

Study	Data description	Outputs	Inputs
Cullinane, <i>et al.</i> (2005)	30 container seaports out of the world's top	Throughput (TEU)	Quay length (m); Terminal Area (ha); Quayside Gantries (n); Yard Gantries (n); Straddle Carriers (n).
Roll and Hayuth (1993)	20 hypothetical seaports	Cargo throughput; Level of service; Users' satisfaction; Ship calls.	Manpower; Capital; Cargo uniformity.
Martinez-Buñia <i>et al.</i> (1999)	26 Spanish	Total cargo moved through the docks; Revenue obtained from the rent of seaport facilities.	Labour costs; Depreciation charges; Other expenditure.
Tongzon (2001)	4 Australian and 12 other international	Cargo throughput; Ship working rate.	Number of cranes; Number of container berths; Number of tugs; Terminal area; Delay time; Labour.
Valentine and Gray (2001)	31 container seaports out of the world's top	Number of containers; Total tons throughput.	Total length of berths; Container berth length.
Itoh (2002)	8 seaports of Japan	TEU handled.	Terminal area; Number of berths; Cranes; Employees.
Serrano and Castellano (2003)	9 seaports of Spain	TEU handled; Total tons through-put.	Berth size; Terminal area; Number of cranes
Turner <i>et al.</i> (2004)	26 North America container seaports	TEU handled.	Berth size; Terminal area; Number of cranes
Cullinane <i>et al.</i> (2004)	25 of 30 biggest terminals in the world	TEU handled.	Berth size; Terminal area; Number of berth cranes; Number of yard cranes; Number of straddle carriers.
Wang and Cullinane (2006)	104 European Container terminals	Container throughput.	Total berth length; Terminal area; Equipment costs.
Park and De (2004)	11 Korean seaports	Berthing capacity; Cargo handling capacity; Cargo throughput; Number of ship calls; Revenue; Customer satisfaction.	Berthing capacity; Cargo handling capacity; Cargo throughput; number of ship calls; Revenue; Berthing capacity.
Cullinane and Wang (2007)	30 container seaports out of the world's top	Throughput (TEU).	Quay length (m); Terminal Area (ha); Quayside Gantries (no.); Yard Gantries (no.); Straddle Carriers (no.);
Barros and Athanassiou (2004)	4 Portuguese; 2 Greek	Ships; Movement of freight; Total cargo handled (dry and liquid cargo, unloaded and loaded); Containers (loaded and unloaded).	Labour (measured by the number of workers); Capital (measured by the book value of assets).
Barros (2003a)	5 Portuguese seaports	Ships; Movement of freight; Gross tonnage; Market share; Break-bulk cargo; Containerised cargo; Ro-Ro traffic; Dry bulk; Liquid bulk; Net income.	Number of employees; Book value of assets; Price of labour measured by salaries and benefits divided by the number of employees; Price of capital measured by expenditure on equipment and premises divided by the book value of physical assets;
Barros (2003b)	10 Portuguese seaports	Ships; Movement of freight; Break-bulk cargo; Containerised freight; solid bulk; Liquid bulk.	Number of employees; Book value of assets
Cullinane, <i>et al.</i> (2005)	57 container seaports out of the world's top	Container throughput.	Terminal length (m); Terminal area (ha); Quayside gantry (number); Yard gantry (number); Straddle carrier (number)
Rios and Maçada (2006)	23 container terminals in Mercosul.	TEU handled; Average number of containers handled per hour/ship.	Number of cranes; Number of berths; Terminal area; Number of employees; Number of equipments
Riaz-Hernandez <i>et al.</i> (2008)	19 Spanish seaports	Containerized general cargo; Non-containerized general cargo; Solid bulk handled with no special infrastructure.	Capital (cranes); Labour
Sharma and Yu (2008)	70 container terminals out of the world's top	Throughput (The number of container movement per year).	Quay length (Total quay length of a container terminal; Terminal area (Total area of a container terminal); Quay cranes (Total number of quay gantry cranes); Transfer cranes (Total number of yard cranes); Straddle carriers (Total number of straddle carriers); Reach stackers (Total number of stacker vehicles).