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**AN ANALYSIS ON MARITIME TRANSPORTATION SERVICES PROBLEMS IN  
BRAZIL AND THE EXTERNAL OVERSIGHT OF THE SECTOR**

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## Abstract

Although extremely important to the economy of Brazil, its maritime sector is not well regulated. Foreign vessels transport the majority of the goods imported and exported from the country without providing strategic information to the regulatory agency (ANTAQ).

In one hand, shippers' associations are demanding the agency to set price-cap regulation, prohibit surcharges and define set of fees allowed to be charged, besides others requirements. In the other hand, ANTAQ presents legal interpretations that allow it not to regulate the maritime transportation sector. Meanwhile, TCU has been pushed to help the sector in finding a solution to the alleged problems.

As a result of the analysis, it is presented a list to TCU containing relevant topics to be audited in futures works in order to better understand the sector, identify the problems and induce improvements. Also, a list of problems in the sector is assessed and some suggestions to ANTAQ are made to better off the future of the Brazilian maritime sector.

# 1. Introduction

## 1.1. Context

The Brazilian National Regulatory Agency of Waterway Transportation (ANTAQ) has the legal authority to regulate and oversee maritime navigation and the commercial use of public port infrastructure all over Brazil. Throughout the 80s and 90s, public opinion in Brazil overwhelmingly favored the transfer of public port management to the private sector in an effort to reduce costs and increase productivity. During that period, the country focused on regulating port services and the use of infrastructure. Nowadays, it is time to regulate navigation services.

The Brazilian Laws 9432 from 1997 and 10233 from 2001 allow double interpretation over the necessity of regulation over foreign vessels in maritime services. Between 2013 and 2015, shippers' associations in Brazil have started to demand that ANTAQ establish and regulate maritime navigation services and prices provided by foreign ships and freight vessels. On the other hand, the Brazilian National Court of Accounts (TCU) has the mission to promote the external control over any public activity provided by public and private agents. In the case of ANTAQ, TCU can conduct audit and supervision over activities provided by the agency to check their legality and recommend improvements to their regulations.

## 1.2. Goals

The main objectives of this paper is to present and examine the legal and regulatory problems of the maritime navigation sector in Brazil that has impacts on consumers, navigation service providers and ANTAQ and to suggest subjects to be audited by TCU in its legal duty of supervising ANTAQ's activities that has the potential to improve the regulation of maritime navigation services in Brazil conducted by the agency for both consumers and companies operating within the sector.

### 1.3. Research framework

In section 2, the research framework incorporates the necessary definitions of the maritime sector, the dynamics and the legal problems regarding Brazil's navigation elements, the role of ANTAQ as a major actor in administrating regulatory acts, the TCU authority and possible contributions to the sector, an overview about the economic reasons to regulate, the economic problems alleged by shippers and the respective solutions also proposed by them.

In section 3, it is presented just few aspects related to the structure and model of U. S. regarding the navigation sector necessary to allow comparison with Brazil.

In section 4, the paper presents discussion and analysis results over the maritime transportation problems in Brazil divided into 2 themes: maritime navigation services and audit process.

Finally, in sector 5, the paper presents a conclusion based on the analysis presented in the prior section.

## 2. Legal framework and literature review

### 2.1. Navigation transport services and definitions

It is important to settle the basic definitions related to the navigation to provide better comprehension of the theme. The definitions used in this work were taken from the legislation of the United States, because they are very close in meaning to those used in Brazil's maritime sector.

As a good starting point, the concept of navigation should be defined as the act of directing a ship from one place to another, according to the Cambridge Dictionary (2015).

From the Shipping Act of 1984 (46 U.S.C. §§ 40101 - 41309<sup>1</sup>), which is the law that still disciplines (with amendments) the navigation between the USA and other foreign countries, there are some definitions important to highlight:

Common carrier (*armador*, in Brazilian Portuguese): “a person that (i) holds itself out to the general public to provide transportation by water of passengers or cargo between the United States and a foreign country for compensation; (ii) assumes responsibility for the transportation from the port or point of receipt to the port or point of destination; and (iii) uses, for all or part of that transportation, a vessel operating on the high seas or the Great Lakes between a port in the United States and a port in a foreign country; but does not include a carrier engaged in ocean transportation by ferry boat, ocean tramp, or chemical parcel-tanker, or by vessel when primarily engaged in the carriage of perishable agricultural commodities (i) if the carrier and the owner of those commodities are wholly-owned, directly or indirectly, by a person primarily engaged in the marketing and distribution of those commodities; and (ii) only with respect to the carriage of those commodities.” Examples of some of the largest carriers of the world are Maersk Line (Danish), MSC (Italian), CMA CGM (French) and Aliança-Hamburg SUD (German)<sup>2</sup>.

Marine terminal operator: “a person engaged in the United States in the business of providing wharfage, dock, warehouse, or other terminal facilities in connection with a common carrier, or in connection with a common carrier and a water carrier subject to subchapter II of chapter 135 of title 49.” In this work, this person will also be called as terminal.

Ocean common carrier: “a vessel-operating common carrier.”

Ocean freight forwarder: “a person that (i) in the United States, dispatches shipments from the United States via a common carrier and books or otherwise arranges space for those shipments on behalf of shippers; and (ii) processes the documentation or performs related activities incident to those shipments.”

Ocean transportation intermediary: “an ocean freight forwarder or a non-vessel-operating common carrier.”

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<sup>1</sup> <https://www.law.cornell.edu/uscode/text/46/40102>

<sup>2</sup> <http://www.portal-administracao.com/2014/02/armadores-no-comercio-exterior.html>

Service contract: “a written contract, other than a bill of lading or receipt, between one or more shippers, on the one hand, and an individual ocean common carrier or an agreement between or among ocean common carriers, on the other, in which (A) the shipper or shippers commit to providing a certain volume or portion of cargo over a fixed time period; and (B) the ocean common carrier or the agreement commits to a certain rate or rate schedule and a defined service level, such as assured space, transit time, port rotation, or similar service features.”

Shipment: “all of the cargo carried under the terms of a single bill of lading.”

Shipper: “(A) a cargo owner; (B) the person for whose account the ocean transportation of cargo is provided; (C) the person to whom delivery is to be made; (D) a shippers’ association; or (E) a non-vessel-operating common carrier that accepts responsibility for payment of all charges applicable under the tariff or service contract.” This is also known as charterer.

Shippers’ association: “a group of shippers that consolidates or distributes freight on a nonprofit basis for the members of the group to obtain carload, truckload, or other volume rates or service contracts.”

Yet with respect to the Legislation of the United States, another important definitions taken from US Code 46, paragraph 42301<sup>3</sup> are:

Foreign carrier: “The term “foreign carrier” means an ocean common carrier a majority of whose vessels are documented under the laws of a foreign country.”

Maritime services: “The term “maritime services” means port-to-port transportation of cargo by vessels operated by an ocean common carrier. This term will be referred in this work indistinctively as maritime transport navigation services.”

Maritime-related services: “The term “maritime-related services” means intermodal operations, terminal operations, cargo solicitation, agency services, ocean transportation intermediary services and operations, and all other activities and services integral to total transportation systems of ocean common carriers and their foreign domiciled affiliates for themselves and others.”

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<sup>3</sup> <https://www.law.cornell.edu/uscode/text/46/42301>

United states carrier: “The term “United States carrier” means an ocean common carrier operating vessels documented under the laws of the United States.”

United states oceanborne trade: “The term “United States oceanborne trade” means the carriage of cargo between the United States and a foreign country, whether directly or indirectly, by an ocean common carrier.”

One of the most important aspects of navigation is its commercial purpose. It means that transport of freight/cargo over sea is an economic activity provided by an economic agent (shipowner or carrier) which has the goal to earn profit. It also means that navigation has a goal to be mutually beneficial to whom hire the vessel (shipper) to transport the freight and for the ship’s owner.

Looking within the navigation sector worldwide, there are multiple navigation transportation services. In Brazil, for example, they were formally defined by legal norms and are divided into five types: waterway services (inland waterway navigation), port support (in support to port activities), maritime support (in aid to maritime vessels), on the coast (also called cabotage, which is a service provided on the coast, connecting two or more national ports) and maritime navigation (which connects the ports of two different countries) (BRAZIL, 1997, article 2). The scope of this work, as previously mentioned, is limited to the maritime transport navigation services.

The carriers have freedom to define operational schemes including ports to berth and routes to navigate in a regular basis. But after doing that, they have to provide their services to shippers as agreed in transport contracts. The charterers are able to rent just a few slots on vessels or entire ships in order to transport cargo.

## 2.2. Navigation related to Brazil

Throughout Brazil’s development, maritime transport navigation has been intrinsically related to the history of this country. First of all, Brazil was discovered by the Portuguese sailor Pedro Álvares Cabral in the year 1500, who discovered it by vessels when trying to find a new way to India.



Secondly, Brazil has a huge territory, fifth in the world ranking, with a tremendously long coast (more than 8,000 km), and several ports along it able to receive international ships.<sup>4</sup> Also because of these characteristics, foreign trade using shipping is relevant to this nation. In Brazil, recent studies have pointed out that 90-95% of Brazil's imports and exports have used the port sector as a way to trade with foreign countries (TCU, 2014b). Additionally, ports have a strong relationship with the maritime sector, because it is through the harbors that goods within a vessel get imported into Brazil, and Brazilian goods get exported in ships.

Thirdly, Brazil has many rivers inside its territory, including the largest in the world: the Amazon River, which have been long used as a way to ease transport. Together, these three characteristics have always been a stimulus to develop the water as an economic mean of transportation.

As regards to the legal hierarchy that disciplines navigation in Brazil, it necessary to start from Brazil's Constitution. Only the Federal government or someone authorized by it can provide maritime transportation services when they involve Brazilian ports (article 21, topic XII, letter d), and by its article 22, topic 10, the Constitution establishes that only the Federal government should pass bills related to maritime navigation.

Then, in article 178 of the document, it is said that no other instruments but laws should dispose about framework and principles of transportation by air, water and land, respecting international agreements and reciprocity. The respective paragraph then adds that the law about waterborne transportation should establish the requirements to admit foreign vessels operating in inland navigation and coastal shipping (it does not cite international maritime service). Its original terms are shown below:

Art. 178. A lei disporá sobre a ordenação dos transportes aéreo, aquático e terrestre, devendo, quanto à ordenação do transporte internacional, observar os acordos firmados pela União, atendido o princípio da reciprocidade.

Parágrafo único. Na ordenação do transporte aquático, a lei estabelecerá as condições em que o transporte de mercadorias na cabotagem e a navegação interior poderão ser feitos por embarcações estrangeiras. (Incluído pela Emenda Constitucional nº 7, de 1995)

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<sup>4</sup> [http://www.nationsonline.org/oneworld/countries\\_by\\_area.htm](http://www.nationsonline.org/oneworld/countries_by_area.htm)

In attention to this article of the Constitution, the congress passed the bill 9432, in 1997, establishing rules for those intended to provide waterborne transport in the country. This law establishes in article 5 that the transport of goods by maritime navigation is open to carriers, companies and vessels from all countries of the world, as long as international agreements and reciprocity were met. Article 7 adds that foreign vessels can only operate in cabotage and port and maritime support if they are rented by Brazilian navigation companies, or *empresa brasileira de navegação* (EBN). The law does not cite maritime service in this paragraph (BRAZIL, 1997).

Conversely, the Law 10.233, of 2001, article 27, when delegating statutory authority to Antaq, establishes that the agency should decide about permits in all kinds of navigation, including international maritime one (BRAZIL, 2001).

### 2.2.1. Characteristics of maritime service in Brazil

TCU (2015, doc. 22) and many news on the media<sup>5</sup> have pointed out that the majority of the vessels used in maritime transport of bulk cargo operate under a foreign flag. Within the container sector, specifically, the percentage of foreign vessels in Brazilian market related to ocean-borne transport is close to 100%.

The reason for that situation, according to the shipper's association, is due to international lower costs to operate foreign vessels than Brazilian ones, few incentives to increase the Brazilian merchant marine fleet, and overregulation of Brazilian firms in comparison to companies from other countries (TCU, 2015, doc. 22).

TCU (2014a), when investigating allegations of improper activities, pointed out that ANTAQ does not normally regulate foreign vessels that berth on Brazilian ports due to a legal conflict between the Laws 9432/1997 and 10233/2001. This is better explained further in the paper.

In summary, due to the fact that 90-95% of the international trade of Brazil goes by maritime transport, Brazil had considered this transport mode as a strategic activity and has disciplined its

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<sup>5</sup> <http://www.portal-administracao.com/2014/02/armadores-no-comercio-exterior.html>

uses in the Constitution and in the laws. Ironically enough, the majority of Brazil's maritime trade is conducted by foreign vessels, which are not regulated by ANTAQ.

### 2.3. ANTAQ

ANTAQ is the Brazilian national regulatory agency of waterway transportation. It was created by the law 10233/2001 in order to discipline the use of public port infrastructure, waterways and ocean under Brazilian jurisdiction (BRAZIL, 2001). As opposed to the model in the USA, ANTAQ is responsible for both regulating ocean commerce and promoting the merchant marine fleet (increasing the numbers of Brazilian vessel and shipyards).

ANTAQ's jurisdiction includes all oceanborne water over Brazilian coast and the rivers which divide states in Brazil. It is tasked with the regulation of navigation transport and port services, the use of public port infrastructure, and also to examine the compliance of economic agents with legal and regulatory acts' requirements (BRAZIL, 2001).

Since its creation, many regulatory acts were produced, observing the legal context and the interest of society at that time. After 2001, considering that port reform has always been on the agenda, much of the time-consuming efforts spent by the agency focused on the development of a new framework for the port sector to create conditions to attract more private investment and partnerships.

For this reason, when comparing the port sector with the maritime transportation, ANTAQ achieved great expertise on the first topic, but the latter did not receive the necessary attention.

#### 2.3.1. Different opinions

Despite the fact that port reform has recently been leading the agenda in Brazil, another fact that explains lack of oversight by ANTAQ on maritime services is a conflict in the interpretation of legal statements.

As previously stated, although Law 10233/2001 has established that ANTAQ should decide over a permit to foreign vessel when providing international transportation, the prior legislation, Law

9432/1997, had assured that the transport of goods by maritime navigation is open to carriers, companies and vessels from all countries of the world.

TCU (2014a) has reported that ANTAQ has followed Law 9432/1997, but in a strict way. The agency does not require any information directly from carriers about cargo, freight or price charged over shippers or even origin and destiny of the cargo (and others considered strategic information). The agency only gets data from terminals, from whom it believes it has legal support to coerce.

ANTAQ defends itself alleging that articles 5 and 7 of Law 9432 intentionally excluded maritime navigation from the activities to be regulated. ANTAQ also has legal arguments and reports attesting its possibility of interpretation and it has assured that has no immediate intention to economically regulate foreign vessels (TCU, 2014a).

Even with the latter Law 10233/2001, TCU (2014a) has pointed out that the question was not solved because maybe this recent Law did not change the aspects regulated by Law 9432/1997.

There is no final interpretation yet and it might be necessary to provoke the Brazilian Judiciary Branch to decide the question. But, in the meanwhile, the shippers' association has been alleging that their costs are increasing due to the lack of oversight by ANTAQ over the sector. This is presented further in the paper.

It is important to emphasize that even with no solution to this conflict, there is no doubt that foreign vessels can operate without a permit given by ANTAQ. So, foreign carriers have been providing transport services in Brazil, in large amounts each year (as one can see in the website of ANTAQ<sup>6</sup>), landing and loading shipments and having no legal disturbances.

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<sup>6</sup> [www.antaq.gov.br](http://www.antaq.gov.br)

### 2.3.2. Bilateral agreement of maritime transportation

As presented in the website of ANTAQ, Brazil and the U.S. have a bilateral agreement to facilitate international trade between the two countries, when goods are transported by vessels and companies to and from these countries<sup>7</sup>. Brazil has a total of thirteen bilateral agreements.

In essence, the meaning of this agreement is to treat companies and vessels from each country equally to facilitate the loading and discharge of cargo on the ports. This deal foments competition between carriers between the two countries because they are treated as equals, when transporting good stipulated in the document.

These deals also have positive effects with respect to Brazil; they allow ANTAQ to promote the same checks and supervision on foreign vessels as it does in Brazilian ships, based on the agreement.

Due to the interpretation of the Brazilian legislation that avoids regulation of foreign ships, these agreements allow ANTAQ to reach foreign vessels in order to examine conditions of transport and collect data about freight and cargo.

## 2.4. TCU

The Brazilian National Court of Account, or *Tribunal de Contas da União* (TCU), is the independent agency in the country responsible to promote external oversight on public activities. In this sense, its mission is close to the function of the Government Accountability Office (GAO) within the U.S.

TCU received statutory authority directly from the Constitution of Brazil, especially in paragraphs 70 and 71. Paragraph 70 defines that the Brazilian National Congress has the ability to examine all the accounts of the Federal level, as well as those of any person or company, private or public, responsible to manage, use or apply federal public money or goods. In the next paragraph, the Constitution assigns TCU the mission of helping the National Congress, giving to

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<sup>7</sup> <http://www.antaq.gov.br/portal/pdf/AcordoBilateralBrasilEUA.pdf>

it specific tasks. The most relevant tasks, with regard to the objectives of this work, are concerned with the power to i) judge accountability from all managers and be responsible for federal money and goods, with the exception of the President of the Brazilian Republic (which is judged by the Congress taking in consideration the technical opinion of TCU), and ii) promote compliance and performance audits over all institutions and agencies of any branch of Federal Government.

Regarding performance auditing, GAO attests that “He [the auditor] evaluates and reaches conclusions about how good a job they [people] have done in carrying out their responsibilities.”<sup>8</sup>

It is possible to summarize all of the activities performed by TCU saying that, similar to GAO, the TCU supports congressional oversight by<sup>9</sup>:

- auditing agency operations to determine whether federal funds are being spent efficiently and effectively;
- investigating allegations of illegal and improper activities;
- reporting on how well government programs and policies are meeting their objectives;
- performing policy analyses and outlining options for congressional consideration; and
- issuing legal decisions and opinions, such as bid protest rulings and reports on agency rules.

Also, TCU advises Congress and gives recommendations to the heads of executive/legislative/judiciary agencies about ways to make government more efficient, effective, ethical, equitable and responsive.

The role of TCU, although described by the Brazilian Constitution, has been expanded by the Supreme Court, in recent decisions, to include analysis of the right use of public money, with respect to not only the accounting side, but also, and most importantly, with respect to the efficiency, efficacy and effectiveness of the program in which the money is spent.

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<sup>8</sup> <http://www.gao.gov/assets/180/179981.pdf>

<sup>9</sup> <http://www.gao.gov/about/index.html>

In this aspect, TCU has the competence to audit and examine all the acts ANTAQ promotes, that demand public money, in order to develop the navigation and port sector.

With respect to ANTAQ, TCU is in charge of examining regulatory acts including their underlying motivation, in order to grant the permit to use public port infrastructure or provide companies the right to provide the economic service of transportation over water.

As a general rule in Brazil, given the goals, the public sector's heads have legal freedom to decide between multiple policies. TCU cannot argue about the decision made, but can examine the motivation used to choose in that way. This is possible due to the existence of a principle of motivation in Brazil's legislation, which establishes that the acts must have explicit reasons that justify them.

## 2.5. Economics to Regulate

According to Kahn (1988, p.1/II), if a decision to regulate is made to supplement competition after realizing that it was inadequate to serve public interest, there would be no regulatory dilemma. The general dilemma arises when a regulatory act restricts competition, to supplant it. Historically, Kahn said, regulation consists of the imposition and administration of restrictions on entry and on what might have been independent and competitive price decisions.

In other words, regulation means that the government attests that the firm has a monopoly or market power and needs to be regulated in order to increase the output produced and reduce the price charged to consumers. Also, regulation can reduce the market power of the monopolist and benefit society.

Some other important concepts that are important to the further analysis presented in this paper are presented as following (BROWNING, ZUPAN, 2012, p. 329-331):

Monopoly power: when one has some control over price of a product that leads to some ability to charge a price above marginal cost.

Barrier to entry – “any factor that limits the number of firms operating in a market and thereby serves to promote monopoly power. Such factors fall into four general categories:

absolute cost advantages, economies of scale, product differentiation, and regulatory barriers.”

Absolute cost advantage – “a situation in which an incumbent firm’s production cost (its long-run average total cost) is lower than potential rivals’ production costs at all relevant output levels.”

Economies of scale – “a situation in which a firm can increase its output more than proportionally to its total input cost”.

Natural Monopoly – “an industry in which production cost is minimized if one firm supplies the entire output”. It is a concept directly connected with the economies of scale one.

Product Differentiation – “a means by which consumers perceive the product sold by an incumbent firm to be superior to that offered by prospective rivals.”

Regulatory barriers – “barriers to entry created by the government through vehicles such as patents, copyrights, franchises, and licenses.”

Contestable market – “markets in which competition is so perfect that the market price is independent of the number of firms currently serving a market, because the mere possibility of entry suffices to discipline the actions of incumbent suppliers.” (BROWNING, ZUPAN, 2012, p.605)

Sunk costs – “costs that have already been incurred and are beyond recovery.” (BROWNING, ZUPAN, 2012, p.10)

Disequilibrium – “a situation in which the quantity demanded and the quantity supplied are not in balance” (BROWNING, ZUPAN, 2012, p.24).

Shortage – a disequilibrium situation when there is an excess demand for a good (BROWNING, ZUPAN, 2012, p.24).

Surplus – a disequilibrium situation when there is an excess supply of a good (BROWNING, ZUPAN, 2012, p.24).



Any market can fail to satisfy the conditions necessary to reach the optimum point, which is the equilibrium between quantity demanded and quantity supplied. The reasons for that are many and include market power, imperfect information, externalities and public goods (BROWNING, ZUPAN, 2012, p. 565).

## 2.6. Regulation demanded by port users

As defined before, port users or shippers are the freight's owner or the shipbroker in charge of exporting or importing goods through a port system. So, they are the only ones that use the port services provided directly by terminals, public and private owned, both regulated by ANTAQ, and indirectly provided by carriers, who deliver service to shippers through terminals.

In recent years, port users in Brazil have created a lot of associations in order to protect their interests and discuss problems and solutions over port and navigation services. Examples of them are the Usuport, *Associação de Usuários dos Portos da Bahia*<sup>10</sup>, USUPPORT-SC, *Associação dos Usuários dos Portos de Santa Catarina*<sup>11</sup>, URPJ, *Site dos Usuarios dos Portos do Rio de Janeiro*<sup>12</sup> and Usuport-RJ, the Shipper's Association of Rio de Janeiro's Ports<sup>13</sup>.

They basically demand a price cap regulation over the services provided by navigation companies and changes in regulatory acts passed by ANTAQ about port services (TCU, 2014a). The reasoning for that is, among others, the shippers' concerns about the possibility of carriers issuing a surcharge for the services they provide.

The shippers allege that this proposed regulation could bring benefits to the sector by reducing market power and the price of monopoly the actors supposedly charge (TCU, 2015).

They are also pushing ANTAQ to promote the increase in competition between terminals inside Brazilian national harbors as a way to provide incentives to navigation sector to reduce prices and surcharges. The shippers alleged that there is in force a division of routes and final

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<sup>10</sup> <http://www.usuport.org.br>

<sup>11</sup> <http://usuportsc.com.br>

<sup>12</sup> <http://www.uprj.com.br/>

<sup>13</sup> <http://usuportrj.org>

destination ports between carriers. They cite, for instance, that in the 80's there were more carriers providing maritime services reaching the Brazilian ports through more routes than in 2014. This could be harmful to the user because one carrier could behave as a monopolist in its route, charging monopoly prices and reducing the supply of services (TCU, 2015, doc. 22).

The shippers also add that behavior of carriers is influenced by the incentives given by Antaq. (TCU, 2015, doc. 22). They claim, for example, that Act 2389/2012 (ANTAQ, 2012) has very bad economic incentives: the shipper pays a fee to the terminal, which should repay the cost plus profit of the carriers. So, when the carriers have no competitors, they tend to artificially increase this amount (TCU, 2015, doc. 22).

TCU (2015, doc. 22) has discussed the problem that the shippers' association alleges they have paid surcharges in addition to prices related to risks exclusive to carriers. Sometimes, even the risks are unlikely to happen. These shippers also are being charged without prior notification or stipulation within a contract of maritime transportation. A list of typical surcharges paid by Brazilian companies can be found on the page of a shipper's association such as the following (<http://www.uprj.com.br/aumento-arbitrario-de-lucro-nos-setores-portuario-e-maritimo.html>):

- *Pick up surcharge*
- *Scanner Surcharge*
- *War risk surcharge*
- *Off-dock surcharge*
- *Port cost surcharge*
- *Transit surcharge*
- *Assurance surcharge*
- *Freight tax*
- *Emergency Terminal Congestion surcharge*
- *Additional port surcharge*
- *Entry summary declaration for exports surcharge*
- *Ship security surcharge*
- *Congestion surcharge*
- *Drop-off surcharge*

- *Container cleaning charge*
- *Manifest charge*
- *Evaluation charge*
- *Seal handling fee*
- *Administrative charge*
- *Release fees/delivery order charge*
- *Reefer monitoring fee*
- *Bulk administrative fee*
- *Maritime security fee*
- *Hazardous fee*
- *Documentation fee*
- *Demurrage deposit*
- *Container maintenance charge*
- *Facilitation fee*
- *Switch bill of lading fee*
- *Movement fee*
- *FCR fee*
- *Bill of Lading Fee*
- *Washing charges*
- *Loading surcharge*
- *AMS charges*
- *Liner charges*
- *Less-than-container load charges*
- *Full container load charges*
- *Administrative charges*

The shippers' association alleged that the surcharges represent arbitrary increases of costs, benefiting carriers and ship owners, at a great cost to shippers (TCU, 2015, doc. 22).

Shippers association pointed that carriers surcharge fees for services supposedly remunerated by the price they charge, like "bill of lading fee", "movement fee" and "administrative fee", and

they should not be allowed to charge them. They added that there are cases where these surcharges were not present on the invoice given by the carriers to shippers (TCU, 2015, doc. 22).

The shippers also presented evidence about debates at the Global Shippers Forum<sup>14</sup>, which is an association for shippers engaged in international trade moving goods by all modes of transport, related to surcharges applied by carriers to shippers, pointing out that this could be an issue in many countries.

They also claim to ANTAQ to establish a permit, license or grant, to foreign vessels to operate (move cargo) in Brazilian ports and the related requirements to obtain it. As a motivation, they pointed out that some countries do this, including the United States.

Shippers require ANTAQ to pose obligations on carriers related to transparency over prices, the obligation of sending to the agency a report/table with the prices prior to charging, and the end of surcharges.

Finally, shippers also pointed out that it is not unusual for carriers to delay transport and skip ports, posing harm to exporters or importers who need to deliver or get the cargo to another port. When carriers do not skip ports, delays could occur in the landing or loading, posing fines (known as demurrage) against shippers due to carriers. They are also pushing ANTAQ to establish fines or repayments in these cases (TCU, 2015).

### 3. Regulatory structure for maritime services in USA

In contrast to Brazil, the United States has two agencies that oversee maritime navigation. The first one is the Federal Maritime Commission (FMC), which is in charge of the administration of the regulatory provisions of shipping laws, and the second is the Maritime Administration (MARAD), responsible for the promotion of the United States Merchant Marine (USA, 1961).

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<sup>14</sup> GSF, <http://www.globalshippersforum.com/>

In its mission, FMC settle the basis of the sector defining that within U.S. waters only American vessels can operate. When related to maritime service, the commission establishes rules to give incentives to American vessel to operate in this sector and reduces the foreign participation.

Also, FMC pass acts to collect information and control the behavior of vessels. For example, a carrier obtaining a permit to berth in an American port needs to fill out forms and applications and send them to the FMC ([http://www.fmc.gov/resources/forms\\_and\\_applications.aspx](http://www.fmc.gov/resources/forms_and_applications.aspx)).

With respect to MARAD, as stated on its website:

Programs of the Maritime Administration promote the development and maintenance of an adequate, well-balanced United States merchant marine, sufficient to carry the Nation's domestic waterborne commerce and a substantial portion of its waterborne foreign commerce, and capable of service as a naval and military auxiliary in time of war or national emergency. The Maritime Administration also seeks to ensure that the United States maintains adequate shipbuilding and repair services, efficient ports, effective inter-modal water and land transportation systems, and reserve shipping capacity for use in time of national emergency.

Since the Shipping Act of 1984, the USA has enacted major deregulatory change for companies operating in foreign commerce. Deregulation within this market has created substantial increases in benefits, similar to the deregulation of the U.S. airline industry.

Alfred Khan, the father of airline deregulation (DUDLEY, 2011), proposed to deregulate the airline sector, in order to lower costs to consumers and increase efficiency by increasing competition between firms, thereby decreasing any single firm's ability to exercise market power. His deregulation was very effective in reducing rent-seeking behavior and monopoly power by producing incentives to increase competition within the sector.

## 4. Analysis

### 4.1. Regulation

Initially, regarding the characteristics of the maritime transport service sector as a whole, two topics can be viewed as relevant to understand the dynamics of the sector. About the costs, once a carrier buys a vessel, the company turns to care about the marginal profits and costs of the

navigation service. The cost of a vessel purchase is independent of any event that may occur in the future. With this characteristics, a vessel is considered a sunk cost.

Another topic that has influence over the decision-making process in the maritime navigation sector is related to the carriers' size. In the recent dynamics of the sector, one can observe that vessels are becoming bigger and bigger<sup>15</sup>. This movement points out that possibly the sector has the characteristics of economies of scale and natural monopoly. The companies can provide more service with less than the proportional increase in cost and the average cost curve could be downward sloping when facing its market share demand curve.

Also, there are just a few major companies providing maritime services worldwide created by merges and acquisitions in the sector. By doing this, the firms became bigger in order to reduce marginal and average costs to be able to increase profits. Small firms couldn't survive in this scenario. And the incumbent companies do not suffer (in its prices and profits) with the threat of new entrants. So, the sector is not a contestable market.

There are significant differences between the regulatory environments between the U.S. and Brazil. In one hand, the legislation of Brazil allows double interpretation when referring to the regulation of foreign vessels in maritime service. The U.S., on the other hand, has a stable legislation and implemented significant deregulation of the industry, leading it susceptible to improvements in market conditions due to increasing competition among carriers from any country in the maritime service.

The shipping act of 1984, in the United States, brought deregulatory changes to the sector and it is still in force. There is no doubt that free market can find better solutions than regulating prices or profits, and the U.S., being the largest economy of the world, has collected benefits from the deregulation, such as lower prices, more competition between carriers, reducing transportation's time, more route offers and service providers.

Being the major economy in the world, with many commercial agreements with the rest of the world, the United States has the appeal to attract a great amount of businesses, exporters and of course maritime services. Because of the huge size of its maritime services market, the rules set

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<sup>15</sup> <http://edition.cnn.com/2013/06/26/business/maersk-triple-e-biggest-ship/>

by American regulators have the power to constrain the behavior of carriers who trade with the U.S. This basically occurs due to competition among sellers of maritime services (carriers).

Since there is no consistent movement towards a change of this model, or a bill in American Congress demanding radical change, one can assume that this pro-market model is still the better solution for the American society at this present time. This statement has support in theory: an oriented-market sector in a capitalist economy could produce better economic results.

About Brazil, initially is important to highlight that although international trade of Brazil is made essentially by foreign vessels, which are out of current regulation of ANTAQ in maritime sector, it worth mentioning that Brazil can reach a foreign vessel. This only happens when foreign ships are registered in a country with which Brazil has a bilateral agreement over maritime transportation and if the cargo being transported fits the description in the document. Also, the conditions related to the transportation and freight must fulfill that rules established in the document.

From Brazil's point of view, the maritime service sector is a market where there is a huge presence of foreign vessels involved in the export and import of goods. So it is a market where the suppliers (of the service) are foreigners, and the demanders (of the service) is constituted by Brazilian shippers, importers and exporters. In order to provide better analysis of any act with impact on the Brazilian maritime service sector, one should focus on the Brazil's side.

Although Brazil has been adopting pro-market actions to develop its economy, like the Law 9432 of 1997 that had established the openness of the transport of goods by maritime navigation to carriers from all countries of the world and the recent Law that incentives private investment in marine terminals (Law 12.815 of 2013), one can still observe the existence of market failures/power specially due to the presence of barriers to entry. And one possible explanation for this fact is that this could occur because the market is not a contestable one and economic agents do not have the right economic incentives (provided by the society and the regulator) to compete among them. This is examined further in this paper.

In order to increase competition, like the U.S. did and collect the respective net economic benefits, it is important for the regulator (ANTAQ) to establish a regulatory framework in a pro-market direction.

The respective actions towards to a pro-market direction are even more important because the maritime sector in Brazil has significant barriers to entry, like absolute cost advantages, product differentiation and economies of scale, that can unintentionally maintain the existence of monopoly power. As an example of the first barrier could be the probable assumption that the incumbent carriers could have lower costs than potential rivals because the former could transport products from many contracts in just one trip (reducing marginal costs as a result), in opposition to the latter that maybe should transport few cargos in a ship not totally full loaded.

About the second barrier, one can imagine, as an example, that one shipper would prefer to transport the products by a known carrier instead of other without a history in navigation sector, to reduce risks related to the service. So, a product differentiation for a company like positive past, quality in transport or timing in loading cargo could benefit the incumbent firms in opposition to the new ones.

In relation to the third barrier, the existing carriers could benefit from economies of scale because their huge vessels transport many cargos in just one trip. So, these companies can provide more maritime transport with less than the proportional increase in their total cost, increasing their own profits.

A barrier that Brazil does not have for foreign vessel is the regulatory one because the carrier could provide the navigation service without a license/permit or other regulatory requirement, as pointed by the shippers' associations.

In theory, the extra profit obtained from the monopoly power due to barriers to entry is harmful to the users who pay above the market price, but could be sustained if the society wants. This could be the case of Brazil if ANTAQ decides to promote the increment in Brazilian merchant marine fleet (second goal of the agency) by passing an act that requires the use of the excess profit in construction of new Brazilian vessels. The agency and the respective Ministry should deal with this question and find the best way to the society.



Another goal towards free market direction should be to solve the controversy about the Laws regarding whether or not foreign vessels can be regulated. With this solution, Brazil could really have an open market to foreign vessels, because there will be a stable legal framework suitable to all carriers, Brazilian and foreign ones, giving economic incentives to competition among them (reducing regulatory asymmetry) and reducing associated regulatory risks.

But, the conflict of double interpretation of Laws and Constitution is not close to be solved. ANTAQ has presented many arguments to support its decision (2014a). Taking in consideration the dynamics of Brazil, a solution to this problem may be found if there is a change in the way of thinking of ANTAQ's heads or superior instances (Ministry or other Executive Branch's high positions) or likely when the Judiciary Branch were provoked to decide about it.

TCU in its statutory authority has no power to definitely decide this question, but it can help the process of finding a solution. TCU can induce some behavior which it believes is going towards a good solution with respect to the legal system in force. As an example, when TCU asked questions to ANTAQ about the possibility of regulating foreign vessel when providing maritime navigation, the Court induces internal discussions into the agency about the matter and may have led the agency open to receive the shippers' demands.

As an example of this, ANTAQ has created a set of meetings<sup>16</sup> with Brazilian shippers called *agenda positiva* with the objective to listen to their demands. The exporters and importers have started to present the problems they face in Brazilian ports as well the proposing solutions for a change in the sector directly to ANTAQ.

With regard to the allegation that the carriers artificially increase the cost of some service that the terminals charge the shippers (allowed by Act 2389/2012 from ANTAQ) it is important to highlight the following: considering that ANTAQ does not properly regulate foreign vessels, which leads to the fact that the agency does not know all the prices charges by the carriers, one can assertively suppose that ANTAQ does not know the costs of a vessels, and there forth the requirement of the regulatory act will be difficult to be checked in ANTAQ's audit process. In

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<sup>16</sup> <http://www.uprj.com.br/sobre-a-segunda-reuniao-da-agenda-positiva-entre-antaq-e-usuarios.html>

other words, it is the case of imperfect information between the regulator and the regulated agent.

Also, ANTAQ should consider not to care about the cost of some services. Cost is related to an enterprise decision that should not influence the decision-making process of a regulatory agency. ANTAQ should only care about price (once it is an efficient mechanism do deal with economic signals among all agents of a sector) and the dynamics of the maritime transport sector and the regulatory issues related to them.

About the claim of the shippers' associations regarding the surcharges paid by shippers to carriers, the carriers' strategy operating in Brazil of surcharging fees against shippers could be viewed as i) an action of a monopolist (carrier) trying to charge monopoly price instead of market price; or ii) a discrimination of prices against the consumers (shippers), which means charging different prices to different shippers. In both cases, the carrier tries to maximize its activity's profit.

Yet concerning this practice of surcharges, ANTAQ should promote the respect to the transportation contract's terms, demanding total obedience from both parties. The agency should work to have access to the contract's terms between exporter and importer and decide whether a payment is or is not due to the other party when an issue surges between them. But, most important, ANTAQ should solve the jurisdiction-over-foreign-vessels issue to be able to enforce the decision taken.

To do that, maybe ANTAQ will have to addresses the problem of defining the service that could be charged over prices (surcharges) and that ones considered prohibited once are inherent to the maritime transportation service. These decisions could promote the competition between carriers because all of them would compete in the same basic rules and the shippers will identify fewer finance risks related to the service.

It is important to say that this suggested methodology does not involve control over prices or profits. It only refers to an establishment of a connection between prices and services to solve the problems of surcharges identified in the Brazilian maritime sector. This could even be a temporary solution which could be withdrawn when the economic agents do not face more

problems when applying the contract's terms. Leaving prices free to flow in a market-oriented sector is the best option to reach equilibrium point between demand and supply of transport services. So, the shippers' demand to put ANTAQ regulation over prices should not prosper.

With respect to the allegation that the surcharges do not compose the final price in the invoice provided by the carriers, ANTAQ could work together with the Internal Revenue Service of Brazil to address this fiscal problem. The ANTAQ's role should be related to, but not only constrained to, make a campaign to incentive allegations of this problem and collect the invoices among shippers to identify this supposed fraud.

In parallel with this action, ANTAQ should pass an act to compel the carriers to upload on a website their prices tables to be applied in Brazil prior to the load of the cargo to give increment to the competition between carriers. With the transparency, like U.S. does, shippers could compare prices between carriers and ports and benefit from it.

The adoption of this procedure could also help reduce the ability of businesses to exercise market power in some hub ports in Brazil, because, with the transparency of the carrier's price, one shipper can choose a port to land or load cargo taking into account the shipping line's fees and the cost of moving cargo between ports by land. It means, deciding strategically, considering all costs incurred.

Yet regarding the transparency aspect, ANTAQ could also implement new requirements over foreign vessels related to the disclosure of information about routes, freight and cargo characteristics. As long the international trade is considered a strategic activity for Brazil, this information could benefit the country to provide better public policies to the sector.

As seen before, the maritime transportation sector in Brazil has barriers to entry which lead the incumbent firms to have some monopoly power. Remembering that vessels are sunk costs and the market of maritime navigation service is not a contestable one, the economic agents fail to reach the optimum point in the market (equilibrium between demand and supply of the service). In this scenario, ANTAQ should focus attention to increase competitiveness between carriers.

Since there is the allegation that the Brazilian carriers have more requirements to fulfil than foreign ones, ANTAQ could promote studies to verify if establishing a permit to foreign vessel to operate could equalize this issue.

Although it could sound weird, since a permit is another type of barrier to entry in a market with monopoly power, a license could help the agency to treat all carriers as equal. It means that by doing this, ANTAQ could demand the same requirements to any vessel, Brazilian or not. Also, considering the dynamics of Brazil, this action could facilitate the further supervision promoted by ANTAQ over the economic agents by establishing a first relation between regulator and regulated. But, of course the agency should solve the legal framework's interpretation before doing that.

And finally, ANTAQ should establish a solution to the problem of missing ports. Shippers alleged that when a carrier skips one port, they have costs (of transport, delay and others) to get or dispatch the cargo in the next harbor. A solution could be ANTAQ to promote study of imposing a fine and defining an effective way to charge it against the carrier when this issue occurs again.

## 4.2. Suggested oversight topics on maritime navigation services

The audits promoted by TCU (2014a and 2015) were examples of first audit works that were in touch with some current problems related to maritime navigation in Brazil. For sure, there will be the need for more works on this sector to provide TCU with the enough knowledge about it.

ANTAQ recognizes that there is no doubt needs for more information related to the maritime navigation sector and wants to improve its knowledge about the dynamics of the sector, not only in Brazil but also worldwide. Because of this, the agency is pursuing information toward this direction by promoting studies about navigation.

Parallel to these studies and in order to contribute with TCU in the implementation of its role regarding identification of failures in state action and related expenditure, requirement of solutions of existing problems and promotion of the improvement of the quality of public expenditure over the maritime navigation sector, it is presented a proposal of topics to be

examined in detail, related to the oversight of ANTAQ over maritime navigation, which can increase efficiency, and the effectiveness of external oversight audits.

- motivation of the new regulatory acts of ANTAQ about maritime service;
- studies about positive and negative impacts over Brazilian exporters and importers due to new regulatory acts (ANTAQ has already methodology to do it);
- initiatives of regulation or deregulation of this sector;
- identification of market failures/power in maritime transportation services sector;
- promotion of increase in competition between foreign and Brazilian companies;
- difference of treatment given by ANTAQ to Brazilian and foreign firms;
- studies about the characteristics of this sector in Brazil;
- studies about impacts on Brazil's foreign commerce due to new regulatory acts;

Also it is important to highlight that ANTAQ has implemented the Regulatory Impact Analysis, which has the role to provide systematic appraisal between positive and negative impacts before a regulatory act is introduced. So, this approach could help ANTAQ when deciding on new act on the maritime transportation sector as well TCU when assessing the legal compliance, motivation and the respective goal of these new regulatory acts with impact on public expenditure and economic efficiency.

If ANTAQ conducts by itself studies on the maritime transportation sector, their conclusions could be an extremely interesting input to encourage competition in the sector, solve market imperfections and allow discussion with the shipper's associations trying to find the best solutions for the problems. The studies can even indicate that the problems pointed out by shippers could be different or have less impacts than presented by exporters and importers.

## 5. Conclusion

Although extremely important to the economy of Brazil, its maritime sector is not well regulated by ANTAQ. Foreign vessels transport the majority of the goods imported and exported from the country without providing any strategic information about the carrier/cargo and without the regulator's knowledge.

ANTAQ maintained the position that, according with the terms of Law 9.432/1997, the government could do nothing about the foreign vessels when landing or loading cargo on ports because the maritime service is open to all foreign vessels.

On the other hand, shippers demand ANTAQ to act within the maritime sector, passing resolutions to establish obligations to be obeyed by foreign vessels when navigating in Brazilian waters. The reasoning for that is the legal authorization (in Law 10.233/2001) and the supposed misconduct of carriers in self-benefit and in detriment of shippers and cargo owners.

Examples of these practices include the imposition on shippers of unnecessary fees, high prices, and surcharging extra services not defined in contract and cargo loading or landing occurring in different ports that were not previously established.

Shippers also alleged that the carriers keep doing that because there is no competition in some routes, when related to Brazil. So, it would be possible to find some routes with operation of just one carrier using ordinarily the same terminals.

Implementing regulations over price and cost is not a good solution because it could improve the rent-seeking behavior of the terminals owners and carriers in detriment of the port's users (shippers and cargo owners). ANTAQ should instead take actions to promote competition between all carriers. And to do that, the agency should solve first the issue about its jurisdiction over foreign vessels.

About the problems pointed out by the shippers over the maritime transportation sector, received by ANTAQ in a meeting set called *agenda positiva*, the analysis indicates that this Brazilian sector has barriers to entry like absolute cost advantages, product differentiation and economies of scale which together lead to some incumbent's market power to charge prices above market price (when perfect competition is present). Surcharges could be an example of a carrier trying to obtain extra profit from shippers.

Yet about surcharges, ANTAQ should promote the respect to the transportation contract's terms, demanding total obedience from both parties to the transport contract or define the services that could be charged over prices.

ANTAQ should also promote the transparency among carriers. As an example, the agency should set to carriers the need to upload their price table before reaching Brazil to increase competition between the service providers.

ANTAQ could also study a possibility to establish a permit for a foreign vessel operate in Brazil and find a solution to the missing ports' issue, like a fine for example.

It is important to highlight that ANTAQ needs to continue to exist in order to promote efficiency and competition between carriers in maritime transportation sector, by reducing the barriers to entry in the sector and promoting studies about the transport dynamics.

Regarding TCU, it is presented a list of important checkpoints to be audited in future works related to the activities of ANTAQ when overseeing maritime transport services.

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