### **Conference on Public Pension and Sovereign Funds**

The second annual conference of CJEB's Program on Public Pension and Sovereign Funds

February 26, 2018
The Italian Academy, Columbia University



This conference was held on background according to the Chatham House Rule; the following summary is primarily without attribution

On February 26, 2018, Director of the Center on Japanese Economy and Business (CJEB), Hugh Patrick, opened the center's annual Conference on Public Pension and Sovereign Funds (PPPPSF) by welcoming the participants, and introducing the leader of the conference, Professor Takatoshi Ito, who is a professor at the School of International and Public and Affairs (SIPA), Columbia University, and the Director of CJEB's Program on Public Pension and Sovereign Funds. The PPPSF conference conducts extensive research on how public pension and sovereign wealth funds should be structured in investor portfolios and in governance. It is rooted in Professor Ito's work prior to SIPA as President of the Japanese Economic Association, Senior Advisor in the Research Department of the International Monetary Fund, and as a former member of Prime Minister Shinzo Abe's Council on Economic and Fiscal Policy.





Takatoshi Ito Hugh Patrick

Professor Hugh Patrick then welcomed Professor Ito to make opening remarks. Professor Ito summarized the purpose of the conference as analyzing how the Japanese government and other governments have been reforming pension funds in response to demographic shifts within their economies. The objective of the research is to learn from different cases and create a model that will aid pension system reforms in emerging economies.

Professor Ito provided an overview of the agenda for the day, which consisted of three panels and two keynote speeches, and centered on the following themes: 1) The macro environment and challenges to long-term investors; 2) environmental, social, and governance (ESG) investment; and 3) infrastructure and real assets. Professor Ito then introduced the first keynote speaker, Former Secretary of the Treasury under President Obama, Jacob J. Lew, who is also current a Visiting Professor at the SIPA. Previously, Secretary Lew also served as White House Chief of Staff and Director of the Office of Management and Budget, a position he also held in President Clinton's cabinet from 1998–2001.

## Keynote Speech: Jacob J. Lew, Former Secretary of the Treasury and Visiting Professor of International and Public Affairs, Columbia University

In his keynote speech, Former Secretary of the Treasury Jacob Lew analyzed current macroeconomic trends and his perspective on the impact that U.S. fiscal and monetary policy is likely to have on macroeconomic conditions moving forward.

Secretary Lew opened his speech by observing that, for the first time since the great recession of 2007–2008, there has been sustained growth across major economies from the United States to Europe to Asia, including both developed and developing economies. Secretary Lew cited employment reports demonstrating consecutive growth in employment rates in the United States, signs of organic growth in Europe, higher-than-expected short term growth in Japan, and the maintenance of sustainable growth rates in China.

Simultaneously, Secretary Lew observed that there has been an unusual proliferation of political risks with the capacity to undermine economic and geopolitical stability. Such risks include heightened concerns about the prospects of nuclear conflict, trade wars, and the economic bubble in China

potentially bursting. In addition to these risks, heightened support for nationalism over globalization and the increasing popularity of populist candidates are contributing to anxious volatility in markets.

Most recently, although markets were absorbing an unusual amount of uncertainty and risk as the new norm, the prospect of increased interest rates has reintroduced volatility to financial markets. Secretary Lew remarked that a number of monetary authorities across the world are moving towards gradually exiting from policies of quantitative easing and increasing interest rates from close to zero levels. Although



Jacob Lew

monetary authorities had been signaling for some time that they were moving away from quantitative easing as the global economy recovers from the financial crisis of 2007–2008, recent announcements of increased interest rates have created considerable concern because of the unprecedented levels of the U.S. deficit and debt in a peacetime condition with economic growth. Tax cuts enacted by Congress at the end of last year will add at least \$1.5 trillion of debt over the coming decade and the U.S. deficit will likely double from 3% of GDP to 6% of GDP.

Secretary Lew outlined the four primary implications that the combination of increased interest rates along with an increasing deficit would have for the United States. First, he emphasized that such conditions would delay the ability of the United States to address long-term demographic challenges. In the post-tax cut environment, Secretary Lew remarked that any steps to reduce the deficit would be seen as attempts to pay for the tax cut, which will make it more difficult to find a bipartisan solution to managing spending and revenue issues in order to address deficits, which are projected to rise further, over the next decade.

Second, the cost of interest as a percentage of the budget is projected to rise from 1.5% of GDP to 3.5% of GDP in just five years. Increased interest rates are predicted to further drive up deficits and create enormous pressures as tradeoffs are made between tax and government spending decisions.

Third, Secretary Lew remarked that it is unlikely that serious action to reduce the deficit and buildup of debt will materialize in the next few years. Although government spending is 21% of GDP and revenues are less at 17% of GDP, there is no conversation about a tax increase in Congress, and the White House recognizes that reducing social security and Medicare spending would be highly unpopular. Furthermore, Democrats are striving to save social welfare programs. This impasse means that substantial reduction of debt in the near-term is unlikely and, simultaneously, that the U.S. debt as a percentage of GDP may exceed 100% of GDP in just a few years. This will also coincide with the full demographic pressure of the baby boomers' retirement. This confluence of events suggests that the fiscal challenges that seemed a decade away just a year ago are now imminent.

Finally, Secretary Lew noted that insufficiently managing the deficit will limit the ability of the United States to use interest rates and quantitative easing as tools for a stimulus should there be an economic downturn in the future. Secretary Lew highlighted the urgency of restoring the capacity of the United States to leverage these tools prior to an economic downturn or crisis occurring.

With regard to managers of large sovereign and pension funds, Secretary Lew observed that there is a prospect of such funds regaining more acceptable yields, such as close to 4% returns, at much

lower risk levels than in recent years. However, sustained growth is not guaranteed as the prospect of higher interest rates will likely result in accelerated growth in the short-term that will revert to lower levels of growth in the long-term. Furthermore, tightening monetary policy just fast enough to avoid inflation without prematurely slowing down the economy is both a science and an art and there is a chance that monetary authorities will miss the mark, possibly bringing a long period of economic growth to an end.

Secretary Lew concluded that the current fiscal policies of tax cuts are irresponsible and dangerous. Not only do proposed cuts in food assistance and medical care as solutions to rising deficits threaten to exacerbate issues of inequality in the United States, but he also highlighted the obligations of the U.S. government to meet public needs through social security. The possibility of having to borrow more, increase future taxes, or make massive future reductions in spending to pay back U.S. treasury bonds could result in a political and financial firestorm. Moreover, Secretary Lew anticipates that government borrowing costs will rise as the amount of debt issued rises.

For fund managers, Secretary Lew advised not placing excessive confidence on general equity growth, but rather, focusing on fundamental value in alternative private equity investments.

### Session I: Macro Environment and Challenges to Long-Term Investors

Professor Richard Clarida, the C. Lowell Harriss Professor of Economics and Professor of International and Public Affairs at Columbia University, moderated of the first panel, which centered on macro environment and long-term investment challenges. Panelists included Christopher Ferrarone, Senior Vice President of Investment Strategy at GIC; Dr. Maria Vassalou, Partner, Portfolio Manager and Head of Global Macro at Perella Weinberg Partners; and Secretary Lew.

Beginning in July of 2018, the United States will have started its tenth year of economic expansion and recovery following the great recession. This is quite an unusual development in business cycles that will present both opportunities and challenges. Many analysts considered 2017 to be a "Goldilocks" year in which advanced economies have maintained inflation rates below target levels, while economies worldwide generally saw an uptick in growth. Moving into 2018, there is general uncertainty regarding whether such growth and positive numbers can be sustained.



Left to right: Richard Clarida, Jacob Lew, Christopher Ferrarone, Maria Vassalou

Professor Clarida invited the panelists to provide their comments and predictions on macroeconomic trends for this year. One panelist noted that the pace at which central banks decide to increase interest rates will have a significant impact on the global economy and should be closely monitored. Additionally, she noted that uncertainties, including renegotiation of the North American Free Trade Agreement (NAFTA), the U.S. withdrawing from the Trans-Pacific Partnership (TPP), Brexit, and new post-crisis banking regulations in the U.S. and Europe, as well as technology as a disruptor and driver of income inequality, have complicated both the economic environment and, consequently, fund management. The panelist predicted that the days of passive fund management are likely to be over soon, with funds needing to focus more on dynamic asset allocation and downside protection.

Another panelist observed that not only have equity markets received higher returns in the Goldilocks environment, but bonds, credit, infrastructure, real estate, and cryptocurrency markets have also produced extraordinary returns in a relatively low-inflation environment. However, some cracks are beginning to emerge in the Goldilocks milieu. As an example, the panelist cited Warren Buffet's letter to shareholders in 2017, which noted that the all-time high valuations of good, but not spectacular, firms served as a barrier to virtually all major business deals. This panelist also cited political and policy risks as



Left to right: Christopher Ferrarone, Maria Vassalou

potential threats that could upset the high valuations observed in markets today. However, the panelist also remarked that inflation rates have increased almost to central bank targets, commodity prices are higher, and labor markets are tightening, all of which are signals that the global economy may be transitioning from a mid-cycle Goldilocks environment to a more classic late-cycle economic environment.

In light of this transition and the fact that negative interest rates fueled economic growth, a panelist questioned how changes in interest rates would not only impact growth but also capital flows. In this environment, Japanese and European insurance funds have flowed into U.S. credit markets. If interest rates change quickly, the capital flows that have been building up over the current cycle could be reversed. Additionally, the panelist raised the topic of overall global financial vulnerability. Although policies have reduced systemic risk, the panelist notes that debt-to-GDP ratios have increased by 45% since the global financial crisis, are at the highest levels since World War II, and that there have been no major attempts at deleveraging. Specific points of concern include increasing household debt resulting from the housing crisis, and that total leverage in China has reached 260% of GDP. Furthermore, the proliferation of ETF and passive strategies, the rise of algorithmic trading, and the reduction in overall liquidity have made markets vulnerable to sudden stops.



Christopher Ferrarone

In response to these concerns, another panelist noted that slow, long-term growth could actually be an indicator of the organic ability of the economy to grow. Additionally, the panelist notes that reducing the estate tax, which taxes gains from technology, reduces of the ability of the government to invest in people and equip them with the necessary skills to respond to structural changes stemming from technology. Moreover, the panelist noted that the pressure to "reverse course" may be doing more to erode the stability that has undergirded economic progress since the global financial crisis than anything else.

The topic other factors that may create more market volatility then surfaced. One panelist noted

that high frequency trading can exacerbate market volatility in the short-term. Regarding the long-term, another panelist cited global indebtedness, aging populations around the world, reactions against globalization and open trade, and rising inequality as pressures on economic and political systems that threaten to create long-term market volatility. In response to these projections, the panelist stated that possible strategies for long-term investors include increasing risk, seeking new revenue streams, and reducing expense ratios to increase returns. The panelist also remarked that investors may have to accept that returns will generally be



Left to right: Richard Clarida, Jacob Lew

lower in the economic environment following the development of these trends.

The conversation then turned to the outlook for China. One panelist highlighted the rise of the middle class and the subsequent increase in consumption as a key driver of economic growth in China. The panelist also commented that the China is taking the right steps to rebalance its economy toward greater consumption and deleveraging. However, it was also noted that China will simultaneously be reliant on global growth and the global trade environment to reach its goals. Another panelist reiterated the reciprocal relationship between the economic growth of China and the growth of the world economy.



Richard Clarida

Another panelist predicted a trend of low inflation as a result of structural rather than transitory factors. The present structure of the economy has shifted towards services, as opposed to manufacturing. Services account for 50% of labor income, approximately 33% of profits and virtually all new net jobs created since the financial crises. The services sector is a large user of digital technology. The effect is that labor has gone from being scarce in the economy to being increasingly redundant. At the same time, the capital required for rendering workers productive in the services industry is one twentieth or less of that in capital intensive industries. The

implication is that technology has also rendered capital abundant. As a result, she also noted, the ability of monetary policy to affect the growth and inflation dynamics through changes in interest rates has significantly decreased. A service and technology oriented economy is a low inflation economy.

The panel then turned to general Q&A. The first question asked the panelists to speak more about the long-term growth of China. One panelist underscored the importance of China working to change its business model from absorbing innovation to creating innovation in order to switch from creating low-cost products to products with higher values. Although the completion of this process will take a long period of time, we should expect China to compete in this field in the future and this view should shape how we perceive and design our relationship with China from a U.S. perspective.

The second question asked for the perspective of the panelists on the outlook for U.S. public pensions. Although a general answer is difficult due to public pension funds in the United States varying greatly in terms of historical returns, funding sources, and current revenue, panelists remarked that it has been very challenging for underfunded systems to keep pace with growing liabilities due to the baby boomers' retirement. Very small changes in tax rates have enormous effects on funding streams, perhaps affecting large systems more than small ones.

The third question asked for more specific questions on Chinese governance decisions and the implications for the global economy, specifically relating to the government takeover of the third-largest insurance company and attempts to make other governmental reforms. One panelist highlighted the need for space for dissenting voices to be heard as critical to long-term growth of the Chinese economy. The fourth question asked for fiscal implications of China's "One Belt, One Road" program and about the potential of competition from Japan, which is working on a rival project. A panelist responded that the "One Belt, One Road" project seems to be a positive story, but further analysis is required.

The final question asked about the outlook of the U.S. dollar. A panelist responded that for many years, the United States had a strong currency that reflected a strong economy, but also the presence of many weak economies around the world. As developing economies grow, however, the U.S. dollar does not indicate an economy that is weak so much as it reveals the effect of liberalizing trade and increasing capital flows and growth in other areas of the world.

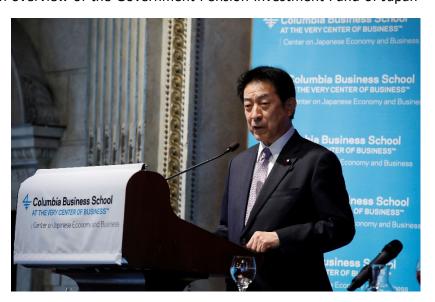
# Keynote: The Honorable Yasuhisa Shiozaki, Member of the House of Representatives of Japan

Professor Takatoshi Ito introduced the Honorable Yasuhisa Shiozaki, Member of the House of Representatives of Japan, and the second keynote speaker of the conference. Mr. Shiozaki previously held the positions of Vice Minister of Foreign Affairs (2005), Chief Cabinet Secretary to Prime Minister Shinzo Abe (2006–2007), and Minister of Health, Labor, and Welfare for Japan.

Mr. Shiozaki opened by providing an overview of the Government Pension Investment Fund of Japan

(GPIF), which is currently the largest pool of retirement savings in the world. The large pool of savings is generally the result of years of conservative strategies in which the fund made low-risk, low-yield decisions, a reaction to the years leading up to the 1990s, in which public pension assets were greatly mismanaged and resulted in large losses arising from aggressive investments in resort real estate development projects.

From the perspective of Mr. Shiozaki, the traditional investment approach of GPIF had not only



Yasuhisa Shiozaki



Yasuhisa Shiozaki

become too conservative, but also outright contradicted the goals of economic growth and breaking out of deflation, which the administration of Prime Minister Shinzo Abe had highlighted as priorities. Mr. Shiozaki proposed that GPIF diversify its investments to include more equities and foreign assets, which would enable GPIF to better enjoy the fruits of Japan's economic recovery under "Abenomics". As Minister of Health, Labor, and Welfare, Mr. Shiozaki proposed that GPIF transition from a single-manager governance model to a board structure based on consensus decision-making as a key starting point to drive GPIF change and growth in the long-term. Due to tremendous resistance from within the ministry, it took approximately three years to establish this new GPIF governance structure.

Although a major hurdle has been overcome, the Mr. Shiozaki emphasized that GPIF should still strive to improve its governance structure in three main areas: internal control, transparency, and talent. Many Japanese firms in the private sector have been building more robust internal audit functions, inviting closer scrutiny from outside board members, and modifying internal rules in accordance with the 2015 Corporate Governance Code. Mr. Shiozaki remarked that GPIF should look to adopt these reforms as a

minimum standard, as it is an organization with a larger asset size than any of the listed firms.

Second, the principles of transparency and accountability are fundamental for GPIF to continue to be trusted with the nation's pension funds. Although the asset value of GPIF has increased by ¥30 trillion since 2014, the market inevitably has ups and downs, and there will be times when GPIF will incur short-term losses. This makes it necessary for GPIF to be transparent and accountable to stakeholders.

Finally, Mr. Shiozaki believes Japan should explore further flexibility in gathering the best talent to manage the GPIF, including moving away from conservative employee compensation to allow for a performance-based compensation structure closer to market value. He stated that good governance only makes a great organization if it is also equipped with great talent. He closed by stating that such reforms are important, difficult, and will require sustained long-term efforts, but that continuing to reform GPIF is critical to protecting the future welfare of all Japanese citizens.

#### Session II: ESG Investment

As moderator of the ESG panel, Professor Takatoshi Ito then invited representatives of several large institutional investors to the podium. The panelists included Carol Jeppesen, Senior U.S. Network Manager, United Nations Principles for Responsible Investment; Lukasz Pomorski, Managing Director of AQR; Carine Smith Ihenacho, Global Head of Ownership Strategies, Norges Bank Investment Management; and Norihiro Takahashi, President of Japan's Government Pension Investment Fund.

The main debates surrounding environmental, social, and governance (ESG) investment



Left to right: Carine Smith Ihenacho, Takatoshi Ito, Norihiro Takahashi, Lukasz Pomorski, and Carol Jeppesen

issues include questions around its definition, attitudes toward ESG investments, and contemporary debates on whether ESG investments not only have good returns, but also sustained, tangible, positive effects for societies. Professor Ito invited the panelists to share their perspectives on ESG investment, as well as comment on the aspect of ESG they believe to be most interesting and relevant to large institutional investors.

Regarding the definition of ESG investments, one panelist remarked that in practice, investors commit to adhering to a certain set of principles because they believe that it will tangibly reduce risk and increase their returns, in addition to aligning investor interests with those of the broader global society, which in turn serve to build a more sustainable global financial system. There are misconceptions that ESG is about philanthropy, but a panelist aimed to debunk this myth by underscoring the emphasis of ESG on investment that is focused on long-term returns, upholds fiduciary duties, minimizes risks, and produces returns for investors.



Norihiro Takahashi

The conversation then turned to whether public pension and sovereign wealth funds in particular should look to apply ESG practices. For one panelist, the answer was a resounding "yes". Private sector and academic research have both demonstrated that ESG practices increase access to information about risks and tradeoffs that allow investors to make more informed decisions. Furthermore, peerreviewed academic research has illustrated that improved corporate governance does in fact lead to greater investment returns and, therefore, pension and sovereign wealth funds should use the learnings from these

studies to improve returns. At minimum, ESG information should be considered to help with identifying attractive investments.



Left to right: Carol Jeppesen, Lukasz Pomorski

panelists agreed that ESG investments and good governance should be especially important to public pension and sovereign wealth funds, as they constitute some of the largest long-term investors globally and have a stake in virtually all of the listed companies worldwide. As the highly-diversified and long-term portfolios of pension and sovereign wealth funds representative of global capital markets, they are increasingly exposed to the growing and widespread costs stemming from negative externalities. As such, one panelist commented that the importance of ESG cannot be understated and has

remarked that their fund is increasingly using ESG indices to track the environmental, social, and governance practices of various companies. As pension funds are intended to provide for the public, the panelist noted that it was important for his fund to be mindful of which externalities could be incurred not only by the private companies, but also by the public.

Regarding the growing number of ESG indices in recent years, panelists remarked that different ESG indices have emerged that reflect different worldviews on the factors that are more important to environmental, social, and governance practices of companies and, accordingly, use different data sources. For example, while some metrics such as CO2 emissions may be easier to measure, there are still different dimensions of CO2 emissions that are weighted differently by various indices. One panelist emphasized the importance of being clear in fund goals and ensuring that the construction of the ESG indices being used are able to address investment goals and challenges.

The conversation then turned to ways for funds to guarantee the implementation of ESG practices and how to ensure that firms are accurately reporting progress they have made with

integrating ESG before turning to Q&A. Panelists reviewed various reporting and accountability measures their respective funds have been utilizing to track the progress of firms with respect to ESG practices.

The first question from the audience asked about how to best use ESG benchmarks in making investment decisions. One panelist responded that ESG benchmarks are meant to be indicators of the risk exposure of the portfolio. A second panelist responded that improvements in ESG metrics based on benchmarks have offered some of the best opportunities for investment returns in the past. A third



Left to right: Norihiro Takahashi, Carine Smith Ihenacho

panelist reiterated that ESG measurement methodologies are still under development and, as a result, his fund utilizes three different ESG indices, but is cautious of not being overly reliant on any individual index due to possible inaccuracies stemming from issues with data collection.

The second question asked about the role of green bonds and the outlook for green bonds in the future. The panelists present remarked that their funds mostly do not invest in green bonds, due to uncertainties around risk for fixed income areas.

A third question asked about the outlook for broader implementation of Sustainability Accounting Standards Board (SASB) standards. One panelist responded that the demand for SASB implementation needs to come from investors first as there needs to be a way to ensure accurate comparison of reporting from numerous firms. Standardized reporting is required before SASB standards can become more widespread.

A fourth question asked about what would be on the panelists' wish list in terms of growing ESG practices on a broader scale in the global financial world. One panelist responded that better reporting from companies themselves would be on their wish list. The panelist remarked that the level of detail provided by companies about the actions they are taking to analyze their carbon footprint, for example, tend to vary greatly. Another panelist responded that improved technologies around data collection and accuracy would be on their wish list to facilitate the broader implementation of ESG practices.

#### Session III: Infrastructure and Real Assets

Professor John Lipsky, the Peter G. Peterson Distinguished Scholar at the Henry A. Kissinger Center for Global Affairs, a Senior Fellow at the Foreign Policy Institute, and professor at Johns Hopkins University's School of Advanced International Studies, moderated the final panel of the conference. included The panelists Anne Valentine Andrews. Head of Funds Management and Global COO for Real Assets at BlackRock; Ralph Berg, **Executive Vice President and Global** Head of Infrastructure at OMERS; and Barry S. Blattman, Vice Chairman at Brookfield Asset Management.



Left to right: John Lipsky, Anne Valentine Andrews, Ralph Berg, Barry S. Blattman

Professor Lipsky opened by congratulating Mr. Shiozaki for the work he has done to implement corporate governance reforms in Japan with GPIF, noting that many in the financial world have been closely tracking the progress and emphasizing the importance of continuing to move forward with these reforms.

Discussion began by highlighting the example of Chile, which had converted a public pay-as-you-go pension system bankrupted by hyperinflation in the 1970s to capitalized, privately managed, but state mandated 401(k) plans. As Chilean social security reform has become arguably the only sustained success story in Latin America, the combination of trade liberalization and the privatization of inefficient state enterprises illustrates the full potential of public pension funds to drive positive economic reforms. The present is an appropriate time for public pension and sovereign wealth fund managers to consider alternative



Left to right: John Lipsky, Anne Valentine Andrews

investments as macroeconomic conditions are likely to change and see more volatility in the upcoming years. While real assets have been attractive investments for institutional investors because liquidity issues are reduced for investors with long time horizons, the panelists contended with whether or not they believed this has changed following the global financial crisis. They also considered which factors should guide portfolio choices between real assets, infrastructure, and private equity and when it makes the most sense for pension and sovereign wealth funds to increase their holdings in each of these areas.

One panelist observed that, in the past ten years, institutional investors have increased holdings in real assets for the returns and have maintained these holdings for the purposes of portfolio diversification, but the main challenge has been increasing yields. A representative of one of the largest alternative institutional investors spoke to his firm's investment in large-scale industrial complexes such as mining and timber. However, as these industries proved to be cyclical and hard to evaluate, his firm already decided in the 1990s to focus on value chains within industries, the value specific firms provide to users, and capital flows to make investment decisions. Nevertheless, in the current economic environment, owning real estate and infrastructure assets has advantages, as such assets currently have high valuations and can be sold to increase liquidity.

The intersection of infrastructure and politics emerged as a theme to consider when making infrastructure investment decisions. Ultimately, there will be pressure to use infrastructure to create jobs and drive the economy. One speaker posited that the "One Belt, One Road" program in China is an infrastructure policy designed to increase that country's geopolitical influence. Additionally, the panelist noted that there is a tremendous amount of funds for investment in infrastructure coming from not only pension and sovereign funds, but also from insurance companies. The panelist sees a lot of changes coming to the infrastructure space at the convergence of global infrastructure needs and the funds that are available to meet these needs.



Left to right: Ralph Berg, Barry S. Blattman

spaces designed to meet other purposes.

Considering the variable, cyclical value of real estate, the question arose of how the panelists would advise pitching the idea of investing in such assets to public pension and sovereign wealth funds. One panelist reaffirmed the importance of investing in real estate that has the potential to generate high cash flows and noted that there is always dislocation happening which creates new opportunities. One example is the dislocation of retail. Investment firms have been helping malls and large department stores to reexamine management of their real estate by possibly either selling the assets or converting the real estate into

Another panelist also observed that infrastructure investments are a global opportunity, whereas large public investors are either overly focused or more comfortable on investing domestically. Thus, increasing infrastructure investment among public investors requires familiarizing them more with the benefits of holding offshore assets. Additionally, the panelist noted that public investment in infrastructure is essentially a win-win, as it is common knowledge that infrastructure improvements increase the GDP output of a country and can create jobs.

Ten years ago, markets focused largely on investing in private equity. Today, the market has changed to accept more likely, albeit lower, returns of 7–8% in the long term as opposed to focusing on less likely returns of 15–20% in the short term. There is certainly a heightened awareness of risk exposure that is present among institutional investors compared to ten years ago.

With regard to making the most of infrastructure investment opportunities, one panelist noted that it is very difficult to be opportunistic in infrastructure because the movement and flow of opportunities with such assets are glacial. Such assets include wind farms and large power plants that take decades to build. In order to take advantage of any opportunities in investing in such assets, investors need to be tracking industries and assets for several years or more. Additionally, opportunities also arise in the privatization of state-owned companies or the restructuring of large corporations.

The moderator also asked panelists which elements they analyze to ascertain whether the cash flows and capital values will still be there after a number of years. One panelist responded that considering the strength of the rule of law and whether there was multigenerational respect for investment values constituted key aspects of analysis for large investors looking to expand infrastructure holdings overseas.

The general consensus on the panel was that there is increasing capital flowing into real and infrastructure assets, and that this will be a growing area of investment for public pension and sovereign wealth funds as well. Additionally, panelists predict there will be a growing supply of infrastructure assets for both political reasons and because countries around the world require them. One panelist observed that partly-compulsory superannuation in Australia not only saved Australia from a pension crisis, but the long-term savings have created a number of opportunities for the public as well. Thus, there is much that the United States can learn from other places in the world in terms of addressing challenges related to the investment of public funds.

The moderator then opened up the panel to Q&A. The first question from the audience asked about the risks that presently concern the panelists about alternative investments (real estate, infrastructure, or any sub-asset classes) assuming we interpret the current macroeconomic conditions as being in the late stage of a bull cycle. One concern shared by a panelist is the high level of valuations seen for both high-quality and mediocre assets today. Additionally, political risk is growing as populism and backlash against globalization may lead to the re-nationalization of certain sectors of economies. Another panelist raised the topic of greenfield investment projects, which are a form of foreign direct investment in which a parent company builds its operations from the ground up in a foreign country. Greenfield investment is becoming increasingly palatable as a way of providing a form of investment and yield to people that they did not previously have, but there are many risks to building actual assets such as new roads and infrastructures. This can be exciting for future opportunities and many public funds are still wrapping their minds around greenfield investment.

Another audience member asked the panelists how to best protect real assets such as toll roads against inflation. Another audience member asked the panelists for their perspective on the best infrastructure opportunities within the United States. With regard to inflation, a panelist responded that analyzing cash flows and GDP are a good way to hedge against risks related to owning real assets. With regard to infrastructure opportunities within the United States, a number of underfunded pension funds have a strong desire to own infrastructure assets. States will make the case for and likely receive federal support to own these assets. It is in the public interest for pension funds to be owners of infrastructure because they benefit the public and pension funds are long-term, stable owners. Another panelist noted that there needs to be more public education about infrastructure investment in general and that institutional investors should strive to create centers of excellence to increase their knowledge of the area and to develop best practices.

Professor Takatoshi Ito concluded the Conference on Public Pensions and Sovereign Funds by thanking all the participants, speakers, and moderators involved for the importance and success of the PPPSF's second annual conference.



Back row: Christopher Ferrarone, Carine Smith Ihenacho, Lukasz Pomorski, Richard Clarida, Jacob Lew, Yasuhisa Shiozaki, Barry S. Blattman, Carol Jeppesen, Ralph Berg, Norihiro Takahashi Front row: Takatoshi Ito, Hugh Patrick