

PORT STRUCTURAL ADJUSTMENT AND LABOUR REFORM¹

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1. INTRODUCTION

Meaningful discussions on the issue of port reform are of great importance not only in finding ways to manage the reform process itself in the short-run but also in highlighting that the need for reform and increased efficiency may diverge significantly from the desire to safeguard port labour standards and other social objectives that might be adversely affected by the reform.

Development agencies have many times been criticised that their economic reform recommendations and austerity programmes are too often excessively preoccupied with stabilisation and structural adjustment without paying adequate attention to the social and labour consequences of economic reform. On the other hand, the International Labour Organisation (ILO) has also been criticised that its policies and Conventions are not flexible enough to allow the effective implementation of reform programmes which are seen by many as the only way to raise living standards and alleviate poverty in developing countries. Although considerable progress has already been made towards an improved dialogue between these bodies, it is felt that there is still some way to go towards a closer convergence of approaches.

2. THE FORCE OF GLOBALISATION

A major contemporary trend that has precipitated many countries' thrust towards economic reform is "globalisation". The latter could be described as the increase in cross-boarder interdependence and, more profoundly, integration, which has resulted from the greater mobility of the factors of production and of goods and services.² This increased mobility can be attributed to three major factors:

- Tele-communications, mass media, advertising, secularism and the abolition of national barriers have all led to a substantial convergence of world cultures and consumption patterns, resulting in larger international markets and intensified competition.
- Although not as yet confirmed by factual developments³, most governments are rather convinced that economic integration, promoted by the globalisation of capital markets and the virtual abolition of exchange controls in industrial countries, will lead to more efficient resource allocation and hence stimulate growth and economic development.
- The significant advances in transport and communications technologies have increased the speed and efficiency of transport and lowered the costs of communication. These developments have lowered the barriers of time and distance and give the impression of a "shrinking world".⁴

¹Proceedings of the 7th World Conference on Transport Research, Sydney, Australia, 1995.

²Campbell (1994)

³Singh (1994) and Cash, Hughes and Singh (1992)

⁴Dicken (1992, pp. 103-110)

In this way, globalisation and trade liberalisation, helped by the significant developments in transport, logistics and communication technologies, have drastically weakened the link between manufacturing and the location of the factors of production, they have expanded internal markets for goods and services, and have led to a most noticeable shift in manufacturing activities towards countries with a comparative economic advantage. As an example, by the end of the 1980s, more than half of the employees of Sweden's 30 largest manufacturing companies (ranked by employment) were working in foreign subsidiaries.⁵

Particularly in developing countries, the need for reform is as much the result of their precarious economic and social situation as of the fact that -without having been adequately prepared- developing countries have been exposed to the relentless forces of globalisation and intensified international competition. This exposure has been taking place simultaneously with the opening-up of developing countries' internal markets so that they can take advantage of the recent developments in the liberalisation of international trade and particularly the many favourable "developing country provisions" of the GATT.

However, many developing countries' exports are little diversified and very precariously dependent on volatile commodity prices. Nowadays, there is another equally important factor that compounds this problem. This factor, or rather series of factors, consists of the complex developments in multimodal integrated transport, logistics networks and Electronic Data Interchange.

Preferential trading relationships, many times inherited from colonial business practices, assume a far less important role today than they did in the past. Today, independent trading Houses and multimodal transport operators have the possibility to scan instantly the world commodity and product markets, at the push of a button, and select shippers, ports, routes, methods of shipment and carriers in such an integrated manner that ensures quality, expediency and reliability while at the same time optimises generalised costs as well as cost-time trade-offs.

This situation makes the demand for developing countries' exports much more vulnerable now than what it used to be in the past. This vulnerability is not only a function of export prices but it also depends on developing countries' ability to comply with modern business and trading practices that have little to do with "neo-colonialism" but are rather consumer and technology driven and oriented. In such an environment, any factor that can blunt developing countries' export competitiveness is bound to have much graver repercussions nowadays than it had in the past. Obviously, an inefficient port sector, in its role as trade facilitator, can well be such a factor.

The exposure of developing countries to the forces of international competition has been taking place at a pace which, for many of them, has been difficult to keep up with. Understandably, this has been the result of both developing countries' limited capacity to rapidly absorb modern technological advances, and of the fact that the scarcity of their capital resources has, many times, forced them to adopt technologies on a piece-meal and uncoordinated basis, having had rather negative effects on optimum resource allocation and distribution of income. The developing world is full of badly designed and implemented projects and it would not be far from truth to say that governments' divestiture programmes of the 1980s and beginning of 1990s

⁵The Economist, November 5th 1994

may have been the result of the same governments' indebtedness in the 1970s.

The effects of rapid technological change on social structures and institutions has been the subject of substantial sociological research in both developed and developing countries. Particularly in the case of the latter, rapid change is not always considered a good thing, not only because many times it cannot be managed efficiently, but also because it may increase uncertainty and loosen people's control over things and situations. Change has to be given the benefit of time in order to be assimilated into economic and social conscience. Unfortunately, "time" is not always available in today's stampeding technology and, more importantly, assimilation periods will tend to be much longer in countries where proper economic and social institutions are not in place.

Developing countries are, thus, confronted with the dilemma of either introducing expensive, state-of-the-art technologies, in the hope that they will last longer and thence induce growth, or opt for the more labour-using intermediate technologies that sometimes may become obsolete before they are even implemented. However, economic obsolescence in developing countries should not be decided on the basis of comparisons with similar technologies in other countries but in terms of the specific technology's ability to efficiently serve the country's development requirements.

3. THE IMPACT OF CONTAINERISATION

It is many times being said that unitisation and particularly containerisation have revolutionised the national and international transport and port industries. Such an emphatic characterisation could be quite acceptable if one considers the enormous impact that this originally purely technical solution in cargo-handling methods had on the design and sizes of general cargo ships, the lay-out, equipment, development, operations and employment in ports, on inland transport requirements, land use, human skills and shippers' perception regarding the functioning of the overall transport chain.

This system of transport had a number of significant advantages over the conventional, labour-intensive, methods of handling general cargo. Apart from the remarkable improvements in port safety and the limitation of pilferage, damages and cargo claims, the system's major breakthrough -particularly in the U.S. where it was first introduced- was in cutting down on expensive labour and reducing ship turnaround time.

Due to costly, largely ineffective and time-consuming cargo-handling prior to the advent of containerisation, general cargo ships were known to spend most of their operational time in ports, waiting, loading or unloading. In many instances and whenever that was possible, shippers were trying to avoid ports and shift towards road and rail transport for long distance carriage.

Furthermore, expediency in cargo-handling was necessitated by the very same nature of general cargo goods whose increasing sophistication and value-added content required fast transit times from origin to destination in order to increase shippers' turnover and minimise high inventory costs. The latter costs were, thus, brought down significantly by the use of logistical concepts and methods and also by the increased reliability and accuracy of liner shipping operations that

allowed manufacturing industries to adopt flexible *Just-in-Time* and *Make-to-Order* production technologies. Among a host of other benefits, these technologies enabled companies to cope with the vagaries and unpredictability of the seasonal, business and trade cycles. Many shippers in industrialised countries were, thus, more than happy to bear the increased initial costs involved in the introduction of the new transport system, given that these costs were only a fraction of the benefits enjoyed by faster transit times and the higher predictability of cargo movements.

The dramatic improvements in cargo handling operations that were brought about by the introduction of containerisation enabled general cargo ships to spend hours or days now in ports rather than weeks or months that was customary before. The reduction of idle port time and the corresponding increase in the income-generating time at sea eventually led to the substitution of the previous multipurpose general cargo ships with specialised high-speed container vessels of substantially (and ever increasing) larger dimensions that could take advantage of the economies of scale afforded by the shorter turnaround times.

However economically justified investments in containerisation might have been in the industrialised countries facing the north Atlantic and Pacific oceans (where the bulk of general cargo traffic is concentrated), developing countries responded to the necessity of this type of investments with varying degrees of scepticism. Their legitimate worries concerned the suitability of capital-intensive techniques in countries with abundant and inexpensive labour, their lack of financial resources together with other pressing investment priorities in the country, and also the fact that the vast majority of their exports (primarily raw materials and agricultural produce) were not "containerisable".

Furthermore, the capital-intensive nature of liner shipping and the consequent "operational arrangements" within this industry in the form of consortia and similar types of co-operation, frustrated many developing countries' plans to get actively involved in liner shipping, despite their cargo-sharing entitlements secured mainly through the provisions of the UNCTAD Code of Conduct of Liner Conferences. Major liner operators argued that if adequate port investments in container-handling facilities and equipment were not timely made, many ports in developing countries would be bypassed by major lines and thus become "backwaters". In many cases, this argument was driven home very successfully for a number of reasons:

- Developing countries would fail to see the importance of efficient national ports as facilitators to trade and as crucial elements in their process of economic development.
- The increase in sizes, sophistication and capital-intensity of modern container ships in deep-sea liner trades, has limited the number of ports of call to only a selected few transshipment ports or load centres. These very important ports have become the *foci* of international shipping and goods are moved by land (road and rail) and water (barge) from inland centres and feeder ports to these global hubs.⁶
- Many developing countries have, thus, taken up the challenge to develop their ports, hopefully into load centres, under keen competition with other regional ports having similar ambitions. These decisions were taken not only because of fear that ports would be bypassed if they did not do so, but also due to other more proactive considerations.
- It was thus thought that the development of container-handling facilities in excess of

⁶Slack et al. (1994, p. 185).

national traffic demand requirements might have the positive spin-off effects of an *unbalanced growth* approach to development. According to this, basic infrastructural facilities (such as ports) are built up far ahead of existing demand, on the part of the industry, agriculture and commerce, in the hope that the latter activities will expand by the wake of the former.⁷

- Apart from considerations of trade facilitation, a number of countries (particularly in Asia) saw port containerisation as an export industry in its own right. It was thus considered that, additionally to their direct financial benefits, the export of transshipment services to neighbouring countries would enable ports to grow and achieve significant economies of scale (not otherwise warranted by the country's limited cargo traffic) that would finally benefit the country's external trade.
- Finally, transshipment traffic would allow the development of feeder service networks for the regional distribution of containers and this would enable the country in question to get profitably involved in shipping (at least of the short-sea type) and value-added distribution activities that would otherwise be lost to competing regional ports. Feeder services and inland transport and distribution possibilities were major considerations by countries that were seriously contemplating investment in containerisation. This was considered so crucial that most countries were realising that if such possibilities did not exist, the likelihood of their being selected as major "hubs" would be rather slight, no matter how efficiently they might like to develop their ports.

4. DEVELOPMENTS IN PORT EMPLOYMENT

The capital-intensive nature of liner shipping and the need for maximum capacity utilisation in order to achieve adequate rates of return on investment, increased pressures on ports for further improvements in labour productivity and operational efficiency. In its efforts to adjust to the new demand requirements, the port industry itself also became a capital-intensive one, requiring massive investments in port infrastructure and sophisticated cargo handling equipment. In this way, containerisation and the induced cargo-handling techniques had an equally profound impact on port employment.

As with other capital-intensive innovations, containerisation substituted capital for labour and thus resulted in substantial reductions in port employment, simultaneously accompanied by enormous increases in labour productivity. These developments can be observed in an illustrative way in Table 1.

As was to be expected, reductions in port employment forced many labour unions all over the world to strongly resist the introduction of the new techniques. But there was also an additional reason for this: The "through-transport" concept and the door-to-door possibilities that the new system afforded, shifted a considerable part of what was previously considered as "dock work" to areas outside the port domain. This development particularly had to do with the stuffing and stripping of containers that could now be performed at the consignor's/consignee's premises by their own staff. Even when that was not the case, containerisation allowed the detachment of staffing and stripping activities from the usually congested "waterfront" and its "rigid" and

⁷see for example Rosenstein-Rodan (1943).

strongly unionised labour, towards *Inland Container Depots*, where ample and cheaper space was available, often conveniently located close to main road junctions.

Table 1 Port work-hours and tons handled in the US west coast

Year	Work-hours [Million]	Tons cargo [Million]
1960	29	29
1980	18	114
1987	16	158

Source: Cuadernos de la Cepal 1989 (taken from International Longshoremen and Warehousemen Union)

Another significant development that came together with containerisation was the remarkably enhanced accuracy in ship sailing schedules that almost completely eliminated the previous unpredictability and irregularity of employment, which had been a chronic phenomenon in ports since the invention of sail. This development has much reduced the use of casual labour and inefficient and costly labour pooling arrangements, and allowed progress towards the registration of dockworkers. Such a registration was often a condition stipulated by the unions for them to accept the introduction of the new cargo-handling techniques. The need for registration was also emphasised by the fact that dockworkers had to be adequately trained and experienced in order to be able to handle safely and efficiently the very expensive cargo-handling equipment. Training of casual labour was of course an uneconomic alternative even when this was feasible.

Undoubtedly, the registration of dockworkers, the permanency of their employment and stability of income were all positive developments that improved working conditions in ports and raised economic and social standards sometimes well above those prevailing in other sectors of the economy. The supply of port labour, however, became "rigid", at times expensive, occasionally "politically sensitive" and at any rate unable to adjust to the changing demand requirements.

Furthermore, the above labour rigidities often led to strict, and sometimes quite unjustified, job demarcation and large gang sizes that resulted in excessive overmanning, little labour mobility and high port user costs. In many ports around the world, the inflexible and monopolistic supply of port labour has effectively discouraged intended private sector activities around the port and has thus deprived the latter from one of its main functions, that of being a "growth pole" for the region and the country.

These problems, compounded by a "civil servant" mentality by many port workers, in an era of trade liberalisation and intense interport competition, have led governments to seriously consider their retrenchment from the port sector and the introduction of private enterprise characteristics and practices in port operations.

Containerisation has also considerably affected the working methods in ports. As already stated above, the high capital-intensity of the modern container vessels requires extremely short turnaround times. This need has been intensified by the increasing competition in liner shipping, its inherent overcapacity and the need to rationalise the provision of shipping services so that the

required regularity and frequency of sailings is achieved with as little physical capacity as possible. Nowadays, rationalisation of liner services has become even more imperative as a result of the intertwining of liner networks within the mushrooming liner shipping consortia, or even between the various consortia themselves.

This trend, together with the increasing competition between regional ports and their endeavours to provide a service of higher quality, has driven many ports to provide services around the clock, seven days a week. As far as port labour is concerned, this development was achieved through the extension of working hours and the use of shifts, which although welcomed by trade unions, has affected the social life of port workers, particularly in ports that due to reform were faced with significant labour shortages.

5 PUBLIC SECTOR INVOLVEMENT IN PORTS

Government involvement in ports can take various forms ranging from the mere ownership of the land to the provision of all port-related services. The State may determine port strategy, management and operations, but it can also interfere in a more indirect way, e.g., by assisting in port development, financing investments, or determining the port's regulatory framework. Several reasons can be put forward for the public sector's involvement in ports:

5.1. Military protection

Many major seaports are located close to a country's borders and are especially vulnerable to attacks from the sea. In former times most ports were thus also military protected areas. Most commercial ports have no direct military protection nowadays, but their strategic importance is still apparent.

5.2. Economic protection

As major ports are usually the gates to international trade, they may afford governments a convenient means to implement import-restricting policies aimed at protecting domestic markets. Import restrictions can be effected by the erection of tariff and/or non-tariff barriers. The latter can take many forms and are usually more difficult to detect and quantify. High port tariffs, long turn-round times and inefficient ports in general are often seen as constituting effective non-tariff barriers to trade. It has often been argued that import-competing domestic producers have strong vested interests in the continuing existence of inefficient ports, as this offers them effective protection. Evidence also exists that these producers can also be effective lobbyists and influential members of pressure groups that resist port reform.

5.3. Natural monopoly

Ports are often referred to as classic examples of the so-called natural monopoly case, in which possible market failures can justify government intervention.⁸ Under certain conditions (a given level of demand, cost structures and technological factors), a market with two or more firms can produce sub-optimal economic outcomes, whereas a single firm might produce the required output more efficiently.⁹ For this reason, governments may, at times, decide to move from a

⁸Shirley et al. (1991, p. 1).

⁹Adam et. al. (1992, p. 17-18).

multiple-firm competitive environment towards a monopolistic situation. This can be achieved either by explicit legislation, allowing only one operator, or by discriminatory subsidies, finally resulting in the withdrawal of potential competitors.

5.4. Financing

The rapidly changing cargo-handling technologies and the growth of trade have resulted in numerous port expansion/modernisation programmes, generally requiring substantial capital outlays. An example of this can be the construction of a new container terminal, but even the adjustment of berths and their superstructure to the increased ship sizes would require considerable capital resources. These investments often exceed the financial resources of the private sector and thus make the case for governmental involvement. Apart from a possible lack of financial resources, the private sector may also be reluctant to invest in ports, particularly when capital outlays have to be made within institutional and regulatory frameworks that cannot guarantee positive financial returns. Private interest is, thus, frequently expressed for activities such as ship-repair, bunkering, mechanical engineering and container, general and bulk cargo equipment. However, as government policies usually extend beyond considerations of short-term financial profitability and towards the maximisation of long-term *economic* profitability and general welfare, a number of infrastructural projects (such as ports) that might be deemed unprofitable by the private sector can be of cardinal importance to the government.

It should be added, however, that the expansion of international trade and the growth potential of many countries around the world are contributing more and more towards making port operations a commercially profitable activity. Furthermore, the globalisation and liberalisation of capital markets and the emergence of powerful corporate investors, building international portfolios, ease substantially the heavy financing requirements of port development in many countries that are faced with scarce capital resources and/or other pressing investment priorities.

5.5. National/regional economic development

In addition to their main function as interface, storage and distribution points, efficient ports also function as growth poles attracting new industries and stimulating trade.¹⁰ In this way, and apart for their obvious direct contribution to GNP growth and regional development, the indirect contribution of ports to the economy is also substantial, given their importance to the competitiveness of the country's export industries. State intervention is thus often justified on the grounds of these "not solely commercial" objectives of ports.

For example in Japan, apart from the direct financial returns of port operations, port development is appraised on the basis of its contribution to the social and economic development of the region and the nation. Port development plans are thus adjusted to and included in the country's regional development plans, while ports are managed and administered by public sector bodies.¹¹ Among other advantages, this approach helps in rationalising port investment, avoids duplication and the wasting of scarce resources due to excessive competition in an industry predominantly described by *sunk costs* and, finally, it helps in optimising the locational aspects of port investments, so that

¹⁰Rimmer et al. (1984, p. 120-129).

¹¹Ports and Harbours Bureau/Ministry of Transport/Government of Japan, 'Ports and harbours in Japan'.

they can tie-in meaningfully with the rest of the country's infrastructure.

Despite this, the realisation of the above-mentioned indirect objectives may generate numerous benefits for the country as a whole that do not necessarily produce visible financial rewards for the ports concerned. Thus, the efficiency and productivity of the latter might, at first sight, be considered as disappointing and inferior to that of comparable privately owned enterprises with clear-cut financial objectives.

5.6. Public goods

Among the many functions of public port authorities, whether regional or centralized, is the provision and maintenance of the ports' basic infrastructure, such as breakwaters, approach channels, turning basins, rail/road facilities within the port, navigational aids, towage and pilotage.

Apart from the general public's interest in the safety of ports, many of these services can clearly be considered as falling within the domain of "public goods" in the sense that no particular user can be excluded from their use if he/she is not agreeable to share in the cost of their production; a situation often referred to as *the free rider problem*. Furthermore, services such as those provided by, say, breakwaters and navigational aids can be considered as *collective consumption goods*¹² in which case, and up to a point, the total cost of production does not vary in relation to the number of users. Finally, a number of port services can be considered as *non-rival in consumption*¹³, given that user A's demand does not reduce (compete) that of user B.

Those port services that qualify as "public goods" ought to be provided by some public authority, although *provision* should not be confused with *production*; the latter could be entrusted either to the public or private sector depending on considerations of economic efficiency.

6. GOVERNMENT DIVESTITURE PROGRAMMES

The reasons for government divestiture from economic activity vary from country to country and have a mixture of economic and ideological origins. Divestiture was believed to be essential in the transformation of the former socialist countries from command to market economies. In mixed economies, divestiture can be used as a tool to improve efficiency and lessen the financial burden that many State Owned Enterprises lay on the national budget.¹⁴

An increasing number of port development plans contain sections on privatisation, suggesting that the performance of many public ports may not be satisfactory by today's standards. This, however, may or may not be so. Ownership is not the key determinant of enterprise performance or of the efficiency of resource allocation.¹⁵ In principle, a public port can perform just as well as

¹²see for example Shoup (1969).

¹³see Musgrave (1969).

¹⁴Kikeri et. al. (1992, p. 13).

¹⁵Adam et.al. (1992, p. 33).

a privately owned one, provided that both operate in the same competitive environment.¹⁶

The fact that many public ports incur heavy financial losses has led many governments to further limit or even eliminate competition and increase financial support. This policy response, however, could result in further deterioration of port performance, which is mainly caused by the lack of competition in the ports' protective environment.

More often than not, the lack of competition has resulted in a negative service attitude within the port. Because of the "soft budget constraint" and the frequent low interest government loans or subsidies, the *opportunity cost of capital* is a principle virtually unknown to many port managers. This may explain why *cost control* is often a low ranked priority in many public ports. Besides, port tariffs are often state-controlled and do not correspond to market prices, which adversely affects the management's motivation to seek cost reductions.¹⁷ Finally, many public port employees enjoy a high degree of protection and relatively high wages. As a consequence, over-manning is common phenomenon.

In many countries, governments have become painfully aware of the inadequacy of their public sector policies in an environment of increasing international interdependences and global competition. Market-oriented policies are becoming more and more popular in order to realise the benefits of higher efficiency and productivity, and a reduction of the financial and administrative burden that SOEs often impose on the State.

Recent divestiture experiences show that, in many cases, the process should be implemented gradually. Unless considerable operational improvements are first realised, public ports will be unable to operate in a competitive environment. A divestiture programme with a short planning horizon will suddenly put the former public ports under the influence of competitive forces, in which case their position might deteriorate even further.¹⁸

To enhance the possibilities of survival in a competitive environment, the government can improve the institutional environment of the firm, thereby enhancing the ability of a port to respond adequately and promptly to changing market conditions. Several well-documented divestiture experiences show that certain prerequisites regarding the firm's economic environment have to be met if the full benefits from divestiture are to be realised. A hospitable and efficient business environment has thus to exist¹⁹, distortions that hinder domestic and international competition must be eliminated, and an efficient capital market with considerable absorptive capacity need to be developed.^{20 21}

Care should be taken in introducing divestiture programmes so that public monopolies are not simply transformed into private ones. The effects of government divestiture without adequate competition are rather doubtful, and private monopolies, apart from reducing general economic

¹⁶Kikeri et. al. (1992, p. 16).

¹⁷Shirley et. al. (1992, p. 7-15).

¹⁸Shirley et.al. (1991, p. 7).

¹⁹OECD-DAC (1993, p. 39).

²⁰Persaud, in: Adam et. al. (1992)

²¹Also in: Kikeri et.al. (1992, p. 41-42).

welfare, may also be socially undesirable. Furthermore, their existence does not necessarily reduce bureaucracy, as new regulatory bodies have to be created to ensure that they do not enjoy monopolistic profits to the detriment of the consumer.

It has been stated that "successful privatisation of natural monopolies requires a regulatory framework that separates out potentially competitive activities, establishes the tariff regime, clarifies service goals, develops cost-minimisation targets and creates or strengthens an agency to supervise the process.... This regulatory framework ensures that divestiture leads to increased efficiency without harming consumer interests".²²

Port reform does not necessarily require the disengagement of the public sector from port activities, but it can also take place through improvements in the existing institutional framework. Most port reforms, however, tend to introduce private sector characteristics in port operations. There are many ways of doing this, ranging from changing port administration and improving competitive conditions up to the more drastic and complex divestiture programmes.

7. THE ROAD TO PRIVATISATION

Several contiguous processes can be involved *en route* towards the final stage of "privatisation". In these processes, the scope of private sector involvement is gradually broadened, which might eventually result in a complete transfer of ownership from the public to the private sector. The challenge for port policy-makers engaged in structural adjustment is to find a proper mix and time-path for the various intermediate processes on the way to privatisation. In what follows, the "stages of privatisation" are discussed in order of increasing need for change, compared to the traditional situation of a publicly owned port which serves as a starting point.

7.1. Improving port administration

The improvement of port administration within the current organisational structure and without changes in law or national policy, can be seen as a first stage of port reform. The consequences of this type of reform for port labour are minimal. Port services are still being provided exclusively by the public sector. Possible improvements could be realised by, for example, better career planning and the introduction of EDI.

7.2. Liberalisation/deregulation

Under liberalisation the private sector is allowed to provide port services in competition with the public sector. Liberalisation includes the removal of statutory restrictions limiting entrance of the private sector to the port services market, and of any discriminatory rules discouraging competition. Eventually, these restrictions are replaced by regulations that encourage or even require competition. For some countries, the advantage of liberalisation is that the introduction of some form of competition in port services leads to efficiency improvements, while the overall control over the (strategically important) port remains completely in the hands of a government department.

A possible disadvantage of liberalisation/deregulation is the potential danger of 'cream

²²Kikeri *et. al.* (1992).

skimming'. The private sector will only be interested to provide port services that have the potential to be profitable, e.g. container, general cargo, or bulk terminal operations. In a statutory monopoly port, the unprofitable (but required) port services can be cross-subsidised by the profitable ones. However, as a result of liberalisation, the public sector may be losing revenues from profitable port activities, having at the same time little possibilities for cross-subsidisation. This issue should be seriously considered when leasing out port facilities to private operators: if the port authority is to continue providing commercially unprofitable services, and in the absence of central/regional government support, the lease should be determined at a level that would allow the efficient provision of the various port services entrusted to the port authority/company. Something like this is also in the interest of the private operators, given that their efficiency improvements in cargo-handling can be easily nullified by inefficient dredging, mooring, pilotage, towage, engineering, security, fire protection and similar operations.

7.3. Commercialisation

Commercialisation implies the introduction of a commercial, business-like environment, in which port management is accountable for its decisions and performance. In the previous stages, ports still retain their status as quasi-government departments. In the commercialisation stage, the status of a "state-owned enterprise" is justified, as the previous "government department" now changes into a public company.

The main objective of commercialisation is to increase management autonomy and accountability.²³ If port managers in bureaucratic port organisations are not held responsible for port performance, they in many cases have little incentive for securing cost reductions or improvements in productivity. Furthermore, as the management of commercialised ports is still public, it often hesitates to consider in time possible reductions in employment. Port labour contracts are usually not governed by regular labour law, but they have a civil service status.²⁴ Solutions to the above situations could be found in an increased accountability for port managers and workers, or by the contracting out of certain port functions to the private sector. Several approaches are used to achieve this:

Performance agreements: These agreements clarify performance expectations and the functions, responsibilities and rewards of all parties concerned. All decisions still remain in the hands of the public sector.

Management contracts: Under this arrangement, the management of an operation is transferred to a private unit. The latter offers management expertise, but the government retains ownership and control.

Service contract/contracting out: This method consists mainly of the contractually specified transfer of responsibilities to a private entity, for the provision of a specific service. A service contract is usually described in more detail than a *concession* (see below).

Lease: Under this agreement, assets are leased for a fixed period to private lessees. The ownership remains with the (public) lessor. Among the many different types of leases that exist,

²³World Bank (1994, p. 9).

²⁴World Bank (1994, p. 40-43).

the following two are frequently used in the port industry:

- A *flat rate lease* where a fixed amount is agreed and eventually adjusted for inflation. The amount is based on a fair return on the value of the property.

- A *mini-max lease*, where the lease amount is variable and it is determined in relation to the actual throughput. The lease increases by steps within a mini-max scale. In contrast with the *flat rate lease* method, there is no maximum level of compensation included in this option. The upper limit is determined by, for example, terminal capacity.

Concession: A concession is an agreement similar to a lease in that the use of facilities is transferred for a predetermined period by the owner to a potential user, but with a substantial amount of control retained by the owner (the public port authority) on the *concessionaire's* use of the rights.²⁵ Upon expiry, the facilities have to be returned to the owner in good condition and free of charge. Examples of this case can be found in the port of Vera Cruz (Mexico) and Bristol (UK).

7.4. Corporatisation

Corporatisation requires the transformation of public sector organisations into private sector companies, the shares of which are held by the government. Enterprises in the commercialisation stage are given more autonomy, but still do not have the legal corporate independence needed to ensure efficient operation. Corporatisation provides the enterprise with a status of independence and subjects it to the same legal requirements as a private firm. A whole new company is thus established, which enjoys administrative and financial flexibility, enabling it to close agreements without continuous reference to the government. All land, moveable and fixed assets are transferred to the new company in the form paid up capital.²⁶

A significant advantage of corporatisation is to be found in its commercial accounting procedures, which make financial cost and benefit structures more transparent, facilitating the identification of sources of inefficiency. As the government does not directly control port management, corporatisation generally attracts more foreign investors than is the case with other stages of port reform discussed above.

The main disadvantage of corporatisation is that, despite the new organisational structure, the official governance of the State remains and this may negatively affect efficiency. Managers still have limited autonomy, compared with their private sector counterparts, and dockworkers may not be sufficiently motivated due to the relatively limited prospects of pay increases based on merit. Market solutions to these problems might include the encouragement of more competition or instructing managers to optimise profits. However, if these solutions cannot be implemented, because of non-commercial goals or monopoly power, alternative approaches may be considered. Options, already discussed above, are the introduction of management or service contracts and performance agreements. Finally, as corporatised ports are still public entities, the arguments regarding port employment, which were reviewed in the context of commercialisation, are also valid here. In many corporatised ports, overmanning and expensive port labour still remain key

²⁵Thomas (1993, p. 15).

²⁶Port Development International (December/January 1993, p. 33-53).

issues.

7.5. Privatisation

Privatisation is the most radical and possibly most complex exercise in government divestiture. It is defined as the transfer of ownership from the public to the private sector and several methods can be used to realise this objective:

Public offer: In those cases where the shares of the port company are quoted on the stock exchange and can be freely traded, the government may decide on a public offering. It may also decide to retain a major part of the stock in order to exercise some influence in future port activities.

Management/employee buy-out: In this situation the government decides to divest its shares to the employees, so that the latter assume ownership of the company. A buy-out would be more appropriate whenever the employees are highly motivated and keen on buying the company. Demand prospects have to be stable and the size of the company should be rather limited.

Private placement: Through a process of competitive tendering, various potential private investors can submit a quotation. By negotiation the government can then decide which offer is the most attractive. It is possible that offers are made by a consortium of companies, banks or even by a group of employees.

BOOT/BOT: In this case, a private company *Builds, (Owns) and Operates* an asset for a certain period. At the end of the period the asset is *Transferred* back to the government. If privatisation takes place in this way, the private sector is given an exclusive concession to operate an infrastructural project, such as a bridge or a port and it assumes the risk of completing it. BO(O)T is a form of non-debt financing of public sector activities, in which the private sector finances the construction and the costs are recovered through user fees. An example of the application of a BOT-like structure in ports can be found in the conversion of the East Wharf in the port of Karachi (Pakistan) into a modern container terminal.²⁷

Sale of assets: This alternative can be considered when private investors are not interested in acquiring the whole of the company, or when better results can be expected through a partial rather than outright sale.

Joint venture: A joint venture represents an enterprise in which two or more private companies, or a SOE and private investor(s), jointly own the equity of the port company.

8. PORT PRIVATISATION AND LABOUR REFORM IN LDCs

It has already been noted that, nowadays, the increased internationalisation of all forms of economic activity, mass media, foreign experts and modern tele-communications intrigue developing countries to attempt comparisons with other nations, western ones included, many of them at a completely different stage of economic and social development, having institutional

²⁷Thomas (1993, p. 16).

frameworks that were set up years ago. If superficially attempted, such comparisons can be extremely dangerous and misleading, particularly when successful economic reforms in other countries are taken *prima facie*, without a thorough understanding of all their implications and without adequate comprehension of the simple fact that, if proper *institutions* are not in place, the future of privatisation, and to this effect the country's economic development by and large, cannot be taken for granted.

The low labour productivity of the public sector is one of the major driving forces behind the various divestiture programmes throughout the world. Employment in most state-owned ports, and to that effect in the wider public sector by and large, is usually characterised by high levels of overmanning. Many times this is not only the result of the government's employment creation policy -particularly in developing countries with rapidly growing populations- but also of the fact that, through its permanency of employment, fringe benefits and stability of income, employment in the public sector is often an ardously sought after objective, many times attained through systems of 'political clientelism'.

The high levels of overmanning, together with the absence of risk in economic activity, the lack of accountability for economic performance, the impersonality of operational structures and a missing sense of belonging and achievement can very effectively remove workers' natural drive for more initiative, innovation and higher efficiency, consequently resulting in very low (and sometimes perhaps negative) labour productivity in ports.

The situation can be further accentuated by the fact that the general macroeconomic benefits of the public sector's involvement in port activities are dispersed throughout the regional/national Economy and thus are not immediately visible or directly beneficial to the workers who contributed to their accomplishment.

However, it would be fundamentally wrong to believe that the above are the only factors accounting for the low labour productivity of the public sector. Comparisons between different countries or between different sectors of the same Economy should therefore be contemplated with extreme care. Labour productivity ought not to be measured only as "output per man/hour" or "tonnes handled per gang-shift", as it is sometimes the practice in many ports, but as *output per man/hour produced with a certain stock of fixed capital of a given technology and operational characteristics*. Thus, differences in labour productivity between the private and the public sector could be explained equally well by the fact that the level of fixed capital investment in the latter sector is frequently inadequate or obsolete, due to the scarcity of financial resources, the budgetary constraints and the economic priorities of the government. Accordingly, any unconditional comparisons of labour productivity between, say, the ports of Rotterdam and Bombay should not be allowed.

Understandably, however, large scale employment in the public sector creates also inelastic government expenditures, increases the Public Sector's Borrowing Requirements (PSBR) and it may lead to inflation and high interest rates. In their turn, the latter can hinder the private (domestic and foreign) sector's propensity to invest and, subsequently, result in less output, employment and growth. Additionally, inelastic government expenditures can reduce the effectiveness of fiscal policy as a tool of economic stabilisation. The latter is (at least nowadays) almost invariably a pre-condition for the successful implementation of structural adjustment

programmes and too often the reason for the divestiture plans of the government.

It is sometimes argued that policies of public sector retrenchment, together with the encouragement of more private sector initiative, are rooted in ideological origins. However, regardless of how true this opinion may have been in the past, current economic and political developments world-wide can no longer support its validity. The real reasons for explaining the widespread popularity of the various divestiture programmes are to be found in the increasing economic interdependence among nations and the trend towards the globalisation of all forms of economic activity.

Regardless of ideological postures and doctrines, an increasing number of governments (and ordinary citizens) realise that they can no longer isolate their Economies or insulate them from external economic influences and shocks. Even if that were still possible, such a policy's effectiveness towards improving standards of living and increasing the general economic welfare of the country would be more than doubtful, at least today.

Current developments towards further liberalisation of international trade have been strongly supported by developing and Newly Industrialising Countries. For the first time in economic history, the impetus to trade liberalisation is not coming from industrial countries, which profess to accept liberal norms, but rather from countries whose past tradition has been to reject them. Most developing countries are now well aware of the tremendous potential benefits from the opening-up of their internal markets and the liberalisation of their external trade. These benefits are, of course, the result of their comparative advantage, due to their still low-basis growth in industrialisation (and, thus, their potential of achieving significant economies of scale), their inexpensive labour force and, in many cases, their rich endowment in scarce natural resources.

Apart from the rather obvious direct benefits from an export-led growth strategy, trade liberalisation and the opening of internal markets can also help developing countries to acquire all the necessary technology, know-how and foreign expertise that, together with the subsequent increased levels of Fixed Direct Investment (FDI), would allow them to accelerate the process of their economic development.

An export-led growth strategy, however, necessitates the adjustment of the economic, commercial and, many times, social characteristics of a nation to the business ethics and practices that are being employed in the game of international competition. In the rapidly changing world of technological innovation and of sophisticated demand requirements, the transition of many economies to market-oriented business practices, developed primarily in the capitalist world, cannot be always smooth. Furthermore, the time required for the gradual assimilation of these practices into economic and social conscience is not always available. Finally, the necessary processes of economic and social reform will be many times resisted by various pressure groups who, sometimes very justifiably, aim at safeguarding the country's environment, ethics, traditions, culture and religious values.

The retrenchment of the economic role of the State and the encouragement of greater private sector participation should constitute a careful long-term social cost-benefit analysis, undertaken by the government. The results of this analysis should form the government's basis for designing and implementing programmes of economic reform. Its strategy, once decided, should be firm,

with clear and transparent objectives, and it should be widely explained through a process of extensive consultation, particularly with those parties that are adversely affected by the proposed reforms. The importance of consultation in structural adjustment could not be over-emphasised, not only in securing labour's co-operation, but also in convincing the latter that the attempted reforms aim at enhancing the country's general economic welfare, which should be every government's utmost objective. This strong message has to be successfully and timely conveyed to trade unions and employees.

As it has already been mentioned, the problem here is that the wider, long-term benefits of economic transformation are not immediately and directly visible by all those, whose short-term well-being is adversely affected by the reforms, and it is only with the co-operation and consent of the latter that the reform process can be concluded in a frictionless and socially acceptable way. Employees have to be firmly convinced that retrenchment and economic austerity measures serve the nobler objectives of raising future incomes and standards of living as well of the eventual elimination of poverty.

The co-operation of trade unions should also be secured by convincingly arguing that, instead of their fruitless, short-run, pursuit of job-preservation in a rapidly changing technological environment, it would be to their members' best interest if they were to embrace more positive attitudes aiming at future job-creation. However, such arguments are bound to be more difficult to handle, particularly whenever it becomes evident that the new jobs are intended to be in the private sector, through enterprise-based labour agreements that tend to reduce union density and, thus, unions' influence in formulating labour policies.

Upon adopting a consistent, nation-wide, strategy on privatisation -or its variants-, governments of developing countries should not fail to *internalise* all the social costs incurred as a result of their divestiture programmes. The economic and social costs of redundancies should, thus, figure rather prominently among them. Assuming that, through privatisation, the government's objective is to raise the general economic welfare in the long-run, it would make sense to argue that workers who are made redundant due to the requirements of economic reform, should be adequately compensated by those who are -or will be- benefiting from it.

The existence of redundancy costs would undoubtedly reduce the financial attractiveness of the to-be-privatised ports, it could dilute private sector interest and it might, thus, prolong the timely completion of the reform process. The same would probably happen if the private investors who contemplate undertaking the previously state-owned ports, are obliged by law to also take over the existing labour force and keep it for a specified period.

The government has again a strong role to play in these deliberations: The various redundancy costs should not be contrasted only with the short-term financial prospects of the privatised port - which of course is the prime concern of the private investor- but with the long-term economic benefits of divestiture for the Economy as a whole. If this is the prevailing principle, the government should bear itself the costs of redundancies and it should finance them centrally. This approach would then constitute a form of income re-distribution towards those who had to lose their jobs, so that others could maintain theirs presently and in the future.

The re-distributional effects of such a policy, being cross-sectoral and multiplicative in nature,

are difficult to calculate, particularly if divestiture takes place in periods of economic recession when the government may find it difficult -if not impossible- to raise additional taxes. One of the reasons for the success of port privatisation in Malaysia, for example, was that it was designed and implemented at the right time, when the Economy was growing at an average annual rate of 8%, with apparent labour shortages and importation of foreign labour.

An additional problem with the central funding of redundancy payments is that it reinforces the general public's impression that divestiture often takes place merely in order to fill the Treasury's empty vaults and that the proceeds from privatisation are uneconomically dispersed to expenditures of dubious usefulness. Public support of divestiture programmes can, thus, be significantly reduced and the whole process prolonged or endangered.

Another method of financing redundancies that is likely to gain wider support from unions and workers is the direct financing through the proceeds from privatisation. In the port of Melbourne, a considerable part of the proceeds from the Port Authority's divestiture of major port superstructure and equipment were used for this purpose. This method's wider acceptability by unions and employees is based on its ability to promote an image of "fairness", to make directly and immediately clear and evident that workers' interests are not neglected or lightly discounted and, perhaps more importantly, to convince those negatively affected that the objective of divestiture is not to solve short-term budgetary difficulties of the government but rather to promote efficiency, growth and additional future employment.

A third method, rather suitable for countries that are particularly concerned with issues of income distribution and accumulation of wealth, is the financing of redundancy costs by those who directly benefit from the economic reform. Employers of privatised companies are here called upon to assume a significant part of the redundancy costs themselves and these costs should be a clear and quantifiable element in their investment appraisal exercises concerned with the evaluation of the financial attractiveness of the to-be-privatised port. Given the long-term macroeconomic benefits of privatisation, the government can -and normally should- share a part of these costs. Finding an optimum allocation of redundancy costs between the private and the public sector should thus be one of the main issues in the design of a port reform programme.

In the case of the Australian Waterfront Reforms, the government provided assistance on a "dollar-to-dollar" basis while, in New Zealand, there was no public funding of redundancies and the latter costs were recovered through levies imposed on port users, being the ones finally benefiting from the ports' improved efficiency.

The above method makes a lot of economic sense, particularly in the port privatisation attempts of developing countries. It can be very defensibly argued that although the economic and social costs of port reform are borne by the country itself, the benefits from the increased port productivity and lower charges -as a result of privatisation- can very well accrue to the foreign shipping operators servicing the country's external trade. In this way, and in the absence of adequate competition in international shipping (or perhaps in the absence of a protected national shipping industry, however condemnable this might be), reduced port charges are not necessarily reflected in lower transport costs, but perhaps in increased profits for the foreign transport operators. If that would be the case, it would be reasonable to argue that the latter operators should bear themselves the costs involved in increasing port productivity.

Again, in the absence of adequate competition in international shipping, levying shipping operators in order to recover redundancy costs may result in higher transport costs that could be easily passed-on to the final consumer. This would be particularly true if domestic commodity and product markets are either not developed, monopolistic or, in general, uncompetitive. However, given that redundancy costs are once-off or time-limited expenditures, the redistributive effects of such a situation would also be limited, and thus innocuous, as long as cargo levies are not becoming a permanent element in the port's cost structure.

Furthermore, the ability to levy foreign operators depends on the port's competitive position, nationally and internationally. If additional levies -for redundancy payments or for any other purpose- are not accompanied by commensurate reductions in port charges as a result of the increased port productivity, and provided that adequate port competition prevails, the additional costs to the shipowner may influence his decisions on port selection. In this case too, however, the short-lived character of redundancy payments is not very likely to have a marked effect on such decisions.

Finally, the "user pays" principle should also be very welcomed to the foreign ship-operators servicing developing countries' external trade, given their interest in the existence of efficient ports in their trading areas. This interest is immediately understandable from the mere fact that, the whatever benefits might potentially accrue to them from their investments in large ships and integrated transport systems, could be easily withered away by inefficient port operations at their ports of call.

The dissemination of benefits from increased port efficiency, however, deserves some further elaboration. This is important given that, during consultation and in order to secure workers' cooperation in the implementation of the reform process, the benefits from the public sector's divestiture must be as tangible and clear as possible. In this context, and having assumed that private sector economic operations are, as a rule, more efficient than those of the State, the question that still remains to be answered concerns the economic effectiveness of the private sector's higher efficiency and the distribution of the benefits of this efficiency among the citizens of the region or country.

A good starting point in this discussion is the port's economic significance within the overall transport chain and its role as a trade facilitator and as a crucial instrument in an export-led growth strategy. It has often been argued that inefficient and expensive ports can severely disadvantage a country's export competitiveness and, thus, hinder economic growth. Although, in theory, this argument holds true, the overall effect on export competitiveness can only be evaluated after having first examined the commodity structure of exports, and also after having estimated the price elasticities of exports in the countries of their final destination.

Even this approach, however, could be inadequate, given that export competitiveness is not only a function of price, but it also depends on attributes such as quality, reliability, packaging, marketing etc. Relevant but of minor long-term importance in this respect is also the fact that domestic exporting industries should have the adequate capacity and flexibility in order to be able to comply with the increased demand for exports without creating bottlenecks, inflation and, thus, further unemployment of productive resources.

It has already been mentioned above that, in the absence of adequate competition in international shipping, the benefits from increased port productivity and lower port charges may well result in higher shipping profits rather than be transmitted to the country's final consumers through lower product prices. Inefficient domestic product markets can further accentuate this result.

Another important consideration regarding the effectiveness of increased port productivity, and the distribution of benefits from it, concerns the port's role within the overall transport chain. The efficiency of a port and the desirability of government divestiture and other port reform plans cannot be judged in isolation but only within the economic framework the port operates. More and more ports in a large number of countries are losing their traditional function as merely interface points between land and sea and are assuming the much wider function of a crucial link in the production-transport-distribution chain. In this way, inefficiencies in the other parts of the chain can easily nullify all benefits derived from improved port efficiency.

For example, many otherwise efficient ports have been known to be faced with extremely bureaucratic and time-consuming customs regulations resulting in unacceptably high dwelling times. In others, where handling rates of 20 TEUs per crane-hour are boasted, it may take three hours from the gate to the motorway (1 km) due to excessive road congestion and to the fact that trucks have to transverse the city centre. In a number of ferry ports, passenger/drivers have been known to be queuing for as much as 12 hours, under extreme weather conditions, in the middle of the city, without access to even elementary sanitary facilities, only because an advance-booking system is not considered by the shipping agents -operating in a cartel- as a good idea.

Bottlenecks and inefficiencies such as these in the port's operating environment can easily choke-off and annihilate any potential benefits from introducing commercial principles and practices in cargo-handling and/or other direct port services. If these issues are not seriously taken into consideration, port unions would be quite justified in arguing that, in cases like the above, their members would have to bear the consequences of divestiture, while the benefits are used to cross-subsidise other inefficient economic activities (such as the provision of inadequate road and rail capacity) where no reform is being planned in the near future.

The above notes are by no means meant to be taken as making the case against the introduction of commercial principles in port operations. On the contrary, the benefits from such a policy permeate the whole of this paper. The only point that is made here is that the successful implementation of port reform plans -if they aim at ensuring general support in democratic societies- must fit within a general strategy of economic reform, where all its implications and consequences are thoroughly debated through honest and sincere dialogue. Piece-meal, *ad hoc*, or unsubstantiated attempts to privatisation are not likely to gain the support of unions and of the general public.

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