7 Conclusions

The purpose of this final chapter is to present and reflect on this research’s main conclusions. First, the conclusions of each of the research chapters are summarized. Second, the implications arising from said conclusions regarding port authorities’ strategic management practices are discussed. The chapter concludes with a set of challenges for further research.

7.1 Summary of findings from the different research themes

This research applies a strategic management perspective to the port authority (PA). In doing so, it aims to provide a better understanding of PA’s strategies by assessing the development and logic of said strategies, as well as by identifying the specific conditions that apply when forming new strategies.

Chapter 2 Characterizing the port authority as a hybrid organization

The first chapter characterizes the PA as an organization that straddles the public-private dichotomy or the purpose of analysing the applicability of concepts from general strategy research to PAs. The two research questions that are central to this chapter are:

- How do PAs characterize from an organizational and institutional perspective?
- What does this mean for the applicability of theoretical concepts from strategy research?

Using the literature on port governance and PAs, chapter 2 characterizes the PA as occupying a space between public and private. In some ways, PAs resemble private firms: PAs act in a competitive environment, are increasingly accountable for their performance (both from an economic and a societal perspective), and face strategic issues regarding positioning and creating value in their networks (e.g., creating competitive advantage and increasing efficiency and effectiveness). At the same time, PAs have characteristics that distinguish them from private firms: they are owned by governments; they place stronger emphasis on goals with a public character compared to private companies; they face limited market control (e.g., PAs will not easily go bankrupt and competition is not always present to the fullest extent); they face a more institutionalized environment that limits the freedom to act; they are more strongly influenced by politics, and finally, they have managerial values that are influenced by a governmental background that has been more oriented toward tasks than customers.

Granted, these deviations from private firms differ across PAs, as port reform has led to a variety of institutional models. Despite these differences in institutional structure, PAs can be largely defined as shared value or hybrid organizations:

- combining both private and public organizational characteristics;
- combining public with private goals;
- combining market revenues with public funding;
- subject to market control (i.e., port users have alternatives), but not to the fullest extent (i.e., PAs will not easily go bankrupt).

Given these conditions, PAs face four main strategic issues: 1) PA reform (integration of corporate governance mechanisms and business objectives into the PA organization); 2) improve
efficiency and effectiveness on the port cluster level; 3) guarantee long-term development through competitive positioning of the port cluster and innovation; 4) develop the port network.

When looking at the selected theoretical concepts alongside PA’s strategic issues and specific attributes, it becomes clear that a strategy research perspective can help in understanding the strategic directions and positions that PAs choose (or neglect). First, there are arguments in support of PAs extending their activities in their value chains: For example, in their hinterland networks, PAs can reduce operational coordination costs by introducing more hierarchical coordination mechanisms (transaction cost approach; Williamson, 1985). Second, the resources and capabilities that PAs have developed over time may serve as drivers for value-creating strategies—for example, in their forelands and hinterlands (Resource Based View; Barney, 1981). Third, PA’s possession of key assets in the port ecosystem (i.e., port land and infrastructure), in tandem with their position as port developer, imply a need for a keystone role (business ecosystems approach; Iansiti & Levien, 2008) in which PAs aims to create value in the port cluster and port networks. Fourth, the interdependence that PAs have with the other port companies—who are simultaneously the customers of the PA and the co-creators of the port product—influences the ways in which they can design and implement their strategic reorientation. Thus, a co-evolutionary approach may illuminate the logic and conditions behind PA’s strategic orientation, especially when considering environmental interactions (Child et al., 2012; Lewin & Volberda, 1999).

Additionally, the analysis makes clear that the specific characteristics of the PA influence how the theoretical lens can be applied. First, and on conceptual level, the applicability of TCE depends on the transaction principle taken (see Williamson, 2008)—in port-linked transport networks, this would generally entail goods-based transport operations with mutual dependency. Consequently, it is necessary to consider transaction value instead of transaction costs, which means that the understanding of value needs to be reevaluated. In the traditional TCE domain, transactional value is merely defined as pure economic value, but this neglects the accompanying societal values that are a necessary component of the PA’s perspective and ultimate value analysis. For example, PAs might invest in multimodal facilities that enhance modal shift in order to reduce emissions, which would hopefully have the effect of increasing the port’s value. Second, the strict premise that resource-based strategies are effective if they lead to profit maximization, as in the RBV, should be loosened in the context of the PA. Methods should be developed to identify those resources that might create value in the port cluster, in the port’s network, and for the PA itself. Also, an additional framework is needed to ensure that only valuable competencies are sustained over time. The absence of the strict market control as is faced by private companies (i.e., they run the risk of disappearing from the market if they choose the wrong strategy) implies that PAs can endure wrong strategies over time.

In summary, all of the selected theoretical concepts can help in understanding and analysing a PA’s strategy; however, the specific nature of the PA requires a proper consideration of its actor-related premises.

Chapter 3  A cognitive perspective on port authority strategy

In this chapter, a cognitive perspective is applied to the PA. We propose that PA’s executives have specific strategic cognitions that influence their strategy-making, and furthermore, that
strategic cognition is to a large extent determined by past experiences. In this research, we empirically measure the strategic beliefs of PA executives and interpret the outcomes, relating them to the specific institutional nature of the PAs. Extending a survey-based measurement tool developed by Meyer (2007), we make a comparison between the strategic beliefs of PA executives and a set of executives from private companies (‘regular’ executives). The research questions underlying this chapter are:

- What is the relevance of a cognitive perspective for the strategy-making of a PA?
- How do the strategic beliefs of PAs compare with ‘regular’ firms?
- What impact does the institutional structure of PAs have on their strategic beliefs?

Regarding the first question, a cognitive perspective adds to the research base for PA strategy:

Firstly, applying this perspective has revealed some specific PA characteristics that impact their strategy formulation. Secondly, our review of PA strategy research has shown a lack of inside-out approaches for analysing PA strategy. Most contributions look at how changes in the external institutional and market environments put pressure on PAs and how said pressure induces changes in their role and strategy. By contrast, the cognitive perspective takes the organization’s attributes as a starting point for strategy formulation.

The comparison of PA executives’ strategic beliefs with the strategic beliefs of ‘regular’ executives has generated some valuable insights. On the analysed dimensions for strategic thinking, PA executives largely resemble ‘regular’ executives, but there are some meaningful differences. The long-term planning environment of PAs seemingly leads to a stronger focus on logic reasoning and analysis among their executives; by contrast, ‘regular’ executives place more emphasis on creativity and intuition. The port environment also encourages a stronger focus on deliberateness over emergence. Furthermore, PA executives see market opportunities as a more significant driver of strategic change than their resources compared with regular executives. These differences imply that any analysis of PA strategy should consider the PA as a specific type of organization.

The PA executives’ thinking on organizational purpose highlights the impact of PA’s institutional structure on their executives’ strategic beliefs. Case in point: PA executives acting in a businesslike context think significantly more in terms of profit than responsibility compared to PAs in a more governmental setting. More striking is the finding that their profit motivation is even greater than that of ‘regular’ executives. This suggests that PAs run the risk of exaggerating the weight of revenue and profit generation when corporatizing (or privatizing), rather than focusing on stakeholders’ needs.

Lastly, it seems that PA executives think more in terms of choice than compliance. This could indicate that PA executives overestimate their ability to change their strategic context and show real industry leadership. In our view, PAs are rather reactive to their environments and are limited in their ability to influence this reality. In other words, landlord PAs have an important, but nonetheless restricted role. It is the private port companies and global port users that play a key role in defining how the port operates, performs and renews.

Chapter 4  Worldwide empirical investigation of beyond the landlord strategies

This chapter empirically researches the strategic scope of the PA worldwide and investigates the relationship between a PA’s institutional structure and its strategic scope. Based on a statistical
analysis of survey responses from 94 PA executives worldwide, we derive answers to the following questions:

- What is the strategic scope development of PAs worldwide?
- How does this relate to their institutional structure?

By considering PA’s strategic scope development, a couple of conclusions can be drawn. First, PAs see their strategic goals as extending beyond their landlord role. Second, PAs substantially engage in a variety of activities that go beyond a landlord role. Third, PAs expect that their role beyond the landlord will further expand in the future. In pursuit of this goal, the surveyed PAs generally see a shift in their focus from investments in operations to investments in facilitating activities. Additionally, they have expanded their geographical scope to the hinterland, and in a few cases, to the global port network.

The analysis on the relationship between institutional setting and strategic goals shows that PAs with more autonomy and a businesslike institutional setting put more emphasis on firm-level goals, whereas PAs in a more governmental setting place more weight on macro- and cluster-level goals. The analysis on the relationship between institutional setting and strategic activities indicates that corporatized PAs (i.e., governmentally owned, but with the organization and behavior of a corporation) show the overall greatest involvement in activities beyond the landlord, especially in creating value in the port cluster and port networks through investments in innovation, hinterland accessibility and congestion reduction. They also show more involvement in stimulating and facilitating activities in the port cluster than PAs with a larger share of private ownership (purely or partly private PAs). PAs in a more governmental setting are less involved in activities beyond the landlord, but they perform the most stimulating and facilitating activities in the port cluster and pay the relatively highest amount of attention to sustainability. Thus, corporatization contributes to ‘beyond the landlord strategies’ insofar as it enhances most value-creating activities in the port cluster and networks. However, corporatizing and privatizing potentially reduce the attention toward public goals like improving trade, employment and sustainability.

Chapter 5 Co-evolutionary perspective on the hinterland strategy of the port authority

Chapter 5 analyses a specific strategic scope issue of the PA: its engagement in its hinterland network. Using a co-evolutionary approach, we analysed the strategies of both PAs and their terminal operators, paying specific attention to the interrelationship between these two actors. The research questions for this chapter are:

- What factors guide a PA’s logic when developing hinterland strategies?
- What role does interdependence play in this process?

The analysis of institutional and market factors at both the Rotterdam and Barcelona ports suggests that changes in institutional structures, competition factors and demand offered clear incentives for both the PA and TOC to go beyond their traditional functions and geographical domains.

The research indicates that interdependence between the actors plays an important role. Within a port, there is a strong interdependence between the PA and other port companies, not only because they are institutionally bound, but because they share the same cluster as well as responsibility for the port’s performance. Changes in port actors’ strategic orientations are
influenced not only by external pressures laid on each actor individually, but also by the specific nature of their interrelationship and interdependence. Thus, a co-evolutionary approach that integrates motives, interdependence and inter-organizational effects is required for analysing port actors’ strategic reorientations in a context of overlapping strategic domains. The case studies in Rotterdam and Barcelona revealed a strongly interactive nature between actors in the strategic reorientation process. However, different PAs also deal with such an interactive nature in distinct ways: In Barcelona, we defined the strategic orientation and its implementation path between PA and TOC as cooperative, but in Rotterdam, the relationships between these two actors could be viewed as more individualistic and diverging.

Over time, terminal operators changed their strategic orientation, which has the effect of altering PA’s strategic context and spurring them to reorient and adapt. In formulating their hinterland strategy, PAs need to consider the strategic intentions of others in the network, as well as the timing and sequence of strategy implementation. This applies to all key port actors, but especially to those PAs that serve more as a facilitator than an operator.

Chapter 6 Internationalization strategy of the PA

This chapter explores the internationalization strategy of PAs, giving particular attention to their motives and the way this internationalization strategy is embedded in their overall strategy. Existing theoretical concepts from internationalization theory are used to structure the analysis. The research questions are:

- What internationalization process do PAs pursue?
- What are motives behind PAs pursuing internationalization?
- Do concepts from general internationalization theory apply?

To answer these questions, this chapter specifically investigated the internationalization strategy of the Port of Rotterdam. Our case study uncovered the following:

- The Port of Rotterdam’s internationalization strategy, while begun as a ‘wild’ idea, has developed into a deliberate plan. Indeed, this strategy constitutes one of the emerging strategic scope directions that goes ‘beyond the landlord.’
- Although the possibilities for overseas investments in port management are increasing, they are still relatively limited. In the first place, not every country has an open attitude towards foreign investments in its ports sector. Secondly, not every port complies to the criteria the Port of Rotterdam applies while searching for opportunities.
- The Port of Rotterdam’s most important value creation for its home port is building strong relationships with strategic customers and strengthening its port’s name and position in the global port network. The port creates additional value (through internationalization?) by generating revenues for the organization and cultivating knowledge and skills.
- The internationalizing PA often enters a highly institutionalized environment in which processes are cumbersome and slow.
- The attitude of stakeholders (i.e., the port companies and the governing bodies) in the home port is not always positive. Governmental shareholders are hesitant to assume the financial risk of an international investment strategy, while port companies do not want to see money earned in the home port invested in the host port. In order to enact an international strategy,
it is necessary to have a clear risk management plan as well as transparency in goals and operating mode.

While not necessarily generalizable, the results from this single case study offer some tentative answers to our research questions.

First, PAs seem to pursue internationalization under the resource-driven logic that they can create value both for the home port and for the larger organization. In explaining such international undertakings ownership specific advantages certainly play a role: PAs looking for new value-creating activities, both for their port clusters and for their own organization, build on advantages relative to other. In the case of the port of Rotterdam, four advantages were identified: 1) the capabilities and know-how of port management and industrial area development; 2) the large global business network that the PA might bring to the ‘host’ port; 3) the financial means to do an equity investment in new port developments; 4) a strong brand. Stage-based models - developed by the Uppsala School for explaining entry modes in foreign direct investment and commonly used in MNE (multinational enterprise) research - only have limited application to ports. Of much more explanatory value is the context in which internationalization can take place: possibilities provided for by the host location/country and also the institutional structure under which the PA itself operates.

7.2 **Considerations for the strategy of the PA.**

This research aims to provide a better understanding of PA’s strategies by assessing their development and logic, which includes identifying those specific conditions that apply while developing new strategies. This section synthesizes the different sub-conclusions, findings and observations into a set of considerations regarding the strategy of the PA.

1). **The new paradigm for PAs is to act beyond the landlord.**

PAs are relevant economic actors that are important to the development and performance of seaports. However, it is no longer the norm for ‘landlord’ PAs to simply act as pure landlords and limit their actions to the development and exploitation of the port’s land and basic (nautical) infrastructure. The empirical investigation as presented in chapter 4 shows that the majority of PAs develop activities ‘beyond the landlord’ and this will only increase in the future, especially in their hinterlands and within the port cluster. The external pressures (chapter 5) and strategic challenges (chapter 2) that PAs face in realizing their main strategic goals (i.e., strengthening the performance of the port and at the same time generating revenues) spur the PAs to partake in value-generating activities in the port’s ecosystem, which comprises the port cluster and its related networks. Explanation for this is further supported by considering various theoretical concepts from strategy research that apply to the boundary of the firm question. There are two nuancing remarks to make here. The first is that PAs are limited in their freedom to act by their institutional environments and this differs per PA. The second remark is that the research has not discovered whether the strategic activities of the PAs were deliberately initiated or rather follow an emergent path. The research on the internationalization strategy of the Port of Rotterdam has identified this emergent character. Question arises whether such ad hoc plans and emergent strategies are common practice and represent the strategic behavior of PAs?
2). PAs that reconsider their strategies and create more value in the port’s ecosystem face a serious challenge in keeping the balance between private and public goals

The strategic reorientation of PAs is induced not only by external pressures, but also by a reform towards a more businesslike organization with greater emphasis on entrepreneurial values. The research (chapter 4) shows that corporatized PAs put more stock in private goals at the firm level than public goals at the macro level compared to governmentally structured PAs; this is even truer of PAs with private ownership. However, as organizations, PAs are not completely similar to private companies; they have both private and public goals which they should continuously align. In principle, private companies face this same challenge, but on average, PAs have a larger societal impact than private firms. Therefore, in most cases their public goals carry more weight than those of private companies. Consequently, these two goal types should together guide their increased value orientation.

3). Strategy-making for a PA is a network- or ecosystem-oriented, co-evolutionary process that requires a continuous monitoring of other actors’ strategies in its ecosystem and the ability to adapt its own strategy.

A huge challenge for PAs involves keeping their strategy aligned with their direct strategic context, which is to a large extent determined by the companies in the port cluster. Due to its position, the PA’s actions in the port’s value network are strongly intertwined with the actions of the port companies. Because these actors share a common goal, namely to bolster the port’s value, they are increasingly interdependent. In chapter four, we learned that external pressures drive both PAs and private port companies to reorient their strategies. At the same time, the interdependence between the PA and the private port companies causes the strategy change of one actor to impact the context of the other, requiring constant adaptation on the part of both actors.

4). PAs may benefit from developing a resource-driven approach

PAs lack a capability-driven approach in their strategy-making. In the first place, PAs mainly look for new business opportunities related to their traditional physical revenue drivers (i.e., port land and nautical access). Only a handful of PAs follow real capability-driven strategies (such as internationalization). In the second place, PAs indicate that their strategy-making is much more driven by market opportunities than by resources, while in practice the market seeking they do occurs within a relatively narrow domain. If PAs want to explore new strategies and new business models separate from their traditional revenue drivers, then they need to develop a capability-driven approach.

5) Corporatization seems an appropriate new institutional structure of PA’s

The new paradigm for PAs (i.e., changing their business models from landlords to key developers and value creators in their ecosystems) requires an appropriate institutional structure. PAs should not be seen as governments: they are more customer-oriented than task-oriented, which is apparent from both their strategic goals and their key activities. Corporatization is instrumental in the reform towards a ‘beyond the landlord’ strategy. Corporatization entails that the PA acts under private corporate law, but the government, acting as a shareholder, maintains responsibility over the appointment of the management board and major strategic decisions that have a wider impact on the port’s region and wider economy. As a result, the PA acquires the institutional, strategic and financial freedom it needs to thrive; at the same time, its operations
and performance are made transparent and political influences are minimized. Chapter 4 indicated that corporatized PAs put more weight on firm-level goals and develop more ‘beyond the landlord’ activities. If PAs want to adopt new positions and business models, then they need to reform to an institutional model that fits a businesslike orientation, such as corporatization.

6). **There are critical comments to be given to the privatization of PAs**

A last consideration, although not one specifically researched, is that the privatization of PAs might go one step too far. At least it should be considered very critically. The research suggests that privately owned PAs can lose sight of the macro-level goals (e.g., regional economic growth, enhancing trade) as well as the cluster-level goals (e.g., accessibility, sustainability) in their pursuit of more firm-level goals like profit generation. Furthermore, our analysis of PA executives’ strategic beliefs shows that corporatized and privatized PA executives think much more in terms of profit than responsibility (chapter three) compared to non-corporatized PA executives do. Their concern for profit is even greater than that of ‘regular’ executives. Nonetheless, PAs still owe more responsibility towards their stakeholders than regular firms, as there are more public interests at stake. But while ‘regular’ firms have gradually adopted more corporate social responsibility, thereby becoming more ‘shared value organizations’ (see Porter & Kramer, 2011), PAs transforming from more public into more businesslike organizations run the risk of exaggerating their profit focus at the expense of port-related public interests. This finding highlights the issues behind privatizing PAs and the need to maintain governmental involvement, especially when appointing executives and building the proper frameworks to guide their operations.

7.3 **Contribution of the research**

In the first place the research contributes to the academic knowledge on strategy and PA strategy. It attempts to bring in concepts from general strategy research into the domain of port research. At the same time by applying concepts form strategy research to the specific domain of the PA new insights are added to these concepts. Unraveling the specific nature of the PA from an organizational perspective, while analyzing its strategies, enable the further identification of relationships between a particular actor’s attributes and its strategy. This is of value to both general strategy research as to port research. The research integrates different perspectives from strategy research and institutional theory resulting in new conceptual models for the analysis of the PA’s strategy. The worldwide empirical research on the actual strategies of PAs relating this to their institutional backgrounds gives academic rigor to already made contributions with a more conceptual character or derived from a single case. Exploring new research avenues as strategic cognition of PAs and the internationalization strategies of PAs broadens the existing academic perspective on the PA’s strategy. Such new avenues bring up bases for new research questions and concept development.

Practically speaking, this research strives to offer PA strategy-makers some valuable insights that they can use for both analyzing as defining their strategies. By looking more in-depth into their own organizational characteristics and by relating their internal and external context to their strategic challenges and potential choices, proposals and conditions for these strategic choices can be given.
7.4 Limitations of the study and implications for further research

This research has produced some relevant insights for the practice and research of PA strategy. At the same time, there are limitations to the various studies, as well as new questions that have arisen, that could lead to further research.

This research has tried to understand the strategy of PAs by looking at aspects of its internal and external context. A next question is whether these strategies indeed lead to better performance. Although challenging, the first step is to find metrics that can offer a useful indication of the PA’s performance, and from there attempt to relate that performance to the PA’s strategy.

The research indicates that PAs need to reconsider their business models and develop value-generating strategies in their ecosystems that go beyond their landlord function. A resource- and capabilities-driven approach is key to changing business models. However, the research on PA strategy shows that PAs are not heavily resource-driven and that they maintain a traditionally narrow view on their potential product market domain. Therefore, future research needs to investigate the valuable capabilities that PAs can possess or cultivate, and how these could be used for developing new revenue drivers.

‘Beyond the landlord’ strategies imply that the PA will become further integrated into its value networks. The first question that needs investigation is, how far should this integration go? The second question is, how should PAs design the new transactional relationships with port companies while developing their own value-creating strategies in the port ecosystem? Game theory might offer some worthwhile insights in this regard.

The empirical analysis on PA’s strategic scope focused mainly on developed countries. Future research could include more ports from developing countries, which are expected to be in a different stage of development and thus have different strategic contexts. Such an expansion could enable research that is oriented toward transition paths, potentially resulting in a stage model of PA role and function development.

Internationalization is an emerging strategy that only a few PAs have pursued. Research into the intentions, the reasons why or why not of PAs concerning an internationalization strategy, provides insight in expected future developments. At the moment only a few ports follow such strategy, also because of institutional limitations in host countries and reserved attitude of port’s managers and stakeholders. One interesting question is whether the increasing private investment in port infrastructure will negate these hurdles. Naturally, private investors want a return on their investment, which is best guaranteed by the best management of these assets—but that manager is not necessarily the local PA. Thus, private investors may begin offering incentives that can attract world-class port managers to the port they invest in, ultimately laying the foundation for a global port management market. From this possibility, two interesting research questions arise: will private investment in port infrastructure increase? And will this lead to a global market for port management services?
REFERENCES


