

# GLOBAL INVESTMENT IN PORTS AND TERMINALS

Ports and terminals operation is big business and growing. In the context of surging global trade, Holman Fenwick Willan has commissioned important new research to identify the trends within this popular investment sector. This report details the areas in which international financial interest has focused, who is investing and why.



## Increasing role for private investment

Until fairly recently, the ownership of ports and terminals was in state hands for strategic as well as commercial reasons. But the emergence of more free trade agreements, unprecedented expansion in trading volumes over the last decade and widespread deregulation of many economies has led to the private sector playing an increasingly important and profitable role in marine terminal management.

The trend has proved particularly acute over the last ten years, says Alistair Mackie, Head of Ports and Terminal Group at Holman Fenwick Willan. He sees private participation in infrastructure (PPI) as a vital part of port development in today's liberalised trading environment. "PPI projects help to provide the financial support and expertise that many ports might need for their commercial and social objectives," he says. "And for the investor they can provide the opportunity to profit from rapid growth in international trade."

In practical terms this can simply mean improving performance. Many ports and industry players have realised that they need to reduce congestion and minimise delays if they are to earn a profit from rising imports and exports. In this sense private capital has proved crucial. In fact, the research revealed that privatisation is often considered as the best and most efficient way to simply increase port efficiency and throughput (see chart 1).

In addition, the research reveals that many governments seek to benefit from private funding into large work projects for economic recovery and job creation. This is seen with the London Gateway terminal development, where private investor DP World highlights the employment opportunities as the "largest job creation project in the UK." The six-berth port, which is currently under construction will create 12,000 new jobs and employ a further 20,000 people indirectly.

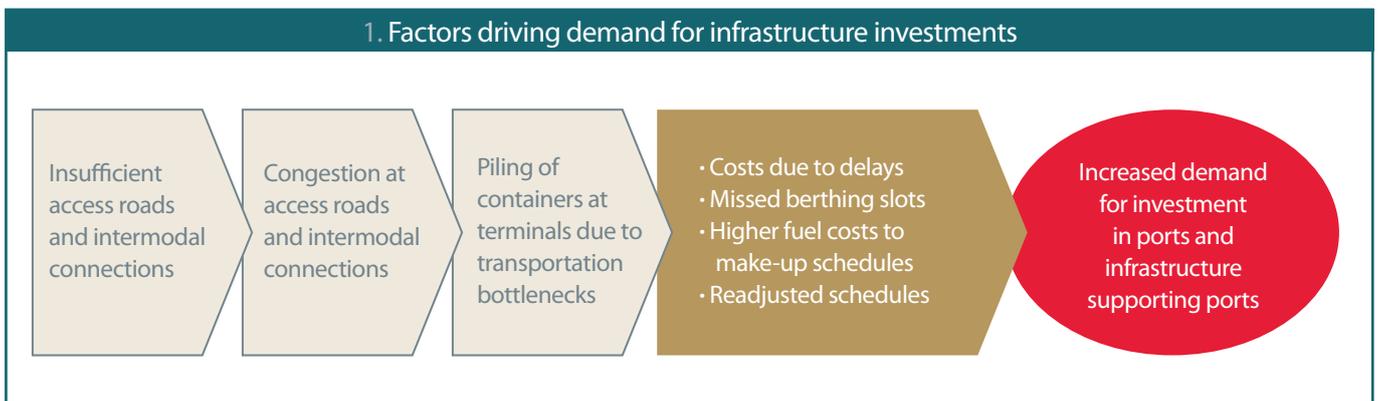
Similarly in Sepitiba Bay, Brazil, on receiving the permit to build an iron ore port facility in September 2010, a private mining company stressed the employment opportunities its port project would lead to for the Minas Geras area.

Recent research from the Organisation for Economic Co-operation and Development has predicted that ports worldwide need to find some US\$830 billion capital expenditure by 2030 for total infrastructure (including airport, port, road, rail, energy and water investment).

## Global phenomenon

This need to fund and expand ports came at an opportune time – when many private investors sought to diversify their portfolios to include exposure to the booming maritime and commodity sector. Long-term terminal lease deals therefore enabled attractive returns on investment.

### 1. Factors driving demand for infrastructure investments

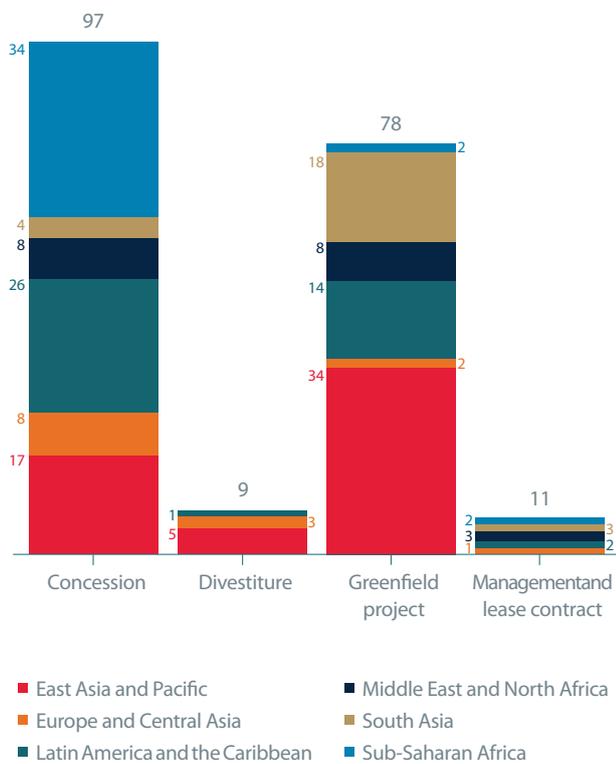




There were 195 separate PPI projects over the last decade, with a total investment of US\$38 billion.



## 2. Projects by type and region\*



\* 2000-2009. Source: PPI-World Bank; Pipal Research analysis

The research reveals there were 195 separate private participation in infrastructure (PPI) projects over the last decade. This was for container, dry bulk, liquid bulk and multi-purpose terminals with a total investment of US\$38 billion.

In investment terms, 'greenfield' or new-site projects represented the major type of project in the seaport sector. The research highlights that US\$20 billion was spent on 78 greenfield projects in Asia, the Pacific, Latin America and the Caribbean through the last decade (see chart 2). Concession deals saw a total investment of US\$15.5 billion for 97 projects. Management and lease projects, meanwhile, received a total of US\$305 million for 11 ventures.

A result of the inflow of capital for many terminals has been separation of port authority from port operator, with the former focusing on policy and regulation and leaving profitable commercial services surrounding port operations to the private sector. This does not come without hefty capital inflows, large scale personnel management as well as heavy machinery and infrastructure investments.

Concessions are generally awarded on a leasehold basis for between 20 and 50 years. This is with the notable exception of the UK, where freehold deals are possible. Investments tend to range from stakes of 20 or 30% to total financing depending on the host country and port authority.



The distribution of PPI deals worldwide is fairly even according to the research. Of the total projects initiated between 2000 and 2009, 29% were in East Asia and the Pacific followed by Latin America and the Caribbean at 22% and Sub-Saharan Africa with a share of 20%. While the share of investments into the different regions are similar, the financing sums do differ. East Asia and the Pacific saw investments worth US\$13.2 billion, Latin America and the Caribbean were US\$9 billion, but Sub-Saharan Africa just US\$4 billion (see chart 3 below).

In terms of individual countries, China, India and Brazil recorded the highest number of PPI investments in ports and terminals business in the latter part of the last decade. Between 2006 and 2009, China saw almost US\$4 billion in PPI projects, Brazil US\$1.5 billion and India US\$2.5 billion. This is a reflection of the rapid trade-related growth in these economies over the last few years.

### 3. Investment in projects by region (US\$ millions)\*

Financial year	East Asia and Pacific	Europe and Central Asia	Latin America and the Caribbean	Middle East and North Africa	South Asia	Sub-Saharan Africa	Total
2000	\$486	\$97	\$520	\$564	\$0	\$178	\$1,844
2001	\$231	\$0	\$825	\$0	\$220	\$0	\$1,275
2002	\$1,400	\$0	\$179	\$0	\$240	\$0	\$1,819
2003	\$1,270	\$121	\$282	\$0	\$44	\$156	\$1,873
2004	\$822	\$54	\$163	\$430	\$238	\$71	\$1,777
2005	\$3,054	\$202	\$229	\$103	\$500	\$2,380	\$6,468
2006	\$2,112	\$301	\$851	\$742	\$1,497	\$86	\$5,589
2007	\$2,650	\$907	\$1,252	\$1,126	\$1,331	\$71	\$7,336
2008	\$758	\$429	\$2,466	\$1,060	\$658	\$873	\$6,243
2009	\$420	\$135	\$2,151	\$153	\$790	\$159	\$3,808
<b>Total</b>	<b>\$13,203</b>	<b>\$2,246</b>	<b>\$8,918</b>	<b>\$4,178</b>	<b>\$5,518</b>	<b>\$3,974</b>	<b>\$38,032</b>

\* 2000-2009. Source: PPI-World Bank; Pipal Research analysis



## Key investors

Investors into new port developments are dominated by the large and experienced players in port management. This includes PSA International, APM Terminals, DP World and Hutchison Port Holdings (see chart 4).

PSA leads the way in terms of the value of its investments with participation in 28 port projects through 16 countries, handling a global capacity of over 100 million TEU per year. In general, the majors in the business appear to have an impressive and varied portfolio although in some cases there is regional bias or expertise. DP World, for example, along with CMA-CGM and APM Terminals have been the major private investors in port and terminal projects in the Middle East and North Africa for the 2006 to 2009 period.

There are also a wide variety of newcomers that have hit the headlines including the 2009 deal of China's COSCO Pacific signing a 35-year lease contract worth US\$4.2 billion to take over the management of the port of Piraeus in Greece.

The ICTSI bid for Portek in June 2011 is further evidence of increasing competition in the sector. The acquisition would put ICTSI at the front of an emerging second tier of operators, also including Yildirim and Noatum Group. While



\* 2006-2009. Source: PPI-World Bank; Port Investor; Pipal Research analysis

much smaller in terms of volumes or capital, these companies are building up portfolios comprising feeder and second-string niche ports: sure signs that the smaller terminal market is set to become a lot more competitive.



## Investment types

The type of ports and terminals receiving investment have revealed some interesting industry patterns, explains Mackie. "We see there has been a huge port sector split between the different types of terminals," he says. "There are also some trends in the type of port financed with private funds," he says. "Historically in Asia, dry bulk projects have often been financed domestically in conjunction with the entity involved in exporting or importing the relevant commodity, whereas container terminals have attracted international private operator investments."

### Bulk sector

Mackie doesn't see much room for change in this trend. "As bulk operators tend to be export terminals for one company, my gut instinct is that it will continue," he says. He points out that mines exporting minerals or coal for example, tend to control their own supply chain so would not necessarily attract nor want private investors. "As there is essentially one customer, this might not be attractive for investors who wouldn't want to put all their eggs in one basket."

In total volume terms, the bulk shipping of commodities still dominates global trade and it is the role of China that singularly stands out. As its economy expanded rapidly over

the last decade, this led to an unprecedented demand for vast amounts of raw materials to feed the country's industrial growth. Even in 2009 when the rest of the world saw a rapid downturn in trade volumes, huge financial stimulus packages from Beijing kept China's appetite for energy, iron ore and other steel inputs extremely firm. And this in turn supported the commodity trades from Southern Africa, Brazil and Australia in particular.

Nonetheless, investments have been relatively limited. Bulk shipping tends to be for projects where a terminal is located next to an exporter or miner. This usually attracts less private investment than say a container terminal where most private investment projects tend to be focused.

### Container sector

Matthew Gore, Associate at Holman Fenwick Willan also notes the growth in container terminal concessions. "Funds on the container side of the business are prominent," he says. "And I expect this will continue."

The container sector dominates seaborne trade in terms of the value of the goods shipped. There has been tremendous growth over the past decade with the shift away from the manually-intensive 'break-bulk' cargoes, towards heavily automated box-trades for manufactured and semi-manufactured goods. There has also been expansion in the volume of some higher value commodities such as coffee, cement and steel being shipped in containers. This trend is set to continue as the number of load and discharge points expands and as containers are frequently a cost-worthy competitor to break bulk trades.

The construction of larger ships to handle more trade volumes has moved alongside this trend. "There is more interest in hubs and catering to the mega-ships," says Mackie. Earlier this year Maersk Line signed a contract for 10 giant 'Triple E' container ships with an option to buy another 20 from a South Korean shipyard. These ships will have the capacity to carry 18,000 TEU, compared with the current largest such vessel with a capacity of 15,500 TEU. Such moves have required significant upgrades to existing port infrastructure and the result has largely been an improvement in port performance and superior economies of scale for container ship operators.

The research highlights this drive, noting that the volume of total port handling rose by 32% from 399 million TEU in 2005 to an estimated 525.3 million TEU in 2008. The following year, however, saw a slump in trade due to the impact of the financial crisis and pull-back in consumer spending and meant a number of ports were faced with an over-capacity issue. This put severe pressure on many bulk shipping companies and container lines leading some to fail. It also contributed to some delays in port investment projects, including the decision in June 2009 by DP World to delay the expansion to its US\$1.5 billion third terminal at Jebel Ali. "The financial crisis caused global operators to scale back internally and look to protect their existing business rather than expand," says Gore. "And that meant they weren't looking to grow at that time."

Data for 2010 suggests this could all change. Preliminary assessments suggest volumes surpassed 2008 levels, with most of the trade growth coming from emerging markets – notably intra-Asian trades. In 2010 itself, China and the Association of South East Asian Nations (ASEAN) established the world's third largest free-trade area after the EU and NAFTA, which is expected to result in an estimated trade value of US\$1.2 trillion.

While Asian markets are making the headlines with their sheer size, some of the fastest expansion in container volumes, at over 20% in 2010 year-on-year, was actually seen in Eastern Europe.

Looking ahead, the research estimates that global container growth for the 2010 to 2015 period will be in the region of 7.3% year-on-year, to reach a value of 750 million TEU by 2015.

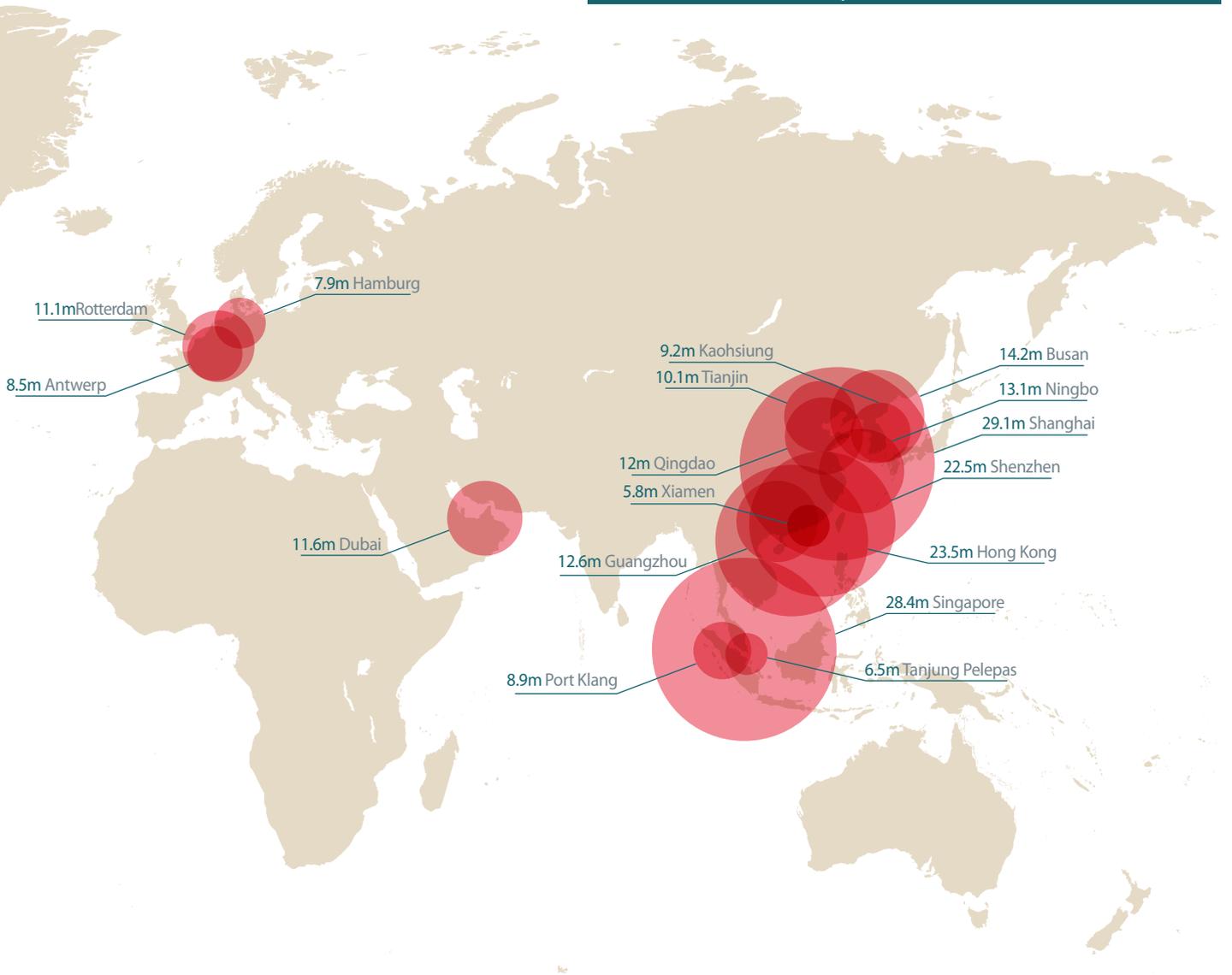
### Where is the growth coming from?

Expanded private port interest has been global. In Brazil, for example, one of the highest-profile recent deals includes that of a US\$990 million investment by APM Terminals. This was for 50% of the shares in Brasil Terminal Portuario, a new container terminal with a capacity of 2.2 million TEU, being built in Santos. The terminal is expected to become fully operational by mid-2013 and will serve the state of São Paulo and its hinterland.



Some of the larger projects include those in India. In 2008, a container terminal concession in Mumbai was agreed, financed by an Indian-Spanish partnership at a cost of US\$238 million. There was another, much bigger terminal concession, started in 2006, at Gopalpur Port financed through a group of domestic and foreign investors at a cost of US\$425 million. Other types of port development in India include a large multi-purpose terminal greenfield deal launched in 2007. This project was financed by a joint-venture between an Indian and overseas company at a cost of US\$600 million.

## 5. World's top 20 container terminals\*



\*2010 container traffic (TEUs). Source: Containerisation International; Pipal Research analysis

### East Asia is the growth market

While containerised terminal growth is scattered throughout the world however, most of the expansion has been within the emerging East Asian markets. Today, out of the world's 20 largest container ports more than half are in the region with Shanghai, Singapore and Hong Kong taking the top three slots and the region accounts for over 50% of total container handling (see chart 5 above).

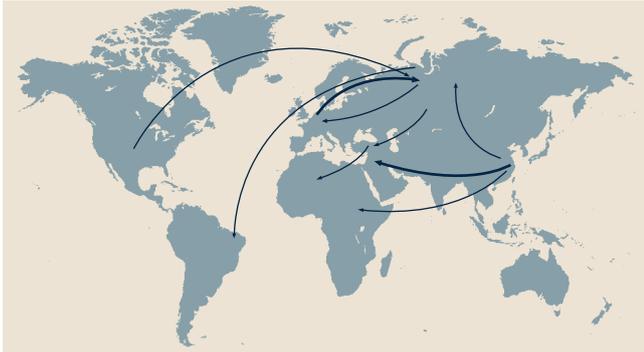
New trade corridors from Asia to the rest of the world require huge amounts of new infrastructure (see chart 6 overleaf).

The emerging economies of the area have seen considerable growth in consumer spending power and intra-regional container trades have become some of the fastest growing over recent years. As such, PPI developments in East Asia and the Pacific have dominated the seaport investment scene over the last 10 years. According to the research, they accounted for almost 29% of the total PPI projects in the business over the last decade.

This was particularly so in China - leading to 34 new projects, including 15 with a total investment value of US\$3.9 billion

## 6. Development of new trade corridors

2000



2008



Thickness of arrows represent the value of exports to manufacturers

\*Source: PwC; news articles; Pipal Research analysis

between 2006 and 2009. "In China, port development is conducted in a very co-ordinated fashion," says Mackie, noting that it makes for a swift investment timetable. "This is not necessarily the case elsewhere."

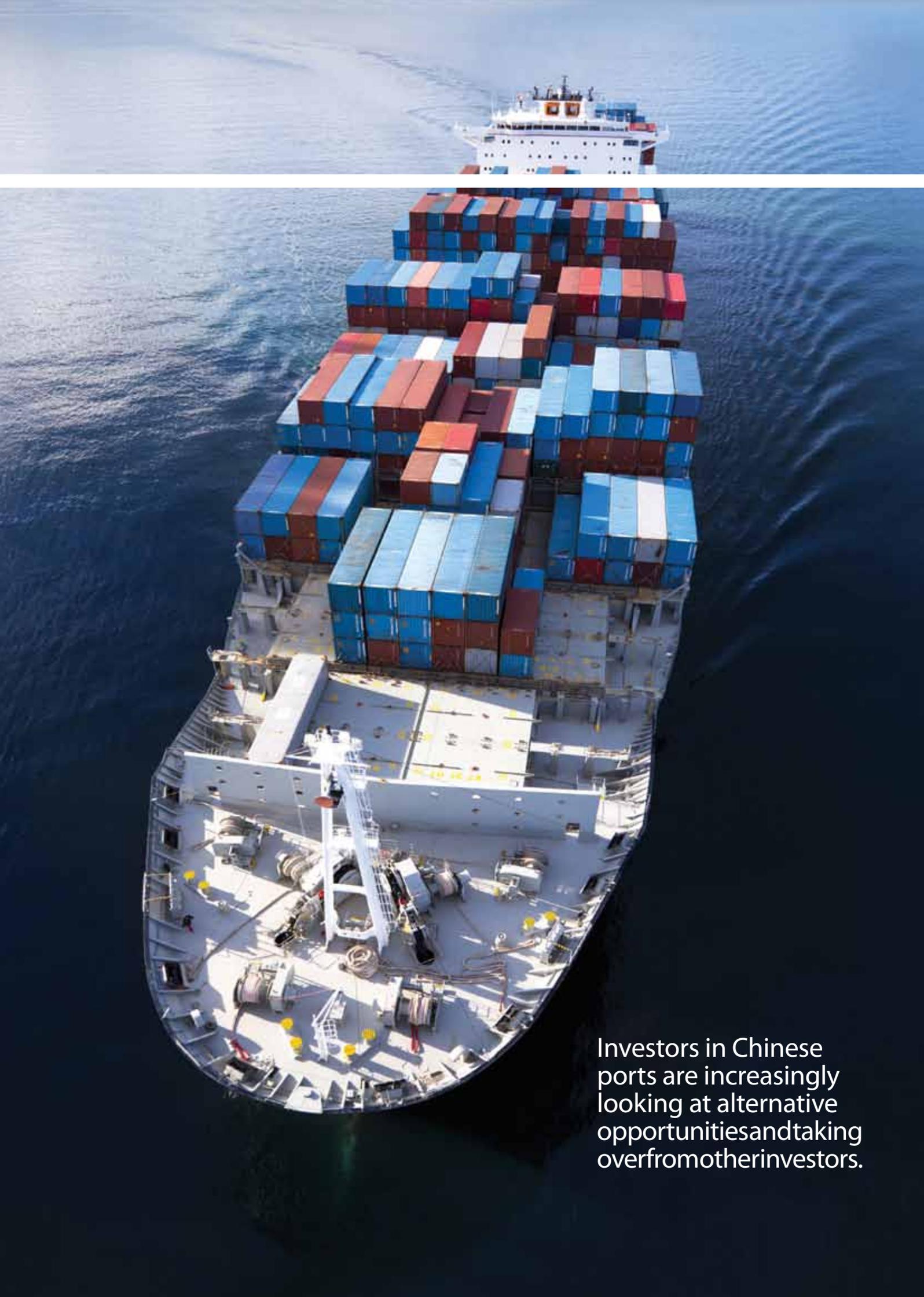
The largest Chinese PPI investment highlighted by the research was a buy-operate-transfer (BOT) project in Qingdao, North China. This deal commanded a total investment of US\$1 billion and was initiated in 2007.

Connie Chen, Special Counsel with Holman Fenwick Willan explains that aside from its size, this deal was unusual, as it involved a number of different parties. She says that the large project had five partners including a local port operator and additional local firm and other foreign interests and added that they all had experience in the port operation business. "With experience comes operational efficiency," she says. However, this could be a sign of things to come. Chen explains that a forthcoming container port joint venture in the same region includes eight different global operators.

For Chinese business today, finding the right opportunity may not be as easy as perhaps it once was. "There are definitely funds there looking to invest in China," says Chen. "However, the barriers to entry are somewhat higher," she adds, noting that concession agreements are in less supply than they once were.

Greenfield sites and seaport projects are harder to come by and about 80% of container terminals along the coastline already have private inclusion. This tends to be a foreign investment with one or more Chinese partners. As a result, investors in Chinese ports are increasingly looking at alternative opportunities and taking over from other investors. This includes looking at inland river terminals and transshipment sites.

As well as actual project availability, there are key factors about the Chinese market that investors still have to heed. "The first of these is relationships," Chen says. "This continues to be of particular importance in China including the need to build a relationship with local government."



Investors in Chinese ports are increasingly looking at alternative opportunities and taking over from other investors.

A large cargo ship is docked at a port. The ship's hull is painted in a dark grey upper section and a bright red lower section. The ship is viewed from a low angle, looking up at its massive structure. In the background, several large gantry cranes are visible, along with a body of water and a cloudy sky. The text is overlaid on the left side of the image.

The multimodal aspect of a port and its facilities can be a major selling point to the shipping lines and win over local authorities.



## What operators can offer

In more general terms, in order to secure a new lease, operators have to consider what they can offer in return. In part, this is the contribution of capital, but also whether the company has the relationship with the shipping companies required to bring the lines to the terminals. This can determine the awarding of a terminal to a particular investor. The recent investment by the Yildirim Group in CMA-CGM will be an interesting one to watch.

Competitiveness between terminals encompasses a number of issues including the speed of turnaround for loading and discharge as well as throughput capacity. "Operators have to remain very efficient and this could involve high degrees of automation and electronic monitoring or tagging," says Chen. New technology is vital in improving efficiency and adding value and leading companies are always looking at innovative ways to improve overall productivity."

In addition, links between ports and the source of cargo or market for goods can also be an integral part of the private terminal deal. This is particularly the case in emerging economies such as Brazil or China, where distances can be lengthy and existing or suitable transport, limited. The multimodal aspect of a port and its facilities can be a major selling point to the shipping lines and win over local authorities keen to develop road and rail infrastructure in general.

Rates are another factor. In many Chinese terminal deals, and for those further afield, the local government sets standard tariffs, then the port operator has to base their charges on these guidelines set by authorities. This can be a balancing act between keeping handling costs attractive to the shipping lines yet proving profitable for the port operator and local interests.

For the operators themselves, exclusivity is key. "An initial bid could have been based on an exclusive deal," says Gore. "The last thing you want is a replica project up the coast." This is particularly so as competition within key trading regions mounts for import, export and transshipment cargoes. Attracting the lines is vital for the large-scale container trades and terminals can offer a wide choice of intermodal connections and marine services such as bunker supplies and repair yards to secure business.



## Key challenges

Challenges remain and the research highlights the legal complexity in many of the terminal ventures embarked upon. This includes stringent rules pertaining to foreign investment, not least because some ports are considered as infrastructure or logistics integral to the country's transport policy. This therefore requires a sensitive approach to the country's appropriate local and national laws.

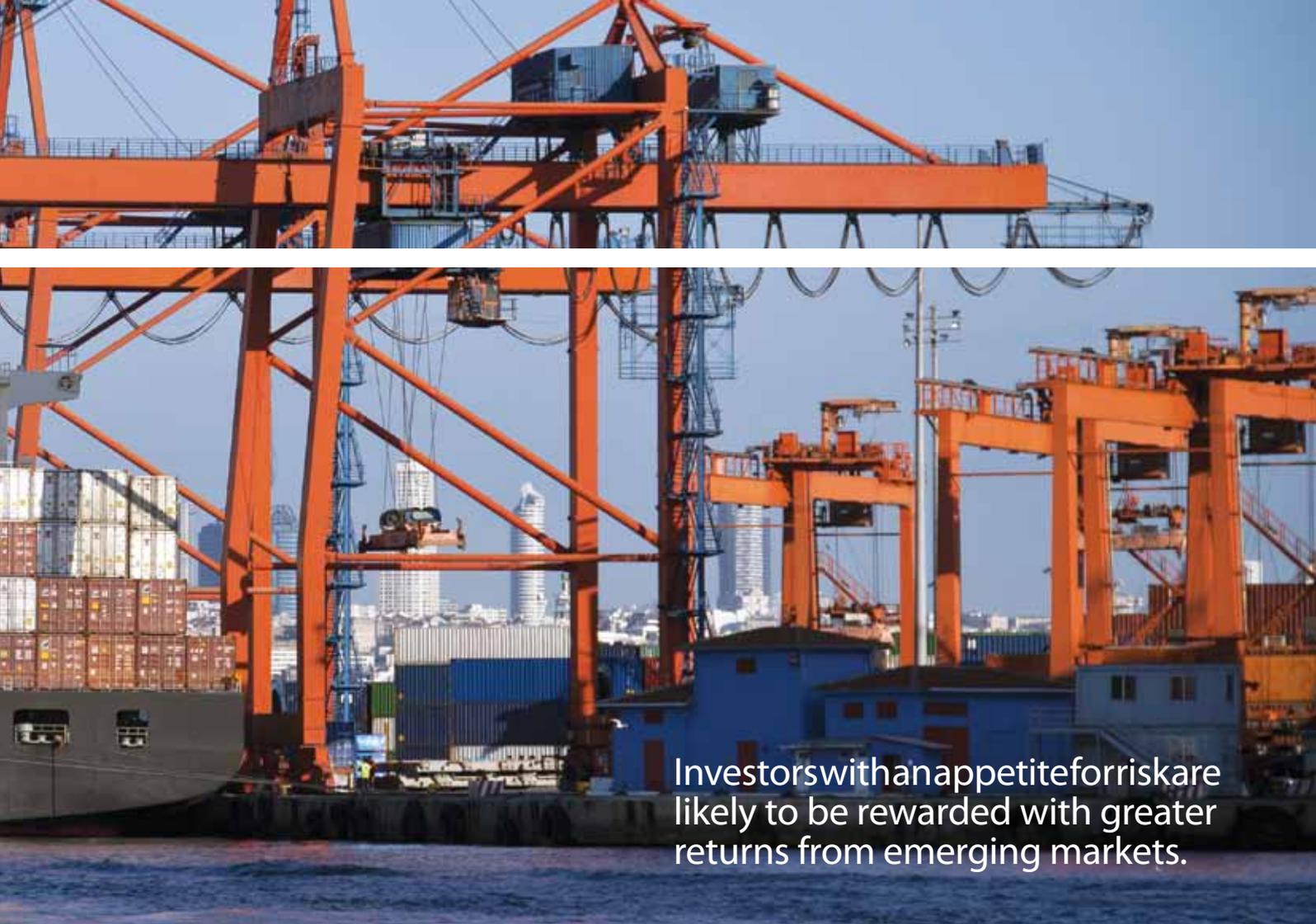
In addition, due to the strategic nature of ports and terminals, there are often regulations as to the extent of foreign involvement. This can be in the form of the private concession being limited to certain sections within a port or the prerequisite that a foreign investor has a partnership with a majority domestic shareholder. In India, for example, while there has been a concerted drive towards bringing in private funds for many terminals and other port services, the complete privatisation of major ports is not allowed as central government retains many of the residual powers defined under the Indian Ports Act 1908 and Major Port Trusts Act 1963.

As well as financial and legal requirements, project investments are increasingly subject to environmental policy – a point that has led to many projects facing delay or even

cancellation due to their perceived impact on the environment. Investors today generally have to take on a proactive approach to ensure compliance to international conventions, codes of practice and regulations as well as local ecological issues. This can include policies for waste and ballast water, dangerous cargo handling, carbon emissions, noise and other forms of pollution.

To meet these requirements authorities and operators generally have to offer sufficient waste-water and oil residue facilities, and while essential to win a concession and worthy for the environment, these investments offer limited pure commercial return. Therefore the question of how to pay for the facilities is frequently a major issue confronting port authorities and operators.

In addition to the legal and environmental hurdles in PPI projects there are also a few wild-card factors for the private sector to consider. This includes the growing problem of piracy and the effect that this has had on the trading of all vessel types in the Western Indian Ocean and into the Gulf of Aden. The widening reach of the pirates in this area to well beyond the Somali coast has led to the use of escort vessels and armed guards. For DP World, the ferocity and frequency of the attacks have contributed to a delay in the company's expansion plans for the port of Aden.



Investors with an appetite for risk are likely to be rewarded with greater returns from emerging markets.

### What's next?

In terms of what's next for PPI projects, merger and acquisition deals now appear to be on the increase following the turbulent economic situation in 2009. There also appears to be growing popularity in deals involving the LNG and oil sectors, while regionally there could be some shift to new markets. "We are looking at the Middle East, India and South America in particular," says Gore. He is certain of further growth this decade in ports and terminals investment. "Private equity is returning to the market following the credit crunch," he says. "But, I see long-term investment funds, such as pensions, gaining further ground."

Non-traditional deals are also being sought. One example is the wind turbine facility at the Port of Hull in North East England. The agreement between engineering company Siemens and Associated British Ports is to develop a manufacturing plant adjacent to a specialised loading dock to ship the turbines to wind farms in the North Sea.

Despite the legal difficulties and other challenges facing potential port investors today, the potential of healthy operational returns sustains private interest. In addition, the advantages of having asset-based projects on the books at a time of inflationary uncertainty and currency volatility also

means PPI projects have maintained a high business profile. Mackie is highly confident that the drive will continue through this decade particularly as ports and their host countries seek to benefit from trade-led development strategies.

The success of complex port investment transactions rests in part with the clear definition of the project and its objectives, says Gore. "Key to this is open and competitive dialogue between all parties," he adds. "Discussing and resolving issues between public and private participants ahead of closing the deal is essential."

Gore also points out that investment opportunity has to be balanced against potential political uncertainty, as has recently been seen, as well as unstable traffic growth and the higher cost challenges of raising finance. He also notes that a number of jurisdictions have complicated legal systems, bureaucracy, ambiguous court procedures and laws which are open to interpretation and can add to the difficulties faced by potential investors.

"Many have found that these factors often balance out over the long run," says Gore. "And, as has always been the case, investors with an appetite for risk are likely to be rewarded with greater returns from focusing on emerging markets."

## About Holman Fenwick Willan

Holman Fenwick Willan is a global law firm advising businesses engaged in all aspects of international commerce. With offices in Europe, the Middle East and Asia Pacific, we have built a reputation worldwide for excellence and innovation and have focused the development of our capabilities and the growth of our expertise in a limited number of sectors, including ports and terminals.

We now have one of the largest teams specialising in legal matters relating to the development and operation of national and international ports and terminals. Our Ports & Terminals Group includes English and foreign qualified lawyers based in offices across our international network.

Our experience, gained from having worked on over 40 major port projects around the globe, includes:

- M&A and Projects.
- Commercial Contracts.
- Development.
- Finance.
- Commercial Disputes.
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- Antitrust, Competition and Regulatory.
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