

Port Performance Scorecard (PPS) Newsletter 2019

Headlines

- Gender participation levels are low across all regions
- Female participation in corporate roles is greater than in operations
- Labour costs just over 21% of revenue on average
- Training costs remain very low given the technological shifts in port operations
- High relative profit levels (EBITDA) reflect capital investment demands for a sustainable Port Entity
- Average port governance profile remains: Corporate, State owned, More likely to have a mixed functional model rather than exclusively Landlord
- Average volume throughput of less than 10m tonnes per annum for more than 53% ports

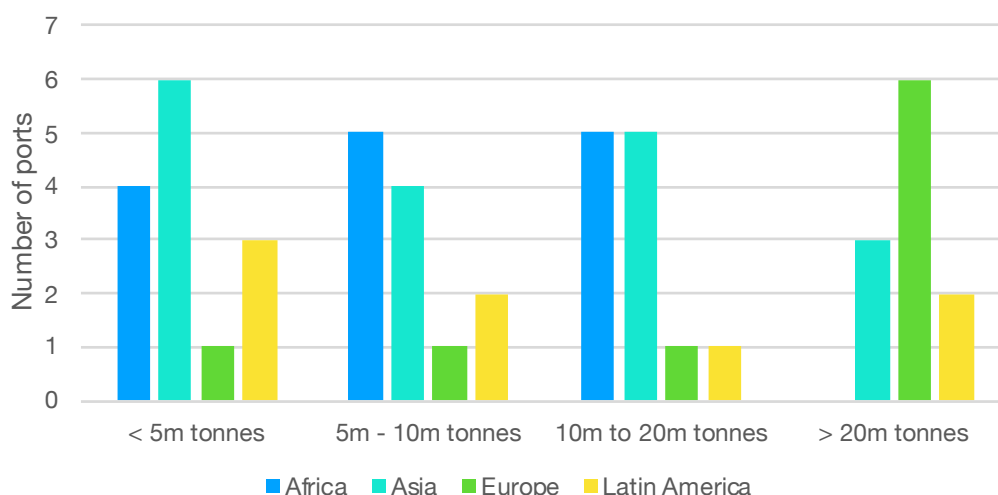
Strengthening knowledge
and skills through innovative approaches
for sustainable economic development



The 'Average' Port

This Newsletter describes the results of data collection and analysis from 2010 to 2018 across the members of the Port Management Programme networks. Data from 49 ports are collated from which we can profile ports by region, ownership and governance. We can also report port entity level performance benchmarks across the financial, vessel operations, cargo operations, environment and people dimensions.

Figure 1 - Ports by Annual Throughput

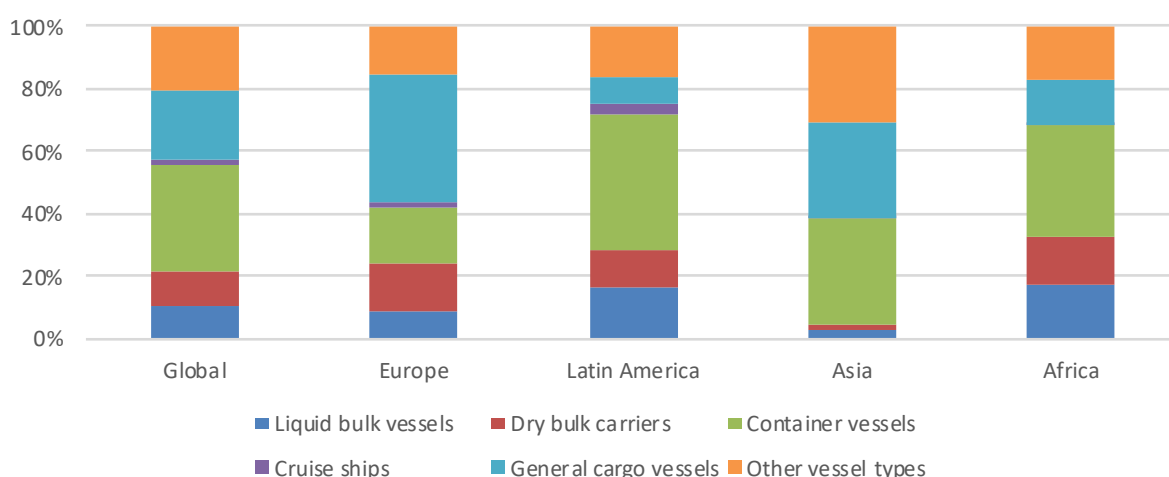


The mix of ports across the networks is varied across the regions and in terms of scale. Just over half the members (53%) have annual reported volumes less than 10m tonnes. This has fallen with the addition of the European ports where 66% of them are more than 20m tonnes per annum. The inclusion of smaller ports adds value to the exercise as most surveys focus on larger, mainly containerised, ports.

The data on the variable mix of port configurations in terms of cargo and vessels reinforces the industry wisdom that “when you have seen one port, you have seen one port”. Each has its own dynamic driven by geography and the local political economy.

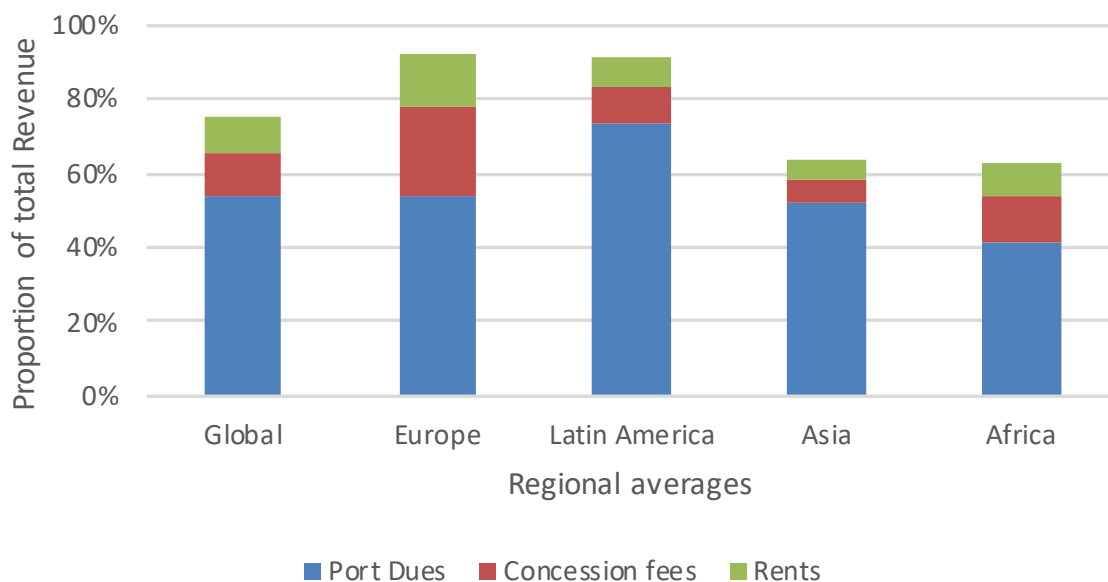
The data in Figure 2 provides a snapshot of the mix of vessels arriving to the member ports. The categorisation of vessels is consistent with the definitions used in the UNCTAD Review of Maritime Transport for World Fleet profiles. The member ports can review their unique mix against the averages in this profile.

Figure 2 - Average of Arrivals per type of ship



Comparing port performance financially is contingent on using the same currency and time periods. In these data the ports input their accounting data in local currency and UNCTAD convert to US dollars, using World Bank published currency tables, to facilitate comparison.

Figure 3 - Revenue Mix

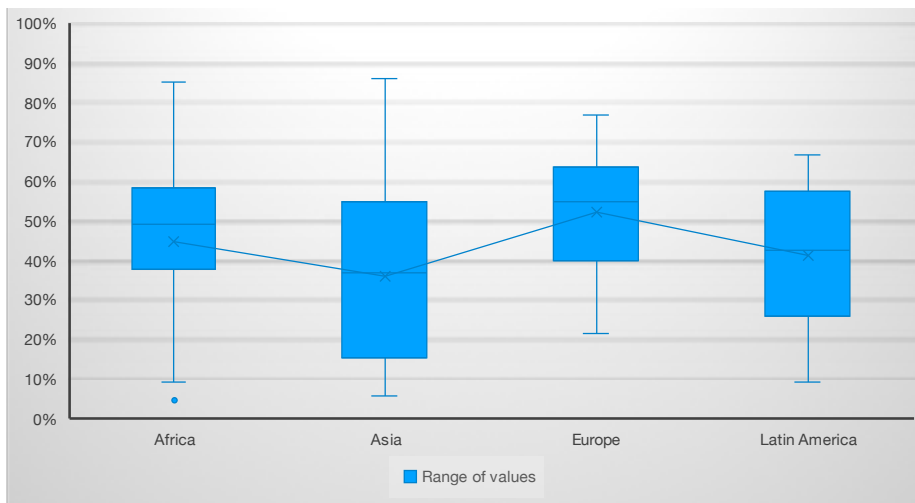


Traditional revenue profiles in ports relied heavily on the dues charged to ship and cargo owners, usually through agents. This revenue stream is required to build and maintain port infrastructure for vessels and for cargo handling. The balance of revenue would be made up of rent on storage sites and the provision of services such as tugs and pilots.

The structure of ports in terms of capital structure and sustainable profitability is a valuable data element in the PPS. It is clear that the capital structure, investment and dividends, varies greatly across the members. For some they are fully independent of the State. For others, the capital side is entirely State driven. For many it is somewhere in between these extremes. With direct membership contact point, engagement greater insights into this dimension of port profiles will emerge.

Profitability is comparable across port types and scale as a ratio of operating profit against total revenue. Figure 4 describes the average levels and the range of values by region. One reason for variance is the range of services that the port entity engages in. The primary infrastructure provision role requires high margins in order to service the capital needs of the CAPEX projects. The direct provision of services require operating margins, averaging around half of the primary margins in these data, that reflect lower CAPEX and higher people inputs.

Figure 4 - Operating Profit by Region (EBITDA)



In a blended environment the net average will be lower. This tends to apply to smaller scale ports and perhaps where containers are less significant.

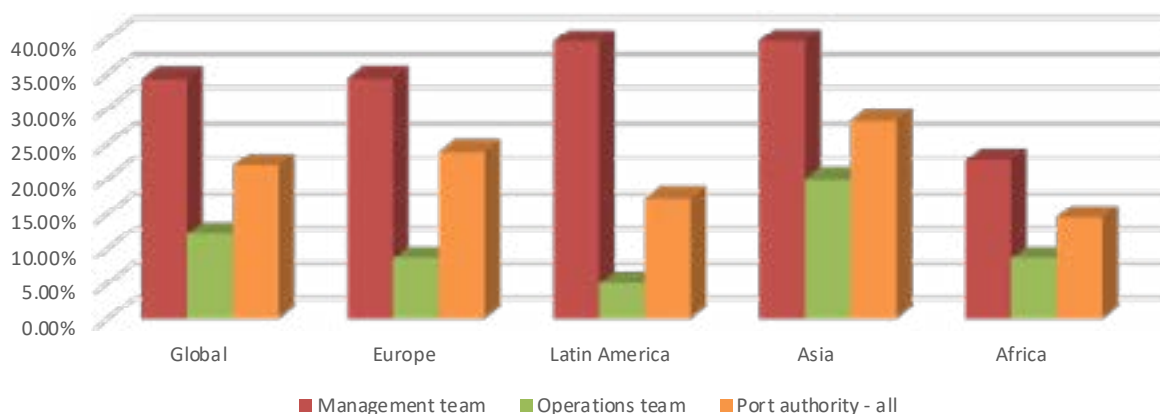
Port People

One of the six category of indicators from the Port Performance Scorecard (PPS) is covering gender-linked to Sustainable Development Goals 5 (SDG 5). It measures the level of female participation in the workforce. Port workers are traditionally regarded as a male dominated group in most societies. Changes in working practices, technology and society generally have opened up the possibility for greater levels of female participation.

Membership of the Port Management Programme mainly consists of Port Entities even though trainees can come from the wider port community. The PPS survey gathers data on staffing in Port Entity structures first and in the wider port community where data is available.

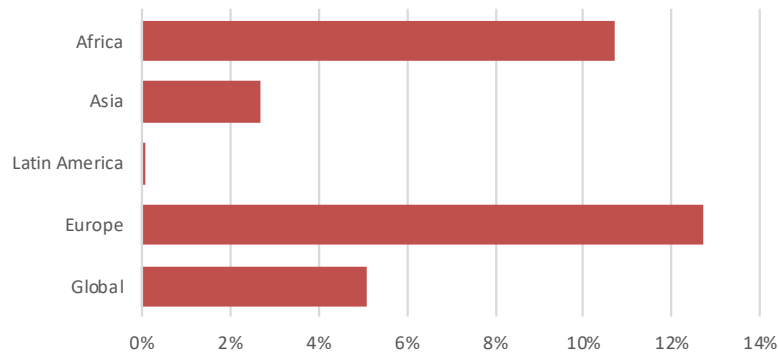
Figure 5 examines the profile of the average Port Entity by region. The predictable results are that overall participation is low however participation on the corporate side is encouraging. The low values on port operations suggest we have low involvement in activities such as engineering and service provision on the quays.

Figure 5 - Port Entity: Female Participation Rate



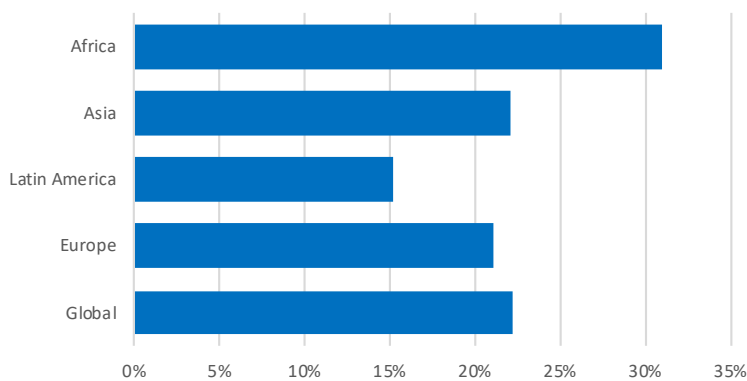
When we look at data from the cargo handling operations, including stevedores, this low level of participation is repeated. Intuition suggests digitisation and automation of activities will lead to higher participation rates. It can also be argued that increases in participation levels require direct action by employers and wider society.

Figure 6 - Female participation in Cargo Handling



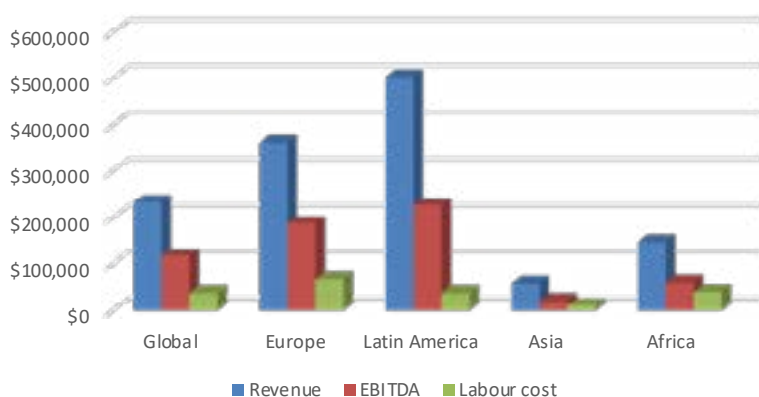
A useful port profile statistic is the cost of labour as a proportion of total revenue. It is a high-level metric with a number of constituent parts. For example, as the level of automation or out-sourcing increases one might expect the average to fall. Such technological shifts can also result in high skills recruitment and an increase in average wages.

Figure 7 - Labour costs as proportion of Revenue



Over the life of the PPS survey reports, the global average has held in the 20% to 25% range. The regional averages for Europe and Asia are also in this range. The relative outliers are Africa and Latin America. Although there is insufficient detail in the data to be definitive, feedback from ports suggest that Latin America is low in Port Entities because of privatisation and high in Africa because of higher numbers of employees. There are other possible explanations such as wages rates, revenue levels, or differences in how ports classify employees.

Figure 8 - Employee Contribution



Continuing with the focus on employees in this briefing note, the relative contribution of each employee to the financial performance of the port is charted in Figure 8. The regional spread is noteworthy, however the explanations are unlikely to be down to a single variable. Figure 7 noted the relative

low figure for labour costs suggesting low employee numbers due to higher level privatisation or outsourcing. This may in part explain the high contribution per Port Entity employee in Latin America. The opposite may be true in Africa and Asia.

Sustainability

A recent innovation is the comparison of environmental investments and standards across the networks. There are limited returns to work with as yet with 23 of the ports completing the standards question and all of them reporting the application of a methodology for environmental monitoring. The majority of these reports the application of ISO14001.

On Environmental spending, feedback suggests that CAPEX and operational costs are rarely classified as a unique project. Therefore, such costs are included under many budget lines in other projects. This may in part explain the relatively low spending (1.7% of CAPEX) reported on the Scorecard.

With each additional year we gain further insight into the “average” port in our Port Management Programme networks. This assumes that ports will continue to share data and contribute with feedback on these annual Scorecards and newsletters.

Liner Shipping Connectivity Index

UNCTAD publishes an annual index of shipping connectivity between global ports. Intuitively we see larger ports with higher connectivity built around regional or global hubs. In 2019 for the first time this index was published in port format as well as country scores.

For ports in the Port Performance Scorecard dataset there are few of these large ports so the scores are on average lower. Figure 1 illustrates the spread of connectivity measures by region and Europe features with higher numbers. Valencia is the largest in the dataset with Tanjung Priok in Indonesia representing the Asian high outlier on the graph. Europe values are spread wider than other regions because the participating ports are generally feeder ports with Marseilles and Valencia operating at higher levels of connectivity.

Callao in Peru and Buenos Aires in Argentina explain the spread of values above the median value.

Figure 9 - LSCI by PPS port 2019

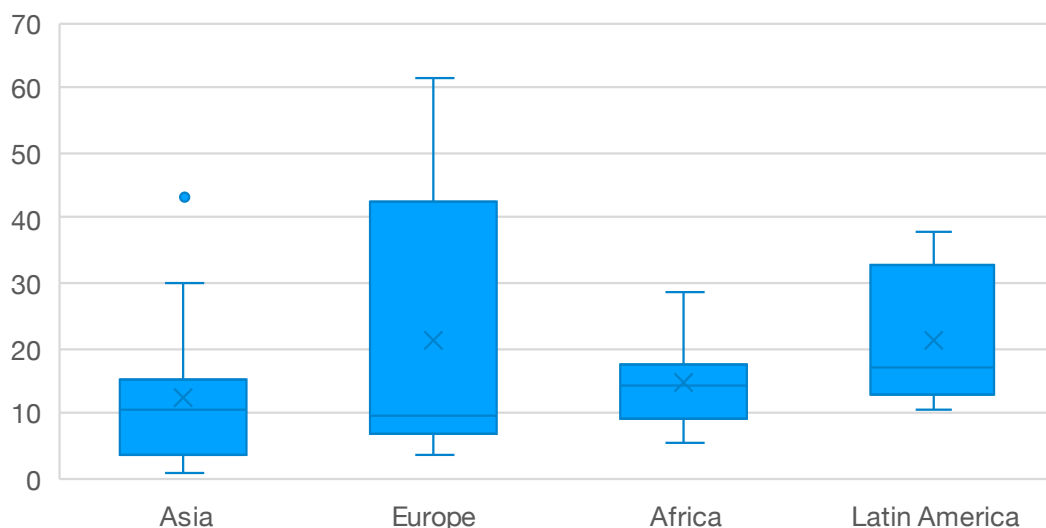


Table 1 - LSCI by PPS port 2019

PORT	2015	2016	2017	2018	2019
Angola, Luanda	22.03	25.79	22.49	23.76	24.90
Argentina, Bahia Blanca	7.08	8.19	8.59	8.59	10.75
Argentina, Buenos Aires	34.67	32.47	31.07	31.13	30.85
Benin, Cotonou	15.54	15.42	16.21	16.78	16.55
Cameroon, Douala	13.51	16.33	16.58	15.86	13.25
Dominican Republic, Rio Haina	11.80	13.25	14.36	14.71	15.04
France - Port de Marseille-Fos	41.44	42.98	43.54	44.07	43.54
Gabon - Office des Ports et Rades du Gabon	8.18	9.17	10.83	10.85	12.24
Ghana, Takoradi	7.55	8.33	9.11	10.19	8.07
Ghana, Tema	21.69	19.04	18.97	18.21	18.01
Guatemala, Puerto Quetzal	13.39	13.95	15.32	19.53	19.13
Guinea, Conakry	8.21	10.05	10.55	8.52	9.99
Haiti - Autorité Portuaire Nationale	8.92	8.52	7.74	8.63	10.08
Indonesia, Balikpapan	1.60	2.05	2.05	7.08	7.08
Indonesia, Belawan	9.45	9.19	9.15	13.55	13.01
Indonesia, Bitung	4.68	3.91	3.78	6.48	6.48
Indonesia, Jakarta	34.25	33.42	41.58	44.01	43.09
Indonesia, Makassar	5.44	8.40	11.13	11.65	11.35
Indonesia, Padang	4.42	4.46	4.18	4.54	4.51
Indonesia, Panjang	6.59	6.49	5.92	7.45	10.55
Indonesia, Surabaya	22.00	21.79	24.85	27.04	26.84
Ireland, Cork	7.79	7.43	7.74	7.82	10.71
Ireland, Dublin	8.26	9.96	8.75	8.74	8.13
Mauritania, Nouadhibou	2.90	4.30	4.30	6.29	5.52
Mauritania, Nouakchott	6.62	8.60	6.87	10.79	7.82
Namibia, Walvis Bay	17.02	15.81	14.96	15.04	14.63
Nigeria, Lagos	13.69	15.63	12.82	8.80	10.89
Peru, Callao	32.26	33.38	36.65	38.65	37.95
Peru, Paita	11.34	10.63	7.73	8.06	13.29
Philippines, Batangas	7.46	10.38	10.13	13.13	13.13
Philippines, Cagayan de Oro	6.48	7.71	7.66	8.07	10.52
Philippines, Cebu	9.63	11.83	11.31	10.79	10.90
Philippines, Davao	14.95	14.82	15.62	15.85	17.32
Philippines, Iloilo	1.65	2.63	2.65	2.65	2.65
Philippines, Manila	22.34	28.78	28.60	29.29	29.81
Philippines, Mindanao Terminal	1.06	1.06	1.40	1.40	1.40
Philippines, Tagbilaran	-	0.92	0.92	0.92	0.92
Philippines, Zamboanga	1.68	2.53	2.53	2.53	2.53
Portugal, Sines	32.35	34.23	36.23	49.29	36.35
Senegal, Dakar	15.67	16.94	16.99	15.61	16.81
Spain, Gijon	4.36	4.60	3.68	4.73	7.67
Spain, Valencia	53.37	53.39	54.24	54.58	61.68
Tanzania, Dar es Salaam	11.54	12.84	12.66	13.51	14.25
Togo, Lome	21.82	26.04	29.02	31.72	28.85
United Kingdom, Belfast	4.26	5.31	3.66	3.75	3.73

Index (Maximum 2006=100)