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## Editorial

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## 1 Rationale of the special issue

Academics and practitioners largely recognise the increasing managerial complexity that exists in port and shipping businesses. The proliferation of new environmental variables to be considered, the 'pace' of market transformations and innovations and the complexity derived from the emerging interactions between public and private players are driving shipping companies and port actors to reshape their strategies and rethink their own business models.

For shipping, one reason for such an increasing complexity is the convergence of maritime transport and logistics facets (Panayides, 2006). Scholars are becoming increasingly aware of the need to integrate logistics and supply chain management concepts in the maritime transportation chain and operations. The concept of service quality, customer service and performance become equally important in maritime logistics (Panayides and Song, 2013) and amongst the various components of service quality, a focus on environmental performance and corporate social responsibility is increasing (Pawlik et al., 2012).

For ports, port authorities (PAs) are also redefining their vision and missions to stimulate value creation in reshaping public-private interactions in transport chains (Parola et al., 2013). New managerial and governance practices are introduced by PAs in many countries, a phenomenon basically triggered by:

- 1 the proliferation of numerous environmental variables pressing public administrations to adopt radical changes in their own organisation and in the definition of processes and objectives (e.g., security, green issues, new technologies, financial austerity, etc.)
- 2 the 'pace' in market transformations and innovations, driving public actors to be able to respond proactively
- 3 the environmental complexity deriving from the increasing interactions and interdependencies between public and private actors.

This special issue gathers some recent and original contributions related to this new managerial complexity in shipping and port markets. It carries revised and substantially extended versions of selected papers presented at the 2013 International Association of Maritime Economists (IAME) Conference on 'Managing complexity in shipping and port markets: firms' business models, cooperative games and innovative public-private interactions'. The conference took place from 3–5 July 2013 in Marseille and was co-organised by Kedge Business School (France), University of Genoa (Italy), University of Naples 'Parthenope' (Italy) and IFSTTAR (Paris). The call for papers was also extended to non-conference papers related to the main following research areas/topics:

- growth strategies of ocean carriers and terminal operators
- PA strategies
- port governance models and mechanisms
- 'blue ocean' strategies in shipping and ports
- emerging market opportunities and trends

- competition and co-operation in shipping and ports
- economies of scale and cost leadership strategies
- vertical integration in shipping and transport logistics
- sustainable development and corporate social responsibility in shipping and ports.

## 2 Contents of the special issue

The first paper of this special issue is by Yu-Ching Chiao, Chun-Ju Huang, Shu-Mei Hsu, and Ya-Ling Guo. It investigates how multimarket contact (MMC) influences a focal firm's competitive aggressiveness as well as cooperation and competition in liner shipping (Heaver et al., 2001; Cariou, 2008; Lam, 2013). The authors perform research from three perspectives. First, this study extends the research on competition from single to multiple countries in order to explore competitive games between multinational enterprises (MNEs). In addition, it analyses the impact of the competitive behaviour of MNEs looking at cooperative embeddedness among firms. Third, the article investigates the behaviour of firms from the perspective of a competitive network by adopting the notion of inward centrality competition. By scrutinising a sample of leading 21 container shipping MNEs and collecting 1,506 news from Cyber Shipping Guide between 2007 and 2009, the authors show that the degree of MMC increases a focal firm's competitive aggressiveness. In particular, the empirical outcomes unveil:

- 1 when the MMC between a focal firm and its competitors is higher, the competitive aggressiveness of the focal firm is also higher
- 2 when a focal firm has a higher centrality of cooperation, it weakens the positive relationship between MMC and the focal firm's competitive aggressiveness
- 3 when a focal firm has a higher inward centrality of competition, it strengthens the positive relationship between MMC and competition aggressiveness
- 4 the greater the competitive aggressiveness of the focal firm, the higher the level of performance it achieves.

In essence, by examining firms' strategies from a multipoint competition perspective, this paper fulfils research gaps both in maritime and general management literatures by extending prior research on interfirm competition in liner shipping (Parola et al., 2014).

The second paper is by Jeffrey Martin, Sally Martin and Stephen Pettit and deals with container ship size and its implications on port call workload. This paper measures, for the first time, the changes in berth and quay workload induced by the increase in ship size (Cullinane and Khanna, 2002) and the impact on ship-to-shore service levels of North European terminals. In recent years, the number of containers that may be unloaded and loaded during a port call has grown tremendously thus impacting berth workload and port turnaround times (Imai et al., 2007). The authors first show trends in TEUs per ship metre length since 1975, then, accounting for changes in the TEU ratio, convert into ship-to-shore moves to calculate a Berth Workload Index. A Quay Crane Workload Index is also developed to determine the extent to which terminals have met these transformations by deploying additional quay cranes or by enhancing quay crane

performance. The paper then focuses on the impact of Maersk's Triple E Class container ship on the workload of a berth and quay crane. To assess how terminals have met the increasing workload, the study assessed the layout of container ships and the ability to deploy additional quay cranes. The empirical outcomes unveiled that operational constraints have limited the maximum number of quay cranes that can be deployed on larger ships, with the maximum increasing from 7 to 13 cranes over the period examined. Given the increase of over 700% in berth workload compared to the 87% increase in cranes deployed, and the fact that port turnaround time has remained constant, the results showed that terminals have undertaken major improvements in productivity by:

- 1 increasing the proportion of ship working time to total port time
- 2 reducing non-productive time while a ship is worked
- 3 increasing the quay crane cycles performed per hour and the number of moves performed per quay crane cycle.

In addition, the authors realised that the increase in peak workload at the berth will also be observed at all sub-systems of a terminal, including quay-to-yard transfer, yard and gate operations. As this study has made a number of assumptions in this respect, further in-depth investigations are required in order to understand the impact of growing peak workloads on other terminal sub-systems. In the light of results, additional research is also required into the design and bay configuration of container ships, most notably to measure the distribution of container slots between bays and to better understand the impact of ship size on quay crane workload concentration.

The third paper, by Larissa Van der Lugt, Peter de Langen and Lorike Hagdorn, addresses the strategic scope of PAs. The study analyses changes in the strategic scope of 94 PAs and further investigates the relationship between PA's institutional structure and their strategic scope. Based on the data obtained from a global survey, the authors draw a set of conclusions. First, PAs are substantially involved in a number of activities that reach beyond a landlord function, and this behaviour will increase in the future along functional, geographical and organisational dimensions (Notteboom and Winkelmanns, 2001; Caballini et al., 2009; Verhoeven, 2010). In addition, the ranking of strategic goals according to their level of importance, with the two highest scoring goals being one at macro level and one at firm level, demonstrates the shared value character of PAs. Third, the different institutional settings of PAs impact both the strategic goals and strategic actions of PAs. This study unveils that PAs with more autonomy and a more businesslike institutional setting put more emphasis on firm-level goals, whereas PAs with more government involvement and less autonomy give more weight to macro- and cluster-level goals. Fourth, corporatised PAs show the greatest involvement in activities beyond the landlord, especially in operations, investment in inland facilities and congestion reduction. Moreover, these organisations seem to be more active in stimulating and facilitating activities in the port cluster than PAs with a larger share of private ownership (purely or partly private PAs). At the same time, however, corporatised PAs are less involved in such activities than PAs with a more governmental character, the latter of which perform the most stimulating and facilitating activities in the port cluster and pay the relatively highest attention to sustainability. The authors arrive at the observation that more autonomy and a more business-like structure in PAs widens their strategic scope and brings in more business-like goals (van der Lugt et al., 2013). This attitude, however, might also imply two possible shifts. One where the focus moves away from goals at the

macro level to goals at the firm level, and one where the role gravitates more away from facilitating activities and closer toward investing and entrepreneurial activities.

The fourth paper is by Geoffrey Aerts, Michaël Dooms and Elvira Haezendonck and offers an analysis of actual stakeholder management practices conducted by PAs. Drawing from several organisation-centric stakeholder management theories, the authors study the conceptualisation and the identification of stakeholders, as well as the application of stakeholder management as executed by PAs (Notteboom and Winkelmanns, 2003; Dooms et al., 2013). To this end, by scrutinising the opinions of middle management, this paper examines whether daily stakeholder management reflects stakeholder theory findings, emphasising the importance of attribute-based stakeholder conceptualisation, identification and stakeholder management strategies. In addition, a comparative analysis is also performed, assessing the quality of the stakeholder management practice in several seaports located in the Rhine-Scheldt Delta. The stakeholder management practice found in the Flemish cases unveils that the academic models and theories tested in the research have not yet gained acceptance into the PA management. Findings show that only in the port of Rotterdam there are elements reflecting the three main theoretical perspectives represented. Indeed, even this PA only partially conforms to the CCBE's (1999) best practice principles. In the other cases, organisation-wide definitions and attributes used to identify stakeholders are missing. The lack of correspondence with the theoretical reflections, present in the applied stakeholder management theory, seems due to the absence of essential building blocks, which may drive to a stakeholder management aimed at achieving strategic objectives (van der Lugt et al., 2013). These elements, consisting out of an organisation and objective-specific stakeholder conceptualisation, an organisation specific and objective-oriented stakeholder identification method, and a structured system for keeping track of stakeholder concerns, model a stakeholder management that targets key stakeholders. The authors conclude that the absence of these elements is sufficiently indicative of the fact that stakeholder management theory has found little access into PA management's cognitive appreciation. The outcomes unveil that there is a very reactive and ad-hoc method in place used to handle interactions with stakeholders. As the effort needed, to transform the 'as is' state of stakeholder management in the Flemish PAs into a higher stakeholder management, is costly, both in terms of resources and time expenditure. It remains to be seen if the PA management will adapt to a structured/learning-based form of stakeholder management, influenced by the tested theoretical contributions and hereto made propositions. A status quo however, implies that these PAs refrain from moving towards a higher stakeholder management capability. In essence, the results show that actual stakeholder management practices found at several PAs do not converge with the methods and theoretical findings presented in academic stakeholder management literature. The crucial element in this reluctance seem to be situated in the administrative and bureaucratic burdens that are associated with and represented by the implementation of a structured stakeholder management approach. The cost, resource and time expenditure associated with implementing and maintaining a structured stakeholder approach, therefore have to be compared to the potential benefits reflected in the lowering of transaction costs by lower organisation vis-à-vis stakeholder and stakeholder vis-à-vis organisation frictions. This allows the authors to formulate exploratory and advisory propositions useful in advancing stakeholder management research and practice within the PA environment. In this perspective, future research can

thus feed the discussion by establishing whether or not a bureaucratic cost vs. transaction cost trade-off is actually present.

The last paper of this special issue is by Francesco Parola, Theo Notteboom, Giovanni Satta and Jean-Paul Rodrigue and addresses multiple-site acquisition strategies by international terminal operators (ITOs) which hold large terminal portfolios worldwide (Olivier, 2005; Parola et al., 2006; Notteboom and Rodrigue, 2012). Basically, a multiple-site acquisition is an external growth strategy focusing on the simultaneous take-over of an entire terminal portfolio as part of a unique transaction. This study introduces an innovative theoretical framework about how spatial and temporal dimensions of foreign growth are affected by these multiple-site acquisitions. The manuscript also investigates the impact of multiple acquisitions on the sustainable growth of firms by identifying the transaction package problem, the locational diversity problem and the irregular growth path problem. The proposed theoretical arguments are illustrated and supported by an analysis of a comprehensive global terminal-specific dataset related to the 1997 to 2010 period, and case studies on strategic market entry behaviour of two major ITOs. The case histories illustrate 'how' this aggressive entry strategy affects spatial and temporal dimensions of ITOs' overseas growth, by quickly enlarging the geographic scope of activities in a compressed timeframe. In addition, the PSA international and DPW cases explain 'why' multiple-site acquisitions may generate transaction management concerns. By increasing organisational and environmental complexity, multiple-site acquisitions produce time compression diseconomies, and can overstretch ITO's absorptive capacity (Satta et al., 2014). This contribution demonstrates when addressing multiple acquisition choices, managers have to consider the complexity of the overall transaction from diverse perspectives. First, the transaction size, i.e., the number of facilities/countries simultaneously penetrated as well as the total amount of financial resources committed, dramatically increases transactional package problem and irregular growth path problem. Second, the number of the new countries (or cultural areas) which are entered through the multiple-site acquisition, and the 'cultural distance' (psychic distance) between the home country and the new host countries are demonstrated to deeply worsen the location diversity problem. Multiple-site acquisition involving the entry in a wide array of new countries and regions have been found to create conflicts over the degree of cultural adaptation and obstacles in achieving integration benefits consistent with evidences from other sectors (Bjorkman et al., 2007). Clashes between different organisational practices are commonly expected when the new host countries are characterised by different legal systems, regulatory hurdles and language. Third, the degree of complexity of the transaction is potentially very different as it depends on the nature and the magnitude of the deal. The authors discuss how the solutions can range from the simultaneous acquisition of diverse assets/facilities, to the take-over of the whole corporation and the private negotiation of blocks of shares. Managers are encouraged to take into account the impact of diverse contractual arrangements on the sustainability of the firm's internationalisation drive. Finally, the authors recognise that international knowledge previously accumulated as well as the prior experience in M&A operations may significantly moderate the managerial and organisational concerns originating from multiple-site acquisitions.

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## References

- Bjorkman, I., Stahl, G.K. and Vaara, E. (2007) 'Cultural differences and capability transfer in cross-border acquisitions: the mediating roles of capability complementarity, absorptive capacity, and social integration', *Journal of International Business Studies*, Vol. 38, No. 4, pp.658–672.
- Caballini, C., Carpaneto, L. and Parola, F. (2009) 'Italian port authorities approaching the post-reform: the Ligurian case', in Notteboom, T., de Langen, P. and Ducruet, C. (Eds.): *Ports in Proximity: Competition and Coordination among Adjacent Seaports*, pp.191–208, Ashgate, Aldershot, UK.
- Cariou, P. (2008) 'Liner shipping strategies: an overview', *International Journal of Ocean Systems Management*, Vol. 1, No. 1, pp.2–13.
- Clarkson Center for Business Ethics (CCBE) (1999) *Principles of Stakeholder Management*, Toronto, Canada.
- Cullinane, K. and Khanna, M. (1999) 'Economies of scale in large container ships', *Journal of Transport Economics and Policy*, Vol. 33, No. 2, pp.185–207.
- Dooms, M., Verbeke, A. and Haezendonck, E. (2013) 'Stakeholder management and path dependence in large-scale transport infrastructure development: the port of Antwerp case (1960–2010)', *Journal of Transport Geography*, February, Vol. 27, pp.14–25.
- Heaver, T., Meersman, H. and Van de Voorde, E. (2001) 'Co-operation and competition in international container transport: strategies for ports', *Maritime Policy & Management*, Vol. 28, No. 3, pp.293–305.
- Imai, A., Nishimura, E., Hattori, M. and Papadimitriou, S. (2007) 'Berth allocation at indented berths for mega-containerships', *European Journal of Operational Research*, Vol. 179, No. 2, pp.579–593.
- Lam, J.S.L. (2013) 'Benefits and barriers of supply chain integration: empirical analysis of liner shipping', *International Journal of Shipping and Transport Logistics*, Vol. 5, No. 1, pp.13–30.
- Notteboom, T. and Rodrigue, J-P. (2012) 'The corporate geography of global container terminal operators', *Maritime Policy & Management*, Vol. 39, No. 3, pp.249–279.
- Notteboom, T. and Winkelmann, W. (2001) 'Structural changes in logistics: how will port authorities face the challenge?', *Maritime Policy & Management*, Vol. 28, No. 1, pp.71–89.
- Notteboom, T. and Winkelmann, W. (2003) 'Dealing with stakeholders in the port planning process', in Dullaert, W., Jourquin, B. and Polak, J. (Eds.): *Across the Border: Building upon a Quarter of Century of Transport Research in the Benelux*, pp.249–265, Antwerp, De Boeck.
- Olivier, D. (2005) 'Private entry and emerging partnerships in container terminal operations: evidence from Asia', *Maritime Economics & Logistics*, Vol. 7, No. 2, pp.87–115.
- Panayides, P.M. (2006) 'Maritime logistics and global supply chains: towards a research agenda', *Maritime Economics & Logistics*, Vol. 8, No. 1, pp.3–18.
- Panayides, P.M. and Song, D.W. (2013) 'Maritime logistics as an emerging discipline', *Maritime Policy & Management*, Vol. 40, No. 3, pp.295–308.

- Parola F., Caschili S., Medda F. and Ferrari C. (2014) 'Measuring the scope of inter-firm agreements in the container shipping industry: an empirical assessment', *International Journal of Shipping and Transport Logistics*, Vol. 6, No. 5, pp.466–487.
- Parola, F., Lee, S.W. and Ferrari, C. (2006) 'On the integration of logistics activities by shipping lines: the case of East-Asia', *Journal of International Logistics and Trade*, Vol. 4, No. 1, pp.113–136.
- Parola, F., Satta, G., Penco, L. and Profumo, G. (2013) 'Emerging port authority communication strategies: assessing the determinants of disclosure in the annual report', *Research in Transportation Business & Management*, October, Vol. 8, pp.134–147.
- Pawlik, T., Gaffron, P. and Dewes, P.A. (2012) 'Corporate social responsibility in maritime logistics', in Song, D-W. and Panayides, P.M. (Eds.): *Maritime Logistics: Contemporary Issues*, pp.205–226, Emerald Publications, London.
- Satta, G., Parola, F. and Persico, L. (2014) 'Temporal and spatial constructs in service firms' internationalization patterns: the determinants of the accelerated growth of emerging MNEs', *Journal of International Management*, Vol. 20, No. 4, pp.421–435.
- van der Lugt, L., Dooms, M. and Parola, F. (2013) 'Strategy making by hybrid organizations: the case of the port authority', *Research in Transportation Business & Management*, October, Vol. 8, pp.103–113.
- Verhoeven, P. (2010) 'A review of port authority functions: towards a renaissance?', *Maritime Policy & Management*, Vol. 37, No. 3, pp.247–270.