VENEZUELAN PORTS MASTER PLANS FACING NEIGHBOR PORTS AND GLOBALIZATION PROCESS

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Abstract

Globalization has been supported by improvements in transport technology and massive investments in transport infrastructures (Rodrigue, 1999), having repercussions on ports. The objective of this paper is to present the current situation of Venezuelan ports La Guaira and Puerto Cabello within the globalization process and facing neighbor ports considered as direct competitors because of their geographical location, as the ports of Cartagena, El Callao and Santos.

The methodology used was documental and the main result was that although modernization works are been performed at Venezuelan ports, once they are finished, are not going to bring the ports to the position of their nearest competitor yet, El Callao, reason why ports master plans in Venezuelan should continue in order to impulse them to the level of their geographical competitors, in volume and equipments, looking to impulse Venezuelan ports to the position they had in the 1996 worldwide and regional port ranking.

Keywords

Maritime Transport Globalization, Port Investments, Port Competition, South American Ports Efficiency

1. INTRODUCTION

It has been proved that transport, and specifically the maritime one, is a key element in globalization promotion. In fact, maritime industry has transform its technologies, national registries and working resources in the last few decades, only to accomplish the globalization demands (Corbett & Winebrake, 2008, p. 4).

Among the technological advances are those shown by the each time bigger vessels, looking for economy of scale, transporting more volume at lower energy consumption, less damage to the environment and final costs reduction.

By 1987, the total TEU's moved worldwide was 1.215.215, while in 2010 was 12.824.648 TEU's, which represents a remarkable increase in quantity and volume (Salama Benazar & Martinez Marin, 2013). By 2013 the total TEU's movement was of 17.750.729 TEU's (Alphaliner , 2013).

Regarding the number of vessels, between 1980 and 2010, bulk carriers increased in a rate of 145,6% and cellular ships in 1.436,4%, which clearly shows the widely and remarkable increased of container ships in the last decades (Salama Benazar & Martinez Marin, 2012)

For this reason, improving port efficiency or productivity has become a critical yet challenging task in the development of many countries (United Nations, 2012)

Facing such situation, it has been necessary a higher investment in ports infrastructure, seeking to adapt its installations to the market demands. Some South American ports such as Colon and Balboa in Panama, Santos (Brazil), Cartagena (Colombia), Buenos Aires (Argentina), El Callao (Peru) or Guayaquil (Ecuador), have opened investment opportunities to private and foreign entities, fallowing the Landlord port management model. Other ports as Puerto Cabello and La Güaira, in Venezuela, have changed from Tool port model to a Service port model, centralizing operations and not allowing private investments.

The main objective of this paper is to present the current situation of Venezuelan ports La Güaira and Puerto Cabello within the globalization process, comparing them to some neighbor ports that could be considered as direct competitors because of their geographical location, as the port of Cartagena (Colombia), El Callao (Peru) and Santos (Brazil).

To accomplish the main objective of this work, the following specific objectives are to be fulfilled:

To show the relation between globalization and transport, causing a demand for port changes

To present the main characteristics of the ports considered as competitors for Venezuelan ports because of their geographical location.

To analyze the Venezuelan ports situation facing its main competitors in the region.

2. GLOBALIZATION

Globalization has been defined by different authors such as Giddens, Rodner, Soros and Annan, depending on their points of view. Some of those concepts are shown below.

According to Giddens "globalization started with commerce and international finances, but year ago surpassed this limited field and has reached culture and religion, starting to influence over personal aspects of everyone live" (Giddens, 2000, p. 30).

Rodner says that "it is a dynamic process of commercial, financial, cultural, political and technological interconnection that is been produced in all the world inhabitants" (Rodner, 2001, p. 11).

Taking into account the economic area, Soros consider that globalization consists on free capital movements and the national economies dominium increased by financial markets and multinationals (Soros, 2002, p. 7). In this aspect, globalization could be related to regular shipping lines (Maersk Line, Hapag Lloyd, Mediterranean Shipping Company, among others) for been multinational companies.

According to Annan, Globalization has been made possible by the progressive dismantling of barriers to trade and capital mobility, fundamental technological advances, steadily declining costs of transport, communications and computing. Technology is maintained in its definition, adding communications, computing and costs of transport (International Maritime Organization IMO, 2007), starting to show transport as part of globalization.

Rodrigue relates even more transport and globalization, saying that "it is well acknowledged that globalization has been supported by improvements in transport technology and massive investments in transport infrastructures". He assures that the concept of *economies of scale* have been applied to transportation and indeed, the ability to transport increasing amounts of freight and passengers at lower costs, has improved considerably the capacity and efficiency of transport systems (Rodrigue, 1999, p. 256).

2.1. GLOBALIZATION OF MARITIME TRANSPORT

Referring to the globalization of maritime transport, "the world is well along the road to an economically integrated global economy (maybe 60%) and shipping has played a crucial and highly effective part in the process".... Although "shipping has a 5000 year documented history, it has been during the last two centuries that sea transport has acquired a special place through its central role in the globalization of the world economy" (Stopford, 2010, p. 6; 1).

Even more, if the trade growth trend of the last 150 years continues, by 2060 the 8 billion tons of cargo will have grown to 23 billion tons (Stopford, 2010, p. 6), reason why maritime transport will continue to be crucial for globalization.

Globalization is the process that allows the world inhabitants and companies of various sectors to relate each other through the information interchange, capital, goods and services transferences by a main participant, the containerized maritime transport, offered by regular shipping lines (Salama Benazar, 2009)

Maritime transport globalization could lead to think about global port operators, but also to a variety of maritime transport elements, such as alliances, fusions and agreements to share spaces. In this sense, an example is the initiative of three big shipping lines to form an alliance called the P3, estimated to be consolidated by May 2014, with 255 vessels and 27 services, to transport 2.6 Millions of TEU's

Regarding port sector, big changes caused by globalization process are leading commercial sea ports to design strategies in the field of innovation, allowing them to take on present and future challenges in a sector where deregulation and competition are increasingly present (Blanco, et al., 2011, p. 75).

Furthermore, innovation is fast becoming a major driving force in the improvement of social welfare a crucial factor in the long term growth and survival of companies and a key element in achieving the sustainable development of economies (Blanco, et al., 2011, p. 75).

2.2. MARITIME TRANSPORT WORLD TENDENCY

World tendency points to vessels each time bigger, looking for transporting more merchandise volumes at lower costs. During several years, since its inaugural voyage in 2006, the Emma Maersk was considered the biggest container ship in the world, together with its 7 sister ships (Edith, Ebba, Eleonora, Elly, Estelle, Eugene and Evelyn), with a capacity of 15,500 TEUs, including 1000 reefer plugs, 397 meters long and 56 meters wide and a draught of more than 14 meters (Port of Antwerp, 2012).



Figure 1: Eugene Maersk

Source: (Eugen Maersk Images, 2013)

Nowadays, these container ships are no longer the largest in the world, since currently there are 20 Triple-E ships ordered (Port of Antwerp, 2012). These ships will be phased in gradually over the next couple of years on the existing route between Asia and Northern Europe (A.P. MOLLER - MAERSK GROUP, n.d.)

The first of the Triple-E series was named in June 14, 2013, in a ceremony at the Daewoo Shipbuilding & Marine Engineering (DSME) shipyard in Okpo, South Korea. It bears the

name of the late Mærsk Mc-Kinney Møller, who passed away in April 2012 at the age of 98 (Churchill, 2013).



Figure 2. The first vessel in series - Maersk Mc-Kinney Møller – crossing under the Storebaelt bridge in Denmark

Source: (A.P. MOLLER - MAERSK GROUP, n.d.)

The Triple-E class is 400 m long, 59 meters wide and has a capacity of 18,000 TEU's, making it unique in her kind and, which is 20% more than the capacity of the Emma Maersk class. The three E's stand for Economy of scale, Energy efficiency and Environment.

Vessels new dimensions reflect the economy of scales, transporting more volume with significant reduction in fuel consumption, dropping it by 35%, as well as dropping CO2 emissions by 50% (Port of Antwerp, 2012), thus, reducing also final transport costs.

Regarding worldwide container fleet and orders, Table 1 reflects there are 86 vessels orders with a capacity between 3.000 and 5.000 TEU's; 90 vessels orders with a capacity between 8.000 and 10.000 TEU's and, 64 vessels order with a capacity between 12.500 and 16.000 TEU's.

Tours Size		nice today	0	n Order			С	n Order	Total	Total
Pango	111 3 61	vice today	2013		On Order 2014			2015	Ship on	TEU's on
Kange	N⁰	TEU's	N⁰	TEU´s	N⁰	TEU´s	N⁰	TEU´s	order	order
0 - 1.499	1.796	1.470.008	25	21.209	12	12.880	2	2.200	39	36.289
1.500 -2.999	1.214	2.648.592	47	99.932	16	33.740	4	8.800	67	142.472
3.000 - 4.999	953	3.910.309	67	284.434	11	50.736	8	29.500	86	364.670
5.000 - 7.999	606	3.686.379	26	160.868	18	95.500	2	13.800	46	270.168
8.000 - 9.999	284	2.432.948	42	368.178	39	343.156	9	81.400	90	792.734
10.000 - 12.499	52	568.028	10	104.800	12	120.000	3	30.000	25	254.800
12.500 - 15.999	119	1.601.293	23	305.916	31	412.686	10	139.350	64	857.952
Over 16.000	1	16.020	7	122.040	10	176.000	11	190.000	28	488.040
Total	5.025	16.333.577	247	1.467.377	149	1.244.698	49	495.050	445	3.207.125

Table 1: Worldwide Container Fleet as of March de 2013 by vessel	1
capacity range in TEU's	

Source: (Informa PLC, 2013, pp. 18-19)

According to Table 1, there are many orders for ships of more than 3.000 TEU's, and in the meanwhile, the vessels that Venezuelan ports could received are of not more than 2.000 TEU's. According to information from La Güaira's Port, Venezuela's port Master Plan will allow the port to receive vessels of 6000 TEU's, but to achieve better economies of scale ships are nowadays of 18.000 TEU's.

Due to the above, South American ports will need relevant inversions in order to be able to received bigger ships, since if modernization is not made, their capacity will be over fit (their capacity will be too short for the demand) by the year 2020 (United Nations, 2011).

According to ECLAC (Economic Commission for Latin America and the Caribbean), it is estimated that between 2016 and 2019, vessels of about 13.000 TEU's will arrive to South American coast and until now, vessels that arrive to those coast are not bigger than 8.000 TEU's. (United Nations, 2011).

2.3. GLOBALIZATION AND PORTS

Port tendency, within the globalization process, points toward mega hubs, global hubs and regional hubs. Nevertheless, this paper is focused on port competition in the globalized world.

Escorsa Castells (2008), cited by (Blanco, et al., 2011, p. 77) considers that the port sector needs to develop innovations that enable it to adapt to the new world situation that it faces, characterized mainly by a high level of competitiveness. Ports, to be competitive, must be able to handle (load, unload and process) large quantities of merchandise quickly, to incorporate new activities and logistic services that add value. In order to do this, they will have to adapt and make investments such as building new infrastructures, acquiring new equipment, creating telematics platforms, developing ICT, improving managements systems, etc (Blanco, et al., 2011, p. 77)

Port competitiveness is now focused on the hinterland war, mainly in European ports, where it is said that if you win the hinterland, you win the competition (Hailey, 2013). Due to this, efficiency of South American ports is essential to gain vessels calls and merchandise distribution to the region.

The presence of such level of competition has been caused by commerce and maritime traffic liberalization, where transport companies look for a bigger market share. The ability of the maritime lines, to negotiate prices based on the high volume of movement, generates to the client attractive offers highly competitive, which affects the final price of the contract of carriage (Martínez Marín, 2011).

Competitiveness increase among maritime transport companies has great impact over ports, its organization and regional role (Cole & Villa, 2006, p. 19). Nowadays, ports have turn into activity axes confronting maritime company's demands. Companies that compete for cargo's expeditors, looking to offer a door to door service, which is more rapid, safe and lower in costs (Cole & Villa, 2006, pp. 19-20)

Even more, cargo expeditors also compete among them, and ports should recognized the economic and social impact that they caused over their nearest areas and hinterlands (Cole & Villa, 2006, p. 20).

3. PORTS OF CARTAGENA, EL CALLAO, SANTOS, PUERTO CABELLO AND LA GUAIRA

Ports chosen for this study are those that compete directly with the Venezuelan ports due to its geographical position, covering the Caribbean (Cartagena), the Pacific (El Callao) and the Atlantic (Santos). Those ports, by the 90's, received their cargo through vessels that first called Venezuela, nevertheless, the situation nowadays is the contrary, i.e. ships go first to neighbor ports.

3.1. PORT MANAGEMENT MODELS

Referring to port management models and private or public functions, in the service port model, the infrastructure construction, equipment and superstructure provision and, services to the cargo and vessels are in hands of the public sector; in the tool port model, services to the cargo and vessels are in private's hands and, in the landlord port model, only the infrastructure construction is in public hands. See Table 2.

Model	Infrastructure construction	Provision of Equipment and Superstructure	Services to the Cargo and Ship
Service Port	Public	Public	Public
Tool Port	Public	Public	Private
Landlord Port	Public	Private	Private

Table	2:	Port	Management	Models
1 4010		1 010	Tranagoment	11104010

Source: Santos (1998, p.1162) cited by (Laxe González, 2002) also adapted from (García Bernal, 2007, p. 4)

In Puerto Cabello and La Güaira ports, the port model passed from tool port to service port in 2009 (González M, 2012), with the reversion to the State of all port assets infrastructures, as well as the roles to maintain, administrate and obtain its profits (Gaceta Oficial, 2009)

Bolivariana de Puertos (BOLIPUERTOS) S.A. is in charge of the management, administration, exploitation and control of all operations concerning port warehouses, depots and silos in both ports (La Guaira and Puerto Cabello), and they are manage under a centralization figure (González M, 2012).

Cartagena (CTG), El Callao (CAL) and Santos (STS) port's have a Landlord port Model, which concedes them the following characteristics regarding its management:

They are manage in a decentralized way; have a high percentage of foreign investments; are ports divided and segmented into independent terminals and each operator is in charge of the investment and maintenance of the infrastructure and equipment.

Once presented the port management models of the studied ports, below are showed some port efficiency variables of such ports. See Table 3

3.2. PORT EFFICIENCY VARIABLES OF CARTAGENA, EL CALLAO, SANTOS, PUERTO CABELLO AND LA GUAIRA

Charact/Port	Cartagena	El Callao	Santos	PBL/LAG
Draught	14.6 m and 17m in 2017	Maximum draught of 14 m North Quay and 16 m South Quay	13,5 m and 14.80 m. 17m in futur	12 m and 16m in futur/ 10.5 m and 15.2 m. in futur
Maximum capacity of ships in TEU's	TEU's : 14.000 2013	TEU's: 9.200 2011 and 15.000 in futur	N/A	/TEU's 2000 y 6200 in future both
N° of gantry cranes (quay cranes)	12	2 North Quay APM Terminals , 4 more in 2013 and 3 more in future/ 6 Muelle South Quay DPWorld Quays:N+S =15	13 only in TECON terminal	None and 6 in future each one.
N° yard cranes	55	2 North Quay and 12 in 2014/18 RTG South Quay (2013)	46 only in TECON	/none. Lifters: 1 for full ctnrs and 2 for empties. 15 in future
Discharge per hour per ship	50 ctr x h	150 ctr x h 2013 North Quay /30 ctr x h South Quay	80.38 mov x h 2011	10 ctr x h/ 11 ctr x h and 75 in future
TEU's Moved	2.2 m 2012	1.8 m 2012 2 m (2014)	3.1 m 2012	0.0008m / 0.0005m

Table 3. Characteristics of CTG, CAL, STOS, PBL and LAG ports

Source: Own elaboration base on data from each port.

According to table 3:

- CTG draught is 14,6m and will be 17m in 2014; CAL draught is, 14 m in North Quay and 16m in South Quay ; in STS draught is 13,5m and 14,80 m and will be 17m in future; in the meanwhile, in PBL draught is 12m and in LAG 10.5m, and will be 16 and 15,2 respectively in future
- Maximum Capacity in TEU's of vessels calling the ports are: in CTG 14.000 TEU's (2013); in CAL 9.200 (2011) and 15.000 in future; in the meanwhile, in LAG and PBL is 2.000 and 6.200 TEU's in future.
- The number of gantry cranes in CTG is 12; in CAL it is 15 and in STS it is 13 only in TECON terminal. In PBL and LAG there are not gantry cranes and will be 6 in future in each port.
- The number of yard cranes (RTG) in CTG is 55; in CAL: 14 in 2014 North Quay and 18 in South Quay in 2013; in STS there are 46 RTG just in TECON terminal. In PBL and LAG none and 15 in future, which mean that Venezuela's port modernization plans will not equal the number of RTG that already exists in the neighbor ports.
- Referring to TEU's moved in 2012, in CTG the movement was of 2.2 million; in CAL 1.8 millions; in STS 3,1 millions and in PBL and LAG, 0,0008 millions and 0,0005 millions, that is, 800 thousand TEU's and 500 thousand TEU's respectively.

As a reference to a better view of the existing differences between Santos and La Güaira regarding its cranes, the following photos of crane types in Santos port are shown in figures 3 and 4. Then, ahead, is shown the crane of La Güaira port (Figure 9).

Figures 3 and 4: Cranes in Santos port; Brasil



Source: (Santos Brasil, n.d.)

Gantry Cranes (Quay)



4. SITUATION ANALYSIS

In reference to the Venezuelan situation, in May of 2008 there were news announcing the investment of a Portuguese consortium to expand La Guaira port and it was said that the plan was to install 11 gantry cranes (Ultimas Noticias, 2008).

According to the real port expansion plan there will be installed 6 gantry cranes in not a certain date provided by port authorities. See Figure 5.



Figure 5: La Güaira´s port expansion mockup

Source: (Salama, 2013)

La Güaira's port expansion works, as of June 2013, are shown in Figure 6



Figure 6: View of the expansion works in La Guaira port as of June 2013

Source: (Salama, 2013)

In the case of Peru, in 2011 was announced that the bottle neck in Callao port was eliminated, making possible to received vessels of 6.500 TEU's by that year (Mundo Marítimo, 2011)

While in 2011 Peru achieved to solve the bottle neck problem, in Venezuela, the ports situation in 2012 was as presented in figure 7



Figure 7. Vessels Anchored in a Venezuelan port in 2012

In 2011, Santos port announced 80.38 movements per hour per ship (MPH), compared to 58.05 MPH registered in 2010, that means, an accumulate growth of almost 40%. In the meanwhile, the discharge rate of a vessel in Venezuela nowadays is 10 MPH

In some images showed below can be observed and compared some characteristics of the ports of this study, such as the existing cranes to charge and discharge the ships and the containers organization in yards.





Source: (Salama, 2013)

Source: (Denis, 2012)

Figure 8 shows how the containers are organized, by 2013, in La Guaira port



Figure 9. Crane to discharge containers in La Güaira port

Source: (Salama, 2013)

Figure 9 shows the available crane in La Guaira port to charge and discharge container ships when they are not equipped with their own cranes

Figure 10. Gantry cranes at El Callao



Source: (RPP Noticias, 2012)

Figure 11. Gantry cranes at El Callao



Source:(RPP Noticias, 2012)



Figure 12. Gantry Cranes at the Port of Santos, Brasil

Source: (Flickr, 2012)

Figure 12 shows the Cosco Vietnam vessel operation at the port of Santos. Discharge with portainers doble-hoist portainers that move 2x40' FEU's or 4x20' TEU's simultaneously.

Regarding container movement evolution during 2000 - 2012, Venezuelan ports have shown a poor increase comparing it to neighbor ports. The container movement increase in Venezuelan ports is as far under the increase experimented by the ports of Cartagena, El Callao and Santos, as it could be appreciated in Figure 13



Figure 13. Comparison of containerized port movement during 2000 – 2012

Source: Own elaboration based on statistics from (Comunidad Económica para la América Latina, CEPAL, 2013).

The specific data corresponding to figure 13 is presented in tables 4, 5 and 6, as fallow:

Puerto	2000	2001	2002	2003	2004	2005
Santos	800.898	1.047.685	1.230.599	1.560.957	1.882.838	2.267.921
Callao	413.646	480.706	521.382	553.138	727.840	887.035
Cartagena	256.216	365.326	234.490	295.233	397.186	549.860

Table 4. Movements in TEU's period 2000 – 2005

Puerto Cabello	550.807	620.523	506.523	380.039	597.930	746.810
La Güaira	237.782	304.119	215.555	150.844	261.036	269.114

Source: Own elaboration based on data from (United Nations, CEPAL Boletín FAL Nº 252, 2006)

Table 5. Movements in TEU's period 2006 – 2009

Port	2006	2007	2008	2009
Santos	2.855.480	2.532.900	2.677.839	2.555.862
Cartagena	711.529	795 380	1.064.105	1.237.873
Callao	938.119	1.022.246	1.203.315	1.089.838
Puerto Cabello	844.952	831.732	809.454	750.000
La Güaira	341.846	341.846	436.911	378.311

Source: Own elaboration base on data from (United Nations, CEPAL Boletín FAL N° 252, 2006) for the year 2006

Source: Own elaboration base on data from (Comunidad Económica para la América Latina, CEPAL, 2009) for the years 2007 y 2008

Source: Own elaboration base on data from (Comunidad Económica para la América Latina, 2010) for the year 2009

Port	2010	2011	2012
Santos	2.715.568	2.985.922	2.961.426
Cartagena	1.581.401	1.853.342	2.205.948
Callao	1.346.186	1.616.165	1.817.663
Puerto Cabello	629.895	721.500	845.917
La Guaira	333.539	467.300	542.710

Table 6. Movement in TEU's pe	eriod 2010 - 2012
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Source: Own elaboration base on data from (Comunidad Económica para la América Latina, CEPAL, 2013)

It is remarkable in tables 4, 5 and 6, the minimum container movement growth in Puerto Cabello and la Guaira during the period 2000 - 2012, while the movement in Cartagena, El Callao and Santos ports, have had a significant growth.

Year	La	Puerto	Venezuela	Cartagena	Callao	Santos
	Guaira	Cabello	LAG + PBL			
2010	333.539	629.895	963.434	1.581.401	1.346.186	2.715.568
2011	467.300	721.500	1.188.800	1.853.342	1.616.165	2.985.922
2012	542.710	845.917	1.388.627	2.205.948	1.817.663	2.961.426

Table 7. La Guaira and Puerto Cabello facing Regional Competitors 2010-2012.
Movements in TEU's

Source: Own elaboration based on (Comunidad Económica para la América Latina, CEPAL, 2013).

In Table 7 is observed that even adding TEU's movements from Puerto Cabello plus TEU's movements from La Guaira ports, the result does not equal or approach the container movement of their nearest competitor in volume, El Callao port.

In regard to port competition, in 1996 Venezuela entered to the worldwide port ranking, with Puerto Cabello occupying the 88 position among 129 ports. Cartagena port was not in that ranking by that year.

Since 2003, Venezuela disappeared from the worldwide port ranking and by the year 2013 Santos was in the 41 position, Cartagena in the 61 and El Callao in the 76 at a worldwide level.

From the year 2000 to the year 2012, the studied ports have changed its position in the Latin American port ranking as shown in table 8.

Port	Ranking 2000	Port	Ranking 2006	Port	Ranking 2012
Santos	1	Santos	2	Santos	3
Callao	8	Callao	8	Cartagena	4
Puerto Cabello	9	Cartagena	13	Callao	6
Cartagena	13	Puerto Cabello	19	Puerto Cabello	17
La Guaira	24	La Guaira	24	La Guaira	29

Table 8. Regional Port Ranking, years 2000, 2006 y 2012

Source: Own elaboration based on (Comunidad Económica para la América Latina, CEPAL, 2013)

At a regional level, Santos was in the first place by the year 2000; passing to the second place in 2006 and to the third place in 2012.

El Callao was in the eighth place during the period 2000 - 2006; even thought in the year 2012 passed to the sixth place, it was surpassed by Cartagena that occupied the fourth place in 2012.

It is important to notice that by the year 2000, Cartagena was under the position of Puerto Cabello, but even though it maintained its 13^{th} position during 2000 - 2006, it was Puerto Cabello the one that descended from the 9^{th} position in 2000 to the 19^{th} position in 2006. La Güaira passed from the 24^{th} position in 2000 to the 29^{th} position in 2012.

Once described the situation in the ports of Puerto Cabello, la Guaira, Cartagena, El Callao and Santos there is just a simple question: Decentralization and Privatization is equal to port development and container movement growth?

This is not a question that will be directly answered by the authors of this paper, but an example of Santos port is shown in order to make each lector think about its own opinion.

In 1993, 21 year ago, Brazil government recognized that Santos port centralization, diminished the port efficiency and competitiveness, reason why it authorized private companies to pre qualify for charging and discharging goods from vessels, breaking up the monopoly in the operational services.

Today, more than 60 terminals in Santos port are managed by the private sector, and Santos occupies the 41st place in the worldwide port ranking. (Puerto de Santos, n.d.)

5. CONCLUSIONS

Port investment is decisive to be inserted into the globalizing process and satisfy the increasing demand of the regional and global market.

In time, Puerto Cabello and La Guaira ports have lost competitiveness facing its neighbor ports, partly because of their slow growth and late, or none, infrastructure inversion.

At ports of remarkable growth, it is emphasize a port authority every time more autonomous with bigger participation of private companies

Venezuelan ports, in order to be at the level of its main neighbor competitors, should continue with the nowadays expansion projects applying benchmarking and amplifying the project dimensions, since as the project is establish until now, once the modernization works are finished, will not bring Venezuelan ports to the level of its nearest competitor, El Callao.

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