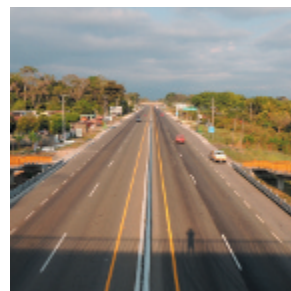


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**BLACKROCK®**

# The Investor Perspective

Stimulating Greater Private  
Capital Markets Investment  
in Infrastructure



2018



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# Executive summary

A question we often get asked by policymakers is “Why isn’t more private capital flowing into public sector infrastructure projects?”.

BlackRock believes that institutional investors, such as pension funds, sovereign wealth funds and insurance companies, are increasingly looking for long-term investments that offer stable income, and that are typically less correlated to the returns they get in the fixed income and equity markets. In recent years, infrastructure investment has emerged as one of the fastest growing asset classes for institutional investors, with a decade-long rise in long-term patient capital seeking risk-appropriate investments.

A lack of supply of investment opportunities is generally cited as the primary limiting factor in the future growth of the asset class. At the same time, governments around the world are seeking greater financing for infrastructure projects that will stimulate economic growth and improve the quality of life of their citizens. However, the requirement for capital and the addressable opportunity to invest seem to be out of sync. This need not be the case.

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**2** STIMULATING GREATER PRIVATE CAPITAL MARKETS INVESTMENT IN INFRASTRUCTURE

# Our key principles

This paper seeks to provide an investor's perspective on the need to 1) create the national conditions to stimulate capital flows into a pipeline of critical infrastructure projects, 2) develop truly scalable projects, 3) understand the key link between the upfront financing and the long-term funding of infrastructure assets, and 4) provide insights on how unintended consequences can diminish market attractiveness by impacting the net return to investors.

## **1. Policy conditions, plus project pipeline together can unlock constrained growth**

We believe there is significant institutional investor appetite to further finance infrastructure, but growth in the asset class is currently constrained by a lack of investible projects. This investor demand can be unlocked by a focus on both policy and pipeline. There are common goals between investors, policymakers, and infrastructure users, which can be bridged with a toolkit encompassing governing policy, investor-friendly procurement processes, project pipeline creation, and independent implementing agencies.

## **2. Scale matters**

A predictable supply of investable projects at sufficient scale is essential. This incentivises investors to do the start-up work on a region, with the confidence they will be rewarded by recurring investment opportunity. Well-developed national infrastructure plans allow investors to better understand policymakers' long-term priorities. For countries looking to stimulate international capital flows, the opportunity must be large enough for international capital to participate alongside domestic capital.

## **3. Certainty matters**

In most cases, institutional investors have made long-term promises to their beneficiaries. They need to know that they will get their capital back, and that they will get a return on those investments. There is a direct link between the flow of capital to finance assets and the ability for investors to assess the sustainable long-term revenue model supporting those assets.

## **4. Beware of unintended consequences**

Investors compare the relative attractiveness of an investment on a net basis. This net return can be impacted by unintended consequences. Additionally, tactical awareness of policies around FX, tax, currency repatriation, political consensus, legal certainty and capital markets regulation will further impact market attractiveness.

# The current state of play

The discussion about the global infrastructure gap continues to grow. Estimates of the annual infrastructure investment shortfall range from \$350bn according to McKinsey,<sup>1</sup> up to as much as \$800bn according to the World Bank.<sup>2</sup> If the UN's Sustainable Development Goals are considered, the need for infrastructure investment rises further still.

## What's causing the gap to widen?

Our world is changing and our infrastructure must adapt along with it. Accelerated technological innovation, demographic shifts and increased concerns around sustainability, have catalysed the conversation about building infrastructure for the 21st century, on a global basis.

Developed markets are grappling with an aging infrastructure base and budgetary constraints, leading to deferred maintenance of existing infrastructure stock. In both emerging and developed markets, investing in infrastructure has the potential to accelerate the path to economic prosperity. Strong social and transport infrastructure enhances labour welfare and mobility, while modern energy infrastructure provides sustainable, lower-cost power to fuel industrial growth.

Policymakers have a critical role to play in planning our future infrastructure, but they find themselves increasingly constrained. Tax increases to fund infrastructure are not always palatable with domestic populations, while adding to fiscal expenditure in today's environment remains difficult in many markets. We believe that private capital therefore has never had a more crucial role to play in building the infrastructure of tomorrow.

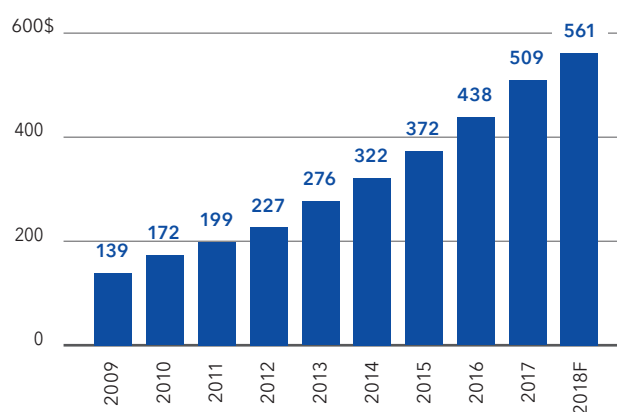
## The rise of infrastructure as an asset class

As the discussion of the funding gap for infrastructure continues to grow, so does the rate of private investment into public infrastructure. But, the gap is still widening.

Over the past decade, infrastructure has blossomed into a standalone asset class. Data by research provider Preqin suggests that total capital raised in unlisted infrastructure funds has grown from US\$139bn in 2009 to over US\$500bn at the start of this year, and BlackRock estimates that at least an incremental 20% can be added to this number when including capital deployed directly on a non-fund basis.

## Capital raised by unlisted infrastructure funds

Total capital raised, USD billions



Source: Preqin, June 2018.

<sup>1</sup> McKinsey & Company, Bridging Global Infrastructure Gaps, June 2016.

<sup>2</sup> World Bank, Global Infrastructure Outlook, 2018.

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4 STIMULATING GREATER PRIVATE CAPITAL MARKETS INVESTMENT IN INFRASTRUCTURE

### Growth outlook for the asset class

This trend looks set to continue, according to the BlackRock 2018 Global Rebalancing Survey, comprising 224 institutional investors representing over US\$7.4 trillion in assets. Over 60% of respondents intend to increase their allocation to real assets, including infrastructure, in 2018, more than any other asset class.

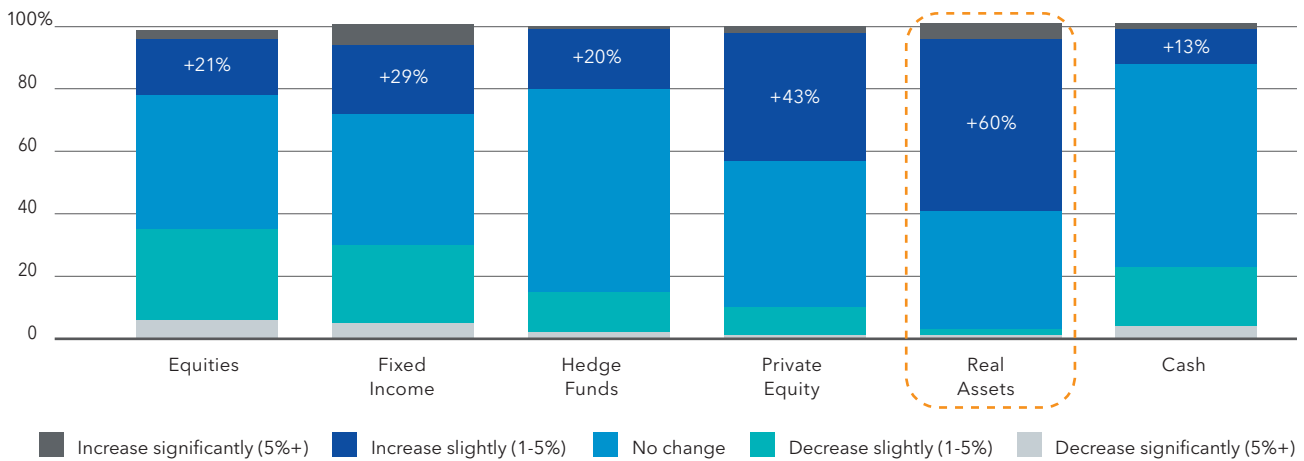
### What's driving this allocation growth?

Investor allocation growth has been driven by positive, fundamental factors. In an environment where fixed income yields have stayed at historical lows, we believe investors have turned to infrastructure investment looking for:

- the less cyclical nature of essential infrastructure
- long-term, contracted income with high-quality counterparties
- enhanced return potential over public market equity and debt
- explicit and implicit inflation protection.

### 2018 BlackRock Global Rebalancing Survey

Anticipated 2018 asset allocation changes



Source: BlackRock, January 2018.

# Key principles

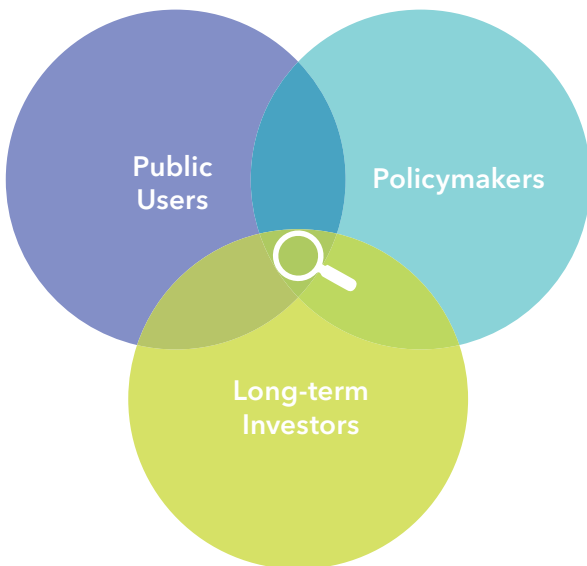
## 1 Policy, plus a well-defined project pipeline can unlock constrained growth

There is significant institutional investor appetite to further finance infrastructure, but forward growth is currently constrained. This growth can be unlocked by a focus on both policy and pipeline. We believe there are two key pain points that need to be addressed to unlock growth:

- Creating a stable long-term environment for investment which covers the policy, legal, regulatory, economic and social environment
- Developing a robust supply of investable deal flow

Policymakers and consumers are generally aware of the enhanced societal benefit that can be provided through better public infrastructure, delivered quickly and at a reasonable cost to the public. If private investors can create, provide and illustrate that value, they, in turn, can benefit from a sustainable long-term return on investment.

### Common goals: Infrastructure investment lies at the intersection of the public, the government and long-term patient capital



#### A supportive policy environment is essential

The first step in attracting private capital to a country or sector is to create the capital market conditions that enable confident deployment of capital over the long life of an infrastructure asset, which can be measured in decades.

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In addition, most private investors understand that there are pressures on policymakers to justify their decisions to the public, and to clearly illustrate both societal benefit and value for their investment.

#### Policy best practice

A policy framework should seek to provide certainty to investors by creating the right capital markets conditions for allocation over the long-term. It is essential that policy decisions transcend the term of a specific administration.

Policy execution should be implemented by independent organizations or agencies, with a clear mandate, that are tasked to execute projects with maximum public utility and limited political involvement.

The benefits of public-private partnerships (PPP) should be communicated. A model showing value for money and illustrating the net benefits to taxpayers and citizens should be considered. Well developed contract law and enforceability are essential for providing investment certainty.

#### Case Study: Mexico's constitutional reforms

In Mexico, two important policy pillars have come together to foster private investment in infrastructure.

First, in 2013 an agreement was signed across the political spectrum that catalysed a series of policy reforms, with the goal of fostering a more robust economy in terms of developing energy sources and competition for asset procurement. The policies in the agreement covered a series of anti-trust measures alongside initiatives focused on liberalization of trade in the energy and communications sectors.

Second, the reforms were followed by a National Infrastructure Program (covering 2014-2018) that set goals for 743 individual projects across the Energy, Electricity, Communications, Water and Social Infrastructure sectors. With investment opportunities clearly identified and bidding mechanisms to operate under improved regulatory certainty and transparency, capital duly flowed in both from domestic and international sources.

Source: BlackRock, September 2018.

## 2 Scale matters: Investors want to see a scaled pipeline of investable assets

A well-developed national project pipeline is an essential complement to a supportive policy environment. Through the process of pipeline creation, policymakers can show the scale of opportunity in a region, can communicate their long-term priorities, and investors are therefore provided with the context of how individual assets fit into the broader national agenda.

Additionally, a predictable supply of investable projects of sufficient scale to provide recurring opportunities for investment is essential to catalyse investors to commit the time, effort and resource to understand market dynamics in a particular region.

Well-developed national infrastructure plans allow investors to better understand a country's long-term priorities. For countries looking to stimulate international capital flows, the opportunity must be large enough for international capital to participate alongside domestic capital.

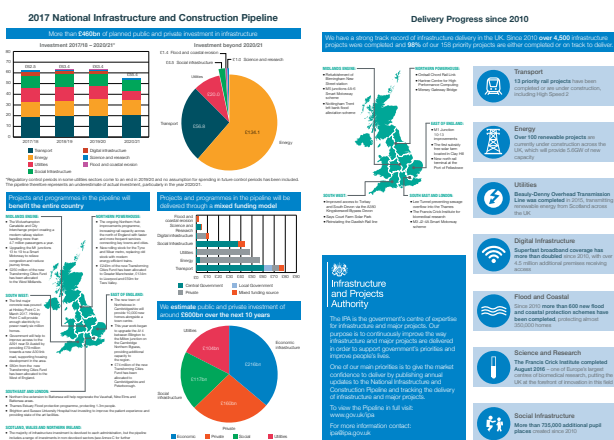
### Case Study: Strategic infrastructure planning

Many countries are developing long-term infrastructure plans that emphasize the scale of the investment opportunity and place individual projects within the context of national priorities. The UK's National Infrastructure Plan is one such example:

### The role of an infrastructure bank

Independent infrastructure banks can play an important role in implementing policy. Working across political cycles, they can help articulate national goals and act as the repository of data and information on best practice for policymakers, project developers, and international investors. They can also help support project delivery by adopting best practice for project procurement, commissioning and approval. Importantly, these independent infrastructure banks can 'crowd-in' private capital by investing in risk tranches that private investors may not be comfortable with, and thus can help drive the formation of a pipeline of projects looking for long-term investment. In all of these roles, a well-articulated development mission is important to prevent 'crowding out' of capital from certain projects which may already be of sufficient robustness to attract private capital.

The recent success of the European Investment Bank (EIB) in implementing the European Fund for Strategic Investments (EFSI), meeting and exceeding the investment mobilization goal of €315 billion under the Juncker Plan,<sup>3</sup> shows the importance of infrastructure banks with clearly articulated policy goals. Key elements of continued success for these banks will be working together with the private sector, providing certainty to investors, improving transparency and determining funding structures that align the interests of investors and public authorities.<sup>4</sup>



Source: National Infrastructure & Construction Pipeline 2017, HM Treasury and Infrastructure & Projects Authority.

3 Source: European Commission, July 2018.

4 For a more detailed discussion of European initiatives on infrastructure investment, please see 'BlackRock Viewpoint: Infrastructure Investment: Bridging the Gap Between Public and Investor Needs, November 2015'.

### **Growing pipeline by asset recycling:**

#### **Selling brownfield to develop greenfield**

Investors use the broad terms 'brownfield' to describe operating infrastructure assets and 'greenfield' to describe construction stage investment opportunities. In general, the thesis provides that the broad market of investors are risk-averse and tend to have limited technical staff, meaning there is a preference for operating assets with a predictable income stream and limited development risk.

In addition, at the very early stage of project development, some risks such as project approvals and permitting may be binary and difficult to quantify for risk-averse institutional investors, who prefer to wait to invest until later in an asset's lifecycle.

While BlackRock would note that many investors are comfortable taking on construction risks, and that investors should perhaps focus on the long-term revenue outlook rather than the short-term construction outlook of a project, the concept of asset recycling, or governments selling operating assets, has proved effective in mobilizing capital into a region for the first time.

Additionally, policymakers can recycle the proceeds from the sale of existing infrastructure into new-build projects, thereby maintaining a virtuous circle.



#### **Case Study: Australia's infrastructure asset recycling initiative**

The Australian government's 'Asset Recycling Initiative', launched as part of the 2014-15 budget, creates opportunities for investors, including the country's large superannuation funds, to invest in quality infrastructure assets around Australia. It is a five-year, AU\$5bn program where states and territories can receive from the government 15% of the price of infrastructure assets sold, so long as the sale proceeds are to be used for new infrastructure investment.

To take an example, New South Wales (NSW) intends to invest over AU\$80bn over a four-year period across a range of infrastructure projects, including road, rail, hospitals and social housing, as a result of the asset recycling initiative.



Source: New South Wales Government, June 2018.



### Emerging markets mobilization

To attract investors towards infrastructure projects in emerging markets (EM), these jurisdictions need all the previously mentioned criteria, but also carry an additional EM risk premium (i.e. reflecting country risk, currency risk). This often pushes up that return requirement unreasonably high, and at times, reaches a rate that is well beyond what the government can finance a project for by itself.

Often, due to perceived project risks, there may be circumstances where emerging market governments may be better off issuing debt and building these assets on-balance sheet. This is where multi-national development agencies can play an important role to mitigate certain risks (e.g. many EM currencies are challenging to hedge). These agencies can also provide support through low-cost political risk insurance, or low-cost currency insurance.

Domestic participation, alongside international investors, has been proven to be one of the most positive factors in stimulating investor interest in EM, and indeed developed market infrastructure. By adopting capital markets policy measures that encourage local pensions to invest in domestic infrastructure, international investors are better aligned with local investors in the event of policy or other changes. In addition, and more fundamentally, local participants will have a more constructive view of country and asset risks. Once local institutions invest successfully in well-structured PPPs, it will encourage other global funds to enter that market, broadening the capital available.

### 3 Certainty matters: Predictable net returns are more important than opportunistic profit

Institutional pension investors have made long-term promises to their beneficiaries and therefore they need to know that they will 1) get their capital back and 2) earn a sufficient return on those investments. There is a direct link between the flow of capital to finance assets and the ability for investors to assess the sustainable long-term revenue of those assets.

#### Asset risk: What investors mean by 'financing' & 'funding'

Infrastructure investors generally make large, upfront investments and get paid back for that investment by collecting revenues for the life of the asset, or the underlying concession. Financing is the term used to describe the upfront investment. Funding is the term investors use to describe the revenue model for the use of the asset over its life.

In general, the sources of long-term funding can come from taxation, or from charges to use the asset. Both have advantages and disadvantages and there is no one-size-fits-all solution. For example, the Hinkley Point C nuclear power station in the UK is a large long-term construction project that will contribute power to millions of users across the country.

This project is being financed by international capital and funded indirectly by energy consumers through charges on power bills, whereas toll roads and bridges, which can be more closely matched with personal usage, tend to favour direct user pay.

The ability to attract private capital to finance a project is closely linked to the transparency of the funding model, or the revenue profile, of that asset.

#### The direct link between risk and user cost

In all cases, the better the confidence that investors have in the long-term funding picture, the less perceived risk there will be and the lower the required return will be. This ultimately lowers the cost of use to the public user.



### **Case Study: Growing public private partnership in Japan - historic airport privatization**

Japan's airport privatization program that began in 2015 has attracted significant private investment from international and domestic investors and is designed as a first step in developing the use of public private partnerships (PPPs) in the country, with expected expansion to other sectors such as roads, water and sewage assets.



A major factor in the program's success was the legal framework Japan had put into effect to support PPPs over time. As Japan emerged from the asset price bubble in the early 1990's, it faced real fiscal constraints. On the other hand, a cash-rich domestic banking sector found itself inefficiently allocated to low-yielding Japanese government bonds. A clear opportunity presented itself to re-allocate these funds to infrastructure investment. However, with an antiquated legal framework and insufficient protection for creditors to infrastructure projects, this was not a straightforward pursuit.

Starting with the 1999 Act on Promotion of Private Finance Initiative (PFI Law), and continuing with the 2011 amendments to the PFI Law designed to facilitate use of the concession model, Japan took steps to increase legal certainty for project investors. Among other aspects of the reforms, these laws allowed private operators to set and collect user fees, and also to perfect their rights in project revenues by according them the same treatment as mortgage liens in real property. These efforts to improve the legal certainty available to investors, and other measures such as narrowing the scope of force majeure events for which concession operators would remain liable, have

contributed to the reliability of cash flows and de-risked infrastructure project cash flows, leading to the consequent success of the concession model.

#### **Regulatory certainty**

Given the social significance of many essential infrastructure assets, many countries use regulatory bodies to provide a level of oversight over private ownership of infrastructure assets.

Long-term infrastructure operators have a responsibility to provide the required level of service at an appropriate cost to users of infrastructure assets, and most investors also understand that the economic environment can evolve over the long term.

In the United Kingdom, the water and sewage sector is financed by private capital, with the government agency Ofwat responsible for the economic regulation of the industry. Investors in this sector know that every five years Ofwat will undertake a price review reflecting underlying variables such as the prevailing risk-free rate, inflation outlook, cost of debt and the tax environment. In this regard, the independent regulator provides a forum to 1) open lines of communication between investors, operators and users, 2) create the rules of the road to establish a level of certainty in a dynamic macroeconomic environment and, ultimately, 3) set a regulated return for investors, that can change over time depending on the prevailing condition.

#### **Encourage domestic investor participation**

An additional step in providing enhanced certainty and comfort to international investors is to encourage participation by domestic pension funds in national infrastructure. Local pension funds' participation helps to align interests with international investors in the event of policy or other changes.

Local participants may have a more constructive view of country-specific risks, and this direct dialogue can be translated into the language of investment that global market participants understand. To complement this insight, international investors are well positioned to place local dynamics in the context of what they see globally.

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Pairing local and international capital creates a mutually beneficial outcome. For local capital, the presence of international capital can bring an outside perspective on the technical 'know-how' in underwriting investments, and a greater understanding of how infrastructure fits into their broader financial portfolio. For international capital, the presence of local capital can bring the 'know-who', of deeper regulatory and political insight, and geography-specific views.

#### **Case Study: Colombian roads financed by Colombian investors**

Colombia is a large country, the size of Spain and France combined, with some of the world's most outdated road infrastructure. Addressing this has been a key priority for the past two administrations. In 2014, Colombia's government (working with the World Bank's development finance arm: the International Finance Corporation), created the Fourth Generation ('4G') road expansion program. The ambitious US\$25bn program comprises 32 projects seeking to both improve existing road infrastructure as well as build 8,000 kilometres of new roads. The project is expected to create 120,000 new jobs and provide substantial investment opportunities for institutional investors.

Broad support from Congress, a comprehensive concession contract, and strong alignment of interests between the government, project sponsors and lenders, were all put in place with the aim of implementing this program across political cycles.

Additionally, the government passed a law to allow the country's private pension fund system to allocate up to 5% of eligible assets to infrastructure, thereby anchoring commitment from the largest pool of local capital.

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Source: International Finance Corporation, April 2017.

## **4 Beware of unintended consequences: Investors look at the net return**

Project-specific risk and return is not the only factor that influences the flow of infrastructure capital to a sector or region. While developers and policymakers often think in terms of the gross or top-line return from a project, the net return is what is important to investors and in a global context investors will compare net return across countries rather than gross return. An investor's net return can be impacted by unintended consequences.

For policymakers aiming to stimulate capital flows, it is important to consider how foreign exchange can impact long-term investments: hedging a volatile currency can be expensive or not possible over the long term. Currency considerations are most acute for EM governments, and they may consider taking on currency risk themselves, such as by issuing foreign currency debt on their balance sheets, and then financing infrastructure projects in local currency. The greater the chance that an investment becomes a play on currency rather than an investment in an asset, the less attractive it is in an infrastructure portfolio.

In the same way, policies around tax, capital repatriation, and capital markets regulation will further impact market attractiveness.

Domestic tax policies within individual countries can help or hinder capital flows into infrastructure from the international investment community. Certain markets for infrastructure can be less attractive to foreign investors due to the complexity of tax policy. For example, certain non-US investors investing in infrastructure in the US may be disadvantaged by tax laws such as the Foreign Investment in Real Property Tax Act (commonly known as FIRPTA), and those related to loan origination investments for non-US investors.

FIRPTA was introduced by the US in 1980. The intent of this act was to address a perceived tax advantage for non-US investors in which they could avoid taxes on capital gains on US property investments. However, an unintended consequence of the Act was that this essentially created a double layer of taxation on investment for international investors, in both the US

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and in their home market. This differed from investment in other asset classes such as US equity and bonds and made investment in property and infrastructure less attractive to those investments on a net basis. In 2015, qualified international pensions were exempted from the provisions of the Act, levelling the playing field between US and non-US pensions.

Australia is another important market for infrastructure investment where complex tax structuring considerations can create obstacles to investment. The managed investment trust (MIT) regime provides for concessions on tax in Australia, but the application of the regime can be complex for foreign investors.

From a more general perspective, the introduction of the (Organization for Economic Co-operation and Development) OECD's-base erosion and profit-shifting initiative is changing the investment tax landscape and, in particular, could have a big impact on how investors access private asset investments in the coming years. Policymakers must be cognizant of the potential detrimental impact on the flow of capital into asset classes, such as infrastructure, as a result of such initiatives.

India has recently made great efforts to encourage international capital flows into the country's infrastructure, with some positive results. The Modi administration there has been cognizant that the tax system is complicated and has made efforts to encourage international investment by easing the minimum alternative tax (MAT) burden, amongst other measures.

Also, in terms of unintended consequences, it is worth noting that decisions in one sector can have knock-on implications in others. Retroactive changes have harmed investors in a number of instances. A well-known case study is Spain's decision in 2010 to adjust the regulatory support for photovoltaic solar power. This change is generally discussed in the context of the growth of renewables. Perhaps what is less talked about is the fact that the significant majority of international infrastructure investors avoided Spain as a target destination for any infrastructure investment in the years following the retroactive solar policy change.

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There have also been positive policy movements impacting net returns for investors, as regulators' understanding of infrastructure project fundamentals have matured along with the asset class. For example, in 2017 EIOPA, the European Insurance regulator, completed a study for the European Commission that led to better regulatory capital treatment for insurance companies if they invested in high quality infrastructure. This project both recognized the stability of infrastructure assets in the context of societal need and made infrastructure investment more attractive for European insurance companies compared to other choices, by allowing an insurer to hold 25% less capital on their balance sheet for infrastructure investments compared to other corporate investments.

More recently, the Financial Stability Board (FSB) requested views on its recent report on the effects of financial regulatory reforms on infrastructure finance. We welcome a continued assessment of where refinements to financial regulation could improve the environment for infrastructure investment. Infrastructure projects typically exhibit lower risk and lower losses than corporate exposures<sup>5</sup>, including unsecured corporate exposures, due to the structured and highly collateralized nature of these projects. Given this, and the G20's priorities around promoting infrastructure development as a means to achieve sustainable and inclusive long-term growth, the unintended consequences of certain capital rules and risk weights on infrastructure finance should be continually evaluated.

## Summary

Institutional investors have the appetite to further finance global infrastructure on a long-term basis and are increasingly aware that for a return to be sustainable over the long term, societal value must be created and communicated.

For policymakers looking to engage international investors, the key principles of policy, pipeline, scale, certainty and a focus on the net return, are what investors will look at when developing their view of relative market attractiveness.

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<sup>5</sup> Source: Moody's, Infrastructure Default & Recovery Rates, July 2017.

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