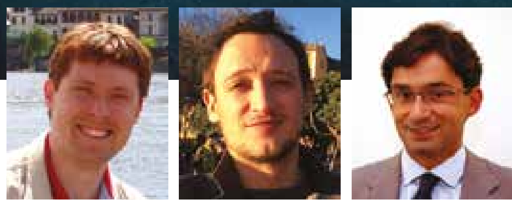


CONTAINER PORT INVESTMENT

THE INEXORABLE RISE OF FINANCIAL PLAYERS

Francesco Parola, Giovanni Satta, Gian Enzo Duci, PortEconomics

Since the early-2000s, given the increasing profitability of the container port business, a number of financial investors were stimulated to both reach new market segments and enter the industry as investors. As additional financial resources have been increasingly requested from the sector to fuel greenfield mega-projects, M&A activity and the accelerated foreign expansion of international terminal operators (ITOs), financial investors increased have their effort by providing financial and technical support to both shipping lines and port companies. In this vein, financial operators and institutional investors soon emerged as key actors orchestrating big financial deals in the sector. They also played a significant role during shipping lines and port companies' listing process or bond issuing.

These financial players understood that they could rely on resources accumulated and skills developed for operating in the container port business as investors. Their market entry was characterised by intensive M&A activity (Table 1). In the 2000-2014 timeframe, the financial deals which they acted as buyers counted for over 82% of transaction value and over 65% in terms of acquired facilities. More recently, some carriers have been forced to reduce their exposure towards the container terminal business in order to generate additional fresh funds for supporting their – highly distressed – core business. For instance, a relevant share of the port branches of MSC (TIL) and CMA-CGM (Terminal Link) was recently sold to Global Infrastructure Partners (35%) and China Merchant Holdings International (49%), respectively.

In line with other infrastructural assets, container port terminals hold a number of features attracting financial investors. Port terminals impose investments large enough to accommodate the huge amount of capital at their disposal and are long-term assets with significant economic life. Moreover, these assets provide key public services: consequently, they satisfy a non-elastic demand and the business often is managed in monopolistic or quasi-monopolistic conditions. The possibility of partially transferring the risk to the host government through public-private partnerships (PPP), combined with the high entry barriers of the industry blow up the attractiveness of container terminal as an asset class. The underestimation of technological risks acted as an additional driving force for entering the market. Nevertheless, the recent development of fully-automated container terminals (see for example the adoption of remotely-controlled STS gantry cranes in the APM Terminals' Maasvlakte II Rotterdam facility) is expected to significantly shape future technological trajectories in the business. In addition, this is also increasing technological risks for those actors operating older and underperforming facilities. Ultimately, terminals naturally hedge investors against inflation and provide diversification benefits (e.g., increase in investment performance, reduction of portfolio volatility), due to their low correlation with other traditional asset classes.

Empirical evidence suggests the predominant role of financial investors within the container port industry (Figure 1). In this perspective, five diverse typologies emerge

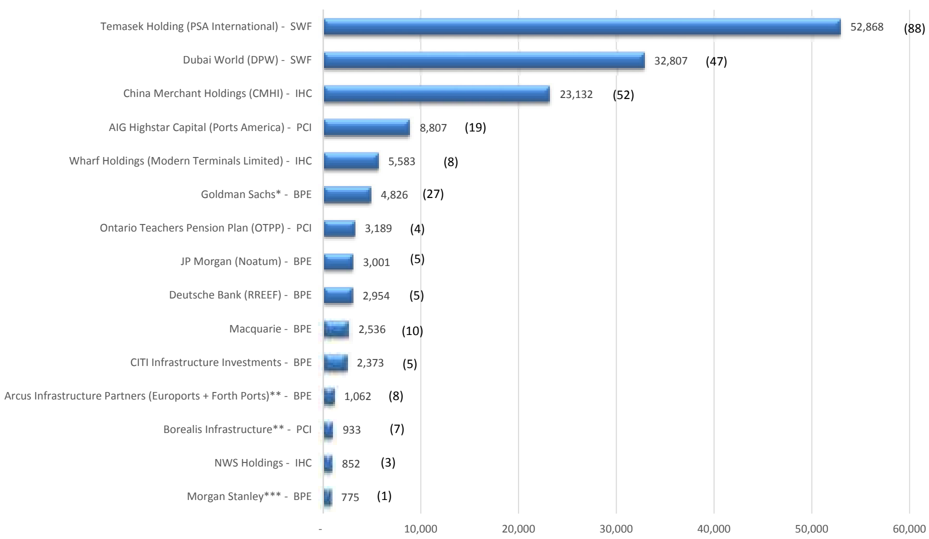
Year	Buyer	Headquarters	Target company	Headquarters	N. of terminals	"Transaction value (USD mm)"
2002	Temasek Holdings (PSA International)	Singapore	Hesse Noord Natie	BELGIUM	5	717
2004	Dubai World (DPW)	UAE	CSX World Terminals (CSX)	USA	7	1,150
2005	Temasek Holdings (PSA International)	Singapore	Hong Kong International Terminals (HIT)	HONG KONG	5	925
	China Merchant Holdings (CMHI)	Hong Kong	Shanghai Int. Port Group (SIPG)	CHINA	9	undisclosed
	Temasek Holdings (PSA International)	Singapore	NWS Holding	HONG KONG	2	386
2006	Babcock & Brown Infrastructures (B&B)	Australia	PD Ports	UK	4	1,368
	Deutsche Bank (RREEF)	Germany	Maher Terminals	USA	2	2,100
	Dubai World (DPW)	UAE	P&O Ports	UK	33	6,800
	Goldman Sachs & Borealis Infrastructure & GIC	various	Associated British Ports (ABP)	UK	7	4,600
	Macquarie	Australia	Hanjin Terminals (Hanjin)	South Korea	6	870
	Temasek Holdings (PSA International)	Singapore	Hutchison Port Holdings (HPH)	Hong Kong	38	4,400
2007	Deutsche Bank (RREEF)	Germany	Peel Ports	UK	4	1,430
	Goldman Sachs	USA	Stevedoring Services Association (SSA)	USA	12	2,800
	Ontario Teachers Pension Plan (OTPP)	Canada	Orient Overseas Container Line (OOCL)	Hong Kong	4	2,350
	AIG Highstar Capital (Ports America)	USA	Dubai Ports World (P&O Ports North America)	UAE	6	1,100
	AIG Highstar Capital (Ports America)	USA	Amports Terminal Baltimore	USA	6	430
	AIG Highstar Capital (Ports America)	USA	Marine Terminals Corporation (MTC)	USA	8	800
2009	Brookfield	Canada	Babcock & Brown Infrastructures (B&B)	Australia	4	625
	Arcus Infrastructure Partners (Euroports)	Luxembourg	Babcock & Brown Infrastructures (B&B)	Australia	4	undisclosed
2010	JP Morgan (Noatum)	USA	Dragados	Spain	5	720
2011	China Merchant Holdings (CMHI)	Hong Kong	Tin Can Container Terminal (from ZIM)	Nigeria	1	154
	CITI Infrastructure Investments	USA	Dubai Ports World (DPW) Australia	Australia	5	1,500
2012	Arcus Infrastructure Partners (Forth Ports)	UK	Tilbury Container Services (from DP World and ABP)	UK	1	150
2013	China Merchant Holdings (CMHI)	Hong Kong	Terminal Link (from CMA-CGM)	France	15	520
2014	Brookfield	Canada	TraPac (from Mitsui O.S.K. Lines, MOL)	USA	2	200

with unique business models, objectives and investment strategies: pension funds and insurance companies; sovereign wealth funds (SWFs); investment banks and private equity funds; investment holding companies; multilateral financial institutions.

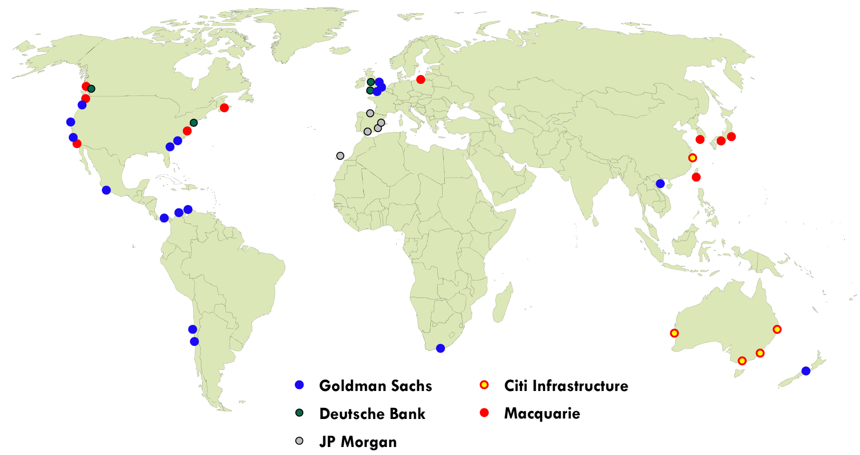
PENSION FUNDS AND INSURANCE COMPANIES

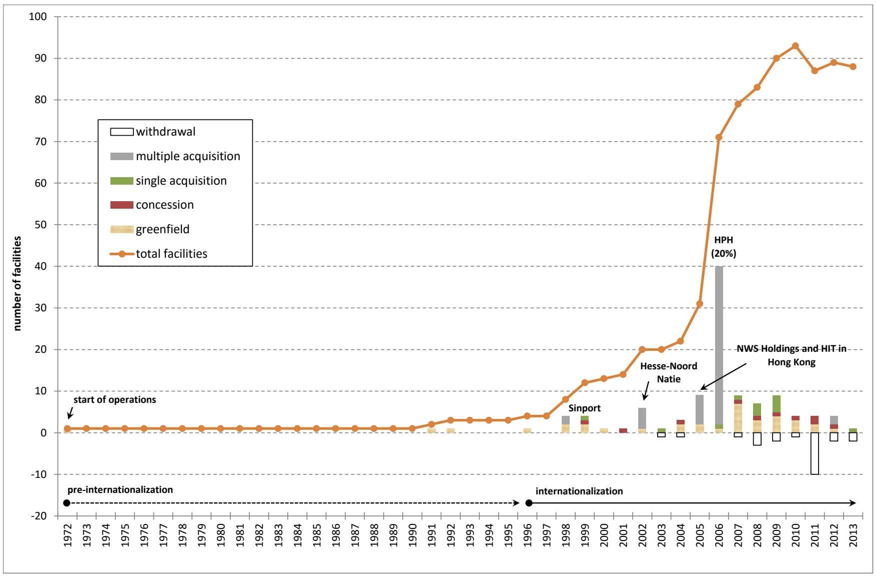
In mid-2000s, investment in infrastructure increasingly gained significance among pension funds and insurance companies, given its profitability and resilient characteristics in terms of diversification opportunities. Port terminals, in particular, are an attractive asset class due to their long-term, predictable, inflation-adjusted returns. These features perfectly match pension funds and insurance companies' investment interests, as they are typically long-term investors seeking for sustainable returns over a 20/30 year timeframe, in order to face ongoing disbursement obligations to retirees/ beneficiaries. In addition, policy makers see favour in their market entry due to the long-term perspective they follow in the management of infrastructural assets.

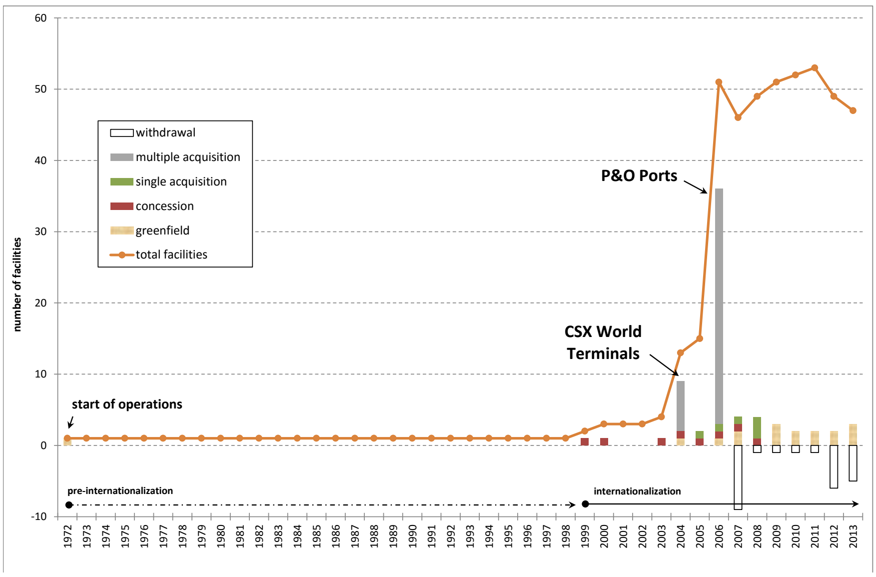
When allocating their financial resources, pension funds and insurers target brownfield assets that have already been in operation for several years, to overtake construction risks and reduce revenue volatility.



Notes:
Data are expressed in '000 TEUs; figures include both direct and indirect equity shares.
SWF = Sovereign wealth funds;
IHC = Investment holding companies;
PCI = Pension funds and insurance companies; BPE = Investment banks and private equity firms.
* Goldman Sachs has progressively withdrawn from the business by selling its stake in ABP at the end of 2014 after the disposal of SSA - Carrix in January 2014.
** Estimated figures
*** Morgan Stanley has withdrawn from the business, by selling its container port assets to Fiera Axium Infrastructure Inc in 2015.







Top: Figure 2; Bottom: Figures 3a and 3b

Conversely, they avoid greenfield projects and new privatisation initiatives due to political instability and nationalisation risks.

In targeting foreign markets, these investors pursue cautious approaches, based on moderate degree of geographic diversification and high concentration in Anglo-Saxon countries, such as UK, Canada and USA (Figure 2).

While in the past pension funds were prone to invest in the port industry indirectly (via listed companies or private equity funds), they now prefer to cultivate in-house expertise. For this purpose they act as direct investors, or operate as co-investors with specialist funds such as Macquarie European Infrastructure Funds.

These institutional investors frequently rely on single terminal or network acquisitions respect to long and risky competitive biddings or public awarding procedures. As concerns the degree of control exerted on new ventures, pension funds prefer huge stakes. Their large equity shares allow them to play an active role in strategic decisions and day-to-day terminal asset management. In addition, when collaborating with other partners, they select long-term investors to achieve a stronger alignment between shareholders' interests and investment objectives.

SOVEREIGN WEALTH FUNDS

Sovereign wealth funds (SWF), or state investment funds, are government investment vehicles that hold and administer public funds to acquire and manage a wide range of national/foreign assets, to gain higher than risk-free rate of return. To some extent, they are similar to state-owned enterprises (SOEs). The funds they administer predominantly originate from government fiscal surpluses, commodity export revenues, or official reserves at central banks.

Although the time horizon and the investment strategies of SWFs may differ given the type and the strategic objectives of the fund, SWFs predominantly invest in foreign countries with a long-term perspective.

Despite some commonalities with other institutional investors, SWFs' state-owned nature has risen concerns in terms of political risks as well as transparency and corporate governance issues, encouraging the fierce opposition of some host country governments. In this perspective, the case of DP World's failure in entering the US port market, motivated by financial protectionism, is well-known and documented.

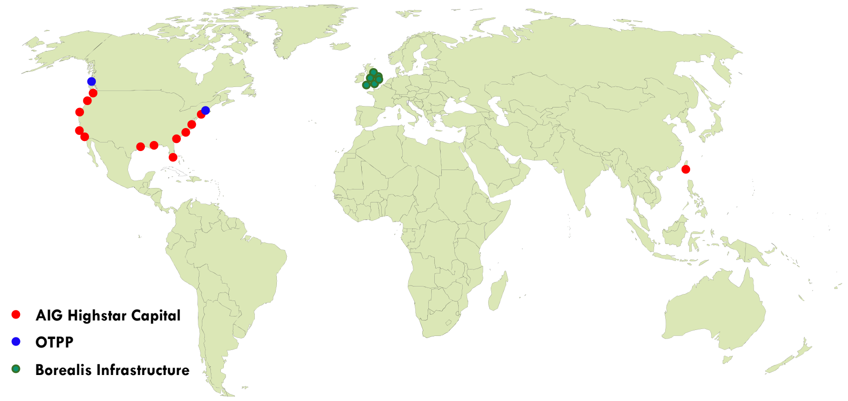
In line with their investment objectives (i.e. industrial/geographic diversification for maximizing risk-adjusted returns subject to tolerable risk), SWFs pursue aggressive geographic diversification strategies in the industry. The cases of Temasek Holdings, which controls around 90 facilities in 30 nations through its branch PSA International (2013) and Dubai World, which manage an asset portfolio of over 45 terminals worldwide, via DPW (2013), are impressive.

SWFs are active shareholders, which leverage on FDIs respect to portfolio management. Preferred entry mode strategies include M&A activity and greenfield investments, even if they predominantly resort to multiple-site acquisitions in order to accelerate their international growth (Figures 3a and 3b).

INVESTMENT BANKS AND PRIVATE EQUITY FUNDS

The need of growing financial resources ascribable to the unprecedented size of new port megaprojects, and the magnitude of recent financial deals in the industry,

Figure 4



forced (international) terminal operators to increasing rely on bank finance to feed corporate growth strategies. In this vein, pure investment banks and merchant branches of international commercial banks found new business opportunity in the container port domain, by offering multiple service solutions for corporate finance.

Banks also increased their financial exposure toward the business, through direct acquisition of terminals and stakes in operating companies, or via in-house/third-party specialised private equity (PE) funds, i.e. an asset class, which consists of shares or other equity securities in operating companies not publicly traded on a stock exchange, not subject to the disclosure rules of listed firms. Notably, PE funds pursue "multiple expansion", selling previously acquired companies for a multiple of earnings (or EBITDA) higher than they originally paid. They use financial gearing to blow up their profits, therefore loading the targeted companies with heavier debt burdens.

Before the explosion of the financial bubble, investment banks and PE funds were prone to pay extraordinary prices to gain control over terminal assets: their entry in the M&A game additionally inflated the transaction values, destabilising the market.

Due to their lack of business expertise and technical skills in the port sector, they keep most of the existing management team after the acquisition of a terminal operating company/asset. Conversely, these financial investors use to exert a certain control over financial/strategic dimensions, by appointing representatives on the targeted company's board of directors.

Due to their risk-return profile and their valuation skills, some PE funds have demonstrated certain attitude to commit financial resources to unlisted greenfield and brownfield port infrastructures.

Some of these financial operators rapidly expanded their operations overseas, looking for portfolio geographic diversification, network and scale effects or additional financial margins. They undertake external growth strategies via acquisition but also participate in bidding consortia for getting concessions in new terminals. Therefore, setting up dedicated branches for wealth management in the infrastructure business, these financial operators diversify container terminal portfolios both acquiring interests in port companies or terminals and fueling greenfield port projects. Deutsche Bank, Macquarie, Goldman Sachs, JP Morgan, Citi Infrastructure Investors and Arcus Infrastructures Partners are among the most active players (Figure 4).

INVESTMENT HOLDING COMPANIES

Over the last twenty years, the massive port privatisation programs undertaken worldwide growingly attracted the interest of investment holding companies, looking for new business segments with high-growth potentials. They are diversified companies with no apparent "core" subsidiaries, whose primary objective is to build complex portfolio architectures capable to ensure attractive long-term returns and capital appreciation.

Their advent in the container port industry experienced a spectacular rise in emerging economies. In some Far Eastern countries, investment holding companies assume the archetype of ethnic Chinese firms, i.e. investment holding companies owned by members of influential families linked with central government, local entities or public officers, which usually commit resources in off-shore investments, mostly in Singapore and Hong Kong.

In expanding the geographic scope of their port network, investment holding companies are quite refractory to invest in far away and unknown market areas. The influential role of psychic distance in defining their allocation strategies drove most of them to limit their geographic scope to those countries that are perceived as culturally close.

MULTILATERAL FINANCIAL INSTITUTIONS AND DEVELOPMENT BANKS

Multilateral financial institutions and development banks are institutions which provide financing and professional advising for sustaining socio-economic growth and development. They typically have a broad membership that includes developed donor countries and developing borrower nations. Traditionally, these institutions support infrastructural projects offering long-term loans at market rates, very long-term below market rates or grants. Multilateral development banks recently emerged also as key co-investors in the container port domain, especially funding greenfield and brownfield projects in developing countries.

ABOUT THE AUTHOR

Dr Francesco Parola is Associate Professor at the Department of Economics and Business of the University of Genoa in Italy, and member of the Italian Centre of Excellence for the Integrated Logistics. He had visiting positions in Rotterdam, Paris and Singapore, and is currently Associate Editor of Maritime Policy & Management.

Dr Giovanni Satta is Assistant Professor at the Department of Economics and Business of the University of Genoa in Italy, and a member of the Italian Centre of Excellence for the Integrated Logistics. He won the 5th MEL Ph.D. competition (2013) sponsored by Palgrave Macmillan with a doctoral thesis about the strategies of container port multinationals.

Dr Gian Enzo Duci, Managing Director of ship management conglomerate ESA Group, is President of Genoa Ship Agents and Brokers Association and Contract Professor at the University of Genoa. He is an Executive Board Member of FONASBA and a Board Member of Bank of Italy. In 2011, he won the Lloyd's List Shipping Award in the category Italian New Generation.

ABOUT THE ORGANISATION

PortEconomics is a web-based initiative aiming at generating and disseminating knowledge about seaports. It is developed and empowered by the members of the PortEconomics group, who are actively involved in academic and contract research in port economics, management, and policy. Since October 2012, Port Technology International and PortEconomics have been engaged in a partnership.

ENQUIRIES

Prof. Dr. Francesco Parola
University of Genoa
Via Vivaldi 5
16126 Genoa (Italy)
parola@economia.unige.it
www.porteconomics.eu