

**Port Governance and Transshipment Success:  
An international case-study comparison of  
the Freeport Container Port, Bahamas and  
the Port of Port-of-Spain, Trinidad and Tobago**

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## **ABSTRACT**

### **Port Governance and Transshipment Success:**

An international case-study comparison of the Freeport Container Port, Bahamas and the Port of Port-of-Spain, Trinidad and Tobago

Jacob L. Fogels

This paper examines the privatization and transshipment success at Freeport Container Port (FCP), Bahamas and Port of Port-of-Spain, Trinidad and Tobago (PPS). The thesis links port development and growth to the divergent governance structures of these two ports that share similar geographic advantages. FCP is located at the north-eastern apex of the transshipment triangle and is an example of a wholly private port, which is owned and operated by Hutchison Port Holdings (HPH), a subsidiary of Hutchison Whampoa. HPH is in a unique situation where they also act as the local government and own large expanses of land and an airport. This unparalleled level of private self-determination has allowed HPH to develop FCP into a very successful transshipment facility. PPS, on the other hand, has been struggling while its competitors continue to gain despite its strategic position at the south-eastern apex of the “Caribbean Transshipment Triangle.” PPS, until recently, was owned and operated by Trinidad and Tobago’s public port authority. Its restructuring program had lasted 13 years and did not meet the goals of the government. The traffic growth at PPS has paled in comparison to FCP, and the governance structures have played a key role in these differences.

Keywords: Freeport Container Terminal, Port of Port-of-Spain, Port Privatization, Caribbean, Transshipment

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## List of Abbreviations

CAD	Canadian Dollars
CCT	Colon Container Terminal
CSA	Caribbean Shipping Association
ECLAC	Economic Community of Latin America and the Caribbean
FCP	Freeport Container Port
GBPA	Grand Bahama Port Authority
HCA	Hawksbill Creek Agreement
HPH	Hutchison Port Holdings
ICTSI	International Container Terminal Services Incorporated
ISPD	International Standard of Port Divisions
IPAPC	Institute Puerto Autonoma de Puerto Cabello
MIT	Manzanillo International Terminal
MSC	Mediterranean Shipping Company
PATNT	Port Authority of Trinidad and Tobago
PFFM	Port Functions Privatization Matrix
PL	Point Lisas Container Port
PLIPDECO	Point Lisas Industrial Port Development Corporation Limited
PPC	Panama Ports Company
PPS	Port of Port-of-Spain
SABC	Sea to Air Business Centre
SSA	Stevedoring Services of America
TEU	Twenty-foot equivalent unit
TT\$	Trinidad and Tobago Dollars
TTO	Transnational Terminal Operator
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
USD	United States Dollars

# Chapter 1

## Context and the Goals of the Thesis

### 1.1 Purpose of the thesis

The container shipping industry has been experiencing a number of remarkable changes that have dramatically altered its operations, and which in turn have profoundly impacted ports (Slack 1993). Ports around the world are adjusting to the changes in shipping patterns, work practices, and organizational realities of modern container shipping brought on by the increase of world trade due to globalization (Hoffmann 1998).

Shipping companies have either consolidated or formed alliances that have greatly improved their power in the industry (Brennan 2002). Transnational terminal operators (TTOs) have recently followed the same course of concentration<sup>1</sup> through merger and acquisition (Fossey 2006a), however, it is the shipping lines that still control the massive amounts of cargo. Shipping lines deploy large ships upon their major trade routes and these vessels require ports to invest heavily in new technology and change work practices. The use of the larger ships has also altered the structure of shipping routes. The majority of ocean bound traffic is concentrated on the east-west trade routes, and is serviced by large vessels that concentrate traffic on specific “hub” or “load-centre” ports. The cargo is then transhipped onto progressively smaller vessels, which service the smaller ports of a particular region (De Monie 1998). In 2005, transhipment traffic

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<sup>1</sup> In 1991 the top five TTOs accounted for 17.8% of global container traffic and in 2004 that figure rose to 41.2% (Fossey 2006a)

accounted for 30% of all container moves, about 125 million twenty-foot equivalent units (TEU) (Fossey, 2006b).

For a port to meet a shipping line's strategic objectives as a hub, it must satisfy several criteria. First and foremost, the port must be located in a strategic position along global shipping routes (Beddow 2004). Ports must also have modern facilities that are operated efficiently and charge simple unitized rates (Frankel, 2002). Many ports in the Caribbean Basin are able to satisfy the first criterion, as the Caribbean Basin is situated at the crossroads of several trade routes. However, until recently, many of the ports in the region, which were predominantly public, did not satisfy the remaining criteria and were characterized by low productivity and out-dated technology and labour practices (Hoffmann, 2001b).

Pressures from the industry to modernize along with several other motivating factors inherent to developing nations resulted in the final years of the 20<sup>th</sup> Century being a period where many nations in the Caribbean began to privatize their ports to either reduce expenditures, increase efficiency and/or capture the emerging transshipment market. The Caribbean Basin has seen, and continues to see, billions of dollars being invested in port facilities in the region by both private and public parties (Sommers 1999). Private management of the new or rehabilitated facilities has become a predominant practice in the Caribbean port industry. The private actors are mostly TTOs, with some local stevedore companies and shipping lines operating a few terminals (Hoffmann 2001a). These companies are profit driven, and it is clear that many of their ventures are designed to capture the notoriously fickle transshipment market.

The application of this profound institutional restructuring trend to the developing economies of the Caribbean Basin presents a significant opportunity to witness an integral facet of globalization at work. The purpose of this thesis is to examine the privatization experience at two ports in the Caribbean Basin: Freeport, Bahamas and the Port of Port-of-Spain, Trinidad and Tobago. These ports were selected from the many eligible alternatives for a variety of reasons. Each port occupies a strategic position within the basin, yet each port has followed a remarkably different path and has experienced very different levels of success. Freeport is one of the success stories in the basin, with unmatched traffic growth (2153% from 1993 to 2000) driven by a successful partnership with the largest TTO in the world, Hutchison Port Holdings and the Grand Bahama Port Authority. Port-of-Spain, on the other hand, represented a port in a strategic position yet with modest growth (179% from 1993 to 2000), and operationally it provided a link to the industry's past as a wholly public operated port. It is hypothesized that port governance, in particular privatization, plays a major role in shaping port performance. By selecting two ports with comparable geographical characteristics as potential transshipment centres, differences in performance may be linked to differences in the extent of privatization. This thesis will examine why Freeport, a wholly privatized port, has been able to establish itself as a successful hub, while Port-of-Spain has encountered difficulties in generating new traffic while it remains a port dominated by the public sector.

The central questions to be examined are:

1. What are the factors behind the difference between traffic growth at Freeport Container Port and traffic growth at Port of Port-of-Spain?

2. What have been the roles of the public sector and the private sector in both cases?
3. Why is Port-of-Spain one of the last significant ports in the region to privatize?

## **1.2 Methodology**

In order to situate the research problem within the broader context of port privatization, a literature review of this topic was undertaken. Literature was reviewed from a wide variety of sources, but primarily through the World Bank, the United Nations (via its Latin American division, the *Economic Community of Latin America and the Caribbean* (ECLAC) and the *United Nations Council on Trade and Development* (UNCTAD)), and the journals *Maritime Policy and Management*, *Transport Reviews*, *Transportation and Research A*, *Marine Policy* and *The Journal of Transport Geography*.

This was followed by an analysis of traffic data from 1990 to 2003 for ports in the Caribbean Basin, which was compiled from *Containerization International Yearbooks*. Focus was placed on the changes in throughput between the years 1994 and 2000, since data was more complete for these two years and the selected years represented a snapshot of the region before and after the extensive use of privatization and transshipment. Several ports showed significant growth, including Freeport.

Trade magazines were also examined, such as *Containerization International* and *Port & Harbours* as well as documents published by the *Caribbean Shipping Association*. The emphasis on privatization and transshipment in the area became clear. Freeport container Terminal, Bahamas (FCP) and Port of Port-of-Spain, Trinidad (PPS)

emerged as two provocative cases in the Caribbean Basin to facilitate an international comparison.

Site visits were made to each of the selected ports in August of 2003 and eight semi-structured interviews were held with some important stakeholders and port officials. At PPS, an executive with the Port Authority was interviewed. Interviews were also conducted with officials at the local shipping association and shipping agents. Unfortunately, multiple requests for an interview with a member of the Ministry of Transportation and Works were unsuccessful. At Point Lisas, a rival container port in Trinidad, an extensive interview was conducted with the port manager. The library at the University of West Indies was also searched for relevant information during the visit to Trinidad.

In Freeport, a site visit was conducted at the container terminal and an interview was granted with the port manager. An interview with an official from the Grand Bahama Port Authority, which is the private governing body and terminal owner, was not granted despite multiple requests and visits. However, local shipping agents and lines were more accommodating and provided interviews and the president of the local chamber of commerce was interviewed extensively and provided a wealth of knowledge about the Freeport situation.

### **1.3 Outline of chapters**

Chapter two is the literature review. The subject of the literature review is port privatization. Particular attention is focused on the theoretical constructs that have been proposed to understand the varying levels of port privatization as well as an examination

of the motivations and perils of private participation in ports. Chapter three outlines the Caribbean shipping scene. The Caribbean Basin is defined and a detailed examination of the strategic position of the basin along major shipping routes is undertaken. The traffic in the region is analyzed and a discussion of the trend of transshipment indicates the role this plays in port development. The concept of the Caribbean transshipment triangle is explained, and an examination of the apex, centroid and base ports follows. This chapter concludes with a discussion of the ramifications of the current developments in the region.

Chapter four presents the context for the case-studies of the Port of the Port of Port-of-Spain and Freeport, first focusing on the physical characteristics, followed by a discussion about the development of the individual port sites. Throughput is examined followed by an examination of the factors that have affected throughput growth. Chapter five provides the privatization analysis of the two sites, and compares and contrasts the two experiences highlighting the diversity that exists within this globally strategic shipping basin. A concluding chapter 6 summarizes the findings of the study.

# **Chapter 2**

## **Literature Review**

### **2.1 The focus**

The purpose of this literature review is to examine the changing nature of the public port authority and the problem of privatization that has changed port governance. The examination focuses on the arguments for and against public involvement in port governance and the motives and perils of port privatization.

### **2.2 Overview of port governance**

Administrative bodies that govern a port hold a relatively independent position between the state and the market, of which the structures will vary greatly. A port authority may have relationships with local, regional, and central governments, as well as dealing with private enterprise. This position creates a relationship between public and private actors where the division of responsibility and regulations becomes an ongoing feature (Stevens 1999). Before the 1980s, ports were largely state-owned enterprises (Kent & Hochstein 1998). A recent trend in the industry has been the restructuring of port administration, with increasing participation of the private sector (Sommers 1999).



### **2.3 Port privatization: definition and background**

The literature on port privatization has demonstrated the many privatization scenarios that can be pursued. Goss (1998) contests that port privatization should not follow the privatization policies of other industries, but should have a policy tailored to the specific needs of each port. Some analysts prefer to not use the term privatization (Baltazar & Brooks 2001; Brooks 2004), and use terms such as ‘devolution’ and ‘alternative service delivery’ in its place. For the purpose of this thesis, port privatization will be used to encompass all port restructuring that seeks to incorporate the private sector to a greater extent than previously.

UNCTAD (1998) defines port privatization as “The transfer of ownership of assets from the public to the private sector or the application of private capital to fund investments in port facilities, equipment, and systems.” This broad definition is useful; however, the level of private participation and autonomy that the private sector varies greatly from case to case. Wiltshire (1988) found that port privatization schemes have been ad hoc with no clear definition. Everett & Robinson (1998) view the privatization of ports as not simply as transfer of ownership, but instead as a fundamental change of a port authority from a statutory body providing public services, to a corporation attempting to be competitive in a highly contested market.

Despite the ambiguity, Cullinane & Song (2001) define four separate elements that together encompass the definition of privatization in their various forms.

1. the ‘privatization’ of the financing of a service that continues to be produced by the public sector
2. the ‘privatization’ of the production of a service that continues to be financed by the public sector (usually through taxation)

3. 'liberalization' - referring to the relaxation of and statutory monopolies or licensing arrangements that prevent private sector parties from entering markets previously exclusively supplied by the public sector
4. 'denationalization' and 'load-shedding' – referring to the selling of public enterprises and the transfer of state functions to the private sector.

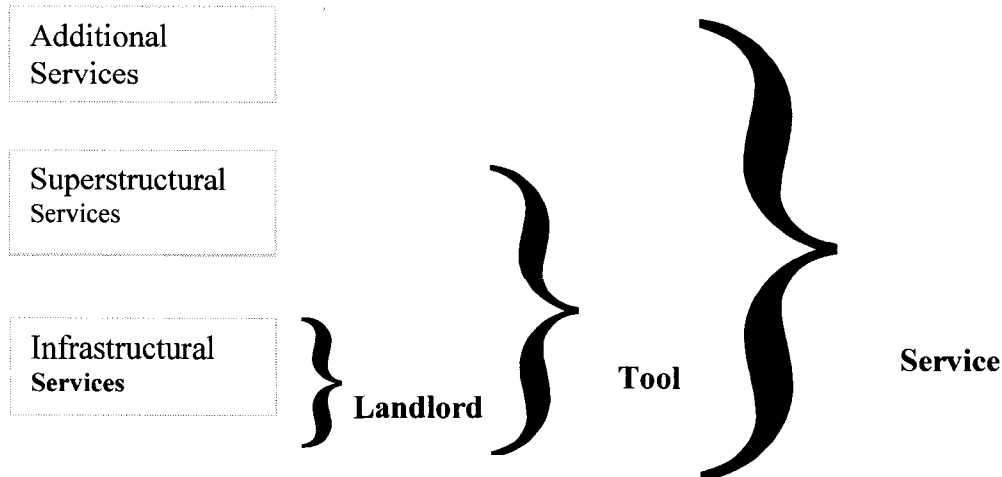
There are several methods of port privatization. A common approach is to lease a port's services to a private operator for a period of time with specific stipulations. In cases where a new port is developed, terms such as BOO (build-own-operate), BOT (build-operate-transfer), and BOOT (build-own-operate-transfer) arise. Each of these schemes has subtle nuances. However, all essentially require a large investment from the private sector. The port operator is given a service tenure. The specifics of these arrangements vary from case to case. The most drastic form of privatization would entail an outright sale of the port's assets to the private sector, which can be achieved by stock flotation or sale to a corporation or individuals (UNCTAD 1998).

#### **2.4 The role of various actors and activities**

International comparisons of port administrations are aided by conceptual constructs that define port functions and ownerships into a matrix of ownership and operations. The World Bank (2003) has proposed an *International Standard of Port Divisions (ISPD)*, which was originally developed by Goss in 1979. This model emphasizes the role of the public sector in relation to the penetration of the private sector within the port (see figure 2.1).

**figure 2.1 - International Standard of Port Divisions (ISPD)**

Source: Stevens 1999



A landlord port is one in which the basic infrastructural services such as berths, fire services, breakwaters, security, etc are provided by the public. All other operations and services such as stevedoring and warehouseing are provided by the private sector. A tool port is one which the public provides all its infrastructural as well as superstructural services, with the private sector employed to move or warehouse cargo, however they are not expected to invest capital in the port. A service port has all the services, facilities, and operations of the port provided by the public sector. (World Bank 2003)

This model has been modified by several academic researchers (Baird 2000a & 2000b and Cullinane & Song 2001). They propose a matrix based on three distinct port functions called *The Port Function Privatization Matrix (PFPM)*.

1. Regulatory function: Statutory powers given to a port's management (either private or public). This can be regarded as the primary role of a port authority and can include activities such as maintenance, conservation, traffic management, law enforcement, licensing, safety, and balancing interests.

2. Landowner function: Typical responsibilities include management and development of the port estate, implementation of port policies and development strategies, coordination of port marketing and promotion activities, provision and maintenance of port infrastructure and intermodal connections.
3. Operator (Utility) function: The physical transfer of goods and passengers between sea and land.

The division of responsibility of these three functions between the private and public sector creates a matrix of influence exercised within any given port. Four main patterns emerge as outlined in the table 2.1 below.

**table 2.1 - Port Function Privatization Matrix (PFPM)**

Port models	Port functions		
	Regulator	Landowner	Operator
PUBLIC	public	public	public
PUBLIC/private	public	public	private
PRIVATE/public	public	private	private
PRIVATE	private	private	private

*Source: Cullinane & Song 2001*

A PUBLIC port is a port in which all three functions are controlled by the government or public authority and is also known as a comprehensive port. The Port of Singapore (PSA) is an example of such a port. A PUBLIC/private port is one where the operator function is controlled by the private sector, and the regulatory and landowner functions control still rest in the hands of the state. This is common in North America, where private actors, via leases or concessions, operate terminals. PRIVATE/public ports have the private sector performing the landowner and operator functions, while the

regulatory role remains in the hands of the state. Hong Kong is the prime example, as private companies build their own terminals, yet the government is responsible for vessel traffic management, other regulatory policies, and planning for new terminal development. A PRIVATE port is one where the three functions of a port are completely in the hands of the private sector. The UK has many examples, such as Felixstowe, where governments have little control of these interests under such an arrangement.

When the top container ports of the world are examined, it becomes evident that the governments are wary of ceding too much control to the private sector. The vast majority of port administrations have opted for the PUBLIC/private model (see table 2.2), which allows the port authority to retain control while enacting market forces (Cullinane & Song 2001). An additional reason for the prevalence of this privatization model is that cargo handling and its revenue are more easily defined and thus more easily packaged separately from other port services, thus more easily privatized (UNCTAD 1998). Combine these two factors with outdated facilities and inefficient practices, and cargo handling lends itself quite well to privatization and the separation of this service from other port functions allows a port authority to have the benefits of effective private management while maintaining a high level of control.

table 2.2 - Ownership status of the world's top container ports

Port	PUBLIC	PUBLIC/ private	PRIVATE/ public	PRIVATE
1. Hong Kong			•	
2. Singapore	•			
3. Kaohsiung		•		
4. Rotterdam		•		
5. Pusan		•		
6. Hamburg		•		
7. Long Beach		•		
8. Yokohama		•		
9. Los Angeles		•		
10. Antwerp		•		
11. New York/New Jersey		•		
12. Keelung		•		
13. Dubai		•		
14. Felixstowe				•
15. Tokyo		•		
16. San Juan		•		
17. Bremen		•		
18. Oakland		•		
19. Shanghai	•			
20. Seattle		•		
21. Nagoya		•		
22. Bangkok		•		
23. Kobe		•		
24. Tanjung Priok		•		
25. Algeciras		•		
26. Klang				•
27. Hawaii		•		
28. Tacoma		•		
29. Osaka		•		
30. La Spezia		•		

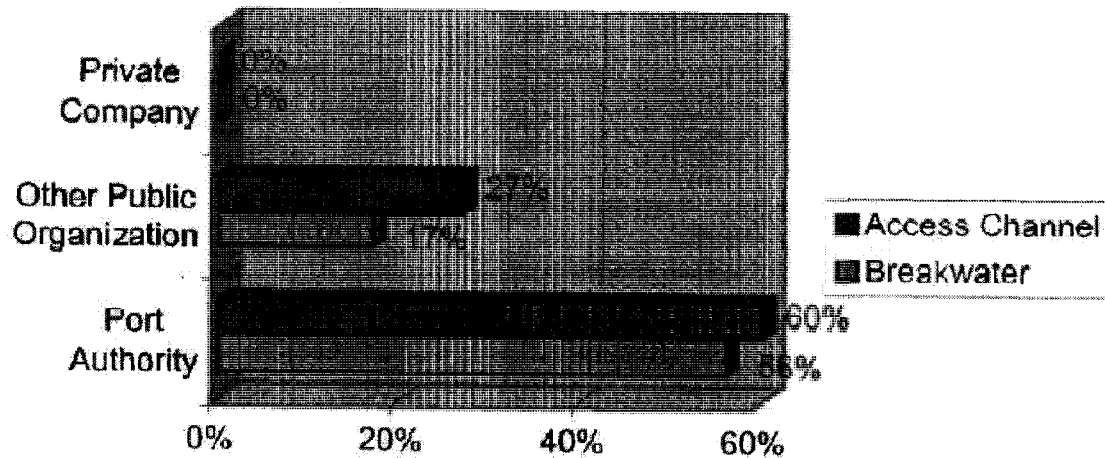
Classified as defined by the port function matrix due to Baird (1995b, 1997).  
 Source: Cass (1996: 167).

## 2.5 Arguments for a public port authority

A primary justification for a port authority is control over property rights. A port has property elements that extend from the land into the water. There is a totally different legal regime that applies to the water as opposed to the one that exists for land. Therefore, it may be in the public's interest to have control over a port's land and adjacent water for environmental and safety reasons (Goss 1990c). In a 1999 *International Association of Ports & Harbors* survey of 188 ports, it was found that

public ownership of breakwaters and access channels was ubiquitous, and private ownership was negligible (Baird 2001 & 2002) (see fig 2.2).

**Fig 2.2 - Ownership of port assets**



**Source: IAPH**

*Source: Baird 2001*

Secondly, there is a need for planning that might best be left to public authorities. Land use conflicts may arise between the port, local residents and businesses. The interests of a private port developer may not coincide with municipal or central planning agendas (Goss 1990c). However, this implies that the planning and policy carried out by public authorities is rational and beneficial to society with proper implementation, otherwise this advantage may be negated. Third, the significance of the port as a public good must not be overlooked (Baird 2004). A public port authority offers some services that may not be offered sufficiently nor satisfactorily, or sometimes not at all, by a private operator. A private operator is more likely to concentrate on profitable services at the expense of other essential port services. Buoys or breakwaters are essential services, yet

they have a fixed cost that does not change despite the number of users and can be justifiably neglected by businesses as sunk costs (Goss 1990c). In addition, private port operators can more easily justify discriminatory practices, which could lead to exclusion of some clients (UNCTAD 1998).

Fourth, a public port authority would also be more apt to deal with the externalities of a port's operation. Issues such as safety, pollution, congestion, hinterland access, and aesthetics would take priority with a public administration, and they would be more able to affect desired changes. Some of these issues would most likely need to be forced upon the agenda of a private port operator through regulation. (Cullinane & Song 2001)

A final advantage of a public port authority is that they may promote greater efficiency in the port. Ports often represent spatial monopolies that can be abused (Slack 1994). This concern is greatest when considering the privatization of a port with limited cargo loads and limited intra-national competition since its monopolistic position is enhanced (Kent & Hochstein 1998). It is in society's best interest to not have a private company gain a monopolistic position rewarded by using the economic rents of the port in the form of profits. These profits can be to the detriment of the economy at large. Goss (1990c) argues that profits are not a good reflection of efficiency. Profits are just a reflection of an ability to make profits. It is argued (Stevens 1999) that the profits realized by a private port operator, will be a result of the exploitation of the customer, employees and the environment. This could lead to an increase in public costs as private profits increase.



## **2.6 Arguments against public port authorities**

The primary argument against public port authorities is the constraints of public bureaucracy. These bodies are established, usually with a statute, which could prove ineffective in practice and may not be flexible enough to deal with change and/or the powers granted may be too narrow (Goss 1990b). Bennett (1995) identifies the bureaucratic legacy of India as the greatest challenge to port privatization, and ultimately the poor performance of Indian container ports. Changing circumstances can become problematic, as many layers of bureaucracy must be penetrated to affect a desirable outcome. For instance, the port authority of Vancouver, Canada had to wait up to 26 months to get approval to spend its retained revenues and it took two years and cost the port \$250,000 to sell a piece of land worth \$95,000 (Ircha 1997). It is difficult for ports compete in the present marketplace with such restrictions on their operation.

Another issue inherent to a large bureaucratic control over a port is subsidization and cross-subsidization. Direct subsidization is the public funding of a port and indirect subsidization occurs in the form of the public sector paying for things such as the dredging of a harbour, yet not recovering the costs (Hoffman 1998). This practice can lead to a port having an unfair competitive advantage. Cross-subsidization, on the other hand, is usually done by taking excess revenue from a core-business to fund a non-core operation, which does not yield a monetary profit and ports subject to this type of activity can be left with a comparative disadvantage (Goss 1990c). Furthermore, once a subsidized port is privatized the subsidies stop and tax revenues are generated, thus potentially benefiting public treasuries by eliminating an expense and creating new income (Institute of Public Affairs 1994). In the case of the US, many ports are publicly

funded by varying levels of government, with much of the justification for this practice based on the creation of competition; however, this subsidized competition will not breed the efficiency expected from competition since each port is able to rely on the public sector to maintain their position (Helling & Poister 2000).

A second argument against public port authorities is that they are not subject to the ordinary discipline of the market. In other words, the port is not required to make money and in some cases is not expected to even cover costs. This can lead to a situation where ports are either unwilling or unable to sufficiently react to market forces (Ircha 1997). Brooks (2004) argues that service ports can lead to the wasteful use of resources. Cullinane & Song (2001) found that market forces have a significantly greater impact upon the performance of private sector enterprises than on those in the public sector and pointed to several studies conducted in the 1970s, which concluded that ports operated directly by governments or public agencies and owned by the public sector are more expensive and less efficient.

Related to this is what Goss (1990c) called “The Monumental syndrome.” This is where a government attempts to use the port to gain visibility within the community and/or a governmental leader uses the port as instrument of his/her legacy. In Canada the motive of visibility was one rationale behind the federal government funded widespread effort to construct ports across Canada that were barely, if not at all, commercially viable (Slack 1994).

A final and serious issue with public port authorities is that of political or regulatory capture. This is where a person or interest group is able to exert their influence over the administration or regulatory board (Goss 1990c). In extreme cases this

would be termed corruption. Another related issue is that of political interference, where port policies or developments may be skewed for political reasons. This was the case in Britain in the 1960s when investment for one port was blocked in parliament and eventually diverted to another port (Slack 1994).

## **2.7 Public motivations for private involvement**

“When carried out properly, and for the right reasons, port privatization offers port users and the economy as a whole many benefits” (Baird 2000a, 19). There are many reasons why a government would want to include private participation, and which form is utilized often reflects which motivation was strongest in their effort (Brooks 2004). UNCTAD (1998) created an extensive list of motivations from varying perspective that are outlined in table 2.3 below.

Upon examination, motivations for private involvement fall into two broad categories: the philosophical or the practical. Eyre (1990) attests that the privatization of a port is a philosophical decision that is based on the same objectives as deregulation, free trade, laissez-faire economics and user-pay concepts. Cullinane & Song (2001) found that in many cases port privatization schemes were typically a result of political will rather than rational cost-benefit social analysis. UNCTAD (1998) also attests that for privatization to succeed there has to be political motivation; whereas in the case of the UK, Thomas (1994a) found that the privatization movement was based on a belief that the private market is most efficient way to allocate resources.

**table 2.3 - Perceived advantages and beneficiaries of port privatization**

Beneficiary	Perceived advantages
Port Authority	<ul style="list-style-type: none"> <li>! possibility to more readily define its priority corporate objectives, thanks to greater (or complete) freedom from government controls;</li> <li>! greater freedom from public sector constraints, particularly with respect to personnel management, pricing, budget review and its sanction by higher authority, administrative impediments, and procurement of equipment and services;</li> <li>! increased ability to define precise financial targets;</li> <li>! increased accountability in line with set targets;</li> <li>! greater transparency of costs, greater likelihood of tariffs being cost-related, reduced risk of cross-subsidization;</li> <li>! a better distribution of port charges and dues particularly in the case of service ports, as these tend to undercharge the ship and overcharge the cargo;</li> <li>! increased responsibility for the private investor with regard to the level of infrastructure investments necessary to carry on with his business;</li> </ul>
Terminal operator	<ul style="list-style-type: none"> <li>! opportunity to bring into the country foreign management and technical expertise as required;</li> <li>! greater potential for the diversification of activities;</li> <li>! freedom to subcontract to third parties any activity the company does not want to pursue itself (or does less well);</li> <li>! full accountability with respect to achieving the set operational and financial targets;</li> <li>! cost transparency allowing for cost-related tariffs and a curb on the practice of cross-subsidization;</li> </ul>
Port customers	<ul style="list-style-type: none"> <li>! availability of customer-tailored quality services;</li> <li>! quicker, more effective response to users' service requirements;</li> <li>! reduction in prices for port services, as competing units will make efforts to reduce costs and prices to attract traffic away from competing ports;</li> </ul>
The world and the national economy	<ul style="list-style-type: none"> <li>! increased responsiveness to changes in market structures and demand;</li> <li>! faster adaptation to changes in maritime transport technology and intermodal transport;</li> </ul>
National government	<ul style="list-style-type: none"> <li>! reduction of the financial and administrative burden on the government</li> <li>! creation of additional tax revenues for the Government as private operators pay their taxes (contrary to statutory port authorities, which often try to escape them) and the increase in business levels.</li> </ul>

Source: UNCTAD 1998

Sommers (1999) argues that the shift to privatization was precipitated by strong political pressure enacted by 'captive port users,' who were growing frustrated as their trade expanded yet, they continued to deal with inefficient port operations, high user fees and insufficient facilities. In the case of India, major shipping lines would not offer mainline service to many of its ports because of inefficiency, such as ship turnaround times of five to six days in comparison to neighbouring ports such as Singapore where turnaround time is measured in hours. Indian port inefficiency relegated this important economy to second tier status, which had a negative impact on Indian exports (Sashikumar 1998). Like India, public authorities around the world were unsuccessful at meeting the demands of the shipping lines, and began searching for answers. A few container terminal operations specialists emerged as promoting best practices with new technology, and achieving enviable economies of scale. These companies found themselves in high demand and expanded operations and were later labelled as transnational terminal operators (Slack & Fremont 2005).

Given these circumstances, improved efficiency of a port's operations and service quality due to private management by port operations specialists is the primary motive cited in the literature (Ircha 2001). Many public ports in developing countries were acting as bottlenecks to economic development due to inefficiency (Fernandez et al 1999). More specifically, crane use efficiency is the key aspect of terminal operational efficiency, which itself is the most important factor in determining port performance (Tongzon 1995). Any reform policy aimed at improving port performance should be focused on such improvements. This is clearly seen in practice, as the PUBLIC/private arrangement is the arrangement of choice in most ports (see table 2.2), which only

privatizes the operator function, whilst the public sector retains a landowner and regulatory function.

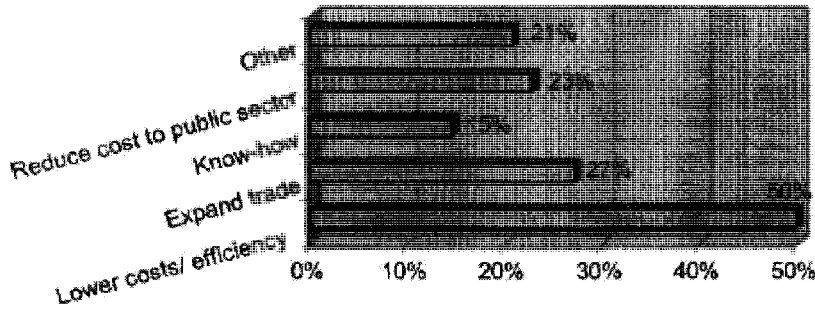
A survey of the top 100 ports in the world conducted by Napier University in 2000 (Baird 2002) found that 50% of responding port authorities<sup>2</sup> had the goal to reduce port costs through more efficient operations (see figure 2.3). Also cited by respondents was the aim of bringing in ‘know-how’ from the private sector. Shipping lines have compounded the pressure to improve efficiency with the practice of separating terminal-handling-charges and port-to-port charges in freight rates (Fung et al 2003). Since the implementation of this practice in 1991, ports have to answer to both shippers (who have seen their shipping costs rise as a result) and shipping lines, which have become more powerful in their cartels. Ports need to focus on efficiency to remain competitive.

Further support for private operational specialists is also found in the Napier University survey results. Port Authorities were asked what the perceived benefits have been from their privatization experience. 31% of respondents (see figure 2.4) cited management expertise as a major advantage of privatization (Baird 2001 & 2002). Thomas (1994b), on the other hand, argues that change can happen within existing institutional frameworks, and can be achieved by focusing on changing people’s beliefs and values. The Port of Singapore (PSA) is the most common example cited (Slack & Fremont 2005) in support of this assertion, yet it stands in relative isolation amongst a sea of evidence of relative private efficiency.

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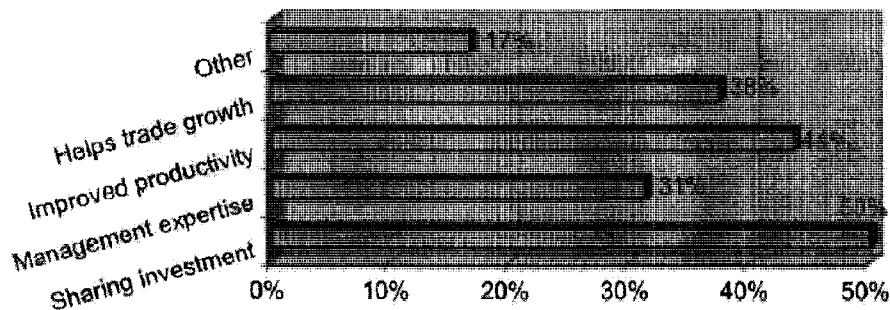
<sup>2</sup> 48 of the 100 container port authorities responded. Together they represented 64% of the world’s TEU moves.

**figure 2.3 - Aims behind bringing in the private sector**



*Source: Baird 2002*

**figure 2.4 - Main advantages of private sector involvement**



*Source: Baird 2002*

“The private sector has made a significant contribution towards the successful modernization and operations of today’s global seaport industry” (Baird 2000a, 14). In Argentina, port privatization resulted in efficiency gains that saw a 50% reduction in container handling prices in a five-year span (Serebrisky & Trujillo 2005). Cullinane et al (2002), however, found that in the case of Asian ports there is no irrefutable link between private participation and efficiency; but a positive relationship between the two can be seen. This study also concluded that ports with higher throughputs tended to be

more efficient, which raises a chicken or the egg discussion. Tongzon (2005), agreed that private sector participation improves port operational efficiency. The PRIVATE/public model produced the best results. His findings also showed that operational efficiency is very important to gain competitive advantage. Also cited by Tongzon (2005) was that the flexibility of private operators to meet the demands of their customers enhances a port's competitiveness.

Operational efficiency can be an end in itself and it is often tied to economic and trade-oriented policy goals. Everett and Robinson (1998) found that governments not only seek to improve port efficiency, but also seek to improve its national competitiveness. At the local level, world class ports can have a very positive effect on the economy. For example, Felixstowe had a multiplier effect of 5:1, meaning that every job within the port stimulated the creation of five other jobs in the community (Baird 1999). Cullinane & Song (2001) point out several expected economic benefits from improved port performance from port privatization, such as:

- Lower total transportation costs of imports and exports
- Stimulation of international trade
- Greater competitiveness in the international trade arena
- More consumer choice
- Lower or even zero government subsidies in the port sector
- Promotion of investment
- Potentially improved employment opportunities
- Greater potential for exploiting economies of scale

Each case may be different, yet generally one or more of these are the efficiency-led-goals set by public administrators in their policies of privatization in the port sector.

The Napier University survey found that 27% of respondents hoped to expand trade via privatization, and in reflection, 38% of respondents cited trade growth as a



major advantage of port privatization (Baird 2001 & 2002). This shows that some ports are realizing trade benefits from privatization that they had not considered before privatization. These benefits rest on the economic reality that ports are needed to facilitate trade and port costs are reflected in the price of goods that pass through them (Goss 1990a). The Argentine government estimates that the port reform saved the economy \$156 million annually (Estache & Carbajo 1996). India's exports were at a competitive disadvantage due to its high port costs that could not be offset by India's low wages (Sashikumar 1998). As global trade increases, ports become even more economically significant. Stevens (1999) metaphorically mused that "Seaports are the mouths through which continents speak to each other." (43)

The present global environment, with specialized transnational terminal operators propagating their efficient methods around the world, has resulted in the industry seeing a 'bottom line' that is being achieved by many ports in the terms of costs and operational efficiency (Baird 2000a). Any port that varies from this is going to be disadvantaged relative to other ports that achieve greater efficiency. The concern for policy makers is that if their ports are not operating at this 'bottom line' level, their region's industrial outputs will be at a comparative disadvantage to other regions with efficient ports (Goss 1990a).

Compounding their desire to privatize is that governments wish to reduce their long-term financial and administrative responsibilities, as the costs of operating a port continue to climb (Hoffmann 2001c). Frankel (1992) argues that this phenomenon is also tied to the increased capital intensity in port operations and concentration within the shipping industry. Privatization can shift the cost of operating a port from the state to the

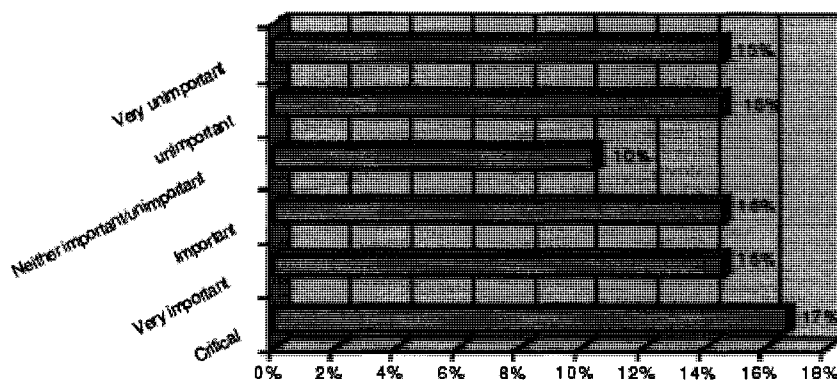
customer (Comtois 1999). Reducing the cost to the public sector was a motivation for 27% of the Napier survey respondents, whilst in hind-sight, the sharing of investment was the main advantage of privatization cited by 50% of the respondents (Baird 2001 & 2002). Frankel (1992) points to a related motive of debt-equity conversion, where port privatization is used as a method of reducing public debt incurred by operating a port into equity or other assets. Governments, especially those in developing nations, might not have the capital to, nor wish to, invest in expensive port equipment, and have looked to private capital as a way of modernizing out-dated port facilities without directly burdening public treasuries (Heaver 1995).

An additional motivation found in the literature, is a desire to reform labour practices. Outdated labour practices have been cited as a major reason for the continued loss of market share in French terminals (Slack & Fremont 2005). In some public operated ports, labour would represent up to 75% or more of its annual budget (Kent & Hochstein 1998). The UK experience demonstrates this issue as Baird (1999) found that Felixstowe, a wholly private port and the UK's top container port, prospered in relation to its competitors since it was not restricted by having unionized workers. In Colombia, labour reform and the related port privatization resulted in impressive improvements in productivity, such as a reduction of ship turnaround time from an average of 10 days to hours, and lower fees for port users, such as a price drop from \$600 to \$150 for each container move; not to mention significant returns for concessionaires (Gaviria 1998).

Labour reform should be seen as a prerequisite for port privatization, not a reason to privatize; however, there are numerous privatization experiences that were flawed because labour reform was not conducted ahead of time (UNCTAD 1998). The Napier

survey asked respondents about the importance of labour reform in attracting private sector investment. 52% of respondents found it to be of importance, with 17% of respondents feeling that it was critical. (see figure 2.5) 40% of respondents did not find this as significant, however, it is pointed out that many of the respondents were from geographic areas that had already completed the labour reform process prior to privatization (Baird 2002).

**figure 2.5 - Importance labour reforms for port privatization**



*Source: Baird 2002*

Other unique motivations have been cited in certain cases. In Canada and the UK, the outright sale of public ports was seen as a way to raise money for the public treasury, and in the case of Canada, to reduce the national debt (Ircha 1993). Other goals include attempts to elevate intra- and inter-port competition and to widen share ownership (Baird 2000a).

## **2.8 Perils of port privatization**

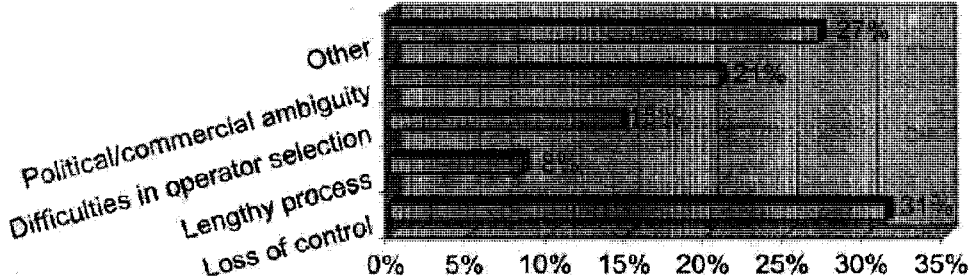
Many of the disadvantages of port privatization would entail a neglect or absence of the benefits of a public port authority discussed in the early section about the benefits of a port authority. For instance, there is a concern that private interests might lead to a neglect of public goods such as the environment. There is also the loss of planning coordination and fears of private ports excluding certain stakeholders from using the port.

In addition to these concerns, several studies have found that there is little evidence to suggest private operators are more efficient than public operators. These studies show no difference in efficiency between private and public management and in some cases that public management fared better than private management (Cullinane & Song 2001; Stevens 1999). In several cases where private enterprise has been successful, it has been shown that the management was not the key factor in the success, which strengthens the argument that ownership is not the key factor that determines operational efficiency. In the UK, Saundry and Turnbull (1997) found that the private ports did not outperform, and in some cases were outperformed by, the remaining public ports; and that any improvement was a result of the abolishment of the National Dock Labour Scheme, a labour reform movement that did not need privatization to occur, nor reap the benefits from. Liu (1995) looked at port ownership specifically and failed to identify ownership as a factor contributing to efficiency advantages. Geographic circumstances such as location and trade patterns have been more important factors for success in some cases (Thomas 1994b), whereas it was competition and labour reform that has led to improved efficiency elsewhere (Estache & Carbajo 1996). Furthermore, if privatization does not realize its goals of improved efficiency (or worse yet, is less efficient), the

region will still be in the same position as when it started, yet the government will be without one asset and lacking control over an important aspect of its economy.

Control is another important issue public authorities face when looking to privatize. The most common response in the Napier University survey to the question of the disadvantages of private investment in ports was a loss of control at 31% (see figure 2.7) (Baird 2002). Public planning initiatives and the coordination of investment can become difficult to implement (UNCTAD 1998). Also, ports constitute a public good, and offer a diverse set of services that can either be neglected or denied if operating under business ethics. This is especially true if a monopolistic position is being privatized (Goss 1990a). Issues may arise, which can be more difficult to ameliorate than if the port had remained in the hands of the public (UNCTAD 1998). Furthermore, in the case of developing nations, it is argued (Fernandez et al 1999) that a monopolistic position is produced at first to garner enough traffic to achieve economies of scale before introducing significant competition. This scenario can be easily abused. It is important that public authorities always ensure that proper legal relations are constructed before privatization to safeguard against these concerns (Stevens 1999).

**figure 2.6 - Main disadvantages of private sector investment in ports**



Source: Baird 2002

Another important issue raised was the concept of political ambiguity, which was cited by 27% of the Napier University survey respondents (see fig. 2.6) (Baird 2002). This is especially true in cases of joint ventures, where the public and private sector are in a partnership. Even in situations where the private actor's role is limited, there is also concern that they may be able to influence the port authority since they would have greater access and their interest in success is mutual. Goss (1990a) termed this as political or regulatory capture. Conversely, Everett (2003) found that Australia's port reform success was hindered by bureaucratic intervention.

Other concerns that government bodies have with port privatization is the loss of a key policy tool. For instance, ports can be conceptualized as a way to provide employment in a given area (Goss 1990a). Changes of port policy can be unpopular and can surface come election time (Slack 1994) or lead to work stoppages (Morris 2000). Port privatization requires a rationalization of labour which typically leads to labour reform (Hoffmann 1998). This usually entails a mass reduction in staff along with a change of required skills (Marges 1999). In some cases working conditions deteriorate as a result of intense price competition (Turnball & Weston 1992). Furthermore, labour reform can also be costly for the public sector. At Cartagena, the workforce decrease from 2718 in 1992 to 884 in 1994, and much of that reduction was completed via early retirement severance packages which have cost the government US\$290 million (Kent & Hochstein 1998). Colombian labour reform exacerbated unemployment levels and led to massive social problems, and it is suggested that labour reform needs to address these potential consequences with a stronger emphasis on retraining (Gaviria 1999). Venezuela suffered similar turmoil as port reform in 1991 led to the lay-off of 10,279 dock workers

and 2,000 officials in the National Ports Institute and cost the government USD 182 million in severance packages (ECLAC 1999).

A final concern for both the public sector and the private sector is the compensation received for the sale of the port assets, which is a greater problem when considering the outright sale of a port's assets. The sales of UK ports were between 5 and 25% of their real market value (Brooks 2004). In the case of the privatization of the port of Bristol (Bassett 1993), the port authority had spent a considerable amount of money upgrading the facility, yet was unable to attract enough business to recover their costs. The port received an unsolicited offer from two entrepreneurs, which resulted in a 150-year concession for the money losing port. Shortly after the concession was granted, the new owners signed an extremely lucrative joint venture with National Power to build one of the most modern bulk handling terminals in Europe. This led Saundry and Turnball (1997) to characterize the port privatization movement in the UK as one that made millionaires out of private port owners at the expense of the public.

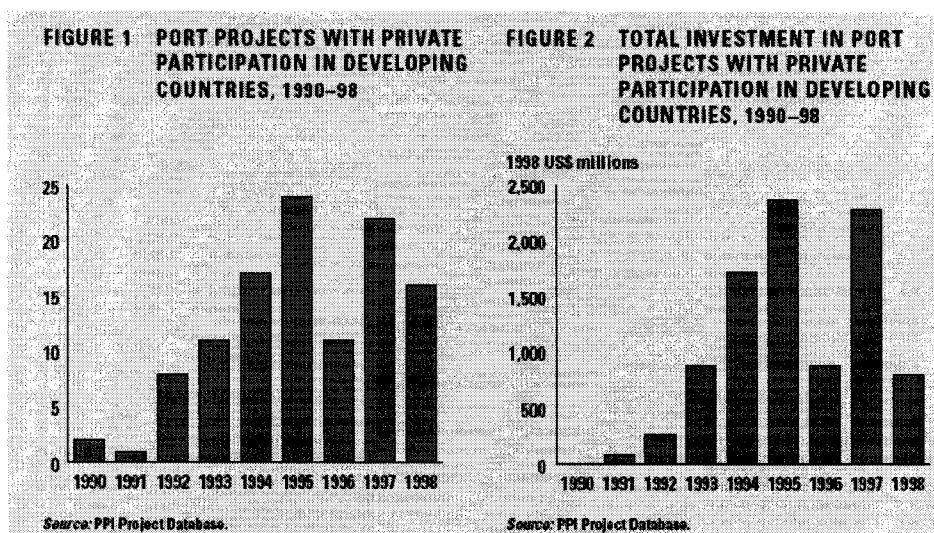
## **2.9 Port privatization trends in the developing world during the 1990s**

The 1990s was a period of rapid privatization in developing countries, which saw an estimated USD 250 billion in privatization revenue (Parker & Kirkpatrick 2005). Ports were no exception as from 1990 to 1998, the private sector invested more than \$9 billion USD in 112 common-user port projects in the developing world (see figure 2.7) (Sommers 1999).

The bulk of the investment in the developing world was concentrated in Latin America and Caribbean, as well as East Asia and the Pacific (See table 2.4), which

corresponds with trends in privatization in other infrastructure such as water, sewage, and electricity (Sommers 1999). The majority of this investment occurred in only five countries, as seen in figure 2.8.

**figure 2.7 - Port privatization in developing nations** *Source: Sommers 1999*



**table 2.4 - Port projects with private participation in developing countries by region 1990 -1998**

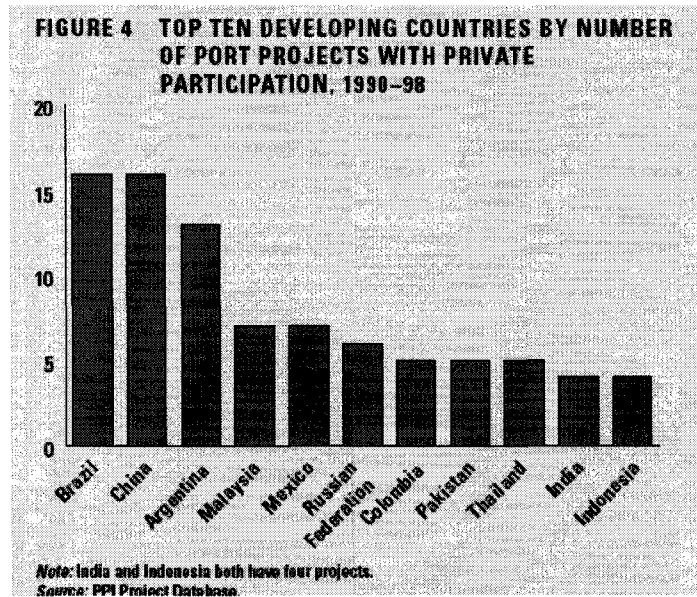
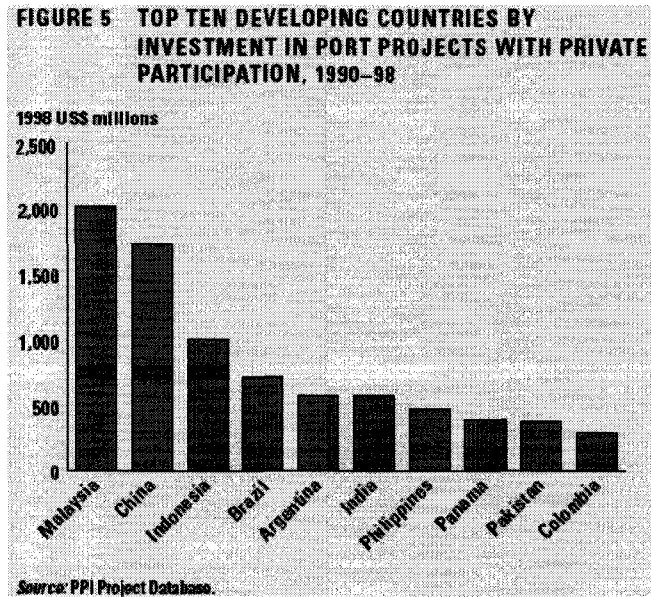
Region	Number of projects	Total investment (1998 US\$ millions)
East Asia and the Pacific	38	5,410.5
Europe and Central Asia	8	23.4
Latin America and the Caribbean	48	2,457.7
Middle East and North Africa	5	376.5
South Asia	9	942.8
Sub-Saharan Africa	4	32.0
<b>Total</b>	<b>112</b>	<b>9,282.7</b>

*Source: PPI Project Database.*

*Source: Sommers 1999*



figure 2.8 - Port privatization by country



Source: Sommers 1999

## **2.10 Conclusions**

Global shipping trends have required governments to make choices regarding their container ports, and an emphasis on modernization and the expected efficiency gains has led to a worldwide phenomenon of private sector involvement in what was largely the domain of the public sector. Embedded within this trend is a belief that the private sector is better at operating ports than the public sector; however, debate exists in the literature about the merits and perils of public versus private sector management. Regardless, there is an over-arching belief amongst the majority of industry analysts that the private sector is superior and this belief is framed by values of efficiency and competition, which are two very important facets in port operations. Within this framework, the public good provided by a container port is conceptualized as lower overall transportation costs and the expected elimination of subsidization.

The most common form of port privatization is the PUBLIC/private arrangement, which demonstrates the importance that public authorities place on their container ports. The majority of the public sector still views ports as significant nodes in national transportation systems and policies; and the private sector is seen as a means to the ends of a modern and efficient terminal.

Within this framework, four foci of analysis emerge. The basic form of port privatization analysis can focus on the methods used and the institutional structures that are made through the privatization process. A second form of analysis can be undertaken to examine the motivating factors behind port privatization. A third form of analysis involves examining changes in port operations. The fourth form of analysis can attempt to evaluate the social, economic, and environmental impact of the port privatization

process. This is a very difficult undertaking that requires an extensive amount of data collection and any results drawn from such a study will be limited at best (Parker & Kirkpatrick 2005).

For the purpose of this thesis, the first, second and third forms of analysis will be utilized for both cases. Attempting to analyze the social, economic, and /or environmental impact of privatization is beyond the scope of this thesis. Attempting to gauge the economic and social impact in Port-of-Spain would be hasty since the transfer to private management occurred in 2006. In the case of Freeport, the port has only recently emerged as a dominant node in the Caribbean Basin, and its development is not complete; therefore an analysis of its impact would be more beneficial once their ambitious plans are completed or abandoned and allowed time to mature.

# Chapter 3

## The Caribbean Basin

### 3.1 Overview

For the purposes of this study, the Caribbean Basin includes the Caribbean Sea and the Gulf of Mexico. The Eastern border is limited to the Antilles in the southeast to The Bahamas in the northeast. The Basin covers an area of 4.4 million square kilometers with over 56,000 kilometers of coastline, bordering on 33 countries (see table 3.1).

**table 3.1 - Characteristics of the Caribbean Basin**

<u>Attributes</u>	<u>Values</u>
Size (km <sup>2</sup> )	4,400,000
Coastline length (km)	56,000
Number of bordering countries	33
GNP of countries <ul style="list-style-type: none"><li>• excluding the US</li><li>• including the US</li></ul>	\$927 billion \$10.7 trillion
Per capita GNP of countries <ul style="list-style-type: none"><li>• excluding the US</li><li>• including the US</li></ul>	\$4,096 \$20,977

*Source: McCalla et al 2005*

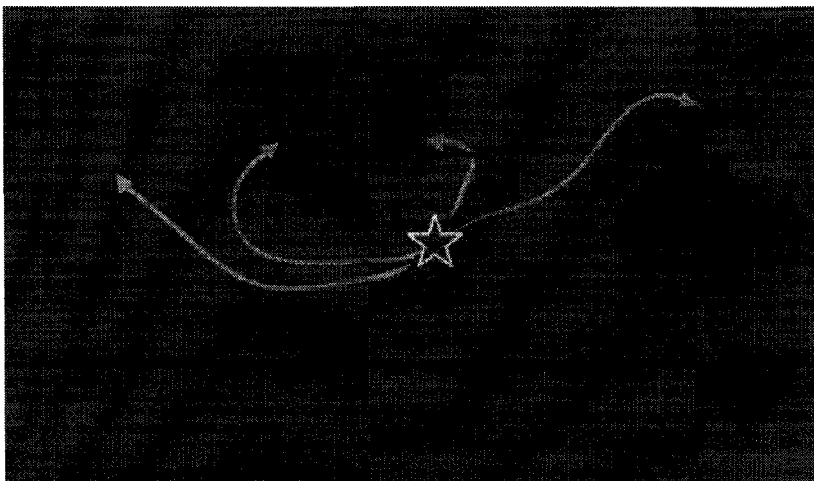
The Caribbean Basin is an area of contrasts. One finds many different nations of varying geographic sizes, population sizes and levels of economic growth. The Northern portion of the basin is occupied by the USA, which has the largest economy in the world. Bordering the basin on the south and west are developing countries with large

populations: Mexico, Venezuela, and Colombia. The remaining countries within the basin are relatively small. The center and eastern portions of the basin are occupied mostly by island states, such as Jamaica, Cuba, the Bahamas and Trinidad & Tobago. (McCalla et al 2005)

### **3.2 Global position**

The Caribbean Basin is situated at the crossroads of a number of important global trade routes (see fig. 3.1). The Panama Canal (represented by the star in fig 3.1) was constructed to facilitate many of the East-West trade routes and remains a focal point for this international trade. Trade from Asia to the Gulf and East Coasts of North America as well as Western Europe often passes through the canal and the basin; as does trade from the West Coasts of the Americas to the Gulf and East Coasts of North America and Western Europe.

**figure 3.1 - Trade routes traversing the Caribbean Basin**



Source [www.mitpan.com](http://www.mitpan.com)

North and south trade routes also traverse the Caribbean Basin independent of the Panama Canal. Trade between the Gulf and east coasts of North America as well as Europe and the east coast of South America pass by several ports on the eastern portion of the region, however these trade routes do not produce as much cargo loads as the east-west routes. Given the centrality (Fleming & Hayuth 1994) of the region, it is reasonable to expect this region to be an important link in international trade, however, the region remains largely on the margins of international trade, with the exception of the Gulf coast states. (McCalla et al 2005)

### **3.3 Port throughput trends in the Caribbean Basin**

Recently, the strategic geographic potential of this region has been recognized and great efforts have been made to capitalize on this advantage. In the 1990s, approximately US\$1.7 billion was spent on new container port capacity alone (Hylton 2003). This investment has coincided with increased throughput in the basin. From 1994 to 2002 the number of TEUs handled in Caribbean ports multiplied by a factor of 2.25, from 5.65 to 12.75 million (see table 3.2) (McCalla 2005). In 1994, the ports with the highest throughput were located in areas with strong local economies. For instance, the ports with the largest throughputs were San Juan, Puerto Rico; Houston, Texas; New Orleans, Louisiana and Puerto Limon, Costa Rica. Each of these ports serviced a large hinterland. San Juan itself served as the dominate port in the region handling nearly three times that of its closest competitor, and this was largely due to the need to import most goods to the island.

By 2002, the region's throughput patterns were very different. There were 17 ports handling in excess of 100,000 TEU, compared to only 13 in 1994. San Juan found itself in second place behind the group of terminals found at the Caribbean/Atlantic entrance to the Panama Canal, which experienced a 468% increase in throughput. Several other ports in the region saw drastic increases in throughput, such as Cartagena, Colombia at 422 %, Kingston, Jamaica at 314%, Puerto Cabello, Venezuela at 285% and Freeport, Bahamas, which went from handling almost no containers to handling 860,000 in 2002. (McCalla et al 2005). These trends have continued for many of these ports.

**table 3.2 - Traffic at Caribbean hubs 1994 & 2002**

<b>Port</b>	<b>1994 Traffic (000 TEU)</b>	<b>2002 Traffic (000 TEU)</b>	<b>% Change</b>	<b>1994 Basin Rank</b>	<b>2002 Basin Rank</b>
Altamira (Mexico)	nd	225	-	-	14
Cartagena (Colombia)	105	549	422.8	12	8
Fort-de-France (Martinique)	110	146	32.7	11	16
Freeport (Bahamas)	nd	860	-	-	5
Havana (Cuba)	nd	214	-	-	15
Houston (USA)	578	1 159	100.5	2	3
Kingston (Jamaica)	339	1 065	314.2	4	4
La Guaria (Venezuela)	nd	304	-	-	11
New Orleans (USA)	306	243	-20.6	5	13
Colon (Panama)	255	1 450	468.6	7	1
Pointe-a-Pitre (Guadaloupe)	100	106	6.0	13	17
Port-of-Spain (T & T)	129	290	124.8	10	12
Puerto Cabello (Venezuela)	161	620	285.1	8	6
Puerto Limon (Costa Rica)	361	564	56.2	3	7
Rio Haina (Dominican Republic)	139	430	209.5	9	10
San Juan (Puerto Rico)	1 598	1 393	-12.8	1	2
Veracruz (Mexico)	256	548	114.1	6	9
<b>Total traffic of selected ports</b>	<b>4 437</b>	<b>10 166</b>			
<b>Basin Total Traffic</b>	<b>5 650</b>	<b>12 750</b>			
<b>Selected Ports % of Basin Traffic</b>	<b>78.5</b>	<b>79.7</b>			

Source: McCalla et al 2005

### **3.4 The move to transshipment**

Transshipment is based on the hub-and-spoke networks that were first utilized by parcel delivery services and later by the airline industry. The rationale for transshipment lies in its ability to consolidate cargo at strategic ports on major routes. Massive vessels are employed and need to have full loads to achieve economies of scale, hence the need to consolidate cargo (Hoffmann 1998). The large vessels reach a port that is considered a hub to discharge cargo set for other locations upon smaller feeder-vessels, and take-on cargo funnelled into the hub-port from the feeder routes. Shipping companies have adopted transshipment as a way to reduce operational costs while extending its service to more ports with greater frequency and reducing the cost per km traveled (De Monie 1998).

Transshipment is taking a dominant position within the Caribbean. The Caribbean basin's strategic position along several trade routes is the cause (see figure 3.1). De Monie's (1998) "Multi-Layered Port Calls" theory, predicts a shipping industry where only major carriers and the alliances will service the major east-west trade routes, utilizing massive super-post-panamax vessels, which are capable of carrying upwards of 15,000 TEU. These ships will only call at four or five 'global hubs'. The traffic will filter down through different levels of hubs and feeders, with the possibility of a container being transhipped an additional 3 times until it reaches its final port of destination. This theory rests on several assumptions, the most notable being that the cost savings due to the economies of scale achieved by using 15,000 TEU capacity container ships is greater than costs of transhipping a container once or even multiple times.



Frankel (2002) tested the validity of this assumption in the Caribbean Basin. He found that transshipment costs would have to be at the most \$45 per container to justify transshipment instead of direct shipment on the basis of cost. Further justification for transshipment rests in the possibility of improved service and increased connectivity, both in terms of ports served and frequency of service. The growing size of ships servicing the north-south trade routes in the Americas can be interpreted as a first step towards a multi-layered network. Larger ships typically mean fewer ports of call, which can lead to greater transshipment opportunities throughout the shipping network (Hoffmann 2001b).

The multi-layer port calls theory predicts a 'global hub' developing in or near the Caribbean. It's within this context that international interest in Caribbean ports recently rose to levels not seen since colonization. Transshipment has become the focus for alliance carriers in this globally strategic location with limited domestic traffic, and the international port sector has reacted quickly and forcefully by rehabilitating existing terminals and building new modern facilities at a dizzying pace, often in places that had no firms operating such terminals before transshipment.

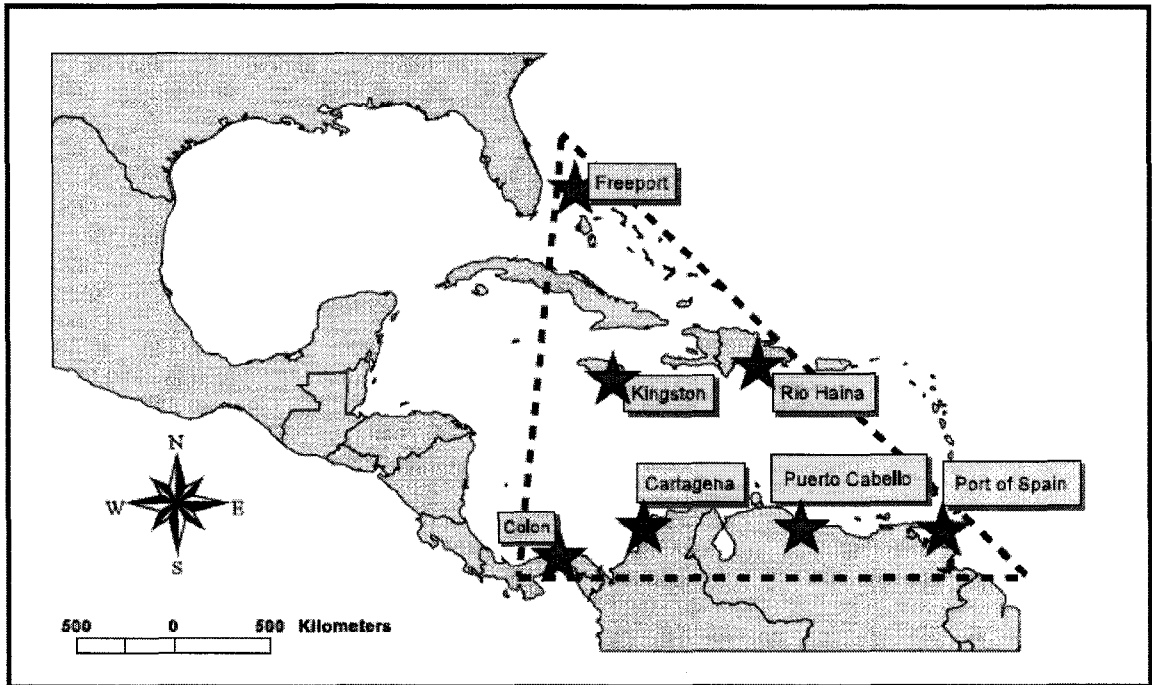
Several ports are striving to become the Caribbean 'global hub.' Twenty-two ports claim to be transshipment hubs, but in reality, there are up to ten ports that possess the credentials to be under consideration for hub status, and none are in the league of 'global hubs' such as Singapore and Hong Kong (Ward 2003). According to Hoffmann (2001b), ports looking to become major hubs need to possess certain features. First, ports with high domestic traffic are advantaged, since a local traffic base helps attract vessels. Second, a port needs to offer low rates, and value added services. Third, transshipment is dependant on the terminal capacity and service reliability. Carriers want direct berthing

with high productivity, high security, and direct links to information systems. Efficiency and responsiveness to demands are hallmarks of successful, customer-oriented, transshipment hubs.

The most important criterion for a potential hub, however, is its location (Ward 2003). The Caribbean Basin is in a strategic global position, and within the basin one finds several ports that occupy excellent locations that require little deviation from major trade routes. An additional locational factor found in the Caribbean is the ability for ports to act as a ‘cabotage by-pass port’ (Hoffmann 2001b). The USA’s Jones Act restricts foreign flagged vessels from the US cabotage trade, thus creating a demand for off-shore hub ports.

In the region, all of the ports occupying transshipment inspiring locations are found within *the Caribbean Basin Transshipment Triangle* (see figure 3.2) (McCalla et al 2005). The apexes of the Caribbean Transshipment Triangle are international trade route points of entry to the basin; the Panama Canal in the southwest; Port of Port-of-Spain, Trinidad in the southeast serving the traffic from the east coast of South America; and Freeport, Bahamas situated at the point of entry for cargo from the east coast of North America and northern Europe. Kingston occupies the centroid of the triangle and close by is the island of Hispaniola, whilst the base of the transshipment triangle is served by Puerto Cabello and Cartagena. (McCalla et al 2005)

**figure 3.2 - The Caribbean ‘Transshipment Triangle’**



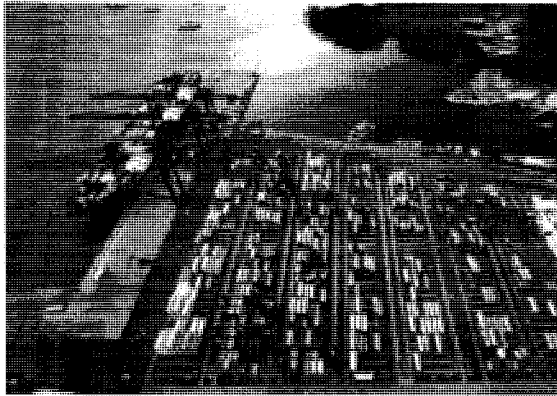
*Source: McCalla et al 2005*

### **3.4.1 Colon, Panama**

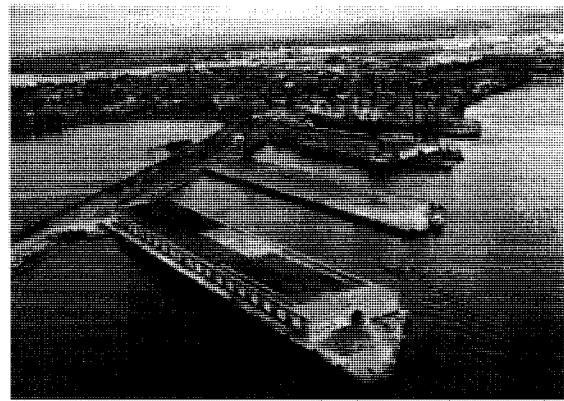
Situated at the Atlantic/Caribbean gate of the Panama Canal, Colon is a strategic location for international trade transshipment, since several major trade routes traverse through the canal. The Panama Canal adds an additional variable to the Caribbean transshipment market. The employment of post-panamax ships (vessels that are too large for the locks at the Panama Canal) on major trade routes has created the need to transfer containers onto smaller ships for the canal journey. Hutchison Port Holdings (HPH) is one transnational port operator that has capitalized on this need and has secured terminals at each end of the canal, Balboa near the Pacific gate and Cristobal at the Atlantic/Caribbean gate, which are operated by HPH's subsidiary Panama Ports Company (Llacer 2005). PPC reported 1.256 million TEU moves at their ports in 2006;

a 38% increase of throughput from 2005 ([www.hph.com](http://www.hph.com)). The facilities in Colon are also located next to the largest free trade zone in the hemispheres. (McCalla et al 2005)

**figure 3.3 - Images of Panamanian ports operated by HPH**



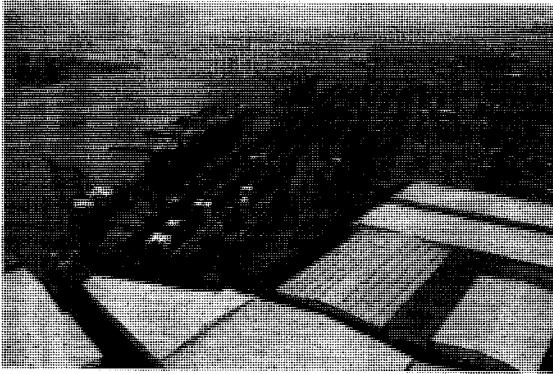
Port of Balboa – Source [www.hph.com](http://www.hph.com)



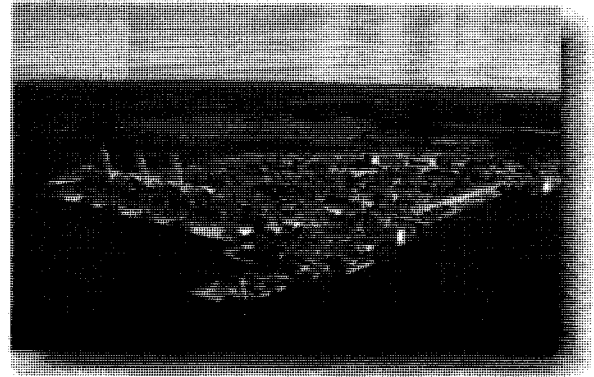
Port of Cristobal – Source [www.hph.com](http://www.hph.com)

The Port of Colon has two other terminals operated by private transnational terminal operators. Manzanillo International Terminal (MIT) is operated by Stevedoring Services of America (SSA), which is an American company. MIT is the dominant terminal at Colon in terms of throughput, yet it experienced a 15% decline in 2006, when it moved 1.331 million TEU compared to 1.580 TEU in 2005. The third terminal in the Colon Port is the Colon Container Terminal operated by Evergreen since 1997. All of these terminals share proximity to the free trade zone. The one possible challenge ahead for Colon, is the proposed widening of the Panama Canal which has the potential to compromise its strategic position (Llacer 2006), and affect global shipping patterns (Nelson 2005).

**figure 3.4 - Images of MIT and CCT**



Manzanillo International Terminal –  
*Source [www.mitpan.com](http://www.mitpan.com)*



Colon Container Terminal – *Source*  
*[www.cct-pa.com](http://www.cct-pa.com)*

### **3.4.2 Freeport, Bahamas**

Freeport is located at the northern apex of the Caribbean Transshipment Triangle, and occupies a very strategic position for two reasons. First, traffic originating from the Eastern Seaboard of North America, and Europe that is bound for the Panama Canal or Gulf Coast sail past this location, as well as north-south trade routes that access the east coast of North America. Second, Freeport is located only 65 miles off the coast of Florida, is able to act as a ‘cabotage by-pass port’ for cargo loads bound for multiple US ports from non-US flagged ships (McCalla et al 2005).

### **3.4.3 Port of Port-of-Spain, Trinidad**

The Port of Port-of-Spain is situated at the south-eastern apex of the transshipment triangle, however, the port has not grown at the same pace as its rival apex ports. This

can be explained in part by the trade routes. The north-south routes have not been as productive as the east-west routes. However, Brazil and Argentina are important markets with great potential. Other factors include site difficulties, water-depth limitations as well as governance and labour reform issues. Port of Port-of-Spain, until recently, was still using out-of-date work practices, and the port was still under total government control. (McCalla et al 2005)

A further challenge that PPS must face is the competition from Puerto Cabello in Venezuela, and within Trinidad from Point Lisas, a privately operated port. The issues have resulted in PPS moving significantly less containers than most of its hub competitors. In 2006, PPS moved 324,539 containers compared to 844,952 at Puerto Cabello in Venezuela and 711,529 at Cartagena, Colombia.

#### **3.4.4 Ports in the middle**

The largest port in this area is Kingston, Jamaica; whose traffic increased three-fold from 1994 to 2002 (McCalla et al 2005), and it has sustained its growth through 2005, with a throughput of 1,670,800 TEU, which represents a 57% increase in only 3 years (CSA 2007). Kingston is a landlord port that is commercially focused. AP Moller operates the main terminal under a 5-year contract.

Kingston's position, however, is being threatened from all sides. Its traditional rival, Rio Haina, experienced a marked loss in throughput in 2005. Rio Haina had been experiencing growth similar to Kingston throughout the late 1990s and early 2000s, but in 2005 they moved only 268,738 TEU compared to 435,200 TEU the previous year.

This represents a 38% decline in throughput in just one year. Rio Haina has been riddled by difficulties in congestion and productivity (McCalla et al 2005). The Dominican Republic has also developed the port of Caucedo, a greenfield project that was originally operated by CSX World Terminals, however, DP World recently purchased CSX World Terminals. They see Caucedo as a port in a strategic position internationally, and locally since it is located in a Free Trade Zone. Some see the potential of this port taking traffic away from Kingston (Ward 2003).

#### **3.4.5 Base ports**

The base of the transshipment triangle is the north coast of South America. The two ports of interest in the area are Puerto Cabello, Venezuela and Cartagena, Colombia. These ports have two strategic factors helping their transshipment goals. First, both ports are relatively close to trade routes. Cartagena is very close to the Panama Canal, and requires only a minor deviation from most major trade routes, whilst Puerto Cabello is relatively accessible to trade routes involving the east coast of South America. The second factor is the sizes of their populations. Colombia has three times the population and Venezuela twice the population of the Bahamas, Panama, Jamaica, Dominican Republic, and Trinidad and Tobago combined. Large markets act as a magnet to shipping lines, since they can serve the large domestic traffic and tranship at the same time. (McCalla et al 2005)

Of the two, Cartagena has seen the most transshipment success, with 43% of its 2006 traffic comprised of transshipment. Its throughput has expanded to 711,529 TEU in 2006, which represented a 29.4% increase over 2005 levels, however, transshipment's

share has changed very little. Puerto Cabello, on the other hand, could only account for 12% of its traffic as transshipment in 2006 (IPAPC 2007). Like Cartagena, Puerto Cabello has seen its port movements expand significantly. In 2006, it reported a throughput of 844,220 TEU; a 36% increase from 2001 (IPAPC 2007)

### **3.5 Conclusions**

The Caribbean Basin is a strategic location in international trade routes, with Panama acting as the axis of the region. Since relatively little domestic traffic is being generated in the region, the emphasis is being placed on transshipment. Many ports are building facilities to access the transshipment market. No single port has emerged as a ‘global hub.’ The employed strategies seem to be quite similar. Port Authorities have emphasized privatization as a way to introduce international standards of best practice to compete for transshipment traffic, while typically placing the port within or nearby a Free Trade Zone to eliminate transaction costs associated with doing business in the port area.

This summary points to the fact that several ports are competing for hub status and the two similarly located apex ports, Port of Port-of-Spain and Freeport Container Terminal have very different growth trends and it is suggested that governance has played a key role in explaining these differences. In the next chapter, these differences will be examined in detail.



# Chapter 4

## Port Characteristics

### 4.1 First impressions

The site visits conducted in August 2003 clearly demonstrated the physical differences between the two ports. Freeport Container Port (FCP) is a modern facility that is highly organized and secure. The use of space has been rationalized and movements are tightly coordinated. It is located several kilometres from residential areas and only accessible by car. Its perimeter is well guarded by high fences and security personnel. The port area is well organized with plenty of space for handling operations.

The visit to Port of Port-of-Spain (PPS) provided a sharp contrast. The site is surrounded by urban development and chaos. The approach to the port area required one to walk past the casual labourer area, which consisted of several unkempt buildings occupied by masses of 'port followers' hoping to be called to work. The entrance of the port area was adjacent to the new port authority building, which was modern and seemed out of place next to rusting tin-clad warehouses. The port area was congested and difficult to navigate between the many buildings and employees. It was clear the PPS's operations had their roots in an era before containerization. Processes were labour intensive. The site was littered with buildings that appeared to have been built over time in a piecemeal fashion. This is in sharp contrast to the modern facilities of Freeport which are marked by open spaces and machinery as opposed to warehouses and

labourers. These visits have left the author with a heightened appreciation of the circumstances surrounding the privatization movement in the developing world.

#### **4.2 Situation**

FCP is located on the Grand Bahama Island, which is one of the largest islands in the Commonwealth of the Bahamas. The port is located 105 kilometres from the east coast of Florida, USA, and is the closest significant offshore port to the USA (Woodbridge 1997). The port is located within a 230 square-mile free trade zone. The port possesses 1,036 meters of berthing space with a draught of 15.5 meters alongside the berths and 16 meters in the channel and turning basin, which makes FCP one of the deepest ports in the region (see figure 5.1). Ten super-post panamax quayside gantry cranes, 50 straddle carriers, and 49 hectares of stacking area, allow this port to act as a transshipment hub for the largest ships deployed today. The port operates 24-hours a day and possesses state-of-the-art communication and port management systems, while it only takes 45 minutes from pilot boarding to berthing (Woodbridge 1997).

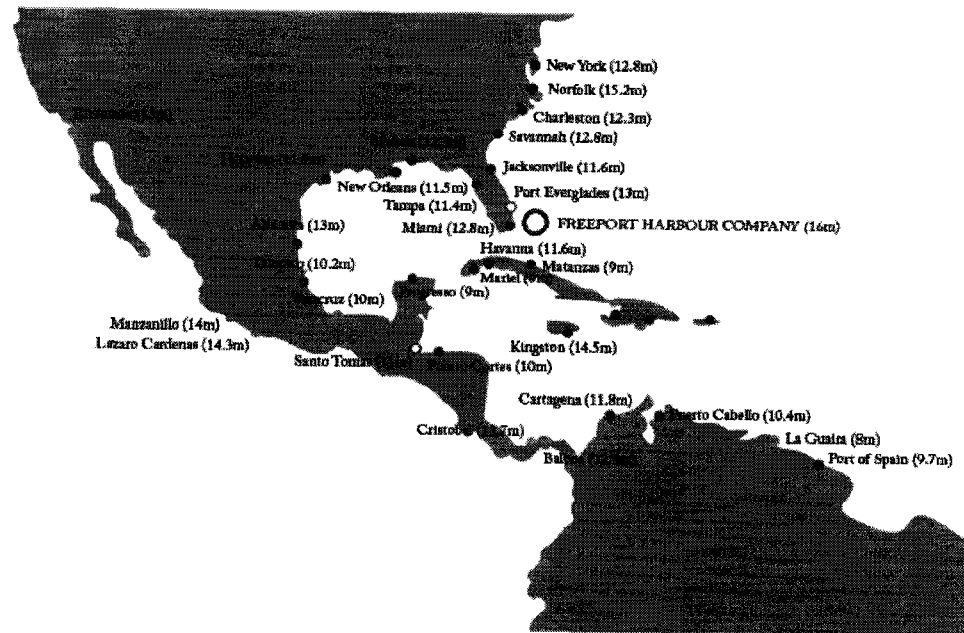
PPS is located on the north-western coast of the island of Trinidad and is seven kilometres off the eastern coast of Venezuela. PPS is a city port. It is located in the city center of the capital of Trinidad and Tobago, Port-of-Spain. The port area is surrounded by urban development. Due to its position, PPS's potential growth is constrained. Regardless of its inability to expand outwards, within PPS, berth space is also constrained due to its multi-cargo handling activities and passenger service. PPS only operates three dedicated container berths which range from 140 to 170 metres in length. These berths are equipped with three ship-to-shore gantry cranes, with 16.5 hectares of container

stacking area serviced by ten rubber tyred yard gantry cranes (PATNT 2007b). Several other berths in PPS are reserved for liquid bulk, dry bulk, ferry services, cruise ships, and several multi-purpose berths that may also handle containers with mobile cranes; and since 90% of the cargo handled in the port is containerized, it is puzzling to see so much of its limited space dedicated to other activities.

PPS, a traditional city port, finds itself in a position where it has direct access to local markets (PPS handles 78% of the nation's domestic cargo), yet there are significant constraints on its expansion. PPS's ability to capitalize on its strategic position is hindered due to its difficult local site, since preset technological standards require larger areas for efficient cargo handling. This challenge is magnified by the reality that transshipment does not need to occur at ports with a hinterland at all, and are typically focused on international positions as opposed to local markets (Slack 1999).

PPS has an additional challenge to overcome with its limited draught. A maximum draft of twelve metres alongside its berths renders PPS unable to handle the largest vessels currently deployed (see fig 5.1). This limitation is unlikely to change since the Orinoco River continually discharges large amounts of sediment towards the port. The low draft precludes PPS from the major transshipment trades. This reality is not lost on the management of PPS, as their stated goal is to become a regional 'sub-hub.' Their ship-to-shore equipment is a further limitation as PPS only possess three ship-to-shore gantry cranes, two panamax and one post-panamax, thus limiting their throughput capacity.

**figure 4.1 - Average port draughts in the selected Caribbean Basin ports**



*Source: [www.freeportcontainerport.com](http://www.freeportcontainerport.com)*

PPS's position is complicated further by the competition on its own coast. Point Lisas (PL) is located thirty kilometres south of PPS and its management has designs to overtake PPS as the nation's top container port. PL operates in the Point Lisas Industrial Port Development Corporation Ltd. (PLIPDECO), which is situated within an industrial park area away from residential areas of Trinidad. The organization operates the port and acts as the landlord to the industries operating within the area. PL has serviced the country's petro-chemical industry; however, management has its sights set on establishing the port as a container transshipment centre. The port is operating under the control of Captain Rawle Badaloo, who is an experienced seafarer and who was President of the Caribbean Shipping Association from 2000 – 2003, serving the maximum of 3 terms in that position. Interestingly enough, during his tenure at the CSA, Point Lisas won the "Port of the Year" Award from 2001-2003 (CSA 2002). Capt. Badaloo's vision

is clearly in its infancy as the port is a skeleton operation. The facility is essentially a greenfield project as the port is simply a large paved area on which several mobile cranes perform the ship-to-shore operations. PL is also hindered by a limited draught, but they have ample room to expand and have been able to attract Maersk, which uses PL as their regional hub.

### **4.3 Port development**

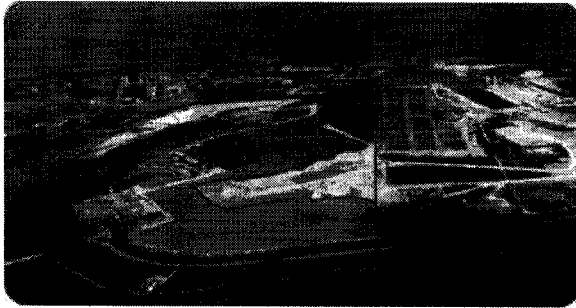
Container terminal development is another divergent aspect between PPS and FCP. The area and berthing space of PPS's container facility has not experienced significant change in the last decade. There were designs for expanding the container terminal to make berths seven and eight dedicated container facilities by the end of 2005, however, these plans were not implemented. All recent developments in the container handling side of the port have been retrofitting existing space and adding new equipment. For instance, PPS has expanded its container stacking space to 16.5 hectares, and purchased new rubber-tyred gantry cranes; however, these developments pale in comparison to the changes made at Freeport.

FCP has developed in several stages (see fig 4.1), aided by Bahama Rock, a neighbouring concrete manufacturer, which has completed the excavation of the limestone bedrock in the port area to the exact specifications of the Port Authority at no charge since they have used the excavated limestone to produce construction aggregate. This project has been so lucrative for this firm that they have invested \$40 million dollars in a new processing facility adjacent to the port. Stages I through IV have been completed, and three additional stages have been planned for future growth, which

includes up to 1,683 additional meters of berthing space and over 20 additional hectares of stacking area.<sup>3</sup>

**Figure 4.2 - FCP's long term development plan**

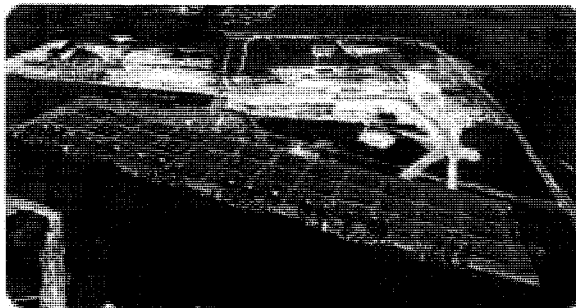
Picture 1: Present condition outlining remaining area to be excavated



Picture 2: Future berthing line



Picture 3: Computer generated image of FCP after completion of Stage VII

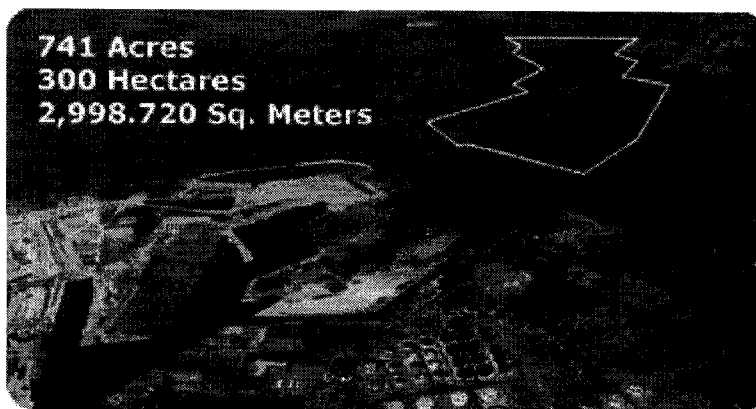


Source: <http://www.freeportcontainerport.com/fcp.php>

<sup>3</sup> An animated description of port development is available online : <http://www.freeportcontainerport.com/fcp.php>

In addition, the Grand Bahama Port Authority is planning to develop 300 hectares of land between FCP and the Grand Bahama Airport, which has been dubbed the Sea Air Business Center (SABC). (see figure 5.3) This industrial park is designed to service logistic needs such as warehousing, distribution, transshipping and value-added manufacturing companies. The advantages of this scheme are the area being a free-trade zone, which reduces transaction costs since there are no taxes levied, and the large skilled work force that exists on the island since the decline in local tourism.

**figure 4.3 - Proposed SABC location**



Source: <http://www.freeportcontainerport.com/sabc.php>

#### **4.4 Throughput**

Traffic has increased at both ports over the last decade, but it is evident that FCP has experienced the most success. Prior to the opening of the modern facility's phase I in 1997, FCP routinely handled between 15,000 to 25,000 TEU per annum, which serviced the island's primarily importing needs. From 1997 to 2006, FCP's throughput had increased a dramatic 883% (see table 5.1). This growth has been due to an emphasis in transshipment both within the industry and in the port, as 98% its traffic is transhipped.

Traffic expansion has coincided directly with the completion of each new phase. There are dramatic increases in throughput in the years 2002 (Phase II) and 2006 (Phases III & IV), which resulted in a 58% increase in capacity (Woodbridge 2001). The expansion plans have been implemented based on demand and it is clear that each phase has approached its capacity before the introduction of additional facilities. Freeport can potentially have a capacity of 4 million TEU once all of the proposed expansions are complete (Fossey 2006b).

**table 4.1 - FCP throughput in TEU and percentage change year-over-year**

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
35,546	19,592	0	148,798	470,000	549,993	572,224	570,000	860,000	1,057,879	1,059,581	1,121,285	1,463,000
40%	-45%	-	-	216%	17%	4%	-0.03%	51%	23%	0%	6%	30.5%

Source: ECLAC - <http://www.eclac.cl/transporte/perfil/infopto.asp?num=35>

PPS, on the other hand, has always played an important role in Trinidad economy, serving as the major port to the island in the capital city. The port authority has been able to expect a certain level of traffic due to its hinterland, but internationally and regionally, PPS is not significant. Its 2005 throughput was ranked 142<sup>nd</sup> out of 360 ports in *Containerization International's* 'world container port traffic league', and PPS is not one of the top ten Caribbean ports. It is overshadowed by several basin ports, including its direct competitors Puerto Cabello and Cartagena. In the hopes of elevating its traffic, PPS targeted the transshipment market. The port authority contends that PPS has traditionally served as a natural transshipment centre, and nearly half of its throughput is



transshipment cargo; yet this still pales in comparison to the 98% transshipment reported at FCP.

The overall traffic growth also pales in comparison to FCP (see table 5.2). 2004 was PPS's most productive year, with a throughput 350,468 TEU, an 88.6% increase over its 1996 throughput. However, this rate of growth was average in the Caribbean. PPS has experienced fluctuations in its traffic since 1996. For example, its traffic decreased by 8% in 2005.

**table 4.2 – PPS throughput in TEU and percentage change year-over-year**

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
185,801	208,666	231,213	278,660	282,487	271,156	290,175	298,000	350,468	322,466
-	12%	11%	20.5%	-1%	-4%	7%	2.6%	17.6%	-8%

Source : ECLAC - <http://www.eclac.cl/transporte/perfil/infopto.asp?num=374>

#### **4.5 Factors affecting growth in Freeport**

The remarkable traffic growth can be explained by several factors:

1. Growth in transshipment in the industry
2. Strategic location
3. USA Jones Act and cabotage by-pass
4. Unique local policy and conditions
5. Efficient and effective private operator
6. Mediterranean Shipping Company

FCP has been designed to cater to main line transshipment traffic, with its deep draught and excellent infrastructure. Due to its extensive berth, transshipment is often

from vessel to vessel, which saves shippers storage fees, reduces shipping times, and improves reliability<sup>4</sup>. In addition, the development of the SABC is intended to attract logistics companies and value-added operations, which is designed to further increase transshipment activity and develop FCP as an international multi-modal hub serving the North American East and Gulf coasts.

FCP, has developed as a transshipment hub due in part to its international location. It is situated at the north-eastern apex of the Caribbean Basin Transshipment Triangle, and acts as an entry/exit point to the basin. Strategically located along several major trade routes, FCP can serve as a transshipment hub between the Eastern Gulf Coasts of the United States, the Gulf of Mexico, the Caribbean, South America, and trade lanes to European, Mediterranean, Far Eastern and Australasian destinations (see figure 5.3).

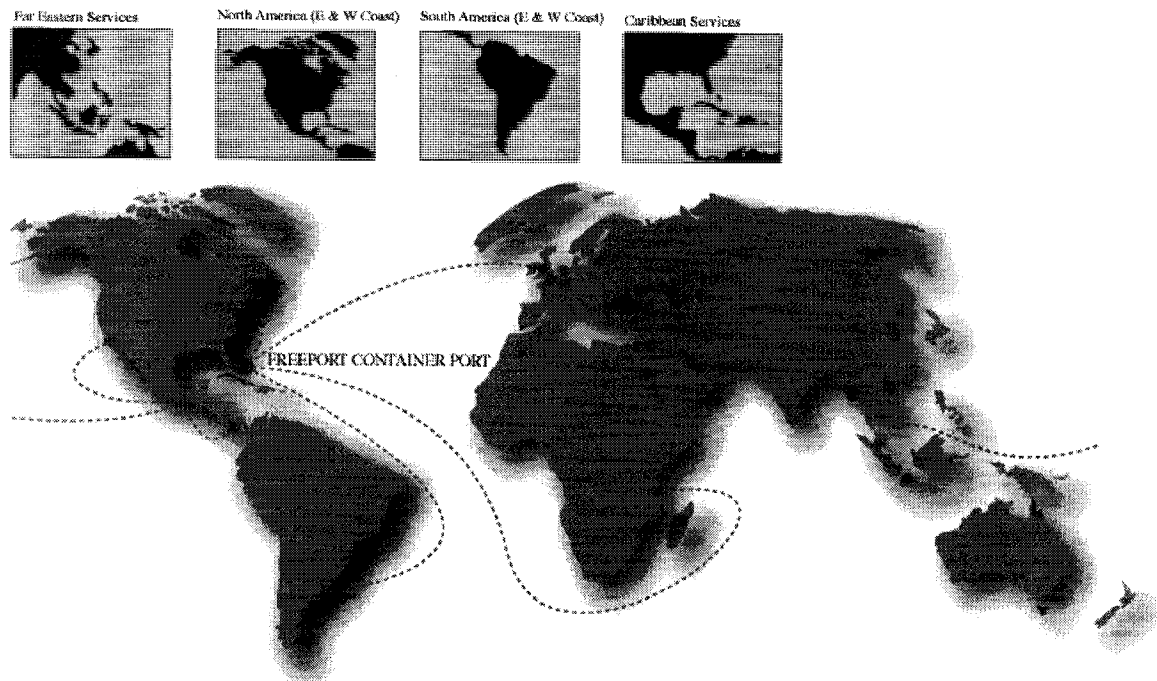
A crucial advantage that FCP has utilized is its close proximity to the USA, and the inherent opportunity to circumvent the restrictive Jones Act, by acting as a cabotage bypass facility (Hoffmann 1998) for US bound cargo. Only American flagged ships, with American crews are permitted to run cabotage routes on American coasts. It is advantageous to tranship US-bound cargo at FCP onto US-flagged vessels to their final destinations instead of extensively operating costly US-flagged vessels in their fleets.

Freeport has been able to under-cut its American rivals with lower port charges, lower transaction fees, and simplified bureaucracy. Major shipping companies eliminate the need to operate expensive American flagged vessels by utilizing FCP. American flagged feeder service providers, such as Colombia Coastal Transport, provide feeder connections to US ports, creating a niche market in global transshipment networks.

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<sup>4</sup> This information was provided by the port manager.

**figure 4.3: Trade routes served by Freeport Container Terminal**



*Source: <http://www.freeportcontainerport.com/sabc.php>*

FCP is also located in an area with a unique governance structure, and this has played a vital role in its development. FCP is located in a 230 square-mile Free Trade Zone. The governing body over this area is the Grand Bahama Port Authority Ltd (GBPA). The Bahamian governing structure is focused on the decentralization of power within the commonwealth in order to be more responsive to specific island needs. However, the GBPA is unique as it is a private entity that has been charged with the opportunity of developing most of the island, whilst retaining the burden of being profitable to its shareholders. This arrangement is found in the Hawksbill Creek Agreement (HCA), which was enacted in 1955. Within this document, and its subsequent amendments, one finds unique opportunities for private enterprise.

The HCA was designed to create the second largest urban center in the Bahamas for the 'economic benefit of the colony.' The document came into force after its signing on August 5, 1955. The HCA is an agreement between the Bahamian government and the GBPA, which was founded by Virginian financier Wallace Groves. The original agreement granted 50,000 acres to the GBPA, and through later acquisitions, the area of governance expanded three-fold to its present 230 square miles. The GBPA has been granted this land for a period of 99 years. In return for GBPA was charged with several tasks. The GBPA is responsible for the creation of a deep-water port, to spawn industrial and commercial development in the Freeport/Lucaya area and to exploit the natural resources of limestone and pine timber. The GBPA is also responsible for providing infrastructure such as roads, an airport, utilities (such as water, sewage, and electricity to CSA standards), schools, medical facilities, free government offices, and housing for government employees, whilst paying 25% of their wages. A later amendment demanded that the GBPA develop over 200 first-class resort rooms to increase tourism in the area. (Bahamian Government 1955)

Additional benefits were bestowed upon the private GBPA. The Freeport/Lucaya area is exempt from customs/duties charges, personal income tax, and banking taxes. The exemption from personal income taxes is a Bahamas-wide policy; however, this is safeguarded in Freeport in the event that the central government were to change its policy. The exemption from customs/duty payments ends in the year 2015. This twenty-two year extension was negotiated in 1993, shortly before the 1994 agreement between Hutchison Port Holdings, and the GBPA. The GBPA also has the authority to grant business licenses, dictate public planning, and carry out many legal actions without the

consent of the government. The GBPA also has the ability to recruit needed labour from abroad with expedited visa applications. (Bahamian Government 1955)

The Freeport/Lucaya area is a private fiefdom with very little public-government oversight, and a private entity provides most services and all infrastructures. The GBPA is able to dictate its own destiny with minimal interference from the government; however, it also holds the responsibility of providing public goods. The GBPA occupies a strange position as a quasi-governmental authority with private business ethics. Freeport fits into HPH's Group Managing Director, Mr. John E. Meredith stated preference that HPH likes "...to be involved where there is no government port operation, because if there is, we would have a conflict of interest. We (HPH) like areas where the government has backed off, and we can do our own thing..." (Dekker 2006)

It is under these business-friendly conditions that Hutchison Port Holdings (HPH) decided to invest in a pure transshipment facility. HPH was established in 1994 as a subsidiary to Hutchison Whampoa Ltd., which is a giant multi-national corporation based in Hong Kong that has interests in telecommunications, real estate and retailing. The company was created to manage the company's rapidly expanding container port portfolio. Hutchison Whampoa Ltd. is the result of a 1970 merger between the British "hong" trading house John D. Hutchison and Company, which was founded in the late 19<sup>th</sup> century (the first company registered in Hong Kong) and the Hongkong & Whampoa Dock Company, which was founded in 1866. Hutchison Whampoa Ltd is a container handling pioneer in Asia and has become the leader in container terminal operations (Airies 2001). Prior to the creation of HPH, its parent company, Hutchison Whampoa, had operated terminals in the port of Hong Kong and it began to expand its operations

beyond Hong Kong in the early 1990s. At its creation in 1994, Hutchison ports handled 8.4 million TEU annually; and by 2006, HPH's worldwide throughput reached 59.3 million TEU, which is a 606% increase in twelve years. Hutchison has grown from operating a handful of berths in Hong Kong to operating 257 berths in 45 ports in 21 different countries on five continents in less than 20 years.

The investment in the hinterland-poor yet transshipment-potential-rich Freeport was made even though Meredith has also publicly stated that "As a private investor, I am not in favour of the private sector putting money into transshipment ports. It is far, far too risky" (Cross 2000). Locally derived traffic in Freeport rarely exceeded 25,000 TEU prior to HPH's investment. However, Freeport offered a unique opportunity for the transnational port operator since it only required a low degree of financial risk and presented a unique geographic position and governance structure. The harbour was excavated for free by Bahama Rock and all HPH had to complete was the surfacing work and the installation of superstructures to become operational in 1997 (Cross 2000). An additional incentive is the potential to produce a modern logistics center that could capture American traffic, along with the lack of development restrictions and taxes also weighed heavily in HPH's assessment.

The deal to bring HPH into Freeport developed out of HPH's purchase of Felixstowe, UK. GBPA was a shareholder in the port of Felixstowe before its sale to HPH. A GBPA board member was touring the facilities at Felixstowe, and had simply mentioned that he was impressed and that he would like to see similar operations in Freeport. HPH surveyed the Freeport site shortly thereafter, and negotiations began between HPH and

GBPA.<sup>5</sup> The conclusion of these negotiations resulted in HPH purchasing a 45% share of the GBPA, including control over non-port investments such as hotels, the airport, and the track of land between the port and the airport for the SABC, which required an initial investment of 700 million USD.<sup>6</sup> For the local population, the investment made by HPH was promising and surprising news. Prior attempts by other parties to invest in the GBPA were routinely denied. The shareholders of the GBPA were unwilling to concede any control over its unique arrangement. The new investment presented new opportunities for the local population. 1600 jobs had been lost in Freeport due to a decline in tourism. By 2003, nearly 500 of those jobs were recovered in the port alone, while HPH reinvested in the tourism industry, thus creating more jobs.<sup>7</sup>

It is under these circumstances that the Mediterranean Shipping Company (MSC) has decided to use Freeport's strategic position as an important hub in its network. In 2003, MSC was responsible for 80% of the port's traffic, while Maersk was responsible for 19% of its throughput.<sup>8</sup> However, by 2004, Maersk had pulled out of FCP (Fossey 2006b). 98% of FCP's throughput is transhipped and 99% of MSC's cargo is transhipped at Freeport (Fossey 2006b). The massive amount of transshipment would suggest that an extensive hub and spoke network has developed, however, that does not appear to be the case. Only a very small portion of the traffic involves feeder services, however, the majority of the transshipment occurs between MSC's mother-vessels and it does not

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<sup>5</sup> This story was taken from an interview with port manager Mr. Jones in August 2003

<sup>6</sup> These figures were obtained during interviews with the President of the Freeport Chamber of Commerce, Mercyntn Ferguson, and port manager Mr. Jones in August 2003.

<sup>7</sup> This information was obtained via the interview the President of the Freeport Chamber of Commerce, Mercyntn Ferguson.

<sup>8</sup> These figures were obtained during an interview with Mr. Jones - FCP port manager - in August 2003.

operate any feeder vessels through Freeport, whilst the local carriers of Colombia and Tropical do not have the capacity to facilitate such cargo loads.<sup>9</sup> This corresponds with Fremont's (2007) model of convergence on mainline routes.

Freeport can act as a pure *convergence-transshipment-hub* as it is situated at the intersection of multiple east-west and north-south trade routes and requires very little deviation for vessels along these routes. Additional feeder services are employed, but the role of pure feeder vessels are secondary. In addition to its strategic location, Freeport is also a port that MSC has been able to dominate since it is 'secondary' on a global scale, and is devoid of any shipping legacy which also fits into Fremont's (2007) model. He argues that Maersk has employed a strategy of entering into historically little used ports and transforming them into significant 'secondary' ports in a very short period of time. Salalah and Algericas are considered to be "Maersk ports" and most of its traffic and all of its transshipment is dependant on Maersk. MSC too seeks to dominate a few major hubs such as Valencia and Antwerp, along with Freeport. Having this type of control over a port's traffic allows the carrier to have greater influence over the port itself and allows greater flexibility since through FCP, MSC can serve a wide variety of markets, deploy ships of different capacities to serve specific markets, and offer customers an extensive choice of services across the world.

#### **4.6 Factors affecting growth in Port-of-Spain**

PPS, as Freeport, finds itself in a strategic geographical position, however, its local conditions are remarkably different. PPS is situated in the south-eastern apex of the Caribbean transshipment triangle. The port is at the crossroads of many international

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<sup>9</sup> Shipping route data obtained from Containerisation International Yearbook 2005



shipping routes that serve the east and north coasts of South America from destinations such as Europe, the gulf and east coasts of North America, as well as Asia and Africa. These routes are not as important as those served by FCP and hence there are fewer containers to capture. Compounding this issue is the high level of competition that exists for this traffic. Puerto Cabello charges very little for transshipment traffic, while Colon and Cartagena also serve as hubs for the same traffic routes. The north-south trade can call at any hub in the entire Caribbean Basin. Furthermore, PPS has competition on its own island.

Point Lisas has been able to attract some carriers to its ports, most notably Maersk. The port handled 98,368 TEU in 2003, which represented a 170% increase over its 1998 throughput, and had grown further to 131,750 TEU in 2004 and 145,246 TEU in 2005. It is reasonable to suggest that some of this growth came at the expense of PPS, since PPS handled 28,002 fewer TEU in 2005 than 2004.

Despite the competition, the primary issue that has constrained the throughput of PPS is its operations. PPS has been trying to compete in the container-handling industry from a position of weakness. Its facilities are small and congested. Its labour practices are intensive and out-dated, with over 700 registered unionized staff and 500 casual labourers called 'port followers' (CSA 2003). Productivity suffered due to these issues, and PPS averaged a mere eight crane moves per hour in 2005 (PATNT 2007a). The Port Authority has been attempting to ameliorate these issues for several years with limited success. The Port Authority has restructured their responsibilities in order to privatize the container handling operations of the port and thus modernize and rationalize operations.

The restructuring process at PPS has been difficult and has seen several revisions. As will be seen in the following chapter, PPS first employed a commercialization process that divided the many functions of the Port Authority. A private terminal operator was initially sought to enter into a joint venture. Debt was cancelled and the government invested in new infrastructure to make the port more attractive to a potential partner. However, PPS was unwilling to enact labour reform and efficiency did not see any significant change despite the investment in new technology. PPS was unable to find an offer deemed acceptable by the government and changed its strategy, which culminated in a management contract in 2006 with Portia Ltd. The port is beginning to see improvements in productivity (12 crane moves an hour) and labour reform is being negotiated (PATNT 2007a).

# **Chapter 5**

## **Privatization Analysis**

### **5.1 Overview**

The move towards privatization employed by PPS and FCP are remarkably different. Both ports are atypical examples of port privatizations and each is situated at either end of the privatization spectrum – PPS representing a situation with very little private participation and FCP representing a private empire. The disparity in governance structures has affected the success of each port.

### **5.2 The case of Port of Port-of-Spain**

PPS is part of the portfolio of the Port Authority of Trinidad and Tobago (PATNT). The PATNT was established in 1962 as a public institution to act as the authority over the Port of Port-of-Spain in Trinidad and the Port of Scarborough in Tobago, while remaining under the control of the central government, and can thus be classified a service or PUBLIC port. In 1993, the PATNT commenced work on a restructuring plan. Nine-years later the restructuring strategy was finalized and approved by the cabinet. The restructuring plan had two main components – the division of responsibilities and activities into smaller companies via the process of commercialization, as a precursor to the ultimate goal of privatizing the new cargo handling unit by means of a joint venture with an international port operator willing to invest in the port. Instituting market forces on the container port's operations and the elimination of cross-subsidization were

primary goals of this commercialization; however, the central objective was to find a partner to help finance a modernization of the container facilities while also rationalizing the work force, thus lowering transportation costs and potentially capturing larger volumes of transshipment traffic, thus improving the local economy through a multiplier effect.

Unfortunately, by the time the restructuring plan was approved in late 2002, transshipment was a saturated industry in the Caribbean Basin. Competing ports, such as Freeport, Colon and Kingston had already oriented their operations. This bureaucratic delay had weakened the position of PPS within the industry, even though it occupied a natural transshipment position in the Caribbean Basin.

Nevertheless, PATNT continued to implement a commercialization process and divided its responsibilities into five units/companies – Cargo Handling, Cruise Shipping, Ferry Services, Real Estate Management, and Marine Services (such as pilotage and tugs) (Baird 2000a). A joint venture with an international port operator was the arrangement of choice for the government of Trinidad and Tobago. The proposed joint venture would involve the creation of a limited liability cargo-handling corporation which would have created a PUBLIC/private port under the *Port Function Privatization Matrix*, with the government retaining a 49% stake while the partner would obtain a 51% controlling interest in cargo handling division (CSA 2003). The port authority would retain ownership of the other business units as well, thus the port authority would act as a landlord and regulator, while maintaining an ownership position in the port operator function. The proposed ownership structure would allow the port authority to maintain

a dominant position whilst benefiting from the new direct foreign investment and the improved operations via world-class management.

Requests for proposals from international port operators were issued at the beginning of 2003. To make the potential investment more attractive, PPS began to upgrade facilities and cancelled debt via an equity swapping scheme which cleared TT\$2.7 billion in debt from the books of PATNT at a cost to the taxpayers (CSA 2003). The new business structure, along with the large debt reduction and improved facilities were still not enough to attract any acceptable bids. It was reported that a bid from ICTSI was given serious consideration, however, by January 2004, Transportation Minister Franklin Khan had publicly declared that all three of the received offers were too low (CSA 2004). The government continued to accept tenders, and engaged in negotiations with a promising bidder early in 2005, however, once again PPS was unable to find a deal that the government could accept (CSA 2005b).

Unsuccessful in their previous two searches for a joint venture partner, the government decided to change strategies and began to seek an international port operator to run the cargo handling function under a management contract. It was within this context that the government of Trinidad & Tobago decided to announce in August of 2005 that they had designs on creating a new port in the Sea Lots area of Port-of-Spain, which would eventually replace PPS as the main container facility on the island. The proposed facility would cost US\$240 million and would provide the island with a state-of-the-art facility and improved land links, yet there were no timelines indicated, and this new facility would negate the recent investments in upgrading the facilities at PPS and the massive debt reduction incurred by the government (CSA 2005a). Whether this

announcement was merely a negotiation tactic or an actual project is unknown as the author is unable to find any further reports on the subject.

Regardless, the shift in strategy bore fruit. Four proposals were received by August of 2005. Negotiations between the government and the preferred management operator, Portia Management Services<sup>10</sup>, took place from November 14<sup>th</sup> to 18<sup>th</sup> 2005. These negotiations culminated with a signed agreement between the two parties on March 14, 2006 (CSA 2006). Portia will manage the port for an initial period of three years and will be compensated USD 1.335 million plus bonuses per annum. Portia has assigned twelve professional staff members as an executive management team, however, it must be noted that Portia is not investing its money in the port (Portia Management 2007).

The stated goals of this contract are for Portia to bring effective management, best operating practices, and increased safety (PATNT 2007b). Embedded within these goals is a rationalization of operations, which is highlighted by labour reform. The port, now managed by Portia, is in negotiations with the *Seamen and Waterfront Workers Trade Union* to create a *Voluntary Separation Package* to reduce the workforce and it appears that the union is aware of the inevitability of this change (PATNT 2007a).

In the end, the ownership structure of PPS did not alter past the commercialization process, which itself is not considered privatization by the traditional UNCTAD definition, which stipulates that there needs to be either a transfer of ownership to, or investment from, the private sector. Using Cullinane & Song's (2001) second definition of port privatization – “the ‘privatization’ of the production of a service that continues to be financed by the public sector” – PPS went from operating as a PUBLIC port to a

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<sup>10</sup> Portia Management Services is the international arm of the UK based Mersey Dock and Harbour Company. They were pioneers in the present privatization phenomenon that started in the UK in the 1980s.

PUBLIC/private port– with a private actor participating in the port operator function in partnership with the public sector, while the public sector continues to provide the regulator and landowner functions. Trinidad was able to meet many of its privatization objectives through this arrangement, such as improved management, the rationalization of labour, with a greater emphasis on market forces in the port's operations. As a result, port charges have decreased, and it is the passage of time will determine whether this has a positive effect on the economy, but there was one objective that this agreement did not satisfy, which was the infusion of direct foreign investment to help modernize the facility without taxpayer's money. This burden rests with either the port financing capital expenditures independently or the continued dependence on public funds.

### **5.2.1 Institutional barriers to privatization**

The experience of Trinidad raises the question – why was it unable to find a partner willing to invest in the port at a level acceptable to the government? Part of the answer rests in the institutional position of the port and how this may have led to an over-valuation by the government and/or lower bids due to a high risk assessments made by the interested firms. PPS did not address its out-dated labour practices prior to privatization, and it was clear that the port remained a high-profile local political issue. In addition, the proposed PUBLIC/private privatization scheme required that the private operator to enter into this joint venture (requiring millions of dollars in investment) in a subordinate position with a Trinidadian government, which had taken the greater part of a decade to merely finalize a restructuring strategy, and still had a controlling interest in a rival port on the same coast line only thirty kilometres away. All of these inter-related

factors were clearly detrimental to the willingness of the private actors to invest millions of dollars in this “regional sub-hub.”

The labour situation at PPS was clearly a problem. The port employs over 700 unionized workers as well as 500 casual workers. The port is one of the largest employers in the city, and layoffs with the spectre of ensuing civil unrest were on the minds of those controlling the restructuring process. A high level of port employment can be contributed to *The Monumental Syndrome* (Goss 1990c). The port can act as means of visible public spending for the government in a nation with serious poverty issues. Providing more people with decent jobs can help legitimize a government, and any change to commercialization would end this aspect of the port. This would not be welcome news to many citizens despite all the negative consequences of having an inefficient port raising prices and/or draining public treasuries. Any prospective partner would be extremely wary of a port with such a legacy and their bids would certainly reflect these concerns. Furthermore, Trinidad’s unwillingness to enact pre-privatization labour reform was in opposition to the recommendations of organizations such as the UN and the World Bank which suggest that labour reform should be completed prior to any port privatization and privatization must not be seen as a means to this end. The Trinidad government, however, was clearly looking for someone else to undertake this unenviable task.

The politicization of the port area is certainly evident beyond the labour issues. The speed of the restructuring process would be unacceptable in a commercial organization. The process began in 1993 and culminated with the consolation of a three-year management contract in 2006. Such displays of decisiveness and swiftness are usually



not attractive in a potential business partner. The elimination of bureaucratic interference is often cited as a motive to privatize a port, as well as a detriment to the privatization process. In the case of PPS, bureaucracy served as an obstacle and was to remain after privatization.

Differing perspectives of value also likely contributed to PPS's privatization complexities. The perspective of the government is that the port is a key part of the country's economy – as a source of income, a significant transportation node, and a major employer. The government thus views the port as an important national asset. The government's assessed value of this asset has been influenced by its local importance, whereas private operators assess the port's value within a global framework, which recognizes the significant competition along the served trade routes, relatively low throughput, the poor condition of the port, poor productivity in the port, labour issues, along with the legacy of debt, bureaucracy, and politicization. These issues each represent risks to a potential partner and likely led to lower bids that were deemed unacceptable by the government.

A further problem that potential partners surely recognized was the duplication of services along PPS's shore. PPS faces stiff international competition, but Point Lisas represented a threat closer to home, and that threat was compounded by the ownership structures in the two ports. Point Lisas is a PUBLIC/private port. PLIPDECO ownership is 51% in the hands of the government of Trinidad and Tobago and 49% in the hands of private shareholders. The government had designs on owning 49% of PPS, and this leads to ambiguity since the government would have significant ownership in two competing ports, including a controlling interest in the competition. The Port of Port-of-

Spain even had a full colour advertisement in Point Lisas' 2001 handbook (pg 20). It is extremely rare to find a company willing to publish the advertising of a competitor in its own promotional material; however, this is the reality in Trinidad. This leads one to wonder where one operation ends and the other begins. Muddled relations such as these can be a significant risk to a private actor.

The difficulties in this privatization process stem from the inherent institutional constructs surrounding the deal. The Trinidadian government was less concerned with privatizing and more concerned with improving its operations and reaping the economic benefits of a more efficient port. The cost of improving the infrastructure and operating the port was secondary; otherwise they would have been more earnest in positioning the institutional structure of the port to favour privatization beyond the debt elimination. Its mission statement illustrates their priorities quite succinctly. The opening portion reads as follows: "To become the most attractive, efficient, customer-oriented port in the region, to achieve and maintain financial self-sufficiency and to be exemplars of corporate performance in facilitating the achievement of national aspirations." (PATNT 2007b)

The first stated motive is to become internationally competitive. Recognizing that the port authority did not possess the ability to neither effectively manage the port nor execute the unpopular decisions necessary to achieve that aim, the private sector was seen as the means to this end. The second motive is to maintain financial self-sufficiency, which harks to the common motive of reconceptualizing a port as a business that makes money, or at least breaks even, rather than a public service which requires public funds to operate and thus a burden on the tax payer. The government clearly saw that the resources

devoted to the port would be more beneficial to society elsewhere. If and when a partner could be secured to operate the port in a profitable manner, the port would then no longer be a burden on the tax payers. Both of these motives have been catalysts to the international port privatization phenomenon, and if the mission statement were finished after these two phrases, the privatization process would have been more straightforward. It is the last motive from this statement that is problematic for international port operators – “...facilitating the achievement of national aspirations.”

Transnational terminal operators operate ports to make a profit. National aspirations may be contrary to such an end. The Trinidadian government remains committed to the port’s role in society. It recognizes the need to improve, yet it still views the port as socially and politically important. This emphasis contrasts the privatization efforts of others where the port has been available to the highest bidder, which is favoured by international port operators. Trinidad, on the other hand, wanted to make the prospective partner the one responsible for carrying out policy, which isn’t typically part of the portfolio of a private actor. In other words, Trinidad was asking potential partners to make significant investments to rehabilitate a poor site, reform a money-losing operation into a profitable one, while conducting labour reform and fulfilling national aspirations. That is a lot to ask of a government, let alone a business. Port operators are able to operate ports, not solve local political issues.

Trinidad needed to create a situation where the new port operator would be part of well formulated policy directive, where the task was to operate the port efficiently and improve facilities, and any political, economic or social benefit would occur indirectly through a multiplier effect. The Trinidadian government instead created a situation

where the operator had to enter into business with the government and its layers of bureaucracy, whom was also their closest competitor, while instituting unpopular labour reform and implementing policy. This is clearly not ideal for any business, nevertheless, there was money to be made and bids were received. The bids, however, were not at the level expected by the government, and this was a function of the institutional circumstances surrounding the deal and the government's over-estimation of the value of the port on the open market.

Trinidad's rejection of joint venture bids and its subsequent acceptance of a management contract demonstrate the government's priorities. It is looking for a partner to bring international standards of best practice, ideally with millions of dollars to invest and the willingness to do its dirty work. It was also not eager to relinquish neither control nor ownership of this important national asset. The end result was a deal that represents a compromise between the desires of Trinidadian government and its apprehensions – a short-term private management contract. They have found the expertise but without the millions to invest and at an annual price of 1.335 million USD plus bonuses.

### **5.3 The case of Freeport**

Freeport's privatization experience is at the opposite end of the port privatization spectrum. Whereas PPS remains firmly in the hands of the public, Freeport is a wholly privatized port. Under the *Port Functions Privatization Matrix*, Freeport is a textbook example of a PRIVATE port, as the GBPA is a private body that performs the functions of landowner, port operator, as well as regulator. It is rare that a private company can have such depth of control, with the UK being the only other prominent example in the

container port industry. Typically a private port operator that functions as the regulator only regulates its port and whatever adjacent property it may own. The GBPA, however, is quite different as it is an autonomous body that is responsible for a number of services that are usually governed by the public sector and apply this power to a vast area well beyond its port facilities, which is seldom seen in the portfolio of public port authorities, let alone private actors. Its control over its jurisdiction is safeguarded until 2054, the end of the Hawksbill Creek Agreement period, which would be considered abnormally long by present standards.

HPH found itself in a unique position with this project, since it did not need to negotiate with public figures. Those negotiations were completed almost 40 years prior to their involvement in Freeport, with the exception of the extension of the duty exemptions negotiated in 1993 between the GBPA and the Bahamian government. The subsequent 1994 deal between HPH and the GBPA was a pure business deal rather than a port privatization, lacking the intricacies and political difficulties that can exist in the process of taking a previously public entity and including private actors. Also, HPH did not have to enter public tenders nor face competition. Strictly speaking, HPH's involvement cannot be classified as privatization since there was not a transfer of ownership from the public to the private sector, or new private investment in a previously public port. The privatization of Freeport occurred 40-years prior with the signing of the Hawksbill Creek Agreement (HCA).

Examining the HCA as a port privatization presents interesting deviations from contemporary port privatization literature, with some important similarities. The most exceptional divergence is the depth of the privatization that is applied to such a large

area. The most common model of port administration employed around the world is the PUBLIC/private approach, where the public sector retains the regulator and landowner functions within the port, while the private sector operates the facilities. In Freeport, being a PRIVATE port, the public sector is essentially absent not only in port administration, but also in the surrounding community. The public sector role has been limited to security in the form of police, justice, and customs services, which are necessary for any port be it public or private. All economic considerations for the port and the surrounding area are regulated by the GBPA. Presently nations are not willing to cede direct economic control over such a vast expanse of its territory.

A further deviation of the HCA in comparison to contemporary privatization schemes is the compensation delivered to the government that ceded control. The HCA required very little from the GBPA for its concession, which is remarkably different to contemporary situations. The HCA 'denationalized' the Freeport/Lucaya area under a Build-Own-Operate-Transfer (BOOT) agreement with an envious term of 99 years; considering the present industry standard is 20 to 30 years for such agreements. Possessing an enormous time frame, HPH has the luxury of patience in realizing returns on their investment. This advantage can be employed in many ways, one being lower port charges, which has been to the chagrin of competing ports trying to match FCP's rates that have been reported to be as low as \$25 for transhipped containers.<sup>11</sup> The HCA inadvertently created a remarkable template for container transhipping success well before container shipping was even invented, let alone the vast application of container transhipment. HPH is reaping the rewards of unforeseen economic benefits sewn 40

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<sup>11</sup> This figure was obtained from an interview with Cpt. Badaloo, former President of the Caribbean Shipping Association in August of 2003 in Trinidad.

years prior to its involvement. A similar agreement is inconceivable in the present market.

The one aspect of the HCA that is congruous with present port privatization literature is its motives. The HCA clearly stipulates that the purpose of the agreement is to develop the economy of the Grand Bahama Island, which ostensibly reduced the pressures on the 1955 public coffers. The central theme of this agreement is to develop a deep-water harbour to act as the catalyst to economic development through international trade. The deal with HPH is a logical extension of this motive. The incentives built into the HCA of no taxes and the elimination of duties on much of the international trade within the region certainly attracted HPH to this port, and in turn HPH hopes that these incentives will attract transshipment related industries to their SABC. The present level of international trade passing through the port must clearly be beyond the expectations of the politicians that drafted this legislation.

Also stipulated within the agreement is a clause to exploit the natural resources of the area, particularly limestone and pine timber. The dredging of the deep-water port was also a harvesting of the limestone. In essence the construction of FCP satisfied two main objectives of this privatization scheme, a successful deep-water port and natural resource exploitation, even if it was not completed in a timely manner.

These HCA objectives, however, were not the catalyst for the partnership between the GBPA and HPH. The motives are purely business related. The local port serviced local needs sufficiently. Much of the port privatization literature focuses on the economic benefits for local industries and businesses from an efficient port, but such motives are lost in this example. This deal was brokered to serve globalizing forces and

capture the potential profits inherent in transshipment business for the benefit of the GBPA shareholders. The GBPA was not actively searching for new port operators, nor new business partners. This is evident by their exclusionary practices when courted by interested investors. The deal between HPH and the GBPA is an outcome of globalizing forces producing a new opportunity for this locality. Any local benefits are positive externalities of this world-class facility.

### **5.3.1 The role of a private port authority**

As a port authority, the GBPA has several ongoing issues that it must address, and its ability to handle these issues will be demonstrative for those dealing with the arguments for and against public port authorities. The three main issues that all port authorities must address are port planning and physical issues, trade and shipping, as well as the role of various actors in the port community. In the case of port planning and physical issues, it has been theorized that the public sector would perform better than the private sector (Goss 1990a). The GBPA, in partnership with HPH, is properly coordinating their investments with a logical and ambitious plan in place with FCP and the SABC. Economically, Freeport/Lucaya has very few resources. The region has always been service orientated with tourism and banking being major industries, however, the downturn in tourism can be explained as an example of poor management. HPH represents a new strategy of growth for the future of Freeport. The effectiveness of its initiatives is yet to be determined. Regardless, The GBPA and HPH are also clearly benefiting from the absence of bureaucratic red tape with these initiatives, which has been one of the main arguments against public port authorities (Cullinane & Song 2001)



Additional concerns relate to exclusion and externalities. How the GBPA deals with accessibility as well as environmental and aesthetic issues will serve to illustrate the potential of private management of public spaces, or serve as an example of the private sector's failure to address these issues. A positive example in Freeport is the accessibility of its facilities to all port users. This has been a central concern with private management in the literature, since certain port users could potentially be excluded in favour of more profitable customers. FCP services the larger ships, whilst the adjacent original Freeport harbour is available to smaller vessels, thus rendering the port extremely accessible.

A negative consequence of the region's private authority is the GBPA's aesthetic strategy of segregation. The tourism facilities are separate from local dwellings, industries and the many shells of incomplete constructions that are scattered throughout the area, and show the everyday circumstances that exist for local residents who do not reside in the resort and airport areas. Freeport/Lucaya is a community of contrasts and simularca, which tells a story of neglect and exploitation as opposed to pina coladas and relaxation.

The environmental impacts of its port construction and corresponding industries are also genuine concerns. The HCA was written over a decade before the first popular modern environmental movements began and such concerns are correspondingly absent. There is no mention of environmental protocol in the HCA and it is unclear whether the Bahamian government has the power to provide oversight for such circumstances.

The second on-going issue, the management of international trade and shipping, has become the most important aspect of the GBPA's portfolio. This is evident in the changes of throughput and the development of the SABC. Albeit more subtle, the roles

of various actors may become the most decisive factor for future growth of the SABC and port throughput as well as economic development in the Freeport/Lucaya area.

The position of the GBPA is certainly unique and represents a situation of great political ambiguity. The present chairman of the GBPA, Mr. Babak, has acknowledged this problem and has vowed to make the private corporation/local authority more accountable (Dames 2006). This issue is compounded by the reality that the GBPA is not a publicly traded company and thus not required to publish its business activities. The position of the GBPA as a public authority with business interests, could have a negative affect on attracting invest in Freeport, especially those that might wish to compete with businesses already owned by the GBPA or its members. The GBPA should identify its core businesses, most notably cargo handling and utilities, and focus on these while eliminating other business concerns to show potential investors that they will be operating on a level playing field; otherwise it may be perceived as too risky to invest in Freeport and its SABC.

From the perspective of HPH, it can be assumed that its position is tempered by extremely competitive external market forces, and it is imperative to its success that Freeport appears as an excellent place to invest, in order to develop a maritime cluster in Freeport, similar to what has developed in Panama (HPH's other major investment in the Caribbean Basin), which would strengthen FCP's position as a transshipment hub. FCP's main concern is losing traffic to competing ports in Jamaica, Dominican Republic, Puerto Rico, USA, and potentially Cuba. They can ill afford to play games with potential investors if they wish for their site to remain competitive. Within this last sentence lays one of the keys to Freeport's success, its global outlook.

Its operations are purely commercial and are responsive to the industry, whereas many private companies find themselves operating ports which are conceptualized by politicians as a local concern first and a global position second. Local political pressures are essentially absent from FCP's mandate and this should be attractive to other businesses, as long as they are able to clarify the position of the GBPA.

The outcomes of all these issues will certainly provide excellent fodder for the port privatization debate, as HPH demonstrates the ability of the private sector to manage total control of its port and surrounding area.

#### **5.4 Conclusions**

The case studies of Freeport, Bahamas and Port of Port-of-Spain, Trinidad demonstrate two extremes in the privatization phenomenon that has swept the container handling industry. There are significant disparities in motivations, process and the resulting success at each port.

PPS had attempted to replicate the common PUBLIC/private arrangement via a joint venture, but they experienced many difficulties along the way and settled for a management contract which represents the least amount of private participation discussed in the literature. Freeport, on the other hand, is a completely PRIVATE port and more. The Grand Bahama Port Authority, a wholly private entity, acts as the terminal operator, landowner and regulator; along with the responsibility of being the local government. The different levels of privatization between the two ports has been the result of differing government policies.

PPS is viewed as a significant national asset by the government. They view the port as an important part of the national economy and an even more important part of the local economy and were not eager to cede complete control. PPS demonstrated many of the arguments against public port authorities, such as the constraints of bureaucracy and the countless delays experienced at PPS while the government decided what to do. The Caribbean transshipment market became very competitive during the dithering, thus limiting PPS's inherent geographical advantage.

Trinidad's rejection of joint venture bids and subsequent acceptance of a management contract demonstrate its intentions. They were looking for a partner to bring international standards of best practice and ideally millions of dollars to invest, while reluctant to relinquish all control. The end result was a deal that represents a compromise between the desires of Trinidadian government and their apprehensions – a short-term private management contract. They have found the expertise but without the millions to invest and at a price of 1.335 million USD plus bonuses annually. The case of PPS is a testament to local politics unwillingness to succumb to international commercial interests. Although PPS's pre-privatization conditions are not unique, their resistance to accept the market value for their asset and their decision to further invest in their infrastructure rather than relinquish control to multi-national corporations were. They were able to achieve some of their goals - most notably improved management and labour reform - yet were unable to find a company willing to invest.

FCP, on the other hand, is simply viewed as a commercial enterprise by all levels of government, and this is unique due to the 1955 Hawksbill Creek Agreement. As a result, FCP developed quickly due to the self-determination granted via the HCA. Furthermore,

the extensive depth of the privatization and its application to such a vast region with many varied functions and for such an abnormally long term, presents a unique situation in the industry which is doubtful to be replicated. The Hawksbill Agreement is from a different era and the advantages for shipping are being realized fifty years after its inception. Hutchison Port Holdings has been able to capitalize on this unique institutional position and has experienced remarkable growth.

The Freeport business model is a private fantasy, while PPS is a political institution that was seeking a private actor to become the catalyst of change in a small troubled port. In an industry that has exploded with opportunity for international terminal operators, it is clear to see why a leading firm, in HPH, was willing to divert from its usual investment criteria of a strong hinterland and invest in a pure transshipment facility in Freeport, whereas the opportunity to invest in a port with a much stronger hinterland at PPS was passed over. The end result is that FCP was able to successfully build upon a piece of legislation that wildly favoured private enterprise, whereas PPS was constrained due to its institutional position. FCP was able to attract clients quickly and respond to their needs without political interference and the port is a success story as a result of these conditions. PPS has been hindered by the government's conceptualization of the port and modernization and growth has stagnated. It has suffered in the hands of an indecisive government which has limited the ability of the port to adapt to the changing market. Meanwhile its competition has blossomed, most notably in Freeport.

# Chapter 6

## Conclusion

### 6.1 Study Findings

Port governance, in particular privatization, plays a major role in shaping port performance. By selecting the two ports of FCP and PPS, which each possess comparable geographical characteristics as potential transshipment centres, differences in performance may be linked to differences in the extent of privatization. Each port is strategically positioned in the basin and has had equal opportunity to succeed. Furthermore, restructuring efforts were initiated at both ports in 1993. By 2007 two very different stories had transpired. Freeport's traffic had exploded while Port-of-Spain's has grown at the similar rate to the basin.

What factors have created this disparity? Freeport serves the most important trade routes in the region and thus has more traffic potential than PPS, which exclusively serves South American trade. Freeport handled more containers than PPS, however, the difference in real numbers is secondary to the change of market share. Freeport has become a significant port since 1993, out-performing its competition; whilst PPS began to be overshadowed by its rivals. Geographic position can explain differences in real traffic growth but cannot explain the difference in relative success. The disparity in facilities has been an important difference between the two, and the development of a given port is the result of management choices; which leads to the second central

question of the study - What have been the roles of the public sector and the private sector in both cases?

The case of Freeport is very unique, and owes its existence to the Hawksbill Creek Agreement, which was signed forty years prior to the initial development of the container terminal. This document inadvertently provided the framework for FCP's success. The HCA allowed the private sector to completely develop the Freeport/Lucaya area with little oversight and eliminated most transaction costs and taxes; thus further suiting Freeport as an ideal transshipment centre, which HPH hopes to expand into a multi-modal export processing and logistics centre. By creating this unique governance structure, the Bahamian government has provided a glimpse of the potential of hub development that is completely guided by transnational terminal operators. The success of Freeport is a testament to the ability of the private sector to develop world-class facilities in a relatively short period of time and capture significant amounts of cargo when granted self-determination. This development has been aided by FCP's geographic location in the context of the transshipment phenomenon, however, it is the unique governance structure that has allowed FCP to thrive. There is not a single port in the Bahamas nor the surrounding islands that compares to FCP. Furthermore, FCP is outperforming its closest competition in Florida - Port Everglades, Miami, and Jacksonville. The common point of divergence is governance.

PPS, on the other hand, is a port that is struggling to maintain its position as a regional sub-hub. PPS has languished as a PUBLIC port with poor performance and facilities, while its competition has modernized through privatization and has reaped the reward of expanding traffic. Puerto Cabello, Cartagena, and most significantly Colon

have each expanded their transshipment traffic after their privatization efforts in the 1990s. Even more troubling is the fact that PPS's growth is less than that of its main intra-national competition, Point Lisas, which was a non-factor in 1993. The primary obstacle for PPS has been its governance structure, which is controlled through several layers of bureaucracy. The constraints of this bureaucracy are most apparent when one considers that PPS and FCP began their restructuring in 1993 and by the time PPS had finalized a restructuring plan in 2002, FCP had already constructed a new terminal that handled 860,000 TEU.

This leads one to wonder why PPS was one of the last significant ports in the region to privatize given the success of its private competition? The answer rests in the way the government conceptualizes its most important gateway. The central government still views the port as a key political asset and has been unwilling to cede control. This explains the thirteen year restructuring process that resulted in a change of management of what are still sub-standard facilities. This is too cumbersome for the present transshipment market and PPS has suffered as a result, while at FCP the port has expanded quickly and rationally and has prospered under the control of HPH.

The examination of the factors behind the differing levels of transshipment success demonstrates that the most divergent factor between PPS and FCP has been governance. Each case has illuminated the many arguments for and against public port authorities in the literature. The case of Freeport demonstrates how effective a transnational terminal operator can be at developing a hub when constraints are absent. Port-of-Spain demonstrates how politics can encumber a port to the point where it is unable to effectively compete in the global shipping market. Governance structures have affected



the development of facilities in a very competitive market, which in turn has created one port with a position to capitalize on an important opportunity while the other's significance in the basin deteriorates.

## **6.2 Study difficulties**

Every effort was made to thoroughly complete this study, however, some questions still remain. The author was denied interviews with important figures in each case. In Trinidad, the Ministry of Transportation and Works was unwilling to grant an interview and in Freeport, the Grand Bahama Port Authority would not grant an interview. These are two very important stakeholders in this study and the research would have benefited tremendously from their input.

As a result of this lack of access, the discussion on Port of Port-of-Spain is based in part on circumstantial evidence. An interview with the Ministry of Transportation and Works would have allowed for increased clarity regarding its role in the privatization effort, and its motivations. In Freeport, a greater sense of the GBPA would have aided in the analysis.

A final weakness of this thesis is that the role of the shipping lines is not examined in detail. In many respects such an analysis is beyond the scope of this research, however, shipping lines are a significant factor in port success, especially in Freeport, where MSC dominates.

### **6.3 Future Research**

This study raises several interesting angles for further research. Firstly, the economic impact of the port privatizations can be undertaken shortly to assess the ability of the port reforms to spawn further economic activity via the multiplier effect. In the case of PPS, the effectiveness of their chosen model of a management contract can be evaluated and whether its delay in privatizing has rendered the port into a continued position of weakness or will the new management team be able to overcome PPS's obstacles and position it for success.

Further research on Freeport's complete dependence on MSC in the context of research conducted by Freemont (2007) may provide further evidence to support his model of convergence hubs and port domination. Related to this is the ability of Freeport to maintain its position in the basin with its complete dependence on MSC's transshipment traffic, since transshipment traffic is fickle and the Caribbean transshipment industry remains very competitive.

The most interesting future research, however, is in the examination of Freeport and its private governance structure. There is plenty of discussion in the literature about the pros and cons of public port authorities and Freeport provides a concrete case of a private port authority. The depth of this private governance applied to such a large area is unique and the GBPA's ability to act as a public governing body while operating as a business will provide some important illustrations about the benefits and drawbacks of private governance.

# Bibliography

- Airiess, C.A. (2001) The regionalization of Hutchison Port Holdings in mainland China. *Journal of Transport Geography*. 9 (3) 267-278.
- Bahamian Government. (1955) Hawksbill Creek Agreement and Amendments. Accessed online @ [http://laws.bahamas.gov.bs/statutes/statute\\_CHAPTER\\_261.html](http://laws.bahamas.gov.bs/statutes/statute_CHAPTER_261.html), September 9, 2007.
- Baird, A. (1999) Analysis of private seaport development: the port of Felixstowe. *Transport Policy*. vol 6. pgs 109-122.
- Baird, A. (2000a) Port privatisation : objectives, process and financing. *Ports and Harbours*. March 2000, 14-19
- Baird, A. (2000b) Port Privatisation: objectives, extent, process, and the UK experience. *International Journal of Maritime Economics*. 11 (3) 177-194.
- Baird, A. (2001) Trends in port privatization. *Ports and Harbours*. January-February, 16-21
- Baird, A. (2002) Privatization trends at the world's top-100 container ports. *Maritime Policy and Management*. 29 (3) 271-284.
- Baird, A. (2004) Public goods and public financing in major European seaports. *Maritime Policy and Management*. 31 (4) 375-391.
- Baltazar, R. & Brooks, M.R. (2001) The governance of port devolution: A tale of two countries. Seoul, Korea: *World Conference on Transport Research*, July. 25 pgs.
- Bassett, K. (1993) British port privatization and its impact on the port of Bristol. *Journal of Transport Geography*. 1 (4) 255-268.
- Beddow, M. (2004) Hub port ambitions. *Containerisation International*. May 2004. 79-83.
- Bennett, M. (1995) Private sector responses to port privatization in India. *Maritime Policy and Management*. 22 (3) 261-264.
- Brennan, J.R. (2002) Brave new world? *Containerisation International*. December 2002, pgs 39-41.
- Brooks, M.R. (2004) The governance structure of ports. *Review of Network Economics*. 3 (2) 168-183.

- Comtois, C. (1999) The integration of China's port system into global container shipping. *Geojournal*. 48 (1) 35-42.
- Cross, B. (2000) End of the empire. *Cargo Systems*. September 2000, pgs 48-49.
- CSA (2002) Point Lisas named 'Caribbean Port of the Year' for second consecutive year. Accessed online @ [www.caribbeanshipping.org](http://www.caribbeanshipping.org), August 14, 2007.
- CSA (2003) Port Authority of Trinidad and Tobago looking for buyers. Accessed online @ [www.caribbeanshipping.org](http://www.caribbeanshipping.org), August 14, 2007.
- CSA (2004) Government rejects bids for Port of Port of Spain. Accessed online @ [www.caribbeanshipping.org](http://www.caribbeanshipping.org), August 14, 2007.
- CSA (2005a) New port to be built in Trinidad. Accessed online @ [www.caribbeanshipping.org](http://www.caribbeanshipping.org), August 14, 2007.
- CSA (2005b) Foreign investment bids for Port of Port of Spain rejected. Accessed online @ [www.caribbeanshipping.org](http://www.caribbeanshipping.org), August 14, 2007.
- CSA (2006) Portia wins contract to manage Port of Spain. Accessed online @ [www.caribbeanshipping.org](http://www.caribbeanshipping.org), August 14, 2007.
- CSA (2007) [www.caribbeanshipping.org](http://www.caribbeanshipping.org) Accessed August 18, 2007.
- Cullinane, K. & Song, D-K. (2001) Port privatization policy and practice. *Transport Reviews*. 22 (1) 55-75.
- Cullinane, K.; Song, D-K.; Gray, R. (2002) A stochastic frontier model of the efficiency of major container terminals in Asia : assessing the influence of administrative and ownership structures. *Transportation Research Part A*. 36, pgs 743-762.
- Dames, C. (2006) Babak says port authority needs to be "more transparent." Accessed online @ [www.jonesbahamas.com](http://www.jonesbahamas.com), August 14, 2007.
- Dekker, N. (2006) Quiet giant steps. *Containerisation International*. February 2006, pgs 60-61.
- De Monie, G. (1998) The impact of structural changes in liner shipping on Caribbean ports. *FAL Bulletin*. Issue 142, 7 pgs.
- ECLAC (1999) Port Modernization: A pyramid of interrelated challenges. LC/G. 2031.
- ECLAC (2007) [www.eclac.cl](http://www.eclac.cl) Accessed October 15, 2007.

- Estache, A. & Carbajo, J. (1996) Competing private ports – lessons from Argentina. *The World Bank Group – Finance, Private Sector, and Infrastructure Network*. Note #100, Dec 1996.
- Everett, S. & Robinson, R. (1998) Port reform in Australia : issues in the ownership debate. *Maritime Policy and Management*. 25 (1) 41-62.
- Everett, S. (2003) Corporatization: A legislative framework for port inefficiencies. *Maritime Policy and Management*. 30 (2) 211-219.
- Eyre, J. (1990) Maritime privatization. *Maritime Policy and Management*. 17 (2) 113-121.
- Fernandez, J.E. et al (1999) Port privatization in developing countries: The case of container terminals. *International Journal of Transport Economics*. 26 (2) 293-314.
- Fleming, D.K. & Hayuth, Y. (1994) Spatial characteristics of transportation hubs: centrality and intermediacy. *Journal of Transport Geography*. 2 (1) 3-18.
- Fossey, J. (2006a) ITOs in sight. *Containerisation International*. April 2006, pgs 78-79.
- Fossey, J. (2006b) Tropical mix. *Containerisation International*. September 2006, pgs 81-83.
- Frankel, E. (1992) Debt-equity conversion and port privatization. *Maritime Policy and Management*. 19 (4) 201-209.
- Frankel, E. (2002) The challenge of container transshipment in the Caribbean. Panama: *IAME Panama 2002*. 18 pgs.
- FCP (2007) [www.freeportcontainerport.com](http://www.freeportcontainerport.com) Accessed December 12, 2007.
- Fremont, A. (2007) Global maritime networks: The case of Maersk.
- Fung, M.K.; Cheng L.K.; Qiu, L.D. (2003) The impact of terminal handling charges on overall shipping charges : an empirical study. *Transportation Research part A*. 37 (8) 703-716.
- Gaviria, J. (1998) Port privatization and competition in Colombia. *Public Policy for the Public Sector (World Bank Group)*. No.167. 4 pgs.
- Goss, R. (1990a) Economic policies and seaports: 1. The economic function of seaports. *Maritime Policy and Management*. 17 (3) 207-219.

- Goss, R. (1990b) Economic policies and seaports: 2. The diversity of port policies. *Maritime Policy and Management*. 17 (3) 221-234.
- Goss, R. (1990c) Economic policies and seaports: 3. Are port authorities necessary?. *Maritime Policy and Management*. 17 (4) 257-271.
- Goss, R. (1998) British Ports Policies since 1945. *Journal of Transport Economics and Policy*. 32, pg 51-71.
- Heaver, T. (1995) The implications of increased competition among ports for port policy and management. *Maritime Policy and Management*. 22 (2) 125-133.
- Helling, A. & Poister, T. H. (2000) U.S. maritime ports: trends, policy implications, and Research needs. *Economic Development Quarterly*. 14 (2) 300-317.
- Hoffmann, J. (1998) Concentration in liner shipping: Its causes and impacts for ports and shipping services in developing countries. ECLAC – LC/G 2027. 101 pgs.
- Hoffmann, J. (2001a) Latin American ports : results and determinants of private sector participation. *International Journal of Maritime Economics*. 2001 (3) 221-241.
- Hoffmann, J. (2001b) Caribbean transshipment hubs and prospects. *Presented in Miami at: TOC Americas 2001*. October 29, 2001.
- Hoffmann, J. (2001c) Latin American and Caribbean common user ports: past and pending reforms. Presented to the Caribbean Shipping Association, Paramaribo, February 2001.
- Hutchison Port Holdings (2007) [www.hph.com](http://www.hph.com). Accessed November 18, 2007.
- Hylton, N. (2003) *Central America, the Caribbean one of most active areas in container port expansion*. Accessed August 14, 2007 online at: <http://www.caribbeanshipping.org/archway/hylton-caribbean.htm>
- Institute of Public Affairs (1994) Why Privatize. *IPA Review*. 47 (2) 28-34.
- IPAPC (2007) Institute Puerto Autonoma de Puerto Cabello website. Accessed online September 12, 2007 @ <http://www.ipapc.gov.ve/>.
- Ircha, M.C. (1993) Institutional structure of Canadian ports. *Maritime Policy and Management*. 20 (1) 51-66
- Ircha, M.C. (1997) Reforming Canadian ports. *Maritime Policy and Management*. 24 (2) 123-144.

- Ircha, M.C. (2001) Strategic planning: Canadian port reform. *Maritime Policy and Management*. 28 (2) 125-140.
- Kent, P.E. & Hochstein, A. (1998) Port reform and privatization in conditions of limited competition: the experience in Colombia, Costa Rica and Nicaragua. *Maritime Policy and Management*. 25 (4) 313-333
- Liu, Z. (1995) The comparative performances of public and private enterprises: The case of British ports. *Journal of Transport Economics and Policy*. 29 (3) 263-273.
- Llacer, F.J.M. (2005) Port privatization in Panama. *Maine Policy*. 30 (4) 483-495.
- Marges, K. (1999) The effects of privatization of seaports on trade unions. Presented at: *The First Meeting of the Inter-American Committee on Ports*. Guatemala October 12-14 1999. 21 pgs.
- McCalla, R.; Slack, B.; Comtois, C. (2005) The Caribbean basin: adjusting to global trends. *Maritime Policy and Management*. 32 (3) 245-261.
- Midoro, R.; Musso, E.; Parola, F (2005) Maritime liner shipping and the stevedoring industry: market structure and competition strategies. *Maritime Policy and Management*. 32 (2) 89-106.
- Morris, R. (2000) A watershed on the Australian waterfront? The 1998 stevedoring dispute. *Maritime Policy and Management*. 27 (2) 107-120.
- Nelson, R. (2005) A tropical issue. *Containerisation International*. August 2005. pgs 73-79.
- Parker, D. & Kirkpatrick, C. (2005) Privatisation in developing countries: A review of the evidence and the policy lessons. *Journal of Development Studies*. 41 (4) 513 - 541.
- PLIPDECO (2000) Point Lisas Handbook 2001-2002. Land and Marine Publications Ltd.
- PLIPDECO (2002) Annual Report 2002. Zenith Printing Services.
- PATNT (2007a) *Quarterly Portside News*. January 2007.
- PATNT (2007b) [www.patnt.com](http://www.patnt.com) accessed September 23, 2007.
- Portia Management (2007) [www.portiamanagement.com](http://www.portiamanagement.com) Accessed November 17, 2007.
- Puerto Cabello Port Authority (2007) [www.ipapc.gov.ve](http://www.ipapc.gov.ve) Accessed August 20, 2007.

- Saundry, R. & Tunrball, P. (1997) Private profit, public loss: The financial and economic performance of U.K. ports. *Maritime Policy and Management*. 24 (4) 319-334.
- Serebrisky, T. & Trujillo, L. (2005) An assessment of port reform in Argentina : outcomes and challenges ahead. *Maritime Policy and Management*. 32 (3) 191-207.
- Shashikumar, N. (1998) The Indian port privatization model: A critique. *Transportation Journal*. 37 (3) 35-48.
- Slack, B. (1993) Pawns in the Game: Ports in a Global Transportation System. *Growth and Change*. 24 (4) 579–588.
- Slack, B. (1994) Ports: public policy issues. *Public Issues: A Geographical Perspective*. Ed. Andrey, J. & Nelson, G. Waterloo: Department of Geography Publication Series.
- Slack, B. (1999) Across the pond: container shipping on the North Atlantic in the era of globalization. *Geojournal*. 48 (1) 9-14.
- Slack, B. & Fremont, A. (2005) Transformation of port terminal operations: from local to global. *Transport Reviews*. 25 (1) 117-130.
- Sommers, D. (1999) Private participation in port facilities – recent trends. *Public Policy for the Private Sector*. The World Bank Group – Finance, Private Sector, and Infrastructure Network. Note #143, September 1999.
- Stevens, H. (1999) *The Institutional Position of Seaports : an international comparison*. Netherlands : Kluwer Academic Publishers. 353 pgs.
- Thomas, B. (1994a) The privatization of United Kingdom seaports. *Maritime Policy and Management*. 21 (2) 135-148.
- Thomas, B. (1994b) The need for organizational change in seaports. *Marine Policy*. 18 (1) 69-78
- Tongzon, J. (1995) Determinants of port performance and efficiency. *Transportation Research A*. 29 (3) 245-252.
- Tongzon, J. (2005) Port privatization, efficiency, and competitiveness : Some empirical evidence from container ports (terminals). *Transportation Research Part A*. 39, pgs 405-424.



- Turnball, P. & Weston, S. (1992) Employment regulation, state intervention and economic performance of European ports. *Cambridge Journal of Economics*. 16, 385-404.
- Turner, H.S. (2000) Evaluating seaport policy alternatives: a simulation study of terminal leasing policy and system performance. *Maritime Policy and Management*. 27 (3) 283-301.
- UNCTAD (1998) *Guidelines for Port Authorities and Governments on the privatization of port facilities*.
- Ward, R. (2003) Too many hubs? *Containerisation International*. January 2003, pgs 60-61.
- Wiltshire, K. (1988) *Privatization : The British Experience*. Melbourne : Longman Cheshire.
- Woodbridge, C. (1997) Terminals battle to become Caribbean hubs. *Containerisation International*. July 1997, pgs 83-85.
- Woodbridge, C. (2001) Caribbean hubs blossom. *Containerisation International*. August 2001, pgs 22-25.
- World Bank (2003) World Bank Port Reform Toolkit. Accessed online @ [www.worldbank.org/ports/toolkit](http://www.worldbank.org/ports/toolkit). Feb 2, 2008.