Conference Paper

Logistics by Ship

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Abstract

According to Carbone and De Martino, a port is an entity involved in delivering value to the end consumer. A requirement for good port performance is the ability to compete through cargo handling in addition to connectivity with the overall supply chain. The types of logistics entities in each port are different, making coordination between them is difficult. In each of these relationships, the operators of a specific port create a logistical value, which relates to the efficient and effective receipt of goods for consumers. (Lee, E.S. & Song, D.W. (2010). Knowledge management for maritime logistics value: discussing conceptual issues. Maritime Policy and Management. Vol. 37 No. 6, p. 226-242)) During the last decade there have been three trends in the development of logistics: integration; specialization; and innovation. This article explores recent studies concerning supply chain integrations designed to create value for consumers. This is followed by a discussion of studies exploring developments from logistics coverage to supply chain management, in order to identify the predominant directions currently being promoted in ports with regards to value creation for consumers, especially consumers of goods transported by sea. Finally, the study considers the value created by port logistics in Indonesia.

Keywords: Logistics; Ships; Transit.

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1. Introduction

Relations between countries play a role as a port as a gateway in and out of traded goods. (Song, D.W & Panayides, P.M. (2008). Global supply chain and port/terminal: integration and competitiveness. Maritime Policy and Management. Vol. 53 No. 1, p. 73-87) The shipping industry in which there is a port business is the most global industry. (Greenwood, R. & Hanson, S.G. (2015).Waves in shipping prices and investment. The Quarterly Journal of Economics. Vol. 130 No. 1, p. 563-568)The main changes in the trading system are influenced by the shipping industry. Ports are now required to further integrate the activities in them so that logistics are effective and efficient. (Notteboom, T.E, & Rodrigue, J.P. (2005). Port regionalization: towards a new phase in port. Maritime Policy and Management. Vol. 32 No. 3, p. 297-313) Ports play a significant role in coordinating goods because ports are transportation nodes, and transportation

itself is part of the overall supply chain. (Radhika, A.D. (2012). The new role of seaports as integral parts of global supply chains. Excel International Journal of Multidiciplinary Management Studies. Vol. 2 Issue 4, p. 131-144) Transport development must now place ports in the context of an integrated global supply chain system. Ports have become elements of the global supply chain controlled by logistics entities, namely shipping companies, freight forwarders and transportation operators (Rodrigue, J.P. & Browne, M. (2010). International maritime freight transport and logistics. In Knowles, R., Shaw, J. & Docherty, I. (Eds). Transport Geographies: An Introduction. Blackwell Publishing, Oxford, p. 1-22.) in order to perform well.

A requirement for good port performance is the ability to compete through cargo handling in addition to connectivity in the overall supply chain. The fact is that the types of logistics entities in each port are different, coordination between them is difficult. (Hakansson, H. & Persson, G. (2004). Supply chain management: the logic of supply chains and networks. The International Journal of Logistics Management. Vol. 15 No. 1, p. 11- 26) The role of ports plays a significant role in logistics or supply chain. (Lambert, D.M., Stock, J. R., Ellram, L.M. (1998). Fundamentals of Logistic Management. Mc Graw-Hill, Boston. p.23) According to Robinson, the port is a place for ships to move cargo/passengers to and from ships and land. At the port is a transportation network node in the context of the movement of goods. The movement of goods during the loading and unloading activities to and from the ship, there is a change in the mode of transportation from ship to truck or vice versa or the place where the inter-mode transportation meeting occurs. (Op.cit) Interdependence among actors at the port creates movement of goods. Referring to the essence of logistics is the effective movement of goods and information. (Christopher, M. (2011). Logistics and Supply Chain Management. Prentice Hall, Harlow. p.12)

It is clear that logistics activities occur at the port the movement of goods at the port requires a smooth flow in order to improve logistics performance. The World Bank, reports that Indonesia's logistics index is at 53rd while Vietnam is at the 48th level of the 160 countries surveyed, a low position. One of the causes is the uneven flow of goods at the port. That the movement of goods at the port is the beginning of national logistics. The smooth movement of goods at the port means improving the performance of national logistics, because at the port it is the support for national logistics (Robinson, R. (2002). Ports as elements in value-driven chain system: the new paradigm. Maritime Policy and Management. Vol. 29 No. 3, p. 241-255) gives the idea that in the port there is a value creation from the movement of goods which is formed by the actors involved in it. The interdependence between them creates logistical value, both enjoyed

by themselves (as intermediate consumers) and by the final consumer. (Op.cit.) At the port there is an upstream relationship, namely with the sender of the goods and at the same time a downstream relationship with the recipient of the goods when the goods leave the port. (Vitsounis, T.K. & Pallis, A.A. (2012). Port value chains and the role of interdependencies. In Song, D.W. and Panayides, P. (Eds). Maritime Logistics Contemporary Issues. Emerald, United Kingdom, p. 155-173)

2. Research Methods

The method used: First, review journals about supply chain integration which are aimed at creating value for consumers. Second, tracking journals that discuss developments from logistics coverage to supply chain management to know the direction to value creation for consumers, especially consumers of goods transported by sea. Finally, the value created from port logistics in Indonesia.

3. Results and Discussion

In each of these relationships, the logistical value enjoyed by the operators at the port is created. The logistics value at the port is the efficient and effective receipt of goods (Lee, E.S. & Song, D.W. (2010). Knowledge management for maritime logistics value: discussing conceptual issues. Maritime Policy and Management. Vol. 37 No. 6, p. 226-242))for consumers. According to Carbone and De Martino, a port is an entity involved in delivering value to the end consumer. During the last decade there have been 3 (three) trends in the development of logistics, namely the more integrated, the more specialized, and the innovation. (Op.cit)The goal is to reduce costs (material inventory costs), goods handling costs, and reduce throughput time. Therefore this issue requires closer coordination among stakeholders at the port. In general, the condition of the logistics system at Indonesian ports currently does not have a unified vision that is able to support the increased competitiveness of business actors, logistics activities are still relatively partial and sectoral in each related institution, while the existing coordination is inadequate. Pay attention to the picture of the elements of Indonesian logistics whose shape is not yet suitable for rotation so that the logistics mechanism works (well). (Carbone, V. and DeMartino, M. (2003). The canging role of port in supply chain management: an empirical analysis. Maritime Policy and Management. Vol. 30 No. 4, p. 303-306)

These problems consist of:

1. Key commodity factors as the driving force for logistical activities have not been coordinated effectively, there is no commodity focus that has been established as a national commitment, and there is not yet optimal volume that ensures continuity.
2. Transportation infrastructure is inadequate both in terms of quantity and quality which, among others, is due to the absence of a hub port, not yet managed in an integrated, effective and efficient manner, and ineffective intermodal transportation and interconnection between port infrastructure, warehousing, transportation and hinterland areas.
3. Logistics service providers/providers still have low competitiveness due to the limited network among them so that multinational actors are more dominant.
4. Information and communication technology has not been supported by the availability of reliable infrastructure and networks, the coverage of non-cellular service networks is still limited, and it is customary to use a manual system (paper based system) in logistic transactions.
5. Logistics human resources still have low competence which is accompanied by inadequate educational and training institutions in the field of logistics.
6. Regulations and policies are still partial and sectoral, accompanied by low law enforcement, ineffective cross-sectoral coordination, and no agency that becomes an integrator for national logistics activities. The six logistical elements above should be in the form of serrated wheels with the same distance between the teeth so that they can rotate synchronously as a national logistics activity.

By paying attention to these national logistics problems, the problems in logistics at ports are formulated as follows:

1. Identification of sources of value creation at Indonesian ports. (De Martino, M., Morvillo, A., & Marasco, A. (2010). Value creation within port supply network: methodoligal issues. Paper Presented at 26th IMP Conference, 2-4 September 2010, Budapest, Hungary)
2. What is the description of the flow of goods and documents that can create port logistics value?
3. Look for the causes of the non-smooth flow of goods at the port to find the best solution. From Logistics to Supply Chain Management The terminology of logistics varies, one of which is widely referred to is based on the thoughts of the Council of

> Logistics Management (CLM), as follows: “The process of planning, implementing and controlling the efficient, effective flow and storage of goods, services, and related information from point of origin to point of consumption for the purpose of conforming to customer requirements. “This definition contains the main elements of management, namely planning, implementing and controlling the flow of goods and information effectively from point of origin to point of consumer. The essence is movement of goods as well as the idea and information, this is then also referred to by Presidential Decree No. 26/2012.

This is followed up by the distribution department which will be passed on to the final customer. The flow between the distribution department and the final consumer may be the first active part of the distribution or vice versa, the first active consumer to obtain the goods. This flow of goods required transportation, as Yercan and Yildiz thought, as follows: (Yercan, F. & Yildiz, T. (2012). International maritime trade and logistics, In Song, D.W. and Panayides, P.M. (Eds). Maritime Logistics - A Complete Guide to Effective Shipping and Port Management. KoganPage, London, p. 23-42)”Logistics concern all the activities required for goods to be made available to markets, with purchase, order processing, inventory management and transport among the most relevant.” Any flow that connects between the two parts is always followed by a flow of information on the goods, or along the flow of goods, the flow of information is always followed.

So it can be concluded that the flow of goods is always accompanied by the flow of information in the opposite direction. The broader logistical terminology proposed by Christopher is as follows: (Christopher, M. (2011). Logistics and Supply Chain Management. Prentice Hall, Harlow. p.32) “Logistics is the process of strategically managing the procurement, movement and storage of materials, parts and finished inventory (and the related information flows) through the organization and its marketing channels in such a way that current and future profitability are maximized through the cost-effective fulfillment of orders “This definition emphasizes the strategic process-movement of goods-flow of information-distribution-cost effectiveness. This definition is more complete than the one proposed by CLM.

In management, strategy is compact, comprehensive and comprehensive planning to ensure the company’s goals to be achieved. (Glueck, W.F. (1980). Business Policy and Strategic Management. New York: Mcgraw-Hill. p.21) Supply chain management is a developmental version of logistics management until the early 21st century which includes physical processes (materials or finished goods) and services consisting of planning, organizing and monitoring the flow of goods/services from the point of supply to consumers as the end point. (Yercan, F. and Yildiz, T. (2012). International maritime

trade and logistics. In Song, D.W. and Panayides, P.M. (Eds). Maritime Logistics - A Complete Guide to Effective Shipping and Port Management. KoganPage, London, p. 23-42) In supply chain management includes customer satisfaction, financial flow, integrated flow of information from all stakeholders. The function of shipping is to deliver goods from the port of origin where the utility is low to another port with high utility. (Branch, A.E. (2014). Elements of Shipping. London: Routledge. p.23) So the flow of goods driven by shipping is certainly through the port, which creates value. The purpose of the flow of goods is to satisfy consumer desires or in marketing it is called consumer oriented. Radhika, mentioned it as adding value. Now ship-owners no longer have the economic power to determine the owner of goods. (Valentine, V.F. & Benamara, H. (2013). Maritime transport and international trade. Maritime Policy and Management. Vol. 40 No. 3, p. 226-242) Consumers are one of the "Three P" elements, which must be met in order for ports to have a competitive advantage.

"The three P's consist of companies in this case are ports, customers in this case are shipping companies and goods owners, and competitors are other ports, (Ng, A.K.Y. (2012). Container liner shipping, port development and competition. In Song, D.W. and Panayides, P.M. (Eds). Maritime Logistics – Contemporary Issues. Emerald, United Kingdom, p. 5 - 27)especially ports from neighboring countries. (3) The mechanism for these three elements is as follows: (Ohmae, K. (2002). The Mind of the Strategist: The Art of the Japanese Business. Mc-GrawHill Education (India) Pvt. Limited.)

1. The port creates value destined for the customer, in this case the shipping company or the owner of the goods.
2. The customer receives the value promised by the port by giving an assessment between the money spent to obtain services from that port and the value that is felt. The assessment is whether or not it is appropriate for the money issued.
3. A competitor is another port that also sells the same service as that port, by offering better value, equal to or below the service that the port offers at various price levels. So competitors for customers are an option that can be used as an alternative.

The port it is clearly a competitor albeit at a different price. Logistics activities at ports can create value if their operations are effective and efficient. (Lai, K.H. Ngai, E.W.T. & Cheng T,C.E. (2002). Measures for evaluating supply chain performance in transport logistics. Transport Reseach Part E. Vol. 38 No. 7, p. 439-456) Effectiveness (do the right thing), is a vital performance component of a port (Brooks and Pallis, 2008). (Brooks, M.R.& Pallis, A.A. (2008). Assesing port governance models: process

and performance components. Maritime Policy and Management. Vol. 35 No. 4, p. 411-432) and efficiency (do the thing right), are key issues for port development. In the sense that it is more effective and more efficient than its competitors (Ohmae, 2002), (Opcit) which means creating a competitive advantage. Christopher, stated about the competitive advantage as a result of logistics activities as follows: “It is only in the recent past that business organizations have come to recognize the vital impact that logistics management can have in the achievement of competitive advantage” The importance of ports implementing logistics management in order to obtain competitive advantage through its performance among other ports is a necessity. (Op.cit) Radhika, stated that the competitive advantage of a port is determined by the efficiency of cargo handling and the level of linkage in the supply chain, this opinion strengthens Robinson’s idea. Today’s global view is that intense competition is no longer between companies, but between the advantages of their supply chains. (Op.cit)Meanwhile, the superiority of the supply chain at a port is determined by the productivity of the port. So the requirement for ports to have competitiveness must be efficient and at the same time be an effective supply chain. The next development is from logistics to the supply chain (SC). Although Lambert et al. Gave a name between logistics and SC that can replace each other, there are many other thinkers who give a distinction but cannot be separated between the two names. Following are the ideas for these developments. Logistics is basically planning-oriented and a framework that seeks to create a single plan regarding the flow of goods and information through the business. Meanwhile the SC builds on this logistical framework and seeks to coordinate processes among the entities involved. Christopher defines supply chain management as follows: “The management of upstream and downstream relationships with suppliers and customers in order to deliver superior customer value at less cost to the supply chain as a whole” The focus of supply chain management is the cooperation and trust of all the players involved in the supply chain. Relationships between them with the intention of yielding better overall benefits than working independently. For comparison, Harisson and Van Hoek provide supply chain terminology as follows: “The management of upstream and downstream relationships with suppliers and customers in order to deliver superior customer value at less cost to the supply chain as a whole”.

The emphasis on this terminology is the network between supply chain actors, both upward/supplying and downward/consumer networks. Both Christopher and Harisson and Van Hoek convey value to consumers. The network in question depends on the strength of the relationship between them as a chain and their respective internal performance. (Yercan, F. & Yildiz, T. (2012). International maritime trade and logistics, In

Song, D.W. and Panayides, P.M. (Eds). Maritime Logistics - A Complete Guide to Effective Shipping and Port Management. KoganPage, London, p. 23-42)

Supply chain actors are producers (factories), it appears that there are 2 (two) main streams, namely product flow and information flow. The product flow includes: relationships with level 2 suppliers in the form of raw material site plants, which are continued to level 1 suppliers as intermediate suppliers by pooling raw materials from level 2 suppliers (which may have more than 1 source), relationships with supplier level 2 and with supplier level 1 is called upstream (upstream). Then proceed to producers to process raw materials into finished goods. Next, after the finished goods are delivered to consumers (in this case intermediate consumers, for example distributors or shops), then it continues to the final consumer who uses the product. The relationship with consumers between and with the final consumer is called the downstream relationship. Internally, the parts involved are part of the purchasing of raw materials, production, marketing, research and development (RD) and finance. To realize the effectiveness of the relationship from the level 2 supplier to the end customer, it requires customer management, demand management, production management, supplier management, commercialization-product development, as well as profit management, all of which require adequate information. Maritime Logistics Shipping activities consist of 2 (two) main activities, namely port side activities and ship side activities, both of which cannot be separated. (Yercan, F. & Yildiz, T. (2012). International maritime trade and logistics, In Song, D.W. and Panayides, P.M. (Eds). Maritime Logistics - A Complete Guide to Effective Shipping and Port Management. KoganPage, London, p. 23-42) Meanwhile, outside it is a shipping economy supporting business. According to Song and Panayides, maritime logistics is a new discipline developed out of ship and port activities. Ships cannot perform operations without port facilities, (Op.cit)and a port without ships stopping there is dead. The port coordinates ships and other shipping support activities, while ships provide sea transportation services. So ports and ships form maritime logistics. Therefore, the ship side and port side cannot be separated in the scope of maritime logistics.

Maritime logistics consists of 3 (three) main actors, namely: 3.2.1. Shipping companies (ship side) that provide ships/sea transportation services, either in the form of agent, branch, or parent. 3.2.2. Port operators (port side) that provide port services for ship loading and unloading activities. 3.2.3. Freight forwarder, which is a mediator between goods owners and shipping companies and port operators to facilitate the delivery or delivery of cargo. The three main actors above form maritime logistics, and furthermore

this maritime logistics adds to the overall logistics or national logistics. Although in the scope of this paper the focus is on the port side, the ship side cannot be abandoned.

That the challenge in supply chain management at ports is better integration among the entities within it. The integration of multiple activities and multiple entities at the port will increase agility, which port consumers are very much looking forward to. According to Christoper, port agility can be realized if it can combine 4 factors: sensitivity to the market, showing the actual port function, can integrate various activities, and is network-based.

The real problem in almost all ports in Indonesia is the inconsistency between the activities in the buffer zone (hinterland) and the system provided at the terminal. In JICT, for example, in 1 hour it can process 30 containers of size 20 “while the availability of outside processes in the amount of income and the amount of expenditure is not balanced. If the number of entries in the same time is 40 units while the total expenditure is only 30 units, then there is an accumulation of 10 units each. This clearly disrupts the synchronization of port logistics as a whole.

Therefore all need an action, including:

1. Creating availability of goods (cargo) at each port.
2. Synchronize the flow of goods into and out of the port.
3. A compact national logistics policy for each sector/ministry
4. Increased logistics insight and skills of human resources for logistics service providers.

In maritime logistics there are 3 (three) main actors, namely shipping companies (GSL and SL), terminal operators, and freight forwarders (Lee and Song, 2010). (Lee, E.S. and Song, D.W. (2010). Knowledge management for maritime logistics value: discussing conceptual issues. Maritime Policy and Management. Vol. 37 No. 6, p. 226-242)) 2. Medium integration level, the integration of the movement of goods from coming/going for import-export was coordinated by GSL as a logistics entity in the 2000s era, which transported goods no longer with port to port limitations but door to door. (Op.cit) This means that since the goods originate from overseas sending warehouses, land transportation (trucking), all of this is in the context of logistical efficiency so that prices become competitive (Ohmae, 2002). (Op.cit)3. A high level of integration, the movement of goods for export-import purposes is played by SL operating on the domestic route which functions as a supplier to GSL, which functions as a collector transport.

All of these are values created by integrated port logistics. This will result in higher value the more integrated among these entities. If they serve partially according to the vision of individual entities it will result in lower port logistics value than if they serve as a whole as a whole. At each port, for example Port A has a level of competitive advantage through different levels of integration, for example with Port B, Port C, Port D and so on. etc. The more integrated the better the logistics efficiency. This is consistent with the characteristics of current logistics competition, where competition between ports is determined by the value of the supply chain. (Vitsounis, T.K. and Pallis, A.A. (2012). Port value chains and the role of interdependencies. In Song, D.W. and Panayides, P. (Eds). Maritime LogisticsContemporary Issues. Emerald, United Kingdom, p. 155-173)Ports in Indonesia have different levels of integration. First Class Ports have higher integration than Class II Ports, let alone at lower class. Port Logistics Value Creation through Dependency Port logistics value creation can be realized due to the complex input-output between entities in ports. Their relationship creates interdependencies, which result in port logistics performance.

Dependency relationships are in the form of technical-physical dependence and administrative dependence. There are 3 (three) types of dependency, namely (Op.cit) serial dependencies, pooled dependencies, and reciprocal exchange dependencies.

4. Conclusion

1. Serial dependence the creation of port logistics value through serial dependent goods movement can be explained as follows. Services produced by one actor at the port (output) are input for other port actors.

2. Dependency Collected Creation of port logistics value through the movement of collected goods.

The real problem in almost all ports in Indonesia is the inconsistency between the activities in the buffer zone (hinterland) and the system provided at the terminal. In JICT, for example, in 1 hour it can process 30 containers of size 20 “while the availability of outside processes in the amount of income and the amount of expenditure is not balanced. If the number of entries in the same time is 40 units while the total expenditure is only 30 units, then there is an accumulation of 10 units each. This clearly disrupts the synchronization of port logistics as a whole.

1. Indonesia is still facing national logistical problems in the form of policies, transportation infrastructure, availability of goods, resources for providing logistics services.

2. The source of value creation at the port is through the added value created by each logistics actor at the port

3. The flow of goods and documents at the port can be serialized, pre-collected, or reciprocal.

4. The activities of each actor at the port are getting better integrated.

5. The flow of goods (containers) that enter the port and those that leave is not synchronized.

References

[1] Branch, A. E. (2014). *Elements of Shipping*. London: Routledge.

[2] Brooks, M. R. and Pallis, A. A. (2008). Assesing Port Governance Models: Process and Performance Components. *Maritime Policy and Management*, vol. 35, issue 4, p.521

[3] Carbone, V. and DeMartino, M. (2003). The Changing Role of Port in Supply Chain Management: An Empirical Analysis. *Maritime Policy and Management*, vol. 30, issue 4, p.98-102

[4] Christopher, M. (2011). *Logistics and Supply Chain Management*. Harlow: Prentice Hall.

[5] Cullinane, K. and Talley, W. K. (2006). Introduction. In K. Cullinane and W. K. Talley, (Ed.), *Reseach in Transportation Economics* Port Economics, Volume 16, 1st Edition, Elsevier: www.elsevier.com

[6] De Martino, M., Morvillo, A. and Marasco, A. (2010). Value Creation within Port Supply Network: Methodologic Issues. Presented at *26th IMP, Budapest, Hungary*. September 2010 “Business networks - Globality, Regionality, Locality At: Budapest, Hungary

[7] Glueck, W. F. (1980). *Business Policy and Strategic Management.* New York: Mcgraw-Hill.

[8] Greenwood, R. and Hanson, S. G. (2015). Waves in Shipping Prices and Investment. *The Quarterly Journal of Economics*, Vol. 130, issue 1, p. 84

[9] Hakansson, H. and Persson, G. (2004). Supply Chain Management: The Logic of Supply Chains and Networks. *The International Journal of Logistics Management*, vol. 15, issue 1, p. 112

[10] Lai, K. H., Ngai, E. W. T. and Cheng, T. C. E. (2002). Measures for Evaluating Supply Chain Performance in Transport Logistics. *Transport Research Part E.,* vol. 38, issue 7, p.651

[11] Lambert, D. M., Stock, J. R. and Ellram, L. M. (1998). *Fundamentals of Logistic Management*. Mc Graw-Hill, Boston.

[12] Lee, E. S. and Song, D. W. (2010). Knowledge Management for Maritime Logistics Value: Discussing Conceptual Issues. *Maritime Policy and Management*, vol. 37, issue 6, p.210

[13] Ng, A. K. Y. (2012). *Container Liner Shipping, Port Development and Competition*. In D. W. Song and P. M. Panayides, (Eds.), *Maritime Logistics – Contemporary Issues*. UK: Emerald.

[14] Notteboom, T. E. and Rodrigue, J. P. (2005). Port Regionalization: Towards a New Phase in Port. *Maritime Policy and Management*, vol. 32, issue 3, p. 54

[15] Ohmae, K. (2002). *The Mind of the Strategist: The Art of the Japanese Business.* New Delhi: Mc-GrawHill Education (India) Pvt. Limited.

[16] Radhika, A. D. (2012). The New Role of Seaports as Integral Parts of Global Supply Chains. *Excel International Journal of Multidisciplinary Management Studies*, vol. 2, issue 4, p.217

[17] Robinson, R. (2002). Ports as Elements in Value-Driven Chain System: The New Paradigm. *Maritime Policy and Management*, vol. 29, issue 3, p. 665

[18] Rodrigue, J. P. and Browne, M. (2010). International Maritime Freight Transport and Logistics. In R. Knowles, J. Shaw and I. Docherty, (Eds.), *Transport Geographies: An Introduction*. Oxford: Blackwell Publishing.

[19] Song, D. W. and Panayides, P. M. (2008). Global Supply Chain and Port/Terminal: Integration and Competitiveness. *Maritime Policy and Management*, vol. 53, issue 1, pp. 73-87.

[20] Song, D. W. and Panayides, P. (Eds). *Maritime Logistics Contemporary Issues*. UK: Emerald.

[21] Valentine, V. F. and Benamara, H. (2013). Maritime Transport and International Trade. *Maritime Policy and Management*, vol. 40, issue 3, p. 75-83

[22] Vitsounis, T. K. and Pallis, A. A. (2012). Port Value Chains and the Role of Interdependencies. In D. W. Song and P. Panayides, (Eds.), *Maritime Logistics Contemporary Issues*. UK: Emerald.

[23] Yercan, F. and Yildiz, T. (2012). International Maritime Trade and Logistics. In D. W. Song and P. M. Panayides, (Eds.), *Maritime Logistics - A Complete Guide to Effective Shipping and Port Management*. London: KoganPage.