

Czech University of Life Sciences Prague

Faculty of Economics and Management

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Bachelor Thesis

Extended Abstract

**Economic Impact of the Panama Canal Expansion
Ekonomický dopad rozšíření Panamského průplavu**

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1. Introduction

Among the largest ventures of mankind that have contributed significantly to progress in the world, the construction of the Panama Canal stands as an awe-inspiring achievement. This unparalleled engineering feat became a reality due to an international effort that took place under the leadership of American visionaries who made possible the centuries-old dream of connecting the Atlantic with the Pacific.

In recent years, the Panama Canal has developed limiting factors that have impacted its operational capacity that at the present moment is causing a downgrade in service of the Canal. These limiting factors are the increase of daily transits that has gotten beyond its real capacity and water shortage.

The Canal expansion program involves the construction of two new New-Panamax (Post-Panamax) lock complexes, one in the Pacific and one in the Atlantic side of the Canal. Each lock will have three chambers with water-saving basins, a system of lateral filling and emptying, and rolling gates.

The expansion of the Canal will benefit its users, Panama and world trade. In addition to increased capacity, the Canal will boost its services to the maritime industry and global trade flows by facilitating the transportation of goods between different markets. Similarly, the expansion will allow Panama to further settle as the transport and logistics hub of the Americas, enabling the strengthening of maritime routes across the Isthmus.

2. Keywords

Panama Canal, Locks, Ports, Waterways, Trade, Tolls, Costs, International Trade, Benefits, Construction, Economic Impact, Social Benefits, NVP, IRR

3. Objectives of thesis

The main objective is to discuss the costs and benefits of the Panama Canal expansion project. Building upon that premise, evaluate how will it affect global trade, maritime routes, and the socio-economic impact in Panama, all across the board.

The obvious supposition is that the expansion project, considering the Panama Canal as an important trade route for the last hundred years, will generate benefits at a global scale. This thesis focuses on quantifying estimates of costs and financial benefits, and compares them with the current situation that is taking place almost upon completion of the project. This thesis is written in order for the reader to understand how important is to satisfy the growing demand for the Panamanian route in international trade, and hence highlight the interest of the global community to improve the capacity to handle cargo required to the Panama Canal.

4. Methodology

Conforming to the objectives of this thesis, a cost benefit analysis was implemented in the practical part. This analysis was based on estimates of costs and revenues that the canal would have during and the after the construction period. With the data gathered, the cost benefit analysis will deliver results such as Net Present Value, Internal Rate of Return and Benefit/Cost Ratio. These results were produced under two possible scenarios for the purpose of this thesis. First scenario is taking the revenues constant throughout the construction phase and the project's life span. The second scenario, similarly, takes the same timeline for the period of analysis but considers increasing tolls. These two situations will show the difference in measurable monetary benefits during and after the expansion project.

5. Results

A cost benefit analysis was performed in order to measure the feasibility of undertaking the expansion project. This analysis was directed towards private profitability and as social externality. The economic indicators to evaluate if the expansion would yield positive results were consistently acceptable across two scenarios. The first scenario is that tolls were kept constant throughout the construction phase until the useful life span of the project. The second

scenario held tolls in an increasing fashion. These differences in tolls affects the revenues obtain from the services provided by the canal.

6. Conclusion

Only the economic indicators produced by the cost benefit analysis have shown that the expansion project is a good investment in mid and long term. Now that the project is upon 99% of completion, the world will enjoy the benefits provided by the expanded Panamanian waterway.

7. References

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