



6TH PEOPLE'S REPUBLIC OF CHINA-ADB KNOWLEDGE-SHARING PLATFORM

WORKSHOP ON DEEPENING PUBLIC-PRIVATE PARTNERSHIPS
IN ASIA AND THE PACIFIC

25-26 November 2014, Beijing

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Abbreviations

ADB	– Asian Development Bank
APEC	– Asia–Pacific Economic Cooperation
BOT	– build–operate–transfer
BTL	– build–transfer–lease
BTO	– build–transfer–operate
CEO	– chief executive officer
GDP	– gross domestic product
IFFCL	– India Infrastructure Financing Company Limited
IPDF	– Infrastructure Project Development Facility (Pakistan)
ROK	– Republic of Korea
LGFV	– local government financing vehicle
MOF	– Ministry of Finance (PRC)
OECD	– Organisation for Economic Co–operation and Development
PDF	– project development facility
PDMF	– Project Development and Monitoring Facility (Philippines)
PFI	– Private Financing Initiative (Australia)
PIMAC	– Private Investment Management Center (Korea)
PPI	– private participation in infrastructure
PPP	– public–private partnership
PRC	– People’s Republic of China
SOE	– state-owned enterprise
SPV	– special-purpose vehicle
TA	– technical assistance

Summary

Key Messages

This report summarizes the proceedings of the Deepening Public–Private Partnerships (PPPs) workshop held in Beijing on 25–26 November 2014. The workshop was sponsored by the Ministry of Finance of the People’s Republic of China (PRC), and the Asian Development Bank (ADB), and coorganized by the PPP Research Committee led by the Research Institute for Fiscal Science.

More than 100 participants from 18 countries attended the workshop from central governments, local governments, the financial and consulting sectors, academia, and development partner institutions. The proceedings focused on identifying (i) new developments in PPPs in the region and further abroad, (ii) ingredients for a successful enabling environment for PPPs, (iii) good institutional models for promoting and regulating the use of PPPs, and (iv) good practices for managing the fiscal risk of PPPs.

The workshop provided an opportunity to stocktake approaches to PPPs in Asia and the Pacific, and to set out new approaches that learn from the experience in the region and elsewhere. Experience was shared from PPP programs at various stages of development. Many fundamental similarities across PPP programs were identified, in terms of the challenges faced and the solutions adopted.

There was consensus on the need for a strong legal and regulatory environment. Important elements of this environment included high-level political commitment, standardization of documentation and processes, and evaluation of value-for-money

throughout a project’s development. Several speakers also emphasized the importance of having in place mechanisms to anticipate and deal with changes in underlying conditions of contracts and disputes. As one speaker explained, PPPs are a marriage, not the wedding. Many PPPs inevitably fall into dispute. This makes it necessary to have mechanisms in place to deal with the rough patches without interrupting service delivery.

The case studies also revealed some higher-level differences between countries’ PPP programs. Participants spoke of the need to tailor PPP programs to each country’s objectives for using PPPs and its political, fiscal, and institutional constraints and unique market conditions. Discussions revealed how it is difficult to get PPP programs “right” from day one. Even the longest-lasting and most successful PPP programs have evolved through frequent refinements in the occasional change in direction.

In examining institutional arrangements, participants emphasized that it is important (and common practice) to have a centralized body responsible for PPPs at a national level, and gradually, over time, at the local level (depending on a country’s size and governance arrangements). There was broad agreement that, for such bodies to be effective, the public sector needs to find ways to bring expertise to the table that is comparable to expertise in the private sector, and it is necessary to have staff with the right education and skills. Having actual experience in doing PPPs was also identified as highly valuable. It was made clear there are a range of institutional options that can and have worked well, with PPP units or PPP agencies attached to ministries of

finance and planning agencies, or established as quasi-independent bodies.

The potential fiscal risk from PPPs was also emphasized and analyzed. It was recognized

that fiscal agencies need to pay close attention to understanding and factoring these risks into fiscal management, and ensure that prevention and control mechanisms tailored to PPPs are in place.

Introductory Remarks

From the presentation of Yingming Yang, Deputy Director General, Department of International Economic and Financial Cooperation, Ministry of Finance, PRC

Respected Director General, Ayumi Konishi, distinguished guests, ladies and gentlemen, good morning. I am very glad I could have the chance to participate in this PRC–ADB knowledge-sharing platform—deepening PPP workshop. On behalf of the Ministry of Finance (MOF) of the PRC, I would like to deliver my sincere welcome to all the participants and also give our sincere gratitude to our collaborator: ADB.

In recent years, through our joint effort, South–South knowledge-sharing has become an important platform for raising long-term benefits and enriching our international cooperation. As our country is the largest developing economy, we would like to share our experience in development with other countries to improve the endogenous capacity of developing economies to realize growth. Therefore, the PRC, ADB, the World Bank, the International Monetary Fund, the Organisation for Economic Co-operation and Development, and other multilateral development organizations have jointly built many knowledge-sharing platforms. Among them is the PRC–ADB Knowledge-Sharing Platform initiated by the MOF and ADB, whose preference is to build an innovative South–South knowledge-sharing mechanism for all developing members of ADB to share knowledge and experience in development. Since its foundation, this platform has held five seminars/workshops. Each one surrounded our common concerns in the development of nations in the Asia and Pacific

region, and served as the basis for the beginning of experience-sharing at the policy level.

Currently, the PPP model is emerging on a global scale. Due to their competitive advantages in leveraging private investments in infrastructure facilities, PPPs have attracted a lot of attention and interest. This workshop takes PPPs as its theme and provides a forum for many experts to exchange knowledge and experiences. It will undoubtedly produce some intellectual properties for the developing nations in this region, including the PRC, to promote the use of PPPs.

In this regard, the PRC–ADB platform has just pulled off another important conference, which is very meaningful for policy and practice.

Although the global economy is on its way to restructuring and recovery, we are still facing many challenges and risks. Many developed nations are still facing structural problems while the growth of developing nations and emerging markets has slowed down.

Countries are facing lots of new challenges, and many countries at different stages of development are facing the dilemma of growth. On the one hand, they need to increase effective demand, especially for infrastructure and other long-term productive investments, to support economic recovery. On the other hand, governments are facing a lot of restrictions on expanding fiscal spending to increase effective demand because there is not enough fiscal space during slow economic recovery. Within this context, the PPP model has become a very important tool for solving this dilemma.

The first benefit of the PPP model is it can help leverage plural sources of long-term funding to surmount the challenge of financing for development. According to recent United Nations statistics, global savings are expected to reach over US\$18 trillion. For the same period, the World Bank estimates that, by 2030, all the emerging economies in the world will require about US\$14 trillion investment. So, right now, we do not lack money; but we lack efficient channels and models of financing. As a new financing model through which the public sector and the private sector complement each other, PPPs can effectively mobilize and integrate three sources of long-term funding:

- First is the public funding from the government, the goal of which is to maximize social benefits. In the PPP model, it plays the role of leveraging or attracting private capital.
- Second is funding from the private sector which seeks maximum profits. The mobilization of the private sector in PPP projects can lower our project costs and increase our efficiency in providing public services and products.
- Third is institutional investment that looks for long-term and stable revenue, like the pension fund and sovereign wealth funds. The involvement of institutional investors can help spread the financial risks of PPP projects and maintain the stability of capital supply in the long run.

The second benefit of PPPs is that they can drive institutional transformation. At the macro level, due to the financial crisis, the international community again recognized that both the public and private sectors are important players in achieving long-term development. But how to properly balance their roles has posed a conundrum to both the economics theory and the real practice. From this angle, the PPP model is not just a financing innovation. It is an institutional innovation that can organically combine the advantages of the public sector with those of the invisible hand and better optimize the supply and allocation of

public monies. At the intermediate level, we can see that PPPs call for reforms in many aspects and at different levels, such as the construction of a legal framework, transformation of government functions, government debt management, and investment and financing mechanism innovation. These reforms are going to further release more institutional bonuses to stimulate internal economic growth.

The third benefit of the PPP model is that it can help achieve win-win results for many parties and bust the difficulty of “win-win cooperation” in development. PPPs can help the government shake off some of its debt and payment obligations and alleviate its pressure of expenditure in the immediate fiscal year. PPPs can also provide a low-cost and highly efficient public product supply mechanism, and lower the possibility of fiscal unsustainability. For private investors, the PPP model creates a more convenient access to more sectors such as energy, transport, and public services. For the society, the PPP model can improve the quality and efficiency of public products and services.

Of course, the PPP model is not a panacea. The benefits brought by PPPs in raising efficiency of financing and public products provision may be offset by many factors. For example, the financing cost of private enterprises is always higher than that of the government; the transaction cost of a PPP is very high and profiteering may occur as enterprises always seek profits. Also, from a government-budget perspective, PPPs only change the timeline of government payments, but do not change the total amount of payment. Without sufficient surveillance, PPPs can actually lead to huge hidden public debt.

So it is important that we exchange not only successful stories but also lessons of failures to help us seek the advantages of PPPs and, at the same time, avoid their disadvantages. I also hope that our exchange will help us to develop this new financing model of PPPs into a duplicable and promotable mature mechanism.

The PRC has recently entered into a critical period of transformation. Our public finance has met an unprecedentedly arduous task in the historical course of deepening reform comprehensively. As the PRC's economy slows down from a double-digit speed to a medium and high pace, the growth of the Government of the PRC's revenue will decrease as a result. However, the pressure on government expenditure keeps climbing. According to an estimate, by 2020, RMB42 trillion (around US\$7 trillion at current exchange rate) will be required by the PRC's urbanization. That is to say, by 2020, \$1 trillion investment is needed per year by urbanization alone. Therefore, the established Chinese model which heavily relies on government contribution cannot be sustained. That is why we promote the use of PPPs to inject new momentum to the PRC's long-term development.

There is an old saying in Chinese, which says "stones from other hills may serve to polish jade of this one". As a newcomer to PPPs, the PRC has to draw on the advanced concepts and experience of the international community and adapt them to our situation. We have to build up our own PPP legal framework, policy framework, and operational model to suit our needs.

There is another saying in Chinese that says "all the long marches are starting from one step ahead". As a PPP practitioner, the PRC has already taken very firm steps. First, we have rolled out to private investors 80 pilot projects in major infrastructure sectors, the new generation information and communications technology infrastructure, and clean energy engineering to try to make a breakthrough. Second, we are now in the process of establishing PPP centers for the central and local governments to standardize and manage contracts. Third, we will, on the principle of win-win cooperation, provide US\$5 million in grants to support PPP development in infrastructure and capacity building in developing economies within this region through ADB's China Poverty Alleviation and Regional Cooperation Fund.

In past cooperation between the PRC, ADB, and other multilateral development agencies, we have always emphasized the importance of knowledge-sharing and built a virtuous "four in one" cycle of knowledge-sharing, project cooperation, institutional innovation, and experience dissemination. This important piece of experience, which we gained through practice, also applies to the promotion of the PPP model. I hope today's workshop will not only focus on knowledge-sharing and policy communication, but also, based on realistic need, identify new areas of PPP practical cooperation. I also expect that all experts can have a very frank and open dialogue over PPPs and offer knowledge and insights into policy making, project management, and capital input.

At last, I wish this workshop a complete success and every participant all the best during your stay in Beijing. Thanks!

From the presentation of Ayumi Konishi, Director General, East Asia Department, ADB

Deputy directors general Yang Yingmin and Jiao Xiaoping, distinguished guests, friends, colleagues, ladies and gentlemen, good morning to you all.

On behalf of the Asian Development Bank, I first would like to extend my warm welcome to all of you here this morning for this 6th PRC-ADB Knowledge-Sharing Platform. The Asian Development Bank (ADB) is very pleased and grateful for this opportunity to work with the Ministry of Finance to bring together policy makers and practitioners from across the Asia and Pacific region on the promotion of public-private partnerships, or PPPs.

The Knowledge-Sharing Platform was established in 2009 with the objective of sharing knowledge, facilitating dialogue, and strengthening partnerships and networks among the governments of the PRC and other ADB developing member countries. The platform focuses on emerging issues and challenges faced by developing countries in the region.

ADB brings to this partnership its strength in knowledge management, dissemination, and sharing, all aimed at mobilizing resources and maximizing returns on its regional experience. The PRC, in turn, contributes its wide and deep development experience and its strong desire and support to promote South–South knowledge cooperation.

The five platforms held to-date have covered a wide range of topics, from sustainable urbanization, to transport, and to technical and vocational education and training. This event, the sixth platform, is aiming to help ADB's developing member countries make further progress in their respective PPP agenda.

PPPs are now a much-talked-about topic in the region. In the PRC, they are part of the public finance reforms initiated by the Third Plenary Session of the 18th Central Committee of the Communist Party of China held on 9–12 November 2013. PPPs are expected to help enable the market play a decisive role in the PRC's development. PPPs were also featured in the APEC summit meeting held earlier this month here in Beijing, as well as at the recent G20 meeting, among other fora. As the host of APEC this year, the PRC organized a number of events on PPPs throughout the year under the APEC Finance Ministers Process, with the compilation of case studies and the development of the “roadmap.” This stocktaking of 44 projects has been made available for you today. We were honored to work with the PRC's Ministry of Finance in those efforts.

As a result of a few decades of strong growth, most of the region's developing economies have already reached the middle-income status. As the countries attain middle-income status, the social demand for public services, including public infrastructure, increased substantially. With the region's economies expected to continue to grow at an average of some 6.4% during the 2015–2020 period, we expect a corresponding or an even larger increase in the need to provide public services. By

With the region's economies expected to continue to grow at an average of some 6.4% during the 2015–2020 period, we expect corresponding or even larger increase in the need to provide public services.

2050, two-thirds of the region's population is expected to be living in urban areas, up from the current 40%, requiring a large investment to develop urban infrastructure. Aging populations and the need to address increasing inequalities and environmental degradation also call for better public services. As the middle-income country status is also accompanied by the emergence of a stronger private sector, there are expectations for possible involvement of the private sector in the provision of public services through PPPs.

Unleashing the region's potential with the participation of the private sector to meet emerging or growing development challenges rests on deepening of reforms. Changing perceptions on the role of the market, and of the government's responsibility to guide the market, are at the forefront of the needed reforms. The region's governments are increasingly looking to the private sector to play a greater role in achieving the inclusive and environmentally sustainable growth that is at the heart of the region's development agenda.

The need for new partnerships between governments and the private sector is most evident in infrastructure. While infrastructure has been developed as the region's economies have grown, significant gaps and considerable regional variations remain. It is often quoted that an investment in infrastructure in the order of US\$800 billion is annually needed up to 2020, and the private sector is expected to be a key player in addressing this need. The private sector is also expected to increase its contribution to the delivery of social services, the demand for which is also immense and growing fast.

PPPs are providing the region's governments a tool for mobilizing the private sector's contribution. PPPs

are providing performance-based approaches to service delivery that foster competition, encourage life-cycle asset management, and provide access to new service providers and sources of finance. PPPs are helping deliver more public services while helping ensure that resources are allocated to their best use and are used efficiently.

In fact, the Asia and Pacific region already has extensive experiences with PPPs, both positive and negative. More countries are pursuing PPPs, improving the enabling environment, establishing and then strengthening PPP units, and preparing themselves for the fiscal challenges arising from PPPs. We are seeing more interest from operators and investors from within Asia and the Pacific in PPP projects in the region.

This 6th PRC–ADB Knowledge-Sharing Platform is an opportunity to share the lessons and insights gained from experiences in the region and as well as those from other parts of the world. It will cover a range of topics related to PPPs with a focus on new ways of using PPPs, their financing, institutional reform, and fiscal management.

I would like to touch upon three key messages that stand out:

One is that PPPs are an evolving tool. Many countries that use PPPs started out with projects in economic infrastructure, such as toll roads, power stations, and water and wastewater treatment plants. This was as much the case in the Asia and Pacific region as elsewhere in the world. But PPPs can do a lot more. The Philippines, for example, is now implementing a much-needed expansion in education using PPPs, building on the experience of the Republic of Korea, the United Kingdom, and Australia, among others. Malaysia is using PPPs to deliver support services across its hospital system. Here in the PRC, its subway system is being expanded using PPPs, and PPPs are now widespread in solid waste management.

The evolution in the areas of the economy using PPPs has been accompanied by an evolution on how governments approached PPP financing. Spurred on by the decline in activities following the 2008 global economic and financial crisis, governments are reconsidering their role. In the United Kingdom for example, the government established a guarantee scheme for PPPs, and is taking an equity stake in PPPs. Europe has put in place a bond guarantee scheme for priority infrastructure projects, including PPPs. India's infrastructure funds continue to expand, and guarantee and take-out financing schemes are also expanding. Viability gap funds are being used more widely.

The broader application of these new ideas on the use of PPPs and their financing is worth considering in our region.

The second key message is that the PPPs agenda is much more than a series of projects. Notably, PPPs can help governments reorient themselves toward a results-based approach to management. In other words, PPPs can help governments change their roles from being the supplier of services to the buyer of services. PPPs can help countries build a new relationship with the private sector and provide business opportunities that will help private firms grow.

The importance of looking beyond projects is also evidenced by the linkages between PPPs and the finance sector. Although Asia is a high-savings region, there are actually gaps in long-term savings, with much of Asia's savings held in short-term bank deposits. This situation is changing as populations are aging and the strengthening of financial market policy and regulation foster an expansion in pension funds and insurance companies. Designing PPPs in such a way to attract these institutional investors can provide an expanding asset base needed by pension funds and insurance companies, and help deepen the finance sector. This deepening of the

finance sector, at the same time will help PPP projects secure long-term financing at lower costs, and avoid a dependence on commercial banks and their short-term focus.

The third key message I would like to highlight today is the importance of project development capacity. Good project identification, combined with solid project preparation, is an essential ingredient to a successful PPP program. This point was emphasized recently by a combined statement from the heads of multilateral development banks and the International Monetary Fund. They noted that a critical barrier to achieving an uplift in infrastructure investment in emerging and developing economies is an insufficient pipeline of bankable projects ready to be implemented.

I am pleased to report that ADB is taking actions to help strengthen project development capacity in Asia and the Pacific.

First, ADB has just established a new dedicated unit called the Office of Public–Private Partnership. One of the key functions of this new office is the provision of transaction advisory services to help ADB's developing member countries bring bankable projects to the market. The new office will provide advice on project marketing, deal structuring, bid packaging, and strategy so that governments are able to complete their transactions and reach financial close.

Second, ADB has just approved the establishment of the Asia–Pacific Project Preparation Facility (AP3F), which will provide ADB's developing member countries the resources to prepare good projects. ADB will also administer the US\$5 million technical assistance (TA) that the PRC recently announced at the APEC Finance Ministers Meeting. The TA is hoped to be scaled up with support from other donors and will help countries improve their capacity to conduct project prefeasibility and preparation.

These initiatives expand on the support already available from our regional departments, which will continue to lead country operations. We will continue to help countries raise awareness and build capacity for PPPs, improve the investment climate through better legal and regulatory frameworks, develop PPP policies and integrate PPPs into planning and budget systems. We will also continue to help establish project development facilities and financing initiatives at the country level that can invest in PPPs or provide guarantee schemes for the transactions, based on the experience from across the region, such as in India, Indonesia, Pakistan, and the Philippines, although we fully appreciate that each country is different and they need to develop their own, tailored project development facilities and financing initiatives. As part of our public sector portfolio, we also continue to support the governments' participation in PPP projects.

In concluding my welcoming speech, I would like to inform you that we intend to prepare a publication based on the insights from this 6th PRC–ADB Knowledge-Sharing Platform for wide dissemination in the Asia and Pacific region. The main presentations will soon be circulated here in the PRC through PPPwiki, a social media site established by our Beijing office.

I encourage all participants to actively participate in this event and share your views, your suggestions on what the region can do next to realize the full potential of PPPs.

I would like to thank once again the opportunity for the Asian Development Bank to support this important event. I wish you all a fruitful and productive workshop.

Thank you.

1. Case Studies from Asia

- Experience from the People's Republic of China (PRC)
- Pakistan's Experience with PPPs
- Observations from an Emerging PPP Nation (Mongolia's Experience)
- The Experience of the Republic of Korea
- Overview of Public–Private Partnerships in Bangladesh
- A Perspective from the Philippines
- A Regional Perspective

Experience from the People's Republic of China (PRC)

From the presentation of Xiaoping Jiao, Deputy Director General, China Clean Development Mechanism Fund, Ministry of Finance, PRC

Today what I would like to share with you is the PRC's PPP story, including its past, present, and future.

A Chinese saying goes like this, “taking history as a mirror, one can know the ups and downs ahead”. I will start my speech from the PRC's PPP in the past.

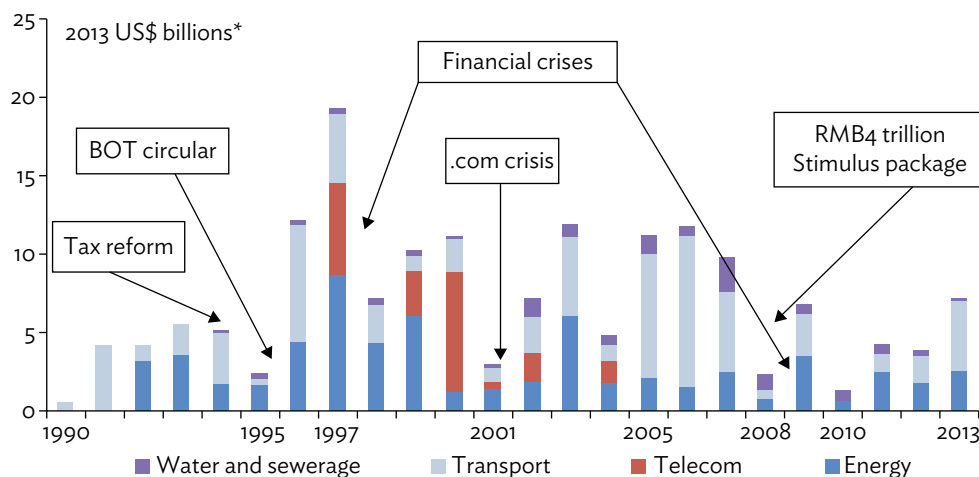
The PRC's experience with PPPs in the broad sense dates back to the 1980s with the household contract responsibility system in the rural area. Under this program, the ownership and management rights of farmland were contracted to farmers. This is the first example of the PPP model in the PRC. But the PPP model we discuss today refers to private investment in infrastructure in the narrow sense as defined by the World Bank. So the story of the

PRC's PPP program, in the narrow sense, starts from the 1990s.

From the 1990s to 2008, two stages can be witnessed. The first stage was in the years following the reform and opening up policy. At that time, our domestic private businesses were in a weak position and our PPP program in the 1990s was closely related to attracting foreign capital. As it well entered into the first decade of 2000s, our domestic private sector, which had accumulated a lot of capital in the 1990s, replaced foreign enterprises and became an important player in the PRC's PPP program.

The World Bank has provided a figure to depict the PPP development in the PRC. But in this figure, the private sector excludes the PRC's state-owned enterprises (SOEs). In our discussion of the PRC's past experience in PPPs, the private sector, however, includes foreign-funded enterprises, the PRC's private enterprises, as well as those SOEs that have established a modern corporate system during the market-oriented reform.

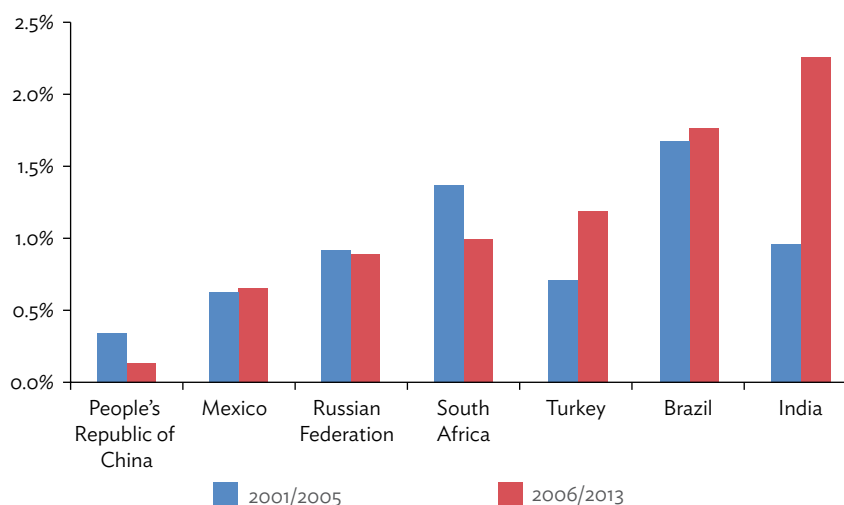
Figure 1: Private Participation in Infrastructure Projects in the PRC, by Sector



* Adjusted by United States Consumer Price Index, 2013.

Sources: World Bank and Public-Private Infrastructure Advisory Facility (PPIAF), Private Participation in Infrastructure (PPI) Database.

Figure 2: PPI Total as a Percentage of GDP for 2001/2005 and 2006/2013



Sources: Private Participation in Infrastructure (PPI) Database and World Development Indicators.

From the figure, we can see fluctuations before 2008. 1997 saw a recession due to the Asian financial crisis and the withdrawal of foreign capital. The second drastic reduction of private investment was found in 2008 when the role of foreign-funded enterprises had already been greatly reduced in the PRC. This dip was the result of the government's RMB4 trillion stimulus package that crowded out private investments in infrastructure.

The PPP projects that the PRC attracted since the 1990s have been concentrated in infrastructure, energy, water, etc. Although there has been significant growth in the use of PPPs with the data of SOE participation excluded, the PRC still lags behind the other six countries. Back from a recent visit, I have been deeply impressed by the Republic of Korea's PPP program. The PPPs in the Republic of Korea have almost been completely domesticated and localized. They have become a sturdy driving force in the localities' economic and social development as well as infrastructure construction. Despite the PRC's over 20 years of experience with PPPs, it has only just started

to see the full range of opportunities that PPPs can offer.

To summarize our experience in PPPs before 2003, we regarded PPPs merely as a financing vehicle and only applied them in construction. Our backward mindset, insufficient institutional capacity, as well as the underdeveloped market environment had constrained the role of PPPs. Specifically speaking, the following are the problems.

The first key problem is that the public and private sectors are not on an equal footing. How can equality be guaranteed? The answer is the rule of law. Without the rule of law, freedom, fairness, and full competition cannot be maintained. But, in the past, we only had a regulation on build-operate-transfer, which was promulgated by the defunct Ministry of Foreign and Economic Cooperation. There was no law then to regulate PPP activities. Various disputes and problems occurred in the implementation of PPPs, which were not addressed through the establishment of a logical legal framework.

The second problem is that our past PPPs lacked a full life cycle consideration. Take build–operate–transfer projects for example. Only the “B” phase caught our attention, whereas, for the long term, “O” phase was neglected. If we take PPP as a complete chain, we only played our role at one particular link. As a result, we failed to give full play to the full life cycle advantages and scale effect of PPPs.

The third problem is with our institutional capacity, including institutional capacity of the government, of the market, and of consultancies. Due to our low institutional capacity, our PPPs were not “marriages” but were only “wedding ceremonies”¹ that lacked a long-term vision. Moreover, we did not have a designated competent unit in the government to formulate a policy framework, provide guidance and technical assistance to PPP projects which had been implemented in different localities and sectors.

The fourth aspect is about our return on investment mechanism. We did not have a clear policy for the payment, pricing, and price adjustment for PPP projects, about which the private sector cares most.

Lastly, PPPs are a market that calls for comprehensive efforts to become full-fledged. They require a market-oriented environment, an advanced mindset, systems and institutions, and a social consensus. To develop the market of PPPs presents challenges as well as opportunities.

To meet the challenges, we must emphasize the rule of law and the role of the market as required by the *Decision on Major Issues Concerning Comprehensively Deepening Reforms*. In terms of fiscal reform, we must also follow the aforementioned two principles to realize our targets of maintaining social justice, letting the market play the decisive role,

establishing an integrated market, and ensuring sustainable development. It was just against such a broad background that Finance Minister Low Jiwei introduced the PPP model at the 2013 National Financial Work Conference.

PPPs will enable comprehensive reform. PPPs are seen as one important way to help the PRC to achieve financial reform. This comprehensive reform requires the reform of the government and that of the market. It calls for a change in the mindset and the improvement of the legal system. It involves the redistribution of resources.

We will make efforts in four aspects to fulfill the comprehensive reform that PPPs require. First, we will put the legal framework in place; second, we will build our institutional capacity; third, we will identify and carry out demonstration projects; and fourth, we will step up publicity and training.

As to the legal framework, several actions have already been taken to promote PPPs. The Budget Law has been revised and now includes clear provisions for PPPs. The upcoming new *Regulation on the Administration of Government Procurement* will have specific stipulations for PPPs. Having defined that PPPs are government procurement activities, we will also remove the confusion and contradiction between the *Government Procurement Law* and the *Tendering and Bidding Law*. Noting that the existing *Tendering and Bidding Law* and the regulation on government procurement cannot meet the demand of PPPs, we have visited Canada and the Republic of Korea and incorporated suggestions of the World Bank and ADB in our new *Regulation on the Administration of Government Procurement*. One of the findings of our study tour is that we have found that the competitive negotiation and competitive dialogue are used more often than public bidding.

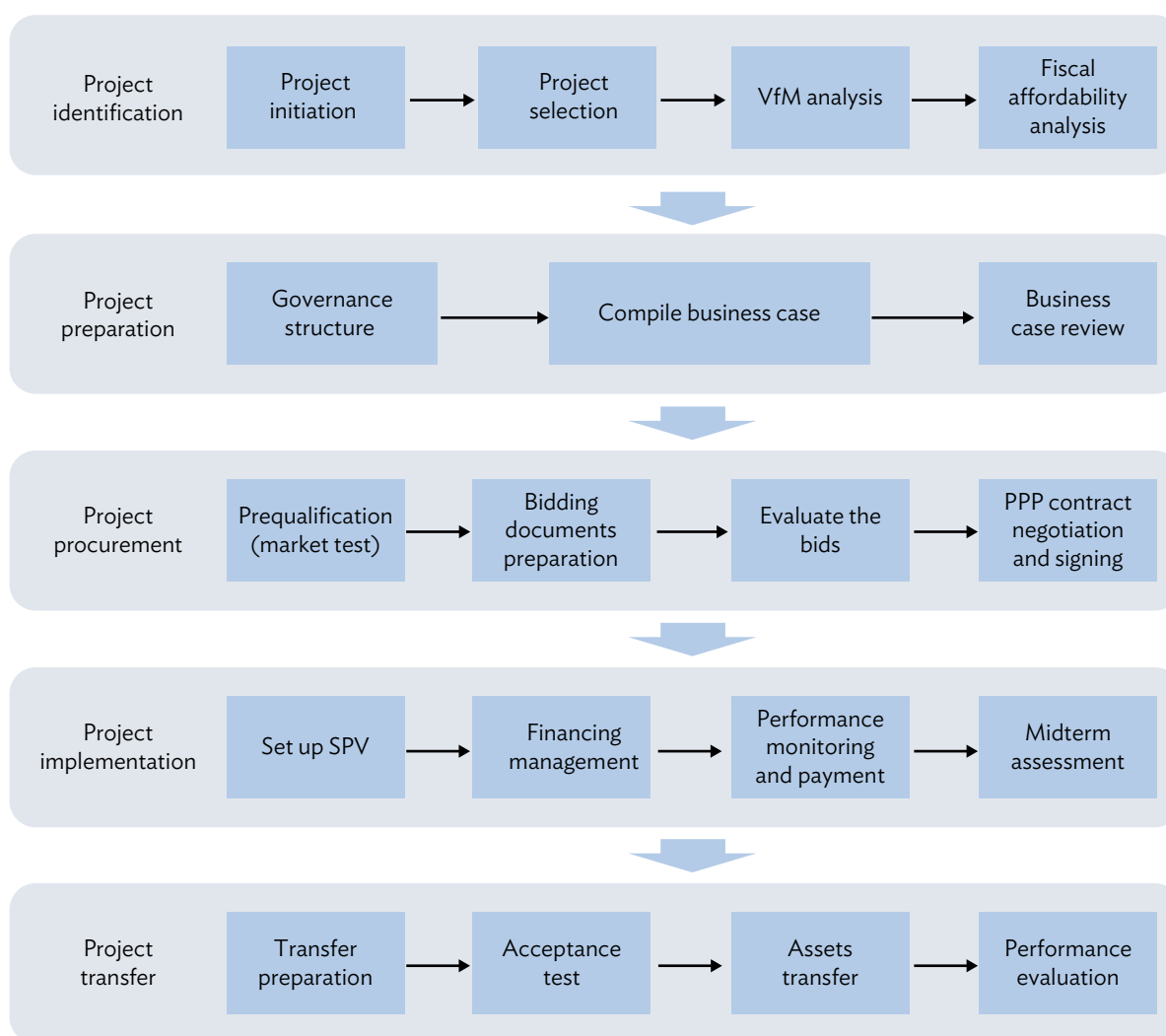
¹ Adapted from PPIAF report on “How to Engage with the Private Sector in Public-Private Partnerships in Emerging Markets” (Public-Private Infrastructure Advisory Facility. 2011). See <http://www.ppiaf.org/sites/ppiaf.org/files/publication/How-to-engage-with-private-sector-Clemencia-Farquharso-Yecome-Encinas.pdf>

For the institutional reform, the State Council has made it clear that the Ministry of Finance (MOF) should play the leading role in the promotion of PPPs. Second, we will set up PPP centers or units both at the central and the local level. The MOF has set up a PPP taskforce chaired by Vice Minister Wang Baoan. It is comprised of seven departments, including the Finance Department, the Budget Department, the Treasury Department, and the

International Department. Another 16 departments have also participated in the institutional design.

We have set up the China PPP Center as the executive agency. Before setting up the PPP center, the taskforce has visited the Republic of Korea, Canada, and Australia and consulted with ADB and the World Bank. I am delighted to inform you that the China PPP Center finally got the official

Figure 3: **PPP Project Process**



SPV= special purpose vehicle. VfM= value for money.

Source: From the presentation of Xiaoping Jiao.

approval the day before yesterday. Its functions will resemble its Republic of Korea's counterpart to the proportion of 80%–90%. It will provide technical support and take initiatives like releasing laws, policies, standards, and operational guidelines to safeguard the implementation of PPPs. Of course, we will give full play to law firms, accounting firms and consultancies.

To standardize the implementation of PPPs, *the PPP Operational Guideline* will be released soon by the China PPP Center. It covers the key issues in the five phases of PPPs procurement. The five phases are project identification, project preparation, project procurement, project implementation, and project transfer. In the project identification phase, we emphasize technical and economic feasibility study and fiscal affordability analysis. Through project preparation, we will decide the particular modality of PPPs to be used, the transaction structure, the legal system, and other key issues. Procurement must be implemented on the principle of openness and transparency. During the implementation phase, financing is the key issue. The last phase involves project transfer.

The top-down design for PPPs first and foremost calls for an institutional design, including both a legal framework and policy making. It also involves the design of PPP procurement procedure, the formulation of standards, and performance evaluation mechanism.

It can be said that our top-down design, the policies, and standards established for PPPs have fulfilled the expectation of the public. Take the PPP Operational Guideline for example. It has been modified for over 130 times. It is not a product of the government. It is a consensus of all sides concerned.

Third, I will discuss how the PRC will select and carry out demonstration projects. We have some priorities with regard to the selection of PPP demonstration projects. One priority is to transform the existing projects of our local government financing vehicles

which are identified not to be funded through issuing local government bonds. Another priority is to respond to the rapid urbanization. So PPPs will be rolled out in urban infrastructure sectors, such as road, sewerage treatment, and refuse treatment. We will also explore how to use PPPs in the social infrastructure such as public rental housing.

The last aspect is about knowledge-sharing and exchange. The MOF and local finance bureaus have also organized many training events to disseminate PPP knowledge.

As I said, the PRC has an open mind. PPPs will provide an important platform for exchange between the PRC and the rest of the international community. We will strengthen cooperation with multilateral agencies like the World Bank and ADB. We will also commit ourselves to bilateral cooperation.

As the PRC progresses on the path of modernization and toward the rule of law, PPPs enable a comprehensive reform. We will build an open, transparent, and integrated PPPs market where international investors and operators are all welcome.

Thank you!

Pakistan's Experience with PPPs

From the presentation of Mujtaba Shahneel, Director General, Finance Department, Sindh Public Private Partnership Unit, Pakistan

The need for PPPs in Pakistan is driven by the relationship between infrastructure and the economy. Pakistan's central location between the PRC, India, and Central Asia could allow it to become an important part of a regional trade corridor. The economy is nevertheless not growing as fast as some of its neighbors. The GDP growth rate is at 4% and per capita income is less than \$1,400 annually. Pakistan has the natural resources and regulatory and financial frameworks to move

The convergence of these infrastructure and social problems creates a situation where there is a great potential and need for PPPs in infrastructure, education, and health [in Pakistan].

forward as a growing market, but is facing constraints associated with insufficient infrastructure. The country currently faces a 500-megawatts shortfall in generating capacity which requires load shedding in 12 of the major cities. As for transport infrastructure, Pakistan has one of the lowest road kilometers per capita in the world, which reduces overall market efficiency. Also, Karachi is one of the most populous cities in the world and a commercial hub with potential, but it lacks the supporting infrastructure, such as mass transit, to accelerate economic growth. This infrastructure gap is estimated to constrain economic growth by about 3% annually. In addition to the infrastructure gap, there is a large young population and health issues such as polio and high infant mortality rate which continue to be problems. The convergence of these infrastructure and social problems creates a situation where there is a great potential and need for PPPs in infrastructure, education, and health.

PPPs are needed to provide such services because the government lacks the institutional capacity and financial resources to implement infrastructure projects. The government's capacity limitations stem from a lack of specialized personnel within the government and an ineffective bureaucratic system that has been in place since colonial times. The financial constraints stem from the high public debt which undermines development budgets, making it difficult for the government to fund large infrastructure projects.

PPP programs differ at the federal and provincial levels. Sector agencies or nodes are charged with various roles in PPP transactions at the federal level with the Infrastructure Project Development Facility (IPDF) taking a role as the implementing agency. IPDF has a set of guidelines for PPP transactions but no formal PPP act has been

implemented at the federal level. Some provinces have established their own PPP programs. Sindh province implemented a PPP Act in 2010 and Punjab followed with its own PPP Act in 2014. Both Sindh and Punjab have dedicated PPP units that are tasked with taking the lead on PPP projects. Punjab and Sindh also have implemented entities responsible for risk management while no such entity exists for the federal government.

Limited success with PPPs is evident at both the federal and provincial levels. No successful PPP projects are ongoing or have been completed within the IPDF at the federal level. The only completed PPPs connected to the federal government have been BOT model PPPs implemented by the Ministry of Highway Authority and the Ministry of Port and Shipping. The Power Infrastructure Board has also signed independent power producer contracts. Only Sindh has had some success in the provinces. Sindh province completed the Hyderabad–Mirpurkhas 60-kilometer dual carriageway and currently has four other PPPs under contract.

The Hyderabad–Mirpurk project provides some of the only available insights into how to implement PPPs in Pakistan. The project was sponsored by a Korean construction company. The government provided the construction company a minimum revenue guarantee of 10%. This guarantee was very important for banks since they have never financed a road sector BOT project. The guarantee attempted to address the problem of fluctuating interest rates in Pakistan which can make stable cash flow projects such as roadways difficult to finance. The Government of Sindh also had to insure the project against a number of possibilities including terrorism, which is expensive in Pakistan due to risks.

Pakistan faces a number of barriers to scaling up the use of PPPs. First, there are no standardized documents for PPPs in Pakistan. Second, political instability is continuously problematic. Third, the federal government has poor credit, which makes it difficult for banks to lend to the government.

The government delayed payments for power produced by independent power producers, and now many banks do not trust the government to pay back loans. Finally, the lack of developed financial markets makes it difficult to find financing for long-term projects. The longest-term project that banks are willing to finance is 10 years, which is not enough time for many PPP projects. This will be made easier as time goes on and banks take on more PPP projects. Their main concern is the uncertainty of these new projects, but financing will get easier as markets develop.

Observations from an Emerging PPP Nation (Mongolia's Experience)

From the presentation of Bekhbat Sodnom, Director General, Department of Innovation and PPP, Ministry of Economic Development, Mongolia

The Mongolian economy's growth has slowed from 17% to 6%. This led to a new government being put in place. The Mongolian economy is heavily dependent on mining. New coal and gold mining projects are going to be developed in the coming years, creating a source of funds for infrastructure projects. The need to support and accelerate economic growth led to an interest in developing PPPs.

In 2009, Parliament adopted the State Policy on PPPs to promote private sector participation in all sectors of the economy. In 2010, Parliament adopted the Law on Concessions, which provides the legal framework for implementing PPPs. A PPP Unit was established in the State Property Committee under the Prime Minister's Office and then moved in 2012 to the Ministry of Economic Development.

The government has approved several regulations regarding the bidding process and evaluation of bids. Originally, 121 concession projects were approved but the list was narrowed down to 51 projects. This is an open-ended list of projects that can be expanded. The projects span 10 different sectors

with various types of PPP arrangements. The government also accepts unsolicited proposals.

A number of mining roads and energy sector projects has been implemented. Concession agreements have been signed for many road and power plant projects to begin construction in 2014. Most of these projects are either BT (build-transfer) or BOT (build-operate-transfer) projects. These projects are a good start and, with the help of ADB, hopefully it will be possible to expand into projects in the health and education sectors.

The enabling environment has been essential in helping with the implementation of these projects. The allocation of responsibilities must be clear.

The Experience of the Republic of Korea

From the presentation of Hojun Lee, Director, PPP Division, Public and Private Infrastructure Investment Management Center, Republic of Korea

The Republic of Korea's PPP program was first formally introduced with the PPP Act in 1994. Since the act was introduced, it has gone through several revisions to incorporate updates to the PPP program. A 1999 revision allowed for unsolicited proposals from private companies and a minimum revenue guarantee from the government for certain projects. The most recent amendment, in 2005, added to the diversity of types of PPPs used by encouraging PPPs in educational facilities and military residences, and by introducing the BTL (build-transfer-lease) type of PPP whereas the BTO (build-transfer-operate) had historically been most common.

The legal framework for PPPs in the Republic of Korea is strong, consisting of the PPP Act and the PPP Act Enforcement Decrees. The PPP Act is the primary piece of legislation which overrules other, potentially conflicting, laws. This hierarchy exempts PPP projects from the strict regulation of national property management and allows private sector companies to play the role of a "competent

authority” or project sponsor. The PPP Act Enforcement Decrees provide for more detailed regulation of PPPs, including the regulation of procurement types and process, and the roles of public and private partners.

The PPP Act also establishes the administrative framework for PPPs. The Ministry of Strategy and Finance and the Private Investment Management Center (PIMAC) are directed to issue the PPP Basic Plan. This plan gives policy directions, details of the PPP project implementation process, and direction on documentation. Another part of PPP administration is a Project Review Committee that is tasked with making important policy decisions. This committee is chaired by the Minister of Strategy and Finance and consists of members from procuring ministries, and private sector experts. When necessary, the Project Review Committee

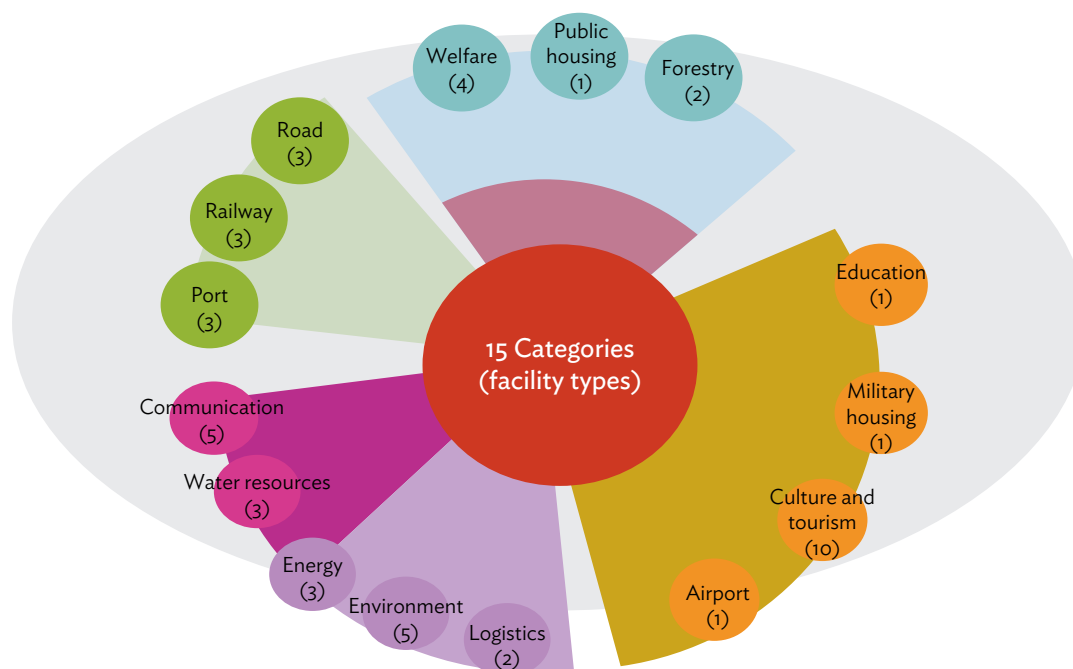
is able to postpone or block expenditure on PPP projects.

The PPP Act limits PPP activity to 15 facility types or categories. Facilities that are not stipulated in the act cannot be implemented.

Both BTO and BTL types of PPPs are common in the Republic of Korea. The BTL scheme was introduced in 2005. Figure 5 compares the BTO with the BTL PPP schemes.

A unique aspect of the PPP program in the Republic of Korea is that both the government and a private company can initiate a project. For a government-solicited project, the government uses a PPP when it determines that PPP procurement will be more efficient than conventional procurement. For unsolicited projects, a private company submits a

Figure 4: **Eligible PPP Facility Types According to the Republic of Korea’s PPP Act**



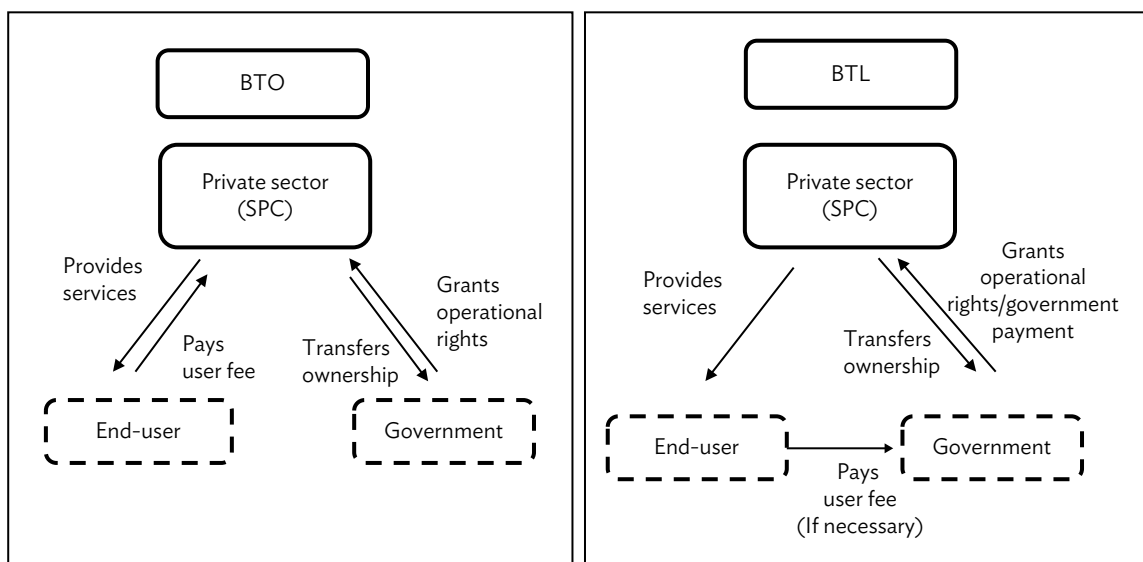
Source: From the presentation of Hojun Lee.

project proposal, which the government can then accept as a PPP. Unsolicited bids, however, are restricted to the BTO model. Given that most other developed countries do not accept unsolicited proposals, this measure is the key to attracting private investment in the Republic of Korea.

PPPs have been successful in increasing infrastructure investment and allowing the government to use its resources more effectively.

Infrastructure investments through PPPs dramatically increased from 1999 to 2007, and have subsequently remained at a steady, high level. PPP investments have represented from 5% to 36% of the value of total annual investments over this period, with an average of 21%. This has enabled the government to reduce its own spending on infrastructure and allocate these resources to other areas.

Figure 5: **Comparison of BTO and BTL PPP Schemes**



Source: From the presentation of Hojun Lee.

Table 1: **Infrastructure PPPs in the Republic of Korea****1. Toll collecting highway project from West Suwon to Pyeongtaek**

- Currently in operation
 - Scale: 38.5-kilometer (km) highway including 3 junctions, 7 interchanges, 86 bridges, and 1 tunnel
 - Total investment cost: \$1,115.4 million
 - Construction subsidy from the public sector: \$309.9 million
 - Private sector investment: \$805.5 million
 - User fee(toll): \$3.1(2012.12)
 - Concession period: 30 years
 - Minimum revenue guarantee
 - Guarantee period: 15 years
 - Requirement: above 50% of the traffic volume
- Condition: initial 5 years 80%, next 5 years 70%, the rest 5 years 60%

2. The double-tracked project of Jeonra Line between Iksan and Sinri

- Currently in operation
 - Scale: construction of double track railways between Iksan and Sinri (34 km), including the new construction of 5 railway stations
 - Total investment cost: \$600.5 million
 - Construction subsidy from the public sector: \$35.1 million
 - Private sector investment: \$565.4 million
 - Government payment: Consisting of facility lease fee and operation cost
- Lease: \$47 million, operation: \$3.7 million annually for 20 years

Source: From the presentation of Hojun Lee.

Table 2: **Health Sector PPPs in the Republic of Korea****3. New construction of Hwasun senior home**

- Currently in operation
 - Scale: Five-story hospital with 192 sickbeds
 - Total investment cost: \$15.6 million
 - Private sector investment: \$15.6 million
 - Concession period: 20 years
 - Government payment: Consisting of facility lease fee and operation cost paid by central and local governments
- Lease: \$1.45 million, operation: \$0.5 million annually for 20 years

4. Modernization of Gongju public medical center

- Present status: Public announcement
 - Scale: Total area of 31,409 square meters (m²)
 - Hospital: 26,615 m² with four-story building, 300 sickbeds
 - Underground parking lot: 4,794 m²
 - Total investment cost: \$70 million
 - Construction initiation: 2014.04.01
- Operation under BTL scheme period: 2016.03 ~ 2036.02 (20 years)

Source: From the presentation of Hojun Lee.

Table 3: Education Sector PPPs in the Republic of Korea

5. Elementary and secondary schools new construction project

- Present status: In operation phase
- Scale: Two elementary schools, one secondary school
 - elementary school A: 27 classrooms
 - elementary school B: 39 classrooms
 - secondary school C: 31 classrooms
- Total investment cost: \$61.62 million
- Private sector investment: \$61.62 million
- Concession period: 20 years
- Government payment: Consisting of facility lease fee and operation cost paid by the local government

Lease: \$2.2 million, operation: \$0.8 million annually

6. New construction of national university dormitories in Gyeongnam Province

- Present status: In operation phase
- Scale: Two dormitories
 - A university: accommodating more than 1,694 people
 - B university: accommodating more than 740 people
- Total investment cost: \$43.1 million
- Private sector investment: \$43.1 million
- Concession period: 20 years
- Government payment: Consisting of facility lease fee and operation cost paid by central and local governments

Lease: \$3.6 million, operation: \$2.5 million annually

Source: From the presentation of Hojun Lee.

Table 4: Environment Sector PPPs in the Republic of Korea

7. Jincheon Sewage treatment facilities

- Present status: In operation phase
- Scale: Sewage treatment facilities and ancillary facilities
- Total investment cost: \$22.8 million
- Private sector investment: \$22.8 million
- Concession period: 20 years
- Government payment: Consisting of facility lease fee and operation cost paid by central and local governments
- Lease: \$1.8 million, operation: \$0.3 million annually
- Pilot projects for sewage treatment facilities under BTL scheme

8. Landfill gas recycling project

- Present status: In operation phase
- Scale: 50-megawatt energy-generating facilities, power-transmission facilities
- Total investment cost: \$95 million
- Private sector investment: \$95 million
- Concession period: 11 years
- Minimum revenue guarantee
 - Guarantee period: 11 years
 - Requirement: Excluded when the ratio of the actual value/estimated value is less than 10%
 - Condition: Excessive profit-sharing is applied
- User fee
 - Supplier membership program + 5 cents/kilowatt-hour
 - Power Purchase Agreement with Korea Electric Power Corporation

Source: From the presentation of Hojun Lee.

The Republic of Korea is now focused on developing PPPs in the renewable energy sector, in particular. With a strong institutional setting for PPPs, the Republic of Korea is hoping to diversify energy resources and cope with climate change in order to increase national welfare. In the renewable energy sector, energy from waste has been the main focus for PPPs. A review of 95 PPP projects that took place from 2008 to 2012 showed that only 17 were categorized as renewable energy project—all 17 projects were waste-recycling energy projects. There is evidence that these waste-recycling projects result in higher returns than other projects. The average rate of return on investment for waste-recycling projects since 2005 was 7.00%, whereas the average rate of return on investment for other environmental projects was 6.54%. We are hoping to diversify renewable energy PPPs away from waste-recycling and into solar energy and wind power.

One way that renewable energy is being promoted is through high government subsidies for renewable energy plants. These subsidies range from 30% to 70% of the total plant cost. In addition to financial incentives, however, there must be better use of risk metrics, better concession agreements, and better cost estimation methods, especially given the high cost of renewable energy technologies.

Overview of Public–Private Partnerships in Bangladesh

From the presentation of Syed Uddin, CEO, Bangladesh PPP Office

Bangladesh has recently revamped its PPP program to align with government goals to increase economic growth through the private sector. The Sixth Five-Year Plan for FY2011–FY2015 that was released by the government in 2009 establishes goals for increasing the rate of economic growth in Bangladesh. Economic growth in the private sector has been hindered by a lack of infrastructure. For example, in some parts of Bangladesh, it takes 8–10 hours to get to the seaport, which is only about 200 kilometers away from the center. As

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such, the Sixth Five-Year Plan sets a goal to improve infrastructure services by increasing infrastructure investments from 2% to 6% of GDP by 2015. In order to achieve the target investments of 6% of GDP, the government would have to triple its investments in infrastructure. In order to ease the burden of investment on government, the Sixth Five-year Plan focuses on how Bangladesh could use private sector investment, private sector participation, and private sector capital to help deliver the infrastructure services that the country needs. This kind of large-scale growth will take time but the use and creation of an infrastructure pipeline will help provide insight into how the system can be improved as PPPs move forward.

There have been four phases of PPPs in Bangladesh. Until 1995, PPPs were developed on an individual project basis. There was no organizing or oversight body. In 1996, Bangladesh issued a private sector power generation policy that led to two large power sector projects. This policy was the beginning of a strong relationship between the government of Bangladesh and private investors in the power sector. The next began with the introduction in 2004 of the Private Sector Infrastructure Guidelines. Because of only sporadic success with the Private Sector Infrastructure Guidelines, there was a move to revise the guidelines and the PPP process in general. As a result, the Strategy and Policy for PPPs

Economic growth in the private sector [of Bangladesh] has been hindered by a lack of infrastructure. For example, in some parts of Bangladesh, it takes 8 to 10 hours to get to the seaport, which is only about 200 kilometers away from the center.

and a Special Power Act (specifically for the power industry) were implemented in 2010, beginning a third phase. The 2010 changes attempted to transform the PPP program from a sector-based approach to a program-based approach. The changes, however, lacked a centralized integrated push.

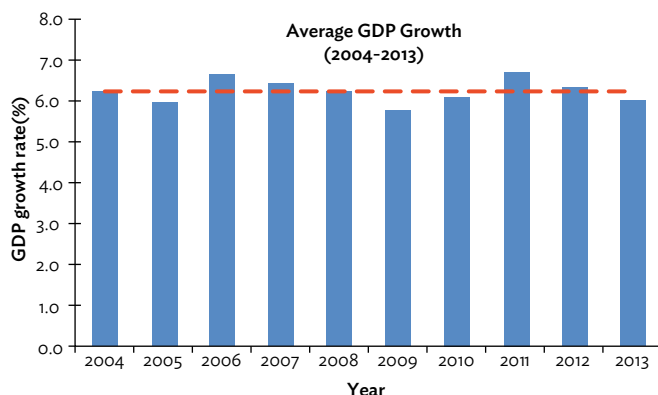
A draft of a PPP law has just received cabinet approval and will soon be sent to the Parliament. Five key changes have been introduced to various parts of the PPP process to establish a more centralized approach. First, new institutions have been created including the PPP Office as a centralized body. Second, the regulatory process has been streamlined. The Cabinet Committee for Economic Affairs, headed by the Minister of Finance, is now the only body that approves PPP projects, policies, and changes. Third, a new, very structured approach has been put in place for project preparation. Fourth, capacity development has been one of the major work areas for PPP development. Training and education have been provided to both public and private sector stakeholders. Lastly, financial support is being provided in three forms: (i) funding for transaction advisory financing; (ii) subsidies called Viable Gap Financing; and (iii) long-term equity financing through the Bangladesh Infrastructure Finance

Fund Limited, a special-purpose vehicle (SPV) under the Ministry of Finance.

The role of the PPP Office is to provide support throughout the life cycle of projects. This begins with the screening process for good PPP projects, through to monitoring the success of finished projects. The PPP Office is part of the Prime Minister's office in Bangladesh but reports to both the Prime Minister and the Minister of Finance. This institutional arrangement allows the PPP Office to be established at the base of power so that cooperation across various government departments can be ensured. The PPP Office also plays a critical role in developing PPP awareness and marketing campaigns to gain support for proposed projects.

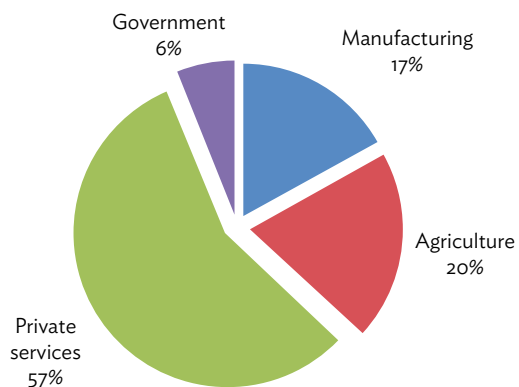
Reforms and improvements in the PPP program have been supported through technical and financial assistance from ADB and the World Bank. The five changes described above are still in various stages of implementation, and a program-based approach has still not been achieved. However, PPPs are still helping to achieve the goals of increased economic development established in the Sixth Five-Year Plan. Thanks to some of the recent reform efforts, PPPs now represent an additional tool which the Ministry of Finance can use to drive infrastructure projects and support private sector growth.

Figure 6: Bangladesh GDP Growth (2004–2013)



Source: From the presentation of Syed Uddin.

Figure 7: Composition of GDP



A Perspective from the Philippines

From the presentation of Rina P. Alzate, Director, Project Development and Monitoring Facility Service, Philippines PPP Center

The Government of the Philippines has recognized the indispensable role of the private sector in national development, and has identified PPPs as one of the key strategies to achieve inclusive growth through accelerated infrastructure development. The PPP program in the Philippines aims to supply adequate, safe, efficient, reliable, and reasonably priced infrastructure and services to the public while affording the private sector reasonable returns and appropriate risk-sharing. Both traditional (for example, toll-roads) and nontraditional infrastructure (for example, health facilities) projects can be implemented as PPPs. The government has been using the capital and expertise of the private sector to induce efficiency and innovation.

The Department of Health has worked with the private sector to upgrade public hospitals and other health facilities. The increasing demand for medical services, the need to upgrade medical facilities and medical efficiency, and limited government resources are some of the reasons why the government is using PPPs in the health sector. To accelerate reform for high-quality healthcare, the government has decided to use upfront private investment for the repair, rehabilitation, and construction of selected health facilities. The first project is the modernization of the Philippine Orthopedic Center. This project will be built and operated by a private company to make this hospital a more reliable and efficient government facility. The private sector will be responsible for the design, construction, financing, equipment, maintenance, and transfer of the hospital facility. The concession period will be 25 years, including the 2- and a half-year construction period. Unlike traditional PPP projects, health projects tend to be more challenging since the low- and middle-income groups rely heavily on public sector health

The Government of the Philippines has recognized the indispensable role of the private sector in national development, and has identified PPPs as one of the key strategies to achieve inclusive growth through accelerated infrastructure development.

facilities. Therefore, health PPP projects require intense stakeholder participation and consultation.

Investing in education has been identified as the design, construction, and maintenance of approximately 10,000 classroom. This approach was selected to minimize the fiscal impact of classroom construction by deferring payments for 10 years. This would allow the government to build more classrooms at one time, given a limited budget. The second phase of PPPs for school infrastructure is adopting the build-transfer contract modality. Under a BT contract, the private sector is responsible for the design, financing, and construction of 10,000 classrooms with all of the necessary equipment. The government has awarded eight PPP projects so far, and will continue to pursue PPPs in order to provide public services in an efficient and effective manner.

A Regional Perspective

Seethapathy Chander, Special Senior Advisor (Infrastructure and PPP), Office of the Vice-President Knowledge Management and Sustainable Development, ADB

Asia is a diverse region so it is difficult to have a regional perspective. The introduction of PPPs had various objectives in different countries. PPPs have been introduced in the smallest and the largest economies.

The objectives for PPPs have ranged from looking for a financial supplement to a need to address a lack of knowledge and internal capacity of the government. But the main difference across the region is not the objectives for PPPs. It is the different pathways taken by the various countries.

...The main difference across the region is not the objectives for PPPs. It is the different pathways taken by various countries.

Centralized versus sector control is one of the main differences between the pathways taken. In India, the highway sector has led the PPP program, which then moved to the energy sector. This has to do with project preparation and a particular view of a group of regulators or bureaucrats; in other, the government's central strategy for investing in people, reducing poverty, and building national competitiveness. PPPs have been identified as important to ensuring adequate provision of classrooms to supplement the current initiatives and programs of the Department of Education to address current backlog as well as future classroom requirements. The first phase of PPPs for school infrastructure is adopting a build-lease-transfer (BLT) modality involving countries where the provincial sector leads the PPPs. A lot of this depends on the motivation and the control behind PPPs and what kind of projects and investments the government wants to make. If a government is looking at a series of investments, then it is better to change laws in a complete way rather than project-by-project. However, if a government is trying to test the success of PPPs, then it can work on a specific project to see what it would require to have a large infrastructure project.

There are many constraints. When the political sector of a country is not comfortable with private sector participation in infrastructure, the process tends to move slowly. When the private and public

sectors can interact directly for full cost recovery, it changes market conditions and, sometimes, the government is hesitant since it sees this as part of its social obligations.

Experience levels vary widely and the more developed the country is with PPPs, the more PPPs start to shift to social sectors (for example, health and education). These require more complex government interventions since the outcome is not as clear as a road project.

When there are many objectives, there must be a hierarchy of objectives so that a project has a clear focus.

Sector and project planning can take up to 3 years before there is a bankable project. It is important to ask how the responsibilities will be distributed between the public and private sectors in order to make the project attractive to the private sector.

For project preparation, risk analysis and long-term financing planning pose additional constraints.

There is a view that large pension and insurance funds will want to invest in infrastructure projects, although there is little evidence of this. In OECD countries, only 8% of infrastructure funding came from insurance and pension funds. Some of these long-term investments are not investing more of their long-term funds because of the regulatory barriers that exist. This constraint is something that may need to be addressed in order to access these large funds for infrastructure investment.

2. Lessons in PPPs from Around the World

- Best Practices from the Organisation for Economic Co-operation and Development
- Australia's Experience
- Lessons from the United Kingdom's Experience

Best Practices from the Organisation for Economic Co-operation and Development

From the presentation of Douglas Sutherland, Senior Economist and Head of US/Iceland Desk, Economics Department, Organisation for Economic Co-operation and Development

If used correctly, PPPs can be an excellent complement to other tools the government might use to provide public services. An advantage of PPP is the output-based approach which allows the government to think about what it wants to provide rather than looking at the details of building the project. Benefits of using the private sector include the potential for innovation that could lower costs over the long-term and the chance to harness the financial expertise of private sector advisors.

A recent survey of OECD countries has found that most countries are happy with the use of PPP for procurement. These countries, however, noted that one detriment to PPPs, in comparison with traditional procurement, is the higher transaction costs. PPPs need heavy up-front investment, which is not always the case with traditional procurement.

The survey found that the rates of PPP activity in many OECD countries are still a relatively small portion of infrastructure investment. Even in a country like the United Kingdom, where PPPs have become a very important procurement method, PPPs only make up 15% of investments.

One of the concerns in increasing PPP activity is that, when PPPs go wrong, the results can be disastrous. If a private company goes bankrupt, or can no longer provide the service, the government may have to pick up billions of dollars in debt to ensure that public services remain available.

In order to reduce the risks of PPPs, OECD has developed three overarching considerations to address prior to any PPP project. First, the

If used correctly, PPPs can be an excellent complement to other tools the government might use to provide public services.

institutional framework needs to be right. Second, you need to decide whether a PPP is the procurement choice that will provide the most value for money. Finally, you need to ensure budgetary transparency.

Risk management is a necessary step that needs to be integrated into any PPP. The public sector is fiscally vulnerable in a number of ways. The first vulnerability is the limited resources of government. There is always a fiscal trade-off the government must consider when deciding how to pursue a project. The government has to look ahead at the viability of the project to ensure that the right project is in place. This will help avoid costs later due to contingent liabilities. Part of the way the public sector can protect itself is to have a robust selection process and develop a long-term strategic plan. Public sector due diligence is essential to ensure that a viable project is selected. It is also important that projects are pursued based on economic goals rather than only political motivation.

There are many ways to limit the fiscal risk associated with PPPs. Parliament can help make sure that PPPs are being implemented properly and effectively by establishing a legal framework. Transparency of the contracts and costs associated with PPPs can also be a helpful way to ensure accountability. For this to occur, all reported costs should be in a standard accounting form to avoid any attempts to shift costs off balance sheet. It is critically important that PPPs are reported in their entirety (on- and off-balance sheets) throughout their life cycles. In addition to project-specific costs, it is also essential to disclose information on all PPPs being used to deliver public services and the fiscal liabilities related to these contracts. Releasing public information can ensure that projects are done on budget and in the manner that was agreed upon.

Better contracting practices can also reduce fiscal risks. Vital to good contracting is a strong legal and regulatory framework that is suitable for PPPs. In addition, a centralized support unit for PPPs is a fundamental need. When the government is entering into a contract, it is helpful to have the consulting services of an independent body that can provide advice in areas where the government may not have familiarity. Another good practice is to avoid entering into long-term contracts for services where technology is changing or demand is inconsistent or hard to forecast. This type of situations presents increased risk using a PPP procurement approach because of future uncertainty.

A situation where the government faces increased fiscal risk is during the renegotiation period. Historically, at least 30% of PPPs are renegotiated at some point. Since the government is obligated to provide public service, the private sector may try to take advantage of this when looking to renegotiate a contract. Limiting the number of ways one can legitimately reopen a contract can help guard against this problem. Also, limiting the amount of debt the private sector can take on can help give the government more leverage in the negotiations. The government can help minimise contract renegotiation risk by reducing planning and environmental licensing uncertainties beforehand.

Finally, it is important to take stock from lessons learned from past experiences with PPPs, which means monitoring and reporting on the implementation of PPP projects.

Australia's Experience

From the presentation of Michael Schur, Managing Director, Castalia and former Secretary of the New South Wales Treasury, Australia

PPPs have a strong track record in Australia. Since 1993, there have been 127 PPP deals, valued at US\$55.6 billion. This is small in relation to the overall infrastructure investment over that period, but still

represents a fairly healthy flow of projects over the period with an average of three projects a year and a peak of 13 projects in 2005. The largest project was a US\$5.7 billion desalination plant finished in 2009. PPP projects are not evenly distributed throughout the states. The national government has taken a smaller role since the infrastructure development responsibilities lie primarily with the states. The PPPs that the national government does take on are usually defense projects.

The success of PPPs in Australia is largely due to the international best practice approach taken across jurisdictions. This approach is now being incorporated into a single set of National PPP Guidelines developed by Infrastructure Australia, a government body responsible for coordinating infrastructure projects. The importance of the National PPP Guidelines is that the model applied is consistent across the entire country, regardless of which state or federal agency is procuring a PPP. This standard approach means that bankers, equity investors, sponsors, construction companies, and operators all understand the risk profile that the government accepts. However, there are still inconsistencies between states that could be standardized, such as planning regulations, environmental and industrial relations laws, approval processes, and approaches to unsolicited proposals. The communication gap between the states on these issues can create barriers to the implementation of large projects.

Despite the success of many PPPs, there have also been some notable failures. While all projects were completed and provide the intended services, PPPs have failed in the sense that the private company either went bankrupt or equity holders lost money. The three notable failures of transit PPPs arose from overly optimistic traffic flow forecasts for toll

The success of PPPs in Australia is largely due to the international best practice approach taken across jurisdictions.

roads. The desalination plant, which has been the single largest project, failed because expenses rose by 27.5% due to construction problems.

In the years since the global financial crisis, the model has changed dramatically in Australia. A major fundamental change in PPPs is that bonds are no longer used to finance projects. All PPPs are now funded with bank debt. Some changes have been more positive, including a much more sensible approach to risk-sharing in which the private sector is no longer expected to take on the demand risk. This is happening in toll roads where the private sector is no longer taking demand risk.

Another recent change is that the government has made significant efforts to attract foreign contractors. The competitive bidding process on PPP projects has been undercut by a construction market in Australia that is dominated by two construction companies. In order to create a more competitive environment, the government has attracted foreign builders by underwriting losses associated with the bidding process. Foreign builders who lose procurement bids are reimbursed for some of the costs they incur while going through the PPP process. This financial incentive has encouraged many European firms to enter the Australian market. The success of these measures is evident in the strong participation in the bidding process with nine bidders on a recent school PPP.

There are still difficulties with the current PPP model. Availability of financing for PPP projects continues to be a barrier. Contractors bear construction risk but are then also constrained by the availability of capital, and are often left to compete against each other for finance. The government has to bear the demand risk and keep the assets on the balance sheet or have the private sector finance the construction phase at a higher cost.

However, there is a new model being considered that attempts to correct these problems. Combining conventional government-financed

In the years since the global financial crisis, the [PPP] model has changed dramatically in Australia.

design-build-operate (DBO) construction contracts with forward sale of the asset on specified terms, major projects could be funded using lower cost government debt. During the construction period, the government would issue converting infrastructure bonds that would be automatically removed from the state balance sheet during the operation period. The investors would receive a fixed coupon payment during the construction period that would convert to asset ownership at a predetermined price and would then earn returns from the SPV. The contractor would assume construction risk via incentive and penalty arrangements, and would continue to operate the asset during the operation period. This proposed model could succeed because capital costs of the asset and associated interim borrowings are now transferred off the government balance sheet at completion of construction. The end result is identical, but risks would be better matched, as construction companies would accept and manage construction risks, and long-term investors would accept long-term ownership risks.

One of the advantages of this new PPP model is that it explicitly decouples financing from construction. This opens financing that was previously inaccessible. The reduction in construction risks would attract superannuation funds (i.e., pension funds). The larger risks would also be better matched with those best equipped to handle them (contractors take on construction risks, investors take on long term ownership risks). Governments would also be able to use high credit ratings to get lower cost debt to finance the construction of the projects.

This model is currently being used for stage one of Australia's biggest urban road project, which will cost US\$11 billion. The government is aiming to complete stage one in two phases, with two different financing sources. For the first phase of

the project, it will use government funding. Then, when stage one construction is complete, a toll will be imposed and collected. The data on traffic patterns gathered based on toll collections will be used to obtain private sector debt against future toll revenues. The government will spend the debt on the second phase of the project, gather additional data on traffic patterns, and then sell the equity it holds. It will then recycle the equity into future phases. Under this approach, the asset remains off the balance sheet and does not affect the government credit rating.

Lessons from the United Kingdom's Experience

From the presentation of Shirvine Zhang, Director Corporate Finance, KPMG Advisory (China) Limited

The PPP program in the United Kingdom was created to bring the skills and expertise of the private sector to the public sector. The Private Financing Initiative (PFI) is the most utilized PPP program in delivering long-term social infrastructure projects. More than 700 projects have been delivered under the PFI model with a total investment of over £55 billion. PFIs usually run 25–30 years and local government authorities are responsible for project procurement. The private sector is expected to design finance, build, and maintain the asset until it is transferred to the government authority at the end of the concession contract. This process was used across a range of sectors.

The government is also responsible for helping to finance the project. Financing is typically secured

The Private Financing Initiative (PFI) is the most utilized PPP program in delivering long-term social infrastructure projects. More than 700 projects [in the United Kingdom] have been delivered under the PFI model with a total investment of over £55 billion.

through limited recourse financing, but approaches vary widely. After the global financial crisis, the PFI program has experienced difficulty due to pressure from government budget deficits and a lack of competitively priced debt financing. The PFI process has been criticized by the public sector because of its inflexibility and a lengthy and opaque procurement process. The government is revising the PFI process, and has changed the procurement process and the role that the public sector will play.

Project W2R is a joint waste-to-energy project between four different authorities. The project started due to the United Kingdom increasing the recycling target to 50% by 2020. The project has obtained £120 million of PFI credit. The government is hoping to have zero waste to landfill by 2020 and this project could divert 90% of waste from landfills in the four authorities. There has been a move to guarantee minimum tonnage in contracts to allow infrastructure provision to be financed using long-term loans from private sector funders. The joint working arrangement between various local authorities is beneficial in waste projects because it ensures that minimum waste volumes will be obtained.

Given a difficult economic and financial climate, the local authorities faced a lot of pressures to create an affordable project. The advantage of this project is the combined heat and power it produces. Two options were considered for allocating the tariff risk. The standard approach is for the government authority to seek a guaranteed electricity price from the bidder plus an upside gain share arrangement. The alternative approach is for the government authority to retain full tariff risk for guaranteed output levels for the facility on electricity generated.

The project was considered against the cost of continuing to use the landfill. A value-for-money test was done to evaluate whether it was the best option for the local authority. The value-for-money test also determined who was best placed to take the tariff risk for the energy output.

3. Finding the Right Institutional Arrangement for PPPs

- Lessons from the Republic of Korea's Public and Private Infrastructure Investment Management Center
- The Success of the Philippines PPP Center
- Institutional Arrangements for PPPs: Experience from the PRC and Other Countries
- The India Infrastructure Finance Company Limited
- Remarks from the International Experience

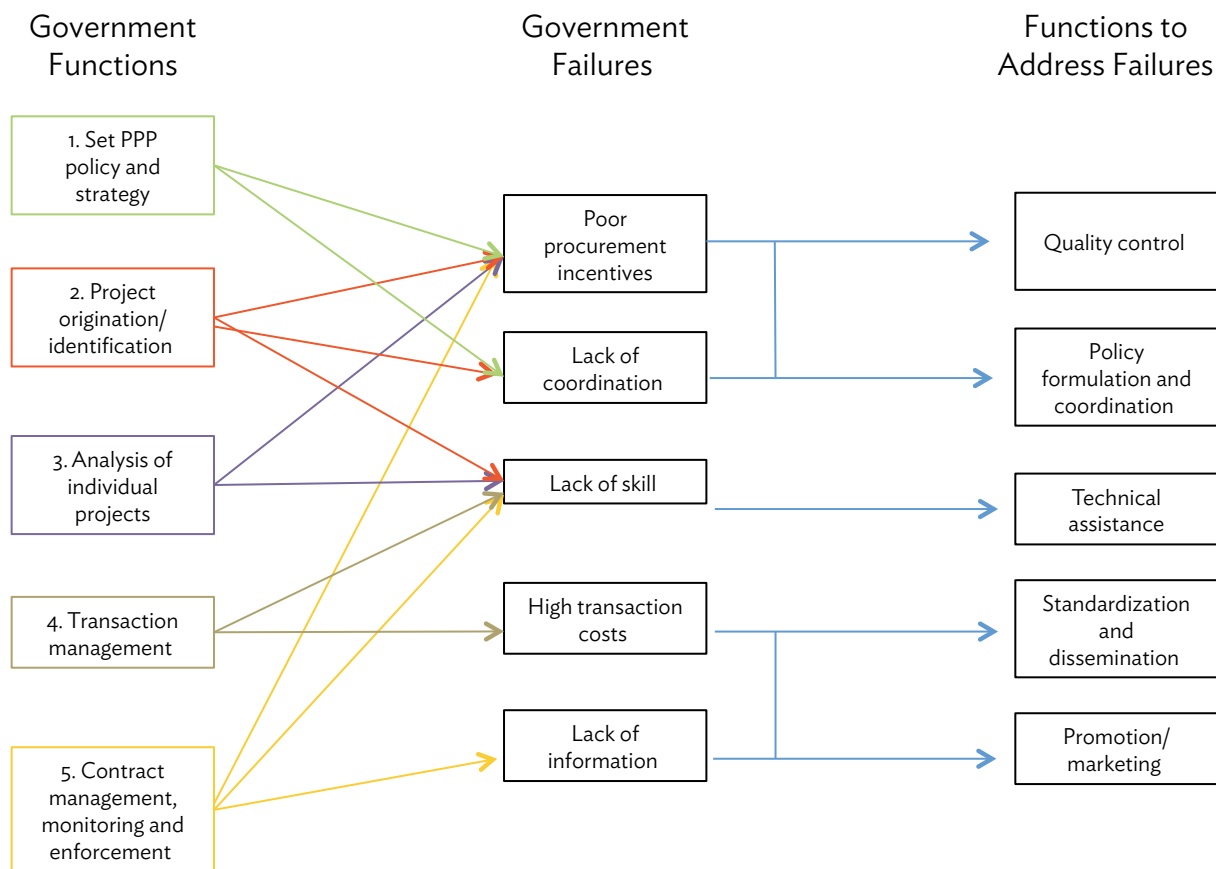
Lessons from the Republic of Korea's Public and Private Infrastructure Investment Management Center

From the presentation of Hojun Lee, Director, PPP Division, Public and Private Infrastructure Investment Management Center, Republic of Korea

The rationale for creating a PPP unit is to deal with potential government shortcomings in the PPP process. The government has policy, project implementation, and transaction and contract

management functions in the PPP process. Problems can arise if these functions are not coordinated among responsible agencies or staff lack the experience and information needed to efficiently carry out the procurement process. PPP units are centralized organizations established with the specific purpose of ensuring that the government has sufficient capacity to support and evaluate PPP transactions. The major functions of a PPP unit are typically to set up PPP policy and regulations, analyze individual projects, provide technical support for the procurement process, and help monitor existing PPP contracts.

Figure 8: Functions of PPP Units



Source: The World Bank, Public-Private Infrastructure Advisory Facility, 2007.

The legal status of a PPP unit and the hiring of skilled staff are important steps in making a PPP unit functional. The legal authority can be established through legislation or decree. A firm legal basis of a PPP unit helps instill private sector confidence in its authority. When PPP units have the enforcement power as well as legal status, they tend to be more effective in obtaining the objectives set forth by the PPP program. For staffing purposes, it is necessary to have a specialized staff across all areas including finance, law, engineering, and accounting. It is also helpful to have an experienced staff across the public and private sectors in order to ensure diverse backgrounds and avoid any conflicts of interest.

When determining the funding of a PPP unit it is important to consider the incentive structure. If a PPP unit is under another ministry or agency of the

government, then the funding should come from the government budget. If, like in the Republic of Korea, a PPP unit is an autonomous body outside of any other government agency, then a service fee scheme will need to be developed to gather revenue during the procurement process. Each of these models has its disadvantages. If 100% of revenue is provided through government funding, then all incentives to promote PPPs are removed because revenue is not tied to PPP activity. However, if expenses are covered 100% by service fees, then there can be a bias in the project screening process because staff will have incentive to increase the number of PPPs. It is important to find a balance in order to ensure economically sound PPP projects. In the Republic of Korea, the PPP Unit can charge a fee to local governments or government agencies but cannot earn profit from this fee.

Figure 9: **Organizational Setup and Operation of PPP Units Worldwide**

	Country	Year created	Policy Guidance	Technical Support	Capacity Building	Promotion
Case studies	Germany	2009	•	•	○	○
	Republic of Korea	1999	•	•	•	•
	United Kingdom	1997	•	•	•	•
	Victoria (Australia)	2000	•	•	•	•
	South Africa	2000	•	•	•	○
Other member countries	Czech Republic	2004	•	•	•	•
	Denmark	2006	•	•	○	•
	Flanders (Belgium)	2002	•	•	•	•
	France	2005	•	•	○	•
	Greece	2006	•	•	○	•
	Hungary	2003	•	•	○	○
	Ireland	2003	•	•	•	•
	Italy	1999	○	•	•	•
	Japan	2000	•	•	○	○
	Netherlands	1999	•	•	○	○
	New South Wales (Australia)	2000	•	•	○	•
	Poland	2001	•	•	○	○
	Portugal	2003	•	•	○	○
	Total		17	18	8	11

• = Yes ○ = No

Source: From the presentation of Hojun Lee.

Functions of PPP units vary slightly by country. Every PPP unit will take on policy guidance and technical support functions. Capacity building and promotion functions are not always part of all PPP units because there are concerns these functions might conflict with the core policy and technical functions. For example, promotion and procurement can conflict with other roles such as technical support and project evaluations. Because of this potential conflict, the Republic of Korea, the United Kingdom, Germany, South Africa, and Victoria in Australia have created dedicated PPP implementation units. PPP units in countries with these procurement authorities take on a more indirect supporting role by focusing on the policy and process.

The Public and Private Infrastructure Investment Management Center (PIMAC) is the PPP Unit in the Republic of Korea. PIMAC is an affiliated body with the Korea Development Institute. The Korea Development Institute was founded in 1971 and has emerged as the leading think-tank in the Republic of Korea. It is the first research institute regarding economic policy in the Republic of Korea. The legal basis for PIMAC was created under the PPP Act (2005), and the PPP Enforcement Decree (2011) gives PIMAC a variety of roles related to PPPs. PIMAC's role as a researcher is to support the formulation of the basic plan for PPPs and develop new initiatives and policy studies on PPP programs. As an advisor, PIMAC is to help with the development, execution, and support of projects, including assistance in tendering and negotiation. PIMAC is also stipulated to act as a market promoter for PPPs through training programs and seminars, international cooperation, and database management. PIMAC is organized into three divisions. The Public Investment Evaluation Division conducts preliminary feasibility projects on all public procurement projects. The PPP Division supports all PPP implementation. Lastly, the Policy and Research Division evaluates public procurement, state-owned enterprise, and PPP projects.

PIMAC takes on the technical assistance and policy functions of the government's PPP program.

Other public sector players provide the policy and coordination support and project procurement functions. The PPP Review Committee, chaired by the Minister of Finance, is responsible for PPP policy coordination. Under the Ministry of Finance are the procuring ministries and the local governments, which are both assisted by PIMAC in order to best implement the policies and ensure successful PPP projects.

The procurement steps for solicited projects begin with a feasibility study through PIMAC. If the project is feasible and is assessed to be a possible PPP, then PIMAC will conduct a value-for-money test. PIMAC then sends the PPP to the Ministry of Strategy and Finance to continue the procurement process. For unsolicited projects, PIMAC conducts a value-for-money test to guard against corruption and ensure transparency for all unsolicited projects.

The institutional arrangement to have PIMAC outside of the government creates improved independent studies, makes it easier to hire outside experts, and isolates it from political pressures. As a comprehensive agency, PIMAC is able to ensure consistency across all public investment management. However, there can be a conflict of interest between promoting PPPs and regulating PPPs that could create a more difficult PPP environment.

The Success of the Philippines PPP Center

From the presentation of Rina P. Alzate, Director, Project Development and Monitoring Facility Service, Philippines PPP Center

The PPP Center of the Philippines was created to serve as a government facilitator and catalyst in pursuing and delivering PPP projects. The government established the PPP Center (originally the BOT Center) in 1986 with the intent of achieving inclusive growth through accelerated infrastructure development. The PPP Center is the main coordinating and monitoring agency for

facilitating PPP projects. Services at the PPP Center now include providing advisory support; facilitating development of PPP projects; managing the Project Development and Monitoring Facility (PDMF); improving the capacity of national implementing agencies; advocating for policy reforms; and monitoring implementation of PPP projects. The mandate of the PPP Center also now includes implementation of the build–operate–transfer (BOT) law and joint venture and other PPP arrangements. The PPP office is involved in every part of the project cycle with the goal of ensuring that projects are bankable, transparent, and geared toward advancing a balance between the interests of the public and the private sector.

The PPP Center is one of several institutions that carry out functions of the PPP process in the Philippines. The other institutions consist of implementing agencies and review and approval bodies. In addition, other government bodies such as the PPP Governing Board, Department of Finance, and Department of Budget and Management have roles. The PPP Governing Board sets and approves policy and strategic directives for the national PPP program and, as part of this role, oversees the PPP Center and PDMF. The Department of Finance has offices that lead the structuring and legal agreement review, and formulation including performance undertakings or government guarantees processing for PPPs. The Department of Budget and Management issues the multiyear obligational authority for projects. It ensures that agencies include certain expenditures each year for the entire duration of the PPP project. To avoid a potential conflict of interest of being a regulator and implementer of a specific project, the BOT Law amendment has a provision prohibiting regulatory bodies from being a party to any PPP contract that they regulate.

Management of the PDMF is one of the key responsibilities of the PPP Center. The PDMF is a revolving fund that supports pre-investment activities to ensure project viability and bankability by engaging international and national consulting

The PPP office [of the Philippines] is involved in every part of the project cycle with the goal of ensuring that projects are bankable, transparent, and geared toward advancing a balance between the interests of the public and the private sector.

firms. There are 22 internationally renowned consulting firms in the consortia of the PDMF that can be hired for project implementation and management. The main responsibilities of the PDMF are to create feasibility studies, structure projects, prepare bidding documents, and ensure support during the bidding process until financial close. The PDMF received US\$28 million from the Government of Australia through ADB and US\$51 million from the Government of the Philippines. The revolving feature of the fund is designed in such a way that the winning bidder is responsible for the full cost of project development and a 10% cost recovery fee.

The PDMF uses ADB procurement guidelines when approving consultants through a two-stage selection process. The first stage is the prequalification of consulting firms on a quality-based selection. The firms in the consortia are retained for 3 years on indefinite delivery contracts without commitment. These contracts are used when consultants are required to provide “on call” advice on a particular activity, the extent and timing of which cannot be defined in advance. The second stage is the call-down assignment where the assignment will go to the first consultancy firm that submits a proposal within the budget. This stage also includes electronic submission and lump sum contracts for the assignments. The advantages of the PDMF include a shorter time for procuring consultants. It helps provide access to associations of international and national consulting firms prequalified to provide project preparation and transaction support services. The PDMF includes a refund to help incentivize bidding. It has been designed in such a way that, upon successful tendering of the project, the losing projects will get a partial refund for the cost of the bidding process.

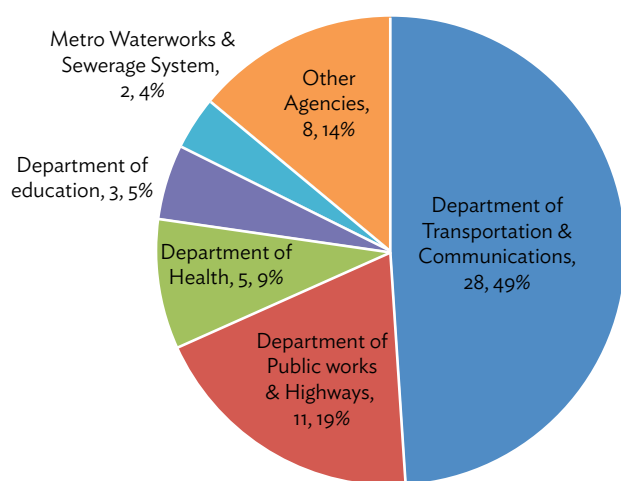
Figure 10: **PPP Projects in the Philippines**

Status	No. of Projects	Estimated Cost (US\$ million)
Projects under Implementation		
Awarded	8	2,833.33
Other projects for implementation	3	2,132.44
Subtotal	11	4,965.77
PPP Pipeline		
Projects for awarding	1	786.67
Projects under procurement	6	3,831.56
Projects approved for rollout	8	4,070.49
For approval of relevant government bodies	1	428.89
Projects with ongoing studies	9	6,882.89
For procurement of consultants	10	TBD
Under conceptualization or development	11	TBD
Subtotal	46	16,000.49*
Total	57	20,966.26*

Note: Figure 10 does not include 28 projects with no estimated costs yet.

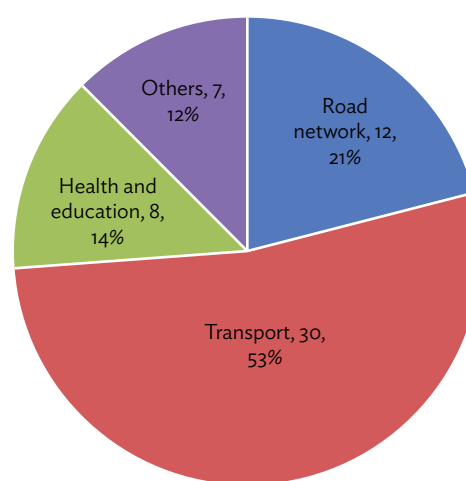
Source: From the presentation of Rina P. Alzate.

Figure 11: **PPP Projects in the Philippines, by Agency**



Source: From the presentation of Rina P. Alzate.

Figure 12: **PPP Projects in the Philippines, by Sector**



The PPP Center hopes to create a robust pipeline of PPP projects by 2016. There are more than 50 projects in the current pipeline. This includes 15 PPP contracts signed, 5 completed PPP projects, and at least 10 infrastructure projects handed over to the private sector for operation and maintenance. Other aims include ensuring a solid PPP legal and policy framework; transparent, predictable, and tested procedures and standard contract agreements that uphold reasonable returns; and a fair risk allocation to the private sector while safeguarding public interests.

Institutional Arrangements for PPPs: Experience from the PRC and Other Countries

From the presentation of Zhi Liu, Director, Peking University—Lincoln Institute Center for Urban Development and Land Policy

Most PPP project failures are failures of the government since the private sector is often better prepared in negotiating and executing the PPP project. For the government, only creating a PPP unit is not enough for success. The broader institutional arrangement is essential.

There are common impediments that can be seen throughout the world. There can be a lack of clear PPP policy and program and weak government institutional capacity for coordination and management. The legal and regulatory framework needs to create an enabling environment. The inadequate knowledge of PPPs, lack of sector strategy and PPP prioritization, and lack of bankable projects can all create large barriers for PPPs.

In the PRC, PPPs are a small but growing part of infrastructure investment. Recently, the Minister

The PPP unit is not enough when looking to create successful PPPs. The broader institutional arrangement is essential.

of Finance has taken actions to promote PPP. A national PPP Task Leading Group has been established. But the PRC is such a large country that a lot of work is required at the provincial level as well. The next steps include supporting the pilot demonstration projects, creating PPP pipeline, developing PPP project guidelines, strengthening laws and regulations, publicly disclosing PPP information, and developing human resources.

Thailand's PPPs started in the early 1990s, and were based on a simple PPP act, namely the Royal Act on Private Participation in State Undertaking, 1992. Since then, Thailand has experienced both successes and failures in PPPs. The most successful is the Bangkok Mass Transit System. The project went public in 2012 and raised US\$2 billion. Recently, Thailand significantly improved the PPP Act and created a PPP Unit within the Ministry of Finance.

India has been able to attract a significant amount of private investment to the highway sector through a well-defined PPP program. Guidelines, plan, and policy were all published in order to draw in private sector funds. This was a strategic approach to give the private sector all of the information that the private sector would need for preparation to participate.

Governments should plan PPP program in a strategic way rather than opportunistically. Capacity development is essential for larger scale success in PPPs.

The India Infrastructure Finance Company Limited

From the presentation of Sanjeev Ghai, Chief General Manager, India Infrastructure Financing Company Limited

The India Infrastructure Financing Company (IFFCL) was incorporated in 2006 and began operating in 2007. IFFCL was created in order to increase PPP activities in India. The Government

of India wanted to create an enabling environment for PPPs, and IIFCL was set up to achieve this objective by increasing availability of long-term financing. IFFCL was set up with four mandates. First, at least 80% of projects funded needs to be PPPs. Second, all financing had to be no less than 10 years. Third, IFFCL could originally only work on hard infrastructure projects, such as highways and airports, and was not permitted to support social infrastructure such as schools or health clinics (this has now changed). Lastly, IFFCL is only allowed to take on the risk of 20% of project costs.

A framework for PPPs was established in conjunction with IFFCL. The government came out with standard bidding documents in order to ensure that the procurement of developer is done in standardized and transparent manner. The second step the government took was to come up with model concession agreement. The government created this agreement model to address concerns from commercial banks and to ensure that the risk is borne by the party that is best suited to it. The model concession agreement includes provisions that outlined the rights of all parties involved in the transaction in case something goes wrong.

Since 2007, IFFCL has been involved in projects worth US\$80 billion. Of the 1,200 PPP projects in India, IFFCL has been associated with 300 projects. These projects have resulted in the modernizing of 20,000 kilometers of national roads; generation of more than 20,000 megawatt-hours of electricity; and the financing of a world-class airport.

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IIFCL has expanded operations with subsidiary companies. A wholly owned subsidiary in the United Kingdom was created in 2008 to help provide financing in foreign currencies. In addition, IIFCL Projects Ltd. (IPL) was developed in 2012 to provide advisory and development services for infrastructure projects. In 2012, IIFCL also set up IIFCL Asset Management Company Ltd-Infrastructure Debt Fund an infrastructure debt fund with the help of ADB. The Infrastructure Debt Fund aims to addresses the problem that the bond market in India is not as developed as one would hope in order to finance infrastructure projects.

IIFCL currently offers several financing options for infrastructure projects:

- Direct lending. Through direct lending, IIFCL is able to give lending as part of a consortium, but is limited to 20% of the total project cost. This allows them to have a 6-week turnaround time for deciding on a project.
- Takeout finance. Takeout finance is a way that the IIFCL can ensure that banks have a smaller asset-liability mismatch with the length of the project and the amount of risk they are willing to take. After 3–5 years, they will make an offer for the banks to exit the project. The IIFCL is limited to 30% of project cost, including direct lending for takeout finance.
- Subordinate debt scheme. The subordinate debt scheme helps sponsors with the contribution to the capital that they must make in order to get involved.
- Credit enhancement (pilot phase). The credit enhancement scheme attracts large pension funds and insurance funds by ensuring a high credit rating on certain projects.

In addition to financing component of infrastructure projects, IIFCL is also one of the few institutions in India with environmental and social safeguards measures for evaluating potential projects. IIFCL works directly with ADB on the Environmental and Social Safeguards Framework and the Management

Unit, which ensures that these safeguards are met and put forth by ADB.

Another important service provided by IIFFCL is nonrecourse funding. This is important because the balance sheet of many companies may not be good enough to justify providing funds for large infrastructure projects. Nonrecourse funding is the provision of funds to an SPV without any recourse to the financials or the balance sheet of the promoting-company or sponsors.

Remarks from the International Experience

From the presentation of Trevor Lewis, Senior PPP Specialist, Office of PPP, ADB

There is a way for one to work through the issues of PPP through institutional development and placement. The PPP unit becomes a pivotal, central point for PPPs. There are a number of approaches and roles that the institutional framework can take whether it is capacity building, technical support, or PPP promotion. The key people who set the tone for PPP units should have a variety of backgrounds, coming from both the public and private sectors. The location and mandate of PPP centers are not uniform, even across Europe. The PPP unit will become the face of the PPP program. The private sector gains confidence from a dedicated PPP unit regardless of exactly where it is placed in the government because it shows the seriousness of the government to provide a programmed approach to PPP development.

In many international examples, most are involved in technical support and policy guidance. Capacity building is more common in more developed PPP

countries such as the Republic of Korea, Australia, the United Kingdom, and South Africa. Most PPP units cannot fully approve the projects themselves; sometimes it is up to another body such as the Ministry of Finance. The question is whether the PPP units should have this ability. It is important

The PPP unit will become the face of the PPP program. The private sector gains confidence from a dedicated PPP unit regardless of exactly where it is placed in the government because it shows the seriousness of the government to provide a programmed approach to PPP development.

to think about funding for PPP unit when creating the mandate. Where the funding comes from could have an effect on how the PPP unit spends the funds. If the unit falls under the Ministry of Finance, the political position of the Ministry of Finance could influence the PPP unit. However, the opposite is true if the funding is generated by fees. This could create PPPs that do not have strong economic value.

If the PPP unit is fully in the public sector, it may not have the resources or funding available to attract the kind of expertise needed for PPPs. If this is the case, the PPP unit may be moved outside of the government in order to be successful.

Expectations and goals for a PPP unit must be realistic, measurable, and phased. Financial closure of projects through the PPP center does not mean overall success of the PPP center. It must be carefully analyzed to ensure that all goals and functions are being accomplished. The overall enhancement of value for money is essential to judging the success of a PPP center.

4. The Enabling Environment: How Can Governments Encourage PPPs?

- Observations from the Experience of Central and West Asia
- Facilitating PPPs in Asia
- The Legal Aspect of PPP
- The Government of the PRC's Procurement System Arrangements for Selecting a PPP Cooperation Agency
- A Perspective from South Asia's Experience
- Observations on PPP Funds

Observations from the Experience of Central and West Asia

From the presentation of Yesim Elhan-Kayalar, Principal Public Management Specialist, Central and West Asia Department, ADB

ADB's Central and West Asia Department provides both upstream and downstream support for developing public–private partnership frameworks and transactions to 10 countries in the region.

The public sector has been the main provider for infrastructure in the region. There is a pressing need for infrastructure services to meet the demands of a growing and fast-urbanizing population. Public resources and delivery mechanisms are limited. PPPs can offer unique value drivers such as more diverse, more efficient service delivery mechanisms, as well as asset creation and risk-sharing. There is tremendous potential for PPPs in the region.

Most countries share these development challenges, and each has a country-relevant approach to developing the PPP frameworks and portfolios. Armenia has partnered with the private sector through lease and management contracts, and water delivery is now provided by private water utilities across the country. ADB has been working with Azerbaijan and Georgia on how private sector development might be further fostered through policy dialogue and facilitative frameworks. In Kazakhstan, the Kyrgyz Republic, and Tajikistan, ADB is supporting the governments' efforts to develop institutional and legal frameworks, and the capacity to effectively manage PPP portfolios. In Pakistan, ADB has worked closely with the federal government and the provincial governments of Punjab and Sindh to build a solid foundation for PPPs since 2005. Achievements to date have been robust. We continue to provide technical and financial support to (i) further strengthen the legal, regulatory, and institutional frameworks; governance structure; and public financial management practices for PPPs; and (ii) develop

Public resources delivery mechanisms are limited and PPPs can offer unique value drivers such as more efficient service delivery mechanisms, as well as asset creation and risk-sharing.

long-term financing alternatives. ADB has also been working with the governments of Turkmenistan, Afghanistan, Pakistan, and India and private sector representatives on developing a 1,800-kilometer pipeline that would transport as much as 33 billion cubic meters of natural gas annually. The project has been making steady progress.

ADB's decade-long experiences in the region yielded several lessons and take-aways. First, rigorous stakeholder mapping and market assessments enable development practitioners to design country-relevant, robust institutional frameworks. They also help develop buy-in among key stakeholders, and manage the intensive accountability structure of the private sector partner and the extensive accountability of the public sector partners early in the process. Second, adopting a transparent legal, institutional, financial, and regulatory architecture—such as PPP or concession laws, model concession agreements, procurement guidelines, project development facilities, viability gap funds—brings clarity and builds public and private sector confidence in the new PPP modality being introduced. Technical expertise is needed to ensure successful PPP transactions. In some cases, the urgency to deliver a project may necessitate the engagement of external advisors and experts to safeguard the public interest until the public sector partners build the requisite in-house capacity. It is, however, crucial not to substitute capacity but to transfer skills and know-how to national practitioners in the public sector for longer-term, cost-effective solutions. Third, early successes build momentum. Countries that opted for noncomplex PPP models commensurate with their capacity to implement PPP projects at the time have achieved better results. The initial projects, when successful, have become the best advocates for new PPPs in these

countries. Four, planned linkages between PPP projects and the rest of the public investment portfolio help create greater value for the users. Prioritizing projects that optimize the synergies between PPP and publicly funded interventions have consistently yielded greater development impact. Finally, public and private sector capacity to select, develop, and implement commercially viable PPPs with economic dividends is the main building block for sustainable, value-generating PPP portfolios. ADB has successfully implemented a two-pronged approach in the Central and West Asia region, i.e., training a critical mass of public and private sector counterparts early on to ensure the buy-in and continuity of PPP initiatives, and continuing the capacity development as partners' PPP experiences increase and project designs become more complex.

Facilitating PPPs in Asia

From the presentation of Seethapathy Chander, Special Senior Advisor (Infrastructure and PPP), ADB

There are several elements that make up a successful PPP. First, it is important to have clear objectives established for the PPP from the beginning. Clarity of objectives will help simplify the legal components of the PPP. Second, it is important provide transparent and unambiguous conditions for development of the transaction. This step will ensure that the private sector operator or investor is clear on both the expectations and conditions on which the investment will take place. A third element of successful PPPs is to link bonuses and penalties to quantifiable performance indicators. Next, it is very important for PPPs to begin with a transparent and competitive procurement process that will provide for a clear understanding of the risks and rewards for both the public and private sectors. The public sector should always lead the PPP to ensure that the public service is being offered and that the PPP is more than a commercial transaction. Finally, the government must take an active role in the PPP

throughout the terms of the concession to ensure that the intended good is being provided and will successfully be transferred to the government at the end of the agreement.

When considering how to better facilitate a PPP, it is important to understand the actual intention of a PPP. PPPs are about the public sector having a responsibility to provide a public service, and subcontracting the private sector to provide this service. Effectively, the objective of the PPP is not an asset-creation exercise but an efficient delivery of services to the public. Therefore, when outlining the objectives of the project, it should focus on the intended performance outcome of the project rather than a physical output. The implementation of a PPP will also benefit from better coordination with sector master plans. It is important to have a sector plan that ensures that the benefits of a PPP project in network sectors like energy, transport, and communications are maximized. These plans mitigate risk to the private sector that shows the whole plan for the sector and, most importantly, how the PPP ties into sector growth. Marketing for private sector participation is another important piece that can improve PPP facilitation. Perception of PPPs has to be improved and marketing is one aspect that can be used. Transparency and objectivity in sector regulation is important to ensure a strong basis of negotiation for the two parties involved.

In preparation for a PPP project, not every detail must be outlined. It is more important to highlight the functional specifications of the project and focus on input-output relationships since the government is outsourcing the work. The government should always have a role in land

PPPs are about the public sector having a responsibility to provide a public service, and subcontracting the private sector to provide this service.

Effectively, the objective of the PPP is not an asset-creation exercise but an efficient delivery of services to the public.

allocations, as they are the party best suited to take on that type of risk. It is also important to allocate risk to those best able to handle it.

When handling long-term financing, currency choices are very important. The currency depreciation risk must be taken into account. Sovereign risk must be addressed as well. Since PPPs are long-term projects but governments have yearly budgets, this creates a danger of creating a backlog of liability where current budget cannot meet liabilities, which forces the project to be rolled back.

The Legal Aspect of PPP

From the presentation of Ellen Zhang, Partner, Pinsent Masons

From a legal perspective, there are certain legal environments that governments can use to encourage PPPs and make them more attractive to the private sector. The common legal concerns globally include the nature of the concession contract, the risk of changes in laws, and management of political risks. The legal framework for PPPs needs to create an enabling environment that addresses these concerns. This framework consists of common law/legislations issued by the country and private “law” which is the contract between public and private. The government plays an important role in both these legal levels as the creator of the legislation and also the party to be bound by the contracts they enter into with the private party.

When considering how this legal environment is established, there are two important issues that will be considered: (i) the need for a PPP Law and (ii) the nature of a PPP project contract.

A common question is whether a PPP law or a PPP act is necessary? The need for this type will depend on each country, but in general this type of law is an important aspect of the legal enabling environment. There are two possible functions of a PPP law, either regulatory or facilitation. In developing countries,

The common legal concerns globally include the nature of the concession contract, the risk of changes in laws, and management of political risks. The legal framework for PPPs needs to create an enabling environment that addresses these concerns.

establishing a facilitation-focused law can assist when national laws conflict with the creation of PPPs. In more developed countries, such as the United Kingdom, a comprehensive PPP law might not be necessary because other enabling laws such as contract, procurement, and property laws are already in place and function well.

One of the key questions surrounding a PPP transaction is the role of the government and the nature of the PPP project contract. Every PPP is a commercial agreement between the government and a private party. The issue is that the government is both the rule maker and the game player in PPP projects. These two roles need to be clearly separated. The government must be able to facilitate the PPP by creating the system of rules under which PPPs should function. It is also important for the government to play a leading role in honoring the contract set forth for the PPP. As such, a PPP contract should by nature be a civil contract rather than an administrative contract. A civil contract can help put the two parties on equal footing with equal responsibility.

The risk of changes in law is also an important consideration. Where it is possible to pass costs on to end-users, changes in the law are treated as private SPVs’ risks. From the government’s perspective, it recognizes that all the legal change risks cannot be shouldered by the private sector alone. If the private sector cannot quantify the risks of a potential legal change, it will raise the price for the government. Ideally both parties should share the risk like what is done in the United Kingdom’s public finance 2 model. In a public finance 2 model contract, changes are divided into three categories. Costs related to discriminatory changes in law or changes that apply to a specific

project are borne by the government. The government also bears the cost related to specific changes in law or any change that specifically refers to the provision of services of the PPP or to the holding of shares in companies whose main business is providing the same services as that of the PPP. The private sector bears the costs of general changes in law that is neither of the abovementioned changes.

Finally, management of political risk is important in foreign investment in an international environment. In certain countries, the political situation is such that the local government is unable to honor the contracts created. This needs to be a part of the due diligence before creating a PPP.

The Government of the PRC's Procurement System Arrangements for Selecting a PPP Cooperation Agency

From the presentation of Wang Ying, Director General, Office of Government Procurement Administration, Treasury Department, Ministry of Finance, PRC

To quickly establish a favorable institutional system for PPPs, the Ministry of Finance has, jointly with other ministries, made new policies and other institutional arrangements in areas such as PPPs procurement procedure, financing, project supervision, and performance appraisal.

I am with the Office of Government Procurement Administration of the MOF. My responsibility is to manage government procurement-related issues. So today I will introduce the Government of the PRC's thinking about PPPs as well as its specific actions from the perspective of government procurement management. My introduction consists of four parts.

First, selecting the cocontracting party of PPPs in accordance with government procurement rules is an international common practice. Adopting the

methods of government procurement to select the cocontracting party of a PPP is not only an international common practice but it is also a logical activity. During the long-term partnerships that PPPs create, the government is obliged to make payments or provide subsidies. At the same time, it also has to monitor prices and quality of infrastructure facilities and public services to ensure best value for money. PPPs procurement is, in nature, a particular activity that the government carries out for the purpose of supplying public services, and so it has to be included in the government procurement supervision system.

International practice tells us that all PPPs can be paid in two ways. One is government payment, i.e., public procurement where the government is buying public products, services, and works, and so it should be under the government's supervision. The second is user payment, i.e., concession. Internationally the concession of services and works is regarded as a form of government procurement rather than merely as a way of financing for infrastructure and public utilities.

The concept of PPPs is also consistent with the World Trade Organization's definition of government procurement in the Government Procurement Agreement. As long as it is for the purpose of discharging government functions, government procurement can be realized through various contract arrangements. That is why the World Trade Organization, the United Nations, the World Bank, and other international organizations as well as many countries follow government procurement rules when they select PPP partners. The *UNCITRAL² Model Legislative Provisions on Privately Financed Infrastructure Projects* emphasized that concession projects shall be procured using the methods of services procurement. The European

With PPPs, more than just price is involved in finding a PPP partner, such as quality and period that user fees will be required.

² United Nations Commission on International Trade Law (UNCITRAL).

Union has also revised its government procurement directives. Particularly, revisions have been made to the principles, methods, the procedure, evaluation standards, contract alteration, performance supervision of concession projects against the rules and requirements of government procurement. We also notice that member states of the European Union, Japan, the Republic of Korea, and other states have all included concessions in the Government Procurement Agreement. This is the international backdrop against which we have designed our own institutional framework for government procurement.

Second, there are a number of differences between PPPs procurement and conventional government procurement. PPPs procurement process is often more complex than that of conventional government procurement. A one-off negotiation is usually not enough to produce a document that can fully and clearly define all the aspects of a PPP project. In many cases, the private sector puts forward a proposal first. The contracting agency evaluates the proposal and negotiates with the private sector against its procurement need. Several rounds of negotiations and modifications will take place until the proposed specifications of the private sector finally meet the procurement needs of the contracting agency.

For PPPs, price is not the only factor in selecting the cocontracting party. Other factors such as quality and payment period are also considered. A toll road project may request the potential concessionaire to bid the shortest distance of toll collection. A public welfare-oriented project may take the duration of concession as a key factor in selecting the cocontracting party.

A PPP project is usually larger than a conventional government procurement project. The transactional risks and costs of PPPs are higher; the competition is lower; and failure is more likely. The contract system of PPPs is also more complicated than that of conventional government procurement project. These require more rigorous performance of

contract and also more consideration of remedies for conflicts that may occur later in the process.

Having discussed the aforesaid differences, the third part of my presentation goes to the PRC's legal arrangements for government procurement.

As I said just now, the PRC's procurement of PPPs must follow the international common practice of adopting government procurement rules. The selection of PPP cocontracting parties shall follow the methods of government procurement. The existing Tendering and Bidding Law and its implementing regulations only apply to building, extension, renovation, rehabilitation, and removal of works, so they cannot provide a legal support for PPPs procurement.

The five methods of procurement stipulated by the Government Procurement Law, which are public bidding, invitation to bid, competitive negotiation, and unitary source purchase and inquiry provide better and flexible choices for PPPs procurement. Besides, regulatory agencies are authorized to designate new methods of procurement. This will further increase the feasibility of PPPs. We are now studying a new procurement method in response to the particular characteristics of PPP procurements.

Our legal system for government procurement also stipulates that energy-saving and environment-friendly products, products of small and medium-sized enterprises, etc. are prioritized in order to excise macro control and realize policy targets. This is also favorable for PPPs to be used in public welfare-oriented sectors. The inclusion of PPPs in the PRC's government procurement system will also contribute to the convergence of the PRC's government procurement market with the international market. This has been our thinking behind the entire institutional framework for PPPs.

The fourth part of my presentation will cover our fundamental considerations over the management of the PRC's PPPs procurement. New institutional arrangements must be made in addition to the existing framework of the government to reflect

the characteristics of PPPs. These characteristics consist of procurement need, competitive methods, contract management, acceptance test, and performance appraisal. Our preliminary considerations are in the following aspects.

First, we will push ahead with the top-down design for PPPs. The top-down design will be carried out within the existing government procurement framework and, at the same time, capitalize on the international experience and practice, particularly the *UNCITRAL Model Legislative Provisions on Privately Financed Infrastructure Projects* and *UNCITRAL Legislative Guide on Privately Financed Infrastructure Projects*.

Second, taking account of the characteristics of PPPs procurement, we will add a new procurement method of competitive dialogue to the existing five methods. The upcoming *PPP Operational Guideline* will introduce the two-stage procurement method of competitive dialogue to ensure clear specifications for the procurement need in the first stage, and then carry out bidding on the principle of fairness in the second stage. Hence, the two-stage procurement method is intended to turn the focus of government procurement to value for money.

Third, we will improve our procurement procedure for PPPs. We are considering mandatory prequalification, field visit and clarification conference, publication of procurement result and contracts, invitation of quality control agencies or users to participate in the performance acceptance, and so on to ensure the successful procurement of PPPs and to improve the quality and efficiency of the project.

Fourth, we will innovate our supervisory methods. In light of the big size and duration of PPPs and drawing on common international practice, we will require a third-party guarantee to complement the administrative supervision and reduce project risks. We will promote information disclosure and welcome public scrutiny.

These are the key aspects of my presentation today. Thank you!

A Perspective from South Asia's Experience

From the presentation of Cheolsu Kim, Lead Finance Specialist, South Asia Department, ADB

There is a positive connection between infrastructure investment and the economic growth rate. According to a World Bank study, if a government invests 1% of GDP in infrastructure, there will be a 1% GDP growth later on. The role of PPPs is to increase opportunity for people to be able to contribute more to society. Multilateral agencies have the role of “the honest broker” for both parties involved.

In India, there has been a dramatic improvement of PPPs, but there is still a lack of long-term financing because of the lack of developed capital markets. ADB first got involved in India in the 1990s when it gave two loans, but these projects were not successful. There were not enough viable projects to be supported by the financial institutions. After 2006, the government worked to create an enabling environment for PPPs. In 2006, there were 150 projects in various stages of PPPs whereas, in 2014, there were 1,339 projects at different stages of implementation.

The government has tried to reform the finance sector to encourage investment in infrastructure development. The lack of bankable projects comes from the lack of enabling environment, expertise, and capacity. To change this, the government merged some smaller institutions with the Industrial Development Bank of India. These mergers would remove any duplication in infrastructure financing to create one entity.

There are certain PPP trends in India. The rising debt-equity ratio highlights the increased comfort level of commercial banks in financing PPP projects, and concession terms encourage the use of debt over equity. There is low participation of foreign players, particularly strategic investors.

Projects cannot go against the market. It is important to read the market, and make sure that what you are offering is something that the market would be interested in. It is important to manage the expectations of the market as well.

Observations on PPP Funds

From the presentation of Craig Sugden, Principal PPP Specialist, East Asia Department, ADB

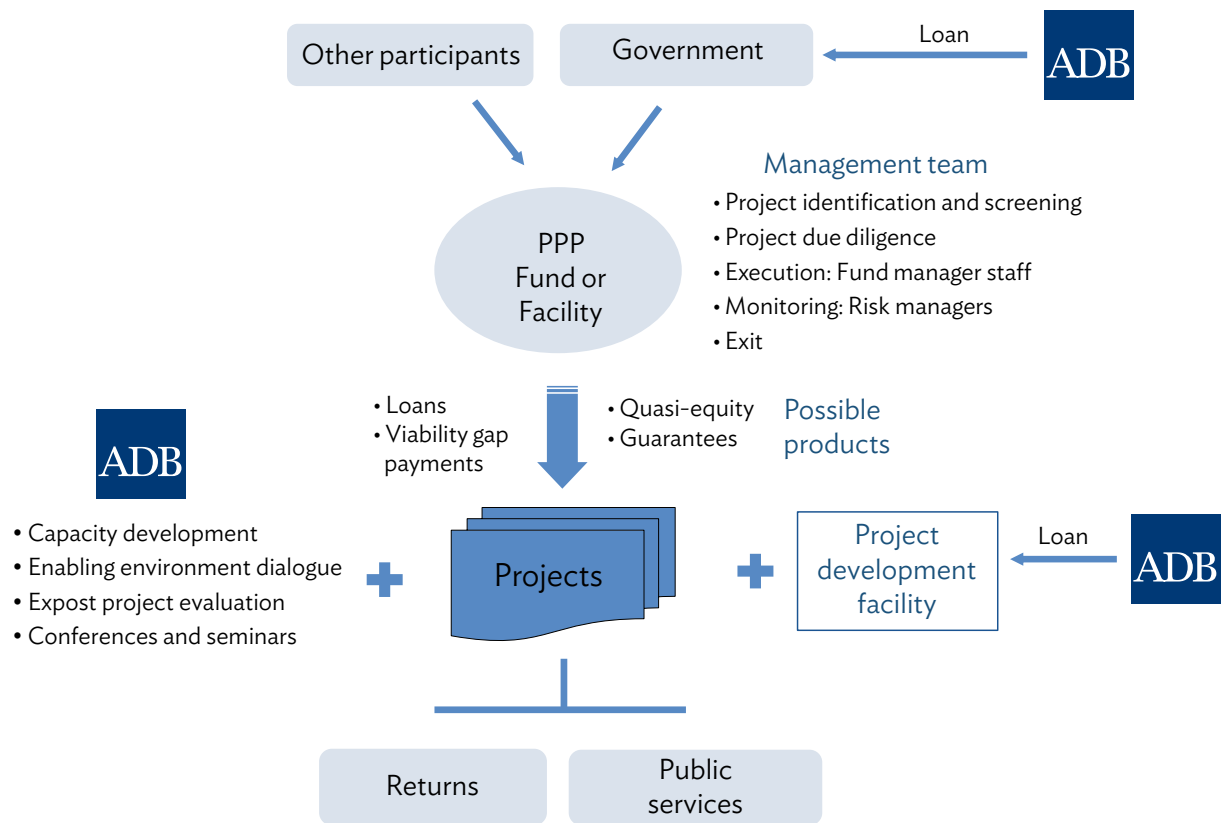
PPP funds are well suited to countries in the early stages of PPP development. They provide an efficient means of delivering government contributions to PPPs that need them. Relying on the budget for such contributions can be problematic as the budget process can be too cumbersome, government ministries can lack the expertise needed to understand PPPs, and because some of the financial products required, such as guarantees, do not fit budgets. PPP funds

do, however, rely on the presence of good projects and good teams to bring high-quality projects forward.

PPPs can be very expensive to prepare and, without the necessary resources and expertise, projects can become stuck. A project development facility (PDF) can help by preparing bankable projects and providing a vehicle for learning from past PPPs. They can operate as rolling funds that provide PPP units the resources they need to engage advisors and prepare essential studies.

ADB can help provide an integrated package of support for PPPs funds. ADB can help governments learn from other countries in the region, help establish the PPP funds and also PDFs, and, in some cases, may be able to provide the resources needed by PPP funds and PDFs.

Figure 13: Integrated Support of PPP Fund or Facility



Source: From the presentation of Craig Sudgen.

5. Managing Fiscal Risks Facing Central and Local Governments

- The World Bank's Framework for Managing Fiscal Commitments from PPPs
- Local Government Debt, Fiscal Risks, and Their Management Framework
- Recent Australian Initiatives
- An Advisor's Perspective

The World Bank's Framework for Managing Fiscal Commitments from PPPs

From the presentation of Binyam Reja, Lead Transport Specialist/Cluster Leader for PRC and Mongolia Transport Practice, Transport and Information Communications and Technology, World Bank

When a government is interested in building a metro transit system or a water supply system, it has two options for procurement. It could go the traditional route and borrow funds from a local bank or it can engage a concessionaire to build either system and pay them availability payments. The difference between these two transactions is in the payment scheme. A loan requires debt payments while a concession contract requires availability payments. A common misconception is to think that, because the government is not taking on debt in PPP, then the investment money are funds the government has raised. PPPs do not create more money for infrastructure investment. There are benefits such as efficiency expertise, but PPPs are a way for the government to finance the cost, not to create more funding. While PPPs do not have the fiscal risks in the form of debt, there are still government liabilities with inherent risk.

Any government that enters into a PPP takes on direct and contingent liabilities. Direct liabilities are known obligations that the government agrees to pay as part of the PPP contract. These payments might include upfront viability or capital payments for work that needs to be completed prior to the project or regular payments over the lifetime of the project such as availability or amnesty payments. Contingent liabilities are any unknown liabilities that accrue as the process moves forward. These ex ante liabilities include guarantees on particular risk variables, force majeure compensation clauses, termination payment commitments, and credit guarantees. These fiscal commitments and guarantees create risk because the government's responsibility only materializes when there are unforeseen circumstances. Contingent liabilities

A common misconception is to think that, because the government is not taking on debt in PPP, then the investment money are funds the government has raised. PPPs do not create more money for infrastructure investment.

There are benefits such as efficiency expertise, but PPPs are a way for the government to finance the cost, not to create more funding.

pose a threat to the fiscal system when governments do not properly implement systems of awareness and management to account for the risk of these commitments.

The government can take precautionary measures to mitigate the risk of these contingent liabilities. Most important is that the government only pursues projects that are economically viable. Project decisions should be based on an extensive assessment of economic benefits. The government also needs to consider whether the PPP agreement represents the most efficient procurement method in the long term. Due to election cycles, there is incentive for governments to favor contingent liabilities in PPP contracts over direct liabilities of public debt. PPPs can provide convenient short-term solutions that allow the government to defer payments and avoid budgetary approval on debt. Another perceived benefit is that, unlike public debt, contingent liabilities taken on in a PPP transaction remain off-book and the impact may not be visible for years. When committing to a project, governments need to make decisions based on a long-term assessment that takes into account potential costs of these contingent liabilities.

The danger of taking on too many contingent liabilities was evident in the Asian financial crisis which started in 1997 and the recent economic crisis in Portugal. During the Asian financial crisis, several Asian countries suffered exacerbated impacts due to off-book contingent liabilities that were immediately turned into public sector obligations. A similar miscalculation aggravated the

economic crisis in Portugal where the government had to take on the debt of many failed PPP projects. The mistake these countries made was that they did not properly anticipate and manage the risk related to the fiscal liabilities they agreed to as part of their PPP transactions.

The issues of extending fiscal commitments beyond their affordability has historically been a problem in the PRC as well. Guaranteed returns have been one of the common commitments provided by governments in the PRC that have overexposed them to risk. These guarantees are not allowed at the national level, but local governments have often used this form of a commitment to attract investors. Local governments regularly over-promise guarantees of return and overlook technical and management qualifications of concessionaires. Some of the problems relate to a lack of institutional capacity to properly manage and assess these fiscal commitments.

Recent national policies aim to establish guidelines for managing the fiscal risks of PPPs in an attempt to increase fiscal responsibility. The *Notice of Promoting and Utilizing Government and Social Capital Collaboration* released in September 2014 provides guidelines for improving fiscal management. One of the key recommendations in the notice is that fiscal subsidies should be based on performance and tied to measures of project costs. The State Council also released the *Directive on Strengthening Local Government Debt Management* in October 2014. The directive requires that local governments include contingent liabilities in their budgets. These changes will promote better management of the costs of PPPs and will improve the tracking of risks borne by the government.

Based on the principles demonstrated from the international perspective, the PRC still needs to adopt a framework that defines the roles and responsibilities within the government for managing fiscal commitments. There has to be an

institution, such as the Ministry of Finance, that manages fiscal risks of PPP projects. In addition to the contracting authority, there also needs to be an interdepartmental coordination in the government. This cooperation requires a formal institutional arrangement between government departments that establishes clear roles and responsibilities for PPP development and implementation. These interdepartmental roles include an advisory body (often the PPP unit), budget department, debt management body, other departments, various ministries, and planning commissions that have to look at PPPs in a more systematic way to ensure that the contracting authorities do not overextend on commitments.

Another important consideration to make is that risk allocation should be balanced between the public and private sectors to ensure an efficient and effective project. If the government has all of the risks, then there is no incentive for the private sector to create an efficient PPP. If the private sector bears most of the risks, then the probability of project failure will increase. There must be a system in place that does not put all of the risks on the private sector yet still safeguards the public sector. Some countries put in place a limit on how much debt, direct or indirect, a government can take on depending on the percentage of the overall cost of the PPP. These liabilities should be reflected in the government finances and be budgeted into the fiscal plan. There are also a few options for budgeting these risks into the PPP cost. The annual payment and direct commitment can be built directly into the budget allocation of relevant

In addition to the contracting authority, there also needs to be an interdepartmental coordination in the government. This cooperation requires a formal institutional arrangement between government departments that establishes clear roles and responsibilities for PPP development and implementation.

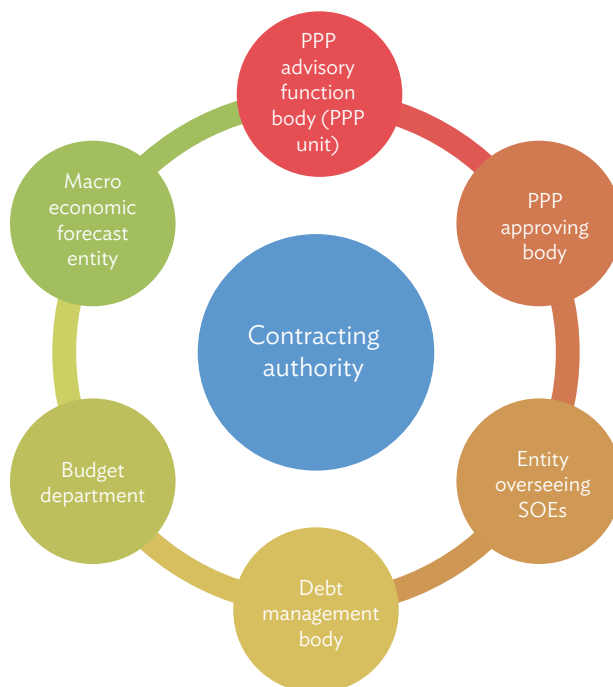
departments. Governments can also budget the long-term PPP commitment or a contingent commitment which creates additional budget flexibility by including contingency reserves in the budget. These can be used to meet contingent liabilities that are likely to arise. This measure could include creating a fund upfront to “insure” against contingent liabilities.

Improvement of the fiscal management system of PPP will also require the PRC to implement a strong and complete legal framework. Legal mandates need to be established that require regular access to performance information throughout the life of a project, and a PPP monitoring unit needs to be assigned the responsibility for

ensuring these requirements are met. There also needs to be disclosure requirements on terms and commitments of PPP contracts. Contract transparency can help prevent excessive promises and commitments in PPP transactions.

The PRC has several steps it must take to improve the management of fiscal risks related to PPPs. Based on international experience, changes to institutional responsibilities, the legal framework, and budgetary systems need to be made. Other steps such as adopting accrual accounting standards and improving processes for evaluating direct and contingent commitments could further support this effort.

Figure 14: **Interdepartment Cooperation in Government for PPP Projects**



Source: From the presentation of Binyam Reja.

Table 5: Roles and Responsibilities of Government Institutions for PPP Projects

Institution	Roles and responsibilities
Contracting authority	<ul style="list-style-type: none"> Government agency or state-owned enterprises (SOEs) that appraise projects from all aspects Identify fiscal commitments and budget, monitor and respond to fiscal commitment over the life of the project
PPP project advisory function (PPP unit)	<ul style="list-style-type: none"> Formulate PPP policy and provide TA in PPP Help develop standard contract clauses and guidance on managing fiscal commitments, and monitor PPP program accordingly
Debt management department	<ul style="list-style-type: none"> Often set in the Ministry of Finance (MOF) to assess and advise on fiscal commitment from a long-term liability management perspective Manage fiscal risk, incorporate updated fiscal commitment into debt and fiscal sustainability analysis, and undertake scenario analyses and stress tests
Budget department	<ul style="list-style-type: none"> Often set in MOF to assess and advise on fiscal commitment affordability from a budget priorities/constraints perspective Document fiscal commitment, allocate and release budget for DL and CL, create provisions for PPP contingencies and fiscal rules to respond to contingencies
Macroeconomic forecast entity	<ul style="list-style-type: none"> Often set in MOF to assess and advise on fiscal commitment from an overall liability and macro management perspective Assess possible adverse impact of excessive subnational exposure to fiscal commitment
Entity overseeing SOEs	<ul style="list-style-type: none"> Set in MOF or as a stand-alone entity, to assess and advise on SOE health and exposure to PPP commitment Monitor SOE performance in PPP contract, and review implications to government budget and expenditure
PPP approving body	<ul style="list-style-type: none"> Minister of Finance, with veto power and supported by a secretariat, to approve PPP project, draft contracts, tender rules, and renegotiation of PPP, based on all rules listed

Source: From the presentation of Binyam Reja.

Local Government Debt, Fiscal Risks, and Their Management Framework

From the presentation of Shangxi Liu, Director General, Research Institute for Fiscal Science, Ministry of Finance, PRC

It is not easy to depict a clear picture of Chinese local government debt, fiscal risks and their management framework in such a short time. It is a challenge for me!

Question 1: Why are local governments in debt?

How can local financial risks be effectively managed in the PRC? The key to this task is improving the allocation of responsibilities between local and central governments.

In China's case, fiscal risk management mainly rests with local governments. To discuss this issue, firstly we have to answer a question: why are local governments in debt? The question seems simply but is actually very complicated. From an accounting perspective, debt is a disposable

resource with future obligations. Although sharing some similarities, government and corporate debts are different in many perspectives. We've got to have a clear picture of these differences before we can hopefully manage control fiscal risks.

Government debt originates from the expansion of government functions and has to do with public risks. Corporate debt, however, follows the expansion of a company's size and has to do with market risks. Almost all modern governments spend more than its revenue to perform their functions and prevent or deal with public risks. The government needs to fulfill its functions and is forced to take on this debt when its revenue cannot cover all of the costs. In the PRC, there is a difference between "local governmental debt" and "local government's debt". "Local governmental debt" is larger than "local government's debt" because it includes different types of debt: debt *in certum* and contingent debt, statutory debt and moral debt. Local government debt derives from public risk management and is incurred as the government has to shoulder the statutory and moral responsibilities and perform its functions. So "local governmental debt" requires a different risk management approach because there is less certainty in public service responsibilities and how much of this debt will be incurred over time. We must realize that the management of "local governmental debt" has a different connotation from the management of debt in a strict accounting perspective.

Question 2: Verification and measurement of local public fiscal risks.

The fiscal risk a government faces is not necessarily in proportion to the size of its debt obligations. Risks are associated with the scale of public resources available to cover the debt obligations. Before we look for resources to cover it, we have to identify and classify different types of debt. It is the statutory contingent debt and moral contingent debt that pose considerable risks to a local government.

Before risks are verified, an assessment should be made on the public resources and assets that a government owns to scale down the debt. The concept of public resources is in its broad sense. They refer to not only revenue from taxation, administrative charges, government conveyancing revenue but also assets and natural resources, the latter two are quite considerable. In this sense, local governments in China have more resources to cover their debt compared with their western counterparts.

Apart from the debt-resources match analysis, we also need a dynamic perspective. We must evaluate the effectiveness of debt utilization. Whether risks are increasing or decreasing depends on how effectively and efficiently the government is using the debt. In this context, some debt can be considered benign and some malignant. Benign debt boosts the local economic growth and generates extra public revenue. Malignant debt increases the debt without expanding a government's revenue. Fiscal risk management is more than matching the size of the debt and the resources that can be used to cover the debt. Instead, better fiscal risk management requires dynamic analysis of the health of the general economy.

Question 3: Basic framework of local fiscal risk management

How can local fiscal risks in China be effectively managed?

Firstly, the functions of local governments must be clearly defined. The functions of a local government predetermine its revenue and expenditure, hence the scale of debt. China must now readjust the allocation of functions between the central and local governments. Only when the functions of the local governments are clearly defined can there be a better understanding of the services required of local governments and the associated expenditure. Otherwise, inefficiencies occur. Shortage of local government cashflow also arises when local governments

arbitrarily expand their powers or responsibilities. For instance, out of political, economic or other considerations, a local government may decide to upgrade its infrastructure network in 3-5 years that normally requires 10 years. PPPs are one form of financing favored by local governments whose debt size is limited. Although they don't become direct government debt, PPPs may become local governments' contingent liabilities and therefore deserve due attention.

Secondly, the responsibilities for risks must be defined and evaluated. On the one hand, we have to clarify the liability subject, namely who should be called responsible should fiscal risks arise. On the other, responsibilities of the subject have to be clarified as well. Both are important.

But now our system has bred a risk "Big-Pot" phenomenon, where risks can be passed on from enterprises to governments, from a lower level government to a government at higher level, from banks to real entities, from one administration to succeeding administrations. Simply put, there is no clearcut division of responsibilities among liability subjects. Under such a Big-Pot risk sharing regime, liability subjects have little incentive to use prudence and avoid risks. Breaking up such a Big-Pot risk sharing regime is a ground work for a better control of fiscal risks.

Thirdly, we also need to improve our technical means, such as adoption of a comprehensive budgeting system and medium-term budgeting for the government and reform of government accounting. Above all, there has to be a criterion to measure government debt. Such a criterion can be achieved by reforming government accounting and establishing a standard of government debt accounting. It is a basis for risk management and is badly needed.

Fourthly, local governments have to adopt fiscal transparency that applies to debt, resources and fiscal risks. A complete transparency in fiscal risks is extremely difficult if not impossible because risks

are likeliness and possibilities which are uncertain and can hardly be predicted. As a matter of fact, there are two conflicting schools of thought in assessment and estimation of risks: the objective school and the subjective school. The objective school holds that risks can be forecasted and evaluated. The subjective school, however, argues that risks come from subjective judgement. In reality, risks are neither objective nor subjective. When assessing risks, mimicking models in natural sciences have to be accompanied by fiscal transparency which is not yet available.

Question 4: The regime of local government fiscal risks management.

A key issue related to local government debt and risks is the local government financing vehicles (LGFVs). There has been heated debate on the roles of LGFVs. In my opinion, LGFVs are the exact point from which we construct local government investment and financing mechanism. They were created when the old budget law forbade local governments from issuing bonds. So the large amount of local government debt has actually been incurred through LGFVs.

In a certain sense, a LGFV is a special form of a PPP with Chinese characteristics. It is a combination of market and government forces. Although LGFVs need to be reformed in many aspects, they have actually helped China during the last global financial crisis. They have contributed to China's urbanization. What we need to do with LGFVs is to improve them and transform them into transparent partnerships instead of abolishing them.

While trying to make more use of PPPs, we have to figure out what PPPs exactly are. We need to do much more than just approving or disapproving of it.

It is unfair to blame LGFVs for all the local government debt. LGVs have multiple functions. They can help assemble public resources and integrate the functions of local governments. They

have played the role of coordination in construction by pulling together resources controlled by different departments. LFGVs have also helped control fiscal risks because they can take ex ante measures and reduce the possibility of ex-post bill-footing.

LGFVs are more than a investment and financing vehicle. They are also an instrument to contral fiscal risks. Although LGFVs may entail fiscal risks, they can also aggregate and integrate different risks into one large pool. In this sense, the risk control function of LGFVs should be better exploited. We need to improve them and turn them into a virtuous mechanism that absorbs money, use money effectively and make repayments sustainable. Only when the risks are assembled can we hope to effectively control fiscal risks.

Thank you!

Recent Australian Initiatives

From the presentation of Michael Schur, Managing Director, Castalia and former Secretary of the New South Wales Treasury, Australia

Enabling framework for PPPs should be supportive of all kinds of infrastructure investment, not only PPPs. The four key pillars of an enabling framework are:

- **Planning.** Improved planning provides transparency and enables better coordination across government jurisdictions. Better coordination can lead to reduced procurement costs.
- **Funding.** Funding should be optimized to provide certainty that is consistent with the planning horizons, maximize government's funding capacity, which should also be balanced with the user's willingness and ability to pay.
- **Financing.** Efficient financing will make projects bankable and minimize funding requirements.
- **Reform.** Inevitably, sector-specific reforms will be required because the general framework

is always going to be a necessary, but not a sufficient condition, for private sector participation.

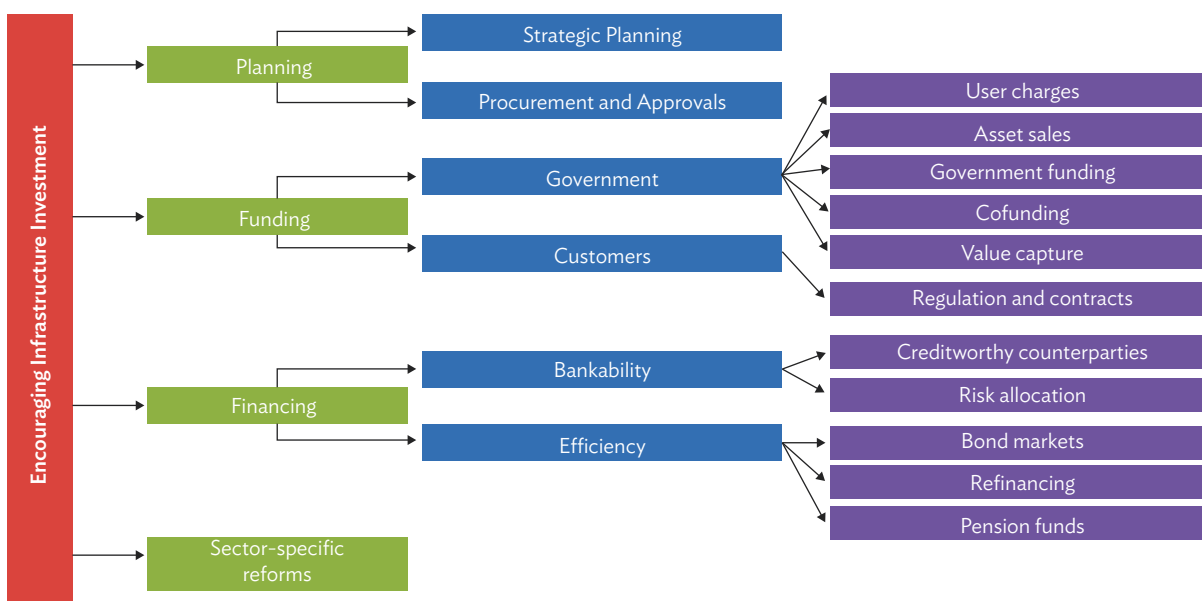
These are not everything required for a PPP framework, but are the key four aspects. Figure 3 demonstrates these four key aspects required in a PPP framework.

Successful funding and long-term financing depend on the consistency, transparency, and reliability of long-term planning. A PPP is not an investment decision; it is a procurement decision. The investment decision should be made in line with long-term investment planning. Project viability, funding, and government support in addition to other aspects must be secure before the PPP is procured. Dedicated agencies set up to coordinate infrastructure investments, such as Infrastructure Australia and Infrastructure New South Wales, are helpful in ensuring successful long-term planning.

Once an investment decision has been made, the next step is to decide on funding and finance. Funding refers to how an infrastructure will be paid for over time. In order to best increase a government's funding capacity, a long-term planning horizon should be created that is linked to a long-term capital planning commitment. This horizon can be changed when necessary, but it gives agencies certainty as to what their future funding limits are likely to be. Given the high cost of new infrastructure, investment pricing signals can play an important role in aligning supply and demand. Capital recycling is an important part in infrastructure planning as well. In Australia, the federal government can use its leverage to facilitate reforms at state and local levels.

Financing refers to the need to deal with the mismatch in timing between upfront development costs and future revenues. The simple fact is that projects cannot be financed unless they are fully funded through taxpayers and users. Countries that struggle to attract sufficient capital tend to

Figure 15: Key Aspects of PPP Frameworks



Source: From the presentation of Michael Schur.

have policies that confuse funding and financing. Countries with successful infrastructure projects tend to have policies that link funding and financing. Fully funded projects that meet all financing obligations are not always bankable because of a lack of trust. An improved appraisal methodology can help attract private sector funding so that everyone understands the basis of the appraisal. The government can also provide temporary credit-enhancement measures that can help provide risk guarantees and decrease borrowing cost without using public sector resources.

A general framework for planning, funding, and financing infrastructure is a necessary, but insufficient condition for increased private sector participation. Experience in different countries has shown that various structural changes in specific sectors are required to attract private investors. Examples of common issues that need to be addressed include unreliable government subsidies, issues over land acquisition, and the role of state-owned enterprises in the PPP market.

An Advisor's Perspective

Seng Chee Lee, Partner, Capital Projects and Infrastructure, PricewaterhouseCoopers

Risk allocation between the public and private sectors must be well grounded. Every risk that occurs within a transaction has a cost. The more risk the government intends to pass on to the private sector, the higher the rate of return will have to be for that project. This depends on the terms of the contract and, if the terms are beyond the market norm, then it will be a riskier contract and, therefore, more expensive. Certain transactions, where all of the risks have been passed on to the private sector (such as the traffic risk from toll roads) can see wide variations in outcomes. In certain cases, the likelihood that the actual traffic will meet the original projections is very low. The private concessionaire could go into financial difficulty and even default, which forces the government to step in to ensure that public service remains available. The opposite

happens when large roads are being built that are major thruways and more traffic than expected occurs, resulting in large profits for the private sector. This occurs infrequently, but can occur. In such situations, the government may be criticized for allowing excessive gains to be made by the private sector. Should the traffic demand risk be passed on to the private sector when the outcomes are polarized?

In PPP procurement, there is competition for pricing and innovation which creates a whole package solution that provides value. The question becomes whether the government can get that same value in direct negotiations, but it is often very difficult to do so. In many countries, direct negotiations are banned except in very exceptional situations where they allow for strategic partnering. So, for example, in the defense sector, we find a lot of strategic partnering because the availability of competition in that particular sector market space can be very limited due to technologies involved. But generally, across infrastructure sectors—water, energy, electricity—there are more than ample players in the market.

What is the role of state-owned enterprises (SOEs) in the PRC? In Thailand, there is an explicit rule banning SOEs from participating. In Singapore, SOEs can bid but they bid on a level playing field and do not receive special

privileges compared with any other companies. This creates a healthy environment for successful and competitive PPPs. In the PRC, there are SOEs that have mandates for developing projects in a particular sector such as toll roads or water. Within these respective companies, there is an established capital market vehicle. This leaves the question of how projects in the PRC are going to be tendered.

Contracts are central to the arrangement between the public and private sectors because they govern over a long period of time. Some of the internationally developed contract templates have been created with years of experience that highlight the areas where disputes are likely to arise. The contract needs to be robust enough to deal with most of the situations and equitable in their handling. There needs to be a clear rate of compensation that will be made to the private company as well as clear deductions for the private company if they fail to complete parts of the contract.

Capital recycling presents opportunities for governments when they are thinking about new PPP projects. There are opportunities to evaluate assets in order to find ways to generate income to boost infrastructure investment. The cost of maintaining the infrastructure over the long term is substantial and is generally larger than the initial investment made.

Concluding Remarks

From the presentation of Ying Qian, Director, Public Management, Financial Sector, and Regional Cooperation Division, East Asia Department, ADB

ADB's East Asia Department had the honor of hosting this platform. Now on its sixth year, this conference has become a flagship of cooperation and knowledge-sharing. We decided to cover PPPs as the key theme in this year's event. The conference was well organized and was implemented very well.

Thanks to the PRC's strong support, we have been able to share a lot of experiences. In my opinion, communication between developing countries is crucial. Typically we see more of developed-to-developing country dialogue, where developed world consultants tell us what needs to be done. Through this particular platform, we were able to get together to share common experiences that actually work.

PPP has recently become considerably more popular, and I can say that 2014 is the year for PPPs. Throughout the past few years, we have made significant progress with these types of forums.

We have been able to reach deep insights of PPP, deepening PPP platforms in our countries. We need to know the right way to do things. So, this platform gives us a place to share our experiences, rather than learning from failures or errors later.

PPPs have also become a new form of normality. Everybody is embarking on PPPs, and is beginning substantial implementation of PPPs. I hope this workshop helps us to achieve these objectives.

Over the past 2 days, three overarching ideas for PPP models have been discussed.

- First, PPP itself is not for show; rather a procurement decision in public investment and public management. Government and

parties responsible for a project need to understand players, risks, and policies involved in PPPs. They need to make sure PPPs are considered as part of a normal investment program.

- It has also been highlighted that PPPs are about financing, not about funding. From time to time, we hear that the government uses PPPs because of shortage of budget, but these governments will be disappointed. PPPs are another norm of public management. They are about a better way of financing, but government commitment still needs to be there.
- Lastly, we have discussed all necessary conditions for good PPPs. These conditions include conducive legal and policy frameworks, and availability of standard documentation. "PPPs are a marriage, not a wedding": You need to update, face problems, be willing to improve and change. Also, PPP institutions are very important and useful. Once you have good central PPP body, over time, such a mechanism can be passed on to local government levels.

From the presentation of Ying Wang, Director, Knowledge Cooperation and Technical Assistance Division, Department of International Economic and Financial Cooperation, Ministry of Finance, PRC

Over the past 2 days, we have seen not only a lot of consensus, but also some differences in our discussions of PPP. We have shared good experiences as well as lessons learned. This type of communication is important to inspire further PPP conversations and thinking.

We have discussed some of the necessary frameworks for PPPs, and how we can use PPP to our advantage. We have laid good groundwork for the next steps in the development of PPP in the Asia and Pacific region. We have shared insights at a theoretical level, as well as best practices, which have laid solid cornerstones.

The ADB estimated that infrastructure will reach US\$730 billion in our region by the end of 2020, so PPPs will have a big role to help the Asia and Pacific

countries develop infrastructure. I hope that we can continue to probe good practices and good experiences.

Appendix A: Conference Agenda

Day 1: Tuesday, 25 November 2014											
Opening Session											
9:00 – 9:30	<p>Moderator: Ying Wang, Director, Knowledge Cooperation and Technical Assistance Division, Department of International Economic and Financial Cooperation, Ministry of Finance, PRC</p> <p>Keynote speakers: Yingming Yang, Deputy Director General, Department of International Economic and Financial Cooperation, Ministry of Finance, PRC Ayumi Konishi, Director General, East Asia Department, Asian Development Bank (ADB)</p>										
Session 1: What's New in Public–Private Partnerships?											
10:00 – 12:15	<p>Moderator: Jie Sun, Research Fellow, Doctor, Research Institute for Fiscal Science, Ministry of Finance, PRC</p> <p><i>This session will recap the latest thinking on what a public–private partnership (PPP) is, and why and how it should be used, drawing on case studies. The experience of Australia and the Republic of Korea will be examined to explore how PPPs can be used in health and education as well as new areas of economic infrastructure. The broadening of the Philippines PPP program into new areas of the economy will also be examined, along with insights from the regional experience. Contributions from the floor will be encouraged.</i></p> <p>Presentations:</p> <table> <tr> <td>The PRC's Experience</td><td>Xiaoping Jiao, Deputy Director General, Clean Development Mechanism Fund, Ministry of Finance, PRC</td></tr> <tr> <td>The Experience of the Republic of Korea</td><td>Hojun Lee, Director, PPP Division, Public and Private Infrastructure Investment Management Center, Republic of Korea</td></tr> <tr> <td>Australia's Experience</td><td>Michael Schur, Managing Director, Castalia and former Secretary of the New South Wales Treasury, Australia</td></tr> <tr> <td colspan="2">Question and Answer</td></tr> </table>	The PRC's Experience	Xiaoping Jiao, Deputy Director General, Clean Development Mechanism Fund, Ministry of Finance, PRC	The Experience of the Republic of Korea	Hojun Lee, Director, PPP Division, Public and Private Infrastructure Investment Management Center, Republic of Korea	Australia's Experience	Michael Schur, Managing Director, Castalia and former Secretary of the New South Wales Treasury, Australia	Question and Answer			
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11:15 – 12:15	<p>Panelists:</p> <table> <tr> <td>A Perspective from the Philippines</td><td>Rina P. Alzate, Director, Project Development and Monitoring Facility Service, Philippines PPP Center</td></tr> <tr> <td>A Regional Perspective</td><td>Seethapathy Chander, Special Senior Advisor (Infrastructure and PPP), ADB</td></tr> <tr> <td>Remarks from a PPP Advisor</td><td>Seng Chee Lee, Partner, Capital Projects and Infrastructure, PricewaterhouseCoopers</td></tr> <tr> <td>Lessons from the United Kingdom's Experience</td><td>Shirvine Zhang, Director Corporate Finance, KPMG Advisory (China) Limited</td></tr> <tr> <td colspan="2">Question and Answer</td></tr> </table>	A Perspective from the Philippines	Rina P. Alzate, Director, Project Development and Monitoring Facility Service, Philippines PPP Center	A Regional Perspective	Seethapathy Chander, Special Senior Advisor (Infrastructure and PPP), ADB	Remarks from a PPP Advisor	Seng Chee Lee, Partner, Capital Projects and Infrastructure, PricewaterhouseCoopers	Lessons from the United Kingdom's Experience	Shirvine Zhang, Director Corporate Finance, KPMG Advisory (China) Limited	Question and Answer	
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Lessons from the United Kingdom's Experience	Shirvine Zhang, Director Corporate Finance, KPMG Advisory (China) Limited										
Question and Answer											

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Appendix A continued

Session 2: The Enabling Environment: How can governments encourage PPPs?											
14:00 – 15:30	<p>Moderator: Ayumi Konishi, Director General, East Asia Department, ADB</p> <p><i>This session will explore the enabling environment for PPPs with an emphasis on what governments need to do to encourage robust PPPs and ensure a strong deal flow. The need for PPP laws and strengthening of the broader regulatory framework will be examined. The reasons why many governments are increasing their financial participation in PPPs, and how they are doing this, will be explored. Government contributions, fiscal subsidies, and tax preferences will be discussed, along with ways that governments are structuring projects so they are more attractive to a broader group of investors. The potential risks of government participation will also be examined. The session will feature the experience of the India Infrastructure Financing Company Limited, which has financed 55 PPP projects with the help of \$1.9 billion in support from ADB.</i></p> <p>Presentations:</p> <table> <tr> <td>The India Infrastructure Finance Company Limited</td><td>Sanjeev Ghai, Chief General Manager, India Infrastructure Financing Company Limited</td></tr> <tr> <td>Facilitating PPPs in Asia</td><td>Seethapathy Chander, Special Senior Advisor (Infrastructure and PPP), ADB</td></tr> <tr> <td>Recent Australian Initiatives</td><td>Michael Schur, Managing Director Castalia and former Secretary of the New South Wales Treasury, Australia</td></tr> <tr> <td>The Legal Aspects of PPP</td><td>Ellen Zhang, Partner, Pinsent Masons</td></tr> <tr> <td colspan="2">Question and Answer</td></tr> </table>	The India Infrastructure Finance Company Limited	Sanjeev Ghai, Chief General Manager, India Infrastructure Financing Company Limited	Facilitating PPPs in Asia	Seethapathy Chander, Special Senior Advisor (Infrastructure and PPP), ADB	Recent Australian Initiatives	Michael Schur, Managing Director Castalia and former Secretary of the New South Wales Treasury, Australia	The Legal Aspects of PPP	Ellen Zhang, Partner, Pinsent Masons	Question and Answer	
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16:00 – 17:00	<p>Panelists:</p> <table> <tr> <td>The Government of the PRC's Procurement System Arrangements for Selecting a PPP Cooperation Agency</td><td>Wang Ying, Director General, Office of Government Procurement Administration, Treasury Department, Ministry of Finance, PRC</td></tr> <tr> <td>An Advisor's Perspective</td><td>Seng Chee Lee, Partner, Capital Projects and Infrastructure, PricewaterhouseCoopers</td></tr> <tr> <td>A Perspective from South Asia's Experience (10 minutes)</td><td>Cheolsu Kim, Lead Finance Specialist, South Asia Department, ADB</td></tr> <tr> <td>Observations on PPP funds</td><td>Craig Sugden, Principal PPP Specialist, East Asia Department, ADB</td></tr> <tr> <td colspan="2">Question and Answer</td></tr> </table>	The Government of the PRC's Procurement System Arrangements for Selecting a PPP Cooperation Agency	Wang Ying, Director General, Office of Government Procurement Administration, Treasury Department, Ministry of Finance, PRC	An Advisor's Perspective	Seng Chee Lee, Partner, Capital Projects and Infrastructure, PricewaterhouseCoopers	A Perspective from South Asia's Experience (10 minutes)	Cheolsu Kim, Lead Finance Specialist, South Asia Department, ADB	Observations on PPP funds	Craig Sugden, Principal PPP Specialist, East Asia Department, ADB	Question and Answer	
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Question and Answer											

Day 2: Wednesday 26 November 2014							
Session 3: Finding the Right Institutional Arrangement for PPPs							
09:00 – 10:30	<p>Moderator: Seethapathy Chander, Special Senior Advisor (Infrastructure and PPP), ADB</p> <p><i>This session will examine institutional arrangements for PPPs with an emphasis on PPP units. Case studies will be presented from the Philippines, Bangladesh, and Pakistan. Special attention will be paid to the roles and functions of PPP units and how they operate. The allocation of responsibilities for project screening and selection, preparation, implementation, and supervision will be explored. Approaches to ensuring coordination across sectors and levels of government, and the sources of success and potential hurdles, will be explored.</i></p> <p>Presentations:</p> <table> <tr> <td>The Success of the Philippines PPP Center</td><td>Rina P. Alzate, Director, Project Development and Monitoring Facility Service, Philippines PPP Center</td></tr> <tr> <td>The Experience of Bangladesh</td><td>Syed Uddin, CEO, Bangladesh PPP Office</td></tr> <tr> <td>Pakistan's Experience</td><td>Mujtaba Shahneel, Director General, Finance Department, Sindh Public Private Partnership Unit, Pakistan</td></tr> </table>	The Success of the Philippines PPP Center	Rina P. Alzate, Director, Project Development and Monitoring Facility Service, Philippines PPP Center	The Experience of Bangladesh	Syed Uddin, CEO, Bangladesh PPP Office	Pakistan's Experience	Mujtaba Shahneel, Director General, Finance Department, Sindh Public Private Partnership Unit, Pakistan
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Pakistan's Experience	Mujtaba Shahneel, Director General, Finance Department, Sindh Public Private Partnership Unit, Pakistan						

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Appendix A continued

	Lessons from the Republic of Korea's Public and Private Infrastructure Investment Management Center	Hojun Lee, Director, PPP Division, Public and Private Infrastructure, Investment Management Center, Republic of Korea
	Question and Answer	
11:00 – 12:00	Panelists:	
	Observations from an Emerging PPP Nation	Bekhbat Sodnom, Director General, Department of Innovation and PPP, Ministry of Economic Development, Mongolia
	Observations from the Experience of Central and West Asia	Yesim Elhan-Kayalar, Principal Public Management Specialist, Central and West Asia Department, ADB
	Remarks from the International Experience	Trevor Lewis, Senior PPP Specialist, Office of PPP, ADB
	Institutional Arrangements for PPPs: Experience from the PRC and Other Countries	Zhi Liu, Director, Lincoln Institute of Urban Development and Land Policy Research Center, Peking University
	Question and Answer	
Session 4: Managing Fiscal Risks facing Central and Local Government		
14:00 – 15:30	Moderator: Xiaolong Mo, Deputy Director General, Clean Development Mechanism Fund, Ministry of Finance, PRC	
	<i>This session will examine the fiscal risks that PPPs can bring and how they should be managed. Presenters will draw out the key actions required to ensure a fiscally sustainable PPP program. Good practices for evaluating projects, and identifying and allocating risks, will be discussed. The integration of PPP risk management within broader fiscal risk management, and ways of recognizing PPP liabilities within debt sustainability frameworks, will be also explored. The session will draw on insights from the PRC and international experience.</i>	
	Presentations:	
	Local Government Debt, Fiscal Risk and Management Framework	Shangxi Liu, Director General, Research Institute for Fiscal Science, Ministry of Finance, PRC
	Best Practices from the Organisation for Economic Co-operation and Development	Douglas Sutherland, Senior Economist and Head of US/Iceland Desk, Economics Department, Organisation of Economic Co-operation and Development
	The World Bank's Framework for Managing Fiscal Commitments from PPPs	Binyam Reja, Lead Transport Specialist/Cluster Leader for PRC and Mongolia Transport Practice, Transport and Information Communications and Technology, World Bank
	Question and Answer	
15:45 – 16:30	Panelists:	
	Remarks from a PPP Center	Syed Uddin, CEO, Bangladesh PPP Office
	A Treasury Perspective	Michael Schur, Managing Director, Castalia and former Secretary of the New South Wales Treasury, Australia
	A Perspective from a PPP Advisor	Denzel Hankinson, Managing Director, DH Infrastructure
	Question and Answer	
Closing Session		
16:30 – 17:00	Moderator:	
	Ying Wang, Director, Knowledge Cooperation and Technical Assistance Division, Department of International Economic and Financial Cooperation, Ministry of Finance, PRC	
	Speakers:	
	Yingming Yang, Deputy Director General, Department of International Economic and Financial Cooperation, Ministry of Finance, PRC (15 minutes)	
	Ying Qian, Director, East Asia Department, ADB (15 minutes)	

Appendix B: Biographies of Resource Speakers 发言人简 历

Rina P. Alzate
丽娜·阿尔萨特



Rina P. Alzate is one of the directors of the Public–Private Partnership Center (PPP Center) in Philippines, which is a government agency that facilitates PPP project preparation and implementation, formulates policies to further improve the PPP enabling environment, and manages the Project Development and Monitoring Facility (PDMF). As the PDMF service director, she is responsible for evaluation of PDMF support requests from implementing agencies, recruitment of PPP advisors, contract management, and PDMF financial management.

The PDMF, which is a US\$70-million revolving facility cofunded by the Government of the Philippines and the Government of Australia through ADB, is used to engage PPP project preparation and transaction support consultants who will prepare feasibility studies and tender documents for PPP projects, and advise the government from the tender process until financial close.

丽娜·阿尔萨特女士是菲律宾PPP中心主任之一。菲律宾PPP中心隶属菲律宾政府，其职能是促进PPP项目的准备和执行，制定改善PPP环境的政策以及管理项目开发和监管机构。作为项目开发和监管服务机构主任，丽娜·阿尔萨特女士主要负责评估项目执行机构的求助请求以及招聘PPP项目顾问、合同管理人员和项目开发和监管机构财务管理人员。

项目开发和监管服务机构是由菲律宾政府和澳大利亚政府通过亚洲开发银行联合出资成立，是一家7000万美元级别的循环融资机构，其职能主要是参与PPP项目的准备，为准备可行性研究和PPP项目投标文件的顾问人员提供事务性支持，并为政府投标提供咨询服务，直至资金到位。

Seethapathy Chander
赛斯帕斯·詹德



Seethapathy Chander is the special senior adviser (infrastructure and PPPs). He is responsible for advising ADB's Management on these areas as well as on broader organization issues.

Chander has been with ADB since 1992 serving as its director general, Regional and Sustainable Development Department concurrently chief compliance officer; principal director, Office of Information Systems and Technology; deputy director general, and officer-in-charge, Private Sector Operations Department;

and chair of ADB's Energy Committee. Prior to these managerial assignments, Chander worked on public sector energy projects in South and Southeast Asia as energy sector specialist.

Before joining ADB, Chander worked for 15 years with NTPC Ltd., India's largest power utility. He was part of the teams responsible for planning, design, procurement, construction supervision, and commissioning of NTPC's first 400-kV transmission systems, and later headed groups responsible for implementing India's first high-voltage direct current transmission system.

A first class graduate of the Indian Institute of Technology at Delhi, Chander is a power systems engineer with a specialization in high-voltage transmission systems.

赛斯帕斯·詹德先生现任基础设施和PPP处特别高级顾问，负责亚行基础设施和PPP领域业务的管理和组织事宜。

詹德先生于1992年加入亚洲开发银行，曾担任区域和可持续发展局局长兼首席合规官、信息系统和技术办公室主任、私营部门业务局副局长兼主任、亚行能源委员会主席等职务。担任这些管理要职之前，詹德先生曾作为能源领域专家致力于推进南亚和东南亚公共能源项目的进程。

加入亚行之前，詹德先生曾就职于印度最大的电力公司印度国家电力公司长达15年之久，曾负责印度国电首个400千伏级输电系统的规划、设计、采购、工程监督和调试工作，并作为团队负责人铺设了印度首条高压直流电输电系统。

作为印度理工学院的顶尖毕业生之一，詹德先生还是一名专攻高压输电系统的电力系统工程。

Sanjeev Ghai **桑杰夫·盖伊**



Sanjeev Ghai has over 32 years of experience in financial services, project finance, investment banking, infrastructure lending, PPPs, and safeguards. He has presented and/or delivered lectures on these subjects (including on safeguards) both in India and overseas, and has worked both in public and private sectors. He has served as director on the boards of leading Indian corporate houses.

For the past 5 years, he had been working with India Infrastructure Finance Company looking after multilateral financial institutions such as ADB, the World Bank, KfW, EIB, and Safeguards (environmental and social). He was able to raise over US\$2 billion funding from such institutions.

IIFCL has supported and/or financed about 275 PPPs in India in sectors such as highways, power (including solar and wind), airports, seaports, transmission lines. IIFCL is wholly owned by the Government of India and is a leading infrastructure financing company.

桑杰夫·盖伊先生在金融服务、项目融资、投资银行、基础设施贷款、PPP和安全防护等领域拥有超过32年的从业经验，并在印度及其他国家开设相关课程（包括PPP和安全防护）。同时，拥有公私部门从业经验的桑杰夫·盖伊先生现任印度公司协会董事。

在过去五年，桑杰夫·盖伊先生就职于印度基础设施发展金融有限公司，主要负责与亚行、世行、德国复兴信贷银行、欧洲投资银行等多边金融机构的合作，同时关注安全防护领域的问题（环境和社会方面）。桑杰夫·盖伊先生从上述机构累计融资20亿美元。

印度基础设施发展金融有限公司在印度本土支持或资助了约275个PPP项目，涵盖公路、能源（包括太阳能和风能）、机场、海港、输电线路等。印度基础设施发展金融有限公司是一家在基础设施融资领域领先的全资国有企业。

Xiaoping Jiao

焦小平



Xiaoping Jiao, senior economist, with master's degree on international economy from Columbia University and also on economics from Peking University. Jiao is now vice chair of the MOF PPP leading group office, and deputy director general of China CDM Fund of the Ministry of Finance.

Since 1989, Xiaoping Jiao has successively worked in the budget department, the international department, and general administration office of the Ministry of Finance; the National Group Purchasing Power Control Office; and the department for World Bank affairs. Xiaoping Jiao has translated and published books including *How to Engage with the Public-Private Partnerships in Emerging Markets*, *Leveraging the carbon playing field: international competition and US climate policy design*, *Future Low Carbon Technology*, "EU emission trading scheme rules", etc.

焦小平，高级经济师，美国哥伦比亚大学国际经济学硕士、北京大学经济学硕士。自1989年在财政部预算司、国家控制社会集团购买力办公室、世界银行司、办公厅、国际司等司局工作，现任财政部政府和社会资本合作（PPP）领导小组办公室副主任，中国清洁发展机制基金管理中心副主任。编译出版了《政府市场合作指南》、《碳博弈-国际竞争力与美国气候政策》、《未来低碳技术》和《欧盟排放交易体系规则》等书。

Cheolsu Kim



Cheolsu Kim has more than 20 years of professional experience in the areas of financial and capital markets. He has served in various posts in ADB's India Resident Mission and Private Sector Operations Department, where he was responsible for finance sector and capital markets development and reforms in various ADB developing member countries. Recently, he led the three PPP infrastructure project financing facilities totaling \$1.9 billion with India Infrastructure Finance Company Limited, an apex institution mandated to promote infrastructure development through PPP modality in India, which includes flagship PPP projects such as Delhi international and Mumbai international airports. He has published two books on pension reforms in India in 2011. Prior to joining ADB, he was chief economist at an investment bank in the Republic of Korea and taught graduate and undergraduate economic courses in the United States and the Republic of Korea. He has a Ph.D. in Monetary Economics from Vanderbilt University, USA.

Cheolsu先生在金融和资本市场拥有逾20年的从业经验。他在亚行担任过多个职务，曾在亚行驻印度代表处和私营部门业务局任职，负责促进金融和资本市场的发展以及多个亚行发展中成员国的改革。Cheolsu先生近期负责了三个PPP基础设施项目，在印度基础设施金融有限公司（一家通过PPP模式促进印度基础设施发展的顶级授权机构）的支持下为总价值19亿美元的基础设施实现融资，其中包括德里国际机场和孟买国际机场等旗舰PPP项目。2011年，Cheolsu出版了两本有关印度养老金制度改革的书籍。在加入亚行之前，其就职于一家韩国投资银行，担任首席经济学家职务，同时在韩国和美国的高校为本科生和研究生开设经济学课程。Cheolsu先生于美国范德堡大学取得货币经济学博士学位。

Ayumi Konishi

小西步



Ayumi Konishi is the director general of the East Asia Department of the Asian Development Bank (ADB). He assumed office in June 2013. Konishi is responsible for ADB operations in the People's Republic of China and Mongolia, and ADB relations with Hong Kong, China; the Republic of Korea; and Taipei, China. Konishi joined ADB in 1988. He has served in various capacities, including his last three positions as the deputy director general for ADB's Pacific Department (2012–2013), senior advisor to the Strategy and Policy Department (2011–2012), and ADB country director for Viet Nam (2006–2011). Konishi is a career international civil servant with 30 years of experience.

小西步 (Ayumi Konishi) 先生现任亚洲开发银行东亚局局长，于2013年6月上任。他负责中国和蒙古国地区的亚行运营事务，以及亚行与香港、韩国和台北的业务关系。小西步先生于1988年加入亚行，曾担任多个职务，最近三次职务为亚行太平洋局副局长（2012 - 2013）、战略和政策局高级顾问（2011 - 2012），以及亚行驻越南代表处首席代表（2006 - 2011）。他是一名职业国际公务员，具有30年的工作经验。

Hojun Lee



Hojun Lee was hired as a fellow of PIMAC in the Korea Development Institute (KDI) in 2009. Since January 2014, he has been a director of PPP division of Public and Private Infrastructure Investment Management Center (PIMAC), KDI.

Since Lee has established his career in KDI, he has conducted researches on the throughout topics of mechanism design in the public sector, law and economics of property rights, regional and infrastructure development, and public finance; coordinated in formulating budget plans, and social and economic policies of the Ministry of Strategy and Finance and other ministries. As a project manager, he has also carried out preliminary feasibility studies and value-for-money test on various public investment projects.

Born in the Republic of Korea, Lee holds a B.A. and an M.A. in economics from the Seoul National University and a Ph.D. in economics from the University of Wisconsin-Madison.

2009年，Ho jun Lee被韩国开发研究院政府与社会资本基础设施投资管理中心聘任为研究员。2014年1月，其任政府与社会资本基础设施投资管理中心PPP部门主任。

自其在韩国开发研究院开始职业生涯以来，Ho jun Lee博士展开了一系列研究，研究内容包括公共部门机制制定、财产权相关法律和经济学理论、区域和基础设施发展以及公共财政等。Ho jun Lee博士还帮助韩国战略及金融部等其他部委制定预算计划、社会和经济政策等。他还作为项目经理对多个公共投资项目进行了工程可行性初步研究和性价比测试。

出生于韩国的Ho jun Lee先生于韩国首尔国立大学取得学士和硕士学位，并于威斯康星大学麦迪逊分校取得经济学博士学位。

Seng Chee Lee

李成志



Seng-Chee Lee is a partner of PricewaterhouseCoopers (Singapore). He provides financial advisory services to support complex transactions, in particular in capital and infrastructure projects.

He has more than 17 years of experience in financial structuring, finance-raising, and M&A activities in both buy and sell sides, government and private sector advisory roles, including expertise in PPPs and private finance initiatives frameworks.

He has advised on the development of a number of milestone infrastructure projects and transactions in Asia, Europe, and Singapore covering sectors including power, water and/or wastewater treatment, transport infrastructure (toll roads, bridges, ports, mass rapid transport, airport, etc.). Seng-Chee has worked with many government agencies, major project finance institutions, infrastructure funds, strategic investors (e.g., developers), and multilateral and/or bilateral donor agencies on infrastructure development, investments, and divestments.

李成志是新加坡普华古柏的合伙人，专注于提供财务咨询服务，特别是在资本与基础设施项目项目。

他拥有超过17年的咨询服务经验，如财务结构、筹资、企业并购活动、政府及私营部门咨询，包括PPP项目与私人融资计划。

李成志在新加坡、亚洲和欧洲等地区的多项基础设施项目或交易的发展过程中担任顾问（例如收费公路、桥梁、海港、地铁及机场等建设项目）。他也为多元化的客户端提供了咨询服务，例如政府机构、项目融资机构、基础设施基金、战略性投资者（开发商）以及基础设施建设、投资与撤资项目中的各多边或双边捐助机构等。

Trevor Lewis 特雷弗·刘易斯



Trevor Lewis leads and supports innovative infrastructure financing, focusing on PPPs in ADB operations in developing member countries.

Trevor also leads the secretariat of ADB's PPP community of practice in its contribution to catalyze private participation in ADB's DMCs in terms of infrastructure investment as well as infrastructure service delivery. As the knowledge anchor, he assimilates and disseminates PPP best practices within ADB and externally.

Prior to joining ADB, Trevor previously held roles in the private sector. He oversaw principal investment and strategy at a regional commercial bank and he cofounded one of the largest private equity infrastructure funds in Asia with the Macquarie Bank Group. He began his infrastructure finance career in financial advisory and has advised both public sector and private sector clients. He holds a B.Sc. from the Mount Allison University.

特雷弗先生引领和支持创新性基础设施融资，在亚行和各发展中成员国业务范围内致力于发展PPP伙伴关系。

特雷弗先生还是亚行PPP实践社区秘书处处长，该秘书处致力于鼓励私营部门参与亚行基础设施的投资和管理运营。作为秘书处的核心成员，特雷弗先生致力于在亚行及外部环境中采用和传播PPP的最优实践。

在加入亚行之前，特雷弗先生在私营部门任职，曾负责监管某区域商业银行的投资和战略活动，同时与麦格理银行集团一起成立了亚洲最大的私募基础设施基金之一。特雷弗先生从金融咨询工作做起，开启了其在基础设施融资方面的职业生涯，其拥有大量来自公共和私营领域的客户。特雷弗于蒙特爱立森大学取得理学学士学位。

Shangxi Liu 刘尚希



Shangxi Liu, doctor in economics, currently serves as research fellow and professor of Research Institute for Fiscal Science, Ministry of Finance of the PRC, doctoral supervisor, party secretary and president all rolled into one. He is granted special allowance by the State Council, and one of the state-level experts of China National Talent Plan. Other current titles include member of the National Educational Advisory Committee, member of the National Medical Reform Advisory Committee, member of the Review Panel of the National Social Science Fund, expert of the Expert Group of China National Commission of Disaster Reduction, special taxation commentator for the

State Administration of Taxation, budget supervisory consultant for the Standing Committee of Beijing Municipal People's Congress, executive director and vice secretary-general of China Public Finance Society, special research fellow of research institutes including NDRC, and special reviewer for periodicals such as *Economic Research Journal*.

刘尚希，经济学博士，现为财政部财政科学研究所研究员、教授，博士生导师，党委书记兼所长，是国务院政府特殊津贴专家，国家“百千万人才工程”国家级专家，社会兼职有：国家教育咨询委员会委员、国家医改咨询委员会委员、国家社会科学基金学科评审组专家、国家减灾委员会专家委员会专家、国家税务总局特约税收评论员、北京市人大常委会预算监督顾问、中国财政学会常务理事、副秘书长、中国改革研究会等研究机构特聘研究员，《经济研究》等刊物特约审稿人。

Ying Qian

钱鹰



Ying Qian is director of the Public Management, Financial Sector, and Regional Cooperation Division of ADB's East Asia Department. Ying Qian and his colleagues in Mongolia and in the PRC initiate and implement programs and projects in areas of access to finance; green and innovative financial services; regional financial market integration and financial stability; fiscal reforms; social security; governance; and private sector development. They also work, at subregional level in Central Asia and Southeast and Northeast Asia, on regional cooperation, trade facilitation, and trade and investment programs and projects.

钱鹰先生现任亚行东亚局公共管理、金融及区域合作处处长。钱鹰先生和他在蒙古国和中国的同事们共同发起和实施了多个计划和项目，覆盖融资、绿色和创新金融服务、区域金融市场整合和财政稳定性、财政改革、社保、治理以及私营部门发展等领域。他们还在中亚、东南亚和东北亚的次级区域开展工作着手区域合作、贸易便利化以及贸易和投资计划和项目。

Binyam Reja

任斌



Binyam Reja is responsible for coordinating the World Bank's transport lending program for the PRC, covering highways, railways, and urban transport projects, and for leading policy dialogue with client governments in central, provincial, and local governments. Prior to moving to Beijing in August 2012, Reja was the senior transport economist and acting sector manager for the South Asia Region of the World Bank based in Washington, DC where he was responsible for managing several transport and urban transport sector projects and promoting high-level policy dialogue with client governments in the South Asia region. He has worked extensively on transport financing reform, PPP projects, and public transport

sector regulatory and institutional reforms.

任斌先生负责协调世行针对中国的交通贷款计划，涵盖公路、铁路和城市交通项目，并负责主导与中央、省级和地方政府的政策对话。2012年8月搬到北京之前，任斌先生是一名高级交通经济学家，在华盛顿担任世行南亚地区部门经理，负责管理多个交通和城市交通部门项目，并促进与南亚地区政府的高层次政策对话。他从事的工作领域非常广范，包括交通融资改革、PPP项目以及公共交通部门监管和体制改革。

Mujtaba Shahneel 穆塔巴·沙尼尔



After working at SAMBA's Investment Banking Group for almost 3 years, Mujtaba Shahneel joined the Public Private Partnership Unit in Finance Department, Government of Sindh in 2010 as director – Finance & Risk Management, where he was promoted to director general in March 2013. Prior to his SAMBA's stint, he worked in the management consulting industry in Canada for close to 3 years. He has worked on land mark transactions, including the first road PPP, the first provincial energy PPP, and the largest commercial financing in Pakistan.

He has a BA (hons) in Economic Management & Development from University of Toronto and an MBA in Strategic Finance from Edinburgh Business School (United Kingdom). He is also a CFA charter-holder from CFA Institute, USA and has a PPP certification in project development from the Commonwealth Business School (United Kingdom). Currently, he is also pursuing an LLB from the University of London.

在SAMBA's投资银行集团工作近三年后，穆塔巴·沙尼尔先生于2010年加入了辛德政府财政部下属的PPP单位，主管金融和风险管理部。2013年3月，穆塔巴·沙尼尔先生被任命为PPP单位主任。在加入SAMBA's投资银行集团之前，穆塔巴·沙尼尔先生还在加拿大从事了近三年的管理咨询工作。穆塔巴·沙尼尔经手了巴基斯坦史上多个标志性PPP项目，包括该国第一个公路PPP项目、第一个省级能源PPP项目以及该国最大的商业融资项目。穆塔巴·沙尼尔先生在多伦多大学取得学士学位，本科专业为经济管理与发展，之后前往英国爱丁堡大学商学院攻读MBA战略金融专业。穆塔巴·沙尼尔先生还持有美国注册金融分析师协会颁发的CFA（注册金融分析师）证书和英联邦商学院颁发的PPP专家证书（项目发展方向）。目前，穆塔巴·沙尼尔正在伦敦大学攻读法学学位。

Bekbhat Sodnom



Bekbhat Sodnom has a BA degree on finance and credit from the Russian Plekhanov Academy of National Economy, and an MA on international development policy from the Duke University in North Carolina, United States.

Among others, he served as expert in the Aid Coordination Unit under the Prime Minister's office, as advisor to chair of Parliamentary standing committee, and as advisor to the minister of construction and urban development and to the minister of health.

He was member of the boards of Xacbank and Tenger Financial group, and chair of the boards of Netmon NBFI and Xacleasing, as well as nonprofit institutions such as The Genden Foundation, The Amarjargal foundation, Mongolian PPP Support Center, Construction and Technology College, and Rotary Club of Ulaanbaatar.

He was appointed as the first honorary consul of the Philippines to Mongolia. He provided consulting services to international institutions, such as ADB, the World Bank, EBRD, WHO, UNDP, and others. As an example, he conducted ADB's Mongolia country assistance program evaluation, the first assessment of

the private sector development in Mongolia, and the first assessment of governance in Mongolia. He was a lead consultant in advisory services on private sector participation in the power sector, the key person in the establishment of the health promotion foundation in Mongolia.

Since 2008, he has been promoting PPP development in Mongolia. When he was advisor to the parliamentary ad hoc committee on PPP, he and his colleagues drafted the state policy on PPPs and the Law on Concession, which were adopted by Parliament in 2009 and 2010 respectively.

Bekhsbat Sodnom先生于俄罗斯普列汉诺夫国立经济大学取得学士学位，专业为金融和信贷，随后于美国北卡罗来纳州杜克大学国际发展政策系取得硕士学位。

此外，Bekhsbat Sodnom先生还担任过总理办公室援助协调组专家、议会常委会主席顾问、城建部部长顾问和卫生部部长顾问。

Bekhsbat Sodnom先生还曾任海斯银行、腾格尔金融集团董事会成员、非银行金融机构监管委员会主席、海思租赁董事会主席，还曾经执掌过多家非营利性机构，包括Genden基金、阿玛加尔基金、蒙古PPP支持中心以及乌兰巴托建筑科技大学扶轮社等。

作为前蒙古驻菲律宾大使，Bekhsbat Sodnom先生向多个国际组织和机构提供咨询服务，包括亚洲开发银行、世界银行、欧洲复兴开发银行、世界卫生组织、和联合国发展署等。Bekhsbat Sodnom先生负责了亚行蒙古农村扶持项目的评估，这也是蒙古国首次对私营部门发展项目进行评估，同时也是对政府治理的首次评估。Bekhsbat Sodnom先生还是私营部门参与能源项目首席咨询专家，同时帮助蒙古卫生事业奠定了基础。

自2008年起，Bekhsbat Sodnom先生就一直致力于促进PPP在蒙古国的发展。Bekhsbat Sodnom先生在担任议会和众议院委员会PPP顾问期间参与起草了蒙古国PPP政策及相关法律法规，并分别于2009年和2010年得到议会通过。

Craig Sugden **柯瑞格·萨格登**



Craig Sugden is an economist with more than 25 years of experience in Australia and in Asia and the Pacific. He has contributed to the preparation or management of PPPs for tollways, electricity distribution, sea and airports, and metro and rail lines. He is also experienced in the management of privatized and corporatized public services, regulatory reform, and the strengthening of government planning, budget, and revenue systems. Sugden has provided economic advice for the resolution of a wide range of commercial disputes and was appointed as an expert economic witness to the Australian federal Court.

柯瑞格·萨格登是亚行东亚局公共管理、金融及区域合作处首席PPP专家。作为一名经济学家，柯瑞格在澳大利亚、亚洲和太平洋地区拥有超过25年的从业经验。他在收费公路、电力输送、海洋和机场以及地铁和铁路的PPP准备或管理方面做出了很多贡献。他还善于管理私有化和企业化的公共服务、监管改革以及加强政府规划、预算和收入系统体系。萨格登还为解决很多商业纠纷提供了经济学方面的建议，是澳大利亚联邦法院指定的经济专家证人。

Sun Jie

孙洁



Sun Jie, who has a Ph.D. in management, is a research fellow in the Research Institute for Fiscal Science, Ministry of Finance, PRC; secretary-general of the Public-Private Partnerships Research Committee of China Public Finance Academy; ADB's PPP expert; and commissioner of Expert Committee of China Non-Profit Organization Promotion Association.

Sun Jie has been engaged in PPP research since 2002. In 2013, Sun Jie communicated with the United Kingdom Treasury Infrastructure Bureau, the Manchester University, and KfW about PPP experiences and then cooperated with ADB and the Embassy of the United Kingdom in Beijing to promote PPP. His main academic contributions are:

1. The first person to take PPP as a management model instead of project financing. Sun Jie did research on PPPs from the point of view of management and defined the concept of PPP in management aspects.
2. Consider BOT, BOOT, PFI, and other programs as a form of PPP instead of parallel form for the first time.
3. Did research on the application of PPP from many aspects, such as education, medical care and health, infrastructure, affordable housing, postdisaster reconstruction, local debts reduction, public services, etc. Published more than 50 papers, wrote four well-known books and participated in several research projects.

“Actively Adopting New Management Model – PPP in the Construction of Infrastructure in New Rural Areas” (in collaboration with Jia Kang), which was submitted to the State Council as specific information, attained the affirmative instructions of Jin Renqing, former minister of finance. Importantly, it also got the affirmative instructions of Hui Liangyu, former vice-premier.

Contact: 010-88191186, 188-1009-9009, Email: mofsj@163.com

孙洁是财政部财政科学研究所研究员，管理学博士。中国财政学会公私合作（PPP）研究专业委员会秘书长；亚洲开发银行PPP专家；中国社会组织促进会专家委员会委员。

2002年以来一直从事PPP研究工作。2013年到英国财政部基础设施局、曼彻斯特大学、德国复兴银行进行PPP经验交流，并同亚行、英国驻中国大使馆合作推广PPP工作。主要学术贡献：

（1）将PPP看为管理模式而非项目融资。（2）将BOT、BOOT、PFI等形式看为PPP的一种形式，而非并列；（3）分别从教育、医疗卫生、基础设施、保障性住房、灾后重建、化解地方政府债务、公共服务等多个领域研究了公私合作伙伴关系的应用。发表论文50余篇；著作4部；各类课题50余项。《新农村基础设施建设中应当积极采用新型管理模式——PPP》（与贾康所长合作）得到原财政部长肯定性批示，同时得到原副总理回良玉的肯定性批示。联系方式：01088191186；18810099009；邮箱：mofsj@163.com

Douglas Sutherland 道格拉斯·萨瑟兰



Douglas Sutherland is a senior economist and head of the United States and Iceland desk of the OECD's economics department. Sutherland joined the economics department in 1998, initially working on bilateral economic surveillance and contributing to the publication of economic surveys of the Russian Federation. He then worked on a wide range of topics, including examining the design of subcentral government fiscal rules, sustainable development, and public sector efficiency. More recently, he has led projects on infrastructure investment, fiscal consolidation, countercyclical economic policy, and macroeconomic stability. Prior to joining the OECD, he worked as a research fellow at the University of Birmingham, from where he obtained his Ph.D.

道格拉斯·萨瑟兰先生是经合组织高级经济学家兼美国/冰岛司司长。道格拉斯·萨瑟兰博士于1998年加入经合组织经济局，早期负责监控双边经济关系，并参与撰写了《俄罗斯经济调查报告》。之后，道格拉斯·萨瑟兰博士的工作范围进一步扩大，延展到审查次级政府的财政政策制定情况、可持续发展和公共部门效率等。近期，道格拉斯·萨瑟兰博士主管了多个项目，涵盖基础设施投资、财政整顿、逆周期经济政策和宏观经济稳定性发展等多个方面。加入经合组织之前，道格拉斯·萨瑟兰博士在伯明翰大学担任研究员，并于该校取得博士学位。

Syed Uddin 赛义德·乌丁



Syed Uddin was appointed in January 2012 as chief executive officer of the PPP Office under the Prime Minister's Office, Government of Bangladesh. In his role as CEO, he has taken over the lead responsibility for the development and implementation of the PPP program in Bangladesh.

He has focused on infrastructure, finance, and trade investment for over 15 years; he was the senior policy advisor in the PPP team at HM Treasury during Rt Hon Chancellor Gordon Brown's tenure. Prior to joining the PPP Office, he has been with PwC in the United Kingdom as a management consultant focusing on advising Government of the United Kingdom departments on the optimum way for structuring their PPP projects.

He completed his LLB (Hons) at the London School of Economics and specialized in banking and finance law during his LLM degree before being called to the Bar from Lincoln's Inn.

赛义德·乌丁先生于2012年1月起担任孟加拉政府副总理办公室PPP办公室首席执行官一职。工作期间，赛义德·乌丁先生负责推进孟加拉PPP项目的发展与实施。

赛义德·乌丁先生致力于基础设施、金融和贸易投资领域长达15年之久，曾在戈登·布朗任职财政大臣期间担任英国财政部PPP组高级政策顾问。在加入PPP办公室之前，赛义德·乌丁先生在英国普华永道公司担任管理顾问，专门为英国政府提供以最优方式建立PPP项目的建议。

赛义德·乌丁先生在伦敦政经学院取得法学学士学位，在校期间专攻银行和金融法，之后在林肯律师协会取得了律师执业资格。

Ellen Zhang

张晓慧



Ellen Zhang is the leading partner of the China Outbound Projects Practice of Pinsent Masons LLP. She is duly qualified in the PRC, England, and Wales. Ellen has broad experience in international energy, mining, and infrastructure projects. She has advised many Chinese infrastructure and energy companies with overseas ventures. Ellen is listed in the International Who's Who of Construction Lawyers 2012/2013 as a leading construction lawyer in the PRC.

Ellen regularly lectures and speaks on various construction and projects topics in seminars and at conferences held by industrial organizations and universities.

Ellen has also published articles on legal topics in both Chinese and English, including a column on PPP and PFI in *Construction Times*, articles on international transportation projects, as well as a series of articles on Chinese law issues in China British Business Council magazines.

张晓慧是品诚梅森律师事务所负责中国“走出去”项目的主要合伙人，同时具备中国、英格兰和威尔士执业律师资格。她在国际能源、采矿和基础设施项目方面拥有丰富经验，为中国很多从事基础设施建设和能源行业的公司进行海外投资提供了建议。她被2012/2013国际建筑律师名录评选为中国优秀建筑律师。

张晓慧经常在各种研讨会上发表演讲，并在各产业组织和大学召开的会议上就各种建筑和项目话题阐述自己的观点。她还发表了许多有关法律方面的中文和英文文章，包括在《建筑时报》开设的PPP与私人融资计划（PFI）专栏中，有关国际运输项目的文章，以及在《英中贸易协会》杂志上发表的一系列关于中国法律问题的文章。张晓慧还是中国财政部PPP中心外部专家小组的成员。

Shirvine Zhang

张娟



Shirvine Zhang specializes on advising both public and private sector clients on PPP projects and project finance transactions across energy/power, renewables, waste, transport, and other infrastructure sectors. She has advised a wide spectrum of clients, including United Kingdom infrastructure fund, major United Kingdom and international construction companies, central and local authorities of the Government of the United Kingdom, and energy developers in Asia as well as Chinese state-owned enterprises on greenfield or brownfield economic and social infrastructure projects.

张娟具有多年PPP项目、项目融资的专业咨询的经验，涉及行业包括能源/电力、新能源、固废、交通、及其他基础设施等多个领域。她为众多客户提供过财务、融资咨询服务，积累了丰富的行业和项目经验，主要客户包括英国基础设施建设资金，英国和国际主要的工程公司，英国中央和地方政府部门，亚洲的能源开发者，以及中国国有企业等。

Michael Schur

迈克尔·舒尔



Michael Schur is managing director, Castalia, based in Sydney. His career spans both the public and private sectors, and incorporates economics, public policy, public sector management, infrastructure, finance, PPPs, and microeconomic reform.

He has been involved in public policy issues, and infrastructure development in particular, since the beginning of his career in South Africa, working initially in rural development, participating in the formulation of infrastructure financing policy for South Africa's first democratically elected government, and later by pioneering the broad application of PPPs throughout the public sector, including establishing and heading up the Government of South Africa's PPP Unit in the National Treasury (widely regarded as international best practice). Here, Schur developed best practice PPP implementation and contracting guidelines, covering project feasibility analysis; financial modelling; development of bid documentation and legal term sheets; and negotiations with preferred bidders.

迈克尔·舒尔先生现任悉尼卡斯塔利亚公司总经理，其职业生涯横跨公私部门，涉及经济学、公共政策、公共部门管理、基础设施、金融、PPP和微观经济改革等众多领域。

舒尔先生长期致力于解决公共政策问题，特别是基础设施发展。舒尔先生的职业生涯始于南非，早年投身于该国的农业发展，参与制定了南非首届民选政府基础设施融资政策，之后在整个公共部门拓展PPP的应用范围，包括建立了南非国家财政部政府PPP单位（被广泛认为是PPP的国际最佳典范）。目前，舒尔先生致力于推广PPP的最佳实践和指南，涵盖项目可行性分析、融资建模、投标文件制定、法律条款以及与首选竞标方的谈判等方面。

Yesim Elhan-Kayalar

叶欣·艾尔哈尔-卡亚拉尔



Yesim Elhan-Kayalar leads ADB's governance and public management portfolio in central and west Asia. She has over 25 years of work experience in the private sector, financial institutions, and academia in 28 countries. Yesim has worked with public and private sector organizations at regional, national, and local levels to help create institutional frameworks for private sector participation in energy, transport, and water sectors and develop long-term infrastructure solutions.

She has a Ph.D. in economics from the University of California; and degrees and qualifications on finance and management from the Harvard University and the University of Michigan. She has published and taught on the fields of economics, finance, and led research on behavioral finance and competitiveness policy.

兼任亚行中西亚局治理处和公共管理处处长的叶欣女士，在全球27个国家的私营领域、金融以及科研机构拥有超过25年的工作经验。叶欣女士在地区、国家和地方层面上同公共部门和私营部门一同建立制度框架，帮助私营部门参与能源、交通和水资源的治理和发展，并致力于提供基础设施的长期解决方案。

Zhi Liu

刘志



Zhi Liu is director of Peking University – Lincoln Institute Center for Urban Development and Land Policy. Prior to this, Liu was lead infrastructure specialist in the World Bank where he had worked for 18 years, with operational experiences in East Asia, South Asia, and Latin America. He had managed a number of investment lending projects and economic sector studies in infrastructure and urban sectors. In 1993–1994, he was a research associate with Harvard Institute for International Development. In 1985–1987, he taught city and regional planning as a lecturer in Nanjing University. He has authored and coauthored a number of academic papers and World Bank reports on the topics of metropolitan infrastructure financing, low-carbon city development, sustainable urban transport, motorization, and poverty and transport. He holds B.S. from Zhongshan University, M.S. from Nanjing University, and Ph.D. from Harvard University.

刘志，现为北京大学—林肯研究院城市发展与土地政策研究中心主任。之前任世界银行东亚与太平洋地区可持续发展局首席基础设施专家。于1995年进入世界银行，主要从事交通与城市发展部门的贷款业务和行业政策研究，在多国带领团队完成一系列大型基础设施贷款项目与经济部门研究。曾主持了印度交通部门发展、中国城市交通政策、柬埔寨能源发展、泰国交通能耗等经济部门研究，并对交通与扶贫、世界汽车化、交通经济分析、基础设施实施、基础设施投融资和城市财政等专题做过研究并发表论文。1994–1995年在哈佛国际发展研究所工作，参与了针对美国、韩国、智利的城市交通与城市经济研究。1985–1987年在南京大学城市与区域规划专业任教。中山大学学士、南京大学硕士、哈佛大学博士。

Appendix C:

List of Attendees

	Name 姓名	Position 职务	Agency 机构
A	DMC Participants 发展中国家参会人员		
1	Abdul Karim	Section Head 部门主任	Contingent Liability Risk, Directorate General Debt Management, Ministry of Finance, Indonesia 印度尼西亚财政部或有负债风险与董事会总债务管理部门
2	Aidyn Omarov	Chief Expert 首席专家	PPP Development Division, Ministry of National Economy, Kazakhstan 哈萨克斯坦国民经济部PPP发展处
3	Ekaterine Danelia	Deputy Head 副主任	National Agency of State Property, Ministry of Economy and Sustainable Development of Georgia 格鲁吉亚经济与可持续发展部国有资产管理局
4	Hung Viet Nguyen	Division Head 处长	Banking and Financial Institutions Department, Ministry of Finance, Viet Nam 越南财政部银行与财政研究司
5	Khishigbayar Purevdavga	Senior Investment Officer 高级投资官员	Economic Development Department, City of Ulaanbaatar, Mongolia 蒙古乌兰巴托经济发展局
6	Kyaw Sunn	Director 处长	Project Appraisal and Progress Reporting Department, Ministry of National Planning and Economic Development, Myanmar 缅甸国家计划与经济发展部项目评估与进度报告局
7	Malik Ahmad Khan	Member 科员	Ministry of Planning, Development and Reforms, Pakistan 巴基斯坦计划发展与改革部
8	Manik Chandra Pandit	Deputy Director (Infrastructure) 副处长（基础设施）	Department of Economic Affairs, Ministry of Finance, India 印度财政部经济事务司
9	Marat Oskombaev	Division Head 主任	PPP Analysis and Risk Management Division, Ministry of Finance, Kyrgyz Republic 吉尔吉斯斯坦财政部PPP分析与风险管理司
10	Md. Bashirul Alam	Deputy Manager 副经理	PPP Office, Office of the Prime Minister, Bangladesh 孟加拉国总理办公室PPP办公室
11	Oraporn Thomya	Economist 经济学家	Public Debt Management Office, Ministry of Finance, Thailand 泰国财政部公共债务管理办公室
12	Pitaya Uthaisang	Senior State Enterprise Analyst 高级国有企业分析师	State Enterprise Policy Office, Ministry of Finance, Thailand 泰国财政部国有企业政策办公室

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13	Ram Mani Duwadi	Deputy Director General 副局长	Inland Revenue Department, Kathmandu, Nepal 尼泊尔加德满都内陆税务局
14	Reyna Depasucat	Project Manager 项目经理	Office of Privatization and Special Concerns, Privatization and PPP Group, Department of Finance, Republic of the Philippines 菲律宾财政部私有化与PPP组私有化与特别关注办 公室
15	Richard Uy	Project Manager 项目经理	Office of Privatization and Special Concerns, Privatization and PPP Group, Department of Finance, Republic of the Philippines 菲律宾财政部私有化与PPP组私有化与特别关注办 公室
16	Sanzharbek Bolotov	Principal Specialist 首席专家	Investment Policy and PPP Unit, Ministry of Economy, Kyrgyz Republic 吉尔吉斯斯坦经济部投资政策与PPP单位
17	Sharada Prasad Trital	Secretary 秘书	National Planning Commission Secretariat, Nepal 尼泊尔国家计划委员会秘书处
18	Sunil Kumar Ayyappan	Project Manager, Head 项目经理, 主任	PPP Office, Vizhinjam International Seaport Limited, Kerala, India 印度喀拉拉邦维津詹姆海港公司PPP办公室
19	Syed Md. Matlubur Rahman	Joint Secretary 联席秘书	Finance Division, Ministry of Finance, Bangladesh 孟加拉国财政部金融司
20	Temuulin Enkhmunkh	General Director 主任	Economic Development Department, City of Ulaanbaatar, Mongolia 蒙古乌兰巴托经济发展局
21	Zohair Fazil	Deputy Chief (Transport and Communications) 副科长	Ministry of Planning, Development and Reforms, Pakistan 巴基斯坦计划发展与改革部
B Resource Speakers 发言人			
22	Bekhat Sodnom	Director 主任	Department of Innovation and PPP, Ministry of Economic Development, Mongolia 蒙古经济发展部创新和PPP司
23	Binyam Reja 任斌	Lead Transport Specialist/Cluster Leader 首席交通运输专家/主任	China and Mongolia Transport Practice, Transport and Information Communications and Technology, World Bank 世界银行交通运输与信息技术局中国和蒙古交通运 输实践部
24	Denzel Hankinson	Managing Director 总经理	DH Infrastructure 丹泽尔·汉金森基础设施公司
25	Douglas Sutherland	Senior Economist/Head 高级经济师/司长	United States and Iceland Desk, Economics Department, Organisation for Economic Co- operation and Development 经济合作与发展组织经济部美国/冰岛司
26	Ellen Zhang 张晓慧	Partner 合伙人	Pinsent Masons 品诚梅森律师事务所
27	Hojun Lee	Director 主任	PPP Division, Public and Private Infrastructure Investment Management Center, Korea Development Institute 韩国开发研究院PPP基础设施投资管理中心PPP部

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28	Michael Schur	Managing Director/Former Secretary 总经理/前任秘书	Castalia, Australia/New South Wales Treasury 澳大利亚卡斯塔利亚公司/新南威尔士州财政厅
29	Mujtaba Shahneel	Director 主任	PPP Unit, Finance Department, Government of Sindh, Pakistan 巴基斯坦信德省政府金融司PPP单位
30	Rina P. Alzate	Director 主任	Project Development and Monitoring Facility Service, Philippines PPP Center 菲律宾PPP中心项目开发和监管服务机构
31	Sanjeev Ghai	Chief General Manager 总经理	India Infrastructure Finance Company Limited 印度基础设施融资有限公司
32	Seng Chee Lee 李志成	Partner 合伙人	Capital Projects and Infrastructure, PricewaterhouseCoopers 普华永道资本项目和基础设施
33	Shangxi Liu 刘尚希	Director General 所长	Research Institute for Fiscal Science, Ministry of Finance, PRC 中国财政部财政科学研究所
34	Shirvine Zhang 张娟	Director Corporate Finance 企业融资总监	KPMG Advisory (China) 毕马威咨询(中国)有限公司
35	Syed Afsor Uddin	CEO 首席执行官	Bangladesh PPP Office, Prime Minister's Office 孟加拉国总理办公室PPP办公室
36	Wang Ying 王瑛	Director 主任	Office of Government Procurement Administration, Treasury Department, Ministry of Finance, PRC 中国财政部国库司政府采购管理办公室
37	Xiaoping Jiao 焦小平	Deputy Director General 副主任	Clean Development Mechanism Fund, Ministry of Finance, PRC 中国财政部清洁发展机制基金
38	Zhi Liu 刘志	Director 主任	Lincoln Institute of Urban Development and Land Policy Research Center, Peking University 北京大学林肯研究院城市发展与土地政策研究中心
C International Organization Participants 国际组织参会人员			
39	Ruixi Zou 邹睿熹	Project Manager 项目经理	Cities Development Initiative for Asia 亚洲城市发展中心
40	Yu Zhang 张宇	Project Manager 项目经理	Cities Development Initiative for Asia 亚洲城市发展中心
41	Li Huo	Country Programme Officer 项目官员	Division of Environment, Development and Humanitarian Aid, Embassy of Switzerland 瑞士驻华大使馆环境、发展与人道主义援助处
42	Monique Bolli	Program Officer 项目官员	Division of Environment, Development and Humanitarian Aid, Embassy of Switzerland 瑞士驻华大使馆环境、发展与人道主义援助处
43	Philippe Zahner	Counsellor 参赞	Division of Environment, Development and Humanitarian Aid, Embassy of Switzerland 瑞士驻华大使馆环境、发展与人道主义援助处
44	Rui Lu	Programme Officer 项目官员	GIZ 德国国际合作机构
45	Kenji Hayashi	Representative 代表	Japan International Cooperation Agency 日本国际协力机构

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46	Benjamin Mason	International Consultant 国际顾问	UNDP, China 联合国开发计划署驻华代表处
47	Mingwen Xia	Strategic Partnership Assistant 战略伙伴关系助理	UNDP, China 联合国开发计划署驻华代表处
48	Siqi Li	Strategic Partnership Assistant 战略伙伴关系助理	UNDP, China 联合国开发计划署驻华代表处
49	Wenhan Luo	Strategic Partnership Assistant 战略伙伴关系助理	UNDP, China 联合国开发计划署驻华代表处
50	Yalin Wang	Project Manager 项目经理	UNDP, China 联合国开发计划署驻华代表处
51	Howard Chang	Special Advisor for Strategic Partnerships 特别顾问 (战略伙伴关系)	United Nations Development Programme (UNDP), China 联合国开发计划署驻华代表处
D PRC Participants 中方参会人员			
52	Liu Miao 刘淼	Consultant 咨询师	ATKINS Beijing Office 阿特金斯北京公司
53	Li Junping 李俊平	Executive Manager 总经理	Beijing Chenda Engineering Technique Co. Ltd 北京辰达工程科技公司
54	Luo Lixia 罗立霞	Assistant to Chairman 董事长助理	Beijing Dexin Yishui Website Technique Co. Ltd 北京德信易税网络技术有限公司
55	Zhou Shaojun 周绍君	Chairman 董事长	Beijing Dexin Yishui Website Technique Co. Ltd 北京德信易税网络技术有限公司
56	Ye Sudong 叶苏东	Professor 教授	Beijing Jiaotong University 北京交通大学
57	Tong Mei 童玫		Beijing Jinwei Consulting Co. Ltd 北京金维咨询公司
58	Li Gang 李纲	Executive Manager 总经理	Beijing Jinyuan Sunshine Development Co. Ltd 北京金源阳光发展公司
59	Chuan Chen 陈传	Professor 教授	Business School Sichuan University 四川大学商学院
60	Wang Zhihua 王之华	Manager 经理	China Financial and Economic Media Group 中国财经传媒集团深圳分公司
61	Chengbin Xu 徐成彬	Director 处长	China International Engineering Consulting Corporation 中国国际工程咨询公司
62	Wang Xiaowen 王小文	Director 总监	China Modern Group 中国现代集团
63	Feng Xuezhong 冯学忠	Project Manager 项目经理	China Railway First Group Co. Ltd 中铁一局
64	Cheryl Low 刘慧明	Executive Director 总裁	China-Britain Business Council 英中贸易协会
65	Wen Xin 温馨	Manager of Executive Office 总裁助理	China-Britain Business Council 英中贸易协会
66	Ying Xiangyang 应向阳	Executive Manager 总经理	Daye Trust 大业信托

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67	Zheng Jie 郑洁	Deputy Executive Manager 副总经理	Dayue Consulting Co. Ltd 大岳咨询有限公司
68	Jessica Zhang		Embassy of Canada 加拿大驻华大使馆
69	Wu Yanchun 吴燕春		Embassy of Canada 加拿大驻华大使馆
70	Patrick Li 李铂	China Business Advisor/Sector Lead 商务顾问/主任	Energy, Infrastructure & Environment, China-Britain Business Council 英中贸易协会能源、基础设施与环境部
71	Yang Fan 杨钊		Fiscal Institute, Beijing Zhong Pinlian Group 财政学会北京中品联集团
72	Paul Wills	1st Secretary, Head 第一秘书, 主任	Infrastructure & Environment Department, UK Trade and Investment China 英国贸易投资基础设施与环境部
73	Hao Chang 常皓	Director 处长	International Cooperation Center, National Development and Reform Commission 发展与改革委员国际合作中心
74	Xueli Jiao 焦学利	Executive Director 执行总监	International Cooperation Center, National Development and Reform Commission 发展与改革委员国际合作中心
75	Jason Xing 邢佶勇	Senior Manager 高级经理	KPMG Advisory (China) 毕马威咨询(中国)有限公司
76	Wang Yi 王毅	Director 主任	Policy Research Office, Chinese Academy of Science 中科院政策研究室
77	Zheng Zhijun 郑志军	President 总裁	Shenzhen Jinzhuan Urban Pioneer Fund Co. Ltd 深圳金砖城市先导基金管理有限公司
78	Fan Shilei 樊石磊	Deputy Chief 副主任科员	The People's Bank of China 中国人民银行
79	Xuelong Mu 牟雪龙	Staff 员工	Tianjin Office, Jumbo Consulting 济邦咨询天津办公室
80	Jingyi Li 李竞一	Principal Head 总经理	Tianjin Office, Jumbo Consulting 济邦咨询天津办公室
81	Han Xiaowei 韩晓威	President Assistant 总裁助理	Zhongcai Jiacheng Group 中财嘉丞
82	Shi Jiaqi 施嘉琪	Assistant to Chairman 董事长助理	Zhongcai Jiacheng Group 中财嘉丞
83	Geng Yu 耿宇		Zhongshan XiaoBenzi Low-Carbon Center 中山小本资低碳中心
84	Han Jinjun 韩晶昀	Director 总监	ZTE Corporation 中兴通讯
E Ministry of Finance, PRC 中华人民共和国财政部参会人员			
85	Yang Yingming 杨英明	Deputy Director General 副司长	Department of International Economic and Financial Cooperation (DIEFC) 国际财金合作司
86	Mo Xiaolong 莫小龙	Deputy Director General 副主任	Clean Development Mechanism Fund, Ministry of Finance, PRC 中国财政部清洁发展机制基金

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87	Wang Ying 王莹	Director 处长	Knowledge Cooperation and Technical Assistance Division, DIEFC 国际财金合作司知识合作与技术援助处
88	Liu Jingying 刘静颖	Section Chief 主任科员	Knowledge Cooperation and Technical Assistance Division, DIEFC 国际财金合作司知识合作与技术援助处
89	Hu Yangzi 胡洋子	Section Chief 主任科员	Knowledge Cooperation and Technical Assistance Division, DIEFC 国际财金合作司知识合作与技术援助处
90	Huang Wei 黄伟	Section Chief 主任科员	Knowledge Cooperation and Technical Assistance Division, DIEFC 国际财金合作司知识合作与技术援助处
91	Liu Jing 刘京	Project Officer 项目官员	Knowledge Cooperation and Technical Assistance Division, DIEFC 国际财金合作司知识合作与技术援助处
92	Wang Wei 王玮	Director 处长	Finance & Risk Management Division, DIEFC 国际财金合作司资金和风险管理处
93	Guo Biao 郭颢	Research Director 调研员	Finance & Risk Management Division, DIEFC 国际财金合作司资金和风险管理处
94	Lu Li 卢力	Research Director 调研员	Foreign Government Finance Division, DIEFC 国际财金合作司外国政府贷款处
95	Wang Guanzhu 王冠珠	Deputy Director 副处长	International Financial Institution Division I, DIEFC 国际财金合作司国际金融组织一处
96	Xie Ran 解然	Project Officer 项目官员	International Financial Institution Division II, DIEFC 国际财金合作司国际金融组织二处
97	Wang Haipeng 王海鹏	Project Officer 项目官员	International Financial Institution Division III, DIEFC 国际财金合作司国际金融组织三处
98	Wang Chun Cheng 王春成	Project Officer 项目官员	International Financial Institution Division III, DIEFC 国际财金合作司国际金融组织三处
99	Guan Xiuzhen 关秀珍	Research Director 调研员	International Financial Institution Division IV, DIEFC 国际财金合作司国际金融组织四处
100	Sun Jie 孙洁	Research Fellow 研究员	Research Institute for Fiscal Science 财政科学研究所
101	Zhao Fuchang 赵福昌	Director 处长	Research Institute for Fiscal Science 财政科学研究所
102	Cheng Beiping 程北平	Director 处长	Research Institute for Fiscal Science 财政科学研究所
103	Zhang Zhibo 张志波	Researcher 研究员	Research Institute for Fiscal Science 财政科学研究所
104	Liu Yanhong 刘燕红	Researcher 研究员	Research Institute for Fiscal Science 财政科学研究所
105	Guo Zhishen 郭志燊	Researcher 研究员	Research Institute for Fiscal Science 财政科学研究所
106	Zhang Shiyu 张诗宇	Researcher 研究员	Research Institute for Fiscal Science 财政科学研究所
107	Yu Zhenli 余贞利	Researcher 研究员	Research Institute for Fiscal Science 财政科学研究所

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108	Sun Wei 孙维	Researcher 研究员	Research Institute for Fiscal Science 财政科学研究所
109	Liu Shaojun 刘绍军		Research Institute for Fiscal Science 财政科学研究所
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112	Zhang Hui 张绘		Research Institute for Fiscal Science 财政科学研究所
113	Wei Yingxin 魏英欣		Research Institute for Fiscal Science 财政科学研究所
114	Long Yanping 龙艳萍		Research Institute for Fiscal Science 财政科学研究所
115	Su Ye 苏晔		Clean Development Mechanism Fund, Ministry of Finance, PRC 中国财政部清洁发展机制基金
116	Liu Baolai 刘宝来		Clean Development Mechanism Fund, Ministry of Finance, PRC 中国财政部清洁发展机制基金
117	Li Wenjie 李文杰		Clean Development Mechanism Fund, Ministry of Finance, PRC 中国财政部清洁发展机制基金
118	Tian Chen 田晨		Clean Development Mechanism Fund, Ministry of Finance, PRC 中国财政部清洁发展机制基金
119	Fu Ping 傅平		Clean Development Mechanism Fund, Ministry of Finance, PRC 中国财政部清洁发展机制基金
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121	Ayumi Konishi 小西步	Director General 局长	East Asia Department (EARD) 东亚局
122	Seethapathy Chander	Special Senior Adviser (Infrastructure and PPP) 特别高级顾问 (基础设施与PPP)	Office of the Vice-President Knowledge Management and Sustainable Development 副行长办公室 (主管知识管理和可持续发展)
123	Hamid Sharif 哈米德·谢里夫	Country Director 首席代表	PRC Resident Mission (PRCM), EARD 驻中国代表处
124	Edgar Cua 许延根	Senior Advisor 高级顾问	PRCM, EARD 驻中国代表处
125	Ying Qian 钱鹰	Director 处长	Public Management, Financial Sector, and Regional Cooperation Division (EAPF), EARD 东亚局公共管理、金融及区域合作处

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126	Cheolsu Kim	Lead Finance Specialist 首席金融专家	Public Management, Financial Sector, and Trade Division, South Asia Department 南亚局公共管理、金融及区域合作处
127	Yesim Elhan-Kayalar	Principal Public Management Specialist 主任公共管理专家	Public Management, Financial Sector, and Trade Division, Central and West Asia Department 中西亚局公共管理、金融及区域合作处
128	Jurgen Conrad 于尔根·康拉德	Head 主任	Economics Unit, PRCM, EARD 驻中国代表处经济部
129	Craig Sugden	Principal PPP Specialist 首席PPP专家	EAPF, EARD 东亚局公共管理、金融及区域合作处
130	Ahmadou Barry 阿马杜·巴瑞	Senior Procurement Specialist 高级采购专家	PRCM, EARD 驻中国代表处
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138	BAI Jie 白洁	Associate Project Officer 项目官员	PRCM, EARD 驻中国代表处
139	ZHANG Xin 张鑫	RKSI Assistant RKSI 助理	PRCM, EARD 驻中国代表处

6th People's Republic of China–ADB Knowledge-Sharing Platform

Workshop on Deepening Public–Private Partnerships

in Asia and the Pacific

25–26 November 2014, Beijing

This report summarizes the proceedings of the Deepening Public–Private Partnerships (PPPs) workshop held in Beijing on 25–26 November 2014. The workshop was sponsored by the Ministry of Finance of the People's Republic of China (PRC), and the Asian Development Bank (ADB), and coorganized by the PPP Research Committee led by the Research Institute for Fiscal Science.

More than 100 participants from 18 countries attended the workshop from central governments, local governments, the financial and consulting sectors, academia, and development partner institutions. The proceedings focused on identifying (i) new developments in PPPs in the region and further abroad, (ii) ingredients for a successful enabling environment for PPPs, (iii) good institutional models for promoting and regulating the use of PPPs, and (iv) good practices for managing the fiscal risk of PPPs.

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ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to the majority of the world's poor. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.



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