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Enhancing Society Together

Port investments: Risks and returns

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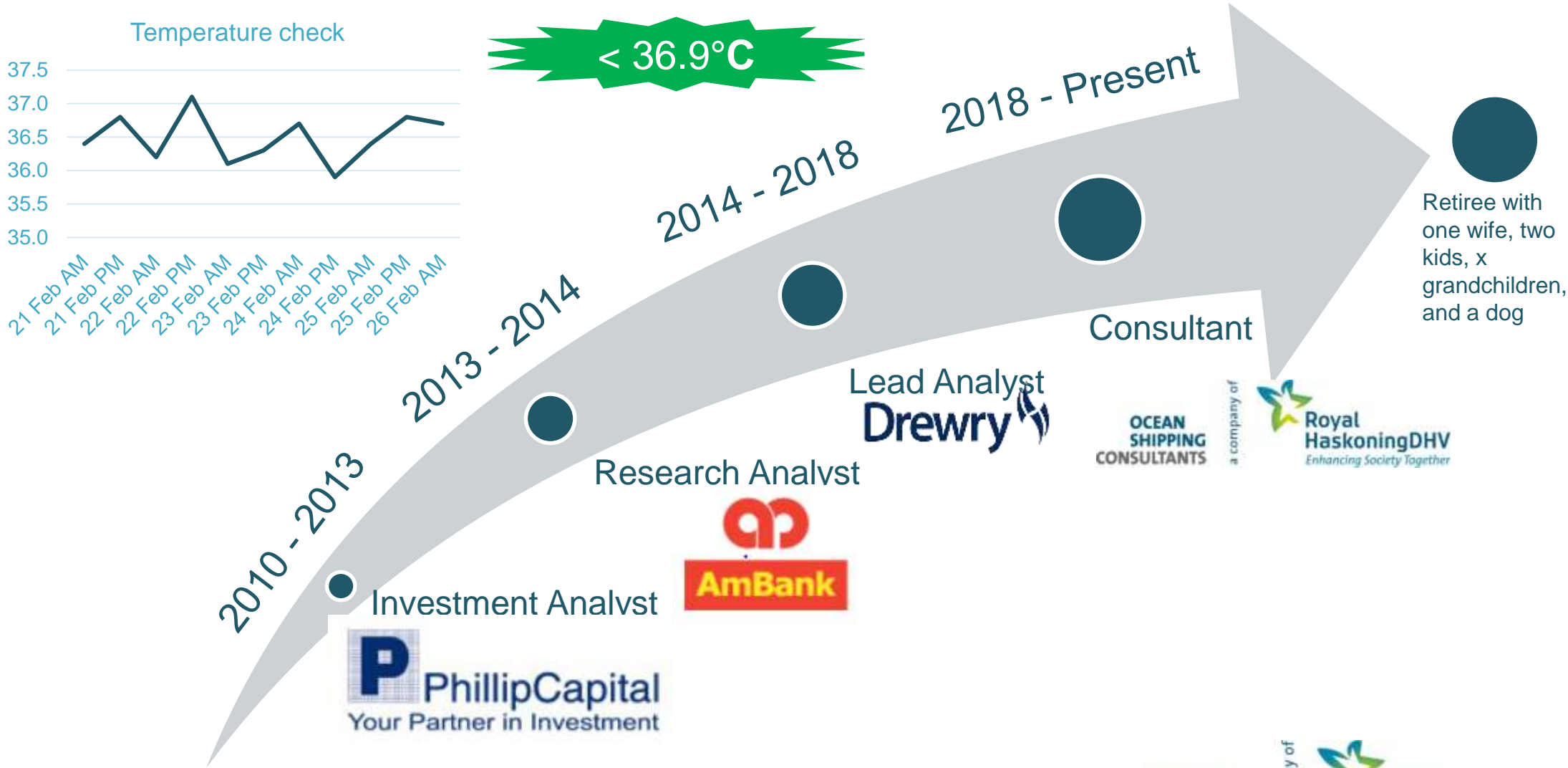




Introduction

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Ocean Shipping Consultants (OSC) is the maritime economic consultancy group of Royal HaskoningDHV, and a leading brand in the maritime sector with more than 35-years of experience

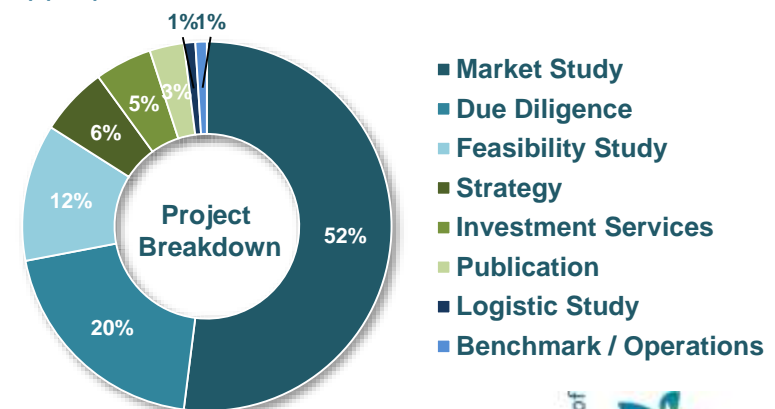
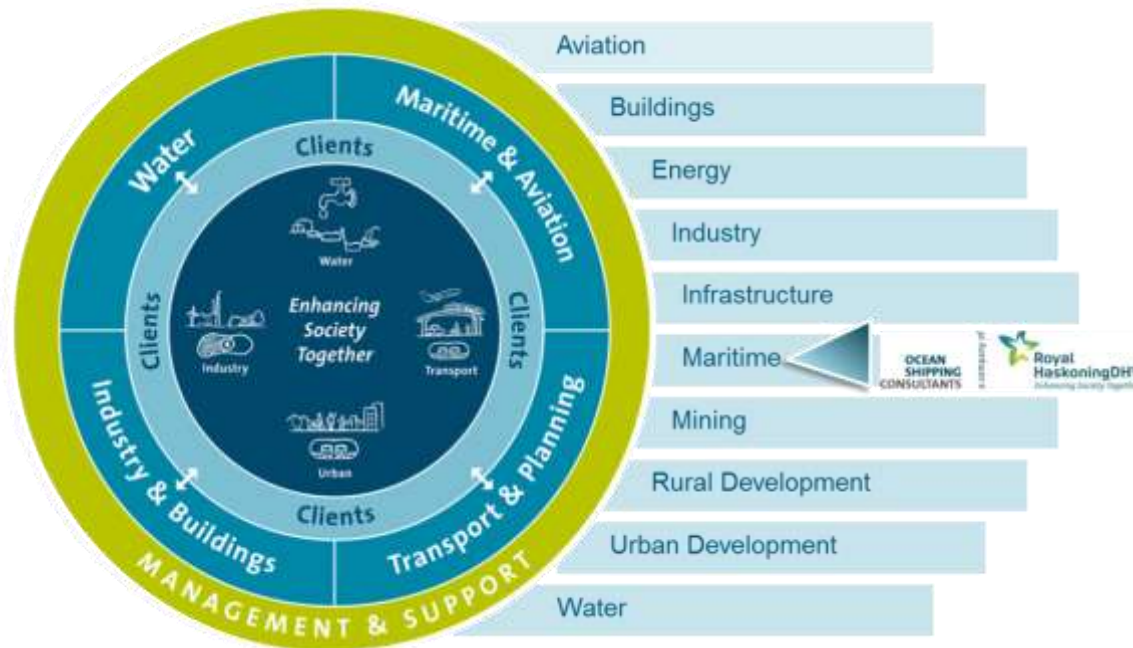
Key profile	Top International Design Firm	Resources
<ul style="list-style-type: none"> - Originally founded in 1881 - 138 years of experience - Turnover €607m (2017) 	<p>Ranked 4th in Top International Design Firms – Marine & Ports by ENR (2018)</p>	<ul style="list-style-type: none"> - 5,700 employees - 100 offices in 35 countries - 650 dedicated ports and maritime professionals

OCEAN SHIPPING CONSULTANTS

With over 350 projects in more than 65 countries successfully completed over the last 5 years, OSC provides global bespoke consultancy services from offices in London, the Netherlands and

Singapore to more than 200 different clients, including port authorities, terminal operating companies, governments, shipping lines, logistics operators and the wider financial community.

These range of services are undertaken for all cargo types and sectors ensuring that clients are able to make appropriate, well informed decisions at all times.





Be patient, history is on your side

Spotlight topic: Impact of CoVid19 on the stock market

World Economy Shudders as Coronavirus Threatens Global Supply Chains
Manufacturers' increased reliance on more interconnected China sees shortages ripple around the globe
Wall Street Journal

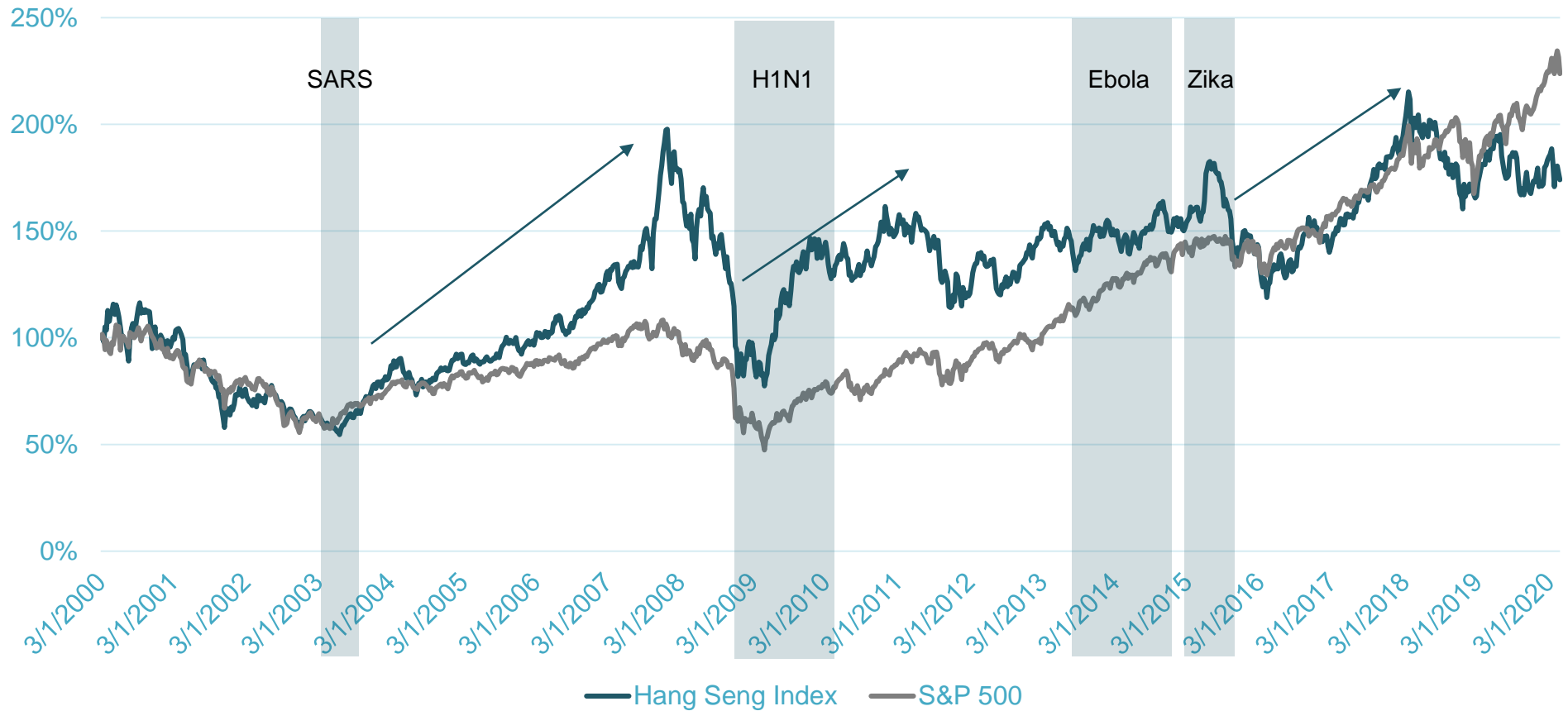
Coronavirus is fast becoming an 'economic pandemic'
CNN

Container capacity cuts can't stop coronavirus-fueled spot rate dive
JOC

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Against the backdrop of epidemics, bargain hunters are positioning for an entry.

During and post-health emergencies



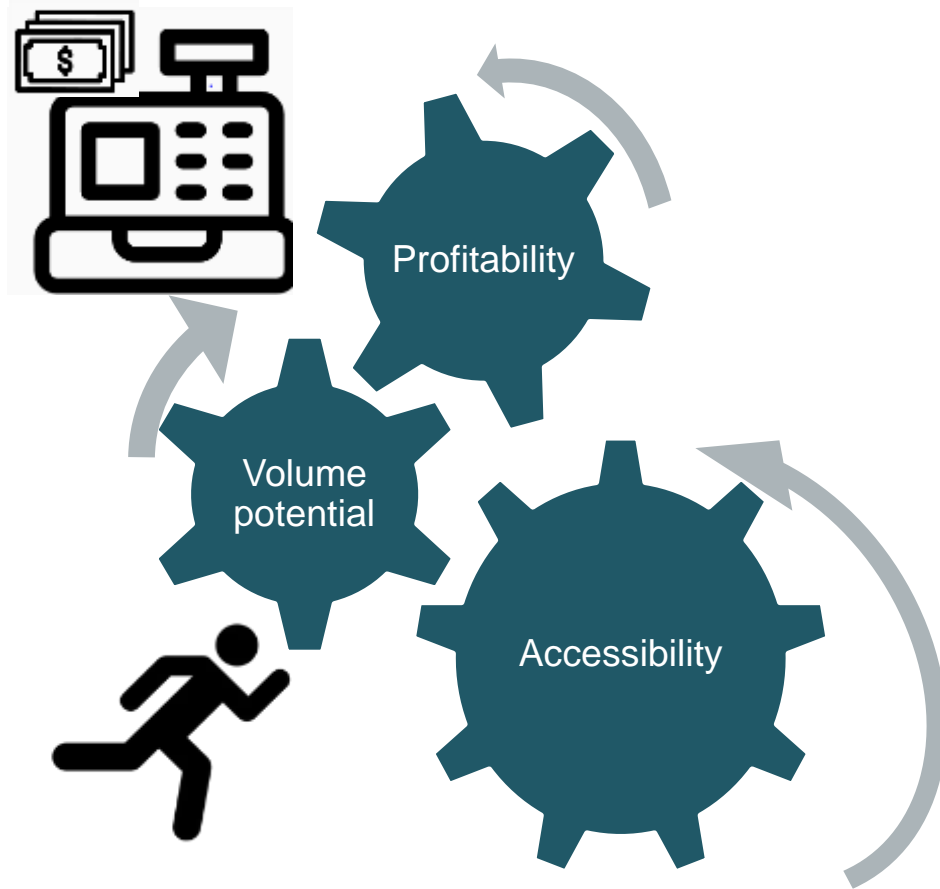
Source: Yahoo Finance, adjusted returns since Jan 2000



Can invest, you said. Where?

For terminal operators

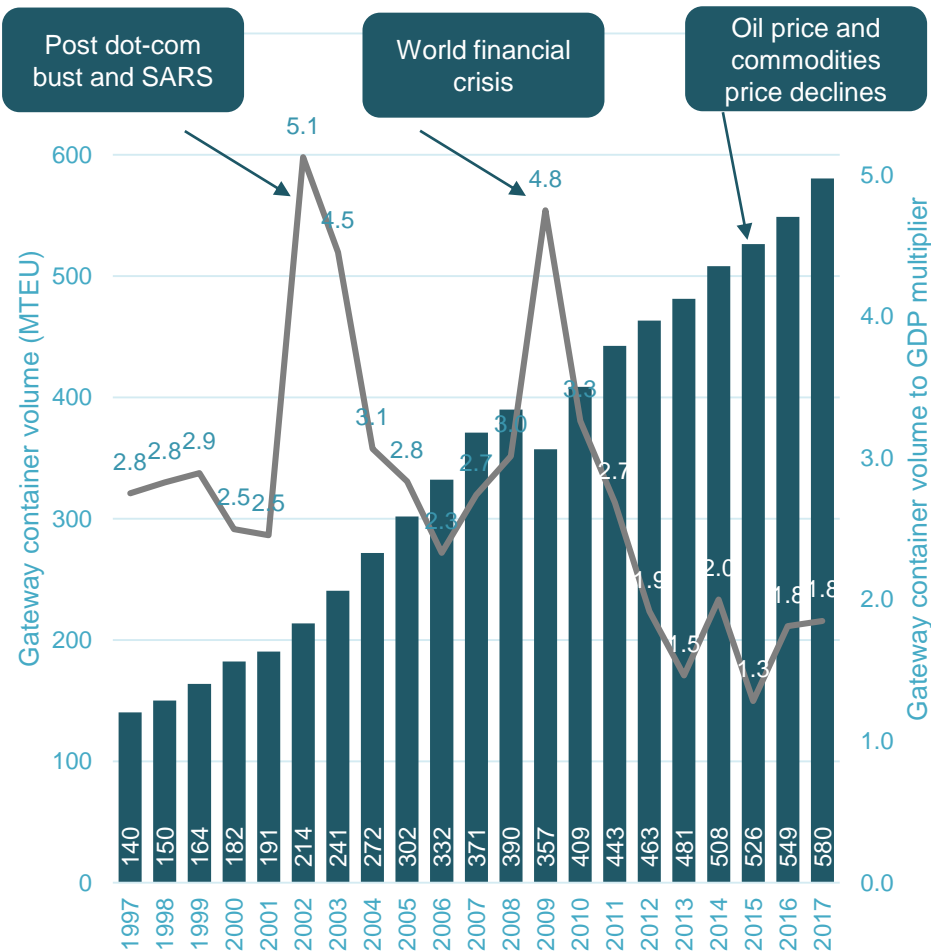
Three essential considerations: Accessibility, Volume Outlook, Profitability



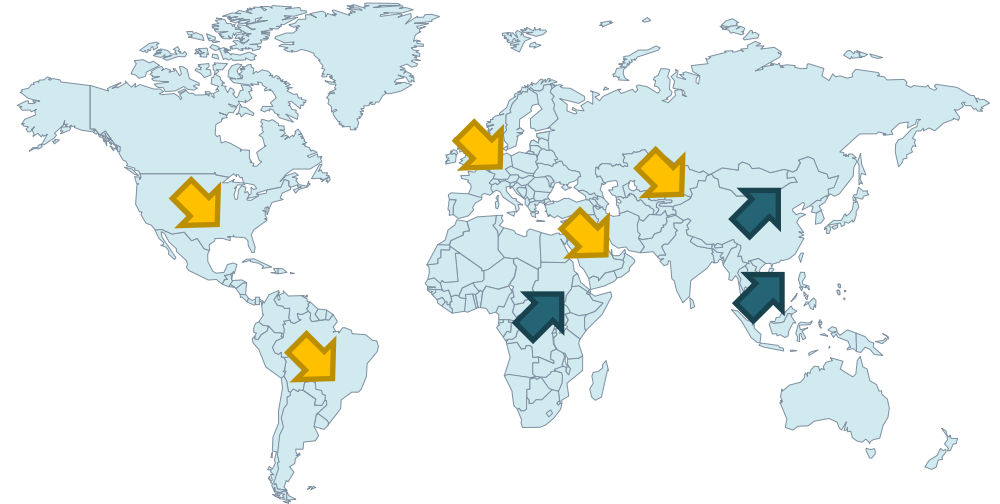
	Accessibility	Volume	Profitability
Singapore	Red	Red	Yellow
Indonesia	Green	Green	Yellow
Malaysia	Yellow	Yellow	Yellow
Vietnam	Green	Green	Red
Myanmar	Yellow	Green	Green
Cambodia	Red	Green	Green
Philippines	Yellow	Yellow	Yellow
Thailand	Green	Yellow	Yellow
Brunei	Yellow	Yellow	Yellow

SE Asia and China are expected to outperform other regional economies.

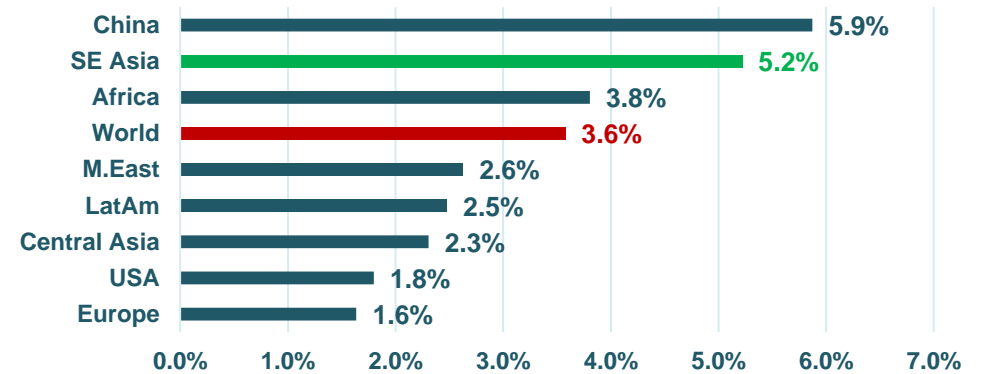
Declining container volume to GDP



Future GDP Performance* Outlook by Region (2018-2024)



GDP forecast CAGR, 2018-2024 (%)



Source: OSC / IMF

Source: OSC / IMF
*Performance as compared to Average World GDP Growth

The declining TEU/GDP multiplier is driven by underlying changes in the market.

Less offshoring, More near/onshoring:

- Offshoring to lower-cost countries is a onetime effect
- Increased reshoring (e.g. US)
- Chinese economy shifts toward domestic consumption / regional sourcing









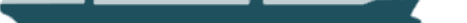
Plateauing in the levels of containerization:

- Most commodities suitable for containerized transportation have already been migrated to containers
- Increasing trend toward miniaturization of manufactured goods

Improvement of port facilities to accommodate larger ships:

- More ports can be part of direct main line services
- Cascading of vessels means larger ships deployed on secondary routes
- Reduced need for transshipment

Driven by market share & economies of scale, the ship size revolution has continued

Container Ship Size Evolution		
Early Containerships (1956) 500-800 TEU		LOA (m) : 137 Beam (m): 17 Draft (m): 9
Fully Cellular (1970) 1000-2500 TEU		LOA (m) : 215 Beam (m): 20 Draft (m): 10
Panamax (1980) 3,000-4,000 TEU		LOA (m) : 250 Beam (m): 32 Draft (m): 12.5
Panamax Max (1985) 3,400-4,500 TEU		LOA (m) : 290 Beam (m): 32 Draft (m): 12.5
Post Panamax (1988) 4,000-5,000 TEU		LOA (m) : 285 Beam (m): 40 Draft (m): 13
Post Panamax Plus (2000) 6,000-8,000TEU		LOA (m) : 300 Beam (m): 43 Draft (m): 14.5
New Panamax (2014) 12,500 TEU		LOA (m) : 366 Beam (m): 49 Draft (m): 15.2
Post New Panamax (2006) 15,000 TEU & Triple E Class (2013) 18,000 TEU		LOA (m) : 400 Beam (m): 59 Draft (m): 15.5
New Generation 22,000 TEU*		LOA (m) : 430 Beam (m): 59 Draft (m): 15.5

Source: OSC, Alphaliner

Effect of Container Shipping Market

- Larger container volume exchanges on primary trade routes, but with a lower port call frequency
- Cascading of vessels as replaced ships are moved to other Secondary and Tertiary trade lanes
- Formation of fewer, larger alliances in an effort to maximise vessel utilisation

Following structural changes, there will be an equilibrium. There has to be.

- Compression in container volume growth to GDP growth multiplier
- Ports face customers with stronger bargaining power
- Move towards “smarting” ports

Business actions in response to structural changes



Low profitability?

Capacity management

Target higher-yielding cargoes

High risk?

Work with end-users

Risk-sharing

Riskometer





Financial risks and returns of ports

Listed port companies have varying attributes for the two main types of investors.

Growth

- Significant exposure to developing markets
- Portfolio mix: Greenfield > Brownfield
- Rising profitability
- Manageable leverage
- Generally small to mid-capitalisation

Value

- Significant exposure to developed markets
- Portfolio mix: Brownfield > Greenfield
- Stable profitability
- Low financial leverage
- Sustainable dividend yield
- Share purchase plan

Listed port operators and their throughput growths

	Listing	Market capitalisation	Portfolio exposure		Reported handling volume (TEU)		
	Country	USD'm	Markets	Container nature	2017	2018	Growth
DP World	Dubai	11,720	Emerging	Gateway	70,079	71,419	1.9%
ICTSI	Manila	5,064	Emerging	Gateway	9,153	9,737	6.4%
China Merchants Port	Hong Kong	5,372	Emerging	Gateway	102,900	109,060	6.0%
Cosco Shipping Ports	Hong Kong	2,734	Emerging	Gateway	87,932	98,045	11.5%
HPH Trust	Singapore	1,350	Developed	T/S	24,281	24,029	-1.0%
Global Ports	London	535	Emerging	Gateway	1,205	1,352	12.2%
Hamburger Hafen	Berlin	1,802	Developed	Gateway	7,196	7,336	1.9%
Westports	Kuala Lumpur	3,346	Emerging	T/S	9,020	9,520	5.5%
Port Sihanoukville (PAS)	Phnom Penh	344	Emerging	Gateway	460	541	17.7%
Phnom Penh Port (PPAP)	Phnom Penh	50	Emerging	Gateway	185	205	11.0%

Growth and value investing in ports

Profitability and leverage of listed terminals. EBITDA margin between 30% and 60%, and leverage at about 3 times EBITDA.

	Sales		Profitability			Leverage		Shareholders	
	Revenue (USD'000)	growth	EBITDA (USD'000)	EBITDA margin	EBITDA growth	Net debt (USD'000)	Net debt to EBITDA	PATMI (USD'000)	Yield (%)
DP World	5,646,280	19.8%	2,808,000	49.7%	13.7%	7,937,289	2.8x	1,270,116	3.1%
ICTSI	1,385,785	11.4%	642,221	46.3%	11.1%	859,974	1.3x	221,494	2.3%
China Merchants Port	1,295,918	16.9%	1,018,367	78.6%	170%	4,040,944	3.1x	465,944	7.7%
Cosco Shipping Ports	1,000,350	57.6%	652,800	65.3%	-18.0%	1,873,214	2.9x	324,583	4.7%
HPH Trust	382,577	5.0%	212,806	55.6%	7.5%	3,204,477	15.1x	23,316*	9.8%
Global Ports	343,575	4.0%	219,128	63.8%	10.2%	780,336	3.6x	-59,279	Nil
Hamburger Hafen	1,390,629	3.1%	329,025	23.7%	8.5%	237,751	0.7x	113,712	3.6%
Westports	386,549	-5.9%	238,870	61.8%	7.3%	252,740	1.1x	127,686	3.2%
Port Sihanoukville (PAS)	68,127	21.2%	24,727	36.3%	13.5%	100,180	4.1x	11,265	1.6%
Phnom Penh Port (PPAP)	20,723	9.9%	11,716	56.5%	12.4%	2,914	0.2x	8,101	2.6%

Port stocks are unloved.

Key figures	2018	2017	2016
Consolidated Income Statement, USD Mil			
Revenue from operations	5,646.3	4,714.7	4,163.3
Adjusted EBITDA	2,808.0	2,469.0	2,263.1
Net finance costs	-435.0	-329.9	-338.1
Profit for the year	1,332.8	1,362.5	1,259.5
Profit attributable to Owners of the Company	1,270.1	1,208.5	1,126.6

Consolidated Statement of Financial Position, USD Mil			
Total assets	26,513.3	26,513.3	23,113.9
Total equity	11,998.9	11,625.4	9,519.7
Total liabilities	14,514.4	11,488.5	11,184.6

Key figures	2018	2017	2016
Consolidated Statement of Cash Flows, USD Mil			
Net cash from operating activities	1,951.5	2,207.9	1,844.5
Net cash (used in)/from investing activities	-2,107.0	-586.0	-1,258.9
Net cash used in financing activities	1,326.9	-1,481.4	-701.3
Cash and cash equivalents as at 31 December	2,614.7	1,483.7	1,299.4
Key indicators			
Basic Earnings Per Share, US cents	156.2	141.8	123.4
Earnings Per Share exc SDI, US cents	153.0	145.6	135.7
Adjusted EBITDA margin, %	49.7	52.4	54.4
Return on Capital Employed, %	8.4	8.8	9.5

“Returning to private ownership will free DP World from the demands of the public market for short term returns.” – DPW Chairman

Interpretation: I feel more appreciated by bondholders, with an alignment of long-term interests. Meanwhile....

“The transaction will weaken the overall credit profile of DP World.” – Moody’s Vice President is reviewing DPW bonds



Conclusion

Maturing port sector, what next for us?

In conclusion...

- For terminal operators: Accessibility, Volume outlook and Profitability
- Structural changes in the sector, look at company's business plan
- For institutional and retail investors: look at the fundamentals (ie sustainability of dividends, leverage, supportive governments/policies).
- Be patient, history suggests the pull-backs could be buying opportunities.

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Our Global Locations – “OSC has offices strategically located to support our connectivity to the maritime market.”



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