# BUSINESS COMMISSION ON SUSTAINABLE DEVELOPMENT IDEAS FOR ACTION FOR A LONG-TERM AND SUSTAINABLE FINANCIAL SYSTEM

A paper commissioned by the Business and Sustainable Development Commission

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## OVERVIEW

To achieve the Sustainable Development Goals (SDGs) by 2030, it is important to develop a sustainable global financial system that is oriented towards long-term outcomes. We believe that five inter-related actions will help to achieve this:

- 1. Aligning economic policy and global financial regulation with sustainable development
- 2. Standardising and mandating sustainability reporting for corporations
- 3. Getting sustainable infrastructure investment right
- 4. Supporting the formation of long-term pools of true risk capital
- 5. Supporting financial innovation that accelerates inclusion.

Below are key recommendations from the Finance Working Group Business Commission on Sustainable Development (BCSD) for business leaders, governments and policy makers, and the global investment community to accelerate progress towards the long-term orientation of the financial system:

#### **Business leaders**

- 1. Commit to pursuing the SDGs generally, with each business nominating one non-executive board member to hold the executive accountable for progress on this front.
- 2. Commit to developing a long-term approach towards corporate strategy.
- 3. Pursue the interests of all stakeholders in a balanced manner.

#### Governments and policy makers

- 1. Incorporate their commitment to the SDGs in policy frameworks.
- 2. Align regulation with policy objectives relating to sustainable development.
- 3. Encourage businesses to pursue the SDGs.

#### Global investment community

- Embed a commitment to the SDGs in investment processes and in environmental, social and governance (ESG) frameworks.
- 2. Encourage long-term investments and allocation
- 3. Lead by example in the way firms operate.

This report provides further detail on key transformations in the global financial system needed to support sustainable development.

## INTRODUCTION

The simultaneous achievement of economic growth, social inclusion and environmental sustainability is the imperative of the 21st century. This imperative can be captured in two important words: sustainable development. The 17 Sustainable Development Goals (SDGs) agreed to by 193 member states of the United Nations in September 2015 embody these principles, with quantitative and qualitative targets and timelines through to 2030.<sup>1</sup>

The concept of sustainable development is taking hold around the world. At the G20 Summit in September 2016, the United States and China ratified the COP 21 Paris Agreement and formally committed to the goal of limiting climate change to less than 2 degrees Celsius from pre-industrial levels. As US President Barak Obama stated at the G20 Summit, climate, and relatedly the broader sustainable development agenda, "could define the contours of this century more dramatically than any other challenge". As of December 2016, 118 parties have ratified the Paris Agreement.

The global financial sector will be at the centre of humanity's attempt to achieve the SDGs. Recent estimates indicate that the SDGs will require an additional US\$2.4 trillion of annual public and private investment into the low-carbon infrastructure, energy, agriculture, health, education and other sustainability sectors globally.<sup>2</sup> It is the task of the financial system to mobilise this capital for the SDG agenda.

The required increase in global investments is not exceedingly daunting given the size, scale and sophistication of the global financial system.

Consider the following quantitative facts:

- The global economic output (gross world product) in 2015 was US\$113 trillion (purchasing power parity (PPP)), and is growing by approximately 3 percent in real terms per annum.<sup>3</sup>
- The stock of financial assets globally is over US\$290 trillion, and growing by 5 percent per annum.<sup>4</sup>
- Interest rates on some developed-market government bonds are at near-historic lows, leading to approximately US\$10.8 trillion of negative-yielding sovereign debt as of late December 2016.<sup>5</sup>
- Emerging economies account for more than 50 percent of the global economy, up from 30 percent only two decades ago.<sup>6</sup>
- More than 5 billion people have access to some level of financial services, thanks to massive improvements in mobile telephony and financial technology.<sup>7</sup>

Simply put, the financial system has the requisite size, technological knowledge, dynamism and global reach to achieve the SDGs.

However, the re-orientation of the global financial system towards sustainable development will be not an easy task. The system is comprised of tens of thousands of institutional participants – including regulators, banks, insurance companies, stock and bond exchanges, institutional investors and more – and billions of individual market participants. Changing the behaviour of this panoply of actors, each of whom operate in different geographies and regulatory environments, will require clear thinking, focused analysis and political will.

While we accept there are huge barriers to achieving the SDGs, we believe such progress is possible. To get there, a system-level shift towards long-term, sustainable capitalism is required.

Long-term capitalism means a financial system that supports long-term investments, from businesses and governments, for long-term outcomes. It means a general orientation for achievements that can only be measured in decades, not in days. The challenges of sustainable development will require this orientation if they are to be overcome. To move financial systems in this direction will require many changes in corporate incentives, the regulation of financial institutions, the diffusion of financial technology and more.

The purpose of this paper is to highlight specific areas and recommendations within the sustainable finance agenda for the consideration of the Business Commission on Sustainable Development. Its goal is not to provide a holistic overview of all aspects of financing sustainable development, nor is it to recommend changes to the entire functioning of the global financial system. However, we do hope to capture key aspects that both individually and in aggregate can help us move to a more sustainable long-term system of capitalism.

## FOCUS AREA 1: ALIGNING ECONOMIC POLICY AND FINANCIAL REGULATION WITH SUSTAINABLE DEVELOPMENT

Sustainable development requires sound economic policy underpinned by coherent financial regulation that allows for long-term investments by both governments and private investors.<sup>8</sup>

On the economic policy front, reigniting global economic growth has become imperative since the 2008 global financial crisis (GFC). Since the crisis, global economic growth has slowed by approximately 1–1.5 percent per annum from long-term historical averages.<sup>9</sup> Despite significant monetary and fiscal stimuli, advanced economies may be suffering from a form of prolonged "secular stagnation", or a permanent shortfall in aggregate demand. Developing economies have also slowed significantly due to the combination of an economic slowdown in China, the decline in commodity prices and weakness in advanced economies.

Infrastructure investment is an important mechanism by which to grow the productive capacity of an economy, particularly in a period of low interest rates. The International Monetary Fund (IMF) has demonstrated that in advanced economies, an increase in infrastructure spending of one percentage point leads to an increase in gross domestic product (GDP) of 0.4 percent in the first year and up to 1.5 percent after four years.<sup>10</sup> According to some estimates, a 1 percent increase in infrastructure spending could increase employment in India by 1.4 million jobs.<sup>11</sup> Long-term infrastructure investment should become a key component of economic policy around the world, and should be done in a way that crowds in private capital. To do so, however, financial regulation at a national level must be aligned with sustainable development.

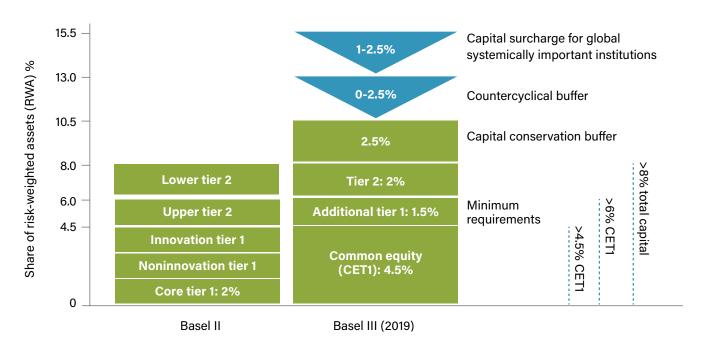
Global finance is highly regulated. Banks, insurance firms, stock exchanges, asset managers, public pensions and other institutional participants in the financial market are regulated by national and supra-national entities, ranging from central banks to dedicated financial regulators. Although participants may want to significantly alter their practices to align themselves with sustainability criteria, financial regulation must first permit such actions.

Three key themes help to improve the understanding of sustainable development within the context of financial regulation:

- 1. Some major recent regulatory initiatives do not target the SDGs, and may in fact impair their fulfilment.
- 2. Sustainable development should become the focal point of financial regulation to ensure long-term growth.
- **3. Emerging markets are in many ways leading the way**, particularly through national sustainability planning.

Since the GFC, financial regulators around the world have revisited key banking, insurance and investment regulations to enhance financial stability and better understand – and mitigate – the risks caused by excessive leverage and the complexity of the financial services industry. Progress has been made in establishing programmes and regulations to guard against such a crisis. These include the Dodd-Frank Act to reform the US financial system, the Basel III international regulatory framework for banks, and the Solvency II Directive covering the European insurance industry. However, these initiatives have not directly taken on the challenges of sustainable development and the need to align financial market development with the SDGs.

## Figure 1



## **Basel III requirements**

Source: World Bank<sup>12</sup>

Figure 1 depicts the capital requirements for banks under Basel II and Basel III agreements. To increase stability in the banking sector, Basel III will require banks to hold more capital against their loans. Other aspects of Basel III regulation include the imposition of leverage/liquidity measures (to protect against excessive borrowing and exogenous shocks) and the requirement for banks to set aside capital during credit expansion to buffer against shocks.

Sustainable development must become the focal point of economic policy and financial regulation. It is beyond the scope of this report to outline every regulatory action needed in banking, insurance, asset management, capital markets, exchanges and other financial sectors.

However, it is important to highlight some of the recent successes and tools that countries have used to sustainably develop their financial systems. The United Nations Environment Programme's financial inquiry (the UNEP Inquiry) has done a marvellous job in outlining key interventions needed in different areas of the financial system, on a country basis. Following is a synthesis of some of the major regulatory focus points in different areas of the financial sector.

- 1. Banks should incorporate ESG criteria into risk management and due diligence assessment: The banking sector has an aggregate balance sheet of US\$135 trillion globally, and holds more than 45 percent of global financial assets. Regulations should require banks to use risk-based governance by incorporating environmental and social standards into risk management and due diligence. In addition, banks must improve access to lending at reasonable costs for long-dated assets such as green infrastructure. The Basel III banking regulation will likely increase the cost of lending for infrastructure assets globally, which will particularly affect developing economies that rely on bank lending for infrastructure. Initiatives such as the Sustainable Banking Network – which aims to enhance knowledge sharing and capacity building relating to sustainable finance for banking regulators and associations in emerging markets – are proving highly useful in spreading best practices and principles around sustainability and banking.
- 2. Explicitly require the incorporation of ESG factors into credit ratings for corporate sovereign debt: Debt capital markets encompass more than US\$100 trillion of assets, making bonds the largest single asset class in the world. If the alignment of debt issues with the SDGs could be rated, the power of the debt markets could further enhance the world's quest for sustainable development. Although the growth of the green bond market is exciting, it remains less than 0.01 percent of the global fixed income market. It should be noted that many institutional asset owners are already requiring their asset managers to apply ESG filters.
- 3. Listed companies should be required to disclose standardised sustainability metrics: Equity capital markets have a total market capitalisation of approximately US\$70 trillion, with more than 45,000 listed companies globally. For equity markets to be better aligned with sustainable development, it is imperative that sustainability disclosure becomes mandatory and standardised for all public companies in a given geography. In addition, as discussed elsewhere in this report, equity and debt capital markets must be unleashed to mobilise private capital for infrastructure development.
- 4. Institutional investors should be incentivised to encourage long-term investment: Institutional investors can play a transformational role in sustainable development financing. With assets of nearly US\$100 trillion, investment funds, pension funds, insurance companies, and endowment and sovereign wealth funds can provide capital and guidance to businesses and government borrowers that are aligned with sustainable development. With the tightening of banking regulations after the GFC, institutional investors receive significantly more interest as custodians of long-term capital. It is imperative that investment systems be developed with sustainability as a stated goal. This means creating regulations and incentives that support long-term investments, the ensuring fiduciaries take account of sustainability in their investment processes and match time frames of investors with the need of the capital recipients.

In many of the areas outlined above, emerging economies are leading the development of financial regulations aligned with sustainable development. Four countries of particular note are Bangladesh, Brazil, China and Indonesia. The Central Bank of Bangladesh pioneered the concept of "development central banking" and established minimum requirements for banks to lend to green projects such as renewable energy. The Central Bank of Brazil, BACEN, was the first central bank in the world to request that banks monitor environmental risks in preparation for implementing Basel III.

China and Indonesia are strong examples of countries undertaking financial regulation and sustainable development for another reason. Both have developed long-term roadmaps to integrate sustainable development throughout their financial system. China's experience was led by the People's Bank of China and the UNEP Inquiry. Indonesia's was led by the OJK, the country's financial regulator, alongside UNEP, the International Finance Corporation and the German Company for International Cooperation.<sup>13</sup> These national roadmaps provide a holistic approach towards understanding and reorienting financial regulation and behaviour to achieve sustainable development. Although China and Indonesia are struggling under significant environmental challenges, these roadmaps provide clear direction for transforming their domestic financial systems to align with sustainable development. There is much to learn from them.

## **Key Recommendations**

Following are two recommendations to closer align financial regulation with sustainable development:

- Global rules-setting bodies should incorporate SDGs into analysis and reporting. All international financial institutions and regulatory bodies should be mandated to incorporate SDG analysis into their rules-setting processes. International financial regulation and policy, emanating from the IMF, the Bank for International Settlements, the International Accounting Standards Board (IASB) and other such institutions must be consistent with the achievement of the SDGs and the global climate target of remaining under 2 degrees Celsius
- 2. Development countries should create national sustainable finance roadmaps using the UNEP Financial Initiative framework.

Each country should develop a national sustainable finance roadmap that articulates how the regulation of various financial actors – including banks, insurance companies, institutional investors and capital markets – should evolve to be aligned with sustainable development. The recent successes of countries such as China and Indonesia in developing such roadmaps should be studied and understood before adapting these tools to local contexts.

## FOCUS AREA 2: STANDARDISING CORPORATE Reporting with sustainable development

Sustainability reporting is increasingly recognised as a valuable tool for achieving the SDGs and in driving long-term performance. Achieving alignment on the most effective approach – likely standardised and mandatory reporting – will be key to fulfilling the SDGs.

Three key themes help to improve the understanding of sustainable development within the context of sustainability reporting:

- There has been real progress in the uptake of sustainability reporting over the last two decades. More than 92 percent of the world's 250 largest companies report on their sustainability performance in one form or another.
- 2. Reporting requirements, indicators and frameworks have not been standardised, however. This lack of standardisation is problematic for businesses and investors.
- 3. There is increasing empirical evidence of a positive relationship between ESG compliance and long-term investor returns.

Since the late 1990s, there has been a significant growth of interest in sustainability reporting from the international business community. There are three broad reasons for this. First, there is a growing awareness of sustainability challenges – including climate change, poverty, inequality and gender disparity – and the role of businesses in solving these problems. Second, investors are becoming increasingly aware of the very strong and clear relationship between ESG performance and long-term investment returns, causing businesses to consider ESG indicators in decision making and report on these indicators. Third, the business community is seeing the commercial value in reporting on sustainability, which has led to improved reputation, increased employee loyalty and, in some instances, improved access to capital.

The increase of interest in sustainability reporting has led to real progress. Today, more than 92 percent of the world's 250 largest companies report on their sustainability performance in one form or another.<sup>14</sup> More than 2,000 businesses in 90 countries adhere to the guidelines of the independent standards organisation, the Global Reporting Initiative (GRI).<sup>15</sup> The World Business Council on Sustainable Development (WBCSD) has seen tremendous progress in the quality of sustainability reports, with the use of more integrated reporting techniques, increased use of external assurance, less lag between reporting period and publication, and an overall decrease in the length of reports, which increases the chance of them being read.<sup>16</sup> More recently, the amount of institutional investor interest in ESG investment has also increased significantly. The UN Principles for Responsible Investment (UN PRI) today has over US\$60 trillion of institutional investor capital from more than 1,400 signatories. This is up from approximately US\$5 trillion and fewer than 200 signatories just 10 years ago.<sup>17</sup> From these numbers, we can safely conclude that the majority of professionally run, institutional capital now takes ESG seriously. The question is not whether the professional investment community will accept ESG standards but rather how we can improve the system so that capital allocation contributes more to long-term sustainable development.

### Figure 2

## Summary of the Offerings, Purpose and Reporting Channels of Four Specialist Reporting Requirement Developers

Organisation	Offering	Purpose	Where information is to be reported?
IIRC	The International Integrated Reporting <ir> Framework.</ir>	The primary purpose of the <ir> Framework is to enable organisations to produce 'integrated reports' and explain to providers of financial capital how an organisation creates value over time; it may also benefit other stakeholders.</ir>	An integrated report may be prepared in response to existing compliance requirements, and may be either a standalone report or included as a distinguishable, prominent and accessible part of another report or communication.
SASB	Sector-specific Sustainability Accounting Standards.	The Standards are aimed at facilitating disclosure of material sustainability information for the benefit of investors and the public	The US Securities and Exchange Commission (SEC) has mandatory filing requirements, such as forms 10-K and 20-F. The SASB Standards are designed to support compliance with these requirements.
GRI	Sustainability Reporting Framework (including Guidelines andd sector guidance).	The Guidelines facilitate organisations' reporting on their economic, environmental and social performance and impacts.	Any type of document that requires such disclosure.
CDP	Reporting programmes on climate change, forests and water, including general and sector- specific guidance.	The guidance helps organisations to measure and manage environmental risk and provides decision makers with information about obtaining evidence and insight to drive change.	CDP's online reporting system.

Source: Association of Chartered Certified Accountants<sup>18</sup>

Many organisations and initiatives now align financial reporting with sustainable development. Organisations setting the standards for sustainability reporting include the GRI, the International Integrated Reporting Council (IIRC), the Sustainability Accounting Standards Board (SASB) and the Carbon Disclosure Project (CDP). Below is an overview of their purposes.

However, this increase of interest in sustainability reporting has not been accompanied by a standard set of reporting requirements, indicators and frameworks. As a result, there has been an extraordinary proliferation in competing reporting guidelines for businesses. Although there is broad-based agreement on the direction of sustainability reporting, there is also significant fragmentation. As argued by the Association of Chartered Certified Accountants (ACCA), "the

absence of agreed, standard terminology for describing and defining the components of the sustainability reporting landscape contribute to the confusion and complexity that currently characterises it".<sup>19</sup>

The lack of standardisation of sustainability metrics is problematic for businesses, specifically their boards, and investors. For businesses, sustainability reporting is often cumbersome and unclear in terms of purpose and measurability. Relatedly, there is significant debate regarding the materiality of sustainability metrics for businesses. This relates to the question of which sustainability metrics are most relevant to measure and report on. To standardise sustainability reporting, there needs to be agreement on the basic principles required for reporting effectively to different stakeholders; the number and types of indicators to be reported; and the standard protocol on how different indicators are measured and managed. For investors, sustainability is an important prism to understand a company's approach towards risk management and dependency on the stability of the natural world for their operations. As the climate increasingly changes, environmental and social risks are becoming material to many more businesses and their ability to operate in certain regions of the world. The Natural Capital Coalition and Natural Capital Declaration are two effective platforms that promote the materiality of natural capital as an important element to companies' business performance and the health of financial institutions.

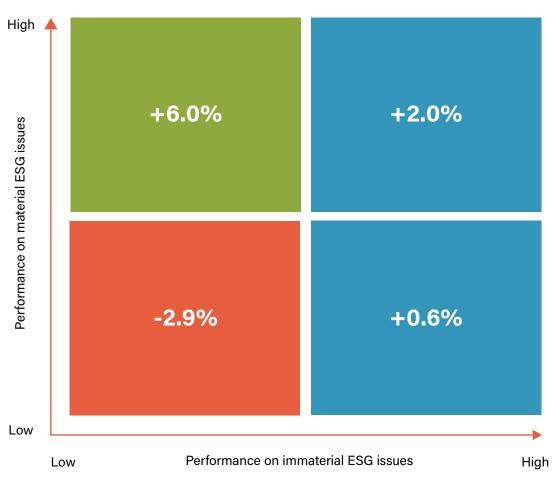
Investors are often frustrated by the lack of comparability between businesses. A survey by PWC found that 82 percent of investors were dissatisfied by the comparability of sustainability reporting between companies in the same industry, while 74 percent were dissatisfied with the relevance and implications of sustainability risks being reported.<sup>20</sup>

This is coming at a time when there is increasing consensus of a positive relationship between ESG compliance and long-term corporate financial performance. In 2015, a comprehensive review of more than 2,000 empirical studies on the relationship between ESG criteria and corporate financial performance found that 90 percent of the studies showed a non-negative relationship between two. A majority reported a positive relationship.<sup>21</sup>

McKinsey recently conducted a study on the effect on financial returns of investors' treatment of ESG issues, using factors from the SASB reporting framework. The study indicates that companies that address material sustainability issues outperform those that do not.

## Figure 3

Effects on the Financial Returns of Investors' Treatment of ESG Issues, Using SASB Factors



Source: McKinsey.<sup>22</sup>

Figure 3 shows the results of a study from 1992–2012 on companies' ESG performance across 45 industries, testing the SASB's material factors while accounting for the effects of variations across firms (including size, profitability and leverage). The study shows significant share-price outperformance for companies with high performance on material vs immaterial ESG issues.<sup>23</sup>

### **Key Recommendations**

Following are three recommendations to improve sustainability reporting for sustainable development:

### 1. Create an International Sustainability Standards Board (ISSB)

There is a clear need for a central organisation and standard-setting board to oversee progress toward global sustainability. This institution would play a similar role to the International Accounting Standards Board (IASB), which is in charge of the International Financial Reporting Standards (IFRS). The proposed ISSB should be a multi-stakeholder initiative, but should be commissioned by the Financial Stability Board (FSB) of the G20

### 2. Create corporate sustainability benchmarks aligned to the SDGs

The lack of publicly available ESG data is a hindrance for institutional investors and civil society. The available data is hard to digest and understand. As a result, advocacy organisations and investors are not able to push corporate behaviour along sustainability metrics as much as they need to. Aviva has proposed the creation of a set of publicly available, corporate sustainability benchmarks that rank companies on their performance across a range of indicators such as climate change, gender, access to health care and other key aspects of the SDGs.<sup>24</sup> Achieving the acceptance of such benchmarks requires the participation of general investors and asset owners in their formulation. A G20-sanctioned request from the FSB with support from national regulators will help this happen within a reasonable time frame.

## 3. Develop sustainability metrics and communication strategies focused on micro, small and medium enterprises (MSMEs)

Most sustainability reporting discussions focus on publicly listed companies. This is, of course, because public companies are on average much larger than private companies and must respond to the demands of public shareholders, media and other stakeholders. However, there are over 500 million MSMEs around the world, which account for a large majority of private sector employment. Many of these businesses are highly localised and not part of global supply chains. The business community must think through how MSMEs can be measured and influenced along sustainability metrics and considerations that are commensurate with their size and scope. Two potential avenues are the procurement processes and requirements of governments, as well as those of large, listed, public companies. However, this requires thorough consideration to arrive at the most effective actions.

## FOCUS AREA 3: GETTING SUSTAINABLE INFRASTRUCTURE RIGHT

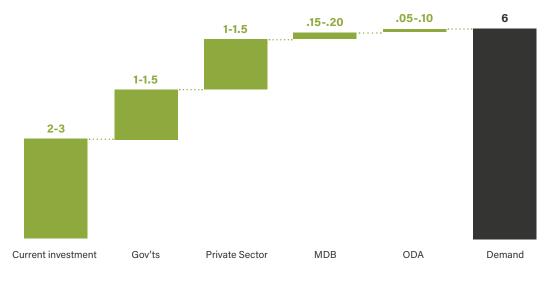
Sustainable infrastructure is required to reignite global growth and achieve the SDGs. There is no single type of investment of greater importance to the achievement of the SDGs than infrastructure.<sup>25</sup>

Three key themes help to improve the understanding of sustainable development within the context of infrastructure:

- 1. The global infrastructure need and financing gap is significant, circa US\$6 trillion and US\$2–3 trillion annually for the next 15 years, respectively.
- 2. Such infrastructure spending is necessary to reignite the global economy, achieve structural transformation across industries and facilitate the transition to a sustainable economy.
- 3. Stimulating this level of investment will require an overhaul of infrastructure financing mechanisms globally, including those involving public and private sources, and multilateral development banks (MDBs). It will also require changes to the preparation, quality and structuring of projects.

A useful definition of sustainable infrastructure has been put forward by a recent report of the New Climate Economy Commission: "Sustainable infrastructure includes all major energy, transport, telecoms, water and waste investments. It also covers the infrastructure required for effective land-use management. Infrastructure that meets key economic, social (inclusive) and environmental (low-carbon, resilient) criteria is deemed to be sustainable."<sup>26</sup> The global economy needs an estimated US\$90 trillion to fund infrastructure development over the next 15 years, or approximately US\$6 trillion per year.<sup>27</sup> Based on current investment levels across public and private sources, this leaves a projected US\$2–3 trillion gap in infrastructure investment per annum over the next 15 years. More than 70 percent of the projected investment needs will be in emerging and developing economies.

#### Figure 4



## **Incremental Investment Needs for Global Infrastructure**

Source: Brookings<sup>28</sup>

Figure 4 outlines the incremental investment needs in sustainable infrastructure to achieve the SDGs. It delineates the possible role of different financing providers – governments, the private sector, MDBs and overseas development assistance – to bridge the gap between the US\$2–3 trillion of current annual investment and the required US\$6 trillion of infrastructure investment.

This level of infrastructure investment will require long-term national and regional planning and vision to ensure: 1) private investors are able to invest at scale in infrastructure projects and reignite the global economy, 2) new technologies are deployed to significantly decrease costs and support structural transformation, and 3) the new stock of infrastructure is aligned with efforts to limit global warming to an increase of 2 degrees Celsius. Implied in all three of these outcomes is a greater collaboration between public and private entities, from the project level to an institutional level.

Sustainable infrastructure will be key in supporting the structural transformation of our global economy. Developing economies are catching up with advanced economies due to technology diffusion and demographic transition, driven by a shift from agriculture to manufacturing and service-based jobs. One major aspect of structural transformation is the rapid urbanisation of the developing world. The global urban population will grow from approximately 3.5 billion today to around 6.5 billion in 2050, all in the developing world.<sup>29</sup> To do so safely and sustainably, urban infrastructure – including affordable housing, public transportation and low–carbon energy systems – will need to be built throughout the developing world. New initiatives such as the Mission Innovation and the Breakthrough Energy Coalition signal a greater willingness for countries and philanthropists to invest in and collaborate on technological research and development, which should help drive this shift.

Getting sustainable infrastructure right is imperative for climate change. The world is on a dangerous climate-change trajectory. On a business-as-usual trajectory, the Earth will warm by over 4 degrees Celsius by 2100. This will have disastrous implications for agricultural production, sea level rise, desertification and broad-based health safety.<sup>30</sup> More than 60 percent of carbon emissions emanate from investments in and the use of infrastructure.<sup>31</sup> Given the long-dated nature of infrastructure investments, it is essential that the next wave of infrastructure development consider efforts to limit the global temperature increase to 2 degrees Celsius, a goal outlined in the COP 21 Paris Agreement.

To finance the push toward sustainable infrastructure will require a significant overhaul in infrastructure financing mechanisms globally. Simply put, the current architecture of public and private financing for core infrastructure will not support the US\$6 trillion of sustainable infrastructure investments required annually. This is true for five broad reasons.

The first major shortcoming of the current financing architecture is the lack of public financing of infrastructure. Despite significant global attention on private investment in infrastructure, the bulk of infrastructure investment and planning comes from the public sector. However, in the European Union and the United States, public investment in infrastructure is less than 2 percent of GDP. In the developing world it's significantly below the 6–8 percent of GDP that would be consistent with growth rates of 5 percent per annum. Increasing public investment in infrastructure will require two major changes in public finance: an increase in tax collection (and borrowing), and an increase in allocation to infrastructure. One major challenge is the lack of infrastructure financing capacity at the city-level. Despite the need for significant infrastructure capital for cities, the World Bank has found that only 4 percent of the 500 largest cities in developing countries are deemed creditworthy in international financial markets.<sup>32</sup>

The second shortcoming is the lack of development bank lending by MDBs and national development banks. Currently, the eight major MDBs, excluding the European Investment Bank, invest US\$35–40 billion annually in infrastructure.<sup>33</sup> This is in comparison to the total infrastructure investment in emerging and developing economies of US\$2 trillion and a gap of an addition US\$2–3 trillion. Recent analyses show that MDBs could lend an additional US\$1 trillion of capital without losing their credit status.<sup>34</sup>

The third shortcoming is an overall lack of private investment. Private sector investment in SDGrelated areas is well short of what is needed, especially against the backdrop of the significant US\$2–3 trillion gap in annual infrastructure funding. The World Bank estimates that from 2009 to 2014, private investment in infrastructure in the 77 low-income countries of the world only totalled US\$73 billion, or less than US\$15 billion per annum.<sup>35</sup> In Africa, only 18 percent of all infrastructure spending comes from private investors, with a large majority of this investment going into the telecommunications and energy sectors.<sup>36</sup> It is clear that incremental progress will simply not be sufficient if private capital is to help fill the infrastructure financing gap in developing countries. The fourth shortcoming is the lack of focus and investment in project preparation. Quality project preparation is estimated to require 5 percent of total investment costs<sup>37</sup>, and in emerging markets this can be much higher. In Africa, for example, project preparation often exceeds 10 percent of total investment costs for infrastructure projects.<sup>36</sup> Given the high-risk nature of this capital, project preparation is generally under-funded, which leads to investors being unable to allocate capital to such projects. At the macro level, a lack of coordination between financiers and project developers exacerbates the problem, with multiple entities trying to solve the same problem through different solutions, creating duplicative rail and road infrastructure to serve the same port route, for example. At the same time, progress is being made on project preparation globally. In 2014, the Infrastructure Consortium of Africa launched the first African Project Preparation Facilities Network (PPFN) to support the Programme for Infrastructure Development in Africa (PIDA) Initiative.<sup>39</sup> In Asia, the Asia-Pacific PPP Project Operations Facility was launched in early 2016 through the Asian Development Bank (ADB).<sup>40</sup> Project development and preparation requires a new architecture of financing and public policy intervention to structure projects so they are aligned with the needs of public and private investors.

The fifth shortcoming is the lack of a liquid asset class for private investors. One of the biggest hindrances for private investment in infrastructure is the lack of liquidity in infrastructure projects. Creating an asset class around infrastructure will require the standardisation of project documents and regulation across geographies. Some progress has been made on this front in Europe by the European Financial Services Roundtable, and in Asia by the ADB.

### **Key Recommendations**

#### 1. Establish a price on carbon and remove fossil fuel subsidies.

Future infrastructure spending must be done in a way that is coherent with the realities of climate change. As a result, infrastructure investment in energy and transportation – the two largest sectors for infrastructure financing – will need to be redirected from high-carbon to low-carbon projects. To do so, it is imperative that carbon is priced, and that the price reflects its true cost to the global economy, including externalities. The IMF estimates that fossil fuel companies receive direct subsidies from governments of approximately US\$450 billion per annum, and as well as US\$5.2 trillion per annum indirectly.<sup>41</sup> These subsidies must be removed and a price on carbon must be established to shift investment into low-carbon infrastructure and energy developments. Initiatives such as the Carbon Pricing Leadership Coalition, which was established at COP 21, should be strengthened and supported by the global business community.

#### 2. Revisit the role and size of development finance institutions at all levels.

DFIs – if properly sized and structured – can play a transformational role in creating scaled pools of blended finance (combining grants, and government and private capital) for infrastructure investment.

DFIs play a critical role in sustainable development financing by providing long-term capital to countries and projects, as well as by helping to create markets for private players. By investing in high-risk projects that cannot be financed on purely commercial terms, DFIs can finance long-term, slow-return projects essential for promoting development. At times, DFIs have been criticised for crowding out the private sector, focusing on lending to low-risk financial institutions such as commercial banks and other creditworthy projects and institutions. DFIs should serve as brokers and market makers for private investors to mitigate risk perception, illiquidity and currency mismatches for large-scale private invested due to perceived high risks.

MDBs can play a transformational role in sustainable infrastructure for two broad reasons: finance and human capital. On finance, MDBs enjoy the significant natural leveraging effect of public capital. For example, the World Bank can mobilise US\$28 from international markets for every dollar put in as paid-in capital.<sup>42</sup> A recent analysis by S&P has shown that MDBs could lend an additional US\$1 trillion without losing their credit rating.<sup>43</sup>

3. Develop national-level infrastructure plans that are coherent with the climate change limit of 2 degrees Celsius and private sector needs.

National infrastructure planning must improve significantly for countries to properly structure and finance the necessary push toward sustainable infrastructure. Specifically, national infrastructure planning must consider the Paris Climate Agreement goal of limiting climate change to 2 degrees Celsius from pre-industrial levels as well as the need to significantly increase private sector investment in infrastructure. The Deep Decarbonization Pathways Project provides a tool and framework for energy-system development at a national level that ensures compliance with the 2 degrees Celsius limit. Such tools must be used and improved to ensure relevance for all countries and their infrastructure investments. The business and financial communities must be actively involved in the development of these long-term infrastructure strategies to ensure that they are bankable and that financial regulations are reformed in a way that will allow the plans to be implemented.

### **Box 1: Insurance and Sustainable Development**

Insurance is at the heart of sustainable development finance because of its unique role in the economy – where it acts as risk manager, risk carrier and investor – and the intrinsic risk the industry faces due to climate change. Some experts argue that climate change that causes a temperature increase of 4 degrees Celsius from pre-industrial levels could lead to an "un-insurable" world.<sup>44</sup>

Following are tree key themes that help to improve the understanding of sustainable development within the context of insurance:

- 1. As risk manager, risk carrier and investor, the insurance industry is a vital macro-level actor. It is not only a key "shock absorber", but can also provide significant capital to drive mitigation and adaption.
- 2. The diffusion of insurance products also drives development at the micro level. It does this by building financial and economic resilience.
- 3. Several initiatives have been launched to align the insurance industry with sustainable development. These focus on access to insurance and improving the understanding of sustainability risk and implications across the industry.

As risk manager, the insurance industry allows economic actors to develop an understanding of risk at all levels – ranging from homes to factories to industrial development. The broader understanding and appreciation of growing economic risks from climate change is the first step towards achieving climate safety.

As a risk carrier, the sector serves very importantly as a "shock absorber" for natural disasters, currency fluctuations and policy shifts. This allows economies of all sizes – ranging from households to national and regional economic unions – to develop financial resilience for inevitable and growing shocks. Between 2005 and 2015, more than 700,000 people lost their lives and 23 million people were made homeless due to disasters.<sup>45</sup> In the past decade alone, the average economic losses from disasters were about US\$190 billion per year, while average insured losses were only US\$60 billion per year.<sup>46</sup>

As investors, insurance companies have more than US\$29 trillion in assets under management – assets that are accumulated and pooled by insurance companies to generate additional funds to meet obligations to policyholders.<sup>47</sup>

The diffusion of insurance products around the world has the potential to dramatically improve financial and economic resilience, and contribute to sustainable development. World Bank studies have demonstrated the causal relationship between insurance coverage, economic growth and financial resilience. However, there remains a significant gap between the needs of people and the insurance sector's ability to meet those needs. As of 2014, only 135 million people in low-income countries, or 5 percent of the total population of those countries, were using micro-insurance products.<sup>48</sup> The size of the market, based on population, is at least 10 times the current exposure. At a more macro level, insurance does not cover the majority of global natural disasters.

Given the known positive impacts of insurance coverage on economic growth and resilience, there must be a concerted effort to increase insurance coverage – for individuals as well as physical property – specifically in the least developed regions in the world. The key barriers to this include, but are not limited to, low levels of financial literacy and engagement with financial services, a lack of necessary risk data, the perceived cost-ineffectiveness of products, and a lack of national regulation for micro-insurance. National and sub-national efforts to increase insurance coverage should be financially and otherwise supported by the global business and philanthropic community.

Natural disasters are increasing, with growing evidence that some of the increase can already be attributed to climate change . Ex-post humanitarian aid is proving insignificant in volume and speed of delivery after disasters. The insurance sector can play an important role in financing post-disaster recovery by spreading the costs of disasters, providing predictable payouts and aligning incentives. In 2012, the insurance industry covered losses of US\$105 billion versus donor aid of only US\$13.8 billion earmarked for disasters.<sup>49</sup> Fixing the market's failure to provide disaster insurance will require increasing the volume of insurance contracts between governments and subsovereigns in developing countries and the global insurance sector (through re-insurance and capital markets). It will also require an increase in the role of multi-lateral institutions such as the World Bank in facilitating access to cheap financing and subsidised premiums.

Over the last 15 years the insurance sector has launched a series of initiatives to improve its alignment with sustainable development. These include, but are not limited to the:

- ILO Microinsurance Innovation Facility (2008)
- Access to Insurance Initiative (2009)
- Global Earthquake Model (2009)
- Kyoto Statement of The Geneva Association (2009)
- Microinsurance Network (2009)
- UNEP FI Principles for Sustainable Insurance (PSI) (2012)
- Climate Risk Statement of The Geneva Association (2014)
- G7 Climate Risk Insurance Initiative (2015)
- Insurance Development Forum (2015).

As noted by the work of the Willis Research Network, each of the 17 SDGs is directly related to insurance, ranging from product innovation to increased institutional investment.

## Figure 5 Relevance of the Insurance Sector to the SDGs

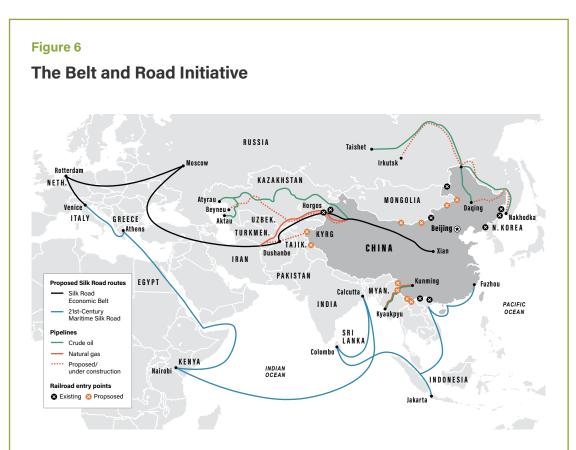
2 3 4	Hunger, Food Security and Nutrition Healthy lives and well being Education	Provision of insurance solutions for climate resilient agriculture; ecosystem services and natural capital Core health insurance priorities; broad overlaps across other priorities
4	Education	
		Limited potential for insurance
5	Gender equality and empowerment	Potential for targeted insurance solutions and outreach, but overall limited potential
6	Water and sanitation	Investments and insurance for water infrastructure
7	Sustainable energy	Investments and insurance for clean energy projects, including innovative products for financing
8	Inclusive economic growth and employment	Strengthen economic resilience through insurance for SMEs; increase capacity of domestice institutions
9	Infrastructure, industrialization, innovation	Core investment priorities
10	Inequality and national and international levels	Support effective frameworks for financial sector regulation; otherwise limited potential
11	Inclusive, safe, resilient, and sustainable cities	Health, property, and a wide range of other non-life insurance priorities
12	Sustainable production and consumption	Knowledge creation and cross-sector leadership to understand and manage risks
13	Climate change	Significant core insurance priorities, across underwriting and investment
14	Oceans, seas and marine resources	Innovation in insurance products
15	Terrestrial ecosystems and biodiversity	Knowledge creation and cross-sector leadership to understand and manage risks
16	Justice and accountability	Support for cultures of risk management witin institutions and organisations
17	Global partnership for sustainable development	Support for broader role of financial sector within sustainable development

## Box 2: Integrating Sustainable Development with National and Regional Investment Initiatives

Many ambitious regional and national investment initiatives are underway around the world. The Programme for Infrastructure Development in Africa is a collection of high-potential infrastructure projects in energy, transportation, ICT and other key sectors across the continent, spearheaded by the African Union and the African Development Bank. The Initiative for the Integration of Regional Infrastructure in South America is an infrastructure initiative linking 12 regional economies through projects in transportation, energy and telecommunications.

The most important example of such an initiative is China's Belt and Road Initiative (BRI). This initiative, launched in 2013 by President Xi Jinping, seeks to further integrate Asia, Europe and Africa through the development of land and maritime infrastructure, and the creation of a Silk Road Economic Belt and a 21st Century Maritime Silk Road. This includes roads, railways, airports, seaports, energy pipelines and other core projects for economic development in the region. Under the leadership of China, the BRI will also further the political, social and cultural links between more than 60 countries.

In 1999, China initiated its *zou chuqu*, or Going Out policy, to support Chinese industries to expand internationally. The BRI should be viewed as a continuation and acceleration of this original policy, which was developed for three main reasons. First, China needed to expand its industries beyond its borders, as more foreign businesses entered China after its ascension to the World Trade Organization in 2001, causing competition. Second, China has been developing a growing foreign reserves balance, creating upward pressure on its currency and affecting manufacturing competitiveness. Third, China sought to gain access to key natural resources for the nation's ongoing investment-led growth. The Going Out policy has been very successful, with Chinese outward foreign direct investment increasing from US\$5.4 billion in 2004 to US\$130–140 billion in 2015, one of the world's largest. In 2015 alone, Chinese enterprises signed nearly 4,000 project contracts across 60 countries associated with the BRI, for a total of US\$92.6 billion.



Source: The Wall Street Journal, US Department of Defense and United Nations

This map is a prediction of some of the key routes along the Silk Road. There is no publicly available master plan of the BRI.

The BRI is based on five pillars: policy communication, road connectivity, unimpeded trade, money circulation and cultural understanding. To support this initiative, the Chinese government created two dedicated financial institutions: the Asian Infrastructure Investment Bank (AIIB), with a total initial capitalisation of US\$100 billion, and the Silk Road Fund, with an investment of US\$40 billion from the Chinese Investment Corporation. The establishment of large dedicated public financial institutions like the AIIB and SRF will be crucial to the success of the BRI, a strategy that is lacking in other parts of the world.

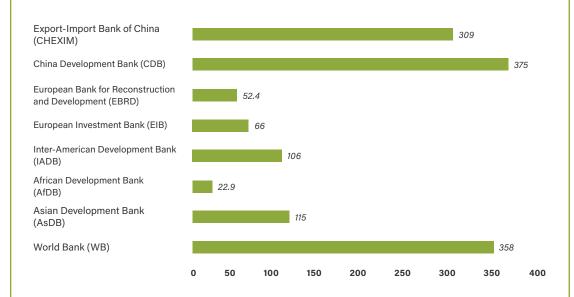
The success of the BRI is intimately linked with China's knowledge and experience in development finance, first domestically and now globally. Today, China's development finance institutions – the China Export-Import Bank and China Development Bank – have a larger global asset base than all MDBs combined. The China Development Bank specifically played the catalytic role in spurring the unprecedented level of infrastructure development since the mid 1990s. China's launching of the AIIB and the New Development Bank (NDB) in 2015 continued

this spirit of development banking to help finance infrastructure globally. The NDB is the only development bank in the world with the stated purpose of supporting sustainable development.

Figure 7 shows the size and reach of China's national development finance institutions in comparison to global institutions. The figures for the Export-Import Bank of China and China Development Bank only include their global lending operations, making these figures a like-for-like comparison with the other institutions depicted.

### Figure 7

# China's National Development Banks in Context – Global Assets (US\$ billion)



Source: Boston University Global Economic Governance Initiative<sup>51</sup>

The sustainable development goals and the Paris Climate Agreement should explicitly guide the BRI. Given the decentralised nature of the BRI, this will be challenging. However, all infrastructure projects that fall under the BRI umbrella should be aligned with the 2 degree Celsius mandates of the COP 21 Agreement and the Low Emission Development Strategies that all countries must produce by 2020.

## FOCUS AREA 4: CREATING POOLS OF LONG-TERM FINANCE FOR SUSTAINABLE DEVELOPMENT

Long-term finance is essential for sustainable development at a household, firm and sovereign level.<sup>52</sup> Regarding the demand of capital, households must be able to borrow to finance long-term investments, such as housing, education and other capital developments. Businesses and governments need to be able to make long-term investment decisions – in technology, research and development, infrastructure and business growth – to undertake the transformations necessary for sustainability to take hold. And on the supply of capital, the structure of financial markets and intermediaries must allow lenders investors to be patient to deploy capital to households, businesses and governments for their needed purposes .

Since the GFC, there has been significant discussion on how to increase the supply of and demand for long-term financing. The World Bank made a fundamental contribution to this discussion with its 2015 Global Financial Development Report titled, "Long-Term Finance". Business leaders such as Dominic Barton of McKinsey & Co, and Larry Fink and Mark Wiseman of BlackRock have visibly made the case for long-termism as an approach for corporate and investment decision-making.

Three main themes are related to the concept of long-term finance and sustainable development:

- 1. Long-term finance is an outcome of many variables including the depth of domestic capital markets, the level of economic development, the structure and size of savings and retirement systems, and the enforceability of legal contracts. There is no magic bullet for increasing the availability of long-term finance.
- 2. There are various sources of long-term finance in an economy, although bank lending remains the largest provider of long-term capital (defined as capital with maturity of one year or more) for businesses and individuals, particularly in developing countries. The structuring and regulations of savings institutions ranging from sovereign wealth funds and pension funds to mutual insurance companies and commercial banks can have a significant impact on the orientation of these institutions.
- 3. The supply of long-term finance from various aspects of the financial sector must be mirrored by long-term investment strategies by businesses and governments.

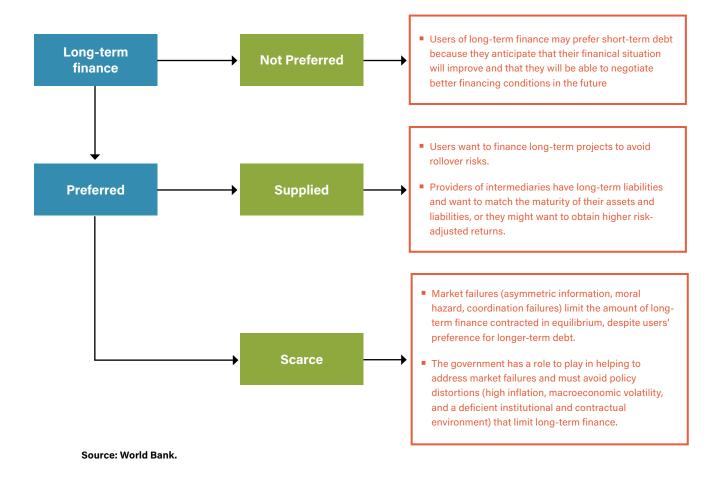
It is worth mentioning that there is significant definitional disagreement around the concept of "long-term finance". The World Bank defines the concept as any source of funding with maturity exceeding one year – a definition that is also used for the concept of fixed investment in national accounts. The G20, on the other hand, defines long-term finance as that with a maturity of at least five years. In neither case does the definition relate to other aspects of sustainable finance. Achieving global definitional clarity of this concept for various financial instruments and savings mechanisms would be an important breakthrough for policy makers.

The World Bank 2015 report on long-term finance has five major conclusions that are worth noting for the purposes of this report.

First, there is significant debate among economists and policy makers about the optimal level of short-term versus long-term finance in an economy and how to increase the availability of the latter. Short-term financing is not necessarily a problem in and of itself. Small firms generally prefer short-term loans to finance working capital, and need long-term finance for fixed assets and equipment. The problem arrives when governments and businesses are unable to finance what is needed due to a lack of long-term financing, which is especially the case for infrastructure financing around the world. The point here is that despite significant discussion about the need for "long-term finance", there is still a healthy debate in many countries about the size of this challenge and potential solutions. Figure 8 provides a useful schematic on this issue.

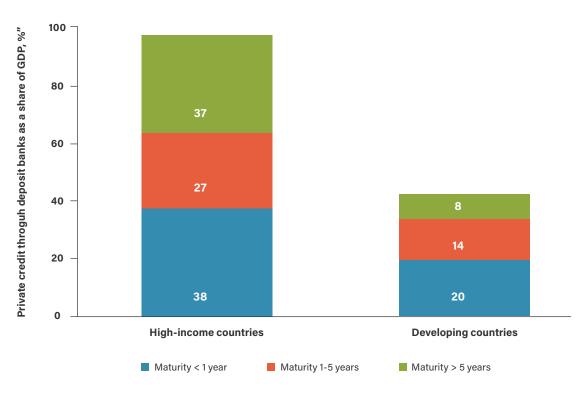
Figure 8 shows a conceptual framework for understanding the use of long-term finance in an economy. It highlights situations in which long-term finance is preferred and in which it is not preferred, and in the case of the latter, what can be done if long-term finance is not provided in the economy.

### Figure 8



## **Conceptual Framework of Long-Term Finance**

Second, long-term finance is more prevalent in developed economies compared to developing economies and is more prevalent in countries with greater financial depth. In developing countries, only 66 percent of small firms and 78 percent of medium-sized firms report having any long-term liabilities, compared with 80 percent and 92 percent in developed countries respectively. Figure 9 shows how the maturity structure of debt compares to a country's financial depth, as measured by private credit as a percentage of GDP. Developed countries, on average, have twice the financial depth of developing countries, and four times the ratio of longer-term debt to GDP. Although there is a relationship between the level of economic development and the existence of long-term finance, the relationship is far from linear, and it is not clear in which direction the causality goes.



## The Relationship Between Financial Depth and Debt Maturity

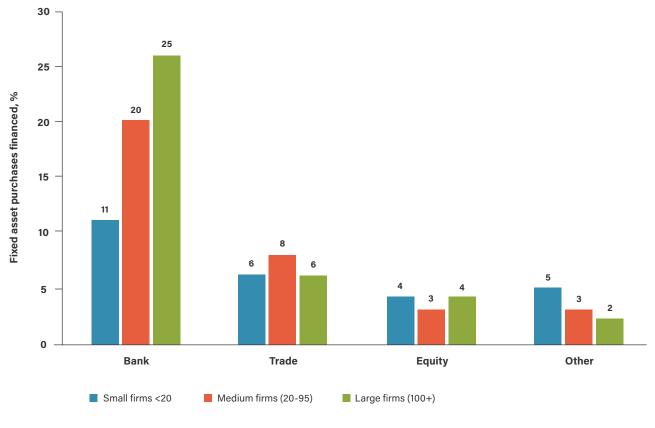
**Figure 9** 

Figure 9 shows the relationship between greater financial depth and longer debt maturity by country income group from 1999 to 2012. It highlights the increased availability of long-term finance in high-income countries compared to developing countries.

Source: World Bank

Third, the banking sector is the largest provider of long-term finance, although institutional investors are increasing in size and influence. Banks remain the dominant provider of financing to both individuals and households around the world. This is why banking regulation has an important impact on the provision of financing for long-term investments such as infrastructure. As countries develop, the share of bank lending for long-term financing increases. The growth of non-bank financial intermediaries – namely institutional investors in the form of pension funds, insurance companies and sovereign wealth funds – is a relatively recent global phenomenon.

Figure 10



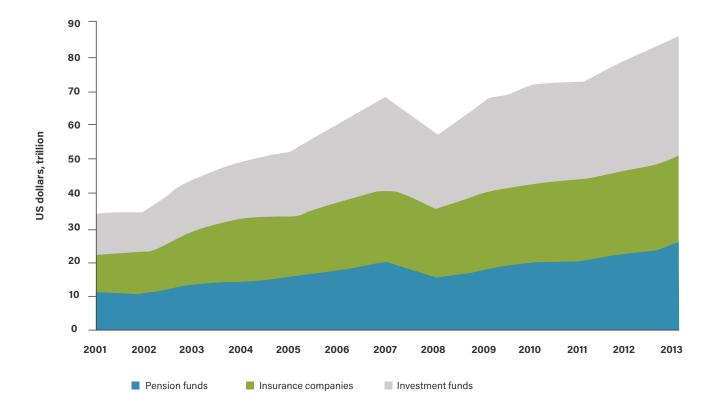
## The Role of Banks in Financing Fixed Assets

Figure 10 shows the sources of external finance used for the purchases of fixed assets by firm size from 2006 to 2014. It is based on calculations for 123 countries. Although fixed assets are only o ne type of investment for businesses, this graph shows the importance of bank financing for firms of all sizes compared to trade credit, equity and other types (including issues of new debt, non-bank financial institutions, money lenders, family and friends).

Source: World Bank

The design and structure of institutional investors is an important policy question for governments that are interested in long-term financing. For example, the shift from defined benefit (DB) retirement savings to defined contribution (DC) saving has led to the individualisation of the claims on long-term savings pools such as pension funds. With individuals monitoring and knowing exactly what their individual part of a pension or provident fund is worth at any given point in time, to facilitate drawdown and switching between providers, long-term illiquid investments pose significant practical problems. There are two solutions to this problem. Firstly, we can attempt to change the retirement system back to DB, where people become members of big funds, which promise a certain outcome. Unfortunately, this is not practical in the context of the current discussion because such a change will simply take too long. It is nevertheless worth pursuing in the context of the debate around longtermism. The second solution is far more practical and could be implemented much faster. This requires the use of state capital (DFI's and other state organs) to make a market in the claims on long-term infrastructure developments. This allows private retirement funds to assume the risks of investing in these projects, with the knowledge that they can have access to some liquidity when required. There are similar debates around the optimal structure of sovereign wealth funds and sovereign development funds with regards to long-term domestic and foreign investment. As seen in Figure 11, the total assets under management of these institutions have tripled in the last 15 years, and are only expected to continue.

#### Figure 11



## Assets under Management of Non-Bank Institutional Investors

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Source: World Bank
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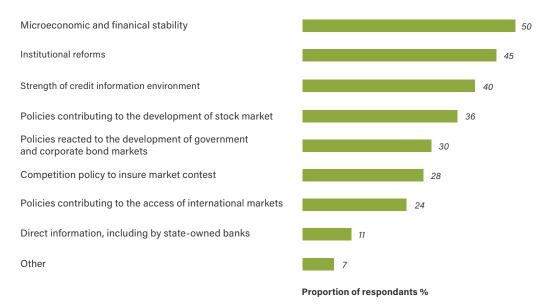
Figure 11 shows the increase in assets under management of non-bank financial intermediaries, including pension funds, insurance companies and investments funds, from 2001 to 2013.

Fourth, governments can proactively support the development of long-term financing mechanisms by supporting the development of local capital markets. By developing local equity and bond markets, governments broaden access to long-term finance beyond a small group of large firms that can access international capital by listing in overseas markets. The exact mechanisms by which governments can support the development of local capital markets is a contentious debate among policy makers and economists. However, key aspects of this include taking a proactive role in developing the domestic corporate bond market, and decreasing information asymmetry between different market participants by improved transparency and financial disclosure. It also requires improving contract enforcement, protecting investor rights and employing sound macro-economic policy management that reduces volatility and increases the likelihood of foreign investors investing in an economy. There has been significant progress in this space, particularly in debt markets. Long-term finance for firms through the issuance of equity, bonds and syndicated loans has increased fivefold in high-income countries in real terms since 1991, and has become 15 times more prevalent in developing countries in that time.

Fifth, there is broad acceptance from financial policy makers on the importance of long-term finance, although there is significant disagreement on what the policy should be. In 2015, the World Bank undertook a global poll on the topic of long-term finance with financial sector practitioners from 21 developed and 49 developing economies. Although 40–43 percent of respondents agreed that access to long-term finance is a significant problem, there were many opinions on how to solve the problem.

#### Figure 12

## **Perspectives on Policies to Promote Long Term Finance**



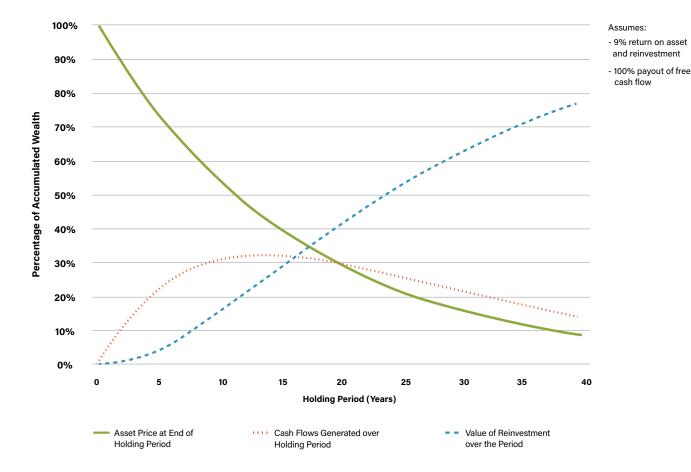
#### Source: World Bank.

Figure 12 depicts the responses to a global survey conducted by the World Bank to further understand what key policy measures could promote long-term finance. It is important to note the varied responses, ranging from "macroeconomic and financial stability" (50 percent) to direct intervention, including by state-owned banks (11 percent).

From a business perspective, long-term finance should support long-term investments and strategy. Dominic Barton of McKinsey and Larry Fink of BlackRock have led the way in encouraging business leaders to have longer-term outlooks. Barton's "Capitalism for the Long Term" thinking focuses on three areas of engagement: 1) changing financial incentives to focus organisations on long-term outcomes, 2) promoting the notion that serving all major stakeholders, including the community and the environment, is not at odds with maximising shareholder value, and 3) structuring boards to govern like owners and have a more active engagement in business direction. The good news is that CEOs agree on the value of looking at the world through a longterm horizon. In a recent survey of more than 1,000 board members and C-suite executives, 86 percent of respondents believed that using a longer time horizon to make business decisions would positively affect corporate performance, but 46 percent felt pressure to deliver on short-term financial indicators from the executive board.<sup>53</sup>

From an investor perspective, the investment horizon of institutional and retail investors could be extended. As of 2015, approximately 70 percent of all US equities trading is done by high-speed traders. In 2015, the 20 largest exchange-traded funds traded at a turnover rate of 1,244 percent, implying a holding period of only 29 days. This is particularly curious since finance experts find that 70–90 percent of a company's value is related to cash flows expected three or more years out. This implies that much of this trading is done due to other reasons, including fees earned by brokers that encourage portfolio churn and short-term evaluation periods of investors by asset owners. Various empirical studies show that financial value is created by long holding periods of well-performing investment securities and the continuous reinvestment of dividends, as opposed to churning of portfolios due to short-term market fluctuations.

### Figure 13



## **Contributions to Terminal Wealth over Different Holding Periods**

Source: Centre for International Finance and Regulation.54

Figure 13 shows the contribution of the accumulated wealth created by the investment in a security from three different elements of the investment: 1) the asset price at the end of the holding period, 2) the cash flows generated over the holding period and 3) the value of reinvestment over the period. The point is clearly made that most of the accumulated wealth of an investment is derived from the reinvestment of dividends over the period of the investment.

### **Key Recommendations**

Below are two recommendations for increasing the importance of long-term finance in the global economy and financial system:

- Financial regulators must make the development of long-term finance a stated goal for national-level financial policy and create policy that supports this goal. The development of long-term finance pools and systems should become a stated goal of national-level financial regulators. This will relate to all areas of the financial system, specifically banks, institutional investors, and stock and bond exchanges. Very importantly, the structure and design of savings mechanisms – including pension funds and sovereign wealth funds – must be aligned with national long-term investment needs.
- 2. Businesses should develop strategic frameworks for long-term value creation.<sup>55</sup> Larry Fink, the CEO of BlackRock, called for the CEOs of the world's largest corporations to each year develop a strategic framework for long-term value creation that articulates plans to innovate, adapt to technological disruptions and develop talent. This recommendation should be heeded.

# FOCUS AREA 5: SUPPORTING FINANCIAL INNOVATION FOR SUSTAINABLE DEVELOPMENT

Financial innovation has clear benefits for sustainable development and is helping to achieve the SDGs. This is true in two specific regards.<sup>56</sup>

First, recent progress in digital technology means that financial products – including banking, insurance, credit, savings accounts and so on – will be accessible by individuals, businesses and governments of all sizes.

Second, recent advances in information technology will allow financial markets to operate in a more stable manner. Technologies such as Blockchain and Bitcoin have the potential to fundamentally transform how financial transactions occur, potentially increasing stability.

The opportunity for financial innovation to help achieve the SDGs can be understood through the following four prisms:

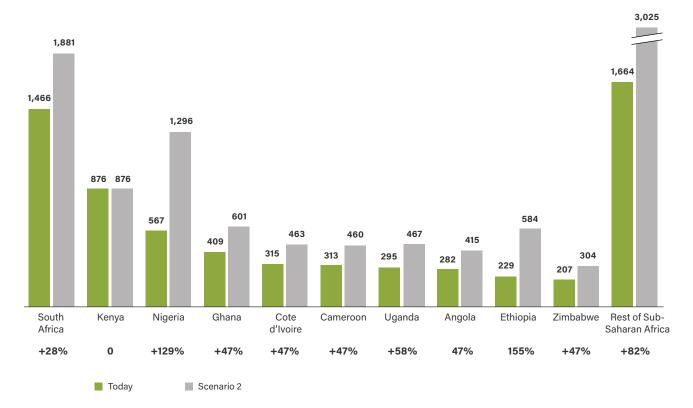
- 1. Financial inclusion, where access to financial services is empowering individuals
- 2. Improved user experience, where reducing frictional costs is allowing people to better use their economic power

- 3. Democratisation of capital allocation, allowing people to invest how they want and increasing the accountability of commercial operators
- 4. Creating identities for individuals and assets, allowing people to be recognised and creating trust in corruptible circumstances.

Financial inclusion has long been considered an essential element of sustainable development. Developments such as mobile money are allowing people and businesses to operate safely and seamlessly in areas of otherwise limited alternative infrastructure. Kenya's M-Pesa, for example, serves 70 percent of the adult population<sup>57</sup> while bank account penetration remains stubbornly low at 40 percent.<sup>58</sup> A recent IMF study shows the empirical relationship between economic growth and three aspects of financial inclusion: access to credit, depth of credit and intermediation of credit. The study shows a direct relationship between the elimination of the blockages to these three aspects of credit and economic growth.<sup>59</sup>

### Figure 14

## Revenue pools for Today's Levels of Digitization vs. if each sub-Saharan African country had the same level of digitization as Kenya (US\$ million)



Source: McKinsey<sup>60</sup>

Figure 14 shows the increase in revenue pools that would develop if the level of digitisation of financial payments in Kenya were to be replicated in other countries in Sub-Saharan Africa.

Improving the user experience in financial services has allowed people to better use their economic power. One clear example of this is in the remittance sector. In 2015, the global economy transferred approximately US\$580 billion of capital through remittances from developed to developing economies.<sup>61</sup> New platforms in this sector, including firms such as TransferWise, have dramatically reduced the transactions costs of remittances (in some instances, by an order of magnitude) compared to incumbent firms.<sup>62</sup> If these platforms become mainstream, this will lead to significant savings and therefore increased capital transfer for remittance programmes.

The democratisation of capitalism is allowing individuals to both invest and donate their capital with more independence and optionality. This has clear implications for achieving the SDGs. Further developments include the rise of crowdfunding and peer-to-peer platforms, which are allowing individuals from around the world to directly invest in people and business anywhere. Kiva, an early example from the microfinance sector, has lent nearly US\$1 billion directly to more than 2 million borrowers over the past five years.<sup>63</sup> Across the world, crowdfunded financing has grown from US\$3 billion in 2012 to US\$34 billion in 2015<sup>64</sup>, with many of the fastest growth rates in the emerging and least developed markets. With young savers increasingly conscious of making investments that are aligned with their own ethical framework, these vehicles are going to grow in significance. (A recent study by U.S. Trust shows that 69 percent of Americans aged 18–32 agree with the statement "Investment decisions are a way to express my social, political and environmental values", while only 31 percent in the 68+ age range agree.<sup>65</sup>)

Creating identities and trust is pivotal in establishing the infrastructure for many financial services. Developments in mutually distributed ledgers (MDLs), the technology that underlies Blockchain and Bitcoin, will transform the way people and organisations handle identities, transactions, debts and contracts. As stated by Z/Yen Group, "the ability to have a globally available, verifiable, and high-integrity ledger or journal provides anyone wishing to provide trusted third-party services, i.e. most major financial services firms, the ability to do so openly and robustly". MDLs can be applied to a wide variety of 'trust' applications including registries (relating to such things as land, ships, aircraft, tax, artworks and fishing quotas), identity (registries identity documents and qualifications), chain-of-custody (diamonds, forestry products, fish, etc.), health information, and voting (for example, corporate voting). The greatest impact of such technologies, however, may be their application to individuals, and specifically, creating legally recognisable identities. Possession of legal identities allows individuals to not only access services but also to hold authorities and state actors accountable for failures or injustices.

Improvements in financial technology and innovation must be coherent with the broader goals of sustainable development and the long-term oriented financial system that it requires.

## **Key Recommendation**

Following is the main recommendation for financial innovation and sustainable development:

1. Advocate for continued democratisation and access to financial services for individuals and small businesses.

M ore than 2 billion people in the world do not have access to financial services. This is significantly hindering growth and increasing inequality. Given the multitude of proven technologies around the world, businesses should continue to advocate for governments to adopt the optimal regulatory environment for these technologies to flourish.

## **6. CONCLUSION**

The goal of this report is to outline some key areas of action for transforming our global financial system into one that is oriented for sustainable development. The list of actions is not exhaustive and requires contextual analysis and refinement, but it provides a general framework for how long-term capitalism for sustainable may be achieved.

Policy makers, business leaders and investors must collaborate for this agenda to take hold. We believe that the recommendations laid out in this report will accelerate efforts to realign the global financial system with the sustainable development agenda.

## ENDNOTES

1 Sustainable Development Knowledge Platform

(2015), *Transforming our world: the 2030 Agenda for Sustainable Development* <a href="https://sustainabledevelopment.un.org/post2015/transformingourworld">https://sustainabledevelopment.un.org/post2015/transformingourworld</a>> [Accessed on 20 September 2016].

<sup>2</sup> Sustainable Development Solutions Network (2015), *Investment Needs to Achieve the Sustainable Development Goals, Understanding the Billions and Trillions (Version 2)* <a href="http://unsdsn.org/wp-content/uploads/2015/09/151112-SDG-Financing-Needs.pdf">http://unsdsn.org/wp-content/uploads/2015/09/151112-SDG-Financing-Needs.pdf</a>> [Accessed on 20 September 2016].

<sup>3</sup> World Bank (2016), *World Development Indicators* <a href="http://databank.worldbank.org/data/download/GDP\_PPP.pdf">http://databank.worldbank.org/data/download/GDP\_PPP.pdf</a> [Accessed on 20 September 2016].

McKinsey Global Institute, Haver, BIS, Deutsche Bank Estimates (2015), *Figure 1: Stock of Global Financial Assets* <a href="http://www.businessinsider.com.au/global-financial-assets-2015-2">http://www.businessinsider.com.au/global-financial-assets-2015-2</a> [Accessed on 20 September 2016].

<sup>5</sup> *Financial Times*, "Rout shrinks universe of negative yielding bonds by \$2.5tn" <https://www.ft.com/ content/9253b220-bb03-11e6-8b45-b8b81dd5d080>.

<sup>6</sup> International Monetary Fund (2016), *World Economic Outlook Database* <a href="https://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx>">https://www.imf.org/external/pubs/ft/weo/2016/01/weodata/index.aspx></a> [Accessed on 20 September 2016].

 <sup>7</sup> World Bank (2015), Global Findex Database 2014: Measuring Financial Inclusion around the World (Policy Research Working Paper 7255) <a href="http://documents.worldbank.org/curated/en/187761468179367706/pdf/WPS7255">http://documents.worldbank.org/curated/en/187761468179367706/pdf/WPS7255</a>. pdf#page=3> [Accessed on 20 September 2016].

<sup>a</sup> This section has benefitted tremendously from the UNEP Financial Inquiry Overview Report (2015), *The financial system we need, Aligning the Financial System with Sustainable Development* <a href="http://unepinquiry.org/publication/inquiry-global-report-the-financial-system-we-need/">http://unepinquiry.org/publication/inquiry-global-report</a> [Accessed on 20 September 2016].

<sup>9</sup> World Bank national accounts data and OECD National Accounts data files <a href="http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG">http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG</a>> [Accessed on 20 September 2016].

<sup>10</sup> International Monetary Fund (2014), *World Economic Outlook report.* "Chapter 3: Is it time for an infrastructure push? The macroeconomic effects of public investment" <a href="http://www.imf.org/external/pubs/ft/survey/so/2014/">http://www.imf.org/external/pubs/ft/survey/so/2014/</a> res093014a.htm> [Accessed on 20 September 2016].

Richard Dobbs et al., McKinsey Global Institute (2013), Infrastructure productivity: How to save \$1 trillion a year
<a href="http://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/infrastructure-productivity">http://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/infrastructure-productivity</a>
[Accessed on 21 September 2016].

<sup>12</sup> World Bank (2015/2016), *Global Financial Development Report: Long term finance* <https://openknowledge. worldbank.org/handle/10986/22543> [Accessed on 20 September 2016].

13 See http://unep.org/publications/

<sup>14</sup> KPMG (2015), *Survey of Corporate Responsibility Reporting, Currents of Change* <a href="https://assets.kpmg.com/content/dam/kpmg/pdf/2016/02/kpmg-international-survey-of-corporate-responsibility-reporting-2015.pdf">https://assets.kpmg.com/content/dam/kpmg/pdf/2016/02/kpmg-international-survey-of-corporate-responsibility-reporting-2015.pdf</a> [Accessed on 20 September 2016].

Is Global Reporting Initiative (2015), Leading for a New Era of Sustainability, Combined report
<a href="https://www.globalreporting.org/resourcelibrary/GRIs%20Combined%20Report%202014-2015.pdf">https://www.globalreporting.org/resourcelibrary/GRIs%20Combined%20Report%202014-2015.pdf</a>
[Accessed on 20 September 2016].

<sup>16</sup> World Business Council for Sustainable Development (2014), *Reporting Matters 2014* <a href="http://www.wbcsd.org/Pages/EDocument/EDocumentDetails.aspx?ID=16367>">http://www.wbcsd.org/Pages/EDocument/EDocumentDetails.aspx?ID=16367></a> [Accessed on 20 September 2016].

<sup>17</sup> United Nations, "Principles of Responsible Investment" <a href="https://www.unpri.org/about">https://www.unpri.org/about</a>> [Accessed on 20 September 2016].

<sup>18</sup> Association of Chartered Certified Accountants (2016), *Mapping the sustainability landscape: Lost in the right direction* <a href="http://www.accaglobal.com/content/dam/ACCA\_Global/Technical/sus/ACCA\_CDSB%20">http://www.accaglobal.com/content/dam/ACCA\_Global/Technical/sus/ACCA\_CDSB%20</a> Mapping%20the%20sustainability%20landscape\_Lost%20in%20the%20right%20direction.pdf> [Accessed on 20 September 2016].

<sup>19</sup> Association of Chartered Certified Accountants (2016), *Mapping the sustainability landscape: Lost in the right direction* <a href="http://www.accaglobal.com/content/dam/ACCA\_Global/Technical/sus/ACCA\_CDSB%20">http://www.accaglobal.com/content/dam/ACCA\_Global/Technical/sus/ACCA\_CDSB%20</a> Mapping%20the%20sustainability%20landscape\_Lost%20in%20the%20right%20direction.pdf> [Accessed on 20 September 2016]. <sup>20</sup> PwC (2015), Sustainability disclosures—Is your company meeting investor expectations? <http://www.pwc.com/us/en/cfodirect/assets/pdf/in-the-loop/sustainability-disclosure-guidance-sasb.pdf> [Accessed on 20 September 2016].

<sup>21</sup> Alexander Bassen, Timo Busch & Gunnar Friede (2015), "ESG and financial performance: aggregated evidence from more than 2000 empirical studies", *Journal of Sustainable Finance & Investment*, 5:4, 210–33 <a href="http://dx.doi.org/1">http://dx.doi.org/1</a> 0.1080/20430795.2015.1118917> [Accessed on 20 September 2016].

<sup>22</sup> McKinsey & Company (2016), *Sustaining sustainability: What institutional investors should do next on ESG* <a href="http://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/sustaining-sustainability-what-institutional-investors-should-do-next-on-esg">http://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/sustaining-sustainability-what-institutional-investors-should-do-next-on-esg</a> [Accessed on 20 September 2016].

<sup>23</sup> Mozaffar Khan, George Serafeim & Aaron Yoon (2015), Corporate sustainability: First evidence on materiality, Harvard Business School working paper <a href="http://ratesustainability.org/wp-content/uploads/2015/04/Serafeim\_">http://ratesustainability.org/wp-content/uploads/2015/04/Serafeim\_</a> etal\_Corporate\_Sustainability.pdf> [Accessed on 20 September 2016].

<sup>24</sup> Aviva (2015), *Mobilising Finance to Support the Global Goals for Sustainable Development: Aviva's Calls to Action* <a href="http://www.unepfi.org/psi/wp-content/uploads/2015/09/AVIVA-Mobilising-Finance-to-Support-Global-Goals-for-SD.compressed.pdf">http://www.unepfi.org/psi/wp-content/uploads/2015/09/AVIVA-Mobilising-Finance-to-Support-Global-Goals-for-SD.compressed.pdf</a> [Accessed on 20 September 2016].

<sup>25</sup> This section has benefitted tremendously from a 2015 paper by Amar Bhattacharya, Jeremy Oppenheim and Nicholas Stern: *Global Economy & Development Working Paper 91: Driving Sustainable Development Through Better Infrastructure: Key Elements of a Transformation* <a href="https://www.brookings.edu/wp-content/uploads/2016/07/07-sustainable-development-infrastructure-v2.pdf">https://www.brookings.edu/wp-content/uploads/2016/07/07-sustainable-development-infrastructure-v2.pdf</a>> [Accessed on 20 September 2016].

<sup>26</sup> The Global Commission on the Economy and Climate (2016), *The Sustainanable Infrastructure Imperative*, [Accesses on 5 January 2017]

<sup>27</sup> The Global Commission on the Economy and Climate (2014), *The New Climate Economy Report: Better Growth; Better Climate* <a href="http://newclimateeconomy.report/>[Accessed on 20 September 2016].">http://newclimateeconomy.report/>[Accessed on 20 September 2016].</a>

<sup>28</sup> Amar Bhattacharya, Jeremy Oppenheim & Nicholas Stern (2015), *Global Economy & Development Working Paper 91: Driving Sustainable Development Through Better Infrastructure: Key Elements of a Transformation* <a href="https://www.brookings.edu/wp-content/uploads/2016/07/07-sustainable-development-infrastructure-v2.pdf">https://www.brookings.edu/wp-content/uploads/2016/07/07-sustainable-development-infrastructure-v2.pdf</a> [Accessed on 20 September 2016].

<sup>29</sup> The Population Division of the Department of Economic and Social Affairs United Nations (2014), 2014 Revision of World Urbanization Prospects <a href="https://esa.un.org/unpd/wup/Publications/Files/WUP2014-Report.pdf">https://esa.un.org/unpd/wup/Publications/Files/WUP2014-Report.pdf</a> [Accessed on 20 September 2016].

<sup>30</sup> Reto Knutti et al., Intergovernmental Panel on Climate Change, Working Group 1 (2013), *Climate Change 2013: The Physical Science Basis. CLA Chapter 12: Projections of climate change, climate sensitivity, cumulative carbon* <https://www.ipcc.ch/pdf/unfccc/cop19/2\_knutti13sbsta.pdf> [Accessed on 21 September 2016].

<sup>31</sup> Amar Bhattacharya & Nicholas Stern (2016), *Climate Change and Central Banks* <http://www.lse.ac.uk/ GranthamInstitute/wp-content/uploads/2016/03/160309\_BIS\_slides\_final\_for\_websites.pdf> [Accessed on 21 September 2016].

<sup>32</sup> World Bank online feature story (2013), *Financing Sustainable Cities: How We're Helping Africa's Cities Raise Their Credit Ratings* <a href="http://www.worldbank.org/en/news/feature/2013/10/24/financing-sustainable-cities-africa-creditworthy">http://www.worldbank.org/en/news/feature/2013/10/24/financing-sustainable-cities-africa-creditworthy</a> [Accessed on 21 September 2016].

<sup>33</sup> Original source: Christopher Humphrey, GGGI-G24 (forthcoming), *The Role of Multilateral Development Banks in Infrastructure Financing*. Referenced from: Amar Bhattacharya, Jeremy Oppenheim & Nicholas Stern (2015), *Global Economy & Development Working Paper 91: Driving Sustainable Development Through Better Infrastructure: Key Elements of a Transformation* <a href="https://www.brookings.edu/wp-content/uploads/2016/07/07-sustainable-development-infrastructure-v2.pdf">https://www.brookings.edu/wp-content/uploads/2016/07/07-sustainabledevelopment-infrastructure-v2.pdf</a> [Accessed on 20 September 2016].

<sup>34</sup> Standard & Poor, press release (2016), *How Much Can Multilateral Lending Institutions Up the Ante?* <a href="https://www.globalcreditportal.com/ratingsdirect/renderArticle.do?articleId=1613669&SctArtId=383109&from=CM&nsl\_code=LIME&sourceObjectId=9594626&sourceRevId=1&fee\_ind=N&exp\_date=20260412-15:41:39></a> [Accessed on 21 September 2016].

<sup>35</sup> World Bank and PPIAF, PPI Project Database (2009–14), *PPI in IDA Countries*, 2009 to 2014 <a href="http://ppi.worldbank">http://ppi.worldbank</a>. org/~/media/GIAWB/PPI/Documents/Data-Notes/PPI-Note-IDA-Countries-to-2009-2014.pdf> [Accessed on 21 September 2016]. <sup>36</sup> Soumya Chattopadhyay, Jeffrey Gutman & Amadou Sy (2015), *Financing African Infrastructure: Can the World Deliver? Brookings Global Economy and Development Report* <a href="http://www.brookings.edu/~/media/Research/Files/Reports/2015/03/financing-african-infrastructure-gutman-sy-chattopadhyay/AGIFinancingAfricanInfrastructure\_FinalWebv2.pdf">http://www.brookings.edu/~/media/Research/Files/Reports/2015/03/financing-african-infrastructure-gutman-sy-chattopadhyay/AGIFinancingAfricanInfrastructure\_FinalWebv2.pdf</a>> [Accessed on 21 September 2016].

<sup>37</sup> James Leigland & Andrew Roberts, Public-Private Infrastructure Advisory Facility (2007), *The African project preparation gap. Africans address a critical limiting factor in infrastructure investment, Gridlines Publication* <https://openknowledge.worldbank.org/bitstream/handle/10986/10716/397920Grid1lines. pdf?sequence=1&isAllowed=y> [Accessed on 21 September 2016].

<sup>38</sup> Taz Chaponda, Matthew Chennells & Mitali Nikore, The Infrastructure Consortium for Africa (2014), *Concept Paper: Effective Project Preparation for Africa's Infrastructure Development* <a href="http://www.icafrica.org/fileadmin/documents/">http://www.icafrica.org/fileadmin/documents/</a> Publications/Effective\_project\_preparation\_in\_Africa\_ICA\_Report\_31\_October\_2014.pdf> [Accessed on 21 September 2016].

<sup>39</sup> The Infrastructure Consortium for Africa (2014) *News Release: ICA Launches the First African Project Preparation Facilities Network (PPFN)* <a href="http://www.icafrica.org/en/news-events/ica-news/article/ica-launches-the-first-african-project-preparation-facilities-network-ppfn-5873/> [Accessed on 21 September 2016].

<sup>40</sup> Asian Development Bank (2016), *News Release: Asia-Pacific PPP Project Preparation Facility Launches Operations* <a href="http://www.adb.org/news/asia-pacific-ppp-project-preparation-facility-launches-operations">http://www.adb.org/news/asia-pacific-ppp-project-preparation-facility-launches-operations</a> [Accessed on 21 September 2016].

<sup>41</sup> David Coady, Ian W.H. Parry, Louis Sears & Baoping Shang, International Monetary Fund (2015), *How Large Are Global Energy Subsidies?, IMF Working Paper* <a href="http://www.imf.org/external/pubs/ft/wp/2015/wp15105.pdf">http://www.imf.org/external/pubs/ft/wp/2015/wp15105.pdf</a> [Accessed on 21 September 2016].

<sup>42</sup> Amar Bhattacharya, Jeremy Oppenheim & Nicholas Stern (2015), *Global Economy & Development Working Paper 91: Driving Sustainable Development Through Better Infrastructure: Key Elements of a Transformation* <https://www.brookings.edu/wp-content/uploads/2016/07/07-sustainable-development-infrastructure-v2.pdf> [Accessed on 20 September 2016].

43 Standard & Poor, press release (2016), How Much Can Multilateral Lending Institutions Up the Ante?
<a href="https://www.globalcreditportal.com/ratingsdirect/renderArticle.do?articleId=1613669&SctArtId=383109&from="https://www.globalcreditportal.com/ratingsdirect/renderArticle.do?articleId=1613669&SctArtId=383109&from="https://www.globalcreditportal.com/ratingsdirect/renderArticle.do?articleId=1613669&SctArtId=383109&from="https://www.globalcreditportal.com/ratingsdirect/renderArticle.do?articleId=1613669&SctArtId=383109&from="https://www.globalcreditportal.com/ratingsdirect/renderArticle.do?articleId=1613669&SctArtId=383109&from="https://www.globalcreditportal.com/ratingsdirect/renderArticle.do?articleId=1613669&SctArtId=383109&from="https://www.globalcreditportal.com/ratingsdirect/renderArticle.do?articleId=1613669&SctArtId=383109&from="https://www.globalcreditportal.com/ratingsdirect/renderArticle.do?articleId=1613669&SctArtId=383109&from="https://www.globalcreditportal.com/ratingsdirect/renderArticle.do?articleId=1613669&SctArtId=383109&from="https://www.globalcreditportal.com/ratingsdirect/renderArticle.do?articleId=1613669&SctArtId=383109&from="https://www.globalcreditportal.com/ratingsdirect/renderArticle.do?articleId=18466\_ind=N&exp\_date=20260412-15:41:39></a> [Accessed on 21 September 2016].</a>

<sup>44</sup> This section benefitted tremendously from:

Butch Bacani, Jeremy McDaniels & Nick Robin, paper for the UNEP Inquiry into the Design of a Sustainable
Financial System (2015), *Insurance 203: Harnessing Insurance for Sustainable Development* <(http://www.unepfi.org/psi/wp-content/uploads/2015/10/Insurance\_2030\_FINAL6Oct2015.pdf)> [Accessed on 21 September 2016].
Owen Barder & Theodore Talbot, Centre for Global Development (2016), *Payouts for Perils: Why Disaster Aid is Broken, and How Catastrophe Insurance Can Help to Fix It* <(http://www.cgdev.org/sites/default/files/payouts-perils-why-disaster-aid-broken-and-how-catastrophe-insurance-can-help-fix-it-0.pdf>) [Accessed on 21 September 2016]
Publications from the Willis Research Network <(http://www.willis.com/willisresearchnetwork/)> [Accessed on 21 September 2016].

<sup>45</sup> UN World Conference on Disaster Risk Reduction (2015), *Sendai Framework for Disaster Risk Reduction 2015–2030*, <a href="http://www.preventionweb.net/files/43291\_sendaiframeworkfordrren.pdf">http://www.preventionweb.net/files/43291\_sendaiframeworkfordrren.pdf</a>> [Accessed on 21 September 2016].

<sup>46</sup> Swiss Re (2014), *Sigma report: Natural catastrophes and man-made disasters in 2013* <a href="http://media.swissre.com/documents/sigma1\_2014\_en.pdf">http://media.swissre.com/documents/sigma1\_2014\_en.pdf</a> [Accessed on 21 September 2016]. See also: <a href="http://www.cgdev.org/publication/payouts-perils-why-disaster-aid-broken-and-how-catastrophe-insurance-can-help-fix-its">http://www.cgdev.org/publication/payouts-perils-why-disaster-aid-broken-and-how-catastrophe-insurance-can-help-fix-its</a>

<sup>47</sup> The City UK (2014), *UK fund management 2014: An attractive proposition for international funds* <https://www.thecityuk.com/assets/2015/Reports-PDF/UK-Fund-Management-An-attractive-proposition-forinternational-funds.pdf> [Accessed on 21 September 2016].

<sup>48</sup> Lloyd's (2009), *Lloyd's 360° Risk Insight Insurance in developing countries: Exploring opportunities in microinsurance* <a href="https://www.lloyds.com/~/media/lloyds/reports/360/360%200ther/insuranceindevelopingcountries.pdf">https://www.lloyds.com/~/media/lloyds/reports/360/360%200ther/insuranceindevelopingcountries.pdf</a> [Accessed on 21 September 2016].

<sup>49</sup> Owen Barder & Theodore Talbot, Centre for Global Development (2016), *Payouts for Perils: Why Disaster Aid is Broken, and How Catastrophe Insurance Can Help to Fix It* <(http://www.cgdev.org/sites/default/files/payouts-perilswhy-disaster-aid-broken-and-how-catastrophe-insurance-can-help-fix-it-0.pdf>) [Accessed on 21 September 2016]. <sup>50</sup> Rowan Douglas, Willis Research Network Working Draft (2015), *The Insurance Sector and the 2015 – 2016 UN Processes: Opportunities for Progress.* 

<sup>51</sup> Kevin P. Gallagher, Rohini Kamai & Yongzhong Wang, Boston University, Global Economic Governance Initiative (2016), *Fueling Growth and Financing Risk: The benefits and risks of China's development finance in the global energy sector* <a href="https://www.bu.edu/pardeeschool/files/2016/05/Fueling-Growth.FINAL\_version.pdf">https://www.bu.edu/pardeeschool/files/2016/05/Fueling-Growth.FINAL\_version.pdf</a>> [Accessed on 21 September 2016].

<sup>52</sup> This section benefitted tremendously from the work of the World Bank (2015/2016), *Global Financial Development Report: Long term finance* <a href="https://openknowledge.worldbank.org/handle/10986/22543">https://openknowledge.worldbank.org/handle/10986/22543</a> [Accessed on 20 September 2016].

<sup>53</sup> Dominic Barton & Mark Wiseman, Harvard Business Review (2014), *Focusing Capital on the Long Term* <a href="https://hbr.org/2014/01/focusing-capital-on-the-long-term">https://hbr.org/2014/01/focusing-capital-on-the-long-term</a> [Accessed on 21 September 2016].

<sup>54</sup> Warrren, Geoff (2014), Center for International Finance and Regulation, Long-Term Investing: What Determines Investment Horizon. Working Paper No. 024/2014. <a href="https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2442631">https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2442631</a>

<sup>55</sup> Larry Fink (2016), *Letter to chief executives at S&P 500 companies and large European corporations* <a href="http://www.businessinsider.com/blackrock-ceo-larry-fink-letter-to-sp-500-ceos-2016-2">http://www.businessinsider.com/blackrock-ceo-larry-fink-letter-to-sp-500-ceos-2016-2</a> [Accessed on 21 September 2016].

<sup>56</sup> This section benefitted tremendously from the work of Z/Yen Group for the Business Commission on Sustainable Development (2016), *Financial Innovations and Sustainable Development*.

<sup>57</sup> The Economist Explains (2013), *Why does Kenya lead the world in mobile money?* <a href="http://www.economist.com/blogs/economist-explains/2013/05/economist-explains-18">http://www.economist.com/blogs/economist-explains/2013/05/economist-explains-18</a> [Accessed on 21 September 2016].

<sup>58</sup> World Bank (2014), *The Global Findex Database* <a href="http://datatopics.worldbank.org/financialinclusion/>">http://datatopics.worldbank.org/financialinclusion/></a> [Accessed on 21 September 2016].

<sup>59</sup> Era Dabla-Norris, Yan Ji, Robert Townsend & D. Filiz Unsal, IMF Working Paper WP/15/22 (2015), *Identifying Constraints to Financial Inclusion and Their Impact on GDP and Inequality: A Structural Framework for Policy* <a href="http://www.imf.org/external/pubs/ft/wp/2015/wp1522.pdf">http://www.imf.org/external/pubs/ft/wp/2015/wp1522.pdf</a> [Accessed on 21 September 2016].

<sup>60</sup> Jake Jendall, Robert Schiff & Emmanuel Smadja (2013), *Sub-Saharan Africa: A major potential revenue opportunity for digital payments* <a href="http://www.aida.co.bw/report/mckinsey/MoP18\_Sub-Saharan\_Africa\_A\_major\_potential\_revenue\_opportunity\_for\_digital\_payments.pdf">http://www.aida.co.bw/report/mckinsey/MoP18\_Sub-Saharan\_Africa\_A\_major\_potential\_revenue\_opportunity\_for\_digital\_payments.pdf</a>> [Accessed on 21 September 2016].

<sup>61</sup> World Bank (2015), *Migration and Remittances Data: Bilateral Remittance Matrix 2014* <a href="http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues">http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues</a> [Accessed on 21 September 2016].

<sup>62</sup> TransferWise is competing to bring down the cost of international transfers, charging 0.5–1 percent compared to 11 percent by companies such as Western Union, the leading remittance handler. The Migration Observatory at The University of Oxford (2016), *Migrants Remittances to and from the UK* <http://www.migrationobservatory.ox.ac.uk/ resources/briefings/migrant-remittances-to-and-from-the-uk/> [Accessed on 21 September 2016]; *The Economist* (2015), "Bigger but not better: Western Union and MoneyGrams proposed merger is good news for shareholders, but less so for consumers" <http://www.economist.com/news/business-and-finance/21650598-western-union-andmoneygrams-proposed-merger-good-news-shareholders-less-so> [Accessed on 21 September 2016].

63 KIVA (2016) <https://www.kiva.org/about> [Accessed on 21 September 2016].

<sup>64</sup> Massolution (2015), *Crowdfunding Industry 2015 Report* <a href="http://crowdexpert.com/crowdfunding-industry-statistics/">http://crowdexpert.com/crowdfunding-industry-statistics/</a> [Accessed on 21 September 2016].

<sup>65</sup> U.S. Trust (2014), *2014 U.S. Trust Insights on Wealth and Worth Survey* <a href="http://www.ustrust.com/publish/content/application/pdf/GWMOL/USTp\_AR4GWF53F\_2015-06.pdf">http://www.ustrust.com/publish/content/application/pdf/GWMOL/USTp\_AR4GWF53F\_2015-06.pdf</a> [Accessed on 21 September 2016].

About the Business and Sustainable Development Commission

The Business and Sustainable Development Commission aims to accelerate market transformation and advance the world's transition to a more prosperous, inclusive economy. Our mission is to make a powerful case—supported by sound evidence, rigorous research and compelling real-world examples—for why the private sector should seize upon sustainable development as the greatest economic opportunity of a lifetime. Our flagship report, to be launched in January 2017 will show how the Sustainable Development Goals (SDGs) —17 objectives to end poverty, reduce inequality and tackle climate change and other urgent challenges by 2030—provide the private sector with the framework for achieving this market shift. The report will serve as the foundation for launching initiatives to inspire and mobilise businesses to achieve the SDGs.



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