Set to revive
Investing in Europe’s infrastructure
linklaters.com/infrastructure-revival
## 1. EXECUTIVE SUMMARY

This report features Linklaters’ market insights and research by Elite Media and Oxford Analytica. Its findings are based on in-depth interviews with 40 leading players in infrastructure, including over 20 of the largest global investors in European infrastructure. These include infrastructure funds, pension funds, insurers, private equity funds, contractors and others. Between them, these organisations manage infrastructure assets of more than US$170bn. Among others, we spoke to three of the largest global pension funds focused on infrastructure, four of the 10 largest Europe-focused infrastructure funds and three of the biggest corporate investors in European infrastructure, as well as leading analysts of, and multilateral investors in, the sector. We would like to thank all of them for taking the time to share their insights and expertise with us.

For an interactive version of this report, go to: linklaters.com/infrastructure-revival

---

### Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EXECUTIVE SUMMARY</td>
<td>04</td>
</tr>
<tr>
<td>2. EUROPEAN INFRASTRUCTURE: THE STORY THE NUMBERS DON’T TELL</td>
<td>08</td>
</tr>
<tr>
<td>3. NORTHERN EUROPE: WHERE WILL THE DEALS COME FROM?</td>
<td>14</td>
</tr>
<tr>
<td>4. SOUTHERN EUROPE: RISING FROM THE ASHES</td>
<td>20</td>
</tr>
<tr>
<td>5. EMERGING EUROPE: BRAVE NEW WORLD</td>
<td>24</td>
</tr>
<tr>
<td>6. CONCLUSION: RIPE FOR REVIVAL</td>
<td>28</td>
</tr>
<tr>
<td>A. APPENDIX</td>
<td>30</td>
</tr>
</tbody>
</table>

---

About the research
European infrastructure investment is still to reach pre-crisis levels, yet Europe remains a global infrastructure giant, offering favourable opportunities to private investors looking for assets yielding long-term, steady returns. With investor appetite growing, the conditions look right for a revival in the European infrastructure market.

A rush of new private money has entered the market in recent years, as an increasing number of institutional investors such as pension funds, insurers and sovereign wealth funds target the sector, recognising the infrastructure asset class as a good match for their long-term liabilities. Our research indicates that these investors alone will have an estimated US$1trn available for infrastructure investment in Europe over the next decade. This additional financial capacity and its ability to attract leverage is changing market dynamics, driving up prices and encouraging both governments and companies to provide investment opportunities in greenfield projects and to boost the pipeline of brownfield assets for sale.

If those opportunities are created and the available funds are actually invested into building and upgrading Europe’s infrastructure, the impact on the economy could be substantial. To find out just how substantial, we commissioned analysis firm Oxford Analytica to calculate the possible impact of this investment on the EU economy.

The findings suggest that European Union countries could see a further 1.4% improvement in their level of annual GDP over the period between 2014 and 2023. The cumulative GDP impact of the additional spending in European economies translates into more than US$31bn by 2023, triple the total outlay on infrastructure assets of US$10m. In terms of the wider economy, the positive effects of infrastructure investment will have a multiplier effect spanning supplier industries, such as construction and raw materials, consumer spending and increased tax revenues.

While the case for infrastructure investment is strong, however, the big question remains whether there will be enough projects and assets on the market to absorb these available funds.

In researching this report, we interviewed 40 leading infrastructure players to find out where they expect deals to come from in an environment that remains challenging – and how far they are willing to stretch their risk appetite to unlock new deals.

By and large, investors prefer the stable economies of northern European and regulated assets, such as utilities. However, with few available assets leading to high prices across northern Europe, most of the investors we spoke to are willing to consider accepting higher levels of risk in order to unlock new assets at more palatable prices in the troubled markets of southern and emerging Europe.
The financial crisis has resulted in a decline in infrastructure M&A activity and the number of public-private partnerships (PPPs) launched. However, Europe remains an infrastructure giant.

Our research shows that global institutional investors have funds of US$1trn at their disposal for potential investments in European infrastructure assets over the next 10 years.

If fully invested, this capital could improve the level of annual EU GDP by 1.4% between 2014 and 2023.

Four key things to watch:

1. Global investors from Canada, China/Hong Kong, the GCC region, Japan and South Korea are helping to fuel this cash mountain. Their investment in European infrastructure assets between 2010 and 2013 rose by 465% compared with the previous four years.

2. Increased investor interest for regulated assets and those which are not linked to a country’s economic performance is inflating prices, sparking fears amongst some of an eventual bubble.

3. Corporate disposals are likely to provide investment opportunities as higher valuations encourage companies to sell subsidiaries or stakes in them, often in a bid to reduce debt.

4. High prices in northern Europe are encouraging corporate investors to stretch their risk appetite and look to the markets of southern and emerging Europe in order to unlock deals at more palatable prices.

5. It is not a lack of private finance that is the obstacle to a revival in European infrastructure, but the lack of assets to buy or appropriately structured projects to invest in.

6. If European governments can provide a pipeline of new projects, release assets for sale and provide a stable regulatory landscape, they have the opportunity to secure investment which can significantly boost their national GDP.

L&klaters commissioned global analysis and advisory firm, Oxford Analytica, to calculate the impact of US$1trn of infrastructure investment over the next 10 years (2014-2023) on the EU economy.

As highlighted in Figure 1.1, in a high impact scenario, the EU could expect to see a 1.4% improvement in its annual GDP between 2014 and 2023. This translates into a potential cumulative GDP impact of more than US$31trn by 2023, triple the US$11tn outlay.

In the central scenario, the cumulative impact of the additional infrastructure spending on EU GDP is estimated at just over US$21tn by 2023, effectively doubling return on investment over the 10 year period. Even in the conservative low scenario, the cumulative impact on GDP is still markedly greater than the trillion dollar cumulative investment outlay, at almost US$11.3tn.

The incremental GDP is calculated on the basis of two types of economic impact: firstly, the spill over effects of infrastructure investment into the wider economy within supplier industries, such as construction and raw materials, and indirect benefits, including a boost to consumer spending and tax revenues; secondly, from the rise in productive capacity generated by the extra investment.
The numbers don’t tell the story

Infrastructure investment is still falling across Europe.

There is now a deep pool of private money available for infrastructure projects.

This has brought intense competition to buy popular assets which has inflated prices.

Higher prices could bring a revival in M&A as companies and some cash-strapped governments are tempted to sell.

Governments are reluctant to launch projects in a time of austerity and to privatise assets in a political climate increasingly hostile towards private ownership.

Investors are being forced to stretch their risk appetite in order to secure higher returns.

In Brief

Infrastructure investment is still falling across Europe.

There is now a deep pool of private money available for infrastructure projects.

This has brought intense competition to buy popular assets which has inflated prices.

Higher prices could bring a revival in M&A as companies and some cash-strapped governments are tempted to sell.

Governments are reluctant to launch projects in a time of austerity and to privatise assets in a political climate increasingly hostile towards private ownership.

Investors are being forced to stretch their risk appetite in order to secure higher returns.

For an interactive version of this report, go to: linklaters.com/infrastructure-revival

The surface story

On the surface, the numbers for private investment into European infrastructure do not look encouraging. Public-private partnerships (PPPs), designed to funnel private cash into building public infrastructure, have nearly dried up as governments mired in austerity fail to launch projects. In the first half of 2013, the number of PPP deals reaching financial closure almost halved to 24 across Europe, compared to the same period in 2012. M&A activity among EU infrastructure companies fell by 15% in 2013, on top of an already significant decline of more than 80% between 2006 and 2012. Europe’s share of global infrastructure purchases has crashed from more than half in 2006 to just a quarter in 2013. (See figure 2.1: Smaller fry.)

Behind the gloomy numbers, there has been a significant shift. As infrastructure becomes more established as a dedicated investment class and investors look for higher, long-term returns in today’s very low interest rate environment, a pool of private investment money is building. The source? Institutional investors such as insurers, pension funds and sovereign wealth funds.

Our research estimates that global institutional investors have funds of up to US$1 trillion at their disposal to invest in European infrastructure over the next 10 years. That is a big contrast to the years immediately after the financial crisis, when a dearth of bank lending made private infrastructure investment difficult.

This new cash pool has already driven prices for some assets, such as airports, back to pre-crisis levels. This is likely to tempt companies to sell their newly valuable European subsidiaries, as they try to reduce debt levels. It will also entice cash-strapped governments in southern Europe to sell assets as they try to slash public debt. “European assets in a diversified portfolio remain attractive at the right price for a long-term investor,” says Ross Israel, Head of Global Infrastructure at QIC, the third largest institutional investment manager in Australia.

“There is now too much money chasing too few deals,” says Georg Inderst, a consultant who wrote a study on private infrastructure investment returns in the current environment, particularly when compared to the prices presently being paid for these assets.”

Some investors now worry that infrastructure prices are a bubble waiting to burst. This was the terminology used by one senior executive that we interviewed, pointing to the inflated prices paid for airports across Europe. He argues that prices have soared too high, making it a question of when, not if, they will crash.

Others take a more pragmatic view, arguing that the high prices reflect a permanent shift in the market, with new types of long-term investors willing to pay higher prices in return for stable, if relatively modest, returns.

The upside to this is that private investment is being driven into new areas, as the obviously attractive deals dry up or become too expensive. Andrew Liu, Managing Director of Ardian’s infrastructure team, says that they are currently seeing more attractive investment opportunities in unregulated assets as compared to price regulated assets. “It was not a policy decision,” he says. “We are constantly studying regulated assets and remain interested in including these within our investment portfolio. However, we feel that regulatory risks present a real threat towards achieving satisfactory investment returns in the current environment, particularly when compared to the prices presently being paid for these assets.”

In the UK, utility companies, as financial investors bid high for what are perceived to be safe assets.

Rapid change

Infrastructure M&A deals by value and volume, EU28

EUROPEAN INFRASTRUCTURE: THE STORY

THE NUMBERS DON’T TELL
Investors are not only looking at a wider range of assets, but also of countries, as they look for better returns. As the supply of assets in northern Europe remains limited, and asset prices are inflated as a result, investors are looking to countries in southern and emerging Europe for prices that are more palatable.

Investor appetite for risk applies not only to brownfield assets, but greenfield projects too. Though construction risk is still a step too far for some institutional investors, others think that the reward warrants the risk. For example, infrastructure and energy fund Marguerite, Danish pension funds, PKA and IP and Siemens Project Ventures, have invested approximately US$548m of equity in the Butendiek greenfield offshore wind project in the German North Sea. This was one of the first times funds have taken construction risk on an offshore wind farm. “These investors thoroughly examined risks attached to this project and found them to be acceptable. The success of this deal may pave the way for further investments by funds into greenfield projects,” says Thomas Schulz, a Linklaters partner in Berlin, who advised on the project.

Who is driving demand?

European investment in home markets has sharply declined. Although buyers from northern and southern Europe still account for close to three-quarters of infrastructure acquisitions on the continent, between 2010 and 2013 they spent approximately 70% less than in 2006-2009. (See figure 2.2: Rapid change.)

Despite spending over 60% less than before, the crisis, northern European investors have maintained their share of the market, accounting for just over half of all infrastructure investment in Europe.

The real collapse has been with investment from southern Europe, which fell 80% after the crisis, as Spanish investors stopped buying. US buyers eased up on acquisitions too, although the fall was less extreme than among the Europeans, with values down by 40%.

Despite the gloomy statistics, some buyers have increased activity in recent years. China, for example, has increased its acquisition activity 80-fold to a total of US$23bn since 2006, including acquisitions through Hong Kong. There have been some big individual investments, with Chinese companies buying stakes in UK nuclear and water companies, as well as in energy companies privatised by Portugal. However, “as much as they are interested in the European market, given the cautiousness of the Chinese and their mode of investment, Chinese investment alone is unlikely to be big enough in the aggregate to have a major impact on satisfying Europe’s infrastructure needs,” says Tom Ng, a Linklaters partner in Beijing.

Canada too offers Europe a source of private investment through its pension funds, who in the last three years have invested over US$13bn into Europe’s infrastructure, often leading consortia on the most high profile deals (see page 13: Canadian pension funds: game-changers?).

Another category of investor with an increased appetite for European infrastructure investment is sovereign wealth funds and government-related entities. “Outbound investment has largely been targeted at developed markets with new investment opportunities arising as European governments seek foreign investment,” says David Martin, a Linklaters partner in Abu Dhabi, singling out the sovereign wealth funds whose 20-30 year time scale for investments is a good match for infrastructure. “They are looking for stable long-term returns and they are increasing their direct investment capability and focus, often in partnership with private equity or specialist funds,” he offers them lowish but stable returns, in contrast to riskier but higher returns in Asia.”

For non-European investors like this, Europe remains an attractive destination, but the sums they spend are compared to the Europeans themselves. For the time being, Europe must mend itself.

Changing the mix: leveraging available infrastructure debt

Just two years ago, one of the spectres worrying Europe’s financial sector was the wall of debt about to mature before 2016 - US$550bn for leveraged buy-outs alone, according to a Linklaters report from early 2012. With banks cutting back on lending levels to meet tougher regulatory requirements, it was clear they would struggle to meet the demand for refinancing by themselves.

Financial investors, including insurance companies, have become increasingly keen to access infrastructure’s secure, long-term, often inflation-linked, cashflows.

This has led to a significant amount of affordable debt being made available again, from institutional investors as well as banks. And companies are cashing in.

Private equity investors, heavy buyers of infrastructure assets, refinanced a record amount of their companies’ debt in 2013. In the first nine months of the year, Standard & Poor’s says that private equity funds refinanced US$31bn of debt, over 50% more than in the whole of 2011 and two-thirds up on 2012. Seventy per cent of all private infrastructure investment since 2012 has focused on refinancing operational infrastructure assets rather than investing in new ones (see figure 2.3: The refinancing option). “The projects that were signed in the boom years of 2006-2007, with five-year bank loans, now need refinancing,” says Charles Dupont, Head of Infrastructure at AXA Real Estate. He adds that AXA can provide debt for a longer term than banks and usually for a higher amount than the original loans, and has the necessary expertise and resources to analyse more complex credit situations than most institutional investors.

Life insurance and pension investors are looking for long-term returns that are higher than for government debt, and infrastructure debt is a good match. Many institutions have launched infrastructure debt funds in recent years, including Allianz, the German insurer, the UK’s Barclays and Australia’s Hastings. That is already feeding a flurry of activity over refinancing, as companies take advantage of the flow of available money into the market. With bank lending stretched, refinancing all the European infrastructure companies that took out debt before the crisis will be a major source of business for financial investors over the next few years.

The availability of international funds can also be tapped to raise money for new investments, and to offer companies a flexible funding source for future refinancing deals. (See case study: Peel Ports: Safeguarding its future.)

In December 2012, Peel Ports, the second largest ports group in the UK, completed the whole business securitisation debt refinancing of its £1.5bn (£2.5bn) debt package in a club deal involving nine commercial banks. In addition to this, it completed an EIB commercial bank project financing of its major new container port, the Liverpool2 deepwater container terminal scheme.

“Peel successfully closed one of the most complex refinancings in recent times,” says Julian Davies, the Linklaters partner who led the deal, “demonstrating that even in a depressed market there is appetite to provide infrastructure debt both for refinancing and for new projects. In the case of Peel Ports, there were several types of investors, with debt provided by the EIB, commercial banks and US institutional investors.”

Less than a year later, Peel Ports raised further funds in the infrastructure debt funds market and was delighted at the response when Westcombe, IFM and AXA agreed to refinance another significant amount of bank debt, further diversifying the investor base and extending the maturity profile of its debt.
Opportunity knocks: who will answer?

Across Europe, there is little government will for new investment, with the focus still on cutting spending and stabilising domestic banks. In addition, political support for private financing of infrastructure is, in general, shaky.

In reality, far from accelerating privatisation to raise cash, several countries are reversing past infrastructure sales in the face of public protest, something true of both French water companies and German municipal energy companies. Elsewhere, there have been political assaults on private infrastructure owners, with UK energy and water companies coming under fierce political and regulatory pressure to cut prices. In fact, southern Europe looks far more likely to yield privatisation deals than the north, as governments, especially the UK, Spain, Portugal and Greece look to sell companies to reduce public debt, and to cash in on today’s high prices. (See section 4. Southern Europe: rising from the ashes.)

Rather than privatisation, many investors are looking towards corporate disposals for acquisition opportunities, as higher valuations encourage companies to sell subsidiaries, or stakes in them, often in a bid to reduce debt.

That is the message from RWE’s sale of its Czech gas pipeline network, announced in March 2013. Net4Gas, a capital-intensive business operating more than 3,000km of pipeline across the Czech Republic, sold for US$2.2bn to two financial investors, Almar, the German insurer, and Borealis Infrastructure, the infrastructure investment arm of the Canadian pension fund OMERS.

The German energy giant RWE admitted that the sale of Net4Gas was more to do with reducing debt and capital spending than with energy unbundling: it is refocusing its business to compensate for low gas prices in a weak European economy and took a hit worth billions of dollars on Germany’s decision to exit nuclear power. More deals like this are likely to follow as companies tap into financial investors’ appetite for infrastructure assets. Many energy companies are looking to sell, as are Spanish construction groups, who are selling out of their depressed home market to fund international expansion.

With a lot of money chasing only a small number of infrastructure deals, even companies in troubled countries can find buyers if they structure their deals to be attractive to the private investors crying out for stable assets that offer better returns than low-yielding government debt. “The question now is whether there is private money available for infrastructure investment, but where the new deals will come from,” says Iain Wagstaff, Infrastructure Sector Co-leader and Linklaters partner in London.

Hochtief: taking off

Hochtief, the largest German construction group by revenue, had been trying to sell its airports division for three years to reduce debt, and refocus away from capital-intensive businesses.

Their diverse portfolio included holdings in Athens, Budapest, Düsseldorf, Hamburg, Sydney and Tirana airports. Some of these countries were deemed to be high risk, sometimes without a majority stake, which deterred industrial investors such as France’s VINCI Concessions and China’s HNA from completing the deal in 2011.

However, in May 2013, Hochtief finally announced the sale of its airport division to Canada’s Public Sector Pension Investment Board (PSP) for US$1.4bn. The deal certainly shows the risk appetite of the Canadian pension funds and suggests that they are willing to invest in assets in sub-investment grade locations, such as Argentina or Greece. However, these airports were also unusually affordable given that prices for airport assets are generally high at the moment with their proven ability to weather a difficult financial climate.

“There was plenty of interest in buying these assets and especially the 50% stake in two large German airports,” says Ian Andrews, Infrastructure Sector Co-leader and Linklaters partner in London who advised PSP on the purchase. “But most bidders were deterred by the complexity of the deal and so it sold for a relatively modest price.”

Canadian pension funds: game-changers?

Big Canadian pension funds have invested around US$13bn into the European infrastructure M&A market since 2010.

“In contrast to many European countries, Canadian pension plans are funded arrangements,” says Ulrich Wolf, a Linklaters partner in Frankfurt. As the Canadian pension system relies on mandatory personal savings, as opposed to pension payments stemming from taxation, this has resulted in the emergence of some of the biggest pension funds and investors in the world. “With infrastructure as one of their preferred asset classes,” says Ulrich, “they have become a significant player in the market.”

“CPPIB has billions to invest each year,” says Michael Goldberg, a director of the largest fund, the Canada Pension Plan Investment Board (CPPIB). Long-term, steady-yielding infrastructure investments are a good match for pension funds’ long-term commitments. “The Chief Actuary of Canada assesses CPPIB over a 75-year time horizon,” he says, adding that CPPIB buys infrastructure assets to hold on to, not to sell on for a private-equity-style profit.

That is not to say that they will pay over the odds to build their infrastructure profiles. They will invest for around half of the return of private equity funds but they will not buy at any cost. In order to access assets at more acceptable prices, they may need to look well beyond the standard “safe” bets of north America, northern Europe and Australia. “Making risky investments is acceptable as long as the risks are fully analysed and compensated for in the investment return,” Michael says, confirming that CPPIB’s appetite is not restricted to investment-grade countries.

Even though they have funded some of the sector’s largest deals, for example, Borealis Infrastructure and Ontario Teachers’ Pension Plan’s US$3.2bn acquisition of HS1 in 2010, Canadian pension funds alone cannot drive the market forward. Their investment of US$13bn in the European infrastructure market since 2010 represents only 4% of the total. For giants such as these, infrastructure is an increasingly useful complement to traditional, safe areas such as government debt, but will not replace it.
The UK, France and Germany dominate private infrastructure investment in Europe and remain preferred destinations for most infrastructure funds because of regulatory, political and economic stability.

Many of the big drivers of the market in recent years, such as energy unbundling and privatisation, have almost run their course.

PPP markets remain quiet, although the UK government is trying to find ways to tap into private money – as are local governments in France.

For now, the market will be driven by corporate disposals.

Established infrastructure investors are being forced into unregulated assets by intense competition.

West with infrastructure investments very sensitive to political and regulatory stability, the economies of northern Europe remain obvious targets for new investment. Absolute values have crumbled since the crisis, but the region continues to dominate private infrastructure investment in Europe.

The infrastructure M&A market in the UK, France and Germany has been worth an annual average of US$45bn between 2010 and 2013, almost double the US$24bn notched up in the southern European countries of Italy, Spain and Portugal. In the first half of 2013, the PPP market in the UK alone was worth more than that in southern Europe combined.

Despite investors’ preference for northern Europe, they are being forced to look more widely for deals. “The problem is that there are few suitable deals out there,” says Ralph Drees, a Linklaters partner in Frankfurt. “Therefore, funds are being forced to stretch risk appetite by looking at deals they wouldn’t normally consider.”

MEAG, the investment arm of German insurance giant Munich Re, is typical of the trend. On behalf of Munich Re Group, MEAG is implementing a global infrastructure investment plan with an intended volume of €1.5bn, as its parent looks for stable, long-term investments. “We prefer to focus on central and northern Europe, along with the US and Canada,” says Alice Forster, Senior Investment Manager at MEAG, because “we are looking for government and especially regulatory stability.” She accepts, however, that MEAG might be forced to look more widely for deals over time.
COMPANIES, NOT GOVERNMENTS CASHING IN ON THE DEEP POOL OF PRIVATE INVESTMENT MONEY AVAILABLE

What’s left to sell?

Airports’ relatively predictable revenues make them popular with financial investors and corporate buyers, the latter looking to improve results through better management. Financial investors are also looking at rail and road concessions where revenues are long term and, provided regulation is stable, predictable.

This contrasts with sea ports, traditionally considered more reliant on GDP and trade growth to interest investors looking for stable long-term revenues, although increasingly attractive to financial investors (see case study: Arcus – Unlocking the hidden potential). For assets such as these, specialist companies acquiring interests can provide the expertise to manage the asset, opening the door to financial investors taking minority stakes in assets they might not be comfortable managing themselves.

In the short term, it is more likely to be companies than the governments of northern Europe cashing in on the deep pool of private investment money now available. Many of the deals will come from companies struggling both to raise capital and to pay down debt or needing to streamline their business. Already, this is leading to a series of transactions where big utility or energy companies sell minority stakes to financial investors. “With share and energy prices low, it’s the only realistic way for them to raise new capital,” says Peter Taylor, Executive Director at Hastings, an Australian infrastructure investment specialist with some US$6.5bn of assets under management.

There are plenty of examples of this sort of deal breaking. In November, France’s energy and transport company Alstom announced some big job cuts, as a public spending squeeze and a flat economy hurt demand. It is considering the sale of a minority stake in its transport arm to raise capital. In July, Japan’s Sumitomo announced that it had bought minority stakes in two Belgian wind farms. “Many European energy companies are considering selective asset sales to free up capital for either reducing debt or funding capex requirements. These asset sales may be minority positions or outright sales and provide opportunities for infrastructure investors,” says Nicola Palmer, a partner at the fund manager Arcus Infrastructure.

Transport-related assets remain a target for many investors. However, infrastructure is more than transport: the biggest recent transactions have been in energy utilities

ARCUS: UNLOCKING THE HIDDEN POTENTIAL

“In the early to mid-2000s we concentrated on regulated assets, especially in the UK. And when we launched a new infrastructure fund in 2007, we expected to follow the same approach, albeit pan-European,” says Nicola Palmer from Arcus Infrastructure. “But, in fact, we found significant price competition for regulated assets. So we used our knowledge and experience to find new infrastructure asset sub-classes which provide attractive balances of risk/reward.”

Nicola cites the 2008 acquisition of Angel Trains in the UK as an example of how Arcus can use its specialist knowledge to unlock deals. Angel leases rolling stock to UK railway operating companies under long-term leases, so the company enjoys strong medium-term cashflow visibility, a manageable risk profile and appropriate returns.

Arcus also believes that certain seaports can make good infrastructure investments, despite financial investors’ traditional wariness of the GDP risk associated with ports.

In 2009, Arcus invested in Euroports, which is a diversified portfolio of ports handling a variety of cargo types in countries including Germany, France, Belgium, Finland, Spain and Italy, such that the portfolio is not overly exposed to the risk of a single country or product. “You need to assess the prospects for each type of cargo being transported through the ports, as well as the quality of the port’s hinterland, rather than just looking at national GDP,” says Nicola.

In 2011, Arcus bought Forth Ports in the UK, which has also performed well, despite a flat economy, because of booming oil and Scottish whisky exports.
Governments need to take the initiative

Governments should be looking for new ways to funnel cheap private money into public infrastructure. One obvious solution would be to revive the PPP programmes that were popular before the financial crisis.

A small number of countries continue to have a healthy pipeline of PPP deals, including Ireland which launched a US$4bn economic stimulus plan in 2012. However, PPP activity in most of northern Europe has dwindled. Germany remains one of the most important markets for private infrastructure financiers with many German government assets fetching the highest prices in the sector. Yet, despite this, the German government continues to launch relatively few PPP projects. Germany saw just one PPP deal closed in the first half of 2013. Britain’s pipeline of PPP projects shrank, too, when the government decided to rethink the structure of its programme.

France was able to keep PPP deals flowing after the crisis, effectively guaranteeing the debt of some big transport projects. However, deals have dried up over the past year after President François Hollande allowed the guarantees to run out. Even François Bergère, head of the government’s PPP unit, accepts that more big national projects are unlikely in the short term. He is, however, hopeful that local PPPs can keep the pipeline of projects flowing.

Some 75% of the financing will be private and part of the planned infrastructure upgrade will be funded through privatisation, with the government doubling its sales target to US$30bn over the next six years. That should yield some good deals for investors, including the sale of the state’s 40% stake in the rail company Eurostar, a portfolio of student loans and property owned by the British government and its about to be privatised nuclear power plant.

Governments across Europe recognise that there’s a big pot of private money they can tap into for infrastructure. And some are starting to do so.

The UK is also working hard to attract foreign investment. In October 2013, the government announced a deal for a private consortium led by France’s EDF to build a new nuclear power plant at a cost of around US$36bn.

Two Chinese investors, China General Nuclear Corporation (CGN) and China National Nuclear Corporation (CNNC), will take a combined 30-40% stake in the consortium.

“The Chinese interest is squarely in technology transfer,” says an investor from another Asian country. He admits that his own firm sees an opportunity to win a foothold in Europe “because European contractors cannot raise finance at competitive rates, allowing us to win contracts on price.” No one is suggesting that the Chinese companies will lose money on their investment in the nuclear plant; but they are funding it very modestly as they buy both a foothold in Europe and access to modern nuclear technology.

The UK government clearly hopes to build on this budding interest from Chinese investors and is structuring deals to appeal to them. The government is shaping the UK’s US$80bn high-speed rail development to be investor friendly by phasing the construction work, in contrast to the old PPP model. The speculation is that Chinese companies will not build the railway but might buy concession rights to run it after the work is done.

A small number of countries continue to have a healthy pipeline of PPP deals, including Ireland which launched a US$4bn economic stimulus plan in 2012. However, PPP activity in most of northern Europe has dwindled. Germany remains one of the most important markets for private infrastructure financiers with many German government assets fetching the highest prices in the sector. Yet, despite this, the German government continues to launch relatively few PPP projects. Germany saw just one PPP deal closed in the first half of 2013. Britain’s pipeline of PPP projects shrank, too, when the government decided to rethink the structure of its programme.

France was able to keep PPP deals flowing after the crisis, effectively guaranteeing the debt of some big transport projects. However, deals have dried up over the past year after President François Hollande allowed the guarantees to run out. Even François Bergère, head of the government’s PPP unit, accepts that more big national projects are unlikely in the short term. He is, however, hopeful that local PPPs can keep the pipeline of projects flowing.

Some 75% of the financing will be private and part of the planned infrastructure upgrade will be funded through privatisation, with the government doubling its sales target to US$30bn over the next six years. That should yield some good deals for investors, including the sale of the state’s 40% stake in the rail company Eurostar, a portfolio of student loans and property owned by the British government and its about to be privatised nuclear power plant.

Governments across Europe recognise that there’s a big pot of private money they can tap into for infrastructure. And some are starting to do so.

The UK is also working hard to attract foreign investment. In October 2013, the government announced a deal for a private consortium led by France’s EDF to build a new nuclear power plant at a cost of around US$36bn.

Two Chinese investors, China General Nuclear Corporation (CGN) and China National Nuclear Corporation (CNNC), will take a combined 30-40% stake in the consortium.

“The Chinese interest is squarely in technology transfer,” says an investor from another Asian country. He admits that his own firm sees an opportunity to win a foothold in Europe “because European contractors cannot raise finance at competitive rates, allowing us to win contracts on price.” No one is suggesting that the Chinese companies will lose money on their investment in the nuclear plant; but they are funding it very modestly as they buy both a foothold in Europe and access to modern nuclear technology.

The UK government clearly hopes to build on this budding interest from Chinese investors and is structuring deals to appeal to them. The government is shaping the UK’s US$80bn high-speed rail development to be investor friendly by phasing the construction work, in contrast to the old PPP model. The speculation is that Chinese companies will not build the railway but might buy concession rights to run it after the work is done.
Private infrastructure investment in southern Europe has crumbled since the financial crisis. Italy, Spain and Portugal signed just one PPP deal apiece in 2012, while infrastructure M&A values plunged by more than 72% in Italy and by 97% in Spain between 2006 and 2013 (see figure 4.1: Collapse). That is to be expected, with all three countries flailing with a default on their sovereign debt and, in Portugal’s case, being demoted to junk status by ratings agencies.

Though the figures tell a sorry story, there are signs that deal flow could improve. With northern Europe proving too expensive for many, investor appetite for the right sort of asset in Spain is growing. They are happy to pay well for the right type of asset – those with predictable cashflows, which are not reliant on the local economy for growth – even in these crisis-stricken countries.

Even Portugal with its sub-investment grade rating, is not ruled out completely. A sub-investment grade rating is not a barrier in itself, says Michael Goldberg, Director at OPPB, pointing out that his fund has made some big investments in emerging markets such as China.

The message that demand could be strong if governments start selling attractive assets again, is beginning to filter through to policy-makers, striving to reduce their sovereign debt mountains.

The Italian coalition government has embarked on what it calls “its largest privatisation programme since the late 1990s” with a plan to raise a further US$16.4bn. In fact, Italy has already announced that it will sell a minority stake in the oil and gas major Eni in 2014, along with, among other things, larger chunks in the state air navigation company ENAV and stakes in the holding companies managing railway stations, shipbuilders and pipelines. The government has also hinted that it will sell a 49% stake in Terna, the national electricity grid. Around 10 sales have been announced so far, worth well over US$15bn.

Spain, too, is restarting a privatisation programme, shelved two years ago due to a lack of investor interest. It plans to sell up to a 60% stake in the highly indebted Aena, the national airport management company valued at around US$30bn, as well as some regional airports and car parks in places such as Barcelona. Also frequently mentioned as possible assets for sale are Spanish toll road operators. “Spanish contractors are buying companies and winning huge contracts in North America, Latin America, Asia and so on,” says Alejandro Ortiz, a Linklaters partner in Madrid.

“They have sold subsidiaries as they reduce their Spanish presence and raise cash for international expansion. And there’s big private equity interest, showing that international money will touch the right sort of asset in Spain.”

Although there are buyers for assets in southern Europe, investors remain highly selective. Crudely put, assets in southern Europe must either be in a handful of attractive areas, such as airports and some utility companies, or “they must be affordable enough to warrant the risk”, as one fund manager said.

That’s a marked shift for countries that would have wiped out the value of any investment had they defaulted on their debt – a real risk just one or two years ago, when even Spain and Italy were struggling to raise sovereign debt in the capital markets. And current interest levels are driving prices up to a level where both government and companies may be willing to sell.
ASSETS IN SOUTHERN EUROPE MUST EITHER BE IN A HANDFUL OF ATTRACTIVE AREAS OR THEY MUST BE AFFORDABLE ENOUGH TO WARRANT THE RISK

Portugal: still attractive
despite downturn

Portugal is one country which has proved that there is investor appetite for assets in southern Europe. It has privatised several big assets to help the state budget, pushed by the terms of its EU bailout and buoyant international investor demand. This has helped the country to raise much needed cash. “What is interesting is the appetite from markets outside of the EU. Chinese investors have been particularly interested in Portuguese assets,” notes Pedro Siza Vieira, a Linklaters partner in Lisbon. For example, the acquisition by China’s state-controlled Three Gorges utility of a 21% stake in EDP at the end of 2011 for US$3.7bn and State Grid International of China and Oman Oil’s acquisition of a 40% stake in power and gas grid operator REN for US$810m. “We have also seen a string of secondary market and equity debt trades in the PPP sector,” says Pedro.

It was the sale of the airports group ANA in December 2012 that really showed that Portugal could sell assets for a good price despite its debt crisis. France’s VINCI paid over US$4.2bn for a 95% stake (see case study: VINCI Concessions: A very different approach), the price, equivalent to around 17 times EBITDA (earnings before interest, tax, depreciation and amortisation), was even higher than that for recent UK airport sales. These sales should not lead to the conclusion that demand for Portuguese assets is limitless; certainly not all assets will fetch such high prices. For example, an attempt to sell the TAP airline failed in 2012, and investors remain wary of taking local GDP risk in southern European countries.

All of the companies mentioned were bought by corporate investors, sometimes taking on the management role at the head of a consortium of financial investors. As with the UK nuclear plants, Asian companies were attracted by the chance of gaining a foothold in Europe, as well as by the lure of local high technology and some of the Portuguese companies’ healthy exposure to emerging markets, such as South America.

VINCI CONCESSIONS:
A VERY DIFFERENT APPROACH

Companies such as French contractor VINCI Concessions take a very different approach to acquisitions than financial investors. VINCI decided to expand internationally when it realised that infrastructure activity was slowing in its home market, France. But it found that stable European countries such as Germany and the UK were too expensive to be of interest to a company that makes money by improving operational performance.

“Intense competition leads to crazy prices, which are not for us,” says Chairman Louis-Roch Burgard. “We tend to be counter-cyclical, buying at the bottom of the market.” That makes southern Europe interesting, despite the lack of new-build work, as well as emerging markets such as Russia, where VINCI is investing with Russian bank VTB in a new motorway.

Judging by its biggest acquisition to date, the Portuguese airport operator ANA, VINCI is far from being a single-minded bargain hunter, however. The price tag was over 20% more than offered by the second-placed bidder, Fraport. Jean-Roch Burgard justifies the price by pointing out that ANA has grown strongly for the past decade, with potential to grow traffic further on some of its routes to Latin America. “It’s a big success,” he says, adding that he likes the fact that you can grow airport business without relying on government regulation or economic growth.

Greece: Any buyers?

Greece’s story is not quite so positive. Following a string of delayed or cancelled sales, Greece’s privatisation target has dropped to US$20bn, less than a third of the goal promised at the time of its initial bailout three years ago. Many blame the Greek authorities for the muddle, but it has also been hard to find bidders for assets in a country that remains at risk of a sovereign default despite two rescues. For a country spurned by the big financial investors such as pension funds, local and emerging-market investors looking to snap up a bargain could be the answer.

Some attractive companies are likely to come up for sale over the next few years, including regional airports serving the big tourist market, the postal service and utilities such as Eta, Thessaloriki’s water and sewerage firm.

Regional airports, in particular, are stirring up strong interest from corporate buyers. They are mentioned as a possible acquisition target by Ulrich Hepper, Project Director of the German airports operator Fraport. And they are singled out by Louis-Roch Burgard, Chairman of the French contractor VINCI Concessions. “We see real opportunities in Greece,” he says.

Privatisations vs. corporate disposals: where will assets come from?

Though there have been a small number of successful privatisations in southern Europe in the last year, there is still strong opposition towards private ownership of national infrastructure. There have been protests against austerity in both Spain and Italy, and it would be mistaken to believe that people there are any keener on private infrastructure ownership than their counterparts in Germany or the UK. However, these countries need cash and now private money is there for them to sell at a good price. Spain may consider privatising its toll roads, for example: “A significant number of toll roads built since 2000 are insolvent and face rationalisation,” says José Giménez, a Linklaters partner in Madrid. “That raises the question of whether they will be reprieved after their financial clean-up.”

It is not just governments in southern Europe, however, that are bringing assets to market. Corporate disposals are also likely to generate investment opportunities, as companies seek to reduce debt and, in many cases, because they want to fund international expansion to escape stagnant home markets.

In October 2013, for example, Spain’s Ferrovial sold a 9% stake in Heathrow Airport Holdings to one of the biggest UK pension funds, the Universities Superannuation Scheme, for US$530m. A year earlier, it had sold an 11% stake to Qatar Holdings and a 10% stake to China Investment Corporation (CIC), in a classic example of a company selling minority stakes in assets to raise capital, whilst retaining control over the asset. In the same month, Microsoft Chairman Bill Gates paid US$105m for a near 6% stake in Spanish construction group, Fomento de Construcciones y Contratas, in a deal widely heralded as confirming that Spain was back on the international investment map.

Although a more challenging environment than northern Europe, certain infrastructure assets in southern Europe have solid underlying credentials and, as we have seen, are attractive to investors. Governments and corporate contractors in southern Europe who require funds to pay down debt, need to harness the increasing interest for these assets.
**EMERGING EUROPE: BRAVE NEW WORLD**

**IN BRIEF**

- Infrastructure in emerging Europe urgently needs updating and expanding.
- Emerging European countries prefer to use EU funds for infrastructure development.
- Turkey and Russia are using PPPs very aggressively to modernise infrastructure.
- The big challenge is the lack of capacity to structure deals that offer adequate rates of return, given the risk.

"It’s a mistake to talk about the infrastructure gap," says Thomas Maier, Managing Director in charge of infrastructure at the European Bank for Reconstruction and Development (EBRD). "In fact, the real question is not about how much infrastructure is needed but about how much can be structured in a bankable way."

Russia and the post-communist states of central and eastern Europe should have a strong argument for trying to tap into private financing available for infrastructure projects today. In many countries, infrastructure dates from communist times and urgently needs updating and expanding. Russia’s Ministry of Transport estimates that the dire state of the country’s roads knocks almost 9% off GDP.

Governments across the region accept that they do not have the funds to sort out problems on this scale by themselves. However, after a wave of privatisation in the 1990s, private finance is being used only lightly, especially for new-build work. Countries from Hungary to the Czech Republic experimented with PPPs in the mid-2000s, but have largely stopped launching new projects.

Russian organisations have been spending relatively heavily on infrastructure since the crisis. Infrastructure M&A in Russia has been more than twice as high as in the UK in both 2012 and 2013, virtually all of it domestic and much of it government money. Foreign investment has been missing.

"There’s a lack of supply of well-structured and prepared projects across central and eastern Europe," says Thomas Maier, adding that the public sector in many countries lacks the capacity to structure and oversee complex PPP projects. Andrei Kiselev, Managing Director of Infrastructure Capital & Project Finance at VTB Capital, which has already invested in three big Russian PPP deals, agrees. "The biggest constraint on the market isn’t money but the lack of people with the expertise to structure deals, especially on the public-sector side," he says. "Deals may take a long time, up to three years, to reach financial close."

There are two exceptions to this rule: Turkey and Russia, both of which have launched huge PPP programmes. Though some analysts question whether the plans are too optimistic, with many investors wary of corruption in Russia and unpredictability and cronyism in Turkey. But there is no doubting the ambition of these schemes, nor the promise they could hold for private investors keen to unlock more deals.

**Fig. 5.1 Infrastructure M&A deals by value (US$bn)**

*OPPORTUNITY
SOURCE: LINKLATERS, THOMSON REUTERS*
Turkey wants to spend US$300bn on infrastructure over the next five years alone

Turkey’s bold plans

Turkey wants to spend US$300bn on infrastructure over the next five years focusing on power plants, railways, airports, roads and hospitals, with 60% financed through PPPs. It has already begun several ambitious PPP programmes, including a US$13bn airport for Istanbul, two motorway projects costing US$10bn and 16 hospitals costing US$8bn. It is not only greenfield projects that Turkey is focused on, but the privatisation of government-owned infrastructure too. Following an amendment to legislation, the Turkish government will be able to relaunch the privatisation of its motorways and bridges.

However, recent corruption scandals around some of the projects, and growing political and financial upheaval, have cast some doubt over the viability of their plans. The challenge for Turkey has always been to find the private money for building on such an extraordinary scale – and recent instability only exacerbates that.

“There’s no shortage of debt from local banks, but there is a shortage of equity investors,” says Zeynep Dereli, Managing Director of APCO Worldwide, an Istanbul-based consultancy, who says the government wants at least 20% of these projects’ value to be equity funded. Currently, the only foreign equity buyers are the contractors, with most financial investors wary of touching a country outside of the EU and with a relatively low credit rating. “Turkey is still the nectar of many pension funds and financial investors for infrastructure projects,” says Zeynep Dereli’s comments were echoed recently by Levint Kirazoglu, Manager of Project and Acquisition Finance at Turkey Garanti Bankası, who said that 70% of the cost of these projects would be funded by Turkish banks. He was hopeful that international banks would help to fund the remaining 30%, with talk of project bond issues for some of the larger deals.

“In fact, the reliance on local finance is opening the door to outside contractors buying their way into the market. One Asian contractor says that his firm is using export bank cash to offer funding at half the rate of Turkish banks allowing it to win some big PPP projects. The giant nuclear power tenders have been snapped up by companies from Russia and Japan – in the latter, Mitsubishi won the US$22bn contract to build a plant at the Black Sea town of Sinop, in partnership with Areva, a French multinational. "In recent years, international investors have looked eagerly at the opportunities presented by the large Turkish market. Along with political concerns, the increasing difficulty in actually concluding deals in the country, has dampened their enthusiasm, but interest still remains," says Ian Andrews, a Linklaters partner in Moscow, who has advised several foreign investors in infrastructure deals in the country.

Unleashing Russian growth

In Russia, the government has also identified creating infrastructure as a limitation to growth and has launched an ambitious PPP programme to attract much-needed private finance.

“There was a pipeline of PPP projects, particularly in St. Petersburg, before the crisis and there has been a hiatus since then,” says Matthew Keats, a Linklaters partner in Moscow.

“But interest has been growing again. The Russian government accepts that a lack of infrastructure prevents economic growth and has recently announced a series of major projects,” he says. The market splits the market into two halves: federal projects, which have a much higher level of utility and social infrastructure. "Regional markets are starting to take off," says VTG Capital’s Andrei Kiselev, who says that 70% of the cost of some projects would be funded by Russian banks.

The Russian infrastructure splurge will succeed in attracting international finance as well as international sponsors and contractors. "There’s a lot of international interest in Russian infrastructure," says VTB Capital’s Andrey Kiselev. He mentions that he is talking to contractors including France’s VINCI and Bouygues, Italy’s Astaldi and Germany’s Strabag.

Questions remain, however. "There’s a crucial risk/reward question for a country like Russia," says Matthew Keats. Some investors say that in recent projects they were offered too low a return. “The public authorities are unrealistic about their target rates of return for investors,” says Leader’s Sergey Kerber, “and they don’t understand the idea of a partnership, meaning that they try to impose too much risk on contractors.”

As in Turkey, Russia’s huge infrastructure needs offer private investors an extraordinary opportunity, and a huge pipeline of PPP projects in which to invest. "They envisage a higher proportion of private finance and hence a bigger pipeline of projects in which to invest. To capture and harness a share of the US$1trn available for investment in Europe’s infrastructure over the next decade, the government needs to structure projects in a way that satisfies the international investors’ risk vs. return requirements."
SEIZE THE OPPORTUNITY

European infrastructure markets have been depressed throughout the financial crisis, with both deal values and volumes significantly below pre-crisis levels. However, our research shows that there are clear signs that a revival could be on the way, with appetite for investment from an increasing number of sources and geographies and large sums of private money earmarked for European infrastructure assets and projects over the next decade. The total amount of available funds, estimated at US$1trn over the next 10 years, is a sizeable sum and an opportunity that needs to be grasped with both hands.

All of the ingredients for a revival are there: infrastructure investment needs are great across Europe; austerity has cut public spending and long-term private financial investors are actively seeking stable, high-yield returns offered by infrastructure investments and are willing to pay good prices for, or to invest in, attractive assets and projects. The biggest obstacle now is not the lack of private finance, but the lack of assets to buy or appropriately structured projects to invest in.

To turn the potential for investment into sustainable infrastructure growth will require a new commitment from European governments to leverage long-term private capital for public purposes. However, there is a reluctance both to launch projects in a time of austerity and to privatise assets in a political climate often increasingly hostile towards private infrastructure ownership. Hostile or unstable pricing regulation is a significant barrier to private investment, as investors seek stable, hospitable regulatory environments which allow them to calculate risk throughout the long lifespan of an infrastructure investment.

Governments have the opportunity to take advantage of the current appetite for European infrastructure.

To date, however, we continue to see large sums of money chasing a limited number of deals. This has led to inflated prices for many brownfield assets. This ought to be an added incentive for governments to sell national infrastructure to private investors, taking advantage of an overheated market, but few have taken the opportunity to do so. Instead, over the last couple of years, it is largely corporate disposals that have provided a pipeline of brownfield assets for investors. Many have been tempted to sell non-core assets to reduce debt levels or generate money for new investments further afield.

Governments can attract investment through new projects and privatisation of infrastructure assets, which they can still control in the national interest through adequate structuring and regulation. However, for their part, investors need to know that infrastructure assets are indeed stable, predictable and safe over the long-term: that is what makes them attractive. The level of risk involved in the asset class should be relatively low. Governments can achieve this – and unlock the potential for investment into their country – by structuring new-build deals so as to share risks during construction, and by giving investors confidence that pricing and other regulation of operating assets will not change to meet short-term political goals. This is particularly important in countries which historically are seen as higher risk and which therefore need to work harder to reassure investors that the risk of investment will indeed be adequately rewarded.

Ultimately, the increasing appetite for European infrastructure by new private investors is an opportunity that needs to be seized rather than squandered. If governments start wooing private money and stop attacking it for political reasons, then there is every indication that European infrastructure investment will bounce back strongly from its post-crisis doldrums.

CONCLUSION: RIPE FOR REVIVAL

European infrastructure markets have been depressed throughout the financial crisis, with both deal values and volumes significantly below pre-crisis levels. However, our research shows that there are clear signs that a revival could be on the way, with appetite for investment from an increasing number of sources and geographies and large sums of private money earmarked for European infrastructure assets and projects over the next decade. The total amount of available funds, estimated at US$1trn over the next 10 years, is a sizeable sum and an opportunity that needs to be grasped with both hands.

All of the ingredients for a revival are there: infrastructure investment needs are great across Europe; austerity has cut public spending and long-term private financial investors are actively seeking stable, high-yield returns offered by infrastructure investments and are willing to pay good prices for, or to invest in, attractive assets and projects. The biggest obstacle now is not the lack of private finance, but the lack of assets to buy or appropriately structured projects to invest in.

To turn the potential for investment into sustainable infrastructure growth will require a new commitment from European governments to leverage long-term private capital for public purposes. However, there is a reluctance both to launch projects in a time of austerity and to privatise assets in a political climate often increasingly hostile towards private infrastructure ownership. Hostile or unstable pricing regulation is a significant barrier to private investment, as investors seek stable, hospitable regulatory environments which allow them to calculate risk throughout the long lifespan of an infrastructure investment.

Governments have the opportunity to take advantage of the current appetite for European infrastructure.

To date, however, we continue to see large sums of money chasing a limited number of deals. This has led to inflated prices for many brownfield assets. This ought to be an added incentive for governments to sell national infrastructure to private investors, taking advantage of an overheated market, but few have taken the opportunity to do so. Instead, over the last couple of years, it is largely corporate disposals that have provided a pipeline of brownfield assets for investors. Many have been tempted to sell non-core assets to reduce debt levels or generate money for new investments further afield.

Governments can attract investment through new projects and privatisation of infrastructure assets, which they can still control in the national interest through adequate structuring and regulation. However, for their part, investors need to know that infrastructure assets are indeed stable, predictable and safe over the long-term: that is what makes them attractive. The level of risk involved in the asset class should be relatively low. Governments can achieve this – and unlock the potential for investment into their country – by structuring new-build deals so as to share risks during construction, and by giving investors confidence that pricing and other regulation of operating assets will not change to meet short-term political goals. This is particularly important in countries which historically are seen as higher risk and which therefore need to work harder to reassure investors that the risk of investment will indeed be adequately rewarded.

Ultimately, the increasing appetite for European infrastructure by new private investors is an opportunity that needs to be seized rather than squandered. If governments start wooing private money and stop attacking it for political reasons, then there is every indication that European infrastructure investment will bounce back strongly from its post-crisis doldrums.
APPENDIX

Economic impact analysis

Linklaters commissioned global analysis and advisory firm Oxford Analytica to calculate the impact on the EU economy if the funds described above are actually invested in European infrastructure over the period 2014-2023.

The findings focus on high, central and low impact scenarios, taking into account: well-known multiplier effects, varying from around 1.0 (for a government fiscal boost that must be paid for by tax increases) to as much as 2.0 (for a very successful private sector stimulus); and variables such as the scale of additional productive investment each year, the ratio of "real" versus financial investments and capacity-building effects.

The range and scale of impact will depend on a number of factors, including speed of uptake, level of M&A, greenfield vs. brownfield investment, project stage, the degree of "active" use of the funds and investment destination.

Key assumptions

> GDP and GDP growth. The baseline EU and UK GDP assumptions are derived from estimates for 2014 and 2015 quoted in the IMF World Economic Outlook, October 2013. Nominal EU and UK GDP growth (ie inclusive of average inflation of 2%) is assumed to be 3.7% and 4.25% per annum for the 10-year period, a growth rate in line with current expectations.

> Capital stock. Capital stocks in the EU and the UK are assumed to be 3.0 and 2.3 times GDP, respectively, based on the main country estimates reported by Derbyshire, Gardner and Wrights (2010), an EU Regional Policy publication entitled ‘Estimating the capital stock for the NUTS 2 regions of the EU-27’, available at: http://ec.europa.eu/regional_policy/sources/docgener/work/2011_01_capital_stock.pdf

> Multipliers. Three different values are assumed for the multiplier, in order to lay out a possible range of outcomes. A recent IMF review, ‘Coping with High Debt and Sluggish Growth’, World Economic Outlook, October 2012, indicated that the government spending multiplier could be as high as 0.9-1.7, about two to three times higher than previously estimated. Private spending multipliers are generally expected to be higher than government multipliers due to the latter’s tax implications and inefficiencies. Based on the received view, we therefore assume a private sector investment multiplier of about 1.5 for the central scenario, a maximum of 2.0 for the high impact scenario and a very low value of just 1.0 for the low impact scenario.

Methodology:
Calculating available institutional investment

A total of US$1trn available to invest in Europe from institutional investors over a 10-year period

The Linklaters calculation that institutional investors may be looking to allocate as much as US$100bn per year from 2014-2023 to European infrastructure projects (equal to US$1trn) has been calculated as follows:

Global institutional investors’ assets, end-2012 US$680bn

Assets targeted at Europe, % 35%

European institutional assets, estimate end-2013 US$259bn

Target allocation towards infrastructure 4%

Total annual amount targeted at infrastructure, 10-year period US$100bn

INSTITUTIONAL ASSETS: PREQIN; ASSET TARGETS: PREQIN; CALCULATIONS: LINKLATERS

The calculation is based on data from Preqin® on the share of total assets targeted at infrastructure projects at the end of 2013 by institutional investors globally. It also takes into account estimates derived from Preqin and Towers Watson® on the share of assets targeted at Europe. It builds on a methodology developed in 2013 by Georg Indenst for the European Investment Bank (EIB). 3

Institutional investors are defined as pension funds, insurance funds, sovereign wealth funds, and other family-based funds and foundations. These may invest in dedicated infrastructure funds, in broader private equity funds or directly in infrastructure projects, but our numbers exclude equity holdings of institutional investors in infrastructure companies and banks.

Our annual figure assumes that the typical project length will be 10 years, in line with assumptions by the EIB and the World Economic Forum. 4

3. Indenst, Georg. Private Infrastructure Finance and Investment in Europe. EIB Working Paper 2013/02. http://www.eib.org/publications/whitepapers/working_paper_2013_02_en.pdf Indenst estimates that investors may be prepared to invest an additional 2-4% of their assets towards infrastructure, from a 1% historical rate, which would imply an annual allocation of €45bn.

30 Linklaters / Set to revive? / Appendix