenditures and providing support for social institutions, such as the convent of Santa Clara.

There were three categories of rates, which were determined on the basis of the type of good and commodity. The custom duty rate categories were based upon whether the delivered good or commodity was 1) grossa or bulk, 2) fina or fine, which meant that it could be weighed in a small balance, and 3) silver. In general, the placement of a good or commodity into one of these three custom duty rate categories was well known and established. Goods or commodities that were grossa or bulk items were, for example, pepper, opium, cloves, sandalwood, sappanwood, tin and lead; a good or commodity that was fina or fine were items such as coral, amber and, at times, textiles. Silver is a self-evident category that included un-minted bars as well as minted Spanish or European coins.

Table 1 outlines the maritime custom duty rates established by the *Senado da Câmara* at Macao from 1690 to 1741.¹⁴ It demonstrates that the *vereadores* or aldermen of Macao's municipal council would adjust maritime custom duty rates to generate sufficient operating income to cover municipal expenditures and obligations. Since many of these same municipal office holders were ship owners, operators and investors, they sought to ensure the city's functioning at the lowest cost to their commercial interests. For example, when necessity required re-payment of a loan from the inhabitants of Macao to the city to cover expenditures

in 1695, the aldermen increased duties on bulk goods from 10 to 12%. Shortly thereafter, they were able to return this rate to its former level. To a limited degree, the fixing and adjusting of these rates may be seen as a barometer of the commercial performance and activities of the city's merchant fleet.

Through a close examination of these reports, evidence also emerges that the aldermen would handle certain goods and commodities on a discretionary basis in relation to market conditions and volumes of commodities that were being imported and the income those quantities were generating for the city. There are a number of examples. In 1701, for instance, European textiles were classified as bulk items and charged a 10% duty; by 1710 the aldermen decided that European textiles could be re-classified as fine goods and the duty reduced to 5%. There were rare instances in which a commodity in a standard category could be selected to pay a rate above the highest rate for that category of good. Such was the case for sandalwood, when the aldermen ordered the payment of a 9% duty in 1727, which was 1% above the 8% standard rate for bulk items. It was more common that the aldermen decided to lower duties on bulk items from selected, specific markets, as was the case of the duty on pepper from Batavia being lowered from 8% to 6% in 1719. This favorable treatment of pepper from Batavia continued for a number of years. The duty on pepper from that colonial port was lowered further to 5% in the early 1720s; this bulk commodity continued to be favored but was returned to a 6% duty in 1727. Other sources of pepper imports, from Banjarmassin among others, received similar favorable treatment from the Macao aldermen. Although it had been lowered earlier to 6%, the import duty rate on Banjarmassin-sourced pepper was raised again to 7% in 1727.

There were similar anomalies in the metals sector. In 1727, possibly in recognition of very large imported quantities, a preferential duty rate of 2% was applied to the bulk commodities of lead and tin. By 1734 these metals had been re-classified as bulk and charged the standard 8%. The aldermen reversed themselves, yet again, in relation to these metals. They lowered the rate from 8% to 4% in 1736 on account of large quantities of lead and tin (via Pegu in the report) being imported from Madras. In the case of tin, the rate fluctuations continued and repeated the same cycle of being classified as bulk and charged at the standard

Table 1. Maritime Custom Duty Rates at Macao, 1690-1741

Year	Grossa	Fina	Silver
1690	12%	8%	4%
1692	11%	8%	3%
1693	8%	5%	2%
1695	10%	5%	2%
1696	12%	8%	2%
1697/8	10%	10%	2%
1700	12%	12%	2%
1701/03	10%	5%	2%
1704	10%	5%	3%
1705	12%	5%	3%
1706/10	11%	5%	2%
1714	12 1/2%	6%	2 1/2%
1719/26	8%	4%	2%
1727/30	8%	5%	na
1734/6	8%	4%	2 1/2%
1739/41	8%	4%	2 1/2%

rate in 1740 and as a fine commodity and charged 4% in 1747. As to silver, according to the record of 1719, the aldermen sought to stimulate contact with the Philippines on account of the difficulty in finding profitable trade goods and commodities for China in that market. They made an exception in the duty rate for silver from Manila, which was lowered to 1½%. The duration of this exceptional treatment for silver import duties at Macao cannot be determined. However, the duty treatment for silver at 1½% was re-established on a reciprocal basis between Macao and Manila in 1775.

SHIPOWNER, OPERATOR AND INVESTOR BEHAVIOR

It was by ship owning, operating, manning and investing in maritime trading activities at Macao that the Portuguese community and crown made their livelihood and benefited from their presence in China. There are some simple and basic distinctions between ship owning, operating, and investing in maritime trade. While there was a small number of ships in the Portuguese merchant fleet at Macao, there was an even smaller number of Portuguese owners of ships. A very

few individuals were owners of multiple vessels. A few vessels were owned individually, and a vessel or two was owned in parts or fractions by multiple owners. There were talented ship captains and/or commercial agents who were employed to operate vessels or represent owners on voyages in which the owners or his/her family were not ready or capable to operate the vessel or accompany the vessel to a specific market. Ship owners could be ship operators and investors in maritime trading activities, but ship operators were not always ship owners or investors.

In the commercial heyday of Macao, everyone in the community, as institutions and as individuals, including the municipal council, the lay brotherhood and the Church, in particular the Jesuits, invested in or financed Portuguese maritime ventures. By 1684, despite a possible exception or two, Portuguese merchants, ship owners and operators were severely de-capitalized, dependent upon freight contracts and attracting investors and finance from external and internal sources—public institutions as well as private individuals. Manning, outfitting, and maintaining the city's merchant fleet was the primary, nearly exclusive, source of gainful employment that was available for the community. De-capitalization had occured through shipping losses, poor investments, the rival commercial policies of other competitors that meant loss of markets and Qing imperial policies aimed at establishing their administrative control that severely limited China's and Macao's maritime trade. 15 With the reversal of that policy, by 1684 and throughout our period, the Portuguese ship owners and operators at Macao attracted support from within the Portuguese community at Macao or other Portuguese communities in Asia. However, not all of the financial or investment funding was from within the Portuguese community but included, among others, Chinese investors at Canton, 16 European private traders and European companies.

The investor in maritime trading activities in the age of sail in Asia, whether European or Asian, operating as a group in a joint-stock company, multipartnership or as individual entrepreneurs, pursued profit maximization goals via commercial exchange at the available regional and inter-regional port/markets. These investors had alternative port/market options with varied risk/return on investment profit profiles based on the availability of goods at the

investors' departing, intermediate and final destination port/markets, and the investors' capitalization and the projected return on the commercial exchange between buyer and seller at the selected ports of call for the vessel(s) in the trading season, normally during one calendar year. In general, the ship owner chose the vessel's route and ports of call, but this was not always the case. There were certain ports of call, such as Timor, that had political as well as economic significance; the crown intervened at Macao for a time in the selection of shipping for that route. The investor would choose to freight goods on or invest in the ship on the basis of the owner's or the operator's reliability and record.

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The sailing ship, as a transportation system, imposed operational constraints on the commercial process of investors and ship owners. In order to operate properly, with less risk of shipwreck, and to transit as rapidly as ship design, operating condition and wind power would permit, ships had to be in ballast, properly loaded and packed with dunnage to avoid the shifting of weight which imperiled a ship's handling and operation.¹⁷ A range of commodities bulk items, generally, with a low cost per unit—were suitable and served this functional purpose, but their selection, negotiation and handling were important elements in the safety of the ships and the investor's investment. The availability in quantity, quality and price and the composition of goods and commodities at port/markets in general and at Macao in particular, therefore, was of paramount interest to regional, interregional and global investors in maritime trade.

Macao's survival and recovery, therefore, was dependent upon the commercial success that their merchant fleet could generate via freighting others' goods and in the trading operations that were on

Portuguese merchants' personal accounts. While freight contracts between ship owners and investors were commonplace for merchants in general and the Portuguese in particular in Asia, the signing of such a contract between the Portuguese and indigenous merchants could embroil the Portuguese community at Macao in undesired political and commercial discussions. In the 1680s, when Portuguese ship owners at Macao were accepting goods and commodities from Chinese merchants at Canton, the *Senado da Câmara* of Macao had to intervene and lower a rate that the Chinese merchants complained was excessive. In

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In October of 1775 the Senado da Câmara of Macao abrogated the powers of individual ship owners to fix the rates for freighting the goods and commodities from any Portuguese investor on any of Macao's merchant fleet. Table 2 outlines the percentage rates that were applied by the Senado da Câmara at Macao between all Portuguese merchants on the value of the principal imported and exported goods and commodities in China. The municipal council's order specifically excluded control over the freight rates that Macao's ship owners could negociate with non-Portuguese investors. The announcement of the freight rates between Portuguese citizens on imported and exported goods for the 1776 trading season by the municipal council was, obviously, a politically and economically motivated manuever, the details of which on account of their length will not be discussed. The

governor, the crown's local representative, refused to be present, and his letter manifesting his disapproval was mentioned in the municipal council's deliberations.²⁰

The commercial decision-making matrix of maritime investors at Macao and rivals along the China coast, in the South China Sea, and in the Indian Ocean extended their annual risk evaluation to their estimation of competing investors' plans at the port/market of departure, the number of vessels, amount of capital and the available goods and commodities. Internal and external market intelligence was received and managed by investors from ships' captains and agents in competing port/markets. This was true at Macao and at other port and colonial port cities in Asia. European and Asian traders, ship owners, captains, supercargoes or agents executed verbal or written instructions from themselves or their investors orienting them as to how to employ the available capital, which goods and commodities to purchase, at what price levels and quantities, in order to maximize return.

THE MERCHANT FLEET

The Portuguese merchant fleet at Macao is estimated at six to eight vessels in 1684. By the late 1710s the number of vessels in this fleet had expanded to thirteen to fifteen ships. Although ships were lost, sold and disincorporated, for most of the rest of the eighteenth century, the number of Portuguese vessels that were owned and operated at Macao remained at or around this number. It is only in the late eighteenth century that the numbers and the cargo capacity of the fleet demonstrated a tendency towards change with the advent of increased opportunities, primarily related to raw cotton and opium from India.

While in the past the Portuguese were not adverse to using vessels of non-European design, it was not a recorded practice over this period. The Portuguese merchant fleet used European-designed vessels that were built by or purchased from Europeans in Asia. In diverse reports, the vessels were described as ships or sloops. Nearly all of the fleet was named for Catholic religious figures; at times, one or more vessels might share the same or similar name, which complicates their identification. Upon loss, sale or disincorporation from active use, a new vessel might be given the same name as an earlier vessel. Coupled to these practices is the absence in Portuguese records of complete and specific

Table 2. Freight Rates on Principal Imports and Exports between Portuguese Merchants at Macao, 1776

Rates on Imports (Percentage on Ad-Valorum)

25	20	18	15	12	10	8	6	4	21/2
Cotton	Incense	Rice	Pepper		Wax	Cinnamon (Ceylon)	Ivory	Cloves	
Sappan- wood		Sandal- wood (Indian)	Sandal- wood (1 st , 2 nd)		Textiles (coarse)	Tin	Textiles (fine)	Birds Nest	
Wine		Areca	Saltpeter			Lead			
Cinnamon (Timor)									

RATES ON EXPORTS (PERCENTAGE ON AD-VALORUM)

25	20	18	15	12	10	8	6	4	2 1/2
Cinamon (China)	Alum	Tea (bulk)	Sugar	Tea (chest)	Copper (worked)	Zinc	Mercury		Gold (worked)
	Furniture, Rosewood	Anis	Tobacco	Yellow Ink	Eaglewood (2 nd , 3 rd)	Silk	Eaglewood (1st)		Silver (worked)
	Porcelain (coarse)	Galanga	Rhubarb	Porcelain (blue)	Porcelain (fine) Paper	Saffron			

annual lists of vessels and owners. Consequently, the identification of the exact number of vessels in Macao's merchant fleet and their owners is a difficult process.

With the above-mentioned limitations in the historical evidence from Portuguese sources on Macao's merchant fleet, how then can a survey of its activities be reconstructed? The records left by Portugal's rivals and competitors in Asia provide outstanding sources. Europeans in the colonial port cities that the Portuguese called upon and in the port cities where those Europeans had offices observed Macao's merchant fleet and reported upon its movements and trading activities. The Dutch records are by far the largest single source, with the most variety of information for this type of

corroborative evidence,²¹ but English, Spanish, French, Swedish, Danish, and Ostend records also contain materials that aid in this research. Reports by Asians on the Portuguese activities are not as readily available.

From 1704 to 1742, Portuguese records at Macao provide data concerning the size and the cargo capacity of some of the vessels in the fleet.²² These reports were prepared to document the adequacy of the vessels that were involved in voyages to Timor for sandalwood and to support the Portuguese community and colonial position on that island. Normally, at this time, one ship made the trip; the tonnage of the smallest vessel was 60 tons, and the largest of the Macao merchant fleet on this voyage was 240 tons. The VOC shipping

records at Batavia independently reported the same size and cargo capacity of the Portuguese vessels, which stopped at that port on thier way to and from Timor.

At this time, all of the Portuguese merchant fleet at Macao was armed with a number of cannon that generally corresponded to the size and capacity of the vessels. There is in the VOC records an observable tendency in the manning of Portuguese merchant vessels from Macao. The tendency is that the crew size correlated with the number of cannon per ship that was reported; the crew to cannon relationship was around four men to one piece of armament. The rare unarmed Portuguese merchant vessels that appear in different VOC shipping reports were very small and in the South China Sea were usually from Siam and Timor.

CHINA, MACAO AND EXTERNAL MARKETS

The Chinese sub-regional market of Guangdong at Canton was consistent and typical in its general structure and composition in comparison with other contemporary global, inter-regional and regional markets. The categories of commodities that were in supply and demand in China were agricultural, textiles and natural dyes for textile production, metals and other commodities. A detailed report on the Chinese goods from Canton that were available at Macao was prepared by a commercially astute Portuguese crown official in 1771; there were twenty-one items exported from China at Macao. The principal export commodities were sugar, tea, tobacco, raw and colored silk and silk piecegoods, zinc, alum and worked copper items. According to the report, there were thirty-three items imported into China via Macao. The principal imported commodities that flowed into the Macao market for sale at Canton were pepper, raw cotton, opium, rice, salt, tin, lead, silver and sappanwood and included the "exotic" China market demand for shark's fin, bird's nest and ivory.23

The Portuguese merchant fleet at Macao made a number of the major inter-Asian colonial and port cities their regular annual ports of call. By the late eighteenth century the list of those ports inculded the ports furthest west of China—Mocha and Mauritius—as well as Surat, Malabar, Coromandel, Bengal, the Malay ports (Aceh and others), Timor, Siam, Vietnam (Cochinchina), Batavia and Manila. Batavia was one of the external markets in which the Macao merchant

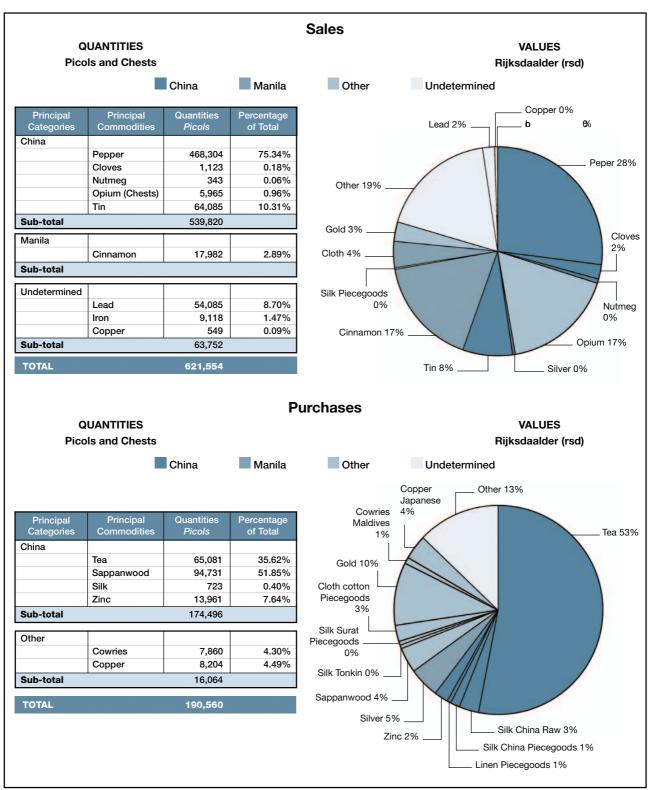
fleet and the Chinese—one of the strongest merchant groups and commercial rivals of the Portugese—were active over this period. Since it is not possible to examine all of the external markets and commodities, nor all of the commercial rivals that the Portuguese confronted, the maritime trade at Batavia in relation to the China market will be discussed.

The maritime trade between foreign traders and the Dutch East India Company at Batavia was overwhelmingly oriented toward the supply and demand of goods and commodities from and for the China market.²⁴ The Manila market, with its New World silver and its demand for cinnamon and Asian textiles, was an important integral link in and outlet for the VOC's inter-Asian trade, although of a lesser scale and dimension in comparison with the China market.

The total quantity and value figures for sales and purchases are a general indicator of the magnitude of the quantities and the values of the commodities that were available and purchased at Batavia to develop and attend the demand for these commodities in the China, Manila and other inter-regional and global markets. The individual commodity quantity and value figures for individual trading seasons aid general and specific research on the market structure, behavior and demand for these commodities, including opium in the China market.

Based on a sample of fifty-one years over 1684-1764, the total recorded quantity of the principal commodities sold by the VOC to foreign traders at Batavia was 615,589 *picols* (1 *picol* = 133¹/₃ pounds) and 5,965 chests. The Company began to include its sales of opium at Batavia in its sales to foreign traders' reports in the 1750's. From 1757 to 1764, in only seven years, the Company sold 5,965 chests, an annual average of 852 chests of Bengal opium at Batavia. Most of this opium was redistributed in the Indonesian Archipelago by Chinese and Indonesian intermediaries; since the 1720s, however, small amounts of opium were purchased at Batavia by the Portuguese and, possibly, the Chinese for export to China. At present, it is not possible to separate and quantify the amount of opium that was bought at Batavia and exported to China. Consequently, Table 3 shows opium as destined for "Other" markets to signify within the Indonesian Archipelago, although an undetermined, as yet, amount was sold and exported to China. The composition of the individual goods and commodities sold by the VOC to foreign traders was pepper,

Table 3. Allocation & Assignation of Sales & Purchases at Batavia by Regional & Inter-Regional Market, Origin & Destination, 1684-7164



cinnamon, cloves, nutmeg, silk and cotton (diverse Indian) piecegoods, gold, silver, tin, lead, iron, copper and others. The total recorded value of commodities sold by the VOC was 15,791,901 *rijksdaalders*. This amount is as an indicator of the relative order of magnitude of this sales activity vis-à-vis its equivalent value in other regional (the China and Manila) markets. Based upon the conversion of *rijksdaalders* to Chinese *taels* and Spanish *pesos*, the total recorded value figure of commodities sold by the VOC to foreign traders of 15,791,901 *rijksdaalders* was the equivalent value of 16,623,054 *taels* or 18,950,281 *pesos*.²⁵

Over the same period and sample, the total recorded quantity of commodities purchased by the VOC from foreign traders at Batavia was 188,728 picols. The individual goods and commodities purchased by the VOC were sappanwood, silk [raw, piecegoods from China, Tonkin, and India (Surat)], cotton [piecegoods], linen [piecegoods], silver, gold, cowries, zinc, copper, and other commodities. The total recorded value of commodities purchased by the VOC was 5,137,375 rijksdaalders. Again, this amount is best employed as an indicator of the relative order of magnitude of these purchases vis-à-vis their equivalent value in other regional markets. Based upon the conversion of rijksdaalders to Chinese taels and Spanish pesos, the total recorded value figure of commodities purchased by the VOC of 5,137,375 rijksdaalders is 5,407,763 taels or 6,164,850 pesos.

The general supply and demand patterns for the principal commodities involved in the maritime trading activities of foreign traders at Batavia is available by regional and inter-regional market segmentation. While not all of the commodities are assignable, an important number and percentage of the quantities and values of the principal commodities sold and purchased at Batavia may be reliably assigned by markets. Table 3 allocates and distributes the quantities and values of the principal commodities sold and purchased at Batavia by regional and interregional markets.²⁶ The China market imported from Batavia pepper, cloves, nutmeg, opium, silver, tin and sappanwood. The Manila market imported cinnamon, silk and cotton (diverse Indian) piecegoods. The other markets imported the gold that was sold to foreign traders at Batavia. The China market exported to the Batavia market tea, silk [raw and piecegoods from China], linen [piecegoods], and zinc. The Manila market exported

silver. The other markets exported silk [raw and piecegoods from Tonkin, and India (Surat)], cotton [piecegoods], sappanwood, gold, copper, and cowries that were purchased by the VOC from foreign traders at Batavia.

Foreign vessels from thirteen European, American and Asian powers called at Batavia over the period from 1684 to 1792. According to the VOC's shipping and trading reports, six groups—the Chinese, Portuguese, Spanish, Armenians, Muslim, and Siamese—actually traded at Batavia. The total number of their ships arriving at Batavia was 1,680. The number and distribution by participant of foreign traders' vessels that actually traded at Batavia is shown in Table 4. It is best employed as an indicator of their presence in the market and to a lesser degree in market trend analysis.

The VOC shipping reports at Batavia provide the cargo capacity of all the arriving and departing foreign vessels by individual ship's tonnage, which permits the calculation of total annual tonnage of cargo capacity of all foreign vessels by trading participants.²⁷ The tonnage displacement and the frequency of the foreign traders' shipping that actually traded at Batavia over this period is presented in Table 5. Tonnage permits individual trader groups' cargo capacity to be compared to others and versus total group cargo capacity on an annual and total basis. Consequently, tonnage is superior to the numbers of vessels in qualifying, quantifying and comparing the relative annual and total trading position of foreign traders, as individuals or as a group. This ability to differentiate cargo capacity by trading participant is rare and unusual in Asian maritime studies.

Tonnage is also available by market origin. Table 6 presents the tonnage of arriving foreign (European and Asian) shipping to trade at Batavia by market origin, 1707-1792. This information aids in placing Chinese, European and other Asian merchants' efforts in the context of the markets in which they were living and operating and not as isolated agents in those environments. Tonnage by market origin and participant may be further segmented: 1) the China market by geographical location and participants of its sub-regional port city markets and 2) the Manila and other markets by participants. This article confines its discussion to the China market's relationship with the Batavia market.

Table 4. The Number of Foreign (European and Asian) Shipping Arrivals to trade at Batavia, 1684-1792

C	hinese	Portuguese	Spanish	Armenian	Muslim	Siamese	Total
1	,098	472	75	19	13	3	1,680

Table 5. The Tonnage of Foreign (European and Asian) Shipping Arrivals to trade at Batavia, 1707-1792 Total tonnage by Participant, 1707-1792

Chinese	Portuguese	Spanish	Armenian	Muslim	Siamese	Total
138,524	94,335	14,000	2,600	3,650	1,000	254,109

ANNUAL TONNAGE BY PARTICIPANT, 1707-1792

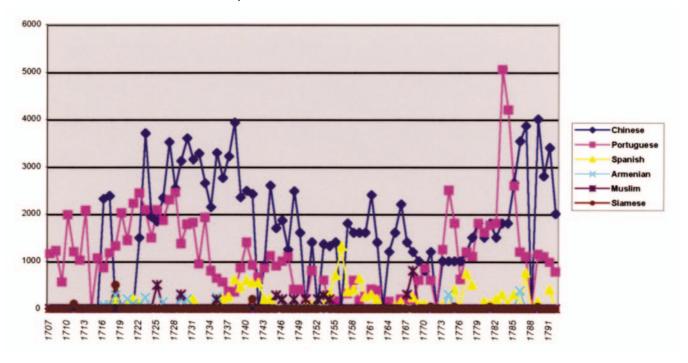


Table 6. The Tonnage of Foreign (European and Asian) Shipping Arrivals to trade at Batavia by Market Origin, 1707-1792

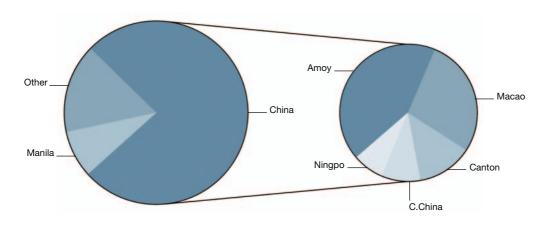
Chinese	Manila	Other (Regional & Inter-Regional)	Total
192,274	20,160	41,675	254,109

Table 7. Batavia Market Segmentation: China Market Detail: Tonnage, Origin & Destination

TOTAL TONNAGE BY PARTICIPANT

Amoy	Ningpo	C. China	Canton	Macao	Total
83,226	13,870	16,568	24,860	53,750	192,274

TOTAL TONNAGE MARKET ORIGIN AND DESTINATION



ANNUAL TONNAGE BY PARTICIPANT

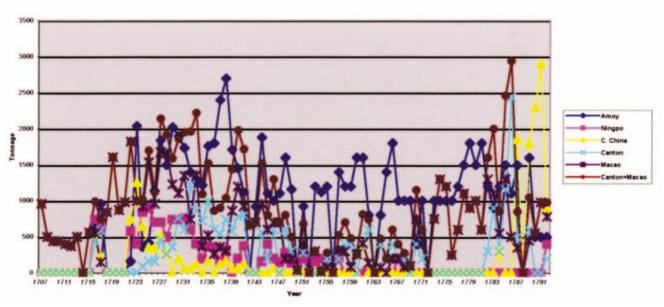


Table 7 details this further segmentation of the participation of the China market at Batavia by geographical location and participants from its sub-

regional port city markets. It graphically reinforces, not that it is necessary, the predominant position of China in this market. It highlights the Portuguese merchant

fleet's activities at Batavia and introduces the question of commercial rivalry between the Portuguese and Chinese merchants.

Within this question of rivalry, there is the issue of the relative dominance of direct Amoy (Fujian) shipping and trading interests in the Batavia market. Perhaps, as individuals with the largest number of ships and tonnage trading in the Batavia market, and based on geographical market origin, this dominance could be maintained. However, the combined position of and participation by Canton (Guangdong) and Macao compares favorably and is almost equal to Amoy's shipping tonnage over the entire period. In 1687 and 1719, to be specific, the VOC occasionally registered individual sales and purchase transactions per individual Portuguese ship and trader from Macao, which permits the following observation in regard to the Portuguese shipping and trading activity from Macao at Batavia.²⁸ Although fewer in number and total tonnage vis-à-vis the Amoy traders, Portuguese ships and traders from Macao, on occasion, were able to concentrate higher quantities and values of goods and commodities in comparison to the Amov and other Chinese traders and investors. There are insufficient numbers of such records to establish and use in a time series. Consequently, at present, there is no evidence to establish this observation as a long-term tendency. It is possible that over the long term there was, in relative terms, better market intelligence and capitalization involved in and supported by Chinese as well as European investors in the Portuguese shipping activities from the Macao and Canton markets. On the other hand, in both cases, Qing imperial restrictions on maritime trade were in the process of being lifted, and these occurrences may be an exception and not a true tendency. Further research is required to establish whether this was a long-term pattern or a short-term aberration.

With the completion of this examination of the Portuguese merchant fleet at Macao and its activities, it is possible to discuss the general conclusions of this study.

CONCLUSIONS

Within the mosaic of China's maritime trade and commercial rivalries, there are a number of interesting implications raised by this examination that concern the economic relationship of Macao's shipping and

maritime trading activities to the discussion of China's early modern economy and its port and hinterland relationships during the late seventeenth and eighteenth centuries.

The first is in two parts: the Portuguese merchant fleet at Macao and the ocean-going junks that were owned and operated out of Canton constituted the total sub-regional maritime trading capacity of China's Guangdong market. Dependent upon the goods and commodities that were supplied and demanded at Canton, their composite numbers, sizes, tonnage, ports of call and trading activities constitute a seldom-used method of visualizing this segment of China's maritime trade. Canton's ocean-going fleet, as opposed to its coastal fleet, numbered around thirty junks in the late eighteenth century.²⁹ In some markets in the South China Sea, as we have seen in the case of Batavia, the Portuguese were commercial rivals and competitors with the Chinese junk owners, operators and investors from Canton, Amoy, Ningpo and other Chinese ports. The second segment of this observation is that the Portuguese merchant fleet at Macao constituted the only segment of China's maritime trading structures over this period with a home base in China that regularly and directly commercialized Chinese goods and commodities in the Indian Ocean inter-Asian port markets.

Chinese commodities were in demand in inter-Asian markets. They could and did produce substantial gross profit margins (the difference between cost and realized sale prices). It is difficult to find Portuguese records that calculate their gross profit margins on transactions in specific markets. It is possible, however, to obtain contemporaneous evidence for VOC transactions and calculations with the same commodities that were purchased at the same time, place and price and were sold in the same markets as the Portuguese from Macao. Alum, radix china, and zinc were commodities that were exclusively sourced in China. In the late 1740's, these commodities were sold in Bengal and at Surat by the Portuguese and the VOC. At this time, the VOC calculated that they realized gross profit margins on alum sales from 57 to 131%, from 136 to 157% on radix china, both being directly delivered from China to Surat, and from 43 to 97% on zinc sold at Hougli in Bengal.³⁰

The case of opium is a particularly important example.³¹ The Portuguese participated in a diverse group of European, Company and private and Asian

traders, in diversifying geographically the inter-regional commercialization of Indian opium in Asia.³² China was one of the inter-regional markets that received attention. K. Pommeranz and S. Topik have documented that the opium "traffic [to China] grew more than twentyfold between 1729 and 1800."³³ The VOC's and the Batavia market involvement in the commercialization of Indian opium in the Indonesian Archipelago was of fundamental importance. While research is on-going, the expansion in the importation of opium into China in the eighteenth century included Bengal opium acquired at Batavia and it is suggested that the quantities may have increased in the latter half of the eighteenth century.

Although fewer in number and total tonnage vis-à-vis the Amoy traders, Portuguese ships and traders from Macao, on occasion, were able to concentrate higher quantities and values of goods and commodities in comparison to the Amoy and other Chinese traders and investors.

Bengal was not the only source of supply nor was the VOC at and from Batavia the exclusive or primary market driver in the expansion of the commercialization of Indian opium to China in the latter half of the eighteenth century. Malwa was the additional source of supply of Indian opium to China. The Portuguese from Goa as well as Macao were among the private trading groups involved in the expansion of the commercialization of Malwa opium to China in the latter half of the eighteenth century.³⁴

By 1771 the Portuguese involvement in Indian opium sourced from Bengal and Malwa in the China market at Macao was 800 chests annually. They were procuring Malwa opium on the Malabar coast from

166 to 233 taels per chest and Bengal opium from 100 to 133 taels per chest; this opium was selling in China from 260 to 750 taels per chest.³⁵ In comparison with other goods and commodities that they were selling in China, the Portuguese were obtaining their largest gross profit margins by far on their Bengal and Malwa opium transactions. From 1784 to 1799 the Portuguese delivered an annual average of 1,359 chests of Indian opium to China. Over a forty-five year period, from 1784 to 1828, Portuguese authorities at Macao quantified their involvement in Indian opium trade as being annually an average of 2,196 chests to China.³⁶ The importation of opium to China by all participants at the beginning of the nineteenth century is presently estimated at around 4,000 chests annually.

While it may be unnecessary to establish that trading activity in inter-Asian markets was commercially viable, this observation does introduce another implication that emerges from this study, which is an answer to the following question: if strong inter-Asian market demand existed for Chinese and Indian goods and commodities that were supplied and delivered by the Macao merchant fleet, why was there not any greater sign of recovery or prosperity in the Portuguese colonial port city? The answer to this question, again, is in two parts. The first is suggested by the way the ship owning, operating and investing Portuguese casado elites at Macao controlled the city's revenue collections by fixing maritime duty rates. The second part of the answer is the suggestion that a significant percentage of the goods and commodities on board Macao's merchant fleet may not have been on the Portuguese ship owners, operators or investor's account but belonged to others. Consequently, the wealth that this trade may have produced may not have stayed in the hands of the shippers that carried the goods to market.

A final implication from this study deals with the overall question of the relative importance of the Portuguese merchant fleet at Macao and the commercial and political activities in which it was involved. The numbers, the size of the fleet and the scope of its activities in this instance do indicate the restraints on the Portuguese ability to compete and be rivals to European companies and European and Asian private traders. Over this period, the Portuguese merchant fleet at Macao was not directly involved in the global long-distance marketing of Chinese goods

and commodities to Europe and America; they were inter-regional and regional market suppliers and intermediaries in Asian goods. Attempts to compete at the global long-distance level were made by the Portuguese East India Company at Macao during the latter half of the eighteenth century. To the degree that the companies and other private traders were involved in inter-Asian markets with Chinese goods, the Portuguese merchant fleet at Macao collectively was not a competitive force with the companies, but its size and numbers compare more favorably if juxtaposed with the private European and Asian merchant's vessels and fleets in individual Indian port cities in the first half of the eighteenth century.

The Portuguese merchant fleet at Macao demonstrated a unique range in its activities in China and the South China Sea. By comparing its activities with those of their Chinese rivals at Batavia and the composition of the goods and commodities in which they were commercially active, we can see that in some

aspects, towards the end of the eighteenth century, the Portuguese merchant fleet at Macao entered into the high volume, low margin, rice and salt bulk commodity segment of China's sub-regional Guangdong market. At the very same time, the Portuguese merchant fleet at Macao was supplying one-half of the recorded volume of Indian opium to China and proving to be a serious competitor in that commodity vis-à-vis European private traders and the Bengal opium monopoly policy of the English East India Company. Finally, in the true fashion of denizens of albeit an atypical colonial port city, the Portuguese merchant fleet at Macao identified a market of opportunity for saltpeter, weapons and metals and intervened in the internal politics of central Vietnam in the 1770s.³⁷ Although the activities of the Portuguese merchant fleet at Macao changed over the eighteenth century, those activities were still fundamentally important to the history of China and China's relations with Europeans. RC

NOTES

- 1 For a discussion of the ethos of the Portuguese urban elites and their activities at Macao, cf. C. R. Boxer, *Fidalgos in the Far East,* 1550-1770, (The Hague, 1948; reprint Oxford, 1968).
- For a reprint of an article discussing an urban typology that anteceded "port city" or "colonial port city", cf. A. Das Gupta, "The Maritime City," in Merchants of Maritime India, 1500-1800, (1994). For the port city, cf. J. Kathirithamby-Wells and J. Villiers, eds., Southeast Asian Port and Policy: Rise and Demise, (Singapore, 1990), F. Broeze, ed., Brides of the Sea: Port Cities of Asia from the Sixteenth to the Twentieth Centuries, (Honolulu, 1995) and F. Broeze, ed., Gateways of Asia: Port Cities of Asia in the 13th-20th Centuries, (Honolulu, 1996); for the colonial city, cf. R. Murphey, "Traditionalism and Colonialism: Changing Urban Roles in Asia," Journal of Asian Studies, 29 (1969), 67-84, D. K. Basu, ed., The Rise and Growth of the Colonial Port Cities in Asia, (Berkeley, 1985) and R. Ross and G. J. Telkamp, eds., Colonial Cities: Essays on Urbanism in a Colonial Context, (Dordrecht, 1985). For Goa as a port city, cf. M. N. Pearson, "The Port City of Goa: Policy and Practice in the Sixteenth Century," in Coastal Western India, (New Delhi, 1981), 67-92.
- For the maritime trade and port hinterland discussion, cf. I. Banga, Ports and their Hinterlands in India, 1700-1970, (New Delhi, 1992), K. S. Mathew, ed., Mariners, Merchants and Oceans, (Delhi, 1995), B. Stein and S. Subrahmanyam, eds., Institutions and Economic Change in South Asia, (Delhi, 1996), R. Mukheyee and L. Subramanian, eds., Politics and Trade in the Indian Ocean World, (Delhi, 1998), and S. Chaudhury and M. Morineau, eds., Merchants, Companies and Trade, (Cambridge, 1999).
- 4 Cf. F. Broeze, "Introduction: Brides of the Sea," 4, in F. Broeze, ed., *Brides of the Sea: Port Cities of Asia from the Sixteenth to the Twentieth Centuries*, (Honolulu, 1995).
- For Amoy and the Fujian region, cf. C. Ng, Trade and Society: The Amoy Network on the China Coast, 1683-1735, (Singapore, 1983); and E. S. Rawski, Agricultural Change and the Peasant

- Economy of South China, (Cambridge, Mass., 1972); for Ningpo and Shanghai, cf. Shiba Yoshinobu, "Ningpo and Its Hinterland," in G. William Skinner, ed. The City in Late Imperial China (Stanford University Press 1977); and M. Elvin, "Market Towns and Waterways: The County of Shanghai from 1480 to 1910," in: G. W. Skinner, ed., The City in Late Imperial China, (Stanford, 1977), 391-439, 441-73. A recent Ph.D. provides details on the functioning of the port of Canton and the long-distance supply and demand of export and imported goods that also breaks with this earlier characterization of the port hinterland relationship, cf. P. van Dyke, "Port Canton and the Pearl River Delta, 1690-1845," Ph.D. dissertation, 2002.
- For examples of the literature on Chinese commodities, their distance and connection with Chinese port cities, cf. C. J. A. Jörg, Porcelain and the Dutch China Trade, (The Hague, 1982) for porcelain production and primary kilns; cf. R. Gardella, Harvesting Mountains: Fujian and the China Tea Trade, 1757-1937, (Berkeley, 1994) for the tea districts and their distance from Chinese port cities; cf. S. Mazumdar, Sugar and Society in China: Peasants, Technology, and the World Market, (Cambridge, MA, 1998) for sugar; and R. B. Marks, Tigers, Rice, Silk, and Silt: Environment and Economy in Late Imperial South China, (Cambridge, 1998), for grain and the environment.
- 7 For Macao, cf. G. B. Souza, The Survival of Empire: Portuguese Trade and Society in China and the South China Sea, c. 1630-1754, (Cambridge, 1986), 33, 62, 143.
- 8 Cf. Broeze (1995), "Introduction," 4.
- Cf. H. Kamen, Early Modern European Society, (London, 2000), 13-14.
- 10 Cf. Kamen, (2000), 97; E. Isenmann, "Norms and Values in the European City," and "Socio-political Concepts of Honour Values and Lifestyles," in P. Blickle, ed., Resistance, Representation and Community, (Oxford, 1997), part IV, 190-5, 201; and F. Mauro, "La bourgeoisie Portugaise au XVIIe siecle," XVII Siecle, (1958).

- 11 For the classic treatment of the Portuguese municipal council in the tropics with treatment and bibliography on the institution in Portugal, cf. C. R. Boxer, *Portuguese Society in the Tropics: The Municipal Councils of Goa, Macao, Bahia, and Luanda, 1510-1800*), (Wisconsin, 1965).
- 12 Cf. Kamen, (2000), 105.
- 13 Cf. F. Braudel, S. Reynolds, trans. The Mediterranean and the Mediterranean World in the Age of Philip II, 2 vols. (New York, 1972) 1, 326
- 14 For the sources for this table and the discussion that follows on the *Senado da Câmara* deliberations, cf. *Arquivos de Macau*, 3rd series, vols. I:1, 29; 2, 81, 97; 3, 137, 155, 159, 187, 207, 241, 257; II:1, 7, 20, 34, 55, 67, 83, 89, 97, 108; II:3, 133; II:4, 195; II:5, 284, 309, 338, 354, 376; III:1, 16-7, 36, 51-2, 82, 98, 105, 121-2, 159, 174, 183-4, 200, 207, 213, 218, 241, 243; and IV:2, 76.
- 15 Cf. G. B. Souza, "Commerce and Capital: Portuguese Maritime Losses in the South China Sea, 1600-1754," in A. T. de Matos and L. F. E. Reis Tomaz, eds., As Relações entre a Índia Portuguesa, a Ásia do Sueste e o Extremo Oriente, Actas do VI Seminário Internacional de História Indo-Portuguesa, (Macau/Lisboa, 1993), 321-48.
- 16 Cf. W. E. Cheong, Hong Merchants of Canton: Chinese Merchants in Sino-Western Trade, 1684-1798, (London, 1997).
- 17 Cf. G. B. Souza, "Ballast Goods: Chinese Maritime Trade in Zinc and Sugar in the Seventeenth and Eighteenth Centuries," in R. Ptak and D. Rothermund, eds., Emporia, Commodities and Entrepreneurs in Asian Maritime Trade, c. 1400-1750, (Stuttgart, 1990), 291-315.
- 18 Cf. G. B. Souza, "Portuguese Country Traders in the Indian Ocean and the South China Sea, c. 1600," Moyen Orient & Ocean Indien, 1:1 (1984), 17-28 and reprinted in: Om Prakash, ed., European Commercial Expansion in Early Modern Asia, vol. 10, (Ashgate-Varorium, 1997).
- 19 Cf. Souza, Survival, 130-131.
- 20 Cf. Arquivos de Macau, 3rd series, vol. IV:2, 96-100.
- 21 Cf. G. B. Souza, "Notes on the 'Algemeen Rijksarchief' and its Importance for the Study of Portuguese, Asian and Inter-Asian Maritime Trade," *Itinerario*, 4:2 (1980), 48-56.
- 22 Cf. *Arquivos de Macau*, 3rd series, vol. II:1, 1, 61, 82, 86, 96; III:1, 35; III:2, 88, 169, 193, 201, 202, 220, 222 and 236.
- 23 This report is found in the Arquivo Histórico Ultramarino (AHU) in Lisbon, cf. AHU, Maços de Macau, 6, doc. 28, 10/11/1771; it has been published, cf. A. M. Martins do Vale, Os Portugueses em Macau (1750-1800), (Macao, 1997), appendix 20.
- 24 J. L. Blusse, Strange Company: Chinese Settlers, Mestizo Women and Dutch in VOC Batavia, (Dordrecht, 1986) and J. De Hullu, "Over den Chinaschen Handel der Oost-Indische Compagnie in de Eerste Dertig Jaar van de 18e eeuw," Bijdragen tot de Taal-, Land- en Volkenkunde, 73 (1917), 32-151.
- 25 Throughout this study, the conversion of *rijksdaalders* (rsd) to Chinese *taels* and Spanish *pesos* is: 1 rsd to 3 guilders, 2.85 guilders to 1 *tael*, and 2.5 guilders to 1 *peso* of 8 *reales*.

- VOC archival reports were used to generate Tables 3-7; a discussion of a portion of this material was presented in my discussion of Batavia's maritime trading activities, cf. Souza (1986), Survival. New and additional archival material has been incorporated, which has been introduced as appendices in an unpublished working paper, cf. G. B. Souza, "Cinnamon, Silver and Opium: Foreign Shipping and Trading Activities at Batavia, 1684-1792," 11th Annual Conference of the World History Association, Seoul, Korea, August 15-18, 2002.
- P. Chaunu initiated a useful discussion on tonnage with his article, "La tonelade espagnole aux XVI^c et XVII^c siecles," in Le Navire et l'Économie Maritime du XV^e au XVIII^e siècles, (Paris, 1957) For its subsequent incorporation and importance in the seminal studies on the maritime trade of Seville, Manila, Canton and Cadiz, cf. P. and H. Chaunu, Séville et l'Atlantique, 8 vols. in 11, (Paris, 1955-60); P. Chaunu, Les Philippines et le Pacifique des Ibériques (XVIF, XVIII^e, XVIII^e siècles), (Paris, 1960); L. Dermigny, La Chine et l'Occident: Le commerce a Canton au XVIII^e siècle, 3 vols., (Paris, 1964); and A. García-Baquero González, Cádiz y el Atlántico: 1717-1778, 2 vols., (Cádiz, 1988).
- 28 For 1687 and 1719, cf. ARA, VOC, 1431, fol. 564-6v.
- 29 Cf. P. van Dyke (2002), "Port Canton and the Pearl River Delta, 1690-1845," Chapter Two and 458.
- 30 For the VOC's rendements on these items in the Bengal and Surat markets, cf. ARA, VOC 2753, f. 1205-1295 and VOC 2770, f. 972-1048.
- 31 Cf. G. B. Souza, "Trafficking Indian Opium to China: Portuguese and Chinese Trading Activities, c. 1750 to c. 1830," an unpublished paper presented at the *Drugs and Empires: Narcotics, History and Modern Colonialism, c. 1600 to c. 1947* Conference, University of Strathclyde, April 10-11, 2003.
- 32 For opium in China, cf. H. B. Morse, *The Chronicles of the East India Company Trading to China, 1635-1834*, 5 vols., (Oxford, 1926-9; reprint Taiwan 1975).
- 33 Cf. K. Pomeranz and S. Topik, World That Trade Created: Society, Culture, and the World Economy, 1400-the Present, (1999), 103.
- 34 For the commercialization of Malwa opium and Portuguese "country trade" involvement, cf. A. Farooqui, Smuggling as Subversion: Colonialism, Indian Merchants and the Politics of Opium, (New Delhi, 1998); C. Pinto, Trade and Finance in Portuguese India: A Study of the Portuguese Country Trade, 1770-1840, (New Delhi, 1994); and C. Pinto, "Goa-based Overseas and Coastal Trade (Eighteenth-Nineteenth Centuries)," in T. R. de Souza, ed., Goa Through the Ages, 2 vols., (New Delhi, 1990), 176-212.
- 35 This information is found in the Santos report in the Arquivo Histórico Ultramarino (AHU) in Lisbon, cf. AHU, Maços de Macau, 6, doc. 28, 10/11/1771; it has been published, cf. Vale, (1997), appendix 20.
- 36 Cf. AHU, Maços de Macau, 60, doc. 6, 10/11/1771; it has been published, cf. Vale (1997), appendix 11.
- 37 Cf. P. Y. Manguin, Les Nguyen, Macau et le Portugal: Aspects Politiques et Commerciaux d'une Relation Privilegiée, 1773-1802, (Paris, 1978).