THE LANDSCAPE FOR INSTITUTIONAL INVESTING IN 2018

PERSPECTIVES OF INSTITUTIONAL INVESTORS
AN INPUT INTO THE INVESTOR FORUM

October 2018

WORLD BANK GROUP

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Executive Summary

The high-level Investor Forum will take place on November 29, 2018, in Buenos Aires, hosted by the President of Argentina, this year's chair of the G20, and co-organized with the World Bank Group. The Forum will bring together leaders from the public sector and the global investment community to explore how their combined power could contribute to sustained global economic growth and increase the flow of long-term sustainable investments to where they are needed most. It is hoped that the Forum will build strong momentum to support collaboration to address areas of shared interest, concern, and opportunity.

As part of preparing for the Forum, the World Bank Group (WBG) conducted semi-structured interviews with senior executives—mostly chief executive officers and chief investment officers—in 34 global institutional investors, soliciting their views on the current operational and investment environment; strategic priorities going forward; and actions required to scale up investments in sustainable, long-term projects, particularly investments in infrastructure. The major topics covered were (i) current perceptions regarding today's economic and investment environments; (ii) mega-trends shaping existing and future investment strategies; (iii) sustainable investing along a number of dimensions; (iv) infrastructure investing; (v) investing in emerging markets; (vi) the potential role of the WBG and, by extension, other international financial institutions (IFIs); and (vii) their guidance on how to make the Forum a success.

Given the geographic diversity, number, and level of seniority of the interviewed executives, we believe that these inputs can be considered a good reflection of views widely held by the global investment community. A key finding from the interviews was the significant degree of consensus among global investors on what were the principal concerns, opportunities, and actions needed.

There was a strong consensus in the interviews regarding the current investment landscape. Nearly all the executives agreed that the extraordinary international macroeconomic policies—in particular, monetary policies—and regulations instituted in response to the 2008 global financial crisis are still in place, and are a major factor shaping today's investment environment. While these measures were largely effective in containing the crisis, they also continue to have unintended consequences affecting markets and the global business environment. Financial regulations, (such as Solvency II and Basel II/III), in particular, were cited as potentially disincentivizing long-term investments, especially in infrastructure, due to their capital adequacy requirements and liquidity risk standards. Investors shared a concern that once central banks return to 'traditional', non-crisis and less accommodative policies this could exacerbate economic instability, triggering a potential increase in market volatility and greater fragility of global economy. They also noted that unconventional monetary policy cannot be the solution for the next financial crisis, and appropriate fiscal and economic measure need to be put in place to ensure continued economic growth.

Four categories of mega-trends were seen as creating both risks and opportunities: (i) environmental (climate change and resource scarcity disrupt supply chains and markets, but also create new investment opportunities, such as in renewable energy technologies); (ii) social (demographic trends shift the distribution of human capital, affect labour markets and the sustainability of existing pension schemes, but also open new markets, while growing inequality presents increasingly serious systemic risk); (iii) technological (disruptive technologies in the short to medium term threaten to eliminate traditional jobs and sources of income, but in the longer term contribute to productivity improvements and create new opportunities); and (iv) geopolitical (political polarization and disruption of the multilateral world order). Executives noted that public policy and market solutions designed to address the challenges raised by any of these trends must simultaneously consider their consequences for other ones, to optimize the overall positive impact on the "state of the world."

Interviewees identified the advancement of sustainable, long-term investing, and investing in infrastructure, as important areas of shared interest and opportunity. Such opportunities can be enabled, they added, by the collective and coordinated action of the global investment community, multilateral institutions, and governments, through channels such as the G20.

There is growing support for sustainable investing, which was seen as having the potential to lower financial and reputational risks, improve returns, and provide long-term revenue streams. The adoption of sustainable investing is expected to increase, and it has the potential to become an investment market component in the short to medium term, and a potential standard for a significant share of investments in the medium to long term, reflecting shifts in the standards and values of asset owners, investors, and consumers. Coupled to this support was a growing interest in long-termism, a natural corollary to sustainable investing, since its benefits play out over years, not days or months.

The investors noted that shifts toward sustainable investment practices—including the adoption of environmental, social, and governance (ESG) principles in investing—are driven in part by consumers and employees who are increasingly reluctant to work for, or buy from, companies with poor ESG practices. Another important driver is companies' growing recognition of the system-level implications of their investment decisions. Increased media attention and global advocacy through international political platforms such as the Sustainable Development Goals support this trend, making it increasingly difficult for investors to turn a blind eye to the systemic and sustainability impacts of their investment decisions.

The interviewees saw infrastructure as an attractive investment because, like all long-term investments, it acts as a hedge against inflation, generates stable cash flows, and is a potential buffer to returns in the next financial crisis. Fresh investment in sustainable infrastructure is also essential to mitigate the pressures that the world will face in the next decade and to adapt to the emerging mega-trends. These needs cannot be met by the public sector or commercial banks alone. Overall, infrastructure investment was seen as an under-realized investment opportunity. Many of the executives were looking to increase their asset allocation to infrastructure. Infrastructure investments were also seen as a win from the global resource-allocation optimization and macroeconomic stability perspectives, providing countercyclical, stabilizing effects, helping to offset short-termism, and promoting sustainable economic growth. There was similar enthusiasm for investing in emerging markets, although it was less uniform, given perceived barriers (e.g., political, foreign-exchange, and credit risks, and a lack of bankable projects).

Key obstacles to increasing sustainable, long-term investing and scaling up infrastructure investments across G20 economies include the following:

Sustainable, long-term investing

- Lack of a common definition of sustainable and impact investing, as well as the need for consistent product labeling and taxonomy;
- Long-standing lack of uniformity on how the concept of fiduciary duty is defined and applied by regulators;
- Lack of high-quality, harmonized ESG data and performance benchmarks;
- Lack of reporting and measurement frameworks to price long-term value creation;
- Excessive short-term-oriented contracts and fee structures between asset owners and asset managers that are incentivizing suboptimal global allocations of investment;
- Post-2008 financial and prudential regulations blocking capital allocation to certain types of assets and investments; and
- Inadequate pricing of externalities and tax regimes that favor short-termism.

Infrastructure investing

- Insufficient information-sharing and inadequate access to information about existing opportunities;
- Transaction-intensive nature of infrastructure investments due to project uniqueness and insufficient standardization;
- Lack of a pipeline of projects of sufficient size;
- Political, foreign exchange, and credit risks in emerging markets; and
- Insufficient capacity of governments to work with institutional investors, especially in emerging markets.

Overall, interviewees were supportive of the Forum's objectives. They emphasized the importance of meeting with their public sector counterparts, but noted that success would be measured by the event's ability to generate tangible higher-level outcomes. They recommended that the Forum focus on a limited number of topics; that a number of actionable solutions be agreed upon and disseminated among the G20 governments at the event's conclusion; and that periodic updates on progress be provided. They see the WBG and other IFIs as playing a key role in de-risking infrastructure projects and in building institutional capacity and enabling environments in emerging markets to make them more attractive to investors. Executives also appreciated the knowledge-sharing capacity, convening power, and analytical evidence-base that the WBG and other institutions can provide in support of this work.

1

Introduction

The high-level Investor Forum (the Forum) will be held in Buenos Aires, Argentina, on November 29, 2018, in the lead-up to the G20 Heads of State Summit. Organized by the Government of Argentina, which is this year's chair of the G20, together with the World Bank Group (WBG), the Forum will bring together leaders from the public sector and the investment community to develop a shared view on how their combined power could contribute to sustained global economic growth and increase the flow of long-term sustainable investments to where they are needed most. It is hoped that the Forum will build strong momentum to support collaboration between the public and private sectors.

Because the public and private sectors often "speak different languages," the organizers of the Forum decided that it would be important to gather the views of leaders in the investment community to identify areas that would be of sufficient common interest, and in which progress could be made through actions taken in collaboration between the public and private sectors. A series of semi-structured interviews was conducted with senior executives, primarily chief executive officers (CEOs) and chief investment officers (CIOs), in a global sample of 34 financial institutions, including asset managers, asset owners, insurance companies, and sovereign wealth funds (see Annex 1), jointly representing over US$20 trillion in assets under management.

The major topics covered were (i) concerns about today's macroeconomic and investment environments; (ii) mega-trends shaping their investment strategies; (iii) sustainable investing along a number of dimensions, including the role of the Sustainable Development Goals (SDGs); (iv) infrastructure investing; (v) investing in emerging markets; (vi) the potential role of the World Bank and, by extension, other international financial institutions (IFIs); and (vii) guidance on how to make the Forum a success. The emphasis on each topic varied over the course of the interview process for two reasons. First, certain common themes became clear early on, and it was not necessary to spend as much time on them in subsequent interviews. Second, while all of these topics were of interest to all of the executives, because of their roles and their institutions there were topics of particular interest and expertise specific to them. Drilling down into more detail on these topics added to the insights gained in the interview process.

It is important to note that this paper is *not* a structured survey based on a large number of respondents conducted to gather quantitative data intended to have empirical validity. The "n" is too small for that, and a semi-structured approach does not gather data that are strictly comparable in a numerical sense. It is also not a research paper meant to address a set of questions or hypotheses in an academically rigorous way. Thus, experts might challenge the views of these executives on a particular topic. This paper neither endorses nor challenges their views. It is simply meant to report on them to provide an aggregate view of these executives at a particular point in time.

2

The Importance of Institutional Investors for Sustainable Development

It is estimated that there is an annual funding gap of US$2–3 trillion for achieving the SDGs. Blended finance, which involves a mix of money from public and private sector sources, is seen as a way of closing this gap. This raises the obvious question of whether theprivate sector has the capacity to contribute to such investments.[1]

In terms of numbers alone, the answer is clearly yes. Around US$200 trillion in global private sector financial assets is being managed for market rates of return.[2] In comparison, there is around US$228 billion in impact funds, largely invested in the private markets (vs. the public capital markets) at, or close to, market rates of return.[3] The multilateral development banks (MDBs) and development finance institutions (DFIs) jointly invested around US$220 billion in 2016.[4] Given that private sector financial assets are roughly 900 times the size of private impact investing and the investments of the MDBs and DFIs in investable assets, it is clear that the private sector has an essential role to play in achieving the SDGs and contributing to the sustainable development agenda.

But simple numbers alone do not tell the whole story. It is also important to understand the structure of the private sector, and of the investment industry within the private sector, if we are to create the appropriate incentives for these investments to be made. The investment industry is a complicated ecosystem[5] of actors, but at its foundation are the relationships connecting asset owners and asset managers. Institutional asset owners include pension funds (around US$45.0 trillion),[6] insurance companies (around US$26.8 trillion),[7] sovereign wealth funds (around US$8.1

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[1] https://www.publicfinanceinternational.org/news/2018/01/sustainable-development-goal-funding-gap-could-be-plugged-blended-finance. See also http://s3.amazonaws.com/aws-bsdc/BFT_BetterFinance_final_01192018.pdf#asset:614:url.

[2] https://www.allianz.com/v_1538638715869/media/economic_research/publications/specials/en/Allianz_Global_Wealth_Report_2018_e.pdf.

[3] https://www.barrons.com/articles/impact-investors-hold-us-228-billion-in-assets-1528294454. Exhibit 2 p. 10 in http://s3.amazonaws.com/aws-bsdc/BFT_BetterFinance_final_01192018.pdf#asset:614:url.

[4] Exhibit 2 p. 10 in http://s3.amazonaws.com/aws-bsdc/BFT_BetterFinance_final_01192018.pdf#asset:614:url. https://www.ipe.com/reports/special-reports/top-400-asset-managers/top-400-asset-managers-2018–10-years-of-asset-growth/10025004.article.

[5] See https://www.blackrock.com/corporate/literature/whitepaper/viewpoint-investment-stewardship-ecosystem-july-2018.pdf for a description of this ecosystem from the perspective of stewardship and engagement.

[6] https://www.willistowerswatson.com/-/media/WTW/Images/Press/2018/01/Global-Pension-Asset-Study-2018-Japan.pdf. There isUS$41.4 trillion for the P22 and additional US$3–4 trillion for the rest of the P195.

[7] https://unfccc.int/files/adaptation/workstreams/loss_and_damage/application/pdf/unep.pdf.

trillion),[8] and foundations (US$1.5 trillion).[9] In addition, high-net-worth individuals hold around US$66 trillion in assets.[10] Asset managers manage the assets for asset owners. Some of the largest asset owners manage some, or most, of their own assets, typically for equities and fixed income in developed markets, while employing third-party asset managers for other asset classes, such as emerging markets, private equity, real estate, and infrastructure. Smaller asset owners typically use asset managers to manage all of their assets. The world's largest 400 asset managers, which account for the vast bulk of managed assets, have around US$76 trillion in assets under management.[11] Also important are the wealth management platforms of the large banks, such as UBS (US$2.40 trillion), Bank of America-Merrill Lynch (US$1.08 trillion), Morgan Stanley (US$1.05 trillion), Credit Suisse (US$792 billion) and JPMorgan (US$526 billion).[12]

Within the parameters of this ecosystem, support for a certain type of investment strategy aiming to address a particulat set of high-level objectives such as the SDGs must come from the asset owners, both in terms of their own investment decisions and the mandates they give to their asset managers. Acting jointly, asset owners and asset managers can select and enable companies and projects that they believe are doing work to support their shared objectives, while recognizing that in all cases these investments must earn commercial returns.

[8] https://www.swfinstitute.org/sovereign-wealth-fund-rankings/.

[9] http://www.pionline.com/article/20180508/INTERACTIVE/180509883/global-foundation-assets-reach-15-trillion.

[10] https://www.oliverwyman.com/content/dam/oliver-wyman/v2/publications/2018/april/Global-Wealth-Managers-Dare-To-Be-Different.pdf p.5.

[11] https://www.ipe.com/Uploads/y/f/g/IPE-Top-400-Asset-Managers-2018.pdf.

[12] https://www.businessinsider.com/the-15-biggest-wealth-managers-in-the-world-2018–6#6-citi-private-bank-460-billion-10.

3

Current Investment Environment

The views of the interviewed executives about today's investment environment were quite uniform, and generally more cautious than optimistic. One key concern was about what would happen if economic growth, which is a major driver of investment returns, slowed, as many felt it would. The major areas of focus identified in the interviews included the aftermath of the 2007–09 global financial crisis (GFC), changes in regulations since 2008, the rise of passive investing, and the shift in capital formation from the public to the private markets.

3.1 Aftermath of the 2007–09 Global Financial Crisis

The 2007–09 GFC was seen as one of the factors, if not *the* major factor, shaping today's investment environment, and that of the immediate and more distant future. The interviewees expressed concern about the effects of unconventional monetary policies[13]—for example, so-called "quantitative easing" and substantial purchases of financial assets—used by central banks to halt and control the GFC (Box 1). As central banks have started to gradually normalize their monetary policies, there are concerns regarding the negative effects on the real economy and**,** perhaps more worrisome, the widely held perception that the central banks may now be "out of tools" to deal with any new major episode of financial turmoil.[14]

Many interviewees noted that governments now need to prioritize structural and fiscal policy reforms such as labor market reforms, pension/retirement system reforms, and tax system reforms. Investors perceived some countries to have made better progress in these areas than others. The expectation is that this restructuring of the real economy can provide the foundation for sustained economic growth and help to prepare countries to cope with the next financial crisis when it finally occurs.

Another important element of concern for institutional investors was the increase in income inequality since 2008,[15] which may have

[13] See Borio C. and A. Zabai (2016) for a review of the empirical literature exploring the benefits and costs of the unconventional monetary policies.

[14] This is a concern shared by central bankers. For example, Yellen (2016) mentioned that "new tools should be sufficient unless the recession were to be unusually severe and persistent."

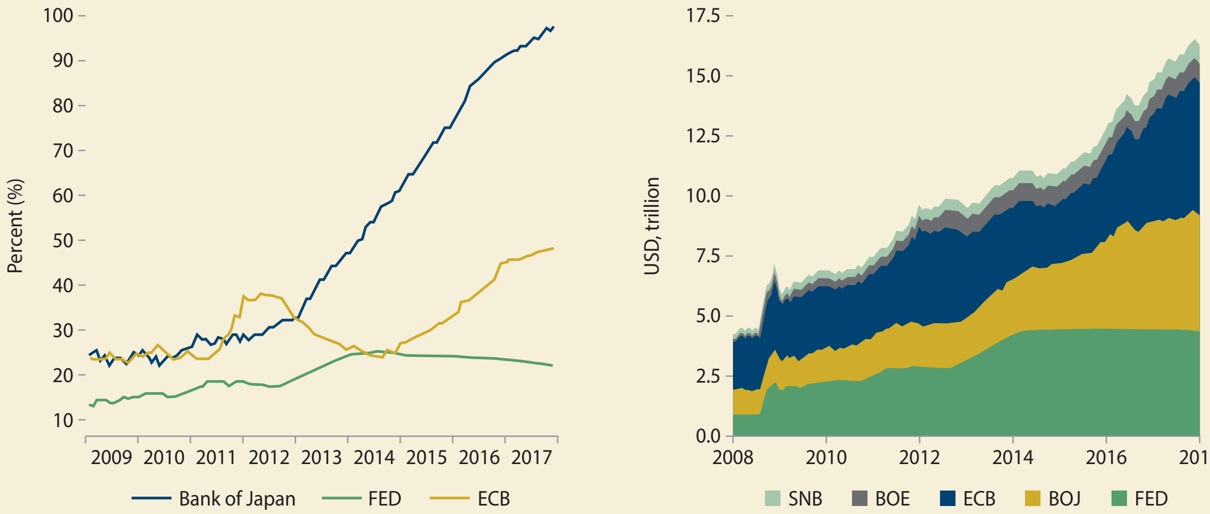
[15] Growing inequality predates the GFC, but since 2008 this trend has accelerated. While the bottom 20 percent of the population has had only a modest growth in income since 2008, the top quintile of the population has benefited from steep increases. Moreover, funding to resolve the crisis was financed predominantly through cuts in public spending rather than

Box 1. The global financial crisis and unconventional monetary policies

The Global Financial Crisis (GFC) turned out to be worse than the Great Depression, according to several parameters: stock market prices contracted more (-57.8 percent in the GFC against -42.7 percent in the Great Depression), nominal house prices fell more (-18.3 percent vs. -6.2 percent), and the decline in household wealth was greater (-14.8 percent vs. -6.0 percent) (see Brookings and Yale School of Management, 2018). To break the panic and stabilize the global financial system, policymakers made an unprecedented response. The inherent ambiguity and unpredictability associated with navigating effectively the first truly GFC of modern times led policymakers to adopt many novel and unconventional measures, which tested the traditional boundaries of institutional authorities and mandates. In particular, central banks of major economies embraced three types of monetary policy: balance sheet policies aiming to affect financial conditions by modifying central bank assets and liabilities—for example, through purchases of public debt or credit assets ("quantitative easing"); forward guidance consisting in providing private sector participants with information about the possible future path of the policy interest rate over time in a more or less precise way; and a low-interest-rate policy and negative interest rate policy (NIRP), aiming to provide liquidity to financial markets (Borio and Zabai, 2016).

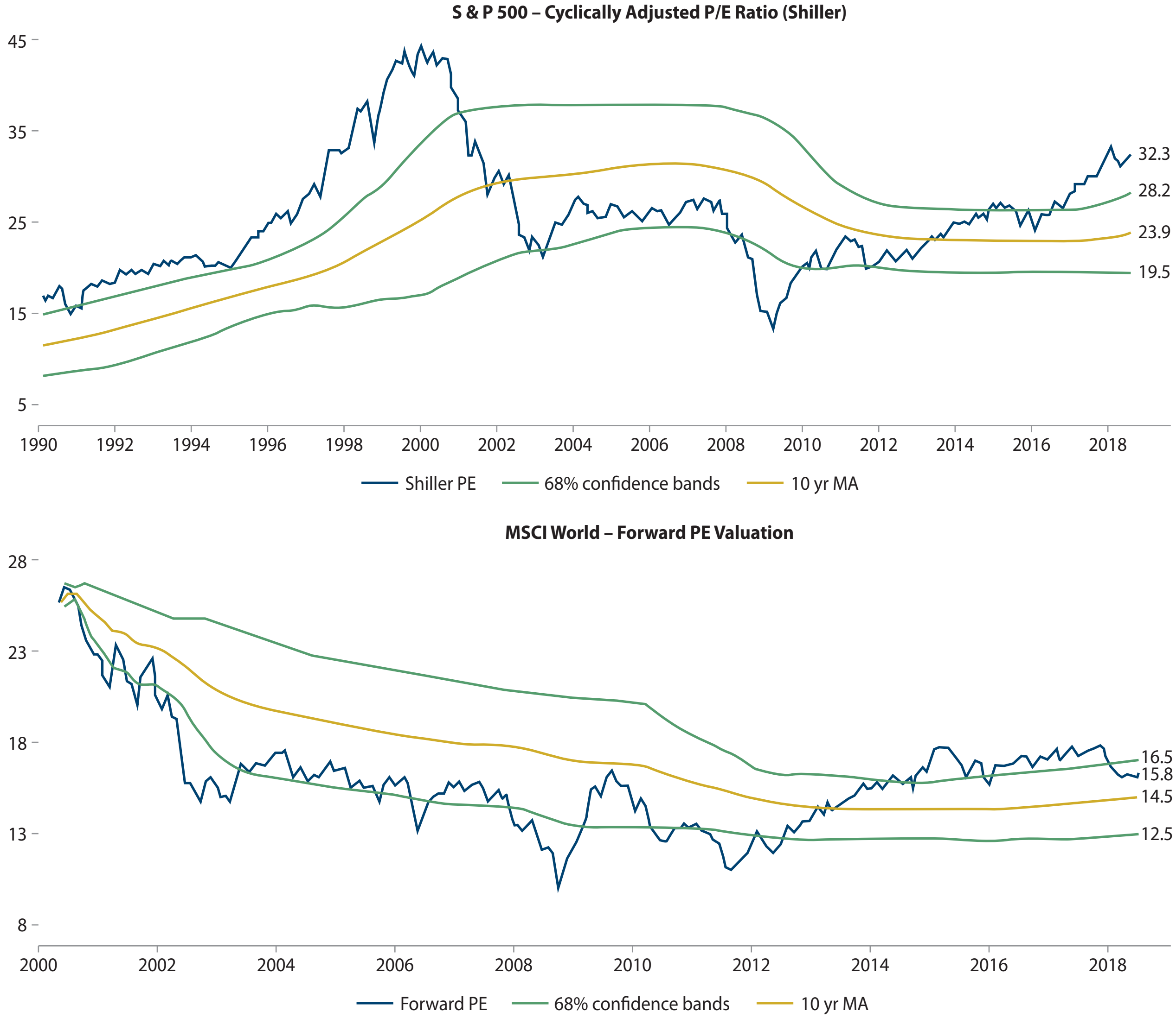
By mid-2009 the panic was halted, the financial system stabilized, and the credit market and bank lending restarted, but the mix of policies deployed focused on restoring the functioning of the financial system and markets, without addressing the strains on the real economy. In an effort to buy time for the recovery of private consumption and to gain momentum for the investment, central banks kept in place for the entire decade the unconventional monetary policies that were meant as emergency measures, and in this way continued injecting liquidity into the global financial system at unprecedented rates, as underscored by their balance sheets.

CENTRAL BANK TOTAL ASSETS (% OF GDP) (LEFT) AND MAJOR DEVELOPED MARKETS' CENTRAL BANK TOTAL ASSETS (RIGHT)



Note: ECB: European Central Bank, FED: Federal Reserve, SNB: Swiss National Bank, BOE: Bank of England, BOJ: Bank of Japan.
Source: World Bank Treasury, Macrobond, Bloomberg.

FIGURE 1: VALUATION INDICATORS



The top graph provides the Price/Earnings Ratio cyclically adjusted for the S&P500. The red line is the 10-year moving average. The bottom graph represents the Forward Price/Earnings Ratio for the MSCI World. The red line is the 10-year moving average.

been exacerbated by the monetary policy response to the GFC. Increasing income inequality is reducing the purchasing power of many households, pricing them out of markets, and is tilting disposable income and capacity further away from the poor and more toward the rich. Many of the executives interviewed thought that the extraordinary and protracted extension of access to liquidity, associated with several years of historically low interest rates and volatility, may have also encouraged a short-term approach to investment decisions, driven primarily by the search for financial returns rather than by long-term, sustainable economic and financial results.

Respondents also discussed the difference between the equity and fixed-income markets. Low interest rates have made it challenging to earn

through higher taxes, tilting disposable income further away from the poor and toward the rich. LIS microdata: Luxembourg Income Study (LIS) Database, http://www.lisdatacenter.org.

returns in fixed-income investments. As interest rates rise, which is inevitable, fixed-income investments could become more attractive, but their rise could also put pressure on equity prices, which some felt were too high. Investors with heavily equity-weighted portfolios were concerned about the effect this will have on their returns. Moreover, equity markets show signs of over-valuation, especially in U.S. and emerging markets (Figure 1).

In this context, several interviewees felt that the crisis demonstrated that modern portfolio theory may no longer be valid as the basis for diversification. The GFC negatively affected all portfolios, regardless of asset class and country of the asset. Some interviewees felt that the best way to position themselves for higher yields going forward was to have portfolio allocations with higher exposure to real assets, such as infrastructure or real estate, which were perceived to offer more stable cash flows.

3.2 Post-2008 Prudential Regulations

Several respondents cited the post-2008 regulations as a "disincentive" for long-term investments. Investors cited in particular Solvency II, the European Union's prudential regulation for insurance companies, which is intended to strengthen the capital structure. Perceived disincentives, which stem from the fact that capital requirements and the definition of risk linked to the volatility of asset prices introduced by such regulations limit the amount of capital available for certain kinds of investments, were viewed as particularly harmful for investing in infrastructure. Investors also felt that these regulations make it more difficult to increase productive capital (e.g., through equity, infrastructure, and unlisted securities), especially in emerging markets.[16] There was a frequent reference to the need to review and adjust these policies, often referred to as the "unintended consequences" of the post-2008 regulations.

3.3 Rise of Passive Investing

A few respondents observed that the rise of passive management had affected the way they invest. While passive investments cannot take over the markets entirely, since at least the initial price is set by active investors, this shift introduces a number of important dynamics into the way capital markets function. In particular, it gives index providers a great deal of influence and makes them an important stakeholder in any dialogue focused on the future of investing strategies. For example, the targeted introduction of certain indexes (e.g., indexes that emphasize companies with strong environmental, social, and governance [ESG] records) could have a significant impact on global capital flows. This also means that asset owners need to find new ways to engage with the companies whose stock or debt they own, acting in close collaboration with other asset owners and asset managers. In contrast to the "hands-off" passive investing of the past, today the large passive investors are more focused on engaging with their portfolio companies. Since they are not going to "sell the stock (or bond)," they want to "fix the stock (or bond)," including on ESG dimensions they believe are inhibiting or contributing to value creation.

3.4 Shift in Capital Formation

A number of investors noted the growing importance of private equity and the decline of listed companies, especially in the United States.[17] A recent McKinsey study notes that "private asset managers raised a record sum of nearly US$750 billion globally, extending a cycle that began eight years ago."[18] The business model of private equity is

[16] Another important regulation introduced in the wake of the 2008 financial crisis that has had significant impact on financing and investing strategies and trends is Basel III—a global, voluntary regulatory framework addressing such issues as bank capital adequacy, stress testing, and market liquidity risk. Since banks were not included in the scope of these interviews, Basel III is not covered in this report.

[17] The number of public companies has declined in the U.S., from a peak of around 7,400 to less than half of that today. https://www.wsj.com/articles/fewer-listed-companies-is-that-good-or-bad-for-stock-markets-1515100040.

[18] www.mckinsey.com/~/media/mckinsey/industries/private%20equity%20and%20principal%20investors/our%20

changing, shifting from simply cost-cutting to revenue growth.[19] It is also characterized by longer holding periods, going from 4.1 years in 2008 to 5.9 years in 2014.[20] The interviewees saw the superior returns available in this asset class as attractive, although they also expressed concerns regarding it: fee structures (the classic "2 percent management fees and 20 percent of the upside past some hurdle rate" model being seen as too rich) and a shift in human capital from the public to the private markets.

At the same time, the holding periods of public equities in the U.S. have been declining. In 2016, the average holding period of stocks traded on the New York Stock Exchange was only 8.3 months,[21] the shortest since the 1920s, and down from around 8 years in the 1940s and 1950s. The stringent reporting and other regulatory requirements of being a public entity make this a less attractive proposition for smaller enterprises, especially given the amount of private equity capital available and the longer holding periods.

If anything, the decline in the number of public companies has been good for large, blue-chip stocks.[22] With fewer investment opportunities available, the money going into the public markets is driving stock prices higher. The concern about the decline in the number of public companies is that small investors have less access to young companies with great growth potential. Unlike wealthy individuals and institutions, they do not have access to private equity funds. This could be another factor producing inequality, albeit in a rather selected group of people.

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insights/the%20rise%20and%20rise%20of%20private%20equity/the-rise-and-rise-of-private-markets-mckinsey-global-private-markets-review-2018.ashx.

[19] www.forbes.com/sites/baininsights/2018/04/09/how-private-equity-is-shifting-from-cost-cutting-to-growth/#-2f9948512a20.

[20] http://docs.preqin.com/newsletters/pe/Preqin-PESL-May-15-Buyout-Holding-Periods.pdf.

[21] http://topforeignstocks.com/2017/10/01/average-stock-holding-period-on-nyse-1929-to-2016/

[22] There were 486 IPOs in 1999 and 406 in 2000, but only 105 in 2016 and 160 in 2017. See https://www.statista.com/statistics/270290/number-of-ipos-in-the-us-since-1999/. Also, for a good analysis of the reasons for the decline in IPOs, see https://www.sec.gov/spotlight/investor-advisory-committee-2012/jeffrey-solomon-presentation.pdf.

4

Global Mega-trends

There was a strong consensus in views about eight mega-trends—two each in the categories of environmental, social, technological, and geopolitical—creating investment opportunities and risks. In addition to the short- and long-term consequences of central banks' interventions to resolve the GFC, respondents cited the following mega-trends as important for current and future investment decisions:

- **Environmental**
  - Climate change
  - Resource scarcity in general, and food and water in particular
- **Social**
  - The double demographic challenge of aging and of unemployed youth
  - Growing inequality
- **Technological**
  - Disruptive technologies
  - Cyber-risk
- **Geopolitical**
  - Political polarization
  - The breakdown of the multilateral global order and trade wars

4.1 Environmental Trends

Nearly all investors raised concerns about climate change and resource scarcity. Climate change was discussed in varying degrees of detail, depending on the type of investor and the investor's location. There was universal agreement that the risks and opportunities associated with climate change come from multiple interacting drivers: physical and natural resources, regulatory action, and technological innovations. Much of the discussion was about the downside effects of climate change—that is, the consequences of extreme weather events, especially for certain industries (such as agriculture and insurance) and companies' balance sheets (e.g., overvalued/stranded assets and understated liabilities in energy companies)—and the general uncertainty climate change creates for generating returns.[23]

At the same time, many saw investment opportunities in technologies being developed to combat global warming, such as renewable energy technologies. Investors varied in the extent to which they were reshaping their investment portfolios to help combat climate change—for example, divestment from certain sectors such as coal,

[23] The report and recommendations provided by the Financial Stability Board Task Force for Climate-related Financial Disclosures, chaired by Michael Bloomberg, have often been referred to as the key pilot project that, if successfully operationalized, could help the business and investment community to fully assess and incorporate the financial impact of climate-related risks and opportunities in market operations.

Box 2. Institutional investors and climate change

The institutional investor community has a number of initiatives addressing the implications of climate change on investment decisions. The Institutional Investors Group on Climate Change (IIGCC) is a European network of 155 pension funds and asset managers (including 9 of the 10 largest pension funds and asset managers) representing €21 trillion in assets under management. Its mission is "to mobilise capital for the low carbon future by amplifying the investor voice and collaborating with business, policymakers and investors." U.S.-based CERES has formed an Investor Network on Climate Risk and Sustainability made up of "more than 150 institutional investors, collectively managing more than US$24 trillion in assets, advancing leading investment practices, corporate engagement strategies and policy solutions to build an equitable, sustainable global economy and planet." The International Centre for Pension Management (ICPM)—a global, research-based network of pension organizations that stimulates leading-edge thinking and practice about pension design and management—has recently formed a "Climate Change Working Group" that is developing a 10-step practical guide to help asset owners integrate climate change into the investment process.

high levels of engagement with oil and gas companies concerning their transition strategies for a +2 C° world, and decarbonization of their portfolios.

Increasing scarcity of resources (particularly food and water) was another environmental trend that many cited.[24] This trend was also seen as providing both risks and opportunities. However, it received less attention than climate change, and respondents generally spoke in less detail about how it was affecting their investing strategy. One strong sentiment was that given the "public good" nature of some of these resources, governments and international organizations need to be more actively involved through policy actions, funding, and innovative solutions, perhaps with the support of institutional investors.

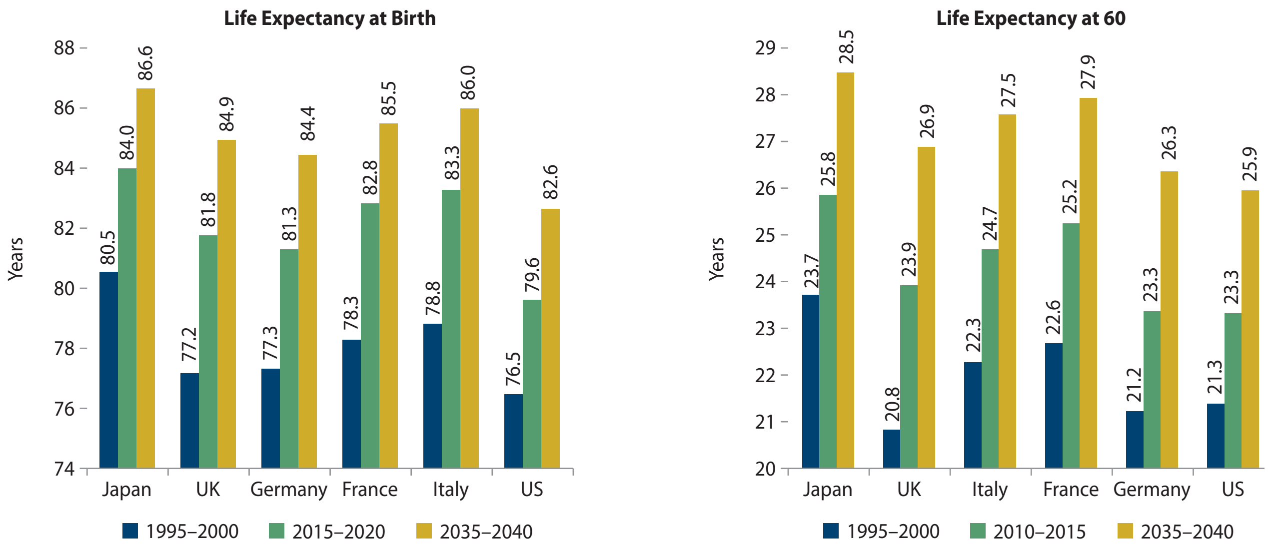
4.2 Social Trends

Nearly every respondent cited two social trends: changing demographics and increased inequality. In the area of demographics, the key issues are an aging population in the developed world and emerging markets (particularly in Asia), and the need to create jobs for a large number of young people across the developing world. Investors noted that the fastest-growing cohort of people in the world is people aged 80 years or more. The developed world's pension system was designed for a time when people lived an average of 60–65 years; today's average life expectancy is 80–85. Life expectancy at birth and at 60 years old has significantly increased over the past two decades in developed countries and will continue to go up (Figure 3). For example, Japan's life expectancy at 60 years old, which was 23.7 years in 1995–2000, will rise to 28.5 years in 2035–40.

Increased longevity is exacerbating two problems: most people are not saving enough for their retirement, and a growing number of people do not have an adequate pension scheme. This creates not only societal challenges, but also opportunities for investors to develop new products to address these problems. For example, longevity risk can be transferred from individuals and employers to insurance companies, which can pool the risk. Life insurance contracts are a natural hedge to the longevity risk faced by pension funds, especially for defined benefit plans. With experience and deep knowledge of this type of risk, insurance companies have been able to develop products for both retail and institutional clients. Three types of product

[24] http://www.valoral.com/wp-content/uploads/2018-Global-Food-Agriculture-Investment-Outlook-Valoral-Advisors.pdf.

FIGURE 2: LIFE EXPECTANCY AT BIRTH AND AT 60



Source: UN and SSGA (State Street Global Advisors) Demographics.

are available to pension funds: buy-out, buy-in, and longevity swaps.[25]

At the same time, it is estimated that by 2034, over 90 percent of the world's population will be in emerging markets. Over the next 10 years, 1 billion young people will enter the labor market. The private sector will need to create 90 percent of the jobs these young people will need,[26] most of them in emerging markets. A number of respondents cited the increasing gap between countries with a concentration of aging populations relying on retirement savings, and countries that are the key source of future economic growth, as a particularly worrisome trend, as well as a key feature defining the future of investing strategies (see section below on investing in emerging markets).

Nearly every respondent cited increased inequality as a concern. As noted above, the GFC was seen as having exacerbated inequality, but respondents cited a number of other causes such as new technologies (discussed below). Inequality was discussed primarily in risk terms, with few respondents seeing it as a source of investment opportunities. In a 66-country study, Grechyna (2016) identifies income inequality as the most robust determinant of political polarization. The consequences of inequality, perceived as a systemic risk in the same way that climate change is viewed, were seen as dire. If politicians see trade restrictions as a solution to reducing inequality—for example, by preserving domestic jobs—this could result in trade wars, or even armed conflict between nations, all of which would have a negative impact on economic growth.

4.3 Technological Trends

Two technological trends were seen to be of great importance: disruptive technologies and cyber-risk. While most of the discussion was about the effects of these trends on the world and the investing environment, it was also noted that they had implications for the investors themselves in terms of how they managed their own organizations.

[25] A pension plan can enter a *buy-out* transaction that allows the transfer of liabilities (and corresponding assets) to an insurer. A *buy-in* is similar, but the responsibility is kept at the plan level, and the insurer makes payments to the plan. In a *longevity swap*, the pension fund makes a regular payment to a counterparty versus a payment corresponding to a loss because pensioners are living longer than expected.

[26] https://www.seedstars.com/magazine/future-emerging-markets/.

The most cited issue was the impact of artificial intelligence (AI) and other disruptive technologies on jobs. In the short term, AI was seen as eliminating certain types of jobs, thereby contributing to inequality (among different population groups and between countries), although creating new types of jobs in the longer term. The majority of respondents were sanguine about the long-term consequences of AI, citing economies' adjusting during previous periods in history, such as the shift from an agricultural to an industrial economy. A short-term benefit investors mentioned was the potential for AI and other technologies to contribute to productivity improvements—a major factor in GDP growth. Companies developing these technologies were seen as providing opportunities for investment. Several respondents noted the potential impact of AI on their own investment process in supplementing the capabilities of their current staff—for example, the changes a big-data approach could make in key operational processes (e.g., processing claims in the insurance industry)—or requiring different skills within their organizations.

A few also cited growing cyber-risks, including those coming from sovereign states. Cyber-risk, a rapidly growing concern in all industries, is especially prevalent in financial services. While financial technology allows companies to rapidly expand their customer base and offer more connectivity options, this expansion also increases the number of potential access points for cyber-attacks, which have the potential to cripple companies, entire industries, and even whole countries. Cyber-attacks also pose major threats to investors in terms of information about what is in their portfolios, who is managing their assets, and who their beneficiaries are. According to a 2015 report by the U.S. Securities and Exchange Commission's Office of Compliance Inspections and Examinations, 74 percent of registered investment advisers have experienced cyber-attacks, either directly or through their vendors. A recent International Monetary Fund study suggested that in the financial sector the average annual potential losses from cyber-attacks may be close to 9 percent of banks' net income globally, or around US$100 billion.[27] To mitigate these risks, a Financial Stability Board report from June 2017 recommends greater cooperation at the global level to promote information-sharing, technology literacy, monitoring, and early incorporation of cyber-security in IT systems.[28]

Cyber-risk was discussed mostly in terms of the threats it posed to investment returns, although some investment opportunities exist in companies that are developing solutions to deal with these threats. As with good corporate governance, companies that are better placed to deal with cyber-risk (an increasingly important governance topic) are more attractive investments than those that are not.

4.4 Geopolitical Trends

Two geopolitical trends—political polarization and the weakening of the multilateral world order—were seen as consequences of the trends discussed above. Both were seen only in risk terms; no one cited any investment opportunities as a result of these trends. Income inequality was seen as a major factor contributing to political polarization. Other contributing factors are the perceived lack of opportunities to achieve a "good" life (e.g., educational and employment opportunities for youth; stable employment and living conditions for those in middle age; and ample retirement benefits for the elderly to live comfortably, such as those enjoyed by previous generations), as well as the "replacement" of the major media supporting a broader social discourse with social media. Two potentially dire consequences of political polarization are that it inhibits the development of the economic and fiscal policies needed to foster economic growth and deal with the next financial crisis, and that it makes it more likely that a country will lack the political will (i.e., the support of a critical mass of its citizenry) to deal with the next financial crisis.

Political polarization was regarded as one factor contributing to the decline of a multilateral

[27] https://blogs.imf.org/2018/06/22/estimating-cyber-risk-for-the-financial-sector/.

[28] Financial Stability Board, "Financial Stability Implications from FinTech" http://www.fsb.org/wp-content/uploads/R270617.pdf.

world order, both a cause and a consequence of globalization. Globalization has ushered in an unprecedented era of growth, lifting millions of people out of poverty (since 1990, nearly 1.1 billion people have moved out of extreme poverty). Openness and partnership between countries have played a critical part in this success, which has also been underpinned by the multilateral political and economic system. But the benefits of globalization have been unequally distributed, and increasing inequality and polarization are outcomes that must be addressed.

4.5 Interconnectedness of Mega-trends and Their Consequences for Public Policy

In conclusion, a number of respondents noted the importance of understanding the interrelationships among these various trends and their consequences for public policy. For example, there were a few references to the implications of disruptive technologies on the changing future of jobs and the need for the public sector to adapt its role in education. Today's government focus is on early-age education (usually primary and secondary) and providing unemployment benefits and retirement benefits for those out of work. In the future, more emphasis will have to be placed on reskilling people throughout their (longer) productive lives. Generally, it was noted that public policy solutions designed to address the challenges raised by any of these trends must simultaneously consider their consequences for other ones. For example, a carbon tax might slow global warming but it could also increase inequality. Or providing government funding to support pensioners could reduce the funding available for public infrastructure investments.

Taken together, all of these mega-trends and their interrelationships have market-level consequences, since they are changing the "state of the world." Interviewees saw that while many of these trends are creating new opportunities, they also increase uncertainty and therefore risk. The result is an investment environment that is challenging for earning the returns beneficiaries expect and need. This also explains why sustainable investing is increasing in importance. Investments that earn market-rate returns while having a positive impact can help to change the "state of the world" in a positive direction. Sustainable infrastructure investments are a particularly good example since they directly respond to the needs posed by various aspects of the demographic, social, and environmental mega-trends, especially in emerging markets. However, making these kinds of investments more attractive and supporting the investment community's commitment will require governments and international organizations to take actions that may be challenging in a context of the ongoing weakening of the multilateral world order.

5

Sustainable Investing

Interviewees identified advancement of sustainable, long-term investing and investing in infrastructure as areas of significant interest and opportunity that could be used as effective tools to deal with the system-level challenges they face. Such opportunities could be enabled, they added, by the collective and coordinated action of the global investment community, multilateral institutions, and governments, through channels such as the G20.

5.1 Strategies for Sustainable Investing

Sustainable investing is on the rise. According to the *2016 Global Sustainable Investment Review* (GSIR),[29] "globally there is now US$22.89 trillion of assets being professionally managed under responsible investment strategies, an increase of 25 percent since 2014." Most of these assets are in Europe (US$12,040 trillion) and the U.S. (US$8,723 trillion) (Figure 3). According to a McKinsey study,[30] "at the start of 2016 sustainable investments constituted 26 percent of assets that are professionally managed in Asia, Australia and New Zealand, Canada, Europe, and the United States—US$22.89 trillion in total." David Blood, the former CEO of Goldman Sachs Asset Management, who co-founded London-based Generation Investment Management with former U.S. Vice President Al Gore, saw no difference between "investing" and "sustainable investing." In his words, "sustainability has driven and will continue to drive global economies. Issues including climate change, challenges around water scarcity, inequality, and poverty are drivers of change."

Several respondents cited the report issued by the European Commission's High-Level Expert Group on Sustainable Finance,[31] which starts with the notion that the purpose of finance is to serve the real economy, rather than being an end in itself. Sustainable investing is about investing in companies and projects that will grow the real economy because they are profitable, they minimize negative externalities, and they maximize positive externalities. In turn, sustainable investing promotes sustainable development,[32] taking an

29 http://www.gsi-alliance.org/wp-content/uploads/2017/03/GSIR_Review2016.F.pdf.

30 https://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/from-why-to-why-not-sustainable-investing-as-the-new-normal.

31 https://ec.europa.eu/info/sites/info/files/180131-sustainable-finance-final-report_en.pdf. The Final Report of the EU High-Level Group on Sustainable Finance emphasizes the role of sustainable investing in ensuring a sustainable economy.

32 *Sustainable development* is defined by the Report of the World Commission on Environment in Development, *Our Common Future* (also known as the Brundtland Report) as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" http://www.un-documents.net/our-common-future.pdf.

Box 3. The argument for sustainable investing

The origins of "sustainable investing," defined in more detail below, are in the values-based "socially responsible investing" (SRI) movement. The essential strategy of this movement was the exclusion of companies on the basis of political, social, or ethical considerations—for example, companies in such industries as alcohol, tobacco, and munitions. A major objection raised about these funds in the investment community was that such screening reduced diversification and thus increased risk. It was also argued that eliminating profitable investments on moral grounds would violate the fiduciary duty of fund trustees to maximize financial returns for their beneficiaries.

The argument for sustainable investing in a current sense is as much economic as it is values-based. At the heart of sustainable investing is incorporating ESG factors into the decision-making process. A recent Bank of America-Merrill Lynch report notes:

> ESG is too critical to ignore. Asset potential is substantial: we conservatively estimate that flows into ESG-type funds over the next few decades could be roughly equivalent to the size of the S&P 500 today. Corporate America is waking up to ESG as it pertains to sustainable growth, and the role of ESG in investing is fast becoming institutionalized via regulators, indices, exchanges and consultants.

The Bank of America-Merrill Lynch research joins a growing body of empirical research by academics and investors that sustainable investing, based on the integration of ESG factors with traditional fundamental financial analysis, has a number of economic benefits. Companies with strong ESG performance demonstrate less risk (e.g., probability of going bankrupt or suffering stock price or earnings declines) and show higher accounting (e.g., return on assets and return on equity) and stock price returns. While some skeptics remain, the debate has largely shifted from "why not to do SRI" to "why to do ESG."

Two reasons help explain why ESG factors can affect a company's financial performance and, thus, an investor's returns. The first is the changing expectations of customers and employees, who are increasingly reluctant to buy from or work for a company with poor ESG practices. This has obvious implications for hiring the best people and getting a fair price and the largest market share possible for products and services. The second reason is the growing recognition that, in the aggregate, how companies are managing their ESG factors has system-level implications affecting the business environment. For example, climate change due to carbon emissions, political instability due to social and income inequality, and the collapse of the financial system due to poor governance in financial institutions can result in a "state of the world" where the economic environment will limit possible investment returns.

These system-level implications are increasingly important for two types of investors: (i) **the largest ones, and** (ii) **those with a long-term view.** The largest asset managers and asset owners are "universal owners" that cannot diversify away from the system-level risks. At the same time, the system-level effects are particularly important over the long term. Shift toward passive investing, which is long-term by definition, and the high concentration in the asset management industry, with many active managers now looking to take a longer-term perspective, are repositioning sustainable investing..

FIGURE **3**: GROWTH OF SRI ASSETS BY REGION, 2014–16

REGION	2014	2016	GROWTH OVER PERIOD	COMPOUND ANNUAL GROWTH RATE
Europe	$ 10,775	$ 12,040	11.7%	5.7%
United States	$ 6,572	$ 8,723	32.7%	15.2%
Canada	$ 729	$ 1,086	49.0%	22.0%
Australia/New Zealand	$ 148	$ 516	247.5%	86.4%
Asia ex Japan	$ 45	$ 52	15.7%	7.6%
Japan	$ 7	$ 474	6,689.6%	724.0%
Total	**$ 18,276**	**$ 22,890**	**25.2%**	**11.9%**

Source: 2016 Global Sustainable Investment Review.

intergenerational perspective, which is important to a number of long-term investors. At the same time, the line between impact investing and sustainable investing is also blurring.

While there was no consensus regarding what constitutes "sustainable investing,"[33] **all of the executives interviewed were interested in it and stated that their funds were practicing sustainable investing to various degrees and in different ways**. A significant portion of the ensuing discussion was dedicated to what this meant in practical terms.

The interviewees had examples of using most of the strategies described in Box 4, with a particular interest in ESG integration and corporate engagement and shareholder action. One respondent stated that his entity now managed its portfolio through inclusion rather than exclusion by creating a sustainability case along with the investment case for each decision. Respondents gave a number of reasons for sustainable investing: an increasingly longer-term focus; the desire to support a sustainable real economy; the changing role of the corporation in society; being a "universal owner"[34] and taking a system-level view; the rising voice of millennials who want their money managed for purpose, as well as for profit; and the SDGs.

5.2 Long-termism

Long-termism was a major theme and covered a number of related topics. To varying degrees, many investors were aware of, and involved in, some important initiatives focused on getting both companies and investors to take a longer-term view when making and evaluating their investment decisions (see Annex 2 for a selective list of initiatives involving/targeting institutional investors). Examples of these initiatives include CECP's Strategic Investor Initiative, the Coalition for Inclusive Capitalism and its Embankment Project, and FCLTGlobal. Long-termism and sustainable investing were seen as "two sides of the same coin," since all seven strategies described in Box 4 are patient ones, expected to earn returns over time rather than short-term trading profits. Academic studies show that there is a positive relationship between sustainability performance,

[33] *Sustainable investing* is often used as an umbrella term for a variety of investing styles that evaluate companies on the basis of ESG factors, alongside traditional stock-picking metrics.

[34] According to Towers Watson (2011), Sustainable investing – The role of Universal Owners "A Universal Owner is a large asset owner who, as a consequence of its size, owns a slice of the whole economy and market through its portfolios. Universal Owners adapt their actions with the intent of improving long-term performance by benefiting the whole economy and market in a logical but ambitious extension of sustainable investing. They justify these actions on financial grounds." A universal owner cannot diversify away its macro-risk. Its returns are based on the "state of the world." Systemic risks created by such trends as climate change and inequality negatively affect the state of the world and, hence, investment returns.

Box 4. Strategies for sustainable investing

GSIR (Global Sustainable Investment Review) has created a widely accepted taxonomy of seven sustainable investing strategies:

1. **Negative/exclusionary screening (US$15,023 trillion)**: the exclusion from a fund or portfolio of certain sectors, companies, or practices on the basis of specific ESG criteria.
2. **Positive/best-in-class screening (US$1,030 trillion)**: investment in sectors, companies, or projects selected for positive ESG performance relative to industry peers.
3. **Norms-based screening (US$6,210 trillion)**: screening of investments against minimum standards of business practice based on international norms.
4. **ESG integration (US$10,369 trillion)**: investment managers' systematic and explicit inclusion of ESG factors in financial analysis.
5. **Sustainability-themed investing (US$331 billion)**: investment in themes or assets specifically related to sustainability (e.g., clean energy, green technology, or sustainable agriculture).
6. **Impact/community investing (US$248 billion)**: targeted investments, typically made in private markets, aimed at solving social or environmental problems, and including community investing, in which capital is specifically directed to traditionally underserved individuals or communities, as well as financing that is provided to businesses with a clear social or environmental purpose.
7. **Corporate engagement and shareholder action (US$8,365 trillion)**: the use of shareholder power to influence corporate behavior, including through direct corporate engagement (i.e., communicating with senior management and/or boards of companies), filing or co-filing shareholder proposals, and proxy voting that is guided by comprehensive ESG guidelines.

in which the company focuses on its material ESG issues and financial performance, but that it takes 5 to 7 years to obtain the financial benefits from sustainability performance.[35]

5.3 ESG integration

The majority of respondents were practicing ESG integration to some extent, and it was consistently cited as being particularly relevant for mainstreaming sustainable investing. All respondents viewed ESG integration as a way to mitigate downside risk, although some also felt that it was a source of upside opportunities, such as by identifying companies with good or improving ESG performance. The most sophisticated investors had integrated ESG considerations into all their asset classes down to the portfolio manager level, although they noted that this was done differently by asset class.

Many cited lack of high-quality and comparable data on companies' ESG performance as a major barrier to better ESG integration. Noting the proliferation of nongovernmental organizations (NGOs) and initiatives seeking to set standards and frameworks for nonfinancial information (e.g., the Carbon Disclosure Project, the Climate Disclosure Standards Board, the Global Reporting Initiative, the International Integrated Reporting Council, the Sustainability Accounting Standards Board, and the Task Force on Climate-related Financial

[35] Khan, Serafeim, and Yoon (2016) used SASB's industry classification system to create portfolios of companies that were performing well and poorly for the material issues in their industry. The firms with the highest annualized alpha of 4.8% were those performing well on the material issues and poorly on the immaterial issues (versus a 2.2% alpha for those performing poorly on both).

Disclosures)[36] and of ESG data vendors (e.g., MSCI, Oekom, Sustainalytics, and Vigeo Eiris), whose ratings can vary widely for a single company, some called for standards for nonfinancial reporting, such as through the EU Directive on Non-financial Reporting.[37] Ideally, it was felt, all companies should be required to report on their nonfinancial performance according to a set of standards, just as listed companies are required to do for their financial performance. Some felt that AI technologies for ESG measurement, such as those being developed by TruValue Labs,[38] could be a short- or even long-term solution to uneven and uncomparable corporate reporting. Poor corporate reporting was seen as especially problematic in emerging markets, although a few investors said this created opportunities for them in their emerging market portfolios, since they had found ways to make the necessary assessments.

5.4 Engagement and Stewardship

Another strategy critical to the evolution of sustainable investing and long-termism is engagement and stewardship (referred to as *corporate engagement and shareholder action* in the GSIR taxonomy), and many respondents discussed the efforts they were making in this regard. A long-term shareholder wants to ensure that its portfolio companies have sustainable long-term strategies in place, and engagement was seen as a powerful instrument that could contribute to advancing this agenda. Those using passive investment strategies saw engagement as important in improving a company's performance from the point of view of sustainable returns. "Fix rather than sell" is the logic here. For both passive and active investors, engagement could take reactive (dealing with a problem) or proactive (preventing a problem from occurring) forms. Engagement was also seen as a way of ensuring that companies followed through on promised sustainable strategies. Some respondents highlighted the importance of supporting engagement strategies with changes in the fee structures, timeframes, and performance metrics in the contracts between asset owners and asset managers.

5.5 The Role of the Corporation in Society

The trend toward sustainable investing was also associated with changing perceptions about the role of the corporation in society. While all respondents still saw creating value for shareholders as fundamental, beliefs about how this is best done are changing. One respondent said that "stakeholder capitalism has arrived," while another drew a contrast between "Anglo-Saxon capitalism and Rhine capitalism." The basic point of both is that the sustainability of the corporation itself, and its ability to earn returns over the long term, now requires more attention to identifying and balancing various stakeholder interests. The changing role of the corporation includes a change in its relationships with shareholders, from a purely transaction-based relationship in which a stock is bought or sold, to a long-term relationship requiring engagement on both sides. It also requires clarification of the fiduciary duty of the board.

5.6 Intergenerational Equity and Pressure from the Millennials

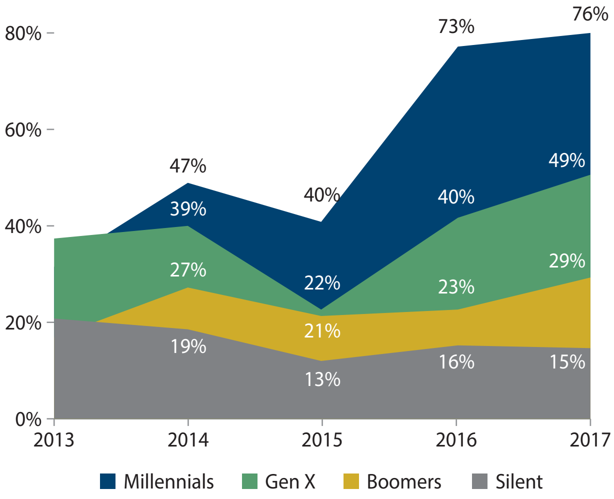
Several respondents pointed out the need for a balance between generations so that returns earned for current generations do not inhibit the returns that can be earned for future ones. A long-term view takes account of the effect of investment decisions on future generations. Most of the

[36] https://www.cdp.net/en; https://www.cdsb.net/; https://www.globalreporting.org/Pages/default.aspx; http://integratedreporting.org/the-iirc-2/; https://www.sasb.org/; https://www.fsb-tcfd.org/.

[37] Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of nonfinancial and diversity information by certain large undertakings and groups. The objective of the Directive is to increase European companies' transparency and performance on environmental and social matters and, therefore, to contribute effectively to long-term economic growth and employment.

[38] https://www.truvaluelabs.com/. One of the authors of this report, Robert Eccles, acts as a senior advisor to to TruValue Labs.

FIGURE **4**: PERCENTAGE OF INVESTORS WHO HAVE REVIEWED THEIR INVESTMENT PORTFOLIO FOR IMPACT



Source: U.S. Trust Annual Survey 2017.

interviewees (particularly pension funds) that have long-tailed liabilities raised this strategic imperative.

In the same vein, several respondents discussed how the growing wealth and voice of millennials is putting pressure on them to create investment products that both earn required returns and contribute to a sustainable world. This pressure will grow as the wealth of the Baby Boomer generation is passed on to its millennial children. This is confirmed by the 2017 U.S. Trust Annual Survey 2017, in which millennials exhibit the highest percentage of investors who have reviewed their investment portfolio for impact (Figure 4).

5.7 The Sustainable Development Goals

There was substantial variation in the extent to which the 17 SDGs were influencing investment strategies, although all respondents were familiar with them.[39] Some investors were using them as the basis for sustainability-themed strategies, such as climate and low carbon, water scarcity, and food security. Those doing so pointed out that 17 is a large number, so they had created themes by combining the relevant elements of different SDGs. Others expressed skepticism about whether the SDGs lent themselves to creating or influencing investment strategies. Despite this variation, there was a general consensus that the SDGs were a useful organizing framework for thinking about collaboration between the public and private (both companies and investors) sectors.

An issue closely related to the SDGs is measuring impact. This is different from measuring companies' ESG performance, discussed below. For ESG metrics, the company is the unit of analysis. In measuring impact, the community or the world—the focus of the SDGs—is the unit of analysis, since the measure is about a positive or negative externality being created by the company. Impact measurement was seen as a "frontier issue," with most investors feeling that they were at best in the early stages of being able to do this. Several cited the work being done by Dutch pension funds APG and PGGM.[40]

5.8 The Blurring of the Line between Impact Investing and Sustainable Investing

A number of respondents referred to the evolution of impact investing and its role as a catalyst of sustainable investing. Although "impact investing" is currently defined as just one strategy in the broad category of sustainable investing, the line of meaning between these two terms is starting to blur. One factor driving this is the SDGs whose emphasis is on impact—positive and negative externalities being created in the world by companies and those who invest in them. BlackRock has suggested a continuum that goes from the negative screening of traditional socially responsible investing, to ESG integration that takes account of a company's performance on ESG factors, to impact investing,

[39] https://sustainabledevelopment.un.org/sdgs.

[40] In May 2017, the big Dutch pension funds APG and PGGM published "Sustainable Development Investments (SDIs): Taxonomies," which identifies investable sub-goals for each of the SDGs except 16 (Peace and Just Strong Institutions) and 17 (Partnerships for the Goals).

thereby focusing on those companies whose products and services target measurable social or environmental impact.[41]

As Box 4 **shows, impact/community investing is the smallest of the seven "Strategies for Sustainable Investing." However, global assets in impact investing showed the highest growth rate between 2014 and 2016.**[42] Even so, there was no clear consensus on the meaning of impact investing. If anything, the term "impact investing" is being used in an increasingly broad sense, extending into private equity and the public markets. For example, Lumberg (2017) essentially equates impact investing with socially responsible investing.[43] New financial instruments are being developed to support impact investing, such as "Pay for Success" Social Impact Bonds, pioneered by Social Finance.[44] Impact funds have been launched by major private equity firms, such as TPG's US$2 billion "The Rise Fund," which is "committed to achieving social and environmental impact alongside competitive financial returns."[45] In the public markets, mainstream investors are starting to create impact products, such as BlackRock's US$60 million "Impact U.S. Equity Fund," which "accounts for the positive and negative outcomes within a benchmark aware portfolio."[46] Even activist hedge funds, such as JANA Partners,[47] are moving into impact investing.

What all of these different instruments and asset classes have in common is the need to measure the social and environmental impact of their investments, not simply the ESG performance of their portfolio companies. This is especially challenging for public company investments, since investors have to rely on data that are available in the public domain, either reported by the company or from other sources. To date, the focus of impact measurement has been in the private markets, such as IRIS[48] ("the catalog of generally-accepted performance metrics used by a majority of impact investors") developed by the Global Impact Investing Network (GIIN).[49] This is not the case for the stock or bond of a public company, which can be encouraged to report data on impact but cannot be forced to do so. Even if companies are interested in reporting impact data, little guidance exists on how to do so.

As the impact investing industry evolves and gains momentum and importance within a broader stream of sustainable investing, it will be important to develop a set of principles defining what actually constitutes impact investing, along with robust methodologies for impact measurement and reporting.

5.9 Barriers to Sustainable Investing

Several barriers to sustainable investing were cited: continuing concerns that sustainable investing means inherently lower returns and promotes short-termism, the constraints imposed by the existing definition of fiduciary duty, and a lack of the necessary market "infrastructure" to mainstream sustainable investing. Only a few of the investors interviewed expressed a concern themselves regarding underperformance from sustainable investing. Indeed, most viewed such a concern as a false perception, with sufficient evidence to now disprove it, including several studies they had done themselves. A 2016 State Street global survey of 582 institutional investors found that 48 percent of

[41] https://www.blackrock.com/investing/investment-ideas/sustainable-investing.

[42] https://www.ussif.org/files/Publications/GSIA_Review2016.pdf, Table 3.

[43] https://www.investopedia.com/news/history-impact-investing/. Impact investing in its narrow sense has classically been associated with foundations, development finance institutions, and wealthy individuals making relatively small investments in the private markets. At times, the line also blurs between philanthropy and impact investing, especially when impact investing is seen as sacrificing at least some return.

[44] http://socialfinance.org/.

[45] http://therisefund.com/.

[46] https://www.blackrock.com/investing/products/279570/blackrock-impact-us-equity-fund-class-a.

[47] "Jana Impact Capital Fund," announced in January 2018, will "invest in companies the hedge fund believes are good bets but could do better for the world https://www.wsj.com/articles/wall-street-fighters-do-goodersand-stingconverge-in-new-jana-fund-1515358929. Eccles is on the Advisory Board of this fund.

[48] https://iris.thegiin.org/, accessed July 2018.

[49] https://thegiin.org/, accessed July 2018.

respondents thought that returns were not sacrificed in sustainable investing, although 35 percent still felt that they were, and 17 percent did not know.[50]

Inputs reinforcing short-termism were quarterly conference calls, the media focus on short-term movements in stock prices, and the relatively short-term mandates asset owners give to asset managers, even though they have long-term investment horizons for the reasons described above. The State Street survey found that although 62 percent of asset owners have investment time horizons of 5 years or more, 79 percent of them evaluate their external managers on time frames of 5 years or less. Even more dramatically, 70 percent said they evaluated the performance of portfolio managers annually.[51]

The issue of fiduciary duty is a complex one, based heavily on laws and regulations in each country. It is also not clear just how big a problem the definition of fiduciary duty is. The State Street survey found that only 10 percent of respondents felt that regulations or a general counsel's interpretation of fiduciary duty represented a barrier to sustainable investing. In this context, several respondents cited the work of the Principles for Responsible Investment I on "Fiduciary Duty in the 21st Century."[52] One respondent felt that regulators should establish a uniform definition of fiduciary duty, emphasizing that the duty is to both beneficiaries and society.

There were also many references to creating the necessary market "infrastructure" of nonfinancial performance metrics and pricing mechanisms for positive and negative externalities, which would adjust capital allocation to reward companies that are creating long-term shareholder value, but not at the expense of society. The Global Reporting Initiative and the Sustainability Accounting Standards Board were cited as leading the work to create ESG measurement and reporting standards at the company level. The World Benchmarking Alliance was cited as having the potential to contribute to standardizing impact measurement through benchmarking.

Respondents generally felt that as sustainable investing itself is going mainstream, so should the efforts to introduce market-level adjustments to create a level playing field in this new era. This kind of shift will require consistent leadership and ownership on the part of all key stakeholders (including institutional investors), as well as close coordination between governments/regulators and the private sector.

[50] http://www.statestreet.com/content/dam/statestreet/documents/Articles/The_Investing_Enlightenment.pdf, p.8.

[51] http://www.statestreet.com/content/dam/statestreet/documents/Articles/The_Investing_Enlightenment.pdf, p.23–24.

[52] https://www.unpri.org/fiduciary-duty/fiduciary-duty-in-the-21st-century/244.article. The UN PRI "Fiduciary Duty in the 21st Century" aims to end the debate about whether fiduciary duty is a legitimate barrier to investors' integrating ESG issues into their investment processes.

6

Infrastructure Investing

Institutional investors expressed considerable interest in infrastructure investing. In the post-2008 environment, the traditional bank-centric intermediation (transforming savings into long-term investments) is shifting toward a system in which institutional investors play an increasingly important role in providing long-term capital. Many of the interviewees said they were trying to figure out how to become successful players in this space. From the perspective of long-term investors, infrastructure is a very attractive investment—especially in sectors such as energy and telecommunications,[53] where projects can generate sufficient returns. Such investors see investment in infrastructure as a hedge against inflation, one that provides a stable source of cash flow, can act as a potential buffer to returns when the next financial crisis strikes, and presents an attractive alternative to government bonds and other fixed-income securities that are increasingly unable to generate cash flows over an extended period.

For the broader economic outlook, the potential benefits of institutional investor involvement in infrastructure financing are significant, providing a countercyclical, stabilizing effect and helping to offset short-termism and promote sustained economic growth (Box 5). Those who invest in infrastructure typically have a long-term investment horizon, driven by the long-term nature of their liability structure (e.g., life insurers or pension funds). The average defined benefit pension fund liability profile has a duration of 12–15 years, while a typical life insurer has a duration of 7–10 years.[54]

However, most of the investors who were interested in infrastructure investing said that their allocation to this asset class was below what they would like it to be. Investing in infrastructure is difficult. Many argued that infrastructure investing is not sufficiently well defined as an asset class. There was also a sentiment that, just as institutional investors are expected to increase their involvement and play a bigger role in infrastructure financing, national governments also need to step up their participation, particularly in the sectors that are seen as public goods. From the government perspective, crowding in the private sector requires creating an enabling business environment through macroeconomic stability, transparent and predictable regulatory frameworks, and a reorientation of public investment from commercially inviable projects to viable ones. A project pipeline and robust public-private partnership frameworks are also needed.

[53] UN Report of the Inter-agency Task Force on Financing for Development states that, for example, investments in ecosystems or water and sanitation will largely be publicly financed because of the public good nature of the sector, while energy and telecommunications are much likelier to be funded through private finance.

[54] Swiss Re publication (2015). "Infrastructure Investing. It matter.s.

Box 5. Investing in sustainable infrastructure to build a sustainable world

Fresh investment in sustainable infrastructure is essential if the world is to face the pressures of the next decade and adapt to the emerging mega-trends discussed in Section III. By 2050, the planet will be hotter by 2 degrees Celsius;[a] agricultural land will have been degraded by 50 percent because of soil erosion and desertification;[b] the world's population will have increased by 29 percent or 2.2 billion;[c] and 68 percent of the world population will live in cities, against 55 percent now.[d] Sustainable infrastructure will be needed to satisfy the needs for more food (+40 percent),[e] more water (+55 percent),[f] more electricity production (+80 percent),[g] and more mobility (1 billion additional cars).[h] Investing in infrastructure could also lead to significant gains for the world economy in the long run. There would be positive effects from construction and power generation, and—over time—second-round effects on broader economic activity due to greater productivity, lower costs, and improved connectivity.

Infrastructure is already a major part of investment expenditure in the economy, but it must nearly double to close the existing gap. Infrastructure consists of "hard infrastructure" (transport, electric power, water and sanitation, and ICT), social infrastructure (hospitals, schools, prisons, etc.), extractives (oil, gas, mining), and real estate. Between 1992 and 2013, the world spent on average 3.5 percent of GDP annually on hard infrastructure, with Asian countries leading and Western Europe and Latin America having the most modest investments. Worldwide spending on hard infrastructure is currently about US$2.5 trillion per year, and annual spending on social infrastructure and extractives is about US$1.2 trillion each. Spending on real estate is equal to US$4.7 trillion. A 2016 study by the McKinsey Global Institute estimates that in 2016–30, US$3.3 trillion per year will be needed in infrastructure investment. Other estimates place future infrastructure financing needs even higher, in the range of US$70–90 trillion through 2030.[i]

These needs cannot be met by the public sector or by commercial banks alone. Many governments have limited fiscal space to finance infrastructure through taxation and borrowing. Commercial banks find it increasingly difficult to take the long-term exposure needed in infrastructure finance. Syndicated bank loans used to be the financing norm for infrastructure projects, but with the new Basel III regulations and the EU Solvency II, which

(*continued on next page*)

6.1 Opportunities Presented by Investments in Infrastructure

The world has substantial needs for investment in both new (greenfield) and existing (brownfield) infrastructure, in both developed and emerging markets. The public investment cornerstones of an agenda for sustainable infrastructure are the SDGs and COP22. Infrastructure is deeply embedded in many of the SDGs (Table 1), although, as discussed above, there is a very significant gap between the funding that is needed and what is currently available through private and government financing. Some notable investment opportunities cited by a number of respondents include technology transfers across geographies—for example, renewable energy, and connectivity infrastructure in emerging markets.

6.2 Challenges Related to Investing in Infrastructure

Institutional investors have investment requirements. They need stable cash flow, moderately low risk, acceptable rate of return, and assets that hold a credit rating (investment grade assets). Many available infrastructure projects do not meet these requirements.

Box 5. Investing in sustainable infrastructure to build a sustainable world *(continued)*

favor shorter-tenor loans for infrastructure, banks must adhere to stricter regulations. Another complication for bank-driven investment is that rating agencies' "sovereign ceilings" limit individual infrastructure project ratings to that of the country in which the infrastructure is located, exaggerating the risk profile of profitable investments (Collier et al., 2014). Hence, realizing infrastructure investment at scale requires the mobilization of pension funds and other institutional investors that are not subject to the same stringent regulatory and prudential provisions as banks.

This means that infrastructure needs long-term, institutional investors, and that by investing in infrastructure institutional investors need to have the opportunity to directly influence outcomes for society in a way that reduces their risk. To succeed, they will need adequate planning, execution, and a strong macroeconomic framework from the countries receiving the investment. On the other hand, by enforcing best (sustainable) practices in their investments, they can create powerful incentives for strengthening the regulatory and business environment at the national, regional, and global levels.

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[a] Adrian E. Raftery, Alec Zimmer, Dargan M. W. Frierson, Richard Startz, and Peiran Liu "Less than 2°C warming by 2100 unlikely" *Nature Climate Change* volume7, pages 637–641 (2017).

[b] Donald Sparks, 2018 Advances in Agronomy, Elsevier – London.

[c] United Nations DESA/Population Division https://www.un.org/development/desa/en/news/population/world-population-prospects-2017.

[d] https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html.

[e] Information Resources Management Association (2018) Climate Change and Environmental Concerns, breakthroughs in research and practice. IGI Global.

[f] OECD (2012), OECD Environmental Outlook to 2050, OECD Publishing.

[g] Zenya Liu (2015) Global Energy Interconnections, Elsevier.

[h] ITF Transport Outlook, 2017.

[i] McKinsey. (2016). Bridging Global Infrastructure Gaps. New York: McKinsey Global Institute.

There are three main sets of reasons cited for the gap between the desire to invest and the ability to invest, and the comfort in doing so. First, investing in infrastructure entails high transaction costs, uncertainty, and additional risk. Second, the pipeline of bankable projects is low, with the further aggravating fact that in some cases public investment crowds out the private sector. Third, there are constraints from existing financial and prudential regulations. Finally, additional complications exist for investing in emerging markets, due to the higher business, political, and currency risks, insuffisient information about existing opportunities, and and the lack of institutional capacity.

High transation costs are associated with the specificities inherent in individual infrastructure projects, a lack of standardization, and high coordination costs.

- **Every infrastructure investment is unique, with highly technical and bespoke projects and financing structures.** As a result, infrastructure investment involves complex legal and financial arrangements, leading to lengthy negotiation processes and costly project preparations (e.g., responding to a request for proposals, due diligence, and negotiating the contract). Investors reluctantly absorb project preparation costs,

TABLE 1: EXAMPLES OF SDG GOALS AND TARGETS RELATED TO INFRASTRUCTURE

	GOALS AND TARGETS	INDICATORS
2 ZERO HUNGER	**Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture**	
	2.a Increase investment, including through enhanced international cooperation, in rural infrastructure [...].	2.a.1 The agriculture orientation index for government expenditures 2.a.2 Total official flows (official development assistance plus other official flows) to the agriculture sector
4 QUALITY EDUCATION	**Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.**	
	4.a Build and upgrade education facilities that are child-, disability- and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all	4.a.1 Proportion of schools with access to (a) electricity; (b) the Internet for pedagogical purposes; (c) computers for pedagogical purposes; and (d) adapted infrastructure and materials for students with disabilities; [...]
5 GENDER EQUALITY	**Goal 5. Achieve gender equality and empower all women and girls**	
	5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies [...]	5.4.1 Proportion of time spent on unpaid domestic and care work, by sex, age and location
6 CLEAN WATER AND SANITATION	**Goal 6. Ensure availability and sustainable management of water and sanitation for all**	
	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	6.3.1 Proportion of wastewater safely treated 6.3.2 Proportion of bodies of water with good ambient water quality
	6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	6.4.1 Change in water-use efficiency over time 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources
7 AFFORDABLE AND CLEAN ENERGY	**Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all**	
	7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	7.a.1 Mobilized amount of United States dollars per year starting in 2020 accountable towards the US$100 billion commitment

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TABLE 1: EXAMPLES OF SDG GOALS AND TARGETS RELATED TO INFRASTRUCTURE *(continued)*

	GOALS AND TARGETS	INDICATORS
	7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support	7.b.1 Investments in energy efficiency as a percentage of GDP and the amount of foreign direct investment in financial transfer for infrastructure and technology to sustainable development services
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	**Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation**	
	9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	9.1.1 Proportion of the rural population who live within 2 km of an all-season road 9.1.2 Passenger and freight volumes, by mode of transport
	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	9.4.1 CO_2 emission per unit of value added 9.a.1 Total official international support (official development assistance plus other official flows) to infrastructure
	9.a Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States	

Source: Developed by the authors based on the UN resolution. See http://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf.

because the inherent risk of failure in the project preparation phase—estimated to be close to 50 percent in public-private partnerships (Kortekaas, 2015)—is high.

- **The lack of standardized documentation, benchmarking, and performance data for the sector contributes to these transaction costs,** and to the overall market "ambiguity" on how to treat investments in infrastructure. (There was significant disagreement among respondents on whether infrastructure can be considered an asset class; it was often contrasted with real estate, which was considered to be a better developed asset class.)
- **Also contributing to transaction costs**, and creating uncertainty about whether the investment can actually be made, is that many projects are politically sensitive, require inputs from many different stakeholders, and often require careful coordination between the public and private sectors.

A lack of bankable projects is also viewed as a binding constraint:

- **There is a seriously insufficient pipeline of deals of sufficient size and quality.** Size is important because large investors need to invest in large increments. Detailed feasibility studies and robust business cases are important to attract investors, who often require high-quality information on which to base their investment decisions. It was noted that development banks and development partners had formed several infrastructure project preparation facilities to address this problem; however, these facilities have limited capacity because of funding shortfalls.

- **In some cases, state actors were seen as pricing the private market out of transactions.** It was felt that public intervention should focus on developing adequate instruments to mobilize the private sector in a transparent and competitive manner to address externalities, information asymmetries, and/or institutional and market failures. Public intervention is also justified for projects with high development impact, but for which a commercial solution can be realized only over the medium to long term. But in some cases—even when the structuring is in the short to medium term and is fully commercially viable—public investments crowd out private investment.

A number of respondents also felt that existing financial and prudential regulations failed to accommodate the needs of infrastructure investing by institutional investors. They ignore the particularly long-term nature of the liabilities of certain institutional investors (e.g., pension funds, which need the capacity to sustain their positions for long durations) and the needs of infrastructure financing, and they significantly limit the possible exposure to certain types of investments and asset classes.

6.3 Infrastructure Investments in Emerging Markets

Many of the respondents viewed infrastructure investments in emerging markets as a key source of future opportunities.[55] There was a general consensus that most future economic growth will come from the developing economies, and significant infrastructure investments will be required to sustain its pace. There was also a general sentiment that infrastructure spending is gradually shifting from "West to East." While infrastructure spending in emerging markets was still often seen as largely government-driven, there was a consensus that private participation has increased significantly in recent years, with the rate of increase often linked to government reforms promoting a stable business and regulatory environment to encourage foreign direct investment.

At the same time, infrastructure investing in emerging markets was regarded as especially problematic, with regulatory and political uncertainty and a lack of institutional capacity (which can vary even within a single institution) resulting in significant difficulties in sourcing projects and negotiating their funding with sponsors. Respondents felt that transparency and predictability in the legal and institutional framework were key to estimating risks and returns on investment, while they saw political and business risks—including corruption, regime change, breach of contract, and the inability to enforce policy changes—and foreign exchange/currency risk as the most significant risks for infrastructure investment in emerging markets.[56]

A number of respondents shared their own experiences of investing in emerging markets (primarily in infrastructure).

- Some of the institutional investors that were interested in investing in emerging markets stated that they lacked information about opportunities, as well as the necessary in-house skills and time to gather it. A few referred to unsuccessful past experiences, but most were still interested in these types of investments. Doing so required finding the right partnerships and financial solutions to mitigate risks. A few of the respondents were successfully working with IFC's Managed Co-lending Portfolio Program.[57]

[55] UBS Longer Term Investments; Emerging market infrastructure – update (2017), expects that growth in infrastructure investments will outpace broader GDP growth in emerging markets over the next decade. It forecasts emerging markets' infrastructure spending to increase from US$3 trillion in 2015 to around US$5.5 trillion by 2025, bringing their share of total global spending on the sector to around two-thirds, up from one-half currently.

[56] Political risk has been identified as the second most important constraint to FDI in developing countries (MIGA, 2014) with adverse regulatory changes and breaches of contract being the top concerns to investors.

[57] This program provides investors a platform for participation in a diversified global portfolio of emerging market projects

- Some investors had successfully developed the in-house capacity to directly engage with emerging markets, cutting out intermediaries. Key success factors included finding reliable local partners (including local institutional investors); establishing "relationships" with government authorities; performing thorough up-front due diligence; and using risk-mitigating mechanisms, including those focused on currency and political risks.
- Respondents almost universally suggested that international development institutions, including the WBG, could and should play a greater role in facilitating access to opportunities for investing in emerging markets' infrastructure. These institutions could share knowledge, develop innovative financial instruments, provide guarantees to mitigate political and business risks, and promote policy reforms to improve the business climate in emerging markets.

6.4 Facilitating Investments in Infrastructure

Respondents made a number of suggestions for addressing the challenges to infrastructure investing, most of which involved some type of collaboration between the public and private sectors. One suggestion was to develop a Global Infrastructure Information Platform that would make it easier for sponsors to advertise their projects and for investors to know about them.[58] Such a platform could also be the basis for sharing knowledge and establishing best practices.[59] Another suggestion focused on fostering the complementarities of the different sources of capital, such as combining concessional and nonconcessional financing, and identifying support measures to improve accessibility for infrastructure financing (e.g., through credit enhancement, guarantee programs, and other instruments provided by governments and MDBs) to cover risks that the private sector is not willing to cover.

Many executives also noted that it would be good if some type of framework were developed that standardized contracts, reporting, and performance benchmarking. This includes, among other things, the measurement and reporting of externalities to help further ESG integration. It was hoped that this would ultimately lead to the development of a standardized and harmonized infrastructure capital market. Related suggestions included the need to maintain stable policy, regulatory, and tax regimes for the infrastructure asset class; the implementation of tax policies that encourage investment in infrastructure; and the development of criteria for what is truly "sustainable infrastructure" to prevent "infrastructure green-washing."

In the legislative and policy areas, there were repeated suggestions to review the unintended consequences of regulatory and tax policies, such as the risk-weighting of infrastructure investments in the Solvency II standard formula and other regulatory charges that disincentivize institutional investment.

Finally, to address the capacity problem, it was recommended that a group of institutional investors work with selected multilateral organizations and possibly some governments to provide education, tools, and processes that those in emerging markets could use. Recognizing that the extra complexity of infrastructure investing in emerging markets will be a reality for the foreseeable future, many emphasized the importance of finding local partners who know how to navigate and manage the local political environment.

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across multiple sectors. It leverages IFC's origination capacity and deep market knowledge to source opportunities for third-party investors to co-lend alongside IFC. All investments are commercially structured and designed to address development needs.

[58] The European Investment Project Portal (EIPP) represents a regional attempt to create such a platform. The EIPP (https://ec.europa.eu/eipp/desktop/en/index.html) is a multilingual online platform providing greater visibility and transparency about EU investment projects and opportunities. The EIPP is a key instrument of the Investment Plan for Europe, designed to support the financing of investment projects in all sectors of the economy across the EU.

[59] The Global Infrastructure Hub established by the G20 initiative aims to address some of these objectives. It works with public and private sectors globally to increase the flow and quality of infrastructure projects around the world. It shares data, knowledge, and leading practices, and helps the public and private sectors work more closely to deliver crucial public infrastructure projects.

7

Expectations for Dialogue with the Public Sector

Senior investment executives agreed that the public sector has an important role to play in facilitating the spread of sustainable investing in its many forms. They also noted that well-functioning capital markets and prosperity need to be anchored in healthy economic fundamentals, which obviously depends on both the public and private sectors.

Thus, admittedly to varying degrees, they concurred that the proposed engagement platform, a high-levl Investor Forum to be held periodically on the margins of G20 Leaders Summits, would help bridge the gap between public and private actors, at the highest level. Because nothing of that scope has ever been done before and because, as many noted, the public and private sectors "speak different languages," this was seen as a good opportunity to develop a shared world view on how to create a sustainable financial system for financing a sustainable economy. They saw the Forum as the opportunity to start a dialogue that could be maintained in various ways, and they hoped that suggestions for how to do so would be one output of the Forum. Several said that it was important for government representatives attending the Forum to really listen to the private sector, and to hear what it needed from the public sector to advance sustainable investing—including for infrastructure.

These executives emphasized that this "grand vision" needed to be tempered by practical reality; a gathering that featured only lofty rhetoric from both sides would accomplish very little. There was a consensus that the Forum should focus on a few key themes in which actions could be identified. To avoid having nothing happen after the conference—an all-too-frequent phenomenon cited by many—it was suggested that a short policy declaration of intention be published, and ideally followed up within a year on how well these voluntary commitments were being fulfilled.

8

Role of the World Bank Group

The WBG, like other IFIs and MDBs, was seen as having an important role to play in the advancement of sustainable, long-term investing, including investing in infrastructure and emerging markets. In discussing such investments, respondents suggested three crucial functions for the WBG and other IFIs and MDBs: facilitate dialogue with institutional investors; mitigate risks, including political, foreign exchange, and credit risks; and have a catalytic and multiplier role for development and financing. The international governance structure of IFIs and MDBs, their close engagement with member countries on policy frameworks, and their strict due diligence standards for originating new investment projects were seen as key factors that give them a special market niche. There is both an immense need and untapped potential for developing countries to access private capital markets. Respondents said that going forward the WBG's principal orientation should be to provide policy advice, assist in capacity building, mitigate risks to catalyze private investment wherever possible, enable a sustainable cost of funding for borrowers, and achieve the much greater scale of development financing that will be required in the next two decades.

There were also suggestions for a much larger role that the WBG could play, given its prominence as a global multilateral institution. It was generally agreed that the IFIs and MDBs, including the WBG, have a unique position in the global community, with G20 members forming the majority of shareholders in almost all the IFIs and MDBs. At the same time, the G20 does not have universal membership and, unlike treaty-based organizations, it is not legally constituted to deliver on decisions. Thus the G20 needs to work in coordination with the IFIs and its countries' own governance bodies to advance many of its aims. Combining the inner determination and energy of the private sector, the global governance mandate and balance sheet strength of the WBG and other IFIs/MDBs, and the convening power of the G20-like forums could enable the achievement of results that neither side would be capable of individually. Those suggestions match rather closely some of the recommendations of the Eminent Persons Group on Global Financial Governance, mandated by G20 Finance Ministers and Central Bank Governors.

In addition, respondents offered a number of examples in which the WBG's collaboration with other similar organizations would help to significantly amplify impacts. For example, the WBG could collaborate with the OECD to establish standard definitions of fiduciary duty and with the International Organization of Securities Comissions to develop standards and reporting requirements for nonfinancial information by listed companies. It could work with the Financial Stability Board on solvency and prudential requirements. Finally, it could support the Task Force for Climate-Related Financial Disclosures on the implementation of its recommendations, using that framework as a pilot for other types of nonfinancial reporting.

9

Conclusion

The interviews summarized in this report were conducted to stimulate and provide structure to the Investor Forum discussions, which will explore areas of potential collaboration between global institutional investors, governments, and regulatory institutions for increasing the flow of sustainable, long-term investments where they are needed most to support sustainable economic growth. A key finding from the interviews is the significant degree of consensus across global investors on the principal concerns, opportunities, and actions needed. Given the geographic diversity, number, and level of seniority of the interviewed executives, it is reasonable to assume that their collective views are a good approximation of views that are widely held by the global investment community.

Interviewees agreed that the advancement of sustainable, long-term investing, and investing in infrastructure, are important areas of interest and opportunity that can be enabled by collective and coordinated action of the global investment community, multilateral institutions, and governments, through channels like the G20. They also identified a set of high-level challenges, summarized below, that need to be addressed under each of these themes to achieve measurable and sustained progress, and that could be discussed at the Forum and placed at the center of subsequent efforts.

Sustainable, long-term investing

- Lack of a common definition of sustainable and impact investing, as well as the need for consistent product labeling and taxonomy;
- Long-standing lack of uniformity on how the concept of fiduciary duty is defined and applied by regulators;
- Lack of high-quality, harmonized ESG data and performance benchmarks;
- Lack of reporting and measurement frameworks to price long-term value creation;
- Excessive short-term-oriented contracts and fee structures between asset owners and asset managers that are incentivizing suboptimal global allocations of investments;
- Post-2008 financial and prudential regulations blocking capital allocation to certain types of assets and investments; and
- Inadequate pricing of externalities and tax regimes that favor short-termism.

Infrastructure investing

- Insufficient information-sharing and inadequate access to information about existing opportunities;
- Transaction-intensive nature of infrastructure investments due to project uniqueness and insufficient standardization;
- Lack of a pipeline of projects of sufficient size;

- Political, foreign exchange, and credit risks in emerging markets; and
- Insufficient capacity of governments to work with institutional investors, especially in emerging markets.

While definitive answers to these challenges will not emerge from the Forum, given the level and commitment of those attending, real progress can be made. This report, along with the report summarizing outcomes of the Forum, will be placed in the public domain. Its readers will be encouraged to provide input and use it for reference and future actions, in line with the Forum's objective to act as a catalyst for a much-needed public/private sector collaboration to shape the capital markets to help support the development of a sustainable society.

References

Borio, C., and A. Zabai (2016). *Unconventional Monetary Policies: A Re-appraisal.* Working paper no. 570. Basel, Switzerland: Bank for International Settlements. Accessed July 13, 2018. https://www.bis.org/publ/work570.pdf.

Brookings and Yale School of Management (2018). "Charting the financial crisis: US Strategies and Outcomes." https://www.brookings.edu/wp-content/uploads/2018/08/2018–09–10–10am-FINAL-Crisis-deck-00–85.pdf.

Carney, M. (2015). "Breaking the Tragedy of the Horizon – Climate Change and Financial Stability." Speech at Lloyd's of London, September 29.

Collier P., J. Leape, R. Manning, C. Mayer, and S. Warden (2014). Private investment in Infrastructure. A report presented at OECD-AfDB Seminar of Addressing Policy Impediments to Private Sector in African Infrastructure.

Danielsson J., M. Valenzuela, and I. Zer (forthcoming). Learning from history: Volatility and financial crises. *Review of Financial Studies*.

Dimson E., O. KarakaĐ, and X. Li (2015). Active Ownership. *Review of Financial Studies* 28 (12): 3225–3268.

Financial Stability, Financial Services and Capital Markets Union (2018a). Final Report of the High-Level Expert Group on Sustainable Finance.

Focusing Capital on the Long Term (2018). Summary Report of Summit 2018, February.

Grechyna, D. (2016) On the determinants of political polarization. *Economics Letters* 144 (7):10–14. Available at https://www.sciencedirect.com/science/article/pii/S0165176516301288

Khan, M., G. Serafeim, and A. Yoon (2016) Corporate Sustainability: First Evidence on Materiality. *The Accounting Review* 91 (6): 1697–1724.

Kortekaas, B. (2015). Infrastructure Finance in the Developing World: Infrastructure Pipeline and Need for Robust Project Preparation. The Intergovernmental Group of Twenty four and Global Green Growth Institute Working Paper Series.

McKay, A., and R. Reis (2016). The Role of Automatic Stabilizers in the U.S. Business Cycle. *Econometrica* 84, January:141–194.

UN General Assembly (2015). RES/70/1, Transforming our World: the 2030 Agenda for Sustainable Development. Adopted on 25 September 2015.

Annex 1. Summary of Interviewed Institutions

#	TITLE	TYPE	COUNTRY
1	Alecta	Pension Fund	Sweden
2	Allianz SE	Insurance	Germany
3	Amundi Asset Management	Asset Manager	France
4	APG	Asset Manager	Netherlands
5	Australian Superannuation Fund (Australian Super)	Pension Fund	Australia
6	Aviva	Insurance	U.K.
7	AXA Investment Managers	Insurance/Asset Manager	France
8	BlackRock	Asset Manager	U.S.A.
9	CDPQ	Pension and Insurance Fund	Canada
10	CalPERS	Pension Fund	U.S.A.
11	CalSTRS	Pension Fund	U.S.A.
12	CPPIB	Pension Fund	Canada
13	ERAFP	Pension Fund	France
14	F.B. Heron Foundation	Endowments	U.S.A.
15	FRR	Pension Reserve Fund	France
16	Global Infrastructure Partners	Asset Manager	U.S.A.
17	GEPF	Pension fund	South Africa
18	GPIF	Pension Fund	Japan
19	Hong Kong Monetary Authority	Reserves Fund	Hong Kong
20	Macquarie Group	Asset Manager	Australia
21	New York State Common Retirement Fund (NYS Common)	Pension Fund	U.S.A.
22	New Zealand Super	Pension Fund	New Zealand

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#	TITLE	TYPE	COUNTRY
23	Ontario Teacher's Pension Plan	Pension Fund	Canada
24	Prudential	Insurance/Asset Manager	U.K.
25	Public Investment Fund of the Government of Saudi Arabia	Sovereign Wealth Fund	Saudi Arabia
26	State Street Corporation	Asset Manager	U.S.A.
27	PGGM	Pension fund	Netherlands
28	Swiss Re	Insurance	Switzerland
29	AP 2	Pension Fund	Sweden
30	AP 4	Pension Fund	Sweden
31	The Vanguard Group	Asset Manager	U.S.A.
32	UBS Asset Management	Asset Manager	Switzerland
33	UNJSPF	Pension Fund	U.N.
34	USS	Pension Fund	U.K.

Annex 2. Selective List of Initiatives Involving and/or Targeting Institutional Investors

A4S – THE PRINCE'S ACCOUNTING FOR SUSTAINABILITY PROJECT – HTTPS://WWW.ACCOUNTINGFORSUSTAINABILITY.ORG/

The Prince's Accounting for Sustainability Project was established by HRH The Prince of Wales in 2004 "to help ensure that we are not battling to meet 21st century challenges with, at best, 20th century decision making and reporting systems". A4S aims to inspire action by finance leaders to drive a fundamental shift towards resilient business models and a sustainable economy. To do this, A4S has three core aims that underpin everything they do: (i) Inspire finance leaders to adopt sustainable and resilient business models, (ii) Transform financial decision making to enable an integrated approach, reflective of the opportunities and risks posed by environmental and social issues, (iii) Scale up action across the global finance and accounting community.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
C-suite and general	Multi-stakeholder

NOTEWORTHY ACTIVITIES

- A4S provides a unique space for inspiration and action. A4S's work is led by A4S Network Members - engaging cutting edge organizations and finance leaders for practical action. A4S has a truly global network where its members can share from best practice, peer support and collaboration. Their CFO Leadership Network operates in 190 countries, and the Accounting Bodies Network (ABN) represents two thirds of the world's accountants. A4S and Network members have a series of ongoing projects which aim to inspire action and transform decision making. Their projects are split into four main themes: (i) Lead the way (Developing a strategic response to macro with sustainability trends): Finance Culture, Managing Future Uncertainty, Incentivizing Action, Engaging the Board and Senior Management; (ii) Measure what matters (Developing measurement and valuation tools): Natural and Social Capital Accounting, Social and Human Capital Accounting; (iii) Transform your decisions (Integrating material sustainability factors into decision making): Strategic Planning, Budgeting and Forecasting, Integrated Management Reporting, Capex; (iv) Access finance (Engaging with finance providers on the drivers of sustainable value): Enhancing Investor Engagement, Debt Finance. A4S hosts implementation workshops that are focused on working to implement the tools and guidance developed by the A4S CFO Leadership Network to enable sustainability to be integrated into decision making. They also organized the A4S Summit 2018. A4S works closely with a number of partners, a number of which A4S has founded. It includes the Commonwealth Climate & Law Initiative (CCLI), Natural Capital Coalition, Measure What Matters, International Integrated Reporting Council (IIRC), and Finance for the Future Awards.
- A4S supports the recommendations of the FSB Task Force on climate-related financial disclosures. A4S launched the A4S International Case Competition (A4SICC) in 2018, in partnership with the Rotman School of Management, University of Toronto (sponsored by Brookfield Asset Management, CPA Canada and Ontario Teachers' Pension Plan).

CAMBRIDGE INSTITUTE FOR SUSTAINABILITY LEADERSHIP (CISL) – HTTPS://WWW.CISL.CAM.AC.UK

The CISL leverages Cambridge University's research and networks to help business leaders address the critical global challenges of today.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Multi-stakeholder

NOTEWORTHY ACTIVITIES

- The Investment Leaders Group (ILG) is a global network of pension funds, insurers and asset managers committed to advancing the practice of responsible investment. It is a voluntary initiative, driven by its members, facilitated by CISL, and supported by academics in the University of Cambridge.
- The ILG´s vision is an investment chain in which economic, social and environmental sustainability are delivered as an outcome of the investment process as investors go about generating robust, long-term returns.

CECP – HTTP://CECP.CO

CECP is a network of approximately 200 of the world's largest companies that represent US$7 trillion in revenues and US$15 trillion in assets under management. CECP helps companies achieve impact via providing customized connections and networking, counsel and support, benchmarking and trends, and awareness building and recognition.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
C-suite	Business-led

NOTEWORTHY ACTIVITIES

CECP's Strategic Investor Initiative (SII) is creating a forum where CEOs can present long-term plans to long-term investors, and demonstrate the greater sustained earnings power proven to come from longer-term thinking. The Strategic Investor Initiative is developing a new platform for leading companies to develop, convey and deliver their long-term plans to long-term investors.

CERES – HTTP://WWW.CERES.ORG

Ceres is a nonprofit organization that works with investors and companies to build leadership and drive sustainability solutions throughout the economy. Ceres tackles the world's biggest sustainability challenges, including climate change, water scarcity and pollution, and human rights abuses through networks and advocacy.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Multi-stakeholder

NOTEWORTHY ACTIVITIES

- The Investor Network on Climate Risk and Sustainability is comprised of more than 150 institutional investors, collectively managing more than US$24 trillion in assets, that advance leading investment practices, corporate engagement strategies and policy solutions to build an equitable, sustainable global economy and planet.
- Ceres launched the Global Reporting Initiative (GRI), which is now an international standard used by more than 1,800 companies for corporate reporting on environmental, social and economic performance.
- Ceres has served as a model for other climate risk coalitions of investors in Europe in Asia.

CHINA SIF – HTTP://WWW.CHINASIF.ORG/INDEX

China SIF is a non-profit organization that aims to develop a platform in China for investors and other stakeholders to discuss SRI and ESG issues.China SIF invites guest speakers, including professionals from SRI organizations, and representatives from financial market home and abroad, to join online and/or offline discussions about SRI in China. In partnership with industrial leaders, China SIF continuously develops and introduces guidelines, toolkits, books and reports to the Chinese Financial market.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Investor-led

NOTEWORTHY ACTIVITIES

- China SIF facilitates individual members' practice and exploration in the field of green finance, helping members to access cutting-edge knowledge and information, and promoting communication and collaboration.
- Provides opportunities to participate in conferences, forums, workshops and other events, and access to research.
- Provides access to training opportunities and career development information on responsible investment.

CHINA SOCIAL ENTERPRISE AND INVESTMENT FORUM (CSEIF) – HTTP://CSEIF-2018-EN.EVENTDOVE.COM/

The CSEIF Annual Conference, the primary function of the CSEIF, promotes cross-border exchanges, consensus for cooperation, foster international links and exchanges.CSEIF was jointly initiated by a group of 17 Chinese top foundations and venture philanthropy organizations in 2014, with the vision of supporting the development of social enterprises and investment in China.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Multi-stakeholder

NOTEWORTHY ACTIVITIES

CSEIF 2018 Annual Conference is organized by the CSEIF with China Foundation for Poverty Alleviation as CSEIF Rotating Presidency, under the support of UNDP China. The theme of the conference is Poverty Alleviation through Impact Investment.

COALITION FOR INCLUSIVE CAPITALISM – HTTPS://WWW.INC-CAP.COM

The Coalition for Inclusive Capitalism is a not-for-profit organization dedicated to promoting inclusive capitalism. It encourages businesses to make changes and expand their investment and management practices to "regain public trust".

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
C-suite	Multi-stakeholder

NOTEWORTHY ACTIVITIES

- Brings together asset owners, managers and creators of the top global companies at annual flagship conference.
- Develops thought leadership and maintains working group of leading institutional investors, asset managers, business leaders, academics, policy makers and labor representatives.

COALITION FOR INCLUSIVE CAPITALISM – HTTPS://WWW.INC-CAP.COM

The Coalition for Inclusive Capitalism is a not-for-profit organization dedicated to promoting inclusive capitalism. It encourages businesses to make changes and expand their investment and management practices to "regain public trust".

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
C-suite	Multi-stakeholder

NOTEWORTHY ACTIVITIES

- Brings together asset owners, managers and creators of the top global companies at annual flagship conference.
- Develops thought leadership and maintains working group of leading institutional investors, asset managers, business leaders, academics, policy makers and labor representatives.

COUNCIL FOR INSTITUTIONAL INVESTORS (CII) – HTTPS://WWW.CII.ORG

The CII is a nonprofit, nonpartisan association of pension funds, other employee benefit funds, endowments and foundations, with combined assets that exceed US$3.5 trillion. CII's non-voting members include asset management firms with more than US$25 trillion under management. CII promotes effective corporate governance, strong shareowner rights and vibrant, transparent and fair capital markets; it encourages policies that enhance long-term value for U.S. institutional asset owners and their beneficiaries.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Investor-led

NOTEWORTHY ACTIVITIES

Notable activities include various committees that provide CII members with opportunities to get involved and engage with other members on a variety of issues:

- The Shareholder Advocacy Committee. The purpose of this committee is to encourage members to discuss and recommend current and future member initiatives and CII activities that promote effective corporate governance and increase the participation of CII members in advocating good corporate governance.
- The International Governance Committee. The purpose of the committee is to educate members on topical international governance issues and identifies and recommends potential areas for CII involvement in the non-U.S. corporate governance arena. It also works to expand coordination and communication between CII and various international governance organizations.
- The Policies Committee. This committee is comprised of the non-officer members of CII's Board of Directors and reviews, maintains and updates CII policies on corporate governance and other issues. CII corporate governance policies set standards or recommend practices that members believe companies and boards of directors should adopt to promote accountability, independence, integrity, rigor and transparency.

EUROPEAN LONG-TERM INVESTORS (ELTI) ASSOCIATION – HTTP://WWW.ELTIA.EU

The ELTI is the European Association of National Promotional Banks and Institutions (NPBIs) and other Promotional Banks from 19 EU Member States and accession countries based in Brussels. The mission of ELTI is to foster long-term investment and to support the cooperation between EU Institutions and NPBIs.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Investor-led

NOTEWORTHY ACTIVITIES

The Association has no commercial purpose and pursues the following non-profit-making objectives at international level: represent, promote and defend the shared interests of its Members; strengthen cooperation, including at an operational level, between European financial institutions as well as with other Institutions of the European Union (EU) acting as long-term financiers; develop the concept of long-term investment within the economic and financial sector; promote academic research on long-term investments inform the EU and its institutions on the role and potential of the Members as institutions and agencies for long-term financing; strengthen the access of the Members to information on matters related to the EU; exchange information and experiences among Members and with national and international organizations sharing the Association's interest in the promotion of long-term investment.

EUROPEAN SUSTAINABLE INVESTMENT FORUM (EUROSIF) – HTTP://WWW.EUROSIF.ORG

Eurosif is a leading European association for the promotion and advancement of sustainable and responsible investment across Europe, for the benefit of its members. Eurosif Member Affiliates include a range of organizations covering the value chain of the sustainable investment industry, from institutional investors, asset managers to financial services providers, ESG analysis firms, academic institutes and NGOs, together representing assets totalling about €1 trillion.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Investor-led

NOTEWORTHY ACTIVITIES

- Promotion of best practice in SRI on behalf of its members.
- Lobbying for European regulation and legislation that supports the development of SRI.
- Support its members in developing their SRI business.
- Promote the development of, and collaboration between SIFs across Europe.
- Provide research and analysis on the development of, and trends within the SRI market across Europe.
- Raise awareness of, and increase demand for, SRI throughout the European capital markets.

FCLTGLOBAL – HTTPS://WWW.FCLTGLOBAL.ORG

FCLTGlobal is a not-for-profit organization that works to encourage a longer-term focus in business and investment decision-making by developing practical tools and approaches to support long-term behaviors across the investment value chain. The organization was founded by the Canada Pension Plan Investment Board and McKinsey & Company, as well as BlackRock, The Dow Chemical Company, and Tata Sons.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
C-suite and senior staff	Multi-stakeholder

NOTEWORTHY ACTIVITIES

- Conducts research and develops practical recommendations.
- Engages the world's top asset owners, asset managers, and corporations to problem-solve and test capital allocation approaches that create long-term value.
- Develops educational resources and actionable approaches that are available and applicable globally.

GLOBAL IMPACT INVESTING NETWORK (GIIN) – HTTPS://THEGIIN.ORG

The GIIN is a nonprofit organization dedicated to increasing the scale and effectiveness of impact investing around the world. Impact investments are investments made into companies, organizations, and funds with the intention to generate social and environmental impact alongside a financial return.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Investor-led

NOTEWORTHY ACTIVITIES

- The GIIN Investors' Council is a leadership group of active large-scale impact investors.
- GIIN Fund Manager Training Program is an education service for fund managers whose funds invest in sub-Saharan Africa and South Asia.
- ImpactBase is an online global directory of impact investment vehicles.
- Developed the Impact Reporting and Investment Standards (IRIS) are a set of metrics to measure and describe an organization's social, environmental and financial performance.
- The GIIN Initiative for Institutional Impact Investment supports institutional asset owners seeking to enter, or deepen their engagement with, the impact investing market, by providing educational resources, performance research, and a vibrant community of practice.

GLOBAL INFRASTRUCTURE FACILITY (GIF) – HTTPS://WWW.GLOBALINFRAFACILITY.ORG/

The Global Infrastructure Facility is a multi-stakeholder partnership comprised of governments, multilateral development banks, private sector investors, financiers, commercial banks and institutional investors working to eliminate barriers to preparing, structuring and implementing complicated infrastructure projects. Through the diverse expertise of its members, GIF provides support to governments across the entire lifecycle of the project and addresses any outstanding needs given other available resources in order to bring sound infrastructure to the market. The World Bank Group co-chairs GIF's Governing Council which oversees the GIF programming, fund management and policies.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Multi-stakeholder

NOTEWORTHY ACTIVITIES

The GIF Advisory Council offers its members an opportunity to discuss relevant infrastructure finance developments and share expertise and knowledge about various cross-cutting issues that relate to GIF-supported endeavours, and inform GIF engagement. It is comprised of all GIF Advisory Partners—inclusive of institutional investors, commercial banks, development finance institutions, regional development banks and state development banks, and associations and "infrastructure quality" organizations—and is co-chaired by the Managing Director and CFO of the World Bank Group and a GIF Advisory Partner.

IMPACT INVEST SCANDINAVIA – HTTP://WWW.IMPACTINVEST.SE

Founded in 2012, Impact Invest Scandinavia is the first impact investor membership network in Scandinavia. The organization's mission is to promote the growth of social and sustainable enterprises in Scandinavia and around the world by supporting investments in companies that deliver measurable social as well as financial returns. It offers a community of practice to facilitate and support impact investing.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Investor-led

NOTEWORTHY ACTIVITIES

- Learning environment. Members get a peer-to-peer learning environment in the area of social and ecological impact in a Scandinavian context. Impact Invest offers a pipeline of pre-vetted entrepreneurs and businesses that have potential for social and economic returns in all sectors.
- Global network and deals. Connects members and clients to international impact investors and funds for access to learning and to investment opportunities at scale.

INSTITUTIONAL INVESTORS GROUP ON CLIMATE CHANGE (IIGCC) – HTTP://WWW.IIGCC.ORG

The IIGCC is a European network of 155 pension funds and asset managers (including nine of the 10 largest pension funds and asset managers) representing €21 trillion in assets under management. Its mission "is to mobilise capital for the low carbon future by amplifying the investor voice and collaborating with business, policymakers and investors."

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Investor-led

NOTEWORTHY ACTIVITIES

- The IIGCC provides investors with a collaborative platform to encourage public policies, investment practices and corporate behavior that address long-term risks and opportunities associated with climate change.
- The IIGCC operates a number of programmes that commission research, produce reports and engage with various stakeholders.

INTERFAITH CENTER ON CORPORATE RESPONSIBILITY (ICCR) – HTTPS://WWW.ICCR.ORG

The ICCR is a coalition of over 300 global institutional investors that currently represents more thanUS$400 billion in managed assets. The ICCR pioneered the use of shareholder advocacy to press companies on environmental, social, and governance issues. Leveraging their equity ownership in some of the world's largest and most powerful companies, ICCR members regularly engage management to identify and mitigate social and environmental risks resulting from corporate operations and policies.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Investor-led

NOTEWORTHY ACTIVITIES

- Dialogue. In-person meetings or telephone dialogues are the most common way ICCR members conduct their corporate engagements. In some cases, these discussions follow a regular calendar, in others, meetings are requested either by investors or management to address a specific issue or concern.
- Roundtables. Once or twice a year ICCR convenes roundtable discussions bringing together relevant stakeholders to advance a specific industry-wide issue of mutual concern.
- Resolutions/Shareholder Proposals (ballot). Proxy resolutions (or shareholder proposals) are generally used as a last resort when investor concerns aren't adequately addressed by management. Resolutions appear on the company's proxy statement and are voted on by all shareholders at the company's annual shareholder meeting.

INTERNATIONAL CENTRE FOR PENSION MANAGEMENT (ICPM) – HTTPS://ICPMNETWORK.COM/ABOUT-ICPM/

The ICPM is a global, research-based network of pension organizations that stimulate leading-edge thinking and practice about pension design and management. Founded in 2005, ICPM has grown to become a network of 42 world-leading pension delivery organizations.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Investor-led

NOTEWORTHY ACTIVITIES

- The ICPM organizes two Discussion Forums each year that bring together ICPM's Research Partners with leading authorities from academia and policy-making circles to network and build knowledge about critical issues facing the pension system. Related, it has formed a "Climate Change Working Group" which is developing a 10-step practical guide for asset owners to integrate climate change in the investment process.
- The ICPM provides funding for objective and transformative research that supports effective pension and investment management. ICPM interacts with researchers and collaborates with top international pension research institutes, think tanks and like-minded organizations on applicable pension and investment research opportunities.

INTERNATIONAL CORPORATE GOVERNANCE NETWORK (ICGN) – HTTPS://WWW.ICGN.ORG

Established in 1995 as an investor-led organization, ICGN's mission is to promote effective standards of corporate governance and investor stewardship to advance efficient markets and sustainable economies world-wide.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Investor-led

NOTEWORTHY ACTIVITIES

Notable activities include two networks the ICGN operates:

- Global Network of Investor Associations (GNIA). In 2013, the ICGN established the GNIA as an international collaboration of investor-led organizations with a common interest in promoting shareholder rights and responsibilities. The network enhances the capacity of national associations to share governance related priorities beyond local jurisdictions to an international audience thereby contributing to global governance reform efforts. Members are drawn from Australia, Brazil, Canada, Hong Kong, Italy, Malaysia, Netherlands, UK and the USA.
- Global Stewardship Codes Network (GSCN). The GSCN is an informal network that enables members to share information and views on the development and implementation of codes. Participation in the Network is open to all organizations responsible for developing stewardship codes, principles or best practice and/or monitoring their implementation (where this is undertaken).

JAPAN SUSTAINABLE INVESTMENT FORUM (JSIF) – HTTP://WWW.JSIF.JP.NET/ENGLISH

Japan Sustainable Investment Forum (JSIF) is a non-profit organization established in early 2001 to promote socially responsible investing in Japan.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Investor-led

NOTEWORTHY ACTIVITIES

- JSIF offers an interactive space to exchange opinions and learning opportunities for people and institutions interested in SRI
- It also encourages companies to disclose more non-financial information and aims at developing the SRI market in Japan.

MILKEN INSTITUTE – HTTPS://WWW.MILKENINSTITUTE.ORG/

The Milken Institute is an independent economic think tank based in Santa Monica, California. It publishes research and hosts conferences that apply market-based principles and financial innovations to social issues in the US and internationally.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
C-suite	Multi-stakeholder

NOTEWORTHY ACTIVITIES

- Centers. The organization has eight centers that explore the convergence of finance, business, health, philanthropy and policy to advance collaborative solutions that will drive progress.
- Events. Milken Institute runs a flagship event, the Milken Institute Global Conference, as well as roundtables and workshops, and Capitol Hill briefings.
- Research. Milken Institute publishes reports that informs policy with research and data.
- Representing over US$20 trillion in assets under management, the Global Capital Markets Advisory Council a range of investors from pension plans, endowments and foundations, sovereign funds, insurance companies, and single-family offices.CIOs and CEOs from around the world meet to consider the most compelling ways to navigate the changing macroeconomic landscape.

PRINCIPLES FOR RESPONSIBLE INVESTMENT (PRI) – HTTPS://WWW.UNPRI.ORG

The PRI is a network of 1800 investment institutions that work together to put ESG principles into practice and contribute to the debate about the role of the investor in the creation of a sustainable financial system that rewards long-term, responsible investment and benefits the environment and society as a whole.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Investor-led

NOTEWORTHY ACTIVITIES

- The PRI hosts convenings several times each year to discuss regulatory reform initiatives that are relevant to the work of its members.
- It is not a lobbying organization and does not engage directly with policy-makers but will propose any necessary changes to public policy, which signatories can then take forward in a process that may be facilitated by the PRI.

RESPONSIBLE INVESTMENT ASSOCIATION AUSTRALASIA (RIAA) – HTTPS://RESPONSIBLEINVESTMENT.ORG/

RIAA represents responsible, ethical and impact investors across Australia and New Zealand. RIAA has a network of over 220 members who manage more than US$9 trillion in assets globally, including super funds, fund managers, consultants, researchers, brokers, impact investors, property managers, community banks, community trusts, faith-based groups, financial advisers and individuals. RIAA's goal is to see more capital being invested more responsibly; shifting more capital into sustainable assets and enterprises and shaping responsible financial markets to underpin strong investment returns and deliver a healthier economy, society and environment.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Investor-led

NOTEWORTHY ACTIVITIES

- RIAA acts as the member hub of timely and relevant ESG, ethical and impact investing information to strengthen the capacity of the finance and investment industries – through regular events, webinars, conference calls and working groups, as well as industry research.
- It increases the awareness and demand for responsible investments through communications and marketing work, media activity, as well as by operating a certification program and the consumer online tool Responsible Returns.

SUSTAINABLE INSURANCE FORUM (SIF) – HTTPS://WWW.SUSTAINABLEINSURANCEFORUM.ORG

The SIF is a network of insurance supervisors and regulators from around the world who are working together on sustainability challenges facing the insurance sector. It serves as a global platform for knowledge sharing, research and collective action.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
C-suite	Investor-led

NOTEWORTHY ACTIVITIES

Notable activities includes advancing a four-track work programme the SIF is advancing in 2018:

- Climate Risks. The SIF is working with the IAIS to deliver joint outputs and engagement for supervisors interested in addressing climate change risks.
- Supporting TCFD Implementation – Risk Signaling & Scenario Analysis. The SIF will continue to support its members in their efforts to encourage uptake of the recommendations of the FSB TCFD.
- Promoting Sustainable Insurance. The SIF is working with several members to develop a short stock-taking paper and action framework, which will be finalized in H2 2018.
- Capacity Building for Supervisors. Drawing on its research outputs and member expertise, the SIF will work to develop training materials and tools for supervisors to use in their jurisdictions.

THE ASPEN INSTITUTE – HTTPS://WWW.ASPENINSTITUTE.ORG

The Aspen Institute is an educational and policy studies organization based in Washington, DC. Its mission is to foster leadership based on enduring values and to provide a nonpartisan venue for dealing with critical issues.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Multi-stakeholder

NOTEWORTHY ACTIVITIES

- The Aspen Institute Business and Society Program works with business executives and scholars to align business decisions and investments with the long-term health of society—and the planet. Through networks, working groups and focused dialogue, the Program identifies and encourages thought leaders and "intrapreneurs" to challenge conventional ideas about capitalism and markets, to test new measures of business success and to connect classroom theory and business practice.
- The Business and Society Program is most known for the First Movers Fellowship Program, for dialogue on curbing short-termism in business and capital markets, and for new thinking about the purpose of the corporation.

UNITED NATIONS GLOBAL COMPACT (UN GC – HTTPS://WWW.UNGLOBALCOMPACT.ORG

The UN Global Compact is a strategic policy initiative for businesses that are committed to aligning with ten universally accepted principles for human rights, labor, environment and anti-corruption.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Business-led

NOTEWORTHY ACTIVITIES

Notable activities include support services, events, and that the UN GC provides companies to help them:

- Set in motion changes to business operations so that the UN Global Compact and its principles become part of strategy, culture and day-to-day operations.
- Publicly advocate the UN GC and its principles via communications vehicles such as press releases, speeches, etc.
- Communicate with their stakeholders on an annual basis about progress in: implementing the ten principles and efforts to support societal priorities.

US SIF – HTTPS://WWW.USSIF.ORG

The mission of US SIF is to shift investment practices towards sustainability, focusing on long-term investment and the generation of positive social and environmental impacts. US SIF members include investment management and advisory firms, mutual fund companies, asset owners, research firms, financial planners and advisors, broker-dealers, community investing organizations and nonprofit organizations.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Investor-led

NOTEWORTHY ACTIVITIES

Notable activities include a wide range of programs and activities the US SIF engages in to support members and to expand sustainable, responsible and impact investing. These include:

- Events. US SIF's annual conference offers an opportunity for members and non-members to network with leaders of sustainable, responsible, and impact investing.
- Policy and Advocacy. US SIF interacts with Capitol Hill and the executive branch in order to expand the general understanding of SRI and to advance the policy priorities of sustainable and responsible investors.
- US SIF Foundation. The US SIF Foundation is a non-profit organization which also carries out certain educational and research programs that advance the mission of US SIF.
- The Center for Sustainable Investment Education. This houses US SIF's research and education efforts, including answers to frequently asked questions about sustainable, responsible, and impact investing, online education courses, resources about community investing, and research and publications, including a biennial Report on Sustainable and Responsible Investing Trends in the United States.
- The US SIF is a part of the Global Sustainable Investment Alliance.
- The organization has served as a model for other social investment forums of investors in Europe in Asia.

WORLD BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT (WBCSD) – HTTPS://WWW.WBCSD.ORG

The WBCSD is a network of companies that works to create a sustainable future for business, society and the environment. The Council provides a platform for companies to share experiences and best practices on sustainable development issues and advocate for their implementation, working with governments, non-governmental and intergovernmental organizations. WBCSD's member firms have annual revenues ofUS$7 trillion, spans more than 35 countries and represents 20 major industrial sectors.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Business-led

NOTEWORTHY ACTIVITIES

- The WBCSD's Global Network is an alliance of more than 60 CEO-led business organizations worldwide. The Network, encompassing some 5,000 companies, is united by a shared commitment to provide business leadership for sustainable development in their respective countries and regions.
- Although the WBCSD works at the global level toward accelerating the transition to a sustainable world by making more sustainable business more successful, the members of the Global Network, through their local and regional initiatives and activities, help to promote sustainable development at the local and regional levels

WORLD ECONOMIC FORUM (WEF) – HTTPS://WWW.WEFORUM.ORG

The WEF is an International Institution committed to improving the state of the world through public-private cooperation. It engages political, business, academic and other leaders of society in collaborative efforts to shape global, regional and industry agendas. Together with other stakeholders, it works to define challenges, solutions and actions. Activities include convening meetings and task forces, building research networks, and collaborating.

LEVEL OF MEMBER PARTICIPATION	SECTOR-LED OR MULTI-STAKEHOLDER
General	Business-led

NOTEWORTHY ACTIVITIES

- The WEF maintains the System Initiative, which aims to close a global US$1 trillion annual infrastructure financing shortfall, help companies and their investors adopt a longer-term outlook, scale impact investing strategies that combine financial and social returns, and improve the efficiency of long-term social contracts such as retirement systems.

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