



**Assessment of the impact of changes
in Canal transit costs on the
economies of Ecuador, Chile, Peru,
China, US, and Japan**

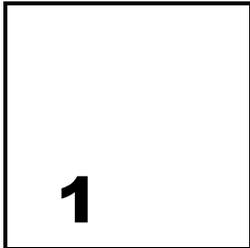
**Evaluación del impacto de cambios
en el costo de tránsitos del Canal en
las economías de Ecuador, Chile,
Peru, China, EE UU y Japón**

Mercer Management Consulting

12 de abril de 2005

Contrato No. 144989

Resumen Ejecutivo



Executive Summary

In 2004, the Autoridad del Canal de Panama (ACP) performed a detailed analysis to determine the impact of Canal transit cost increases on the Canal's customers. This research indicated that an increase in Canal transit costs would not have significant adverse effects on traffic, although the impact would vary by Canal customer segment. Given the mix of commodities that transit the Canal and the political and economic importance of the countries of origin, the ACP determined that it was important to explicitly assess and understand the impact of different pricing options on the economies of stakeholder countries.

The ACP therefore commissioned Mercer Management Consulting, Inc. to undertake such an analysis. Mercer is one of the largest consultancies in the world dedicated to transportation, and assisted the ACP in the development of the 2004 Panama Canal Demand Forecast Study.

The ACP selected six countries for analysis: the United States, China, Japan, Chile, Ecuador, and Peru. Mercer undertook a separate study of each country, which included:

- A high-level overview of that country's sea trade and trade in relation to the Panama Canal
- A detailed analysis of the impact of potential new Canal pricing options on the export and import commodities transiting the Canal that are most important to the country's economy (representing in most cases approximately 80 percent of total volume that trades through the Canal to and from that country)

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For each commodity, the analysis examined the relevance of Canal-based traffic to overall country imports and exports and the impact of transit cost increases on overall landed costs and the country's economy.

Finally, Mercer developed a robust report for each country that can serve as communication and lobbying tool to address the major concerns around Canal transit cost increases and their impact on trade.

Mercer's analysis determined that the United States, China, and Japan should not have major concerns regarding Canal transit cost increases, as their economies have a relatively low dependence on the Canal. In most cases, only a small portion of export/import commodities traded by these countries transit the Canal, or those goods moving through the Canal represent a very small portion of the country's GDP.

Chile, Ecuador, and Peru have a higher sensitivity to Canal cost increases, particularly for certain export commodities. Overall, however, their economies will not be materially affected by Canal toll increases.

United States

The United States is moderately dependent on sea trade, but has little dependence on the Panama Canal. US merchandise exports are also decreasing relative to total trade as the US moves increasingly toward a service economy. The US remains however the world's largest exporter of a number of agricultural products and natural resources, including corn, soybeans, wheat, lumber, and petroleum coke.

Twelve Canal-relevant export commodities were analyzed for this study. Only three commodities – corn, soybeans, and wood pulp – have more than a quarter of export value transiting the Canal. Corn and wood pulp account for a very small percentage of total US exports, while the impact of up to a 200 percent Canal toll increase on landed costs for soybeans would be very low, and therefore unlikely to impact trade or the economy.

On the import side, a 200 percent increase in Canal tolls would increase total import costs by only 0.0028 percent and decrease GDP by 0.003 percent, with a negligible impact on inflation.

China

China is highly dependent on sea trade, but has little dependence on the Panama Canal. Manufactured goods make up nearly half of Chinese exports, and China is the largest exporter of many containerized commodities, including furniture, toys & games, footwear, and apparel.

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Fourteen Canal-relevant export commodities from mainland China were analyzed for this study. None make up a significant portion of China's total exports; therefore up to a 200 percent Canal toll increase on landed costs for these commodities would be unlikely to impact trade or the economy.

Hong Kong exports were not analyzed, as domestic Hong Kong exports transiting the Canal represent only 0.15 percent of total Chinese exports. An increase in tolls for Hong Kong exports would not affect China's trade or economy.

On the import side, a 200 percent increase in Canal tolls would increase total import costs by 0.007 percent and decrease GDP by 0.003 percent, with a negligible impact on inflation.

Japan

Japan is highly dependent on sea trade, but has little dependence on the Panama Canal. Ninety percent of Japan's Canal-relevant trade is with the United States. Japan has been increasingly exporting components to countries with lower labor costs for final assembly, and as a result is losing export market share for manufactured goods, particularly to China. Containerized cargo and autos & trucks make up a significant share of Japan's exports.

Eight Canal-relevant export commodities were analyzed for this study. One commodity, natural coke-coal, has a large proportion of exports transiting the Canal, but overall represents a very small portion of Japan's exports. An increase in Canal tolls therefore would be unlikely to impact trade or the economy.

On the import side, a 200 percent increase in Canal tolls would increase total import costs by only 0.0018 percent and decrease GDP by 0.002 percent, with a negligible impact on inflation.

Chile

Chile's trade is moderately dependent on sea trade and on the Panama Canal. Total sea trade has grown faster than trade transiting the Canal, however, mainly due to a shift in trade supply and demand to Asia. Chile's main exports are raw materials and natural resources; it is the world's largest exporter of copper.

Thirteen Canal-relevant export commodities were analyzed for this study. The landed cost of only one commodity, salt, would be highly impacted by an increase in Canal tolls, but this commodity represents a very small portion of Chile's exports. Additionally, fruit, copper, and wood exports make up a significant portion of Chile's total exports; however,

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the impact of up to a 200 percent Canal toll increase on landed costs would be very low, and therefore unlikely to impact trade or the economy.

On the import side, a 200 percent increase in Canal tolls would increase total import costs by only 0.11 percent and decrease GDP by 0.03 percent, with a negligible impact on inflation.

Ecuador

Ecuador's trade is highly dependent on waterborne cargo and moderately dependent on the Panama Canal. Ecuador mainly exports bananas, petroleum, and coffee, but in recent years has begun to diversify its exports in order to stabilize its economy.

Five Canal-relevant export commodities were analyzed for this study. Crude oil and bananas make up a significant portion of Ecuador's total exports. An increase in the Canal toll would not affect Ecuador's crude oil exports overall, but would likely change the transportation mode from waterborne to pipeline. For bananas, a 200 percent Canal toll increase would be minimal compared to recent increases in ocean freight rates; since these much larger rate increases have not affected demand growth, a toll increase also is unlikely to impact demand. Anticipated European tariff increases also will have a much larger impact on the cost of bananas.

On the import side, a 200 percent increase in Canal tolls would increase total import costs by 0.18 percent and decrease GDP by 0.04 percent, with a negligible impact on inflation.

Peru

Peru's trade is highly dependent on sea trade and moderately dependent on the Panama Canal. Canal exports have been growing faster than total trade, but demand for Peruvian exports is gradually shifting to Asia. Peru's main exports are raw materials and natural resources; it is the world's largest exporter of fishmeal.

Seventeen Canal-relevant export commodities were analyzed for this study. The landed cost of only two commodities, salt and iron ore, would be highly impacted by an increase in Canal tolls, but these commodities represent a very small portion of Peru's exports. Additionally, zinc, copper, and fishmeal exports make up a significant portion of Peru's total exports; however, the impact of up to a 200 percent Canal toll increase on landed costs would be very low, and therefore unlikely to impact trade or the economy.

On the import side, a 200 percent increase in Canal tolls would increase total import costs by only 0.17 percent and decrease GDP by 0.02 percent, with a negligible impact on inflation.

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In summary, given the analyses described above, it appears that there will be little impact on any of the countries' overall economies when tolls are raised. Some industries are highly cost sensitive, however, and thus the decision on increasing tolls should take into account possible demand shifts which could affect Canal transits and revenue.