

Container terminal leasing/pricing methods and their economic effects

by Thomas J. Dowd

Income from leasing container terminals and terminal facilities over the last fifteen years has risen from miniscule levels to a majority of total income at some ports.

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Income from leasing container terminals and terminal facilities over the last fifteen years has risen from miniscule levels to a point where it now represents a majority of the total income at some U.S. ports! This paper provides an overview of the methods used to lease container terminals and terminal facilities, examines the leasing methodologies and pricing approaches used by U.S. public port authorities, and discusses the economic effects that each of these might have on a port.

Terminal leasing developed primarily as a means for ports to establish long-term relationships with water carriers. Long-term lease relationships were initially appealing because of the capital-

intensive nature of containerization and the need for a secure base upon which to issue bonds to finance new facilities. To accomplish this goal and encourage carriers to commit for the long term, ports developed a pricing structure that gave financial incentives to the water carrier as well as financial benefits to the port.

Each port or carrier defines its competition differently; each lease reflects such difference. Therefore, the subject of terminal leasing virtually defies the use of generalities. Each port appears to approach the subject of leasing in its own manner, negotiating terms and conditions that fit its own unique requirement. There is no average or typical lease.

Semantics are confusing too, since many ports refer to the lease document as a *lease*, whereas others refer to it as a *preferential assignment*, even though the documents in question are identical in their essential provisions. One reason that some ports use the term *preferential assignment* instead of *lease* is to avoid creating leasehold interest that would be subject to property taxes in some jurisdictions.



What is a lease?

Accountants classify land, buildings, and machinery as fixed assets. A fixed asset can be viewed as a bundle of services rather than an object.² A fixed asset gives off service after service ad infinitum. One who purchases a fixed asset in fee simple is in reality acquiring ownership of all the future services renderable by that asset. If the owner of a fixed asset does not wish to enjoy the current services of his asset, then that particular service is lost. In effect, an idle fixed asset implies income forgone.

A lease is a contractual arrangement by means of which the use of a fixed asset is transferred for a restricted time by its owner to a potential user, while its title is retained by the former. In such an arrangement, the owner is referred to as the *lessor* and the potential user as the *lessee*. The above definition would include preferential assignments, in which case the parties would be the *assignor* and *assignee* rather than *lessor* and *lessee*.

If the lease is merely a contract of sale of currently usable services, it is a one period lease. If the owner (lessor) also

sells the future services as they become currently usable, then it is a periodically renewable lease.

Someone leases a fixed asset from its owner for a variety of reasons. Among the more common are that the asset whose services are desired is not for sale or that it would not be financially feasible to pay to own the asset since funds could be used more profitably elsewhere. To purchase a fixed asset (to purchase all of the services renderable by a fixed asset ad infinitum) involves an investment that ties up a larger sum of capital than does the purchase of each service as it is used.

Types of leases

Terminal leases can be classified most readily by the form of their compensation computation. Using this method, there are three basic types of terminal leases — flat rate, mini-max, and shared revenue.

If compensation is a specific amount for a specified time period (e.g. \$1 million annually or \$35,000 per acre annually), the lease can be classified as a flat rate lease.

The flat rate lease is relatively simple since it required no tariff rates or cargo auditing. The basis for the compensation can be a "fair" return on the value of the property or it can be some estimated per unit rate based upon a study to determine estimated throughput or it can be a figure unrelated to either "fair" return or throughput that will entice the water carrier to agree to the lease.

If the compensation is stated on a specific scale with a minimum and maximum amount (e.g. tariff rates with a guaranteed minimum of \$250,000 annually and a maximum of \$2 million annually, or tariff rates on a guaranteed minimum of 500,000 tons annually and a maximum of 3 million tons annually), the lease can be classified as a mini-max lease.

The mini-max lease form provides for compensation to the port for use of a terminal in relation to the cargo throughput, while the flat rate lease does not. The mini-max lease contains both a guarantee of minimum compensation to the port and a lid of maximum tariff payments by the lessee. It provides a means by which the port can share some of the benefits of increased throughput, and



An overview of Los Angeles-Long Beach Port, one of the largest port facilities in the nation.

still limit its own risk through the use of a guaranteed minimum compensation level.

Compensation computation for a shared revenue lease is similar to the mini-max lease since both have a guaranteed annual minimum dollar amount or tonnage, and tariff rates are applied to the cargo throughput. However, in a shared revenue lease, there is no maximum annual amount of compensation payable. Instead, the port and the lessee share the tariff revenue, above a specific dollar or tonnage level, on all throughput. For example, the lessee guarantees a minimum annual compensation of \$750,000 and remits 100% of the tariff charges to the port until he has paid the port \$1 million; then the lessee remits 75% of the tariff charges until he has paid \$2 million to the port. After that the lessee remits only 50% of the tariff charges to the port on all cargo for the remainder of the year.

Another example would be a minimum guaranteed throughput of 750,000 tons with 100% of the tariff charges being paid to the port on the first one million tons, 80% of the tariff charges on the next 500,000 tons, 75% on the next 500,000 and 50% on all cargo over two million tons.

The choice of a trigger mechanism (e.g. dollars of tariff charges paid to the port, throughput tonnage, TEU's, ship calls, etc.) is very important. For example, if dollars of tariff charges paid to the port are used as a trigger mechanism, a tariff increase would benefit the lessee, not the port, since a lessee could reach the maximum of a mini-max lease or a sharing step of a shared revenue lease with less cargo.

If used, a dollar trigger mechanism can be made less risky from the port's standpoint if it is incorporated into a lease having a short time period (maximum 2 years) between rental renegotiations.

Although some mini-max and shared revenue leases use both wharfage and dockage⁴ tariff charges to fund lease rental payments, the majority use only wharfage. This tends to directly tie the lease compensation to the amount of cargo throughput.

Strategy considerations

Leasing of container terminals and terminal facilities is a form of volume pricing. In fact, long-term leases of container terminals and terminal facilities are agreements involving incentive pricing at less than the published tariffs. For