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COMPARING THE PACE OF PORT INSTITUTIONAL REFORMS IN WESTAND CENTRAL AFRICA TO THE REST OF THE WORLD

By

MONICA ADOKARLEY JOSIAH
Ghana

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DECLARATION

I certify that all the material in this dissertation, that is not my work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own personal views, and are not necessarily endorsed by the university.

.... (Signature)
9TH MAY 2003 (Date)

Supervised by:

Dr. Shuo Ma
Course Professor of Shipping and Port Management
World Maritime University

Assessor:

Dr. Bernard Francou
Associate Professor of Port management
World Maritime University

Co-assessor:

Mr Gary Crook
Chief-Transport Section (Logistics Branch)
United Nations Conference on Trade and Development

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"Morning by morning, new mercies do I see"

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ABSTRACT

Ports all over the world are undergoing diverse types of reforms of increasing private sector participation in their operations. This research topic was chosen by the writer to compare how ports in West/Central African are faring in this global evolution of institutional reforms in the port industry.

In this author's attempt to establish the global trend of institutional reforms in ports, developments in the maritime industry and the global economy that necessitated increased public/private cooperation in the management of ports since the early nineties are discussed. Diverse degrees of private involvement in the various regions of the world are reviewed. The searchlight is finally cast on West/Central Africa to examine the pace of institutional reforms and the type of private investments attracted to the sub-region's ports as a result of these reforms in comparison to different regions in the world. Peculiar problems that retard the sub-region's port reforms efforts are also discussed.

The study establishes from the cases considered worldwide that the volume of traffic in ports positively influences the amount of private capital invested in port projects by private sector players any port reform process. The study concludes that although ports in West and Central Africa are undergoing institutional reforms, the pace is slow compared with the rest of the world. Low container traffic in the ports results in a comparatively low level of private investments in port superstructure; this is worsened by the bad inland connectivity among the countries that limits the hinterland of individual ports. The highly volatile political environment in the region does not help the situation. The study attempts to make recommendations as to how some of these bottlenecks can be minimised to facilitate the reform process in the sub-region's ports.

Keywords: Institutional reforms, Privatisation, Public/Private financimg, Superstructure, Infrastructure,

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LIST OF ABBREVIATIONS

AAPA	American Association of Port Authorities
AU	African Union
CSAV	Compania Sud Americana de Vapores
ECA	Economic Commission on Africa
ECOWAS	Economic Community of West African States
ECT	European Combined Terminals
ECTM	European Conference of Transport Ministers
EDI	Electronic Data Interchange
EPZ	Export Processing Zones
FTZ	Free Trade Zones
GDP	Gross Domestic Product
GHATIG	Ghana Trade and Investment Gateway
GPHA	Ghana Ports and Harbours Authority
HPH	Hutchison Port Holdings
ICD	Inland Container Depot
ICSTI	International Container Terminal Services Inc.
IFC	International Finance Corporation
JICA	Japan International Cooperation Agency
OCDI	The Overseas Coastal Development Institute of Japan
P&O	Peninsular and Orient
PDI	Port Development International
PMAWCA	Port Management Association of West and Central Africa
SAAM	Sudamericana Agencies Aereas y Maritimas
SSA	Stevedoring Services of America
TEU	Twenty Equivalent Units
UNCTAD	United Nations Conference on Trade and Development
VLTC	Volta Lake Transport Company

CHAPTER ONE

1. INTRODUCTION TO THE STUDY

The port industry worldwide has undergone significant institutional reforms with growing private sector participation in a number of activities traditionally considered to be the preserve of the public port authority since the 1990s; a trend set to continue in coming years.

Ongoing global developments such as rapid advancements in information and shipping technology, the shift in international division of work from production to process based (leading to globalisation of production and consumption), as well as demands for better and cheaper services by customers has meant that every component in the supply chain, including ports, be cost effective and competitive.

Cross-border investments by global port operators, mergers/alliances and acquisitions by major shipping lines which strengthens their bargaining power, have added to the pressure on ports to upgrade their facilities and provide better services at competitive rates in order to retain their clients and attract new ones. This entails financial responsibilities which most states and public port authorities find difficult to bear, thus the need to involve private financing and expertise to improve the efficiency and competitiveness of ports.

The outcome of these developments is a public-private partnership in the funding of port infrastructure/superstructure and port operations through organisational restructuring and institutional reforms.

A growing number of public port authorities are divesting themselves of all commercial and managerial operations of their ports to the private sector who are increasingly participating in the ownership, administration and management of ports. These developments in the global port industry have been acknowledged by prominent maritime economist like Baird, De Monie, Juhel, Cullinane and Song just to mention a few. As Juhel (2000) puts it, the most striking reorganisation of the port institutional structure is the growing participation of the private sector in the provision and management of port services.

Private participation in ports is widely seen as a remedy to capital constraints in order to reduce government long-term financial and administrative responsibility of an expensive industry such as a port; as well as injecting dynamism associated with the private sector to improve the operational and commercial efficiency of ports.

1.1 STATEMENT OF PROBLEM

Private sector participation in the management and operation of ports has become the norm rather than the exception. (Cullinane & Song, 2002) A number of ports in both industrial and the developing world have implemented various forms of restructuring. The World Bank identified 112 port projects with private sector participation in 28 developing countries between 1990 and 1998 with Latin America and Asia leading in these reforms (Crook, 2002, p.26). Applying Baird's Privatisation Matrix Function, ports can be categorised into Public, Public/private, Private/public or Private depending on the extent of the public and private sector involvement in the regulatory, land ownership and operational functions of the ports. The Public/private model seems to be the most preferred approach to institutional reforms in ports; of the 100 World Top Container ports, 88 had Public/private status as of 1999 (Baird, 1999). In many countries, port or local authorities grant long-term concessions or management contracts to private companies to provide services especially in the operator functions of the port, and retain the regulatory and landownership functions. West/Central Africa has not been left out of this move towards public-private partnership in ports.

West/Central Africa has 25 countries, 20 of which are coastal states and 5 landlocked states. 33 seaports serve both the coastal and landlocked states in the sub-region. Like other regions of the world, West/Central African ports are implementing institutional reforms; state involvement in ports operations is gradually diminishing. Port authorities are changing status from service to landlord ports and there are moves in recent years to encourage more private sector participation in ports. The President of PMAWCA, Jean Marie Aniele, admits that the region simply does not have the financial resources and expertise needed to modernise and upgrade the ports to international standards, thus the need for private sector involvement. Countries like Cote d'Ivoire, Cameroon, Ghana are in various stages of the implementation of these reforms. Lack of political will and consensus of stakeholders, fragile political situations, small cargo base, undeveloped and inadequate connectivity (leading to small and captive hinterland) are some of the problems that have retarded the progress of port reforms in the sub-region.

The essence of this study is to investigate the pace of port reforms in West/Central Africa and compare it with port reforms in other various regions of the world. In trying to highlight the similarities and differences between the reforms in the region understudy and the rest of the world, the following questions would be considered. What types of reforms are being implemented in different parts of the world? Are West/Central African ports undergoing institutional reforms? If yes, is the reform process similar to the global situation? What kind of public/private cooperation characterises the sub-region's reform process? Do the roles of the public and private sector change after port reforms are implemented? What is the area of focus (i.e. investment in port facilities and operations) of the private sector players of the sub-region's reform process? How similar or different are port institutional reforms in the sub-region compared to the rest of the world? Are there any problems that affect the smooth implementation and progress of port institutional reforms in West/Central Africa?

The study would try answer these questions and to make recommendations on how such reforms can be implemented smoothly in the region taking into consideration the socio-economic setting.

1.2 OBJECTIVES OF THE STUDY

1. To identify the types of port reforms, outlining the traditional functions of port authorities and how private sector involvement affect these functions as well as their objectives.
2. To investigate the trend of port institutional reforms being implemented in various regions of the world, bringing out the diverse public-private partnership emerging in different parts of the world.
3. Examine the pace and the extent of port reforms in West & Central Africa
4. Identify the impact of such reforms on the operations of ports in the region
5. Compare the nature of port reforms in the region with other parts of the world
6. Highlight any peculiar constrains the region encounters in implementing such reforms and make suggestions as to how they can be overcome.

1.3 METHODOLOGY

Relevant information on the types of port institutional reforms and their objectives was collected. Data was collected from various sources including journals, periodicals, articles and books to identify and establish the trend of the on-going institutional reforms in ports worldwide. Internet research was extensively undertaken. Expert knowledge on the area of study was also sought. Questionnaires seeking to establish the type and extent of port reforms in the sub-region were sent to various ports in West and Central Africa. The study is organised as follows:

- An introductory discussion of global developments in the maritime and international transport scene that have promoted port reforms was undertaken. The objectives and options of port privatisation identified in existing literature were considered; Baird's Port Privatisation Matrix Function was used to show how the private sector could be involved in the various functions of the port.

- An overview of the types of port reforms in various regions of the world was undertaken to establish the global picture.

- The role of the public and private sector in these reforms, and the differences that exist in various places is touched upon. A figure by Wiegmans et al (2002) showing the general financial structure of the central actors involved in container terminal investment was adopted to explain the general financial relationship that exists among the various players in the Public\private port model.
- Port reforms in the various West and Central African countries were examined and compared with the global trend bringing out the similarities, differences and the obstacles that retard the progress in port reforms in the region.
- Conclusions are then drawn on the trend of reforms being undertaken in West and Central Africa as to whether it is in consonance with the global trend or has its own peculiar characteristics.

It must however be conceded that some constrains encountered in the data collection exercise for the study are bound to affect the completeness of all the issues relevant to this study. Literature on port reforms in West\Central Africa is very scanty; Response to the questionnaire sent out to ports in the various countries was very dismal and attempts to obtain information from regional bodies concerned with ports in the region yielded little result; this made statistical analysis of the sub-region's situation impossible. The Internet was used extensively to obtain literature on the sub-region's reforms but this did not provide all the required information.

These limitations not withstanding, the study sheds light on the trend of institutional reforms in the port industry worldwide and establishes that West/Central African ports are not left out of the global move. The study highlights the public/private partnership being adopted by various governments in the sub-region especially in the provision of port services, funding of port facilities as well as the factors that retard the progress of the region in this move.

CHAPTER 2

2. Types of port institutional reforms

Introduction

Ports represent a collection of physical facilities and services designed to serve an interchange point between land and sea transport, thus constitute a critical link in the overall logistics or supply chain.

The last half-century has witnessed rapid advancement in information and shipping technology (containerisation, bigger ships, better handling of bulk cargo) and an increasing shift of international division of work from production based to process based. These developments coupled with the growing demand for better services by customers has meant that every component in the supply chain be cost effective and competitive, the port industry being no exception. De Monie (1994, p.1) points out that the need for increased transport efficiency resulting from international sourcing and globalisation of the market place has had a significant impact on ports around the world.

Strong growth in world trade, the unpredictability of trade flows and the ability of ship operators to easily change ports of call as well as the continuous process of change in international transport management towards a much more integrated transport concept in the last decade has placed pressure on the port industry to adapt their roles and functions to a more demanding operational environment to meet the needs of their clients and attract potential ones.

Massive cross–border investments by global stevedores and container terminal operators have in no small way affected ports around the world, this phenomenon adds to the pressure on ports to upgrade their facilities and operations in order to compete with these global players. Alliances, mergers and acquisitions by shipping lines grant them powerful bargaining position during negotiation with ports and terminal operators making it expedient for on ports to improve their services and performance to retain these shipping operators.

According to Crook (2002, p.24), the IMF and the World Bank advocated structural adjustments policies to developing countries that involve the cutting down of public spending and the promotion of commercialisation, corporatisation and privatisation of state enterprises to improve their efficiency; port sector reform often accompanied these policies.

Various literature on the global port situation confirm the fact that most ports are modernising and expanding their facilities to stay ahead of the competition and retain their market share; this translates into capital and financial responsibility that most states or local authorities find difficult to bear.

These developments in the global economy have implications on the national port development strategies as well as legislative, regulatory, and managerial environment within which commercial ports have to operate (Juhel, 2001, p.139).

To conform to prevailing global trend, institutional and organisational reforms in ports have been undertaken in a number of countries since the last decade away from a situation where the public sector plays a central role.

Although a few countries have adopted corporatisation, which entails establishing autonomous entities still owned by government but operating along commercial principles; it is mainly privatisation that has characterised the changes witnessed in the ports sector. According to Juhel (2000), the most striking re-organisation of the port institutional structure is the growing private participation in the provision and management of port services. Baird (2000) adds that responsibilities and activities formerly carried out by public sector port authority employees are now the preserve of private companies; Cullinane & Song (2002) endorse this view and confirm that public port authorities are increasingly moving away from performing all the functions in the port to a growing private sector participation in the ownership, administration and operation of ports. Baird (2000) however cautions that this trend does not imply the complete withdrawal of the public sector from the port industry.

A World Bank study cited by Sherman (1995) outlines the various ways in which a port can be organised as:

a) Publicly owned and operated
b) Private stevedoring in publicly owned facility
c) Private shore-side cargo-handling and stevedoring in public facility
d) Private operating concession in public facility
e) Privately owned and operated terminal

Most port reforms involve a shift from the publicly owned and operated ports to the more private involvement such as the types listed in (b-e) in the previous paragraph.

Generally, actual privatisation refers to the transfer of ownership of public assets to the private sector; in context of this paper however, the definition by Sherman (1995, p.2) is more appropriate, that is privatisation involves

> … a spectrum of options ranging from the "complete" sale of public port assets on one extreme to contractual or leasing arrangements in which ownership remains in the public sector but operational control is delegated in some fashion to private concessionaires.

Notteboom &Winkelmans (2001, p.244) summarise it by the explanation that a port privatisation scheme can involve the whole port, a certain port service or a specific set of port operations.

2.1 Objectives of port privatisation

Anon (1996) observes that private participation in port management and operation has become the norm rather than the exception. (As cited by Cullinane & Song, 2002) Public port authorities are often plagued with cumbersome organisation structures, complicated lines of command, lack of incentives and accountability, outmoded management practices and excessive employment of port labour that necessitates the reorganisation of port management (Juhel, 2000).

According to Baird (2000), the level of efficiency and performance of ports influences a country's competitiveness in the international market; Baird believes that the objectives of port privatisation stems from the notion that access to an efficient transportation system benefits trade; furthermore there is a general belief that private enterprises are more efficient since the need to generate profit motivates them to be more cost conscious, efficient and customer orientated than their public enterprise counterparts.

A variety of factors have been identified to influence the decision of national governments to privatise or restructure their port industry. Cass (1996), Baird (2000), outline the following as the main objectives of port privatisation.

- To improve inefficient and expensive port operation which act as a constraint to foreign trade and stall economic development
- To derive economic benefit from improved port efficiency through the transfer of technology know- how, entrepreneurial and managerial capacity of the private sector. For example multinational terminal operators and

subsidiaries of global shipping lines such as HPH, PSA, APM Terminals know precisely how to meet the ever changing and exacting demand of port users worldwide; they also benefit from economies of scale and experience through their wide geographic scope of activities.

- To reduce governments' long-term financial and administrative responsibility for port labour costs, new port facilities and acquiring cargo-handling equipment.
- To stimulate private investment through the infusion of capital to sustain and modernise port operations
- To downsize port authority and reduce the usually bloated port labour by contracting out provision of port operations and services to the private sector.
- To relieve a financially strapped government by bolstering the national treasury (Sherman, 1995)

Baird (2000) gives the following as the objectives of the UK privatisation:

- To introduce more competition into port operations by removing their public status through diversified activities as well as remove institutional barriers that discourage innovation and isolate port management from the exigencies of the global market place
- To eliminate public monopolies
- To improve the quality of staff through training and motivation
- To broaden share ownership

In spite of all the advantages expressed in the objectives above, most writers on port reforms warn that privatisation of ports bring their own problems and risks. De Monie (1994, p. 3) lists the following drawbacks that could result from port privatisation:

- The risk of the private sector disregarding the statutory 'public service' functions of a port administration as private operators may tend to favour profit maximisation and cost minimisation at the expense of services that are socially or environmentally essential

- The probability of a public monopoly being turned to a private monopoly
- The risk of a poor coordination of investments between public port authority and private sector operators that could ultimately reduce the efficiency of operations at sea to land and land–to-land interfaces.
- Port privatisation could lead to discriminatory treatment of a port's clientele with common users finding themselves in a relatively weaker negotiating than those associated with the private operating company.

2.2 Port Functions

Port functions comprise three main elements namely regulatory, land ownership and operations; these can be privatised individually or collectively. To appreciate the degree of private sector involvement in any port, it is imperative to examine the various elements of their traditional functions; and carefully analyse the distinct activities, roles and responsibilities that can be transferred from a public port entity to the private sector (Baird, 1999).

According to Baird (1999, 2000), the regulatory function involves duties and responsibilities that have been established by statute, reflected in the title 'port authority'. Port regulatory responsibilities include:

- Maintaining the conservancy function e.g. ensuring maintenance of navigable approaches to ports.
- Provision of pilotage services, vessel traffic management and ensuring safe passage of vessels within defined area of jurisdiction
- Enforcement of applicable laws and regulations, particularly relating to health, safety and pollution.

- Licensing port works regarding developments within its area of jurisdiction
- Safeguarding port users' interest against the risk of monopoly formation. Monitoring the performance of port and coordinating policy making with local and national government bodies, plans for future expansion, marketing and promoting the port.

The regulatory function is one essential element of the port which might least be transferred to the private sector. The literature on port privatisation shows most maritime economist arguing strongly in favour of the retention of public port authorities in order to carry out the regulatory function effectively.

The key task of a port landowner according to De Monie, (1994. pp. 5-11) include:

- Managing and developing the port estate
- Planning and implementing port policies as well as development strategies
- Supervising major civil engineering works
- Providing and maintaining channels, fairways and breakwaters, locks, turning basins, berths, piers, wharves.
- Providing or arranging road or rail access to port complex

The operator functions refers to the physical transfer of cargo and passengers between land and sea and operation activities of ports include cargo handling, warehousing, storage, packaging, ship towage, line handling, equipment maintenance, waste disposable, security, ship repair. This function attracts more private sector participation than the two functions already discussed.

The public and private sectors can be involved in diverse extents in the performance of the basic tasks in a port. Table 1 shows the Port Function Privatisation Matrix designed by Baird to show the extent to which the private sector can be involved in the main functions of the port. From Table 1, it is obvious that port can be organised four patterns; these range from a situation where all the functions are performed by the public sector, to all functions being the responsibility of the private sector; with variations between these two extremes – PUBLIC/ private and PRIVATE/public.

Table 1: Port Function Privatisation Matrix

	Port Functions		
Port Models	**Regulator**	**Landowner**	**Operation**
PUBLIC	Public	Public	Public
PUBLIC/private	Public	Public	**Private**
PRIVATE/public	Public	**Private**	**Private**
PRIVATE	**Private**	**Private**	**Private**

Source: Baird, A. J. (2000)

PUBLIC port

In the public or comprehensive port, the government controls all the three functions, thus the public port authority provides and maintains direct responsibility for the management and operation of all port services and facilities; such ports are referred to as service or operating ports. Examples can be found in Singapore, Israel, India and some African states. Contrary to the general claim that the Public port model is the most inefficient of all the alternatives, the port of Singapore has proved to be one of the most efficient ports in the world. A lot of governments are however moving away from this model to include some private sector in the organisation of their ports.

PUBLIC/private port

In the model, the private sector is only responsible for the operational function of the port whiles the regulatory and the land owning duties are in the hands of public sector entities. This type of arrangement is very popular and extensively preferred throughout countries of Europe, North America and Asia. A classification by Cass

(1996) and an update by Baird (1999) on the extent of privatisation in the world top 100 container ports in 1995 using the above matrix showed that there were 15 PUBLIC, 80 PUBLIC/private, 1 PRIVATE/public and 4 PRIVATE and by 1999 the statistics had changed to 7 PUBLIC, 88 PUBLIC/private with 2 PRIVATE/public ports and the rest PRIVATE as shown in Table 2. This shows that more ports are changing form PUBLIC to the PUBLIC/private model.

Saundry & Turnbull (1997) believe that the Public/private model would become even more popular because of its ability to allow the benefits of private sector management to be combined with public and common user interest (cited by Cullinane & Song, 2002)

Two types of ports that can emerge from the PUBLIC/private alternative are the landlord and tool ports. Baird describes a landlord port as one where the public port authority provides the infrastructure (quays, dredging, terminal paving), with the superstructure (handling equipment, warehouses) and stevedoring labour owned and employed by private companies; this type of arrangement is common among European ports.

In a tool port, the public port authority provides both infrastructure and superstructure and leases it to the private sector that sometimes provides port labour. Some maritime economist describe the tool port as a variant of the landlord port, examples of this exist in the France, US, Australia, Portugal and Chile.

TABLE 2- EXTENT OF PRIVATISATION IN THE WORLD TOP 100 CONTAINER PORTS

	PORT MODEL			
YEAR	PUBLIC	PUBLIC/private	PRIVATE/public	PRIVATE
1995	15	80	1	4
1999	7	88	2	3

Source: Cass, 1996 (p.169); Baird 1999

PRIVATE/public port

In this model, the private sector performs both the landowner and operator functions with the regulatory aspect under state control. Examples include Hong Kong, Tilbury in the UK. In Hong Kong, private companies build their own terminals but the government retains responsibility for vessel traffic management and other regulatory policies, as well as planning of new port and terminal development (Cullinane & Song, 2002)

PRIVATE port

In a PRIVATE port, all the three core functions are controlled by the private sector. The UK following its 1991 Ports Act is the only country that has actually privatised its ports (Grosdidier De Maton, 1997). According to Cass (1996), there are many Private ports in the UK including all the 22 ports owned by Associated British Ports and the ports of Liverpool and Manchester, which were transferred to the private sector during the 1980s.

Tull and Reveley (2001) however argue that Baird's model masks the actual degree of involvement of the private sector; for instance it is not obvious from the model whether a private sector involvement in a port operator function entails investment by the private operator as well.

Baird (2000) acknowledges that to establish the true extent of private sector participation in any seaport, it will be necessary to consider the role of the private and public sector with respect to each of the functional activities as well as the actual proportion of public and/ or private sector participation in a port with regard to individual activities.

2.2 Port Privatisation Process

Several options of privatisation of seaports exist; as rightly put by Heseler (2000, p.25), the privatisation process is multifarious in degree and form and does not necessarily mean a transfer of ownership. Methods employed to involve the private sector in ports include commercialisation, liberalisation and corporatisation; others are sale of assets concession, build, operate and transfer (BOT) schemes, joint venture and management (or technical) contract.

Baird (2000) and Cass (1996, pp.40-49;) explain the various privatisation approaches listed above.

Commercialisation

Baird (2000) explains that commercialisation entails dividing the port authority's principal activities into operating units, each functioning as an independent, commercial company. Each company is allowed to procure services from any other company according to market needs and at market rates, while paying the port authority a rental for the premises it occupies. Commercialisation grants management freedom in matters relating to hiring of competent personnel, however procurement and contracting practices are subject to national regulations. The main attraction of this method is the access to public financing for the construction of major capital facilities in the port. This method may allow for the selling of some or all of the shares in each of operating units to the private sector or to employees in the future. Commercialisation could thus be viewed as a stepping-stone towards privatisation. An example of this approach is the Port Authority of Trinidad and Tobago (PATT), which commercialised its activities by creating separate units for cargo handling, property, conservancy, and VTS.

Liberalisation

According to Cass (1996), this approach reduces the public port's organisational monopoly power by allowing the private sector to provide the same services, thus enhances performance through a competitive environment, which normally results in more efficient services. There has been limited application of liberalisation in the UK and Asia.

Sale of Assets

Sale of assets could be transacted through the public offer or issue, competitive tender or a negotiated sale. The public offer involves a full or partial sale of shares to the general public through the stock exchange. One disadvantage of this method is that the company could fall into the competitors or even foreign owned companies. (Baird, 2000; Cass, 1996)

The competitive tender entails the sale of assets rather than shares; with the sale normally open to a company or consortia to bid, and the sale is made to one bidder normally a trade buyer. The bidders may include a group of management and employees in a management/ employee buy out (MEBO) or a management buy out (MBO) where the company is acquired by the in situ management team or a management buy in (MBI), which is the acquisition of the company by an external management team. (Baird, 2000)

A negotiated sale is where the sale is negotiated with a single buyer, which may be a trade buyer or a MEBO. The government is free to select the buyer and the price is determined by negotiation. (Baird, 2000)

Corporatisation

In this approach, a 100 per cent state-owned company is established to take over the business of providing port services, while port assets are leased to the private sector. The aim is to insulate port management from constant intervention by state government as well as remove port authority officials and employees from the responsibility of port operator functions.

The main task of the port corporation is to provide terminals for private sector to lease and operate. Corporatisation has been widely applied in Malaysia and Australia. (Baird, 2000)

Concession

Baird (2000) explains that a port concession involves the port authority giving rights over specified port land to a private entity for a number of years in return for an agreed fee. The property reverts to the possession of the state at the end of the concessionary period, although there is normally an option to extend the agreement. The concessionaire usually makes investments to improve and/or expand an existing port facility. Concessions have been widely used in Brazil, Argentina, Panama, Mexico, Italy and Spain.

Management (or Technical) Contract

In this approach, the port authority retains ownership of the assets and is responsible for provision of further capital; however private contractors provide a package of expertise to effectively operate the port or terminal; i.e. the port authority entrusts a third party with the management of part or all of its facilities and/or services. Management contracts do not involve any major up front investment by the contractor and contracts are granted for a period of at least five years. This method of port privatisation is widely used in the Middle East. (Baird, 2000)

Build operate and transfer (BOT) schemes

In BOT schemes, the private sector builds, finances and operates a port facility for an agreed period, say 25 years, with ownership transferring to the state thereafter. Examples include the Jawaharlal Nehru Port Trust (India) that awarded a $200 million BOT contract for the construction of a 600metre long container-handling quay for a 30-year period. Other examples can be found in Panama (Hutchison International Terminals), Oman (Sea-land), Malaysia (P & O Ports) and Indonesia (Evergreen Marine Corporation). (Baird, 2000)

Joint Venture

This approach entails a port authority setting up a jointly owned independent organisation with one or more other organisations. The 'parent' organisations share the costs and rewards (profit, gained technologies/ expertise). A number of ports in China have used this approach; e.g. Shanghai Container Terminals is a joint venture between Shanghai Port Authority and Hong Kong private terminal operator HIT, Shenzhen Container Terminal is a joint venture between Shenzhen Port Authority and Maersk Sea-land; the Dalian Container Terminal is a joint venture between the Dalian Port Authority and Port of Singapore Corporation[1]

Conclusion

It has been established over the years that private ownership has advantage over public ownership in terms of efficiency. Like Adam Smith (1776), most proponents of privatisation argue that private ownership of ports improves productivity and efficiency through innovation and entrepreneurial dynamism of the private sector, thereby enhancing economic performance. The general manager of P&O ports for Asia, reiterates this view with the comment that "our terminal performance data shows that privatisation always delivers improved efficiency in a port environment" during a conference 'Sea Japan 2002' (Flynn, 2002).

Cullinane and Song (2001, p.190) however observe that there is no proof of a direct causal link between private sector involvement and economic efficiency; and suggest that the appropriate method of measuring the outcome of any reform is to undertake specific empirical analysis to determine the relative efficiencies of alternative forms

[1] This joint venture is between two public sector entities.

of ownership in the context of different exogenous influences in the various cases. This view is summarised in the words of Tull & Reveley (2001), that is "whiles port privatisation has become a global phenomenon, the specific path of privatisation in each country is shaped by each country's institutional and cultural characteristics".

Much as the private sector plays a very important role in the port industry today, the public sector has a responsibility to make ports operate efficiently by creating the atmosphere for a cost- effective utilisation of port facilities as well as an effective cooperation between public and private players to achieve the expected benefits of reforms. Prominent commentators on port privatisation like De Monie (1994), Baird (2000) have repeatedly pointed out that growing private involvement in port is not synonymous with a redundancy of public port authorities. Like many other industries, regulatory measures need to be implemented in tandem with port privatisation policies to prevent potential problems and threats associated with privatisation.

This writer, while acknowledging the efficiency and benefits associated with private sector participation in the port industry believes that the public sector has a critical responsibility to create the enabling environment for the operations of the private sector as well maintaining the public interest of ports. Juhel (2001) endorses this view by his classification of the public sector's role into three areas, namely the catalyst, statutory and facilitator mission. These missions, he explains, require the establishment of a well-defined public authority to ensure openness to competition in the provision of port services, appropriate regulatory arrangements where market conditions necessitate it, physical and regulatory integration of transport network as well as strategies for development planning of ports, environmental and social issues.

The view of Grosdidier de Matons (Cited by Cass, 1996, p.22) that 'it is the cooperation by both private and the public sector, rather than their opposition or conflict that is most likely to reach the desired objectives of economic efficiency, financial balance, quality of service and the preservation of public interest' summarises the relationship that should exist between the public and private sectors in a port institutional reform. This cooperation would bring to bear the best from both sectors to benefit ports in any institutional reform process.

The result of any public/private sector partnership in a port is largely influenced by the peculiar local circumstance; it is therefore expedient that each port undertakes an assessment to determine which functions to retain or delegate to the private sector. In doing so, the level of capital intensity, labour intensity, period of return on investment, maintenance required, the operational and financial capabilities of the private sector to deliver must be considered, in addition there should avoidance of a monopolistic situation.

Crook (2002) re echoes this view by the statement that "reforms are not always successful unless a number of preliminary conditions are satisfied and the proper strategies and procedures are implemented". This writer believes it would take both the private and public sectors to iron out any problems that may exist so as to set in motion the necessary conditions for a successful implementation of any reform process in ports.

CHAPTER THREE

3. Global trend of port institutional reforms

Seaports play a very critical role in international trade, with over 90% of world trade by volume transported by sea; an efficient and competitive port is thus a vital input to the economic development of any nation and influences its economic prosperity to a great extent. In recent times, ports have been continuously integrated into the supply chain due to globalisation of production and consumption and there is increasing demand for cost-effective total logistic solution (e.g. JIT) by manufacturers. The desire of ship owners to reduce the diseconomies of ship size in ports (due to the construction and deployment of large ships) has added to the heat on ports to be efficient. Furthermore, the ever-present quest for favourable terms of trade makes countries desire to cut down port cost, setting in motion a global evolution of institutional reforms as means of achieving high productivity and lower cost in ports.

A number of countries are involving the private sector in various areas of their ports, especially commercial operations, to substitute state monopolies (a common characteristic of public port) with market forces in their bid to be efficient and competitive.

A World Bank official observes that a number of governments faced with the consistent inefficiencies of their public sector operated ports and the low productivity of their services compared with the landlord ports in the western world and the impressive performance of privately-run terminals in some Asian ports, initiated institutional reforms and opened up their ports to private sector participation. (Peters, 1995)

A public-private partnership in port administrations has been the corollary of these global developments in various regions of the world, with more countries joining the bandwagon over time. Baird (2001, May) confirms the fact that trend of institutional reforms on the global port platform is certain to continue and calls for the situation to be closely observed. In more cases than not, port authorities retain the regulatory function and the ownership of land.

3.1 Regional overview of reforms in the port industry

A review of ports reforms worldwide reveals diverse administrative structures in various countries. Various methods of institutional reforms are being pursued by ports of different countries; differences have even been witnessed in ports within the same country. Private sector involvement has been witnessed in the financing of port projects as well as management and operation of facilities.

These institutional changes in the port industry since the last decade have resulted in the emergence of global stevedores whose main area of interest is container terminal and handling activities. Prominent among them are HPH (Hong Kong), PSA (Singapore), P&O Ports (Australia), ICTSI (Philippines) and SSA (USA); others include APM terminals (subsidiary of Maersk Sealand). It is estimated that the first five companies mentioned above handle about 30% of the world's container throughput per annum. (Heseler, 2000) Their activities spread across different locations of the globe, with some regions e.g. Asia benefiting more and Africa benefiting least.

A look at institutional changes in ports in Europe, Asia, Latin America, North America, Australia and Africa is thus necessary to present a clear picture of the global trend to enable the assessment of progress of specific regions using the global situation as a benchmark.

3.1.1 Europe

Ports were solely owned by public sector and government bodies during the post World War II era in Western Europe and the not too distant past in the socialist states of Eastern Europe, however private sector participation has been consistent feature in European ports since the eighties.

According to Notteboom & Winkelmans (2001, p.251), the the container handling business in European port has attracted global terminal operators like HPH, PSA, P&O ports and leading regional stevedoring groups like Hessenatie and Eurogate to invest in ports, there by changing the dynamics of the business. Most of the top operators in the industry operate in the UK, the Hamburg- Le Havre range and the Mediterranean.

-UK

The UK is a pacesetter of private sector participation in port activities in Europe; most commentators on port reforms describe it as the only country where ports have actually been privatised (a one of a kind case in the port industry worldwide!). According to Cullinane and Song (2002, p.70), privatisation of UK's ports began in 1982 following Transport Act of 1981 which privatised the British Transport Dock Board (BTDB) and created the Associated British Ports (ABP) to manage and operate all ports owned by BTDB. By 1984 all the shares of ABP had been sold, with 49% being offered to private investors in 1983 and the rest being floated public on the stock market the following year.

The Ports Act of 1991 that allows for the transfer of Trust Ports to companies limited by shares and those registered under the companies Act further resulted in the privatisation of a number of ports. Most ports in the UK were transferred to the private sector by mid-nineties; examples include Liverpool, Manchester, Medway, Clydeport, Tees & Hartlepool, Forth, Dundee Felixstowe, Thames, Southhampton. Global port and terminal operators are playing active roles in the privatisation process in UK ports, especially in the container handling business. HPH owns and operates Felixstowe, Harwich, Thamesport (London); P&O Ports is operating in ports of Southampton and Tilbury (UNCTAD, 2001, pp.69-70); it comes as no surprise that these five ports are listed among the top 100 world container ports. Many of privatised ports are now operating as private landlords leasing terminals to operators like DFDS/Tor lines, North Sea Ferries, Geest Lines (Cass, 1996, p.40).

Unlike other places in the world where private participation in ports involves leases, joint ventures and concessions with a public body or port authority responsible for the regulatory and landownership, port privatisation in the UK entailed the transfer of all the three core port functions to the private sector. Baird (2000, p.184) notes that the state no longer plays any meaningful role in the ports. For instance, the private sector is solely responsible for all the key functions in the ports of Southampton, Liverpool, Thamesport, Medway, the former railways port (now owned by Sweden's Stena Line). Tilbury and Felixstowe have regulatory powers within their respective port estates that do not extend to the navigable approaches outside their port. (Baird, 1999) Private port operators in the UK are self-regulating; raising concerns of whether the interest of the public would be considered in the following

- The use of the foreshore since it belongs to all and must be freely accessible
- The operations of the ports and their impact on the environment, road traffic
- Ensuring that there is inter and intra-port competition to avoid the creation of private monopolies.

Baird (2000), De Monie (1994), De Matons, Goss (1990) and many other writers believe that a public regulatory body is necessary to implement measures to protect the public interest of the ports and make up for the failure of the market in provision of infrastructure that do not directly bring returns to ports e.g. dredging of channels.

Another problem UK's privatisation process is the prices at which the ports were also sold, according to Baird (2000), most of them were given away for 5 –25% of the real values. For instance, Medway sold for £13.2 million in 1992, but was acquired for £104 million the following year by Mersey Docks and Harbour Company (MD&HC); also Clydeport was sold at £11.2 was floated on the stock market with market capitalisation of about £60 million. He argues that the discounted rates are a form of state aid (which The UK frowns upon) and an interception of economic rent that has only made former port officials millionaires overnight at the expense of the taxpayers' money.

In addition the whole privatisation exercise was characterised with policy inconsistencies e.g. some ports freely exercise all three key functions of ports, others like Felixstowe have regulatory powers restricted within their navigable waterway; the refusal of sale of some of the ports to foreigners whiles some were sold to foreign companies.

-Northwest Europe

Northwest Europe's coast is lined up with most of the major ports in Europe (a unique feature on global standard); these include the Ports of Rotterdam, Antwerp and Hamburg. The dense concentration of large ports, coupled with the good connectivity of roads, rail and inland waterway among the various countries within the region and the disappearance of national borders due to membership to the EU results in intense competition among the ports. Private sector participation in port financing and operations is an integral part of the existing competition, especially in the container handling business.

In spite of the diverse history, politics, economics and the legal systems that have developed in the different countries of Northwest Europe over time, most of the ports in the region are similar in structure and operate within the same basic regulatory frame work i.e. port authorities act as landlords and form part of the public administration with no separate legal status. Typical examples can be found in ports within the Hamburg-Antwerp range. The local authorities lease port infrastructure to private stevedores including international/regional terminal operators and shipping lines; these private operators invest in terminal facilities, which they invariably operate and manage. (Cass, 1996)

In the Port of Rotterdam (Netherlands), the Rotterdam Municipal Port Management is responsible for the port infrastructure, which it leases to private stevedores who in turn provide the required terminal superstructure. A number of global terminal stevedores operate and finance a significant number of investments in the port, currently the largest container port in Europe. For instance, in 1999, HPH gained 35% ownership of ECT after the Directorate IV of the European Commission ruled that 50% intended purchase by HPH would give it dominance in the Northern European container market; 35% was acquired by a Dutch consortium (which was scheduled to acquire the other 50% with HPH). A third party acquired the remaining 30%. (UNCTAD, 2001) In Maassvlakte (Rotterdam), HPH together with P&O Nedlloyd are constructing a new major container terminal – Euromax; whiles APM Terminals is operating the Maersk Delta in the same area, inaugurated in October 2001.

The situation is no different in the Port of Amsterdam; a public/private partnership exists in the port. In 1996, Ceres Terminals bought Combined Terminals in the Port of Amsterdam and in 2000 won approval to jointly fund an indented berth that would enable cranes to work on both sides of a vessel with the Port Authority of Amsterdam. (Heseler, 2000)

According to Notteboom and Winkelmans (2001, pp.245-246), although port authorities in Belgium still have strong ties with their respective municipal authorities through the ownership structures, the Harbour Decree in 1999 made ports more autonomous and decisions are made on independent basis; making port managers more accountable. The Municipal Port Authority of Antwerp is a limited company with shares fully owned by the city (UNCTAD, 2001); terminal operators like ACT, Noord Natie lease sites from the port authority and provide their own superstructure. (Cass, 1996) PSA Corporation of Singapore is currently a major shareholder in Hesse-Noord Natie (an amalgamation of the former Hessenatie and Noord Natie) Terminal; also in Zeebruggee a Florida based fruit juice producer has invested in a production and packaging fruit juice unit in the port to be operational by 2003 (Woodbridge, 2002 June)

The City of Hamburg's Ministry of Economic Affairs (Germany) is charge of the day-to-day operations of the Port of Hamburg. Its responsibilities include building and maintaining infrastructure, fixing harbour dues, traffic regulation and conservancy. The ministry leases out areas of the port to private operators, who mainly run cargo-handling activities and employ their own cargo handling personnel. These companies provide their own superstructure e.g. pavements, gantries, van carries. (City of Hamburg Handbook, 2001/2002) It must be mentioned that the city apart from its port authority function, owns the largest stevedoring company in the port (HHLA), making the Port of Hamburg both a service and a landlord port. (Baird, 1999)

The State of Bremen (Germany) established its port authority as a limited company with 100% shares in 2000. (UNCTAD, 2001) Private operators like Eurogate (a merger between Eurokai and BLG) operate one of the biggest container terminals in the Bremenhaven. (Hesler, 2000)

Public finance continues to be injected into private sector port projects in Northwest Europe. For instance, in the Netherlands, a 50-50 split is planned between Municipal Authority and the private sector for the $444 million Euromax Terminal being proposed by ECT and Nedlloyd in Rotterdam; also in Germany, the proposed deepwater container port in Wilhemsaven might have financial support from the Government of Germany (UNCTAD, 2001)

The literature warns of a danger of overcapacity due to the high concentration of container terminal investments in the ports of Northwest Europe; Heseler (2000) comments that in spite of low earnings and the steady decline in their utilisation of the terminals in recent times, these investments are still undertaken due to fierce competition and the political importance of ports in the area. He reveals that the cost from overcapacity is not fully borne by the terminal operators, since the state and municipals authorities apart from financing port infrastructure occasionally subsidise superstructure.

Southern Europe

As witnessed in other parts of the world, private port operators including international terminal operators and shipping lines continue to increase their activities in Southern Europe since the nineties. According to (Wiegmans, Ubbels, Rietveld &Nijkamp, 2002, p.8), the move towards landlord port model in Southern Europe, where port authorities and/or the state were until recently responsible for almost all port investments has resulted in a gradual convergence in financial structures in ports of Northern and Southern Europe

In France, ports are treated as public service organisations as a matter of national policy. In recent times, although the public port authorities still perform all the functions in small ports, big ports like Le Havre have the infrastructure and superstructure provided by the port authority and government after which they are leased to private operators in line with the tool port concept.

New ports are being built to serve as load centres for transhipment and relay traffic on the Europe–Asia route in the Mediterranean. For instance, Maersk Sealand operates a transhipment centre in Algeciras (Spain); PSA Corporation owns and operates Voltri Terminal Europa (VTE) in Genoa, Venice Container Terminal in Italy and a 1.3 million TEU Terminal in the southern port of Sines in Portugal. P&O Ports as of 1998 had 50% stake in Gruppo Investimenti Portuali and Genoa's South European Container Hub terminal in Italy. Plans are far advanced to involve private sector in the transhipment hub in Marsaxlokk by the Maltese government. In Greece, there has part sale of the port of Piraeus by the government and Thessaloniki Port (the first port to be privatised in Greece), has been listed on the stock exchange and currently has 25% shareholding in private hands. Plans are underway float list the port of Piraeus on the stock exchange soon. (Lloyds List, 2002, June 6) P&O Ports has been reported to be interested in the privatisation of Piraeus and Thessaloniki. (Heseler, 2000)

-Eastern Europe

According to Wild (cited by Cass, 1996, pp. 79-80), a number of countries in Eastern Europe are developing a hybrid or partial privatisation of their ports following the collapse of the iron curtain. A number of ports in the region are gradually moving from the situation where the state was responsible for all activities in the port. In Poland for instance, all the three ports Gdynia, Gdansk, Szczecin-Swinouiscie took on landlord status during the 1990s; countries like Latvia, Lithuania, and Estonia have not been left out. The Port of Rostock in East Germany undertook some reforms in the 1990s after the unification of Germany. Russia privatised twenty-one of its by the end of 1995, these include St Petersburg (Cass, 1996, pp.77-92).

Although most of these reforms have not been easy, some of these countries e.g. Poland, are determined since these policies as part of the pre-requisite to join the European union

Private participation in ports is certainly developed in Europe; although currently Western Europe is leading in terms of private investments (with ports in the Hamburg-Le Havre Range benefiting from what some commentators describe as 'over' investments), Southern Europe is following closely with Eastern Europe are gradually warming into the move.

Southern Europe's proximity to Asia and Africa gives it the prospect of attracting more port investments as loading and relaying points for cargo to and from the two continents; with the talk about mega-ships, the Mediterranean is likely to benefit from the construction of more off-shore terminals by the private sector to handle vessels on the Europe-Asia route.

The opening up of Eastern European economies to trade and investments after the collapse of the Soviet Union and membership of some countries to the EU would act as a catalyst for more port investments in Eastern Europe that is likely to be championed by the private sector in the not too distant future.

3.1.2 ASIA

Asia's port industry has witnessed significant changes due to private sector involvement since the nineties. This is especially true in East Asia which apart from its booming trade in manufactured goods with the US and Europe, is positioned at the centre of two of the three main East-West routes i.e. the Transpacific and Asia-Europe routes. The presence of numerous hub ports of varying capacity has in no small way contributed to attraction of the private investors in the region's port. Peters (1995) points out that funding and management of port investments through public-private partnerships have existed for many years in some Asian economies, notably in Hong Kong and Japan, especially in the area of container terminals.

Cullinane and Song (2001) observe that port reforms in Asia is unique compared with other regions of the world; with the most obvious trend being the growing private sector ownership and operation of container ports/ terminals, the proliferation of dedicated carrier operated terminals and joint ventures in port operations.

Global terminal operators like HPH, P&O and PSA are actively involved in port reforms in Asia. Carriers like Maersk-Sealand, Evergreen, APL/NOL, Cosco, Hanjin, P&O/Nedlloyd as well as some Japanese and Korean Carriers manage and operate dedicated container terminals independently or in partnership with government bodies or investment institutions.

Like most places in the world, majority of Asian ports and terminals are shifting from the pure PUBLIC model towards the PUBLIC/private model of port administrative structure, where the landowner and regulatory function are maintained under public sector control.

The Port of Hong Kong is the largest container port in the world, handling over 18 million TEU in the year 2000. According to Cullinane & Song (2001, p.179) the Hong Kong Special Administrative Region (HKSAR) owns the land in the port; the Marine Department of the government acts as the Port Authority and deals with all navigational matters, finances port infrastructure and concessions them under long-term leases to private operators. For instance, HPH is in charge of 88 % of the Hong Kong International Terminal (HIT) and 44 % of Cosco-HIT; also the River Trade Terminal is currently wholly owned by HPH. (Heseler, 2000, p.12) Other private companies operating terminals in the port of Hong Kong include Modern Terminals Limited (MTL) and Sea-land Orient Terminals Limited. (Cullinane & Song, 2001)

The Ministry of Transport (Japan) is in charge of all Japanese ports with specific responsibility for harbour mastering, navigational aids and vessel traffic management. The port authorities of the various municipalities leas fully developed berths to private operators e.g. ocean carriers (tool port concept), who equip and manage them in line with their own needs. For example, private operators in Japan are allowed to provide warehouses, cargo-handling equipment, machine operators and workers, pilotage and towage, specialised operators can construct their own port facilities where necessary to suit their operations. A Cargo Systems supplement, Asia 2001/2002 report indicates that Hibiki Container Terminal (the first Japanese port to be deregulated under the government's private investment initiative) was concessioned to a PSA led consortium in 2001; PSA has a 60% stake in the concession which involves operating and managing the terminal for 25 years, other members of the consortium include Kitakyushu city (10%) and 16 Japanese companies (30%).

The Port of Singapore is described as the most efficient public port in the world and has consistently occupied the second position on the top 100 world container ports for a number of years (it occupied the first position in 1998). Although the public sector owns, manages and controls all the operational aspects of terminals and container terminal facilities in the Port of Singapore, a three-staged privatisation process was initiated in the mid 1990s, two of which were completed as of 2002. The first was the formation of a statutory board, the Maritime and Port Authority (MPA) of Singapore from a merger of the National Maritime Board, the Marine Department and the regulatory department of the PSA in 1996; the second stage was corporatisation in which the state owned Temasek Holdings (Pte) became the sole shareholder of the port. The third and final stage (yet to be implemented) would involve the listing of PSA Corporation on the Singapore Stock Exchange. (Cass, 2002, p.5) PSA Corporation has expanded its activities to ports and terminals in countries like China, India, Yemen, Brunei, Japan and South Korea, all in Asia; as well as Italy and Portugal in Europe making it the 2nd largest global terminal operator after HPH.

Following the impressive performance of the privately run terminals and the effects of the poorly managed ports in Asia, other countries in the region began to involve private sector in their port operations.

Malaysia became the first country to involve third parties in the management of their port facilities in 1986; Port Klang became the first target of the government. Port Klang (which ranked 12th in Cargo Systems Top 100 Container Ports in 2001) comprises two privatised container facilities that are operated by the merged private operators Klang Container Management and Klang Port management. A third facility of the port is 30% owned by Hutchison Port Holdings (Cass, 2002, p.11). In 2001, Maersk-Sealand moved its transhipment activities from Singapore where it had a dedicated terminal to Tanjung Pelepas (Malaysia) causing a major reduction to the number of TEU handled by Singapore.

The Philippines was the second in the region to involve private sector in her ports after Malaysia in 1988 (Cass, 1996), global stevedores like ICTSI are involved the management of Manila's International Container Terminal. (Heseler, 2000)

India's privatisation of container terminals in started in 1990. By 2002, three private container terminals were operating – two by P&O Ports and PSA in Tuticorn. PSA's involvement in Tuticorin is a 30-year concession in 1999 to develop and operate the Southern India port. (Heseler, 2000, p.19) In 1997 P&O Ports was awarded a 30-year licence to build, operate and manage the Nhava Sheva International Container Terminal (NSICT) in Jawaharlal Nehru Port (JNP); the project cost US$ 200 million. P&O Ports has been operating the Chennai Container Terminal since November 2001. The company's 30-year contract in Kandla Container Terminal was suspended in May 2002; after the renegotiation of the bid conditions with the Kandla Board Trust was found unacceptable by P&O Ports. ("Kandla and," 2002, May 21,) In the Port of Colombo (Sri Lanka), South Asia Gateway, an International investor with P&O Ports as a shareholder commenced a US$ 240 million development in February 2000 that increased the terminal capacity fourfold to 1 million TEU in 2002. (UNCTAD, 2001)

In Indonesia, HPH is involved in the Jakarta International Container Terminals and P&O is also operating the Pelindo III Surabaya International Container terminal where it has a 49% stake in the complex at Tanjung Perak. (Heseler, 2000)

Ports in China were formerly under the control of the Ministry of Communication (MOC); however they have all been decentralised except the Port of Qinhuangdao. China began involving the private overseas participation in the management of some of its terminals in 1991; by 1998 thirteen facilities in China were being managed by the private sector. For example, the Shanghai Container Terminal (SCT) is a joint venture between the Shanghai Port Authority and Hutchison Whampoa Limited in 1993; the Shanghai Harbour Bureau (the Port Authority) is responsible for the regulatory matters within the port and to some extent involved in the terminal operations. SCT can thus be classified as an independent operator that is jointly organised by a public entity and a private company. Currently a number of other container terminals in China are being managed and operated by joint ventures between local authorities and foreign companies e.g. the HPH Group owns about 50.5% of the Yantian International Container Terminal; PSA owns 49% of the Guangzhou Container Terminal (Woodbridge, 2002, pp.21-24)

China's accession to the WTO in 2001 has resulted in the abolition of regulations that restrict foreign companies to a minority stake in mainland port facilities from April 1 2002. The regulations will allow foreign investors to take a controlling stake or to wholly own terminal facilities and their operating companies, however this only applies to terminals, not the ports themselves, which will remain in the hands of port authorities ("China to allow," 2002). This would undoubtedly open up China's port industry to even more private sector participation.

In the Middle East, the port industry is gradually opening up to more private sector participation; the container facilities in Oman's Port Raysut and Port Aden (Yemen) as well as the general cargo terminal in Damman (Saudi Arabia) and a liquid bulk terminal in the port of Fujaira (United Arab Emirates) all have private sector involvement. (Somers, 1999, p.7)

The Asian cases discussed do not capture all the port reforms in the region; several other ports in the region are undergoing reforms of increased private sector participation, these reforms are however not evenly distributed; East Asia has chalked more progress than the other areas in the region.

The high level of manufacturing activities, intra-Asian liner trade and the booming demand from Europe and especially the US has resulted in the deployment of larger and faster ships, the formation of mega alliances, greater concentration of cargo flows in ever–larger hub ports in East Asia. In addition, improved inland transportation networks coupled with the port rationalisation process has led to a situation where the hinterlands of even various hub ports are overlapping at the peripheries. (Cullinane and Song, 2001) This situation has increased inter-port competition in Asia e.g. the existing competition between the Ports of Singapore and Tangjung Pelapas in Malaysia. This promotes efficiency in ports of the region and it is not by chance that Asian ports have consistently occupied most of the top positions in the World Top 100 Container Ports since the last decade. As can be seen from the Cargo Systems Top 10 Container Ports in Table 3, five Asian ports occupied the first four and sixth positions in 2000.

Table 3 – Top 10 Container Ports in 2000

RANK	PORT	COUNTRY	NUMBER OF TEUs
1	Hong Kong	China	18, 100,000
2	Singapore	Singapore	17,040,000
3	Busan	South Korea	7,540,387
4	Kaohsiung	Taiwan	7,425,832
5	Rotterdam	Netherlands	6,300,000
6	Shanghai	China	5,613,000
7	Long Angeles	United States	4,879,429
8	Long Beach	United States	4,600,787
9	Hamburg	Germany	4,248,247
10	Antwerp	Belgium	4,082,334

Source: Adapted from Top 100 Container Ports, 2001 (Cargo Systems Supplement, p.6)

3.1.3 Latin America

In the nineties, private sector involvement in the ownership, management and operation of port facilities increased in several Latin America ports in the face of a gradual withdrawal by the public sector due to under investment in ports, fiscal difficulties and the need to promote foreign trade. The public sector however maintained the regulatory function of the ports.

Hoffman (2001, pp.225-224) identifies five common characteristics of the reforms in Latin America's port industry.

- Latin America has many landlord common user ports where governments concession individual terminals for periods between 12 and 30 years to private entities. The private sector invests in infrastructure in addition to owning and operating the superstructure. There are two schemes, the mono operating system - where the same operator with a concession is the only company providing stevedoring services on a given terminal. Example can be found in Buenos Aires where five mono-operators compete within the same port.

The other is the multi-operator system where the public sector provides the infra- and superstructure and rents them out to different private stevedoring companies on hourly or daily basis. Port like San Antonio (Chile) and several Brazilian ports combine the types within the same port by leasing one or two terminals, but leaving other areas as 'tool' terminals to be used by various operators

- There is private sector involvement (through ownership, operations or leases) in specialised ports and industrial terminals; these facilities handle about two-thirds of the region's imports and exports by tonnage.

- There exist entirely privately owned and operated ports and terminals; these include general cargo and container facilities. Examples are Zarate's container terminal (Argentina), Manzanilo International Terminal (MIT) in Panama as well as specialised terminals like Mejillones in Chile (Copper), Euro-America in Argentina and the grain terminals in several countries in Latin America.

- As observed in other regions there is a strong presence of foreign companies in Latin America. These include international port operators like Hutchison, ICTSI, P&O, SSA; and Chiquita, Cargill, Mobil who operate specialised terminals in the ports. Regional companies like SAAM (Chile), Exolgan (Argentina), Multiterminals (Brazil) have also gained strength especially during the privatisation in Brazil and Chile.

- Latin America does not have hub ports like Asia; the only exception is port of Cristobal Colon in Panama, which comprises several competing terminals. The region has many but small and divided common user ports.

In Panama, the first concession was awarded to Manzanillo International Terminal (MIT) in 1994; other terminals were concessioned to Hutchison and Evergreen; these terminals together form a single port in Cristobal Cólon.

Initial attempts to include the private sector in common user ports in Argentina include the concession of six terminals to five operators in the Port of Buenos Aires concessioned in 1993.

In Colombia, the 'Port Societies' are responsible for the infrastructure and own the superstructure, the Port of Cartegena is owned by the 'Port Society' which comprises 95% shares from the private sector and 5% from the public sector.

In Costa Rica, Ecuador, Guatemala there have been labour reforms and increased private sector participation in stevedoring and warehousing; there are also concessions and BOT projects but their governments are still very much involved in port investments. (Hoffman, 2001, pp.227-232)

Common user ports tend to be divided into competing terminals so as to encourage intra–port competition e.g. In Puerto Cabello (Venezuela) several private operators including Intermarca, Intershipping, CSX World Terminals handle containers in the port; another example is the port of San Juan (Puerto Rico) where Puerto Nuevo Container Terminals handle 65% of the container throughput in the Southern part of the port with the remaining 35% handled by Crowley and Trailer Bridge. ("Testing times," 2002, p.3)

The Valparaiso Container Terminal (Chile) was concessioned to the second highest bidder to avoid the dominance of CSAV group that had earlier won neighbouring San Antonio; this is to encourage inter -port competition.

Latin American port reforms have been favourable from the point of view of port users, shippers and consumers than private port operators. Some private port operators have suffered unfair competition (Buenos Aires), delays (Chile), labour unrest (Brazil) and complete failures (Montevideo in Uruguay) with some completely withdrawing involvement. (e.g. Rosario in Argentina).

Obstacles to port reforms in the region include labour regimes, labour/trade unions and labour unrest, frequent changes of administration and unclear legal regimes due to political and institutional instability. In addition ports traditionally providing social services like hospitals, schools and housing that private investor often avoid. Others problems include high illiteracy rates and perceived corruption.

These problems not withstanding, some countries seem to be making more progress than others; according to Hoffman (2001), countries like Panama, Argentina, Mexico and Colombia have made most progress in their port reforms followed by Chile, Brazil, Peru and Venezuela. Countries like Ecuador, Paraguay and Uruguay have made the least progress.

Hoffman (2001) believes that the emergence and growth of Latin American port operating companies is plus to privatisation process in the region.

3.1.4 North America

In North America, the public/private partnership in ports is witnessed once again. Ircha (2001, p.1999) indicates that major commercial ports in Canada were restructured in 1983 with the passing of Canada Ports Corporation Act; the Act did not however address the institutional structure of other public ports e.g. Harbour

Commission and the smaller Transport Canada facilities. Further port reforms were necessitated due to improved continental and domestic competition resulting from good inter-modal systems, federal bureaucratic interference and Ministerial directives.

In 1996, Canada made headway in her port privatisation efforts when Parliament's Standing Committee on Transport (SCOT) passed the Canada Marine Act to convert some of the state owned ports to private ownership. Nineteen ports including Halifax, St John's, Montreal and Vancouver became private Canadian Port Authorities (CPA) with mandate to operate under full commercial discipline (Ircha, 2001, p.213). A provision in the act however classifies these ports as non-profit making private sector corporations; also the government will not withdraw entirely from the scene since it would appoint the ports' board of directors and the port authorities will pay an annual fee for the continued use of federal property and facilities (Cass, 1996, pp. 132-133).

Industry watchers like Ircha (2001, p.217), believe that although the Canadian reform process is a significant step in the right direction, further actions must be taken to allow the CPAs operate as profit making business entities with sufficient flexibility and access to financial resources to effectively compete domestically and with US ports.

The United States has never had a national port plan, and no commercial port or group of ports has ever been under the complete control of the federal government, however the ports function more like public enterprises with the parent government at either the local or state level. Ports continue to be efficient enterprises as they emphasise local autonomy and support economic development that enable them to compete vigorously with each other and their Canadian counterparts (Ircha, 2001, pp.212-213).

A survey in the mid nineties by AAPA of US ports identified 31 operating ports i.e. cargo handling inland from quayside is performed by employees of the authority; 34 non-operating (landlord) ports, where these functions are performed by terminal operator tenants and seven 'limited' operating agencies which combine the characteristics of both operating and landlord ports, leasing some facilities and operating others. In both leasing and operating ports the loading and unloading of vessels is performed by private stevedore companies which hire labour on the basis of a contract with International Longshoremen's Association and International Longshoremen's and Warehouseman's union (Sherman, 1995, p.6).

Some of the private players in the US port industry include the Stevedoring Services of America (SSA), which operates nine terminals at the US west and east coast. (Heseler, 2000)

3.1.5 Australia

A report by Meyrick and Associates Pty Ltd (2001) indicates that the Australian port sector saw unprecedented reforms in the 1990s; an Industry Commission report on port authority services and activities in 1993 advocated the adoption of the landlord model and corporatisation of the port authorities. These changes were followed in most states in Australia; in Victoria these reforms included the establishment of the landlord port of Melbourne (Melbourne Port Corporation) and the Victoria Channel Authority (VCA) – a statutory authority to manage channels in port waters of Melbourne, Geelong and Port Phillip Channels for use on a fair, reasonable and commercial basis. The State Government of Victoria however abandoned plans to sell shore-based and non-port related assets of the Port of Melbourne Authority when it came under intense criticism from users, unions and ship owners in 1994. (Sherman, 1995, p.4)

P&O Ports is an important terminal operator in Australia operating large-scale terminal facilities in each of the major container ports in Australia including Sydney, Brisbane, Melbourne and Freemantle. (Heseler, 2000)

In 1996, the port of Portland was sold to a 50/50 consortium comprising the Scott Group and Infratil Australia; the underwater assets of the port still continued under state ownership.

3.1.6 Africa

Although it took a long way, African ports have not been left out of the ongoing port reforms in the industry. Most ports in Africa were at the design or early implementation stage of commercialisation, restructuring and privatisation in the early 1990s.

Mozambique was the first African country to embrace a comprehensive private sector management of its ports; in 1995, P & O finalised shareholder details regarding the take-over of the lease for the container terminal in the Port of Maputo, Mozambique (World Port Privatisation Highlights, 1995).

As part of the port reforms in Kenya (East Africa), the Mombassa ICD was commercialised under a management contract to Flextow Port Consultants of UK in 1996. In 2000, ICTSI entered into a 75% - 25% joint venture with a local company, Vertex Financial Services, to manage and operate the Tanzanian International Container Services for 10 years, the expected investment is US$ 6.5million; this deal marked the first ever privatisation of a container terminal in Tanzania. ('ICTSI clinches Tanzania .... ' 2000). ICSTI sold its share to HPH in May 2001. (Crook, 2002)

According to Crook (2001), Dubai Port International won a 20-year management contract for the container terminal in Djibouti, which includes US$ 2million investment in human resource and computerisation.

The introduction of the 'National Commercial Ports Policy' in South Africa unveiled government plans to stop the National Ports Authority (NPA) from providing port operations services. The new NPA will be the landlord to South African ports and own the land and port infrastructure; the policy encourages greater private sector participation in port operations through leases and concession. ('South Africa reveals global ...... ' 2002)

In West Africa, countries like Ghana are gradually implementing measures to change the status of the port authority from that of a service to a landlord port (Meletiou, 2000, p.8).

3.2 The Global Picture

The examples cited cannot be said to be representative of all the port reforms taking place in the world or even the countries discussed; indeed a study like this can only capture a small percentage of port institutional reforms in different regions of the world to portray the global spread of the evolution in the port industry towards more private sector intervention and also to enable an inter-regional comparison using the general situation as a benchmark.

A consistent trend identified worldwide is a shift towards increased private involvement in ownership, management and investments in existing common-user ports; statistics that a total of 112 ports projects with private involvement reached financial closure with investment commitments of over US$ 9 billion in 28 developing countries between 1990 and 1998 by Sommer (1999) lends credence to this trend.

The Landlord port model is the most popular; this is confirmed by classification of the World Top 100 Container Ports by Cass (1996) and the update by Baird (1999) captured in Table 2. A few countries, notably Singapore, have corporatised their ports (with the public sector still in charge of all port activities) and there is the exceptional case of the United Kingdom where the public sector plays no role in the core functions of the ports.

Commercial activities in many ports around the world are currently in the private sector domain. The focus of investors is mainly in container terminals activities with the volume of container traffic in a port greatly influencing the extent of private capital invested in any port. International terminal operators and global carriers e.g. P&O, Hutchison, PSA, ICTSI, SSA, CSX, APM and global carriers like Maersk Sealand, Evergreen comprise a significant chunk of the private players in the port reform process worldwide. Their activities and investments are concentrated in ports along shipping routes in Asia, Latin America, Europe, Australia, North America and in recent times Africa. They mainly invest in state-of-the-art stevedoring facilities, which they manage and operate. Statistics in the 2001 UNCTAD Review of Maritime Transport (p.70) indicates that in the year 2000 HPH handled 22 million TEU in 18 ports around the world, PSA handled 20 million TEU, and P&O Ports handled 8.3 million TEU in 24 ports; others are SSA which handled 5million TEU in ports mainly concentrated in the US and ICTSI with 2.7 million TEU worldwide. In 1997, four private global terminal operators (i.e. HPH, P&O, SSA, and ICTSI) handled almost 15% of the world container traffic[2]. (Juhel, 2001, p.156)

The public sector in a majority of countries retains the regulatory and landownership of ports through a port or marine authority either at the local or national level

[2] PSA not included since it is government-owned

depending on the size of the country. The port authorities often take on landlord status, provide the infrastructure such as access channels, quay walls (sometimes with funding from the state) and divest themselves of managerial and financial responsibilities for commercial facilities in the ports. This is confirmed by Wiegmans et al (2002, p. 5) who note that almost all European transport infrastructure are been funded and operated by governments or public bodies.

ECTM (as cited by Wiegmans et al, 2002, p.5) identified some characteristics of investment in port infrastructure that make them more appropriate for public sector financing and risky for private investors. These include

- Long economic life (20 or more years) that results in long pay back periods (15-30 years).
- Large capital requirement leading to high interest cost; government is able to attract loans at cheaper interest rates than the private sector.
- Long waiting period before actual construction of infrastructure due to legal procedures, resistance by society and interest groups and other formalities.
- Irreversibility of the investment once the project has started, increasing the threshold of the minimum rate of return from the investor's point of view.
- Long construction period
- Uniqueness of each project could influence cost estimates due to lack of experience, low learning possibilities and lack of comparability.
- Unsatisfactory return on investment since charges on infrastructure are often based on marginal cost pricing.

The above characteristics bring with them political, financial, construction, operational and commercial risks that make them unattractive to the private sector, thus private sector companies through joint ventures, management contracts, concessions and BOT schemes cooperate with public sector bodies to minimise the inherent risk.

Private sector port operators usually fund port superstructure such as paving, buildings and mechanical equipment that are considered less risky and directly facilitate their activities e.g. cargo-handling, warehousing and equipment maintenance.

Figure 1 was used by Wiegmans et al (2002) to show the general financial structure of the central actors involved in container terminal investment; but it is used in this study to explain the general financial relationship that exists between national/local and port authorities (representing public sector bodies) and private sector entities involved in the provision of any port facilities in a Public\private port model (the model most port reformers are adopting).

As is the norm in this landlord port model, Figure 1 shows a situation where governments or local authorities fund and provide infrastructure such as inland and maritime access to the port for the port authority. The port authority in turn provides terminal structures and other infrastructure and leases them to terminal operators for a period; the terminal operators pay the port authority for the infrastructure and any services the port authority renders to them. Terminal operators provide container-handling services to container carriers and continental transport companies who pay for the services they receive, cargo owners may directly pay part of these payments to the terminal operator.

The roles of the various players in public/private ports do not always conform to the relationship captured in Figure1; diverse implementation procedures, systems of administration and ownership exist regarding areas of direct government, port authority and private sector responsibility. Stehli (1978) and Goss (1986) endorse this view and indicate that although there exist slight differences in the physical methods of port operations, wide variations exist in the systems of administration and ownership in ports around the world[3].

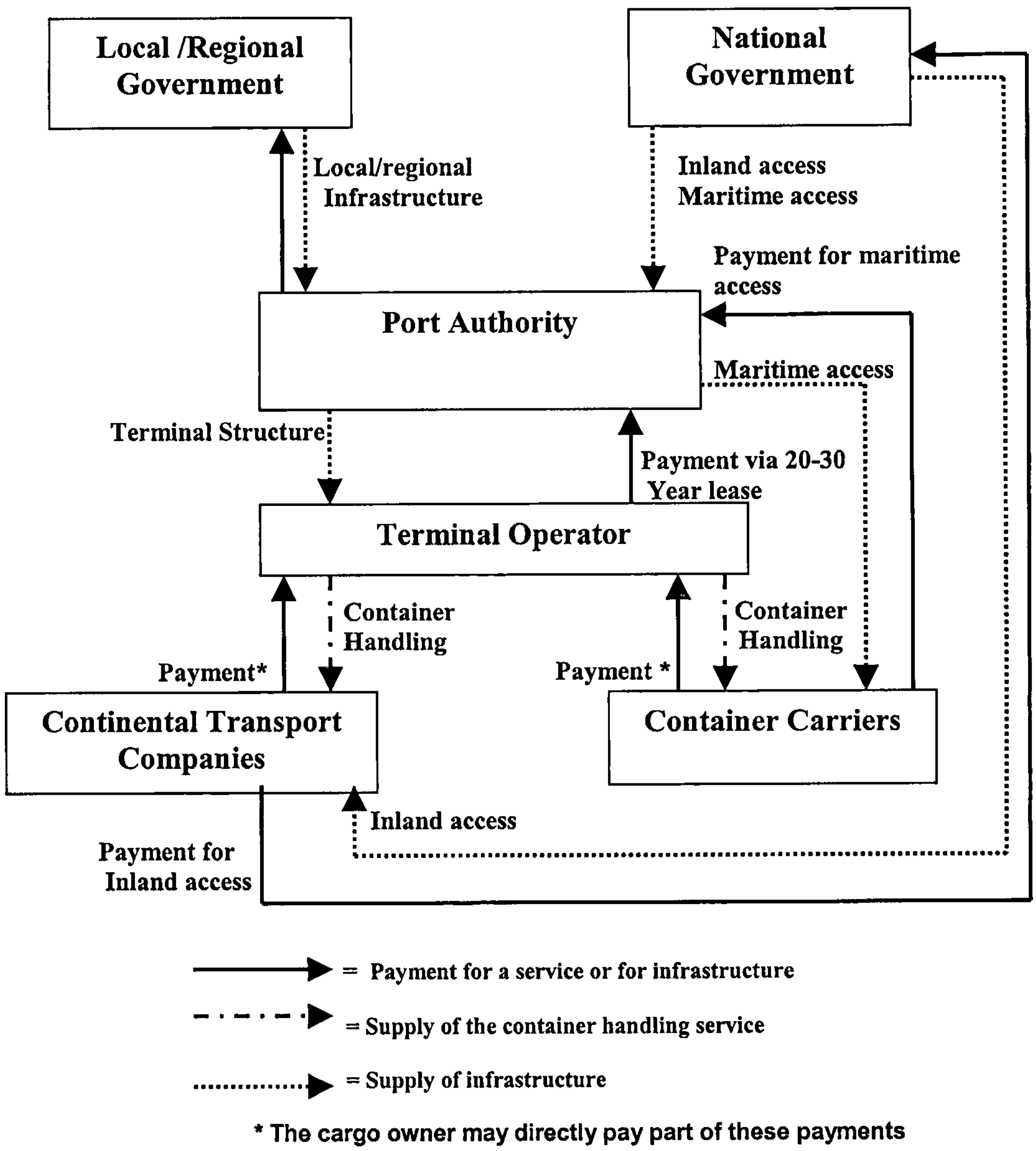

Figure 1: An overview of central actors and relationships in container terminal investments
Source: Wiegmans et al (2002, p.9)

[3] As cited by Cullinane &Song (2002) in their paper 'Port privatisation policy and Practice

In ports classified as PUBLIC/private or landlord, it is not uncommon to find the state/port authorities partially or wholly financing the superstructure as well as being actually involved in the operation of commercial facilities. Cases identified in the literature include

- A city or port authority independently operating a terminal facility in addition to the landowner and regulatory functions e.g. HHLA in Germany
- Joint venture between private sector and local authority in the management and operation of terminals, as prevalent in China
- Port Authority providing advance funding for superstructure e.g. Rotterdam City Authority
- State providing both infrastructure and superstructure and leasing them to private operator e.g. France and some Latin American countries

This writer identifies the following reasons in the literature for the above trend:

- High capital requirement makes it very costly and risky for private sector entities to solely bear the financial responsibility of port superstructure, thus the public sector gets involved to share the risk and encourage private participation.
- The fear of private investors especially foreign companies solely owning strategic assets like port facilities and also to maintain the public good balance of ports
- To prevent private monopolies and inject some degree of competition. For instance in Latin America, the government fund terminals and concessions them to private operators to compete with other private companies owning terminals in the same port.
- Government regulation and policy is another reason. Until recently national regulations in China did not allow foreign companies to solely own terminals, this resulted in several joint ventures between local companies and private investors. It is the policy of the French government to own all public assets

There are also cases where the private sector is entirely in charge; this is mainly common with the oil and mining companies e.g. MIT in Panama and Mejillone (Chile) are solely owned and operated by the private sector.

Table 4 shows the degree of involvement of the private/public sector in the provision of infrastructure, superstructure, operations and ownership in some of the World Top 100 Container Ports.

Table 4. Public and private sector partnership in some top containers ports in the world.

Country	Port	Ownership	Infrastructure	Superstructure	Operations
UK	Felixstowe	Private	Private	Private	Private
France	Le Havre	PUBLIC/private	Public	Public	Private
Germany	Hamburg	PUBLIC/private	Public	Public; Private	Public, Private
Singapore	PSA	Public	Public	Public	Public
Hong Kong	Hong Kong	PUBLIC/private	Public	Private	Private
China	Shanghai	PUBLIC/private	Public	Public; Private	Private
Malaysia	Klang	PUBLIC/private	Public	Private	Private
US	Long Beach	PUBLIC/private	Public	Public, Private	Private
Canada	Halifax	PUBLIC/private	Public	Public, Private	Private
Chile	San Antonio	PUBLIC/private	Public	Public, Private	Private
Colombia	Cartagena	PUBLIC/private	Public	Public, Private	Public, Private
New Zealand	Auckland	PUBLIC/private	Public	Private	Private
South Africa	Durban	PUBLIC/private	Public	Public	Private

Public here implies the state, local, municipal or port authority

Created with information from various sources[4]

A regional breakdown of transactions and investment flows clearly puts Latin America and Asia in the lead regarding private sector involvement in port operations. Meletiou (2000) endorses this by the statistics that of the over 100 private sector

[4] The ownership status of the port was adapted from Cass (1996, p.169)

investments in container terminal related projects between 1990 and 1998, 42% are located in the Latin American and Caribbean region, 38% in East Asia and Pacific region, 7% in South Asia, 5% in the Middle East and North Africa and 4% in Europe, Central Asia and Africa. The distribution of the investments is uneven within the various regions, Sommers (1999) reports that five countries accounted for half of the projects reaching financial closure in 1990-1998 and more than 65% of the committed investments.

A number of factors determine the distribution of the projects indicated above. Large volumes of container traffic in Asian and Latin American ports make them commercially attractive to private investors; thus container terminal investments in these regions (especially East Asia) are phenomenal compared to any other region in the world. The high volume of containerised trade in these regions can be attributed to the factors below:

a) Apart from the sea borne intra-regional trade in the region, East Asia is at the centre of two major shipping routes i.e. the transpacific and transatlantic routes. The region is also noted for the manufacture of mainly high-value cargo like kitchen appliances, furniture and computers for the US and European markets, thus generating high volumes of TEU capable of sustaining the high capital container-related investments. According UNCTAD Review of Maritime Transport (2001, p.91), in the year 2000, cargo flows across the Pacific from the two loading ranges; China (comprising Mainland China, Hong Kong and Taiwan province of China) and North East Asia (i.e. Japan and Republic of Korea) reached 5.5 million TEU and estimated to reach 5.8 million TEU by 2001. Shipment from South East Asia (Asean-4 and Singapore)[5] to US in the same year was 1.1million TEU and expected to grow to 1.15 million by 2001. Mainland China alone accounted for 2.6 million TEU eastbound shipments to the US, although westbound cargo from the US was

[5] ASEAN-4 comprise Indonesia, Malaysia, Thailand and the Philippines

only 0.5 million (China's accession to WTO would open up the huge domestic market to foreign goods and the figure is bound to grow).

b) The presence of several hubs of varying capacity including Singapore, Port Klang and Tanjung Pelepas in Malaysia and Bangkok (Thailand) in South East Asia, Hong Kong (the largest container port in the world) and a number of Mainland China ports (especially Shanghai) makes the region and important loading and discharging points for huge volumes of TEU. This makes their ports attractive to terminal operators.

c) The large population of some countries in the two regions is another factor. The population of China, India, Indonesia and Brazil alone almost account for over half of the population of the world making these regions a big market place for various goods.

d) A number of manufacturing firms continue to relocate to Asia and Latin America from the US and Western Europe to take advantage of the relatively low-cost skilled labour, lenient environmental laws and the good infrastructure; it must be said that much as Africa has even more lenient environmental laws and cheaper labour, it lacks the pre-requisite infrastructure and quality of labour needed for the efficient operation of such firms. High volumes of raw material are thus shipped to the regions for production that in turn generate huge volumes of finished products, mainly high value cargo. These products are exported to the US, Europe, and in Asia among the other Asian countries; containerised trade is thus high in their ports. China accession to WTO and the policy change to allow foreign companies to entirely own companies in China would further boost these developments.

As destination for manufactured goods from other parts of the world (especially Asia and Latin America), ports in Europe and North America receive high volumes of TEU making them target for investments in container terminal projects by the private sector. It must however be said that Western Europe and the US have a long history of private participation in their ports compared to Asia and Latin America, this could be the one of reasons for the low figure for the period cited by Meletiou i.e.1990 - 1998. The opening up of East Europe's economies would further improve the amount of private investments that flow to European ports.

The statistics above show that private investments flow to African ports are about the least; this is not surprising since Africa accounted for a little over 3% of the world container traffic between 1995 and 1998; it must be said that over half of the TEU generated in African ports originate from eight ports in Egypt and South Africa. (UNCTAD, 2001b) A number of port investments in Africa are thus likely to be concentrated in these two countries considering the total container traffic they handle and the policy change to make the NPA of South Africa a landlord port authority in 2000. The fragile political situation in most sub-Saharan African countries coupled with its relatively low container traffic and captive market situations (due to bad inland connectivity) dims its chances of significantly increasing private investments in ports despite the fact that a number of countries are implementing port reforms involving private sector participation.

Conclusion

Port institutional reforms have undoubtedly gained momentum globally since the nineties with diversity of policies and methodologies employed by different countries. One common characteristic so far identified in most port reform processes worldwide is the participation of the private sector; however variations exist in the extent of private sector involvement in ports of different countries; even ports within the same country show differences in the implementation of their institutional reform policy. The regional cases considered so far show outright purchase of ports by the private sector (the UK case), leasing or joint venture arrangements where the private sector partners the public sector in diverse forms to operate ports; others include corporatisation and commercialisation. Diverse forms of private investments accompany these reforms; generally private investments have been concentrated in the area of port superstructure. The public sector in some cases offer financial support to the private sector in the provision of port superstructure.

Governments worldwide are minimising direct intervention in all aspects of port activities and implementing institutional reforms to improve the productive and operational efficiency as well as the financial viability of their ports. Public port authorities are fast changing their roles to landlords and normally retain the regulatory and land ownership functions of their ports.

Private sector entities are always profit oriented, thus the financial viability of any port project determines the extent of involvement of any private operator. The volume of traffic (current and potential) in a port is an important factor in attracting private operators; this becomes even more critical if the private operators are to undertake any investments. It is therefore no surprise that private terminal operators (regional, international and carriers) concentrate in regions with high volumes of container traffic e.g. East Asia, Northwest Europe.

From the ongoing, it is obvious that more countries would reform their port sector in coming years; public/private ports are expected to increase in all the regions – Asia, Europe, North America, South America, Australia and Africa. The pace, especially in terms of the types and cost of private port investments, would however differ in the various regions. Asia would continue to lead as the destination for port investments by global port operators and carriers in the foreseeable future. This is due to its strategic position on the main shipping route (East Asia), the solid domestic and foreign demand (especially by the US) for Asian products (UNCTAD, 2001, p.87) and China's membership to WTO. Municipal authorities in Northwest Europe would continue to support private port operators to invest in their ports so as to sustain the competition thriving in their ports of the region. Latin America due to its closeness to the US stands the chance of being destination for manufacturing industries relocating from the US; such developments would help its port industry to attract more private operators. The port industry in Africa would also register increases in the number of institutional reforms; however the quantum of private port investments the region attracts would be the lowest in comparison to the other regions of the world due to the financial and political risks such projects could face considering the socio-economic and volatile political situations in the region.

Indeed, if the current trend of port reforms in the various regions continues the same way as is being witnessed today then the disparity in the ports of the regions favoured by private operate and the least favoured regions would further deepen. Whiles regions like East Asia, Northwest Europe would suffer over-investments in their ports and the under-utilisation of port facilities, regions like Africa could suffer from under-investments in their port, further marginalizing Africa in the global economic order.

CHAPTER FOUR

4. Institutional Reforms in Ports of West and Central Africa in Comparison with the Rest of the World

Africa can be divided in-to three maritime regions, West/Central, Eastern/Southern and Northern Africa depending on similarities in problems of demand and supply for shipping services as well as safety and environmental protection threats associated with shipping. (Addico, 2001)

West/Central Africa comprises twenty coastal and five landlocked countries. The coastal states are Angola, Benin, Cameroon, Cape Verde, Republic of Congo, Democratic Republic of Congo, Cote d'Ivoire and Gabon; others are Gambia, Ghana, Guinea, Guinea Bissau, Equatorial Guinea, Liberia, Mauritania, Nigeria, Sao Tome and Principe, Senegal, Sierra Leone and Togo; the landlocked states are Burkina Faso, Chad, Central African Republic, Mali and Niger.

4.1 Socio-Economic profile of West and Central Africa

The sub-region's population in the year 2000 was 331.8 million (World Bank, 2001) Nigeria population is the largest (126.9 million) followed by the Democratic Republic of Congo (51.4million); Sao Tome and Principe have the least population of 150,000. (World Bank, 2001) Four official languages, French, English, Portuguese and Spanish, connoting the colonial links of the individual countries, are used throughout the sub-region.

The GDP of the sub-region averaged $4.7 billion in 2001.[6] (World Bank, 2002) Nigeria has the highest of US$ 41.2 billion, while Sao Tome & Principe has the lowest of US$ 50 million. The sub-region is traditionally dependent on primary commodities such as agricultural commodities, minerals and oil. Import and export represent over 60% of the GDP of the most countries in the region. (World Bank, 2001)

The political climate in West/Central Africa is very fragile; most countries were plagued with a series of military coups and bloody civil wars in the eighties and nineties; Cote d'Ivoire, considered the most stable country in the sub-region had its share of a military take-over in 1999 and a rebel incursion in September 2002. Most countries are adopting democratic governance and after twenty long years of civil war, there is finally hope for peace in Angola with the death of the rebel leader Jonas Savimbi in early 2002.

Political instability has had a negative impact on trade, shipping, port activities and the economic development of the sub-region as a whole as most investors perceive it as a risky place to do business.

Sea borne Trade

Sea borne trade in the sub-region is facilitated through the 33 ports; the landlocked countries depend on the coastal states for maritime transport. The ports vary in size, operational capacity and efficiency depending on the level of the economy, population size, volume and type of cargo of the various countries. Countries like Nigeria, Mauritania, Angola and Ghana just to mention a few, have more than one port, but none of the ports serves as a main transhipment port for the sub-region.

[6]The average excludes the per capita GNI figure for Liberia which was not available

The region's coast is one of the few in the world with no dominant hub port. ('Hub and spoke vs. multiple ports of call', 1998)

The use of sea-transport in the sub-region commenced several centuries ago when traders from Western Europe brought in commodities like guns, alcoholic beverages in sailing ships in exchange for slaves, gold, diamond and spices. Over the years, West/Central Africa has become an important source of raw materials for the developed world; about 70% of the region's trade is with Europe, other partners include the Far East and North America. ('Hub and spoke vs. multiple ports of call', 1998) Apart from oil, which is traded between oil producing and non-oil producing countries in the sub-region, intra-regional trade is negligible.

Statistics from MOWCA indicates that 95% of the 247 million tonnes of foreign trade cargo generated in the sub-region per annum (4.8% of the world's volume) is transported by sea. Exports from the sub-region include wood products, timber, cocoa beans/products, coffee beans, cotton, fish/fish products, bauxite, aluminium and oil. Due to the nature of these cargoes they are shipped in conventional and bulk form; even with the increasing containerised shipping since the latter part of 20th century, majority of these cargoes are still shipped in the conventional form due to their low value. In recent times however, coffee/cocoa beans and sawn timber are increasingly being shipped in containers.

Compared to the outbound cargo, majority of imports to the sub-region with the exception of the liquid and dry bulk cargo are containerised. These include machinery, vehicles, building material, electronic goods, clinker, grain and crude oil. It is estimated that 1.3 million TEU per annum are handled in the sub-region's ports with approximately 500, 000 loaded import and 320, 000 export units, the ratio between the import and export of containerised cargo to the region is estimated to be 61:39. ('Hub and Spoke vs. Multiple Ports...........' 1998, p.1)

4.2 The State of West and Central African Ports

The need to physically and institutionally upgrade ports in conformity to current global developments and keep up with demands of contemporary shipping has put ports in West/Central Africa under great pressure to implement reforms to reverse the general situation that hinder their efficiency and competitiveness as well as that of the sub-region's trade as a whole.

Prior to port reforms efforts in West/Central Africa, ports in the sub-region were all service ports with far-reaching powers and public monopoly over all the main services. Public sector characteristics such as excessive bureaucracy, cumbersome organisational structure and decision-making process, lack of initiative (due to unnecessary government intervention) and obsolete management practices plagued the ports. Gyebi-Donkor (2001, p.3) asserts that the above situation, coupled with burdensome legislative framework restrict management from streamlining operations and responding quickly to market needs. For example, until December 2000, vessels leaving Nigerian ports had to obtain a sailing certificate from the National Maritime Authority (NMA); this caused unnecessary delays to ships and created room for extortions/bribes. ("Joy as Nigeria," 2000) Cumbersome customs procedure is another problem; all these sum up to worsen congestion in the region's ports and lengthen the turn-around time of vessels that call the ports.

Most ports in the region are virtually extensions of military zones with the presence of multiple security agencies for purposes of national security, adding to the already cumbersome port procedures. In the eighties, for example, Nigerian ports had as many as 26 security agencies, in some cases one security outfit had two or more different units with duplicating functions at various stages of cargo delivery. (Chidi, 2000, pp.16-17)

Management teams of the region's ports are often as unstable as the political situation in the sub-region; each new government comes into power with its own management team some of which have lack the necessary expertise about operations of ports. A statement by a newly politically appointed director of the Port of Abidjan rightly captures the above situation " Today's change does not indicate that the management team failed, on the contrary, when a new regime is installed, it is within its rights to put its own people in place to apply its programme of government." ("Abidjan's port chief," 2000) Board of directors of most ports consist mainly of government appointees and public sector officials with no stake in ports and basically put in place to serve the interest of government rather than that of port users.

-Infrastructure

Like most developing countries, the supply of port infrastructure is traditionally the responsibility of the state, West/Central Africa being no exception. Recent review in public funding of state infrastructure and the ailing economies of most countries in the sub-region led to a steady decline in government subsidies and funding leaving a wide gap between the demand for port infrastructure/superstructure and available public sector financing resources. For instance, apart from the ports of Abidjan and Douala which have gantry cranes and a few other ports with mobile cranes, equipment in most ports are obsolete making them unable to efficiently and speedily handle cargo, especially containers. Night sailing is rendered dangerous and impossible due to lack of light on the buoys in Nigerian ports. With the exception of the Port of Lome and a few other ports in the sub-region, most of the access channels and the quay drafts in the ports are shallow limiting their ability to receive and accommodate larger vessels.

-Port equipment

The lack of adequate funds also affects the maintenance of port equipment resulting in their frequent breakdown; it has been reported that damage to containers is rife in the Port of Lagos due to inappropriate handling equipment. ("Port look towards," 2000, October 30). Some governments consider ports as sources of budgeted revenue, thus port proceeds are not re-invested; ports often suffer under-capitalisation resulting in obsolete and inadequate equipment. An anonymous maritime expert in Nigeria commented that privatisation would not bring down the cost of handling cargo in Nigerian ports if the government still considers port charges as budgeted revenue. ("Way out west", 2001, p.24)

-IT

Modern information technology facilities like EDI are absent in most of the ports in West/Central Africa thus accentuating of lack of coordination amongst the various organisations within the port.

-Human resource/expertise

Containerisation of cargo with its highly mechanised handling procedures has greatly improved productivity in stevedoring, thus requiring a highly trained and skilled workforce to operate port equipment. The sub-region's ports has a two-fold problem, that is most of the workforce lack the required skill to efficiently handle the equipment; also the technological gains from containerisation requires a reduced dock labour than what exists in most of the region's ports, thus there is overcapacity of dock labour in West and Central African port.

Local transport environment

In addition to the above problems, intermodal links (road, rail and inland waterway) connecting ports to inland areas are often in a bad shape; as reported in the Africa Transport Technical Note – Trade and Transport in January 1998, only few containerised imported cargo leave the ports intact; most containers are stripped in the port and loaded on to trucks for onward delivery inland. Inter-ontinental road and rail connections among the various countries are very limited and some of the few are in a gross state of disrepair; also rail gauges between Anglophone and Francophone countries are incompatible. This promotes a captive market situation in the various ports and does not enhance competition among ports within the same country or among countries.

These problems translate into low productivity of cargo handling, slow turn around time for ships, port congestion and high cost of using the region's ports to ship owners\consignees ultimately affecting the competitiveness of the region's international trade. It has been reported that freight cost is 5% higher in Africa than the average for developing countries and it cost about the same to clear a 20-footer container through the ports of Dakar or Abidjan as it did to ship the same container to a north European port in the 1990s. ("African trade clogs up," 2002) The state also loses revenue as a result, a World Bank study in 1998 revealed that the Port of Cotonou loses US$ 21 million annually as a result of bad management in spite of being well equipped. ('Cotonou Port-World Bank Report', 1998)

The high maritime dependence ratio of the West/Central Africa, as well as the fact that the region derives a high proportion its GDP derived from international trade makes it imperative that the above situation in ports be addressed to enhance the economic development of the sub-region.

De-linking ports from the dominant influence of the state and public sector through restructuring involving the private sector is very much needed to inject efficiency and competition into ports operations in the sub-region.

4.2 Efforts towards institutional reforms in West/Central African Ports

In recent years, African policy makers have increasingly embraced the restructuring of public sector organisations to include private sector participation as tool for improving efficiency, competitiveness as well as mobilizing the much needed funds that states find difficult to provide, ports are one of such organisations. As acknowledged by Jean Marie Aniele, President of PMAWCA and the Director of the Port of Pointe Noire in Congo

> The ports needs to be a place where investments are made, we need to develop logistical platforms, ... Important financial resources are needed and African countries simply don't have those resources. And even if they did have those resources, the government is not known as a good manager. This means that these activities need to be relegated to the private sector. ("Way out west" 2001, p.21)

Most governments in the sub-region have planned or already initiated port sector reforms in an attempt to address the dismal state of their ports; the responses to questionnaire sent out to ports in the sub-region by this writer confirmed the implementation of various forms of reforms involving the private sector, the progress and stage of implementation however varies for each country.

Some countries have long set the pace to distance the state and public port authorities from the management of port operations and services.

-Guinea

As far back as the eighties port operations in Guinea were privatised to comply with World Bank directives. In an interview with the Lloyds list in November 1998, the then Minister for Transport indicated that the State has the responsibility for the provision of infrastructure; and the private sector (mainly shipping agencies) provides port services. Although ports are 100% state funded, government's role is limited to a regulator, playing very little role in their administration and management; the port operates like a private company and pays dividends and profit tax to the government. Autonomous regulatory bodies run the Port of Conakry and the smaller Port of Kamsar; approval of decisions taken by the ports is the responsibility of a board of directors that comprise members of the maritime industry, the chamber of commerce, port users and government representatives. The same article revealed that the planned expansions in the Port of Conakry would be funded without state assistance, the project would include an expansion of the container terminal from 54, 000 TEU capacity to 74,000, extension of the fuel terminal and warehousing. The port authority would raise 10 % and international institutional investors would be sought to finance the rest. (Rissik, 1998)

-Cote d'Ivoire

Another country that has long implemented the public landlord - private operator port reform is Cote d'Ivoire; ports began to be managed along private enterprise principles in 1992. As explained by an official of Port Autonome d'Abidjan (PAA) to Lloyds List, the state has 100% stake in the organisation and appoints the board of directors but the port authority takes independent decisions and later justifies them to government. ("Ivory Coast port," 1994) PAA plays the role of landlord leasing out property to operators on behalf of the state, but port actual operations such as stevedoring, tug-handling, shore-handling, clearing and forwarding are all in private hands. In 1996, there were 10 cargo-handling companies and 30 freight-forwarding companies in the port of Abidjan. Towage is performed by the private sector and government has a 35% stake in order to inject some control since there is no real competition. The port authority is in charge of the gantry crane operation in the container terminal because the private sector was not interested due to very high investment cost. PAA is totally self-sufficient and operates without state assistance; however the State may assist with financing of major extension work in the port. PAA does pay not any revenue into state coffers except company tax. (Rissik, 1996) An Anglo-Dutch consortium including P&O Nedlloyd signed a 30-year BOT concession with the government to develop a US$ 200 million container terminal at the port of Abidjan; this project will include a multi-user container terminal with a capacity of 500, 000 TEU per annum, an industrial free zone, a 100-acre container terminal, an industrial park and a telecommunication gateway. The government would fund the provision of the infrastructure associated with the project at the cost of US$ 60 million.

-Cameroon

In Cameroon, a National Port Authority was formed in 1971 with responsibility for all the ports in the country, a role that was being played by the Ministry of Transport; another reform took place in 1998 that granted the Port of Douala as well as the secondary ports autonomous status. In the Port of Douala, the private sector provides all the services; various private companies operate dedicated berths, which they rent from the port authority. A private company formed by all the stevedoring groups in the port (mostly shipping agencies) operates and manages the container terminal; the government however has shares in the company. The port authority provides paving, gantry cranes and other infrastructure, but the operators do the maintenance of the equipment and also provide some of the light equipment needed for their operations.[7]

-Senegal

Senegal is another country where the Port Autonome de Dakar (PAD) plays the role of a landlord, supplies and maintains basic infrastructure but does not run port operations. Stevedoring, freight forwarding and shipping agency are all performed by private entities and there are moves to involve private operators in the supply and operation of equipment such as gantry cranes. Maersk and SDV play a very dominant role in the operations of the port of Dakar. ("Ports move," 1996)

-Congo

In Congo (Brazzaville), activities such as equipment maintenance in the Port of Pointe Noire were delegated to the private sector over 10 years ago. (Way out west, 2001) The Port Authority signed a co-operation agreement with Portnet of South

[7] Informal interview with a WMU student from the Port of Douala

Africa for management input for running of their port in 1995. ("Portnet in fresh," 1995, August 29)

-Benin

In the Port of Cotonou, the state funds the infrastructure with a state-owned handling company SOBEMAP having monopoly over handling operations in the port, Maersk however owns a dedicated terminal in the port and provides and maintains the equipment e.g. cranes in the terminal, Maersk has entered into an agreement with SOBEMAP regarding the operation of the terminal.[8]

-Togo

Although in the Port of Lome the provision of infrastructure is the State's responsibility and there is public monopoly over handling operations, there are moves to involve more private sector in the provision of equipment and the operations in the port. In a bid to boost the Port of Lome's potential to be the hub port of the sub-region, a US$ 100,000 container terminal is being co-funded by Ecomarine - a West African regional shipping group. Ecomarine was formed by the World Bank and member states of ECOWAS in June 2001 and is based in the capital city of Togo – Lome. (Osler, 2001)

-Nigeria

Plans to implement port reforms in Nigeria have been in the pipeline since the early 1990s, however the government of Nigeria is yet to determine what form it would take. As stated by Babatunde Sanni, NPA's assistant general manager for corporate affairs at a stakeholders' workshop organised by the port authority – "Whether you like it or not, private sector involvement in port operations is a must, ... The extent of private sector involvement is what is yet to be one hundred percent defined. " ("Way out," 2001) The Nigeria Port Authority (NPA) as an operating port authority in charge of the provision of infrastructure, superstructure as well as the supervision

[8] Information obtained from a World Bank Source with the assistance of Professor Ma

of loading/unloading of vessels. ("Special Report," 1991) The NPA has been run on commercial basis since 1992 and operates as a profit-making commercial venture without federal subventions under the supervision of the Ministry of Transport and a 100 % public representatives board of directors. ("Way out," 2001, p.24) There are however plans to make NPA a landlord port authority and delegate more operational activities to the private sector. The Transport Sector Steering and Reform Committee on Privatisation in 2001 recommended to the government to divest 60% of its 100% controlling shares in NPA and retain the rest; 40% of the divested shares should be given to core investors whiles the remaining 20% should be offered to the general public. These recommendations generated a lot of debate as to the allocation of shares ("Federal Government," 2001) Plans are underway to concession at least one port by December 2002. (Onileimo, 2002) The Nigeria Labour Council and the Maritime Workers Union of Nigeria are posing serious resistance to the pending port reforms.

There is some form of private sector participation in cargo handling and storage of cargo in some ports; for instance Maersk-Sealand has invested in a new container terminal in Port Harcourt to plan ahead of the congestion and the nearing capacity of Port of Lagos as well as cater for Chad, Cameroon and the eastern areas in Nigeria where there is a vast business in textile trade. (Rissik, 2000)

<u>-Ghana</u>

Preparations for port reforms in Ghana began in 1986 when GPHA was established from a merger of Ghana Ports Authority (GPA) and the two public cargo handling companies – the Ghana Cargo Handling Company (GCHC) and the Takoradi Lighterage Company (TLC) by PNDC Law 160 as a statutory government corporation under the Ministry of Transport and Communications (MOTC). GPHA's responsibilities included making plans for the development, management and operations of the Ports of Tema and Takoradi as well as to build, develop, manage and maintain the ports. Port reforms constitute a key component of the

GHATIG project; the plans and measures to be implemented in the reform are contained in the port component of GHATIG. A Landlord Port Bill was passed in 2000 to give effect to the proposed reforms. A study financed by the European union in 1993 to prepare a Master Plan for the development of the ports of Tema and Takoradi recommended the following: (Meletiou, 2000)

- Change status of the Ghana Ports and Harbours Authority (GPHA) from a service/ operating port to a landlord.
- Increased private sector participation in port operations to encourage more competition.
- Dredge the depths of the ports to receive and accommodate modern vessels.

In response to a questionnaire sent to the port by this writer in May 2002, the Chief of Corporate Development at the GPHA indicated that the implementation of the reforms commenced in 2001 and would be completed by the end of 2002. The new Port Act in Ghana i.e. the Landlord Port Bill will convert GPHA into a landlord where the port authority would maintain landownership and responsibility for the management of the ports, aids to navigation, pilotage, towage, mooring, berthing, storage, security and provision/maintenance of infrastructure. The draft of the Landlord Port Bill specifies that the procedure for private sector participation in the ports would entail leasing of port land, build-operate-transfer Schemes (BOT) and concession arrangements. As part of the reforms, cargo handling (shore handling and stevedoring), which was mainly GPHA's responsibility (75% stevedoring and 100% shore-handling), weighing, tallying and the maintenance of superstructure have been earmarked to be completely outsourced to private companies. By the end of 2002, GPHA had outsourced a total of 70% of its stevedoring to seven private sector companies representing an increase by four more companies from the initial three private operators. ("GPHA to offload," 2002, p.10).

A master plan by JICA proposed that the container terminal within the Port of Tema (yet to be constructed) should be operated by a single private operator; the possibilities of the single operator could be one of the following (OCDI, 2001)

- One private company such as a shipping or stevedoring company
- A joint venture company of private companies
- A joint venture company of private companies and GPHA

In the latter part of 2002, negotiations began between GPHA and the Ghana Port Consortium (GPS) for the award of a concession to operate and manage the port. GPS would invest about US$ 200 million towards the construction of the container terminal at the Port of Tema. The consortium comprises seven companies including APM Terminals, Bathgate Management Limited (an infrastructure developer), Beckett Ranking Partnership (an international port consultancy) and Bonygues Travaux Publique (a construction company in France). Others are Mersey Docks and Harbour Company of Liverpool, SDV Ghana Limited (Bollore Group) and Sutton Group, Ghanaian partners. . As part of the agreement, Quay 2 at the Port of Tema is being extended and developed into a common-user container terminal. According to the Director General of GPHA, Mr. Ben Owusu-Mensah, the first phase of the project costing US $60 million to be funded by GPHA, has already been awarded on contract and would be completed in 18-months. The consortium would fund the second phase and manage the terminal. ("Ghana Ports," 2002) Plans are underway for a France based fruit company, Fruite Compagnie, to construct and operate a fresh fruit terminal in the port of the Tema.

Currently the board of directors of GPHA consist of both public sector representatives and 27 % private sector representatives; although the private sector representatives are stakeholders in the port, none of them operates in the port.

It must be stated that even before the commencement of these reforms, there was some extent of private sector participation in the operations of the port; companies like Atlantic Port Services, Speedline Stevedoring Limited Services, Express Maritime Services were handling 25% of the stevedoring operations in the port, clearing and forwarding of cargo at the ports was also a private sector responsibility. Manufacturers and mining companies like VALCO, Ghana Manganese Mining Company (GMMC) manage and operate dedicated berths, which they have leased on rental basis from the port authority of Ghana.

In line with GPHA's plans to involve more private sector in the provision of port services and move as much of the operational procedures out of the precincts of the port to ease congestion and reduce the dwell time of containers in the port, the Tema Container Terminal, an off-port cargo terminal was developed by a joint venture between Antrak and SDV at the cost of US$ 10 million in 2001. It is estimated that 60% of containers passing through the Port of Tema would be handled in this terminal facility

-Gambia

Response to a questionnaire to the Gambia Port Authority (GPA) indicates that reforms began in the port of Banjul in 1986. Port reforms in Gambia entails full commercial; GPA is an operating authority, performing all the core functions of the port along strict commercial principles with little interference from government. The Port of Banjul has entered into joint ventures and management contracts agreements in the provision of services as well as a memorandum of understanding with the government regarding performance. The Government of Gambia is the main shareholder of the Port of Banjul; there is however some private sector involvement in cargo handling on quay, storage, tallying of cargo and maintenance of superstructure. The board of directors comprise both public sector representatives and about 30 % representation from the private sector. There are plans for more private sector participation in future.

From the examples discussed, it becomes obvious that West/Central African ports are increasingly changing from being solely operated and managed by the public sector to a public/private partnership.

Port performance in the sub-region has been greatly enhanced by the reforms; a Guinean Minister for Transport indicated to Lloyds List that there had a marked improvement in services to port users as well as higher revenue to government as a result of reforms in port (Rissik, 1998). In Ghana, principal performance goals such as raising the average hourly container handling rate from 12 boxes/hour to 20 boxes/hour and ultimately up to 24 boxes per hour as well as reducing the dwell time for inbound containers from 25 days to 15 days then to 7 days are targeted as part of efficiency improvements of the reform process. ("Special report," 2000) Responses to questionnaire received from the various ports indicated that the reforms have so far showed positive results commercially, financially, socially, operationally and politically; GPHA however indicated it was too early to assess the financial and social impact of the reforms.

The autonomy granted ports during reforms has reduced the bureaucratic procedures involved in obtaining approval for port projects; decision-making is thus expedited and ports are more responsive and proactive to the needs of port users. An official in the Port of Abidjan summarised it in these words to the Lloyds List "We are free to take decisions, invest money and respond quickly to changing demands." ("Ivory Coast port," 1994, June 28) Increased private participation would also reduce the effect of change in governments on the operations and management of ports, with the limited role government plays in public landlord port authority.

The injection of capital through private investors relieves governments and the public sector the financial burden of having to provide every facility required in ports; this enhances the modernisation and upgrading of the sub-region's ports to conform to international standards. For instance, the Tema Container Terminal, the off-port terminal, funded with US$ 10 million by the Bollore group in Ghana handles about 60% of all containers bound for the port of Tema; this relieves government the burden of financing the project and has significantly enhanced cargo reception, storage, clearance capabilities; the congestion within port has minimised as a result. The US$ 200 million container terminal -Lodeco terminal project in the Port of Abidjan is another private sector financed project that stands to further raise the productivity and efficiency of the port.

Another benefit associated with port institutional reforms in the region is the introduction of expertise and technical know-how by global terminal operators and shipping lines to conform to international standards, thus raising increase the productivity of ports in the sub-region.

Labour productivity has improved in West/ Central African ports where reforms have been implemented; the retraining of dockworkers, use of more modern and efficient equipment as well as cost effective operational (down-sizing) and managerial practices by private sector port operators improves the output of port workers. Downsizing of over-bloated staff - a process with adverse social effects on the people laid-off is often resisted by the dockworkers and labour unions in the sub-region. The reforms by GPHA resulted in the downsizing of casual dock labour by over 4700. (Odoi, 2002)

Quantifying the gains made by ports in the West and Central Africa is difficult due to unavailability of port performance data prior to and after implementation of these measures, however institutional reforms undoubtedly have potential to improve the quality of services rendered and inject competition in ports operations through out the sub-region.

4.4 Comparison of port institutional reforms in West and Central Africa and the rest of the World

Developments in the sub region's ports correspond with the global trend of port institutional reforms. There is growing private participation (both local and foreign) in a number of ports that have traditionally operated as comprehensive ports with public monopoly over the years. Private companies are taking on operational and managerial responsibility in ports, whiles port authorities are taking on landlord status and retaining the regulatory and landownership functions, just as is in vogue worldwide. No country in the sub-region has however embarked upon the UK type of port privatisation. Port reforms in West/Central Africa are more geared towards attracting private capital and efficient management of ports operations and services than just replacing port administrations with the private sector.

As observed in countries like China, a number of governments in the sub-region decentralise the national port system by granting financial and operational autonomy to individual ports so as to limit the influence of the central government e.g. Cameroon, Cote d'Ivoire. Countries like Nigeria have commercialised their port operations to achieve self-sufficiency, profitability and client responsiveness as preparation prior to the implementation of institutional reforms involving more privatisation. Gambia's port reform however involves a full commercialisation with the public sector spearheading all the functions.

Like other regions, divestiture of existing port services and assets through long-term concession contracts (e.g. The Lodeco terminal project at Abidjan is a 30-year BOT concession arrangement), joint ventures, management contracts are gaining popularity in West/Central Africa; these are accompanied with growing private investments in both existing/new public port assets and facilities.

Implementation of port reforms are unevenly distributed within West/Central Africa as observed worldwide; some countries have made more progress than others e.g. Nigeria is yet to settle on the type of port reforms to implement. From the literature, it appears francophone countries in the region like Cote d'Ivoire, Cameroon, Benin have made more progress in the implementation efforts than their Anglophone Portuguese, and Spanish counterparts. Like the French system, Francophone states in the sub-region still retain a 100% stake in the port and lease assets to private operators. Countries like Ghana are making serious efforts to implement measures to make GPHA a landlord port and cede off all operational activities in the port to private operators by December 2002. The literature does not show any significant strides in port reforms by war-torn countries like Liberia, Sierra Leone and Angola.

The sub-region however lags behind in the number of port projects associated with port reforms relative to the other regions discussed. This is not surprising since Sub-Saharan Africa (excluding South Africa) as a whole received only 1% of the total private capital flows into developing countries and only 3% foreign direct investment between 1994 and 1997 (Sarbib, 1997). Private port investment statistics from the PPI project database (cited by Sommer, 1999) endorses this fact with the information that out of 112 port projects in developing countries between 1990 and 1998, Sub-Saharan Africa benefited from only four projects as shown in Table 5, even out of the four projects, Mozambique and Kenya (outside West/Central Africa) are beneficiaries showing how little the region has benefited from such projects.

A number of private domestic operators provide stevedoring services in ports in the sub-region as observed worldwide; for instance in Ghana there Atlantic Port Services. Few of these domestic operators have however developed to become regional operators like Exolgan (Argentina), SAAM (Chile) and Eurogate (Germany) who have undertaken various port investments in their regions of operation. The only regional operator so far identified in the literature is Ecomarine - a regional shipping group co-funding a US$ 100 million container terminal in the Port of Lome.

As observed worldwide, private investment in container terminal facilities are on the increase in the sub-region. Container-related port projects in the sub-region are mainly championed by shipping lines/agencies; prominent among them are Maersk Sealand - involved in a number of port projects countries like Nigeria (a common user container terminals in Port Harcourt, Nigeria) and Ghana. P&O Nedlloyd is part of the consortium funding the Lodeco project in the Port of Abidjan (Cote d'Ivoire). The Bollore group comprising SDV and Antrak (both shipping agencies) has invested about US$ 10 million to develop the Tema Container Terminal in Ghana. APM Terminals (the number-three terminal operator on global standards after HPH and PSA) is so far the only international terminal operator in West/Central Africa; operating a terminal in the Port of Cotonou (Benin).

Table 5: Port projects with private participation in developing countries by region (1990-1998)

Region	Number of Projects	Total Investment (1998 US$ millions)
East Asia & the Pacific	38	5,410.5
Europe & Central Asia	8	23.4
Latin America & the Caribbean	48	2497.7
Middle East & North Africa	5	376.5
South Asia	9	942.6
Sub-Saharan Africa	4	32
Total	112	9,282.7

Source: Sommer (1999)

Unlike Latin America, Europe, the US and particularly Asia, where private operators invest huge amounts of capital in port projects, especially superstructure, the amount of capital invested in West/Central Africa's port reform process is relatively very small; this is evidenced by total amount of capital spent on Sub-Saharan Africa in 1998 (US $32Million) in Table 5. This could largely be attributed to the low volume of traffic in West/Central African ports compared to Asia, Europe, Latin America and the US, the Port of Abidjan, the largest container port in the sub- region, handled around 434,654 TEU in 2000 (UNCTAD, 2001); another factor is the highly volatile political environment in the sub-region, the Port of Abidjan is a potential investment destination for international terminal operators but for the political turmoil in the country. The following factors contribute significantly to low volume of traffic (especially container) in West/Central African ports.

a) Unlike East Asia which is strategically positioned along the Trans-pacific and the Europe-Asia routes, the sub-region is not positioned along any major shipping routes
b) Export of high–value commodities is very low in West/Central Africa compared to East Asia and Latin America, a greater percentage of the region's export is shipped in the conventional form.
c) The relatively low population size (with the exception of Nigeria) and GDP does not make the sub-region a major market for imports like Europe and the US; these translate into low throughput in the ports. Furthermore, intra-regional trade sea trade is very negligible.
d) The absence of a major container hub or transhipment ports in the sub-region compared East Asia and Northwest Europe further limits the container traffic handled by the ports; the geographical position of West/Central Africa also limits any hub potential of the ports.

It is no surprise that big names like HPH, P&O, PSA, SSA, and ICTSI championing container terminal investments and port operations in other developing countries, are so far not operating in the sub-region.

The absence of the established port operators limits the region's potential to attract financing for port investments as financiers like IFC prefer to finance more established port operators than the less known ones. (Baird, 2000b)

Unlike the other regions of the world where port hinterland overlap due to good intermodal connections between ports and countries and membership to economic blocs resulting in the removal of frontiers (as pertains among the E.U member countries), ports in West and Central Africa do not share hinterland. This could mainly be attributed to bad inter-modal links among the various ports and countries. For instance, rail gauges are different in Anglophone and Francophone countries rendering it impossible to haul cargo by rail from ports in Ghana to say Togo or Abidjan, her immediate neighbours in the east and west respectively e.g. the Port of Lome (Togo) is less than 200 kilometres from the Port of Tema (Ghana). The seasonal nature of the rivers and lakes in the sub-region makes inland water transport an unreliable link among the various countries and ports. For instance, as of April 2003, the VLTC in Ghana had suspended the carting of bulk cargo on the Volta Lake (the main inland water link from southern to northern Ghana) for over seven months due to the low level of the lake. (Dzamboe, 2003) Inter-port competition is thus very negligible; the only competition that exists among ports in West/Central Africa is for transit cargo bound for landlocked countries that the various coastal countries share as hinterland. This captive market situation in West/Central Africa limits the extent of market that each port investor can tap.

4.3 OBSTACLES TO PORT INSTITUITONAL REFORMS IN WEST AND CENTRAL AFRICA

Port institutional reforms in West/Central Africa are not without stumbling blocks; a number of factors in the region act as retardants to its progress; this slows the sub-region's pace in the technological and structural changes in the industry.

-Political will

One main problem is the lack of political will on the part of governments in the sub-region to divest aspects of ports operations due to their strategic importance to the national economies in terms of revenue generation, employment creation and national security in the region.

a) In Ghana for instance, in 1999, the Port of Tema alone collected 36.4 billion cedis (US$ 9.9 million) as port dues, US $1,083,000 from harbour rent and pilotage and towage yielded US $ 4.4million; the government received 5 billion cedis (US$ 2.5 million) as tax from the port authority in 1997 (Gyebi-Donkor, 2001); governments stand to lose some of these revenues by delegating the above activities to the private sector. Unlike Europe and parts of Asia where city and municipal authorities support port financially, the reverse is what prevails in West and Central Africa; ports often grant financial support to projects being undertaken by the cities where they are located e.g. ports provide social amenities such as, hospitals, housing for employees as in the case of GPHA. In the mid nineties for instance, GPHA funded a major rehabilitation of a 5km road from the Port of Tema to the Tema Motorway (an important link between Tema and Accra-capital city). With the 'juiciest' operations of the port operations being outsourced to the private sector, port authorities are crippled in their ability to support such projects and there is the fear that private operators would discontinue such support to communities. An official at GPHA explained that stevedoring is the most financially rewarding operations at the ports and wondered whether GPHA can continue render public social services with the out sourcing of stevedoring to the private sector.[9] One could also say that the fear of losing revenue is unfounded since the expertise and efficient management practice of private operators would rather improve the revenue that ports stands to earn, however this improvement in revenue would only be

[9] Informal interview with an official at GPHA

relevant to the country or city if private port operators re-invest the revenue and continue to support projects within the ports and the community.

b) Apart from ceding off direct sources of revenue generating activities in ports to the private sector, government also stand to lose in the short or medium-term through tax concessions/holidays often granted to private companies that take over public organisations; this creates some reluctance on the part of governments in the region (whose tax base are already narrow) to implement such institutional reforms in their ports. According to De Monie, there are occasions when central governments may have to fund major rehabilitation works in ports e.g. dredging, to attract long-term financial participation by the private investors, this often require very huge amount of capital. In Ghana for instance, the access channel and two existing deep-water berths at the Port of Tema were dredged to a depth of 12.5 and 11.5 metres respectively at a cost of US$ 10.2 million at part of preparations for the reform process; also GPHA is funding Phase 1 of the container terminal at the cost of $ 60 million before GPS would continue with Phase 2. Iheduru (1993, p.4) views the real cost of capital needed to make ports attractive to private investors from a socio-economic dimension given that West/Central Africa is one of the poorest regions in the world and over 80% of the countries in the sub-region receive donor support to fulfil the health, education and food requirements of their people. He indicates that the pressing need for the provision of basic facilities such as health and education in the sub-region take precedence over investing very huge capital to rehabilitate state assets that have never turned in profit since their establishment only to attract private investors.

c) Ports are big employers in West/Central Africa like most developing countries. Strong unions, inadequate and obsolete cargo handling equipment, poor training coupled with government policy to maintain employment in ports often lead to over-manning. Port institutional reforms often entail downsizing the labour force; in Ghana, GPHA laid-off 1439 (32%) of its permanent staff in 1989 as part of its preparation for reforms. (OCDI, 2002) In 2001, 4700 casual dockworkers were retrenched by GPHA and reabsorbed by the Ghana Dock Labour Company who supplies them to the private operators on casual terms. (Odoi, 2001) Such policies have social and financial implications that often necessitate governments to invest in retraining and redundancy schemes in ports, the already cash strapped governments in the sub-region are limited in their ability to implement such reforms. Another dimension to the downsizing of port labour is its political implications. Resistance by labour unions and dockworkers often create socio-political hiccups for governments especially those seeking re-election in the short term, this makes governments reluctant to undertake such bold measures that invariably make them unpopular.

d) There have been instances when caches of ammunition have been smuggled through seaports for subversive activities in the sub-region. Ports are thus considered as security zones and governments are apprehensive to put private operators in charge of such security-sensitive national assets bearing in mind the already fragile political situation of the region. The October 30th edition of Lloyds list (1998) indicated that one of the arguments against port privatisation is security; referring to the fact that Nigerian ports have used been as routes through which arms used in numerous coups in the country have been shipped.

-Lack of consensus

Port institutional reforms (especially private sector involvement) in West and Central Africa is a politically controversial issue; in Ghana, due to the presidential and parliamentary elections in 2000, government delayed some aspects of the implementation of the pending port reforms so as not to become politically unpopular. General public ignorance of the dismal performance of some state-owned organisations as well as a common fallacy that reforms involving privatisation entails outright sale of national assets to foreigners, draw opposition from interest groups resulting in a lack of consensus among the various stakeholders. The Secretary General of PMAWCA, Fernand Gauze, in an interview with Port Development International (October, 2001) stated that "The trend towards privatisation in the sub-region is not without its critics; in most cases they have put policy makers at the crossroads, torn between the expectation of their people and the demands of international lending institutions." In Nigeria for instance, the Senior Staff Association of the NPA has been in the forefront of a series of campaigns and agitation against the port privatisation, the Association addressed a position paper to the President of Nigeria outlining 10 reasons why the ports should not be privatised and called for full commercialisation of the ports instead. As in most regions, labour unions pose stiff resistance to the port privatisation efforts; an article in the October 2001 PDI in describing this attitude to privatisation stated that the mention of port privatisation is enough to make them take to the street. The Maritime Workers Union of Nigeria (MWUN) argues that the NPA is the only major parastatal organisation under the supervision of the Federal Ministry of Transport that is able to fend for itself, thus there is no for need for privatisation. ('Federal Government...' 2001, January) Tema, Lagos and Abidjan ports have all in recent times witnessed disruption of work by laid-off workers. On the 29th of May 2002, over 500 casual workers of Tema port laid off as part of the ongoing reforms at GPHA besieged the port preventing workers of some private stevedoring companies and customs from carrying out their duties in agitation for additional benefits (Odoi, 2002, May 30); such attitude scares of potential investors to the ports.

-Unstable political environment

The fragile political situation in West/Central Africa scares off investors, both local and foreign. Countries like Ghana, Nigeria, Cote d'Ivoire, Sierra Leone, Liberia and Angola suffered military coups, civil wars and rebel incursions in the eighties and nineties. Projects are put on hold or delayed as a result of such activities in the sub-region, thus developments negatively affecting the pace of port reformsin the sub-region. For instance the Lodeco Terminal project in Abidjan suffered delays as a result of the military coup in Cote d'Ivoire. ('Way out west' 2001) Potential investors avoid West and Central Africa due to the perceived fragile and unstable political situation. Private investors withdraw totally or temporarily from the region with the outbreak of civil wars and military coups due to the risk pose to their investments. The fragile political situation also limits the utilisation of ports of other countries by their neighbours; this is because frontiers to neighbouring countries are often closed following military coups or civil upheavals, in addition there are several security check points and human barriers spring up on the roads between the various countries putting the cargo and people accompanying them at risk. At the time of writing, most cargo bound for the landlocked countries of Burkina Faso, Mali, Niger have been held up in the port of Abidjan due to the rebel incursion in La Cote d'Ivoire in September 2002, most vessels bound for Abidjan had to be diverted to the port of Tema. (TV 3 News, 2002, October 3)

Lewis (1990) (cited by Iheduru, 1993, p.40) elaborates this point by the assertion that

> ...the government (being the biggest importer and exporter in West Africa) and many private consignees, ... prefer to have cargo brought by ship to their local port rather than to a larger port/load centre in another nearby country. For political reasons the preference for national port (even if they are inefficient) may not be entirely unreasonable in West Africa. In this sub region,

> and certainly most of Africa, 'moving freight across international boundaries… can be a time consuming and uncertain process'. Goods may be delayed or impounded for political reasons.

Such situations limit the extent of hinterland of ports of the coastal countries in West /Central Africa and hinder the potential of hub and transhipment activity from developing in the sub-region. This deters global terminal operators, who consider the extent of a port's hinterland before investing in the region.

-Ideological direction of governments

Different governments come into power with various ideologies; e.g. some governments favour nationalism and view all forms of private involvement in the running of national assets negatively; thus put to hold, reverse or abandon any measures already implemented in line with privatisation or are reluctant to initiate reforms at all.

-Local investors

Lack of local investors in port projects is another retardant to the progress of port reform in West and Central Africa. De Monie explains that private investors in developing countries do not often fund high capital-intensive projects such as required in ports by the following assertion:

> In developing countries private investors, disposing of sufficient capital resources to fund port projects of a certain magnitude, are a rare breed, even when and where they exist they may not be tempted to invest in an industry which has often a poor track record in terms of financial returns and social peace, and which unwarranted government intervention is proverbial

Another problem is that local businesses have always being targets of military governments in the sub-region; in Ghana for instance, the military government of the PNDC in Ghana confiscated the assets of many local businessmen during their tenure of office in the early eighties, this has served as deterrent to potential local entrepreneurs from investing in the country. Unlike Europe and the US where local investments constitute a substantial part of the private sector involvements in ports, no such investors have been identified in the literature. This situation coupled with the scarcity of international capital and the difficulty local investors face when sourcing for international contribute to retard the progress of port institutional reforms in the West/Central Africa.

-Inland connectivity

Good and reliable inland transport is critical for a port's future and the overall growth of trade prospects in any country. Good inter-modal links (rail, road, Inland waterways) hardly exist between the various ports and countries in the sub-region compared to Europe, Asia. Unlike the other regions of the world where port operators are able to tap regional or sub-regional hinterlands due to good intermodal connectivity, the situation in West and Central Africa is different; the only markets that can be tapped in addition to the captive hinterland of a country are the landlocked neighbours of the various coastal countries. Iheduru (1993, p.40) acknowledges this situation by the statement that there are only few intercontinental roads and rail links between the various countries in West/Central Africa and even where they exist they are in such state of disrepair. This contributes to retard the pace of port institutional reforms in West/Central Africa

- Population size and cargo base

Although international trade constitute a significant proportion of West/Central African's GDP (over 50% of the GDP in most countries), the cargo base is very narrow compared to other regions of the world. The volume of imports into the sub-region is relatively low due to the low population size and low GDP of the various countries. Apart from Nigeria whose population attracts a substantial volume of imports, the small population size and the low GDP of the various countries limit the amount of imports flowing into the sub-region necessary to sustain high capital investments in ports. The mainly raw-commodity exports also limit the development of containerised trade due to their low value; this worsens the traffic imbalance situation and increases the container repositioning cost of vessels that call the region. For instance, only three countries in the region – Cote d'Ivoire, Nigeria and Ghana handled more than 200, 000 TEU in their ports in the year 2000 (UNCTAD, 2001, November). In this era of containerisation, when investments in ports are more geared towards container terminal facilities, such small cargo base discourage terminal operators and potential port project financiers who place a high premium on investments that offer a high growth of returns and are less risky. Financiers like IFC, Schroders, ABN Amro Bank consider a port's projected traffic growth, trading patterns and trends as part of the criteria in determining which ports to invest. (Baird, 2000b) One could however argue that the volume of cargo generated within a particular country and its population size are not really critical factors to the volumes of cargo handled in a port; the ports of Hong Kong and Singapore with population size of 6.9 million and 4.1 million (World Bank, 2001) respectively rank numbers one and two in the world top container ports. Hong Kong's agriculture, industry and the service sectors constitute 0.1%, 14.7% and 85.2% of GDP respectively and in Singapore agriculture, industry and service sectors constitute 0.2%, 34.7% and 65.1% of GDP respectively (World bank, 2001). It can inferred from the proportion of GDP contributed by the agriculture and industry sectors in the two countries above that the volumes of cargo within the two countries is negligible relative to the number of containers handled in their ports annually; rather it is the transhipment services offered in these ports that ensure the high volumes of container traffic in the two countries. This goes to confirm that the country's population or manufacturing do not really guarantee high volumes of cargo throughput in ports; rather a port's ability to provide transhipment and hub services are the main contributory factors for the large volumes of cargo that attract private operators. The absence of hub ports and the low throughput in individual ports encourages the retention of state monopolies since there is inadequate inducement attract private operators to ports in the sub-region. The possibility of private monopolies replacing public monopolies in the sub –region is real, e.g. the 28th September 2000 edition of Lloyds list reported that GPHA in Ghana is gunning for only one operator to run the container terminal in Tema since throughput of less than 200,000 TEU is not sufficiently viable to attract a strong international terminal operator if split. (Rissik, 2000, September 28)

-Financial state of ports

Some ports in West/Central Africa are unable to attract private investors due to the high indebtedness that may need to be settled before private sector is brought in. Iheduru (1993, p.38) indicates that the easiest firms to sell off are the most profitable ones, government often have to induce purchase of enterprises in loss positions by discounting the purchase price or maintaining subsidies to make up for expected future losses. The use of scarce resources on a 'never do well' state enterprise as well as the loss of short or medium term revenue often deter governments in the region from embarking on such measures and private investors stay off such projects. A Lloyds List article in 1998 identified that the main factor inhibiting privatisation of GPHA at the time was the need to generate adequate income to repay substantial loans from the World Bank and other international donors used to upgrade the ports of Tema and Takoradi in the late 1980s and the early 1990s. (Rissik, 1998)

With the increasing relocation of manufacturing and processing plants to developing countries due to the high labour cost and environmental concerns in developed countries, manufacturers are always on the look out for low cost region to set up their plants. With the sub-region's relatively cheap labour cost and more lenient environmental policies, the potential exist for an increased manufacturing activity if ports are more competitive and efficient. With port costs reduced and manufacturers attracted to the region, traffic volumes would grow, bringing along varied economies of scale benefits. It is thus imperative to minimise the factors that impair the pace of port reforms in the sub-region, so that the ports would be more efficient and productive.

This requires a concerted effort by all stakeholders. Individual countries in the sub-region have a responsibility to create an enabling atmosphere to make ports more attractive to private investors, who are the main 'spice' in this current evolution of reforms in the global port industry.

Conclusion

Public-private partnership in the provision and management of port facilities is gradually being established in the sub-region. Different countries are using diverse approaches and are at various stages of implementation. A number of ports that were traditionally service ports with public monopolies are increasingly changing to landlord status, where the public sector retains landownership and the regulatory functions, confirming the popularity of Baird Public\private model globally. The commercial aspect of port operations have been at the receiving end of private sector participation and investments, especially in the construction of new and the modernisation of existing facilities for container terminal activity. Investments are being made in both common user ports e.g. and dedicated terminals; examples include the APM Terminal in the Port of Cotonou, the Tema Container Terminal (an off-port dedicated terminal) for the Bollore group in Ghana. Donor agencies like the World Bank are facilitating private sector investments in various countries in the sub-region e.g. the US$ 100 million new container terminal in Port of Lome (Togo) by Ecomarine.

Although more governments are adopting a positive attitude towards port institutional reforms and embracing private sector involvement, the progress of implementation is very slow compared to the rest of the world like East Asia. The pace of port reforms in West/Central Africa can be attributed to various socio-economic and political factors prevalent in the sub-region.

Seaports are critical to the economic prosperity of West and Central Africa as over 95% of the sub region's import and export trade are transported by sea. There is the need for ports to be efficient and competitive so as to cut down the cost of freight to improve the terms of trade and balance of payment position of the sub-region. Private investors are very critical players in port reforms worldwide and all must be done to attract them to West/Central Africa so as to hasten the pace of the sub-region's reform process. Individual states in the sub-region needs to work together to clear these obstacles so as to present the sub-region as a safe and cost effective destination for all investments.

The above can only take place in a peaceful and stable political atmosphere; there is a need for individual states to work at minimising insurgence and instability in their territories, regional bodies like ECOWAS, the AU need to assist in this direction.

CHAPTER FIVE

5. CONCLUSION AND RECOMMENDATIONS

5.1 CONCLUSIONS

This study examines port institutional reforms worldwide with the view to establishing the global trend so as to compare it with the pace in West and Central Africa. It discusses private sector participation in port industry globally, the methods of privatisation, port activities of interest to the private sector, port functions retained by the public sector, the ever-growing public-private partnership in port administrations and the global distribution of these developments.

Private sector involvement in ports has been on the increase since the early nineties. Diverse forms of port privatisation, including leases, joint ventures, concessions, BOT and outright sales have been implemented in different locations around the globe. The most popular is the landlord port where governments delegate the operating functions of their ports to the private sector companies and retain the land ownership and regulatory functions with port authorities or public sector bodies. The only exception is the much talked about UK privatisation process where all the three key elements of port functions were transferred to the private sector. As Baird (1999, 2000) points out, the actual extent of private sector participation with regard to individual port activities vary from port to port.

International terminal operators (the coverage of their activities reflect the global nature of developments in the port industry), regional stevedoring companies (some of whose activities are taking global dimensions), shipping lines and agencies constitute the main private sector actors in the reform process worldwide. There are also specialised and dedicated ports/terminals mainly owned by private mining, oil and fruit processing companies in many countries.

The private sector is mainly interested in stevedoring, especially container handling/terminal activities and logistics services like warehousing and packaging. The volume of containerised traffic in ports greatly influences the scale and size of investments undertaken by the private sector; this explains the increasing number of private terminal operators in ports in East Asia (where the world's top two container ports are located). Private operators often invest in superstructure (cranes, paving, sophisticated software) so as to modernise, expand and create new container ports/terminals.

The public sector through the state or the port authority normally finances the provision of port infrastructure; however the literature shows governments and city authorities in all the regions discussed supporting the private sector in the financing of superstructure. Various examples can be found in the study (see pp. 31, 51&71). Reasons for this include the high cost of superstructure, policy of government to own the whole port or be in joint venture with private sector companies, fear of private monopoly and reluctance on the part of private investors fund entire port projects due to the risk involved.

Current developments on the port scene in West/Central Africa reflect the global trend. The predominantly state-owned or government controlled ports are fast giving way to private sector involvement in the funding and management of ports. Various methods of reforms have been initiated, however like the global situation the landlord port authority is becoming very popular in the sub-region. Like the rest of the world, this trend is not uniformly distributed in the sub-region.

The main private sector actors in the port reform process in West/Central Africa are shipping lines/agencies and number of consortia. As observed in all the regions considered, these investors mainly fund container related facilities and manage them. APM Terminals is the only global terminal operator so far identified to be operating in the sub-region (Benin); other global terminal operators like HPH, PSA, and P&O Ports are not yet present in the region.

Considering that some countries in the sub-region started implementing reforms way back in the eighties, the progress of the reform process is rather slow relative to other developing nations in Asia and Latin America. The number of projects and the amount of private capital invested in West/Central African ports so far can in no way be compared to the other regions of the world already discussed in this study; Sommers (1999) confirms this with the statistics that Sub-Saharan Africa benefited from only 4 port projects with private participation in developing countries between 1990-1998. (See Table 5)

It is very obvious in the literature that the major private operators in the global port reform process prefer investing in Europe, Asia, Latin America, Australia and North America to West/Central Africa. Of the private investments in container terminal-related projects between 1990 and 1998, 42% are located in the Latin American and Caribbean region, 38% in East Asia and Pacific region, 7% in South Asia, 5% in the Middle East and North Africa and 4% in Europe, Central Asia and Africa. The features that favour high capital private investment in ports of other regions of the world cited above include:

a) Central position of East Asia along major two of the three main East-West shipping routes namely the Transpacific (linking Asia and North America) and the Transatlantic route (linking Asia and Europe)
b) Major container hubs and transhipment ports as found especially in East Asia and Northwest Europe

c) High population size (Asia and Latin America) and GDP (Western Europe, North America) making them major markets for imported commodities compared to West/Central Africa.

d) The presence of many manufacturing and export processing centres in East Asia and Latin America, thus generating high volumes of containerised traffic destined mainly for North American and Western European Markets. In addition, these regions have become major destinations for the raw materials required for such industries.

Apart from the absence of the above features, West and Central Africa is bedevilled with precarious socio-economic and political problems including wars that pose serious risk to investment. (See Chapter 4.5) All these factors combine to retard the pace of port institutional reform in the sub-region.

In these times when carriers, especially container carriers, are seeking shorter transit times through direct routes, maximised direct calls and reduced ports of calls by covering sub-regions through a net work of feeder services, it is imperative that the West/ Central Africa expedites the reform process in ports to address the prevailing inefficiencies and avoid the situation where all ports in the sub-region would be served by feeders.

De Monie (1997) predicts that the coming years will witness changing shipping line policies with regards to the ports of call and the role ports are required to play within a line's network. Factors like the importance of a captive hinterland, quality of feeder and inland transport connections, quality of port's infrastructure/superstructure, the reputation of the port in terms of output performance, reliability and applied technology as well as the institutional environment in a port would come to bear in arriving at a shipping line's decision. The implementation of institutional reforms in West/Central African ports with the right players and timely investments would improve the reliability and output performance of the sub-region's ports and thereby present their image as a good destination for profitable and sustainable investments. This would positively influence the choices of shipping lines and intermodal operators regarding the frequency of service, the size of vessels deployed and the degree of cooperation with other vessels for the sub-region.

Globalisation is real; and it takes competitiveness and efficiency for any region to participate effectively in the global economy. With the high percentage of GDP derived from the import/export of goods and the high maritime dependence, efficient and competitive ports are vital inputs for West/Central Africa's international trade (very much needed for the economic development of the region). Much as institutional reforms are not a panacea to all the problems that exist in the sub-region's ports, it helps to modernise port infrastructure/superstructure and introduce modern technology into port operations.

Crook (2002, March), like most maritime economist, believes that port reforms improve the competitiveness of port services and strengthens their trade capacities. For West/Central Africa this implies that the wastage and high cost prevalent in the ports would be minimised to ensure a more favourable terms of trade and an improved balance of payment for a sub-region considered to be one of the poorest areas of the world.

5.2 Recommendations

Whiles acknowledging that most ports in Asia, Latin America, Europe, North America, Australia, North and South Africa have an edge over West\Central Africa in attracting more established private operators (undoubtedly very critical players in any port reform process), the pace of the West/Central African port reforms can be expedited when conditions prevailing in the various countries and ports satisfy the criteria set by terminal operators and financiers. According to Baird (2000c, pp.18-19), the social and political stability in a country and the commercial viability of projects are some of the critical considerations for terminal operators and financiers in their choice of regions/countries to undertake port investments.

Stakeholders in ports including dockworkers' unions, port users, ship owners/ agents and port cities must all be involved in the preparatory stages of any port reforms to obtain consensus for a smooth take-off and implementation, thereby ensure social peace within the ports during reforms. This is especially critical in West\Central Africa where the least disagreement over government policy can spark political tensions.

The incidents of rebel activity, civil wars, religious conflict and other insurgence are a real threat to investment in the sub-region. There is an urgent need for regional bodies like ECOWAS and the AU to work with individual countries to create structures and institutions that prevent conflict and social unrest and effectively manage them when they do occur. This would make the sub-region's ports more attractive to private operators/investors.

For port projects to be commercially viable, the initial cost of projects should be within reasonable limits to the private operator, furthermore market demand and growth prospects in the ports must guarantee minimum levels of returns to sustain the investments and yield profit to private operators. To make port projects commercially viable, governments and port authorities in West/Central Africa need to put in place adequate infrastructure base necessary for the operations and investments of private operators. For example, shallow berths and access channels in ports need to be dredged; modern navigational aids must be provided and properly maintained and for tool ports (as prevalent in the Francophone countries) the necessary superstructure must be provided; this would minimise the initial cost to be borne by private operators. Labour reforms must be implemented; De Monie (1994) advises that the public sector should invest in retraining and redundancy schemes; this would improve the productivity of dock labour. Port authorities need to clear all long-standing debts to attract more private operators. The economic status of West/Central Africa and the lack of adequate funds at the port authorities make the implementation of such recommendations impossible without some form donor support. Donor agencies like the World Bank and IMF who are already offering financial support to some ports in the sub-region need to do more; also shipping lines that call the sub-region's ports must assist since they would be the beneficiaries of the productive and competitive ports that would result from reforms.

Governments can enhance the attractiveness of West/Central African ports through industrial development policies e.g. the creation of FTZ and EPZ that would boost market share of ports and improve growth prospects of cargo throughput of various ports. Governments must encourage exporters to expand the narrow export base of the sub-region through diversification to increase the traffic in the ports; this would ensure the sustainability of existing investments and attract potential investors. Ports in the sub-region need to do more marketing to encourage exporters to ship through their ports so as to increase their market share; it is also important that port encourage exporters to ship in containers to increase the traffic of TEU they handle.

Roads and railway links within and among the countries in West/ Central Africa must be put in good shape to broaden the hinterland of the various ports as well as foster competition. This needs co-operation among the member states; as maritime experts like Addico (2001) advocates, cooperation is very critical as shipping, as an international business, thrives only on regional and international cooperation. In this regard, there must a concerted effort to address link the sub-region with good inland transport links; the Trans-Saharan Highway linking Cote d'Ivoire, Ghana, Togo, Benin and Nigeria is a step in the right direction, however regular maintenance and rehabilitation is necessary to optimise its use.

Such efforts in the sub-region are bound to attract more established private port operators who are very instrumental partners in the institutional reforms in the global port industry and expedite the pace of institutional reforms in West/Central African ports.

In the sub-region's bid to attract significant port investments and given that inter and intra-port competition are very negligible in the sub-region, caution must be taken to avoid a situation where a particular group of private sector operators dominate and have monopoly.. This would only be replacing existing public monopolies with private ones and could defeat the whole purpose of the institutional reforms.

Having said all of the above it is important to note that the peculiar socio-political characteristics of the sub-region must be considered in fashioning out the suitable port institutional reforms. In this regard, Iheduru (1993) advocates that region-specific or country-specific domestic and structural problems that render generic policies ineffective must be considered to determine how and where privatisation policies ought to be adopted. This would assist the realisation of the objectives of private sector participation in the sub-region's port.

Considering the current pace of West/Central Africa's f port institutional reforms and overall socio-economic development, it would be overly ambitious to expect the pace and amount of private sector investments to be like that of other successful regions of the world already mentioned. Even within the sub-region, one should not expect all ports to be equally developed in terms of the nature and extent of reforms plus investments attracted. What is likely to emerge in the medium, if not long, term is a few major ports undergoing successful reforms and thereby attracting significant investments and growing in importance to become dominant ports that will serve the sub-region to the extent possible given the transportation constraints.

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APPENDIX A

WORLD MARITIME UNIVERSITY

P.O.BOX 500, 20124 MALMÖ, SWEDEN

TEL: 46 40 356300, FAX: 46 40 124827

Dear Sir,

INFORMATION FOR DISSERTATION

My name is Monica Josiah, a Ghanaian and currently pursuing a Master of Science degree programme in Maritime Affairs at the World Maritime University in Sweden. In partial fulfilment of the requirements for the award of the degree, I am undertaking a research on 'Institutional Reforms of Ports in West & Central Africa'.

Having identified your organisation as one of the ports in the region, I would be grateful if you would assist me by completing the attached questionnaire. I would also appreciate any publication related to the research topic from your port.

Thanking you in advance in anticipation of your assistance.

Yours faithfully

Monica Josiah

WORLD MARITIME UNIVERSITY

Questionnaire

Please fill in the blank space or underline the response where applicable

1. Name of Port ....
2. Is your port undergoing institutional reforms a) Yes b) No
3. Which year did these reforms commence?...................................
4. Which year will these reforms be completed.......................................
5. Do these reforms entail private sector participation a) Yes b) No
6. Are these private entities local or foreign companies?...........................
7. Please indicate if any of these global stevedores are operating in your port a) Hutchison b) PSA c) P&O ports d) AP Möller (Maersk) e) Others (specify)....

   ....
8. Indicate which option(s) of reform(s) your Port Authority is undertaking

a) Commercialisation b) Corporatisation / leasing of port assets c) concession d) management contract e) Build, operate and transfer (BOT) f) Joint Venture g) Sale of port assets h) Others ....

9. Please indicate the sector(s) handling the activities shown in the table below. Mark **X** to indicate the sector and **NA** if the service is not provided in your port. Note: Public sector implies Port authority.

	SECTOR			
Activity	**Public**	**Public/Private**	**Private**	**Other Public bodies**
Management				
Landownership				
Aids to navigation				
Pilotage				
Towage				
Berthing				
Mooring				
Cargo handling on quay				
Storage				
Stevedoring				
Tallying of cargo				
Weighing				

Maintenance of equipment 1. Infrastructure 2. Superstructure				
Container Terminal				
Fire fighting				
Port Security				
Marine Police				
Others (Indicate)				

10. Please indicator whether private sector participation in your port involves a single or more operators (specify)...
11. Please indicate the composition of the Board of your Port a) Public sector b) Public/ Private sector c) Private sector
12. What percentage of the membership of your Board is from the private sector ....
13. Are these private sector board members involved in the operation of your port ....
14. Which status do you aim to attain by implementing these institutional reforms a) Service/ Comprehensive b) Landlord c) Tool
15. Indicate the function(s) your port authority will play after the reforms are completed a) Land owner b) Regulator c) Operator
16. Mention the main challenges you have faced in implementing these reforms...

....

....

17. What is your assessment (up to now) the above-mentioned institutional reform of the port sector in your country? Please mark X where applicable.

I. Commercially (e.g. customer satisfaction, market share, throughput): very positive ( ), positive ( ), no change ( ), negative ( ), very negative ( ). Comment...

II. Financially (e.g. income, profit): very positive ( ), positive ( ), no change ( ), negative ( ), very negative ( ). Comment:..................................

111. Politically (competition, non-discrimination): very positive ( ), positive ( ), no change ( ), negative ( ), very negative ( ).

Comment: ....

IV. Socially (e.g. employment, employees happiness): very positive ( ), positive ( ), no change ( ), negative ( ), very negative ( ),

Comment: ....

V. Technically (e.g. facilities and equipment): very positive ( ), positive ( ), no change ( ), negative ( ), very negative ( ).

Comment: ....

VI. Operationally: (e.g. productivity, safety, quality): very positive ( ), positive ( ), no change ( ), negative ( ), very negative ( ).

Comment..

15. Any further reforms (or adjustment) required? a) Yes b) No.

Comment..

....

16.Your position: ....(optional)