

why brazil did not develop a merchant marine; brazilian shipping and the world in the 19th century

Birgitte Holten
Copenhagen Business School

ABSTRACT

The weak performance of the Brazilian merchant marine is surprising, as a huge external sector is normally expected to go hand in hand with the development of a national merchant marine. To elucidate this question, the article proposes an analysis and discussion of the development of the Brazilian merchant marine in the nineteenth century. The early focus on the extremely specialized importation of African slaves led to a near abandon of long distance shipping when this trade was banned in 1830. The same tendency to desist from exterior shipping can also be found in the United States in the late 19th century. A comparison of the two countries demonstrates, that the need for developing the national territory and for providing transportation facilities for the growing interior economies diverted the concentration from exterior ventures to national ones.

Key words: slave trade; shipping; Brazil; USA; interior development.

RESUMO

O fraco desempenho da marinha mercante brasileira é algo surpreendente, pois seria de se esperar que um vasto setor externo estivesse acoplado ao desenvolvimento de uma marinha mercante nacional. A fim de esclarecer essa questão, o artigo se propõe analisar e discutir o desenvolvimento da marinha mercante do Brasil no século XIX. A preferência inicial pela importação extremamente especializada de escravos africanos conduziu a um quase abandono da navegação de longo curso quando o tráfico foi proibido em 1830. A mesma tendência de desistir da navegação externa pode também ser encontrada nos Estados Unidos ao final do século XIX. Uma comparação entre os dois países demonstra que a necessidade da conquista de um território nacional, e de prover meios de transporte para a crescente economia interna, desviou recursos dos empreendimentos externos para os internos.

Palavras-chave: comércio de escravos, navegação, Brasil, EUA, desenvolvimento interno.

In 1865 one of the leading legal minds of the Brazilian Empire, Antonio Pereira Pinto, made a severe accusation: The privileges for British goods and shipping interests that had been inserted in the early nineteenth century commercial treaties... "had already in 1810

destroyed the national long-distance trade, obliging the Brazilian ship owners to sell or disarm their huge vessels, up until then employed in the trade with Europe, Asia and Africa".¹

In the same vein, in 1897 Bernardino de Campos, Minister of Finance of the early Brazilian Republic, could affirm that "... our ensign was displayed abroad on the mast-heads of our vessels; since the fatal decisions after 1860, it is no more seen blazing in the sun of these countries, and the Republic found our merchant marine totally destroyed".²

Both statements tell the same story of dilapidation of a national asset and the loss of a cherished property by negligence. This is a common feature of Brazilian historical accounts written in the nineteenth century. They are frequently coupled with a strongly worded and vindictive criticism of the imperialistic encroachment of especially Great Britain on Brazilian judicial rights and sovereign powers. The parallelism between the two statements is especially striking, when the moment of their proclamation is taken into account: the golden age referred to by Minister de Campos, the period before 1860, is exactly the same as the period that is declared to be in total ruin by Pinto in the earlier statement.

Over a considerable period of time, the disappearance of the Brazilian merchant marine during the nineteenth century has been considered to be an established fact. The real extent of the problem and how it developed has however rarely been discussed, other than in general terms. The usually stated affirmation, that it was a combined result of British imperialism and the give-away of Imperial trade policy evidently has some core of truth; the question is whether these isolated reasons were sufficient to cause the problem to its full extent.

This article seeks to analyze and discuss the development of the

¹ Antonio Pereira Pinto: *Apontamentos para o direito internacional*. Vol.6. Rio de Janeiro, 1865 (2nd edition, Brasília, 1980), p. 148 f. "As franquezas insertas na cláusula de que tratamos, bem como a diminuição dos direitos de importação a favor de Grã-Bretanha, já haviam em 1810 acabado com o comércio nacional de longo curso, procedendo os armadores brasileiros, nessa época, à venda ou desarmamento de suas grandes embarcações empregadas na navegação da Europa, Asia e Africa..." (My translation).

² Ministério da Fazenda, *Relatorio do anno de 1897*. Ministro Bernardino de Campos, 31/5 1898. p. 270. "... a nossa bandeira ostentava-se no estrangeiro nos topos dos mastros dos nossos navios; tanto que começaram as prorogações fataes posteriores a 1860, nunca mais ella brilhou ao sol que illumina esses paizes, e a Republica veio encontrar a marinha mercante nacional completamente desfeita." (My translation).

Brazilian merchant marine during the nineteenth century, in the hope of throwing some light on this question. This will be done using several different methods of analysis. As the problem has never been discussed in detail, secondary literature on the specific question will only be given secondary importance in the analysis. Instead, primary sources of statistical information are used. These statistics were partly extracted from the daily shipping lists published in the *Jornal do Commercio* of Rio, partly taken from late nineteenth century Brazilian publications. This quantitative attempt is completed with incursions into the existing literature concerning the economic and administrative development of Brazil and an attempt to widen the perspective including a comparison with the contemporary development of the merchant marine of the USA.

Returning to the two initial statements, they both represent a classical before-and-after sequence. The glorious past before the commercial treaty of 1810 or the opening of the coasting trade for foreign ships in the 1860's, when Brazilian ships cleaved the oceans — is seen in stark contrast to the bleak present marked by decay and ruin.

Before turning to the answers, let us take a rapid look at the historical and geographical background to this question.

Rio and the Atlantic

In 1815, the British traveler John Mawe published a description of his journeys in Brazil from the extreme south of the country to the diamond district of Northern Minas Gerais. In his description of Rio de Janeiro he stresses that

"No colonial port in the world is so well situated for general commerce as Rio de Janeiro. It enjoys, beyond any other, an equal convenience of intercourse with Europe, America, Africa, the East Indies, and the South Sea Islands, and seems formed by nature as a grand link to connect the trade of those great portions of the globe. Commanding also, as the capital of a rich and extensive territory, resources of immense amount and value, it seemed to require only the presence of an efficient government to give it political importance, and this advantage it has now gained by becoming the chosen residence of the court of Portugal."³

³ John Mawe: *Travels in the Interior of Brazil*. London, 1815. p. 100.

The main Atlantic shipping routes were throughout most of the nineteenth century by two diagonal routes: 1) North America — Cape of the Good Hope: the great trading route to the Indian Ocean and the ports of Asia; and 2) Europe - South America: to Rio de Janeiro, Rio de la Plata and further through the Magellan Straits to the West coast of the Americas. The two North-South routes followed the continental coastlines: The east coast of the Americas and the west coast of Europe and Africa. This last route normally followed an S-shaped course in the South Atlantic, often calling at Rio de Janeiro or Salvador and rounding the Azores. And, finally, the East West routes — between North or Central America and Europe; and between Brazil and West Africa. Through the generosity of nature Rio was an extremely convenient port of call for provisions, refreshments or trade on the great majority of these routes.

The port of Rio was important also as the main trading post and port of exportation for the most valuable part of the Brazilian agricultural and mineral production. Since 1763, when Rio became the capital of Brazil it was also the economic center of the agricultural and mining South. Brazil's international trade in the nineteenth century was concentrated in Rio with Santos as its main rival working bravely upstream, however without much success until the end of the century. The sugar-producing North-East had entered its century-long decline while the South, engaged in alternative sectors of great commercial potential, was still locked in outdated technology waiting for the introduction of refrigeration; and finally, the rubber-boom in the extreme North was still in the making.

The geographical situation of the port was a further reason for Rio's maritime significance: the Guanabara Bay is well protected, easy to defend, deep and large enough for accommodating a great number of embarkations. The city is situated near one of the few canyons of the Serra do Mar, the mountain range which forms an efficient barrier between the low coastal region and the interior highlands of Brazil. Only in a few places does a natural descent or breach in the mountains permit easier access to the interior, channeling the products from the interior to the most important ports of Brazil: Salvador, Rio de Janeiro, Santos and later Rio Grande. The coastal connections uniting the Brazilian archipelago of isolated

cities were made by a multitude of small vessels bringing passengers, foodstuff and goods for exportation to the international ports and returning with imported goods to the local areas.⁴

The port of Rio was protected by efficient administrative control as well. From the late 18th century, cutters controlled the coast between Cabo Frio and the approach to the Guanabara Bay. All foreign vessels passing the bar were obliged to have a ship's pilot. Also, health and customs controls were performed at the islands inside the bay before proceeding to the place assigned for anchorage.⁵ During the 18th century, the port of Rio went through several extensions and modernizations, reaching Independence in 1822 equipped with a quay of 105 fathoms (200m), several warehouses, a balance and a wooden crane. The goods that could not be loaded or discharged at the quay had to be carried on the backs of slaves and sailed to the warehouses on rafts by a small number of free longshoremen. As time went by, the port installations continued to be increased until around 1900 when a totally new port was constructed in the Guanabara Bay north of Rio.

The mercantile policy of the late colonial period had imposed severe restrictions on the Brazilian exterior trade, including a formal ban on foreign vessels accessing Brazilian ports except for repairs or refreshments. But naturally these restrictions could not be enforced. Portugal was committed to England by a series of commercial treaties crowned by the Methuen-treaty of 1703, and was too weak economically and militarily to impose serious restrictions on her most important commercial partner. Instead of monopolizing the trade with Brazil, Portugal sought to impose her position as a mandatory intermediary, forcing all communication with Brazil to pass through Lisbon. This might have restrained, but did by no means exclude, foreign shipping from this lucrative market. The methods were many: Portuguese shippers and merchants would freight foreign ships; English merchants would invest in Portuguese trading firms or

⁴ René de la Pedraja: *Oil and Coffee, Latin American Merchant Shipping from the Imperial Era to the 1950s*. Westport, CT, 1998, p. 5.

⁵ Corcino Medeiros dos Santos: *O Rio de Janeiro e a Conjuntura Atlântica*. Rio de Janeiro, 1993. p. 23.

employ Portuguese straw men; or more daringly, an increasing number of foreign ships would arrive in Rio under the pretence of an emergency situation, discharging English manufactured goods and loading Brazilian products while under repair. This was outright contraband trade, carried out with active assistance by Portuguese subjects, while civil servants looked the other way.

The final years of colonial regime witnessed a situation marked by steeply rising imports of mainly British manufacture and growing exports of primarily agricultural products from Brazil. The declining number of vessels making the voyage from Lisbon to Rio demonstrates however a glaring contrast to the general rise in commercial activity.⁶ The preponderance of British manufactured goods in the Portuguese trade with Brazil was a well-established tradition; the new fact was that ships from the most diverse seafaring nations — Britain, Denmark, Norway, Holland and others, no longer obeyed the Portuguese restrictions for commerce with Brazil. The French Revolution and the Napoleonic Wars had diminished the Iberian powers' control over their American colonies, and the local government in Brazil did not impose an over severe control on foreign vessels arriving in the ports of the colony (Table 1).

Table 1: Colonial times: Voyages Rio-Lisbon, 1790-1809⁷

5-year intervals	Rio-Lisbon	Lisbon-Rio
1790-94	79	61
1795-99	99	33
1800-04	136	5
1804-09	85	4

While as few as 5 ships made the voyage from Lisbon to Rio in the five-year period from 1799 to 1804, about 30 foreign ships arrived in Rio claiming the necessity to enter the port for repairs.⁸ Meanwhile, an impressive total of 136 ships left Rio for Lisbon during the same period. This patent lopsidedness points to a much larger contact than indicated by the number of incoming ships, only explicable by

⁶ Corcino Medeiros dos Santos: *Relações Comerciais do Rio de Janeiro com Lisboa (1763-1808)*. Rio de Janeiro, 1980. p. 120.

⁷ Santos, 1980, p. 120.

⁸ Santos, 1980, p. 134.

the arrival of more ships than accounted for. This infringement of colonial regulations could obviously only happen under a benevolent eye from the colonial authorities.

The opening of the ports and the commercial treaties

The flight of the Portuguese Court to Brazil as French troops advanced towards Lisbon in 1807 caused a dramatic change of policy around Brazil's commercial and maritime interests and its incursion in the Portuguese colonial empire. The starting point was the opening of the ports to ships of all friendly nations in 1808. Portugal was under French occupation, confined behind the continental blockade and severed from any connection with her colonies. Continental Europe as a whole was inaccessible and Britain alone ruled the seas. The rupture of Portugal's colonial monopoly was thereby tantamount to, strictly speaking, granting privileged access to Brazil for British shipping.

In 1810 the situation became even more comfortable for Britain, as a commercial treaty reduced the customs tariffs for the importation of British manufactured goods to Brazil. This is the treaty alluded to by Pereira, notorious for the lower tariffs introduced for British than for Portuguese products.

After Independence in 1822, the newborn Empire accepted a commercial treaty with Britain in 1827, accompanied by a convention from 1826 intending to stop the importation of slaves from Africa by 1830. Ever since that time, the Brazilian criticism of these treaties has charged British imperialism with any inbred structural difficulties in Brazilian society. While no doubt exists that British commercial and shipping firms saw great opportunities in the newly opened South American markets and used their government employees efficiently in order to guarantee their privileged access, it is on the other hand sadly true, that British negotiators' efficient manipulation was met with a total lack of foresight by the Brazilian counterpart, assisted by the State's and the political and agricultural elites' neglect of the matter and diverse political purposes.⁹

Maybe the most interesting allegation in the statement of Antonio

⁹ For a discussion of this question, see for example: Stephen Haber & Herbert S. Klein: *The Economic Consequences of Brazilian Independence*. In: Stephen Haber (ed.): *How Latin America Fell Behind*. Stanford, 1997.

Pereira Pinto, which opened this article, is the affirmation that "Brazilian" shipping had suffered by the treaty of 1810 — at a period when Brazil did not yet exist as a Nation State. Seen at a distance and discounting nationalistic sentiments, the immediate result of this first treaty was probably rather an advantage for Brazilian shipping — while the former colonial mother country, Portugal, was the great loser, as peninsular shipping to Brazil was rapidly split up between British and local Brazilian ship-owners. Contrasting with the affirmation of Pereira Pinto, this treaty might as well be considered an opening of new possibilities for the Brazilian-born merchants to force their way into the privileges of their former colonial masters.

The one area of trade of specific interest to Brazilian ship-owners was the importation of slaves from Africa. The slave trade as a business enterprise is ruled by specific characteristics. The heart of the question is the extreme version of the labor force as a commodity, to be bought and sold in physical form. Slaves were bought in Africa for products that were highly sought after by the local sellers: brightly colored cotton goods and firearms (made in Britain), or tobacco and brandy (made in Brazil). One shipment of slaves from Africa was worth around three shipments of the goods for barter.¹⁰ Counting an average importation of Africans to Brazil per year of 32,770 for the decade 1811-20 - and a low estimate of 400-500 slaves per ship, it should be evident that the African slave trade involved a greatly developed and highly specialized shipping industry.¹¹ Ships for slave transports had to be equipped with extra decks and installations that permitted to the transport of a large water supply for the 30-day voyage across the Atlantic. Fetters for the slaves were another heavy investment in slave ships. The shipping of slaves was a highly specialized trade, which demanded great investments and was rewarded with extremely high freight rates and returns.

In colonial times, this highly lucrative trade had been a prerogative of the Portuguese shippers. Now it became gradually more 'brazilianized', as Brazilian subjects took over from their former colonial compatriots. The basic development in this early period was thus: British navigation ousted — now openly — the Portuguese merchant marine from the trade between Europe and Brazil, while

¹⁰ Pedraja, p. 4

¹¹ IBGE: *Estatísticas Históricas do Brasil*. Rio de Janeiro, 1998. Table 2.2, p. 60.

the emerging Brazilian merchant marine replaced the Portuguese in the African slave trade.¹² Portugal suffered heavy losses, while Brazil and Britain shared the loot.

One example suffices to illustrate the huge profits of the slave traffic. The brig "Henriquetta", owned by João Cardozo dos Santos, made six voyages to Africa between February 1825 and June 1827. These voyages resulted in a total of 3,040 slaves disembarked in Bahia at a net gain estimated at £80,000, and the profit from just one of those voyages was sufficient to compensate the owner for the earlier loss of three ships.¹³

It proved to be a short respite; in 1830 the prohibition against slave imports came into force, and the greater part of the extremely specialized Brazilian long distance merchant marine entered into clandestine operations. To ascertain the impact of this prohibition on Brazilian shipping, we shall now introduce the first part of the analysis of Brazilian shipping from the port of Rio de Janeiro.

Statistical material and methods

Finding primary documentation for Brazilian maritime history has proved to be a difficult task. My routine requests for nineteenth century shipping registers in any Brazilian archive visited since the early 1990s have brought very little relevant material to light — and nothing that permits reconstruction of a continuous series of data or even a narrow basis for comparison.

Fortunately, some very good secondary sources do exist. The daily survey of "*Movimentos do Porto*" from *Jornal do Commercio do Rio de Janeiro* brings a very detailed and apparently complete shipping register of the port of Rio de Janeiro — at this time the most important port of Brazil — moving about 50 per cent of the total foreign trade and centralizing the coasting trade of southern Brazil. The major drawback of this source is the necessity to register the calls on a day-to-day basis, which has proved a very time-consuming task. The *Boletim da Alfandega* from the same city brings some useful statistics for the 1880s; and the Reports of the Commercial Associations of

¹² Jorge Caldeira: *A Nação Mercantilista*. Rio de Janeiro, 1999. p. 327.

¹³ Robert Edgar Conrad: *World of Sorrow; The African Slave Trade to Brazil*. Baton Rouge, 1986. p. 70.

Rio and Santos have given some interesting evidence for the late Empire and early Republic.

In the following pages, a number of statistical series are analyzed in order to estimate the performance of Brazilian shipping in the 19th century, confronting three crucial events: The ban of slave imports from Africa in 1831; the definitive stop for this import around 1850-51; and the opening of the coaster trade for foreign shipping in 1866. In all three cases, the number of calls in Rio de Janeiro some years before and after the event is compared, attempting to analyze the shifting trends and their impact on Brazilian shipping.

The general problem of statistics is that they say at the same time too much and too little. The number of calls is a relevant measure for shipping activity but masks, on the other hand, the underlying trends of rising tonnage, intermediate calls, types of goods carried and ships voyaging in ballast. In the following analysis, I shall try to counteract this weakness by complementary commentaries.

Table 2: Origins and destinations for vessels calling at the Port of Rio de Janeiro ¹⁴

	1828*		1833*		1848		1853	
	destination	origin	destination	origin	destination	origin	destination	origin
Brazilian ships								
Brazilian ports	1197	1181	1412	1607	2502	2432	2346	2381
South America	12	4	19	18	29	48	50	50
USA					1			
Europe	2	1	7	11	16	10	11	14
Africa	91	95	17	3	2	1		
Asia		2	4					
Packet Lines			37		83		103	
Foreign ships								
Brazilian ports	73	39	53	54	115	83	112	38
South America	102	68	87	60	163	114	106	106
USA	49	66	95	101	250	211	236	197
Europe	235	250	211	306	336	582	432	542
Africa	21	28	54	46	63	90	24	22
Asia	23	6	36	15	28	8	26	15
Packet Lines	48		36		41		66	

¹⁴ The numbers are extracted from the *Jornal do Commercio*. As there are certain gaps in the earlier years of the collection of this journal in the Biblioteca Nacional in Rio de Janeiro, the numbers are extrapolated, calculating the ratio of calls in the registered copies of the journal to the total annual number of editions.

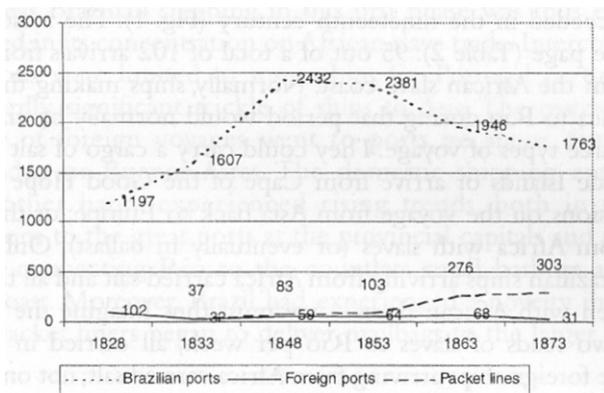
The ban on slave imports is considered by comparing the number of calls for the years of 1828 and 1833. Parallel to that, the effective stop for the traffic is examined by doing the same for the years of 1848 and 1853. These two series suggest a quite detailed survey of origins and destinations of ships passing through Rio (Table 2). On the other hand, the impact of opening the coasting trade for foreign vessels is much harder to ascertain. A detailed discussion of these difficulties is found below.

Even accounting for all these reservations, I have found it worthwhile to attempt a cautious estimate of the impact of the opening of the coaster trade on the Brazilian shipping industry. To this end, I have used a summarized version of the four first series combined with two more, for 1863 and 1873 (Table 3; Fig. 1).

Table 3: Origin of Brazilian ships arriving at the port of Rio

	1828	1833	1848	1853	1863	1873
Brazilian ports	1197	1607	2432	2381	1946	1763
Foreign ports	102	32	59	64	68	31
Packet lines		37	83	103	276	303

Fig. 1: Origin of Brazilian ships arriving at the port of Rio



The stop on legal slave imports (1828/33)

The years 1826-30 were boom years for slave imports. An estimated total of 250,200 African slaves were introduced to Brazil during that period — or an annual average of 50,040 - only matched by the 257,500 slaves imported during the traffic's last five years, 1846-50.¹⁵ The continuous difficulties of obtaining freights to Europe or the United States was probably not perceived as a serious problem for the Brazilian ship owners, as the slave trade was still the best-paid branch of shipping worldwide, benefiting from high freight-rates as well as being free from the heavy competition of other trades. Every rational consideration pointed to the slave trade as a privileged area of activity for the Brazilian ship owners, as long as nobody cared to address the moral side of the question. Besides, serious and eloquent economic and even moral arguments in favor of the slave trade were furthered with some frequency, such as the necessity for the Brazilian agriculture, God's wise design in placing Africa within such close reach of Brazil, and so on. For strictly economic reasons, the widespread business developing side by side with the slave trade spoke equally highly: the slave trade traditionally integrated vertically into the service sector — being the financial fundament for the national credit market as well as the marginally capitalistic agriculture.

1828 represents the most flourishing phase in the history of Brazilian international shipping, marked by a number of calls at foreign ports never exceeded in the nineteenth century (Fig. 1). The reason jumps out of the page (Table 2): 95 out of a total of 102 arrivals from abroad came from the African slave coast. Normally, ships making the voyage from Africa to Rio during that period would normally be engaged in one of three types of voyage: They could carry a cargo of salt from the Cape Verde Islands or arrive from Cape of the Good Hope stopping for provisions on the voyage from Asia back to Europe; or they could arrive from Africa with slaves (or eventually in ballast). Only one of the 95 Brazilian ships arriving from Africa carried salt and all the others were laden with African slaves — we must thus imagine the influx of almost two loads of slaves to Rio per week, all carried in Brazilian ships. The foreign ships arriving from Africa carried salt; not one arrived loaded with slaves in this period.

¹⁵ IBGE, *op cit.*

As the ban on slave imports from Africa came into force in 1830, a new situation arose in Brazil. The demand for slaves for agriculture did not falter and enormous amounts of capital were invested in the Negro trade; but on the other hand, the risk of British interception and capture of ships was constant. The Brazilian slave traders, who did not wish to abandon this lucrative trade, were forced to react creatively and invent a new commercial organization to counteract the prohibition.

Moving on to 1833, a couple of years after the official stop on slave imports, the most significant change is the abrupt fall in Brazilian shipping to Africa. The contraband trade was already established as a healthy and popular enterprise but now under mainly Portuguese and North American colors. Most of these, however, were under the command of Brazilian subjects acting under cover in combination with the foreign ship owners, while maintaining the real control of the trade themselves.¹⁶ During this period, increasing numbers of slaves were put ashore along the Brazilian coast where clandestine markets sprang up far from the reach of British judges and consuls. One interesting characteristic of the situation in 1833 is revealed by looking at the voyages of Brazilian vessels between Rio and the coast of Africa. While only three Brazilian ships admitted arriving from Africa, seventeen left from Brazil carrying cotton goods and spirits to destinations on the slave coast, obviously as part of the trading scheme.

Overseas Brazilian shipping in this first phase was thus extremely specialized in its concentration on African slave trade. Intercontinental destinations were limited to some ships for Portugal or the Azores and a hardly significant trickle of ships to Asia. The overwhelming majority of foreign voyages went to ports no more distant than Montevideo or Buenos Aires. The domestic shipping enterprises, on the other hand, experienced rising trends, both in terms of connections to the great ports at the provincial capitals and the petty shipping connecting Rio to the countless small harbors along the nearby coast. Moreover, Brazil had experienced a novelty in 1833, as regular packet liners began to deliver mailbags to the larger Brazilian ports.

¹⁶ Conrad, p. 147. Pedraja, p. 4.

The close of the slave trade (1848/53)

Advancing about 20 years in time, the first thing that leaps to the eye is the doubling of the Brazilian interior shipping up to 1848 (Fig. 2). Another novelty is the increase in the number of departures for Europe, mostly to Portugal or the Azores. An important number of ships were leaving for the Azores via Angola, probably due to some masked participation in the slave trade. The schemes of this trade continue as in 1833, demonstrated by the arrival of 23 Portuguese and North American ships from Africa in ballast; all of these are however intercepted by the police of Rio and accused of having put ashore a cargo of slaves before entering the harbour.

The final years of the slave traffic were marked by an elaborate business organization under the leadership of large companies — in Rio alone there were as many as 18. Competent planning and accounting and a great capacity for creative adjustments to new problems characterized these companies.¹⁷ The slave ships employed in regular transports across the Atlantic were even covered by insurance against capture by the British navy. This was an important measure of security, as the Royal Navy in the years 1840-48 seized as many as 625 ships suspected of participation in the traffic, confiscating more than 30,033 slaves.¹⁸

The short span of years from 1848 to 1853 was in many ways a watershed for Brazilian shipping, even if in rather ambiguous terms. While the raw number of domestic calls was entering its long downwards slide from the apex in 1848, the packet services covering the long coastline, as well as the small steam lines for regional and local transportation were soaring. At the same time, while the nearby foreign destinations — especially the Rio de la Plata-region — were gaining importance, calls to other foreign destinations decreased but became diversified. While Africa had lost any former interest, the interest for European destinations was growing, Brazilian ships visiting a much broader segment of European ports. A totally new phenomenon was the occurrence of Brazilian ships arriving from Europe carrying equipment and products for major installations — machinery for the Rio Light Company, telegraph or railway equipment.

¹⁷ Conrad, p. 118.

¹⁸ Conrad, p. 141.

It is important to stress that the decreasing number of local calls was not equivalent to a fall in tonnage. Ships were growing in size - while around 1830 maybe as many as 20 small vessels a day would arrive to Rio from the nearby ports, in 1853 this number might have dropped to one or two; but then, just one of those would probably be a steamer of greater tonnage than the combined small ships of the earlier date.

The opening of coaster trade

Disengaged from formal commitments, as the commercial treaties from the late 1820's expired in the years after 1840, the Brazilian Empire entered a long period of alternating policies for the external trade. The mildly protectionist Alves Branco-tariff from 1844 was substituted in the mid-sixties by the liberalist Ferraz-tariff adopted mainly for political reasons — to counteract US designs on the Amazon and to create international goodwill during the Paraguayan conflict.¹⁹ During the late 1860's the same political reasons led to the further opening of the Amazon and still greater possibilities for foreign ships in Brazilian coaster shipping.

Opinions on the opening of the coaster trade were by no means unanimous. The Bernardino de Campos citation is only the final expression of a long list of severe accusations put forward, as the Republic abrogated the former permission for foreigners to participate in the coaster trade. While the Republican focus was clearly on the negative effect for Brazilian shipping interests, the commercial associations were more prone to stress the general advantage of the opening.²⁰

In 1871 and again in 1880, by request from certain groups of Brazilian merchants, the imperial government submitted the question to the commercial associations of the greater cities. These entities comprised Brazilian and foreign commercial houses and it is hardly surprising that they pronounced their unreserved approval of the free access to the coaster trade. It is, however, interesting to

¹⁹ Amado Luiz Cervo & Clodoaldo Bueno: *História da Política Exterior do Brasil*. São Paulo, 1992. pp. 91-96.

²⁰ Eugene Ridings: *Business Interest Groups in Nineteenth-Century Brazil*. Cambridge, 1994. pp. 250-1.

look more closely at the arguments of one of these associations: the reply of 1871 from the Commercial Association of Rio.²¹

The opponents focused on the necessity of maintaining a monopoly to sustain the national shipping industry and shipyards and to guarantee the supply of able seamen for the navy. The Commercial Association of Rio, on the other hand, while admitting some decline in Brazilian shipping and shipbuilding industries, emphasized the much greater advantages reaped by the nation, most importantly a substantial fall in the interior freight rates — up to 50% on shipping between Rio and Santos.

The Rio Association, asserting that the best measure to guarantee that end would be to stop employing slave labour on board Brazilian ships, on the other hand summarily dismissed the essential question of sailors for the navy. The Commercial Association put much more importance on another question, quite indicative of some of the real difficulties of the Brazilian shipping industry and even for the general economic performance of the country: the deficient labour force. One of the most detrimental factors for Brazilian shipping was the rule concerning the nationality of the crew. A very large proportion of Brazilian-born sailors were needed for any ship wanting to fly Brazilian colours. The most concrete proposition of the Commercial Association of Rio to the Government was to reduce this proportion, giving the Brazilian ship owners access to the great supply of foreign sailors always present in the harbours and guaranteeing them better possibilities in the competition. It was envisioned by the mainly liberal members of the Commercial Association, that the major hindrance for national shipping was the regulation made exactly to protect the national shipping interests.

A close examination of the statistical survey for the port of Rio in the 1880s offered by the *Boletim da Alfandega* of 1889 can give some further information on the status of Brazilian and foreign shipping for that period (Tab. 4). This table, as well as Figs. 2-3, is based on the

²¹ "Parecer" to Visconde do Rio Grande; *Relatorio da Associação Commercial do Rio de Janeiro do Anno de 1871*. Rio de Janeiro 1872. Documento 3.July 9^o, 1871.

Table 3: Types of voyages - Ships entering the port of Rio²²

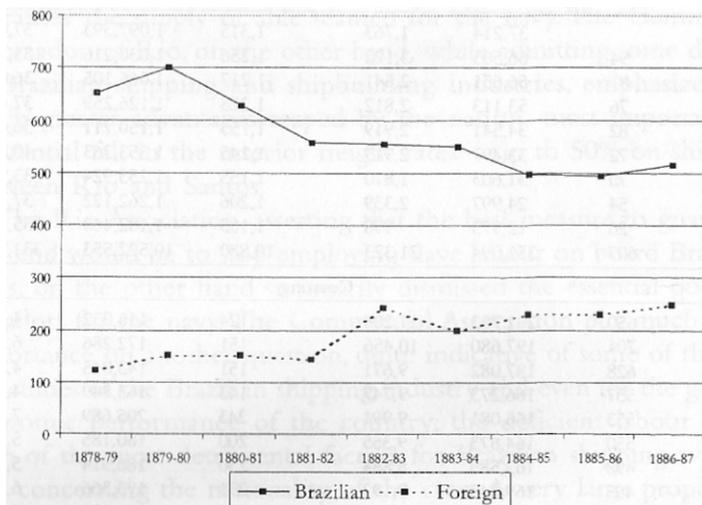
Years	Number	Brazilian		Foreign		
		Tonnage	Crew	Number	Tonnage	Crew
Overseas						
1878-79		37,214	1,763	1,315	1,097,393	37,696
1879-80	94	66,505	3,122	1,256	1,030,216	35,717
1880-81	81	56,651	2,641	1,217	1,066,105	36,071
1881-82	76	53,113	2,812	1,228	1,126,259	37,623
1882-83	82	34,541	2,919	1,155	1,150,711	36,622
1883-84	72	33,497	2,919	1,245	1,353,363	40,844
1884-85	70	31,603	1,810	1,155	1,253,924	33,926
1885-86	54	24,997	2,339	1,206	1,262,122	37,704
1886-87	26	12,973	998	1,103	1,182,460	35,366
	607	351,094	21,323	10,880	10,522,553	331,569
Coasting						
1878-79	650	201,783	11,208	124	116,032	4,699
1879-80	701	197,680	10,456	151	172,286	6,219
1880-81	628	187,082	9,671	151	143,845	4,871
1881-82	557	166,273	9,747	143	163,849	4,248
1882-83	553	166,081	9,991	243	205,689	7,333
1883-84	550	164,873	9,355	200	180,185	5,883
1884-85	498	163,589	8,884	230	186,914	5,562
1885-86	495	169,043	9,192	231	193,366	6,376
1886-87	514	181,604	11,139	248	221,251	6,965
	5,146	1,598,008	89,643	1,721	1,583,517	52,156
Local						
1878-79	757	133,491	8,657	2	434	18
1879-80	671	122,967	8,265	3	1,140	68
1880-81	634	112,298	7,322			
1881-82	707	125,970	9,429	3	1,087	41
1882-83	730	118,737	10,098	4	653	36
1883-84	579	109,162	8,207	3	1,191	41
1884-85	698	112,132	8,478	4	1,656	49
1885-86	658	116,284	8,394	2	1,860	60
1886-87	571	111,472	8,020	3	2,452	60
	6,005	1,062,513	76,867	24	10,473	373

statistical series from the *Boletim da Alfandega*. The issue in question offers a general survey of the Brazilian external sector for the decade from 1878 through 1887. Unfortunately, the criteria for the survey are not qualified in the publication, which greatly diminishes the usefulness of the data. In consequence of these reservations, the idea of making any conclusions from these statistics seems quite hazardous. Nevertheless,

²² *Boletim da Alfândega do Rio de Janeiro*. Anno VII, Sabado 27 de abril, 1889, n.º especial.

these numbers can be used — with caution — to throw some light on the development of the Brazilian shipping industry in the nineteenth century.

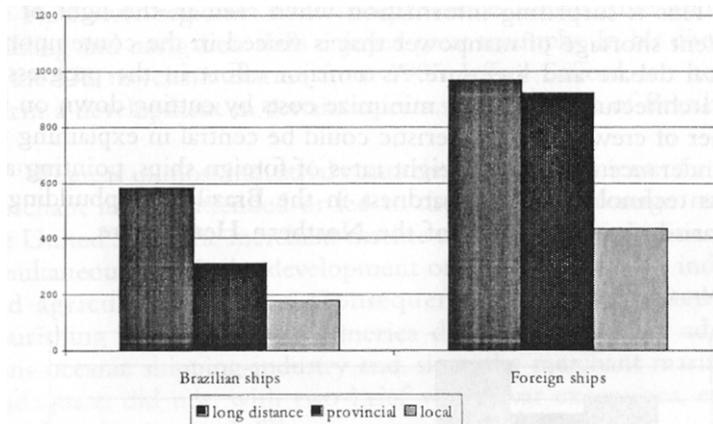
Fig. 2: Coaster Trade: Foreign and Brazilian calls in Rio



The foreign and domestic engagement in Brazilian coaster trade during the 1880s is illustrated in Fig. 2: While the participation of Brazilian vessels suffered a slight fall in the last decade of the empire, no indication can be seen of the total annihilation mentioned by Bernardino de Campos. And, even if the foreign participation demonstrated a rising tendency, the total number of foreign calls continued well below the corresponding number of calls by Brazilian vessels.

On the other hand, the fact that the average foreign ship was larger than the corresponding Brazilian ships is hardly surprising, as any foreign ship, except the Argentine and Uruguayan, had braved the Atlantic before arrival (Fig. 3). But here again it is important to alert against interpreting the statistics as hard evidence. Superficially these numbers suggest an objectivity, which must however be looked at critically. It is tempting to look through the statistical tables and conclude that there is a large foreign involvement in the coaster trade. But a comparison of these absolute numbers with the day-to-day experience of the newspaper shipping lists demonstrates a different reality and a complexity that is hard to express by simple numerical arguments.

Fig. 3: Average tonnage, 1878-87



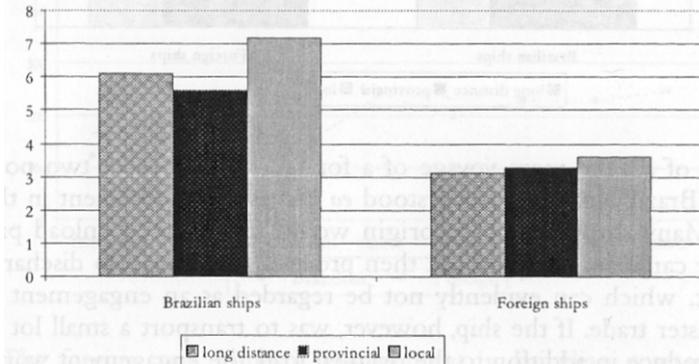
First of all, the mere voyage of a foreign ship between two ports within Brazil cannot be understood *eo ipso* as an involvement in this trade. Many ships of foreign origin would for instance unload part of their cargo in one port and then proceed to another to discharge the rest, which can evidently not be regarded as an engagement in the coaster trade. If the ship, however, was to transport a small lot of local produce in addition to the original load, the engagement would be manifest — but the appearance of such a job in the shipping registers is doubtful. At the same time, the detailed analysis of the cargo of every single ship would greatly augment and complicate the task of compiling the shipping series. The fact that packet liners and steamers following a scheduled itinerary from Europe along the coast of South America and back again poses a similar problem. The shipping registers, making their actual engagement in the coasting trade a matter of common sense rather than verifiable knowledge, do not inform of the type of cargo of most steamers.

A different problem concerns many foreign ships leaving Rio for the ports of northern Brazil. It was quite normal to make this stretch in ballast in order to seek a return cargo of sugar to Europe or the USA; the phenomenon however introduces a false positive in the statistical series. This pattern can be observed throughout all series in this survey albeit with increasing frequency over the course of time.

The ratio of Crew to tonnage is maybe the most revealing item of information in this survey. As shown in Fig 4, the number of sailors

per 100 tons is almost twice as big on the Brazilian as on the Foreign ships. This is surprising information when seen in the light of the persistent shortage of manpower that is voiced in the contemporary political debate and literature. As a major effort in the progress of naval architecture is made to minimize costs by cutting down on the number of crew, this characteristic could be central in explaining the preponderance and lower freight rates of foreign ships, pointing at a serious technological backwardness in the Brazilian shipbuilding in comparison with the ships of the Northern Hemisphere.

Fig. 4: Manning per 100 tons, 1878-87



A comparative perspective - the case of the USA

The weak performance of the Brazilian merchant marine is surprising *a priori*, as a huge external sector is normally expected to go hand in hand with the development of an important national merchant marine. The same combination can however be found in several other cases, most notably in the United States in the late 19th century, where the upsurge of industrial and agricultural production after 1850 was paradoxically accompanied by a steep decline in the activities of the merchant marine. A comparison of the development of the shipping ventures of Brazil and the United States will thereby be useful in elucidating the peculiarities of the Brazilian case.

The colonial background of the North American merchant marine was different from that of Brazil. The New England traders had enjoyed a degree of commercial liberty unknown in South America, as they had the possibility of doing business with several neighboring areas, mainly Canada and the Caribbean. Their Brazilian contemporaries,

on the other hand, were restricted to interior trade and contraband in the Plate-river region.²³ After Independence, North American ship-building and navigation skills enjoyed great triumphs. In his discussion of the US merchant marine from 1800 to 1939, Jeffrey Safford can however affirm a development in certain aspects similar to that of Brazil:

"Whereas in most industrial countries the development of a strong merchant marine attended or led to the growth of foreign trade, in the United States the merchant marine commenced to decline almost simultaneously with the development of America's greatest industrial and agricultural phase... Consequently, the development of a flourishing foreign trade in America did not produce an adequate trans-oceanic shipping-industry and, since the merchant marine was inadequate, did not, with two brief world war exceptions, exist to stimulate foreign trade."²⁴

Until the mid-1850s the US merchant marine escapes any comparison with that of Brazil. This was the golden age of the clipper ships and the long runs south of Cape Horn to California, when U.S. shipping was characterized by state of the art shipbuilding and seamanship, and the U.S. merchant marine carried at least 85% of the American exterior trade.²⁵

The depression of the mid-1850s, which culminated in the Panic of 1857, started the decline of U.S. shipping. The outbreak of the Civil War intensified the problems. But the return of better times did not enable the merchant marine to recover its former strength. In order to find a reason for this surprising development, Safford advances a series of reasons for the decay of North American interests in long distance shipping. Some of these are specific to the United States, such as the American Civil War, while others are general and valid also for an analysis of Brazilian shipping interests. The following considerations are based on the statements of Safford, but extend their scope to also include the Brazilian development.

²³ Fernando A. Novais: *Portugal e Brasil na Crise do Antigo Sistema Colonial (1777-1808)*. São Paulo, 1985. p. 95.

²⁴ Jeffrey J. Safford: *The United States Merchant Marine in Foreign Trade, 1800-1939*. In Tsunehiko Yui & Keiichiro Nakagawa: *Business History of Shipping: Strategy and Structure*. Tokyo, 1985. p. 91.

²⁵ Safford, p. 93.

Until 1849, the situation of the international market for shipping had been to the advantage of American shipping, mostly due to the availability of high-quality wooden ships, while British shipping had been hampered by restrictions impeding the use of foreign-built vessels. Due to deforestation, British shipyards were forced, early on, to experiment with the construction of steel ships, but their time still had to come. The repeal of the Navigation Laws eliminated this barrier, making investments in a much wider range of vessels viable thus opening new possibilities for the British shipping companies. This occurred at a very favorable moment for Britain. The demand for shipping capacity was rising and the British ship owners, henceforth free to acquire all the ships they needed without waiting for the national wharfs to deliver, were able to greedily augment their carrying capacity and hence their engagement in the international freight market,

Brazilian trans-oceanic shipping, at the same period, was suffering severe harassment by the British navy, being suspected (often justly) of being involved in the illegal slave traffic from Africa. A great number of Brazilian ships were seized or sunk by the British. The remaining Brazilian slavers were, as already mentioned, highly specialized, being equipped expressly for the traffic and not fitted for alternative trades.

Coincidentally with this development, British shipyards were reaping the fruits of their early investments in iron-hulled ocean-going steamers. This gave British steamers and packet liners a clear and welcome lead. While the North American shipyards were reluctant to abandon years of experience in the construction of huge, wooden clipper-ships, the Brazilian shipbuilding enterprises were generally specialized in the construction of smaller, wooden sailing ships for coaster shipping. One exception was the Ponta de Areia iron foundry in Niterói, owned by the first great Brazilian industrialist, Irineu Evangelista de Sousa, the Viscount Mauá. In the 1850s this plant turned out a great number of medium-sized iron steamers for the Brazilian coaster and river trades, employing a thousand workmen and winning a silver medal at the great exposition in London 1862.²⁶ This enterprise was however short-lived; the liberal Ferraz-tariff introduced by the government in 1860 removed the economic foundations for the iron works, and when a fire in 1862 destroyed most of the plant, its days were numbered.

²⁶ Anyda Marchant: *Viscount Mauá and the Empire of Brazil*. Berkeley, 1965, pp. 53-54.

The American Civil War was probably the single most important reason for the decline in North American shipping, interrupting the cotton trade and making the cost of marine insurance soar, while Confederate pirates took the toll on Union ships venturing out of the safe ports. The sum of these difficulties made many ship owners wary of the trade, selling their ships and transferring their interests to inland enterprises like mining or railways.²⁷ While many European governments actively supported their national shipping interests, granting subsidized mail contracts for trans-oceanic steam packet lines, the post-war US policy never adopted such measures and consequently impeded the revival of US shipping activities.

The Brazilian government subsidized interior shipping, such as a packet line along the coast of Brazil, as well as the navigation on the Amazon. While the South Brazilian packet line extended its service as far as the Uruguayan Capital of Montevideo, the task of connecting the major ports along the entire extensive coastline was sufficiently great so as not to encourage further efforts.

Behind the coastal regions, both Brazil and the USA were composed of very large and mainly unexploited interior areas and with a population too sparse to guarantee the development of the natural resources. The maintenance of slavery in some areas and the request for European immigrants to integrate into the labor force was a common result of this situation. Another effect was that any able-bodied male was requested for services in the local community, which limited to a minimum the number of people leaving their homes to seek alternative occupation on-board ships. The need for the development of the interior economy and infrastructure also offered a series of alternative options for capital investments — more secure and less prone to foreign competition than overseas shipping — channeling resources away from the merchant marines.

The high degree of specialization in particular trades had, for a limited period, guaranteed the success of overseas shipping of these two nations. Later, the needs for developing the huge national territory and for providing transportation facilities for the growing interior economies diverted the concentration on exterior ventures to national ones, even causing the withdrawal of resources already invested in

²⁷ B. Holtz: *Imaginary Markets; Communications and Intercontinental Trade in the Pre-Telegraph Period*, i.p.

exterior activities. The two greatest New World states had these characteristics in common and, after abandoning respectively the African slave trade and the greatest part of the clipper transport, both turned their focus to the interior trades and development.

The financial climate of Brazil

In addition to these peculiarities, the entrepreneurial development of Brazil was hampered by a series of other difficulties. One particular problem was the slowness and high cost of transportation from the interior to the coast. Navigable rivers did not exist in the regions with the greatest need for transportation, and the construction of railways advanced at a slow pace. In the absence of adequate and up to date means of transportation, the Brazilians were restricted to using mule trains in the interior. Most agricultural products, like coffee or sugar, arrived at the port of exportation by mule; and most imports — from cheese to pianos — had to be carried in the same way in the opposite direction, an extremely slow and expensive means of transportation. Nathaniel Leff stresses in one article that the Brazilian governments during most of the nineteenth century "... failed to provide on a sufficient scale the infrastructure investment needed for the country's economic development."²⁸

The Brazilian public investments in transportation of any type, interior and exterior were manifestly insufficient. On the other hand, the lack of a well-developed capital market and the extremely restrictive government policy regulating the financial market put severe restraints on the development of private investment in the industrial and service sectors.²⁹ The Brazilian Empire had, as its basic economic doctrine, the development of the great, slave-based agriculture producing goods for export, more and more focused on the rich coffee-plantations of the center-south.

Any industrial or service enterprise in 19th century Brazil had to struggle against a hostile environment: limited access to capital, dependence on personal networks and unlimited risk for the capital invested. Joint stock companies with limited responsibility were

²⁸ Nathaniel Leff: *Economic Development in Brazil, 1822-1913*. In Stephen Haber, p. 5.

²⁹ Stephen Haber: *Financial Markets and Industrial Development*. In Stephen Haber, p. 147.

discouraged by political restrictions; the possibility of obtaining a bank loan for manufacturing enterprise did not exist; and even the Rio Stock Exchange did not mediate financing for this kind of enterprises. The imperial government on the other hand, was narrowly focused on a conservative economic policy, maintaining the doctrines of monetary stability, the creation of banks as a source of government finance, and resistance to the development of corporate structures, restricted by the requirement of obtaining special permits from the government.

It is thus clear that the Brazilian merchant marine was up against heavy odds. The difficulties were widespread — from inadequate use of manpower to insufficient financing, suffering from the aftermath of an acute specialization and a vacillating governmental policy. Furthermore, shipping was hampered by the developmental needs of a very large, thinly populated, newly independent colony needing to find its own legs in a highly competitive environment. Brazil resembled Portugal of the Methuen period by having huge comparative advantages in its agricultural sector: in the nineteenth century no other nation could challenge the Brazilian capacity for coffee cultivation. The imperial government stared fixedly at this comparative advantage - and did not see any interest in developing other sectors.

Conclusion

The quotations that introduced this study demonstrate a positive conviction that the identity of the culprits is known. But they are wrong. Pereira makes a nationalistic slip of the tongue when he claims Brazilian shipping to be in ruins at a time when it entirely lacks meaning to speak of such a phenomenon — particularly when the real sufferers, in the long term, were the Portuguese, having been ousted from their previously so lucrative markets by the joint British and Brazilian activities.

The error of Campos is the affirmation that the opening of the coaster trade had destroyed the international shipping activities. As the discussion of the statistical data demonstrates, the international shipping of Brazil had eclipsed about 40 years before this. Brazil had a leading position in a single trade, the importation of slaves from Africa. When it was abandoned, the days of Brazil as a sea-faring nation were at an end. This statement does not however render

further discussion of the effects of opening the coaster trade superfluous. On the contrary, the importance of the development of coaster trade in Brazil remains an important area for further investigation.

The comparison that has been made with the largely similar development of North American shipping offers some explanations. The most important of these might be the suggestion that there is a different economic rationality for new nations with a great and still unexploited potential for internal development when coupled with insufficient human and financial resources. The discussion suggests that both Brazil and the USA deliberately withdrew from developing their national engagement in the external service sector in favor of internal investments. This is, however, another area that demands more detailed study.

As for developing the interior economy, the focus on comparative advantages coupled with stubborn conservatism was prone to guarantee 'business as usual'. The restricted financial resources thwarted a genuine industrial development, and the social immobilization of a slave-based society became still more evident in the course of the nineteenth century. A long line of Brazilian authors — from Fernando Henrique Cardoso to Emilia Viotti da Costa and Jorge Caldeira — have pointed at one main suspect of the cause of this calamity: the archaic agricultural elites of the Brazilian Empire.³⁰ One of the most seductive explanations as to why Brazil did not develop a mercantile marine seems to be this: lack of interest!

³⁰ Cardoso, Fernando Henrique & Enzo Faletto: *Dependencia y Desarrollo en America Latina*, Mexico, Siglo Veintiuno, 1977 (1. ed.: 1969). Costa, Emilia Viotti da: *The Brazilian Empire; Myths and Histories*, Chicago, UP, 1985. Jorge Caldeira: *A Nação Mercantilista*, Sao Paulo, Editora 34, 1999.