

THE IMPACT OF SEAPORT INVESTMENTS ON REGIONAL ECONOMICS AND DEVELOPMENTS

Sibel BAYAR ÇAĞLAK

İstanbul University Engineering Faculty Department of Maritime Transportation
Management Engineering
I.U. Eng. Fac. Department of Maritime Transportation Management Engineering
Avcilar Campus/Avcilar/Istanbul/Turkey
E-mail: sibelb@istanbul.edu.tr

Gülsüm AYDIN

İstanbul University Engineering Faculty Department of Maritime Transportation
Management Engineering
I.U. Eng. Fac. Department of Maritime Transportation Management Engineering
Avcilar Campus/Avcilar/Istanbul/Turkey
E-mail: gaydin@istanbul.edu.tr

Güler ALKAN

İstanbul University Engineering Faculty Department of Maritime Transportation
Management Engineering
I.U. Eng. Fac. Department of Maritime Transportation Management Engineering
Avcilar Campus/Avcilar/Istanbul/Turkey
E-mail: guleralkan2@yahoo.com

—Abstract—

A large part of world trade carried by maritime transportation. In addition to this, seaports provide an important contribution to the area's economy as well as countries development. The ports have provided vital opportunities such as increasing flow of trade, foreign exchange and employment transportation and other infrastructures, the formation of main transport arteries etc.

The aim of this study is view of seaport investment effects both economic and development aspect. Firstly the economic's effects of seaport investment will

examine. Then the study has illustrated direct and indirect impacts on the area's economy and developments.

Key Words: *Seaport, Economic, Development*

JEL Classification: 018

1. INTRODUCTION

The seaports play an important role in the sector of sea transportations, exports, imports, tourism, and travel, and this is an important ingredient of economic growth (Yoo,2006). Therefore, most coastal cities growth around the world is attributed to seaports' location. These ports catalyze international trade (Oni, S., I., 2003). Moreover, they have acted as the primary transshipment domestically as well as in foreign trade (Boschken, H., L., 1982).

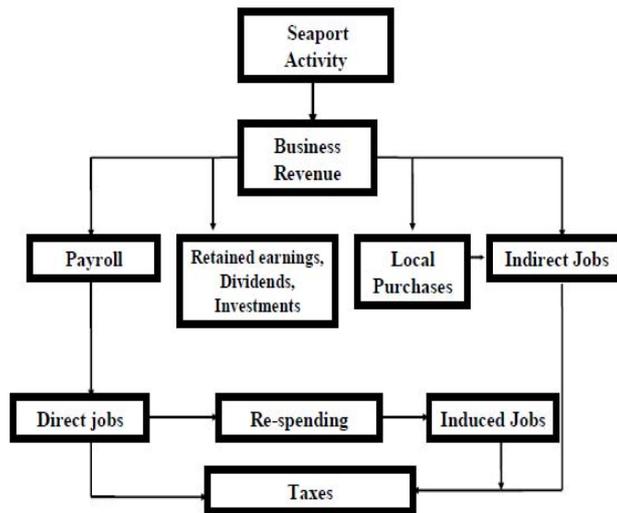
While, ports play an essential role in stimulating and developing the economy, they are at the same time located within sensitive natural ecosystems and surrounded by complex socio-economic, cultural and political environments (Oni, 2003).

2. IMPACT OF SEAPORT INVESTMENTS ON ECONOMY AND REGIONAL DEVELOPMENT

2.1. Impact of Seaport Investments on Economy

Think about the roles carried out in large-scale seaports, ranging from trade in direction of the industry to financial activities, with major economic, environmental and external social impacts. The term "economic impact" includes all the change as regards employment, the demand for goods and services, and contribution to tax revenue that can be attributed directly and indirectly to the transport infrastructure's presence (Carlucci, F., Cirà, A., 2009). In this context, Figure 1 has shown flows of economics impact of a seaport activities.

Figure 1: Flows of Economics Impact Through the Economy



Source: Martin Associates, 2007

As Figure 1 indicates, the marine cargo and vessel activity initially generate business revenue to the firms supplying marine services. This revenue is used to purchase employment (direct jobs) to provide the services, to pay stockholders and for retained earnings, and to purchase goods and services from local firms, as well as national and international firms (creating indirect jobs with these firms). Businesses also pay taxes from the business revenue (Martin Associates, 2007).

As shown above, the economic impact of seaports has a complex structure. In this case, economic impacts of the seaport can be classified in 4 different ways (Ferrari, et all, 2010:11):

- a) direct impact
- b) indirect impact
- c) induced impact
- d) catalytic impact

Direct impact is the employment and income generated by the direct construction and operation of the port. Indirect impact is the employment and income generated by the

chain of suppliers of goods and services, and the induced impact is the employment and income generated by the spending of incomes by employees created by the direct and indirect effects. Finally, the catalytic impact is the employment and income generated by the role of the port as a driver of productivity growth and then as an attractor of new firms (Ferrari, et al, 2010:11).

Seaports have been increased business and employment opportunities (direct and indirect), GNP, land prices etc. with their developments. Thus, population and migration towards the area have risen. Finally this area has developed economy as local, regional and national. The improvements of seaports is important, because of all these conditions. These improvements should be made for investment in seaports.

For this reason, their investment is a key issue in modern ports economics with respect to planning to port development, financing and assessing to return on investment (Musso et al, 2006:171).

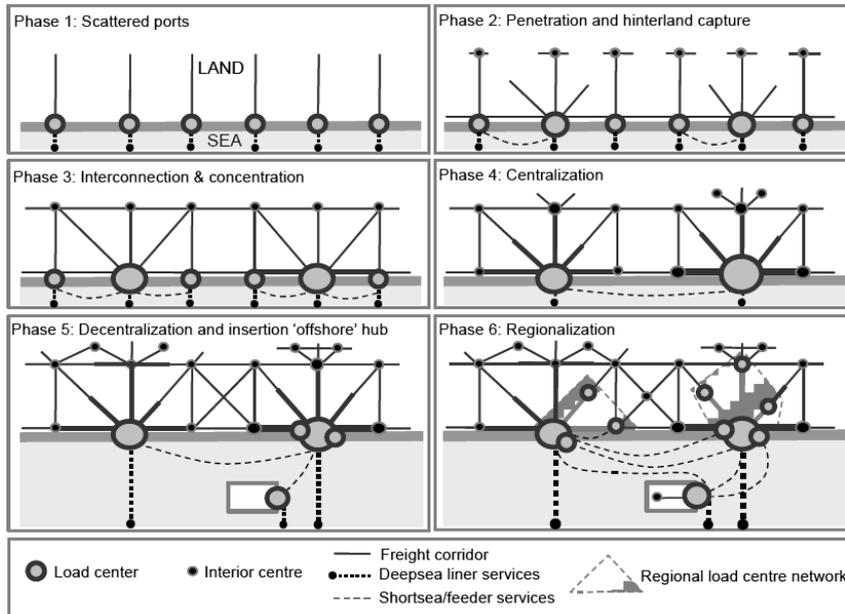
2.2. Impact of Seaport Investments on Regional Development

A seaport investment affects either economy or regional developments. Investment of seaport have been increased urban developments with employment and infrastructures opportunities, taking migration, land valuation, technology developments, economic growth, etc. With regard to development of regional impact of investment in the port shown in Figure 2.

Figure 2 has been described the spatial development of a port system. When seaport developed, urban has also evolved. Firstly, seaports are scattered in an area. Ships rarely come from the port in phase 1. There is no connection with settlement. Phase 2 is penetration and hinterland capture. Both seaport and its surround begins to develop in this phase. Shortsea /feeder services occurs between the nearest ports and each port is established to connect with land. Population and economic growth begin to increase slowly. Then, interconnection & concentration is other phase. In the phase, there are connection between each points. Then, centralization is next phase. Main seaports, city's centers and freight corridors have occurred. Load flows tend in the main seaports. Phase 5 is decentralization and insertion 'offshore' hub. Load centers and deepsea liner services begin to

operates at phase 5. Phase 6 is regionalization. Finally, regional load centre network improves. (Notteboom and Rodrigue, 2005).

Figure 2: The Spatial Development of a Port System



Source : Notteboom and Rodrigue, 2005 :300.

As describe above, when seaports developed, center locations. Because of trade and economics movements, employment is needed. Thus, workers and their families begin to settle in the area. Then, the people need houses, infrastructures opportunities and companies such as grocer, bank. Consequently, economic movements and regional development is associated with each other.

3. AN EXAMPLE OF SEAPORTS INVESTMENT IN TURKEY (CANDARLI PORT)

There is already a project in progress to develop only a freight port in Candarli, as an alternative for the Enhancement of the Existing Izmir Port (for only freight) mentioned above (Duvarcı et all, 2008).

Candarli seaport will have 1,070,000 m² terminal area and 980,000 m² logistics center area. (Oral, 2009). Cargo handling at the port is planned to be 2 million TEU/year at first stage and 2 million TEU/year at second stage (total 4 million TEU/year) (Ministry of Transport, Republic of Turkey, 2009).

Candarli Seaport, which it will cost 4.5 billion dollars in total, will employ 15 thousand people. The first stage, 125 people will be employed in the construction of the port, and 130 people will be employed in the operation phase of the port. After the completion of the port will open new business opportunities to operate approximately 15 thousand people. The purpose of the port of Candarli, Turkey is to become the most important center of the east-west line (Aliğa Express,2011). Thus, regional and national economy and area status will develop.

3. CONCLUSION

The seaports has an important role both trade and economy The improvements of seaports is important, because of all these conditions. These improvements should be made for investment in seaports. In this context, seaport investments have been increased business and employment opportunities (direct and indirect), GNP, land prices etc. in the area. Thus, population and migration towards the area have risen. Finally this area has developed economy as local, regional and national.

For example, Çandarlı seaport will be employed approximately 15 thousand people directly and indirectly.

BIBLIOGRAPHY

Aliğa Ekspress., (2011),İzmir'e 4 Liman Yapılacak, <http://www.aliagaekspres.com.tr/?p=5676>, 10 Mart 2011, Access Date: 30.03.2011.

Boschken, H., L., (1982),The Demands of Conflicting Change on Public Enterprise: West Coast Seaport Development and Environmental Regulation, Public Administration Review, p: 220-226, May/June 1982

Carlucci, F., Cirà, A., (2009), Modeling a Plan for Seaport Investments through a System Dynamics Approach, Pomorstvo, god. 23, br. 2 (2009),str 405-425

Duvarcı, Yavuz, Selvi, Ömer, Günaydın, H. Murat, Gür, Güneş, (2008), Impacts of Transportation Projects on Urban Trends in İzmir, Teknik Dergi Vol. 19, No. 1 January 2008, pp: 4293-4318.

Martin Associates, (2007), The Local and Regional Economic Impacts of the US Deepwater Port System 2006, Prepared for American Association of Port Authorities September, 5, 2007

Ministry of Transport, Republic of Turkey, (2009)Transport And Trade Facilitation In South Eastern Europe The Need To Develop Innovative Financing Solutions Multi-year Expert Meeting on Transport and Trade Facilitation: Public and Private Partnerships for the Development of Infrastructure to Facilitate Trade and Transport 8-10 December 2009.

Musso, Enrico, Ferrari, Claudio, Benacchio, Marco, (2006), Port Investment: Profitability, Economic Impact and Financing, Port Economics, Research in Transportation Economics , Volume:16, 171-218.

Notteboom, Theo, E., Rodrigue, Jean- Paul, (2005), Port Regionalization: Towards a New Phase in Port Development, Maritime Policy and Management, Vol. 32, No. 3, pp. 297-313.

Oni, S., I., (2003), Port Cities environment and Infrastructural Planning: Case of Lagos, Nigeria, COPEDEC VI 2003, Colombo, Sri Lanka Paper No: 048

Oral, Ersel, Zafer, (2009), İzmir’de Deniz Etkinliğinin Arttırılması “Liman Kenti İzmir”, Dokuz Eylül Üniversitesi İktisadi Ve İdari Bilimler Fakültesi İktisat Bölümü II. Çalıştayı İzmir Merkezli Bölgesel Kalkınma Dinamikleri

Yoo, S.,H., (2006), Seaport Infrastructure Investment and Economic Growth in Korea, International Journal of Critical Infrastructures, Volume: 2, Issue:1, p:1-9.