

The Economic Effects of the Expansion
of the Panama Canal on Maritime Trade

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“The Economic Effects of the Expansion of the Panama Canal on Maritime Trade”
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We would also like to highlight that this research carries significant added value. In fact, visits of the locks and infrastructure of both the new and the pre-existing canals were carried out in Panama at two observation points: Agua Clara on the Atlantic and Miraflores on the Pacific Ocean.

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EXECUTIVE SUMMARY

The inauguration of the expansion of the Panama Canal is scheduled for June 26th, 2016.

The main data on the Panama Canal before the expansion

- ▶ Between **3% and 4% of world trade** travels through the Panama Canal; as well as **14.3% of grains globally traded**, **5.6% of the chemical commodities** and **3.7% of containers**.
- ▶ **144 routes, 1,700 ports and countries in the world** are involved in the passage through the Canal.
- ▶ The annual traffic counted almost **14,000 ships**; the delivered goods were about **230 million tons**, **138 million (60%) of which were bound for the Atlantic-Pacific direction** while **92 million (40%) for the Pacific-Atlantic direction**.
- ▶ In the Atlantic-Pacific direction, the role of **Far East** countries was major while, in the opposite direction, traffic was mainly bound for the **East coast of the US** and towards Europe. Between 2001 and 2015, the traffic bound for Asia grew by +2.4% while that of the East Coast of the USA grew by +17%.
- ▶ The countries which mostly used the Canal were the **United States, China, Chile, Japan and Peru**. Amongst the first 20 countries also rank: **Spain (13th)**, **Netherlands (14th)**, **United Kingdom (17th)**, **Belgium (19th)** and **Italy (20th)**.
- ▶ The 4 busiest routes were: **East Coast of the United States – Asia** with a total transit of goods amounted to 35.8% of the total; **US East Coast – West Coast South America** with 16%; **US East Coast – West Coast of Central America** with 7% and the route **Europe - West Coast South America** with 5.9%.
- ▶ The Panama Canal generated an **annual revenue** for the country of **\$2.7 billion** and a **managing cost** of \$1.25.
- ▶ The **direct contribution to the GDP of the country** accounts for 6%, and adding the indirect contribution the percentage becomes 25%;
- ▶ The average **transit time** of the Panama Canal is slightly above **12 hours** in one direction. The total average time (**transit + wait time**) is almost **31 hours**.
- ▶ Panama also has an important Free-Zone near the Canal: **the Colon Free Zone which numbers about 2,600 companies**. Its trade amounts to **\$21.6 billion** **\$11.4 billion of which are export**; the **Free Zone imports mainly from China** (\$3.5 billion), followed by Singapore (\$1.9 billion) and the United States (\$922 million). Among the top 10 countries there is also Belgium (\$236 million); the United Kingdom (\$166 million) and Germany (\$165 million). **Italy accounts for \$157 million**.
- ▶ It is expected that the Free-Zone will be enhanced with the expansion of the Panama Canal.

The characteristics of the expansion work and its impact

- ▶ **The new Canal, which adds to the previous one, has provided for the realization of two locks**, one the Atlantic Ocean and the other on the Pacific. Each is composed of **three chambers** 55 meters large, 427 meters long and 18.3 meters deep. They are equipped with horizontally sliding sluice systems which **can overcome the existing difference in level between the oceans and Lake Gatun**.
- ▶ The realization of the project, started in 2007, was assigned to an **international consortium** “Grupo Unidos por el Canal” which includes the Italian Salini Impregilo SpA (consortium leader), the Spanish company Sacyr Vallhermoso SA, the Belgian Jan de Nul and the Panamanian CUSA.
- ▶ The **costs of expansion** of the Canal in the initial phase amounted to **\$5.2 billion**. **It is estimated that the costs reached \$6.2 billion in phase of realization**.
- ▶ The Canal employs **9,925 employees and over 30,000 jobs** have been created since the work of expansion have begun.
- ▶ **The revenues deriving from the annual management of the Canal** as a result of the expansion will rise potentially up to **\$4 billion**.

The three main effects which the expansion of the Canal will have

- ▶ **The new Canal allows the passage of larger vessels**. The new locks will allow the passage of container ships **up to 13,000/14,000 TEUs**; the limit of the existing Canal is of 4,500-5,000 TEU; **the transit of the Canal will allow the passage of a greater load capacity (the Megaships)**; in 2019, **more than 95% of the container fleet will be able to pass through the Panama Canal**.
- ▶ **A new type of vessel will also be able to pass**. A new market segment **will expand the offer of Panama: this is the LNG (Liquified Natural Gas) and LPG (Liquified Petroleum Gas)**.
- ▶ **The number of transits in the medium to long term will increase**. The passage will potentially allow the **simultaneous transit of 3 ships**: 2 of smaller size in the old locks, and 1 through the new ones; potentially, the passage of **further 12 daily vessels** will be made possible, adding to the pre-existing 38 for a **potential total maximum of 50 transits per day**.

Main evidence on the impact of the Canal on the routes and on ports

IMPACT ON PORT FACILITIES IN PANAMA

- ▶ Today, the **Panamanian ports** are home to the world's major shipping companies including **Maersk, CMA-CGM, MSC, APL / MOL, Hapag Lloyd, Evergreen**. The expansion will likely extend the Canal's relationships to other leading global carriers.

- ▶ The Panamanian ports are handled by the **main terminal companies (e.g. Hutchinson Port Holdings, PSA, Evergreen)** that, in view of the expansion, **are making major investments**. As proof of the interest toward the area for the new terminal of **Corozal**, on the Pacific, 4 terminal operators of global significance came forward: APM (Holland), Terminal Link (France), PSA (Singapore) and Terminal Investment Limited (Belgium).

EVIDENCE OF THE IMPACT ON THE PORT AND MARITIME TRAFFIC TOWARD THE NORTH AMERICA

- ▶ **The expansion of the Canal will help broaden the strategic dimension of Panama allowing it to become an international maritime hub, especially for the USA.** Most of the cargo in transit will have as destination the main ports on the east coast of the United States; there are numerous expansion projects of **US ports** in progress: the ports of **New York** and **New Jersey** have completed the dredging operations that will allow the landing of larger vessels, as well as the ports of **Savannah** and **Charleston**.
- ▶ Between 2009 and 2014 **the US Federal Government allocated \$320 million** for infrastructure projects along the East and Gulf Coasts. These investments will allow the **interception** the **new Post-Panamax** ships which will be now able to circulate in the Canal.
- ▶ With the expansion, **Panama will increase its potential as a hub and logistics port of reference with Latin America and the Caribbean.**

Panama-Suez comparison and respective interdependencies

- ▶ **On some international routes, the main competitor of Panama is Suez.** The extension of the Canal aims not to lose market share; an example of competition is represented by the Far East-US East Coast route which is one of the most travelled in the world (7.4 million TEUs per year): in 2010, 15 vessels passed weekly via Panama and 4 via Suez, in 2015, 16 ships travelled via Panama and 9 via Suez; an increase for both Canals, but higher for Suez.
- ▶ On the basis of a simulation carried out in a study on ships of 12,000 TEUs which will be able to pass through the new Canal, in terms of time and costs, Panama remains competitive on some strategic routes. Panama competes with Suez both on the **Shanghai-New York** route where estimates say that the cost to transit per TEU is \$820 (to and fro), against the \$830 of Suez, both on the route **Hong Kong-New York** where the cost of the trip per TEU is \$830 against the \$855 of Suez; **on the routes Shanghai-Rotterdam and Yokohama (JAP)-Rotterdam**, instead, more **competitive remains the transit through Suez**.

- ▶ However, a measure of the Suez Canal Authority of very recent approval (6th June 2016) launched a **tariff line that provides a discount of up to 65% on some container routes coming from the American ports on the East Coast and bound toward the ports of South and South East Asia**. This decision may be a strong incentive to intensify the passages through Suez, increase their competitiveness against Panama (which will probably be urged to review its tariff's strategies) and discourage the routes that circumnavigate the Cape of Good Hope also as a result of the decrease in the price of oil. All this will contribute to increasing the centrality of the Mediterranean and to strengthening the routes of traffic coming from the Atlantic, which enters the Mediterranean and after Suez, continuing towards the Far East.
- ▶ At the same time, **China** also is actively working to open a maritime "Silk Road" of immediate interest for its Mediterranean trades; in relation to this strategy there is a strengthening of the routes which from the Far East are directed toward the *Mediterranean*.

The possible impacts on world trade, and on the Euro-Mediterranean Area

- ▶ The widening of the Panama Canal **will have a direct impact on the economies of scale of the shipping companies**; an estimated overall increase in the volumes of goods transported by **15% in 2020 equal to 3% per year, has been calculated**.
- ▶ As a result of the expansion of the Canal the **traffic coming and bound for the following four macro-areas will grow more**: Asia (mainly China, Taiwan, Japan) with a potential increase of 4.3 % per year; South America (Chile, Colombia, Ecuador, Venezuela and Peru) with 4%; Central America (Guatemala, Mexico, Panama and Trinidad & Tobago) with 3.7%; North America (USA, Canada) with 3.5%;
- ▶ **Even Europe** (represented by Belgium, Netherlands, Italy, Spain and the United Kingdom) and **Italy will benefit from the expansion of the Panama Canal**. In particular, it evaluates an average annual increase of the tons exchanged by 2.2%.

The expansion of the Panama Canal is an engineering work of great importance and will have a strong impact in the short and long term on the routes and on the port facilities worldwide, in particular, on that of the American continent, with potential direct and indirect effects on Europe and the Mediterranean.

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