



Gaining Currency: The Rise of the Renminbi

Time: November 3, 13:30-15:30

Venue: Penn-Wharton China Center

Panelists:

Eswar Prasad, senior fellow at the Brookings Institution, Tolani Senior Professor at Cornell University

Ben Shenglin, professor of Banking & Finance, dean at Academy of Internet Finance, Zhejiang University, executive director at the International Monetary Institute, Renmin University of China

Marshall W Meyer, Tsai Wan-Tsai Professor Emeritus, Emeritus Professor of Management at Wharton Business School, University of Pennsylvania

Xiang Songzuo, deputy director at the International Monetary Institute, Renmin University of China

Moderator:

Guan Xin, business news anchor & reporter for CCTV NEWS

Guan Xin: Ladies and Gentlemen, welcome to today's event about Gaining Currency: The Rise of the Renminbi. Today's event is hosted by Brookings-Tsinghua Center for Public Policy and co-hosted by the Penn Wharton China Center and International Monetary Institution. Thank you all for coming here and joining our discussion today. While the issue of Chinese Yuan has been a very important topic, it has been gaining traction lately. Just a month ago on October 1st 2016, we all witnessed the historic step for the Chinese currency. The International Monetary

Fund has officially included the currency into special drawing right basket granting the currency status of global reserve currency. It is the result of China's growing economic clout, continuous reforms of the financial system, and efforts to make the currency more widely used in international trade. But, it is a real game-changer for just its symbolism. What does it mean for the Chinese economy when it is facing substantial downward pressure and what does it entail for China's ongoing financial reforms? What role will China play in world economic affairs with the rise of the Chinese currency? To address these important issues, I'm very pleased to introduce Professor Eswar Prasad. He will share with us his insights on his new book *Gaining Currency: The Rise of the Renminbi*, which was published by Oxford University last month. Professor Prasad is a Senior Fellow at the Brookings Institution, where he holds the New Century Chair in International Economics and he is also the Tolani Senior Professor of Trade Policy and Professor of Economics at Cornell University. He was also previously Chief of the Financial Studies Division at International Monetary Fund and before that he was head of IMF's China Division. We also have the honor to have 3 distinguished panelists joining him to discuss China's growing economic clout in the rise of the Chinese currency. They include from right to the left -- Marshall Meyer, Tsai Wan-Tsai Professor at Emeritus, Emeritus Professor at Wharton Business School, University of Pennsylvania. Professor Ben Shenglin, Professor of Banking and Finance and also Dean at Academy of Internet Finance at Zhejiang University. Xiang Songzuo, Deputy Director at the International Monetary Institution. Would also like to mention that Professor Ben is also the Executive Director at the IMI at the Renmin University of China. Thank you for our distinguished panelists joining us this discussion today. Professor Prasad will first deliver a 35 minutes presentation about the rise of the Chinese Renminbi and then we will move on to a 40 minutes panel discussion with our panelists here and then the floor will be open to a Q&A forum with our audience present here today. So without further ado, let's give a warm welcome to Professor Eswar Prasad.

Professor Prasad: Good afternoon and thank you everyone for coming, so thank you for the kind introduction. The Chinese Renmibi has come a very long way in a very short time. It is remarkable that we are sitting here today talking about a currency that has in principle already ascended to the club of elite reserve currencies

and who would have thought it just thinking about where the RMB was a few years ago. But, as miss Guan pointed out, there are important questions that the innovation of the RMB to this elite status raises. How did China get to this stage? What are the implications for China's whole economy and for the rest of the world? And, what are the prospects of the RMB becoming a more important international currency over time? So, in my talk I intend to focus not just on the implications for the International Monetary System, but also for China's whole domestic development. Because I think there is an interesting story here about what RMB internationalization has meant in terms of Chinese economic reforms. And there is an interesting analytical issue here about how to think about whether China has developed the right approach or the right sequence to how it does things like capital account opening, making the exchange rate more flexible which is all seen as necessary for a country to have its currency become a reserve currency. And certainly the process of becoming a reserve currency does create some risks in itself. So we will talk about that as well. But, the more interesting part of the story actually goes back to not a few years ago, but many centuries ago.

As I started writing the book, I came upon a lot of interesting facts, which I had not known even though I had been working on China for about a decade and a half. In fact, China had the very first paper currency in the world which some of you already know. It was during Song Dynasty in the 7th century there was, at the time, the notion that a paper currency really could not work very well to substitute real currencies created in the form of commodities or precious metals. In fact, some of the debates about currency go back even further. Many of the debates that we have these days about the role of the government in issuing money and so on actually took place in the 2nd century B.C. when Confucius scholars were debating the right role of the government in issues of finance. Many Confucian scholars apparently took the view that in fact it is better to have private agents or private institutions issue money at the time it was commodity money because if you had private agents competition, then in fact you could have the value of money being preserved through competition. The sovereign at the time felt that in fact only the government should have the privilege of issuing currency. There was a very famous historian I'm sure many of you have already heard Sima Qian who was a Confucian scholar, but he in fact the

position of the government in that stage. The sovereign government would be better preserving the value of the currency. So many of these debates in China have the resonance in the present day. While China had the first paper currency in the world, things get even more interesting in the 13th century when the Yuan dynasty took power in China. The Yuan Dynasty's prime ruler, Kublai Khan, now we know from the writings of Marco Polo who went back to Europe and reported on this wonderful alchemy that this grand Khan had come up with. Because in the 7th century and until the turn of the 13th century paper money had not come to Europe yet. In fact, paper money only came to Europe in the 17th century. So at the time, the notion of money that was not backed up by commodities or precious metals was a very strange thought. How can you have money that is just printed on paper? So Marco Polo writes that this grand Khan as he calls him has just performed the best form of alchemy. He just puts his imprint on mulberry bark, which is what paper was made of at the time, and everybody throughout the land accepts the money. So how did Kublai Khan make his currency into currency throughout the land? It was simple, he passed a decree saying that anybody who did not accept this currency would lose his life. That turned out to be very effective in making the currency into a real currency. Of course the issue to print money was too strong. What happened was you had one of the first episodes of hyperinflation after Kublai Khan passed away and a subsequent member of the Yuan Dynasty then ended up having to print too much money to finance wars so we they had among them one of the first episodes of hyperinflation. What you have behind me on the screen is a printing plate and also an actual note from the Yuan Dynasty notes and the text at the bottom for those that can read it is probably obvious what it says is basically that and it talks about some characteristics of the notes and it points out that counterfeiters would be put to death and that anybody reporting the counterfeiters would not only get a monetary reward but also all the family property of the counterfeiters. Now, with the episode of hyperinflation is that paper currency started disappearing because people didn't recognize its value anymore. And it's only in the Song Dynasty in the 13th Century after Marco Polo had passed on that he got paper currency once again appearing. So paper currency in that sense does have a very long tradition dating back to the Song Dynasty and then to before that, the Yuan Dynasty. This note from the Ming Dynasty is when currency started playing a prominent role again in the form of paper

currency, but even this currency was in fact backed by commodities. Then, coming into more recent history in terms of recent not just the only innovation China had among the first issues of paper currency, the first real currency, the first episodes of hyperinflation.

By the 1930s of course, we have the Kuomintang controlling a good chunk of China. The Kuomintang also had experimental paper currencies some of which worked and some of which did not work very well. And they, too, faced the temptation of printing too much money to finance the war expenditures and you had hyperinflation. That led to the Fabi reform in 1938 when the Kuomintang government issued the currency that was in principle backed up by U.S. Dollars or British Pound Sterling. So there was relative monetary stability for a very short period and then what happened was you had competition coming from the Japanese who started annexing certain parts of Chinese territory and by 1938, they had set up a puppet government, the Wang Jingwei in Nanjing. Then, China had the first currency war. This was the middle currency war. What happened was that the Japanese set up their own central bank because they recognized that in order to have economic power, you need to have your own currency. The Nanjing government set up a central bank and set up a branch of the central bank in Shanghai which was a financial sector for China. The Kuomintang government had set up its own central bank and it too set up a branch in Shanghai. And of course there was currency competition and what happened in this competition is that the Kuomintang government's agents went in and dynamited the central bank's branch of the Wang Jingwei's government. In retaliation, the Wang Jingwei's government started putting out employees of the Kuomintang central bank driving them out of the place and executing them. So there was literally blood on the streets of this currency war. If you think that currency wars business is very fierce, it was nothing like back in China, which really had blood on the streets. This is just a picture of many of the struggles that were happening in Shanghai related to the currency turbulence of the time. And then of course in 1949, the PRC was instituted and this in the first chapter of the book, and I could speak about the first chapter of the book for the next two hours because learning about Chinese monetary history turns out to be the most fun part of this book so if you ever get the book, read the

first chapter. The rest of the book is about exchange rates and capital flows, and so on pretty boring stuff. We'll talk about that, but it's not half as exciting as chapter 1.

In 1949, the PRC was formed and the People's Bank of China was actually formed as the central bank for the New Republic even before the New Republic was declared. I have some archival material suggesting that Nan Hanchen who was the governor of the People's Bank of China at the time and goes to Mao and says, "You are the father of the party, you are the father of the nation, everybody wants your picture to be on the new bank notes." And what Mr. Mao says is, "No, I am just a party functionary. This is after all the Renminbi, the people's money, so my image should not be on it." So it turns out that in the initial bank notes, the image of Mao did not appear at all. There were various other images showing different ethnic minorities, different ethnicities, and different representations of the idealized society. So for instance in the 3rd series of bank notes issued in 1982, this was seen on the 50 Yuan note as a sort of idealized representation of society. You can see there the person shown with the glasses, the farmworker and the industrial worker. So this was seen as a perfectly balanced society. It was only in the 4th series of RMB Bank notes issued in 1987 that you see four leaders including Zhou Enlai and Mao shown, but still, you don't have the full-faced iconic image of Mao that you see on all your Yuan notes today. So what changed? When I used to come to China back in the '90s and so on, I thought it was always that Mao was always on all the notes. It wasn't until the 5th series of RMB notes that were issued at the 50th anniversary of the PRC's foundation. This was issued started in 1999. Mao's full-faced image appears on all the Yuan notes. There is a story, why did it happen? Was it just because it took so long for the legacy to be realized? It turns out that the managers of the printing agencies faced a very severe problem at that time and that problem was counterfeiting of banknotes. So this image I'm showing is the internal deliberations they had. And then the members of the Printing Bureau decided that the best way to limit counterfeiting was to put an image on all the bank notes, an image that everybody would recognize. So there is a discussion should they have Confucius, should they have one of the other leaders, should they have one of the famous landmarks in China? No, they decided that the only image that everyone in China would recognize is that of Mao. So that's why you have Mao's full-faced iconic image appearing on every bank note now.

So if you think about Chinese monetary history, just the sheer history related to the monetary debates in China and the evolution of paper currency, it's a very interesting story in itself. In fact, while collecting all this material, I became so fascinated with this, it delayed my whole book project by more than a month and a half because I was just reading Chinese monetary history and I was very tempted to write the book just about that. There are so many interesting things about that. But, in the interest of time, we will think about where we are right now and we get back to the subject of more boring stuff. So, in thinking about what the RMB has accomplished, it is useful first to lay out some concepts. So I am a professor and professors always do, it's good to start by defining concepts very clearly before we try to understand how the RMB got to where it is. So there is the concept of an open capital account where capital can flow relatively easily across national borders and then there is a concept of an international currency – a currency that is used widely in trade and finance transactions. Now it turns out that neither of these is necessary or sufficient condition for the other. You can have a country that has a fully open capital account, but its currency may not play a very big role in international finance. Then one can think about a currency like the RMB, which belongs to a country that does not have a fully open capital account, but seems to be gaining, as I will show you, some traction as an international currency. But being an international currency and a reserve currency are very different things. You often hear the term RMB internationalization and that rolls into a variety of things. You hear about the RMB playing a bigger role in international payments, you hear about the RMB becoming part of the IMF SDR basket, but these are really very different concepts. A reserve currency is one that is held by foreign central banks as part of their effects reserve portfolios. There are other subtle distinctions about reserve currencies that I will get to, but that is a good operational definition to begin with. Now, starting with a very basic concept, that of capital account opening. One question is why? Why bother? One argument which is the classic argument in international finance is that if a country has a more open capital account, especially if it is a developing country, it can get more financing from abroad because there is less domestic financing and if you get more financing, you can invest more and grow faster. That's the classical theory, but I've argued in

some of my other research that what I call indirect or collateral benefits of financial opening are even more important.

So if you think about China, China does not need foreign money really because it has a lot of domestic savings and it has export capital rather than import capital. If you think about reserves that China has accumulated in previous years, what China was doing was basically exporting capital to the rest of the world. But still, there are benefits to be had from capital account opening. If you think about why the Chinese government was so inviting of foreign direct investments, because it would take a lot of indirect benefits – technology transfers, corporate governance, and managerial practices, and all of those may be even more important than just the money itself. You also get the opportunities for domestic investments from diversified portfolios that may get better returns, but more importantly get more diversification in portfolios. And, if you think about China's relatively closed capital account, that means a lot of the savings in China goes into the banking system, which therefore has less of an incentive to reform itself. If Chinese households and corporations have the ability to take money abroad, there's less capital deposit base that forces to some degree and capitalizes, that means generates a push for financial sector reforms, but there are a lot of questions about whether China is going about this the right way. What economic theory tells us is if you open up the capital account, enough capital will flow in and out before you have good financial systems, good regulations, that's going to create a lot of risks. Likewise, if you try to manage the currency's value, that becomes much harder and the capital account becomes more open, plus, there are risks to the banking system. If the concerns about the banking system rise, then there may be a lot of capital that could flow out. And last year, we saw some of these risks coming in to play after August 11, when the PBOC reduced the exchange rate or tried to free up the exchange rate and impacted capital outflows and a lot of concerns. So maybe China is getting it the wrong way. One could argue that on the other hand, although China did lose about 800 billion in reserves last year, still, China has a lot of foreign exchange reserves, and maybe the risks are not that bad. But I think there is a bigger and deeper story here that could be thought about – why is it that China has gone about it this way? When thinking about the benefits and risks, one can argue about whether the sequencing is right, whether the trade-offs are

right, but I think the more important question is what the process of RMB internationalization has done for China. If you think about what the government did last year, a couple of years ago, the idea of making the RMB an important international currency, especially getting it into the SDR basket was very important in terms of building political support for some very difficult reforms. So if you think about what is necessary to make the RMB a reserve currency and we'll talk more about this in a few minutes, you need good financial markets, you need a more flexible exchange rate, you need better regulation. Independent of what happens to the RMB, these are all very good for China. The problem is that all of these reforms have a lot of opposition. So, one could say, how can we get around this opposition? My view is and I call this the Trojan Horse strategy. You've heard about that Trojan Horse narrative that it is seen as a gift, but inside the gift are all these soldiers hiding inside the gift. That is you introduce changes or reforms as soldiers, but doing it with the object or framework by making the RMB more important.

If you think about what Chinese officials have been telling us, if you read their statements carefully, this begins to come together. Many people like Governor Zhou when he was head of SAFE and then deputy governor of PBOC. They've all been telling us that in fact, they will not force the issue of the RMB becoming an international currency, but if the market wants it, they will facilitate it. And that is a key distinction about the market determining what happens to the currency. And over time, China's capital account has become much more open in order to accomplish these objectives that are very important. Right now, if you think about China's overall external balance sheet with the respect to the rest of the world, China has about 6.3 trillion dollars of foreign assets and about a little over 4 and a half trillion of liabilities. So China's overall asset position relative to the rest of the world, that is it a creditor of about 1.6 trillion dollars. But notice one interesting thing is that if you notice the structure of liabilities and assets, most of China's assets are in the form of foreign exchange reserves. And how are these foreign exchange reserves held? They're held largely in the form of U.S. Treasuries, Euro government bonds, and other government bonds of advanced economies that are paying very very low rates of return. On the other hand, most investment into China has come in the form of foreign direct investment, which is certainly riskier than investing in advanced

economies government bonds or any government bonds, but has potentially higher rates of returns. So, another way of thinking about the goal of making the RMB an international currency, is to get in on this very strange imbalance. So why is this a strange imbalance? It's a strange imbalance because China's in the very unique position of being a creditor to the rest of the world. So if you're a creditor, if all of you lend me money, I would be paying you back, right? That's the way things are supposed to work. But the remarkable thing is if you look at the return on China's assets, those are lower the returns of the liabilities. So in fact, even though China is a creditor to the world, that is the rest of the world, if you think about how much money China made on its assets and relative to the amount made in its liabilities last year, you would think it would maybe be a small positive. No, in fact, it was negative. In fact, China lost 60 billion dollars on its net asset position last year. So this is crazy it's like I owe money to all of you, and all of you give me some returns because I borrowed from you. If you look at the actual numbers, this is not a pattern just over the last year, if you look at the last five or six years, the returns have been negative. In fact, the returns have never been significantly positive.

What would I do you don't even care about the benefits of being a reserve currency really low costs and so on, but I think there is another angle to this as China's capital accounts become more open, then one can think about China's Central bank PBOC not accumulating so many foreign exchange reserves, but how will corporations go and diversifying? Maybe they will hold with riskier, but higher return assets. In the book I have a comparison of the U.S. and in the U.S., the situation is exactly the opposite. The U.S. owes to the rest of the world about 4 and a half trillion dollars. So guess how much the U.S. is paying the rest of the world...It turns out in fact, the rest of the world is paying the U.S. so if you look at the net returns on U.S. foreign investment position, the U.S. is earning more than its assets which is smaller than its liabilities, but paying very little. Why? Because most of the rest of the world owes assets to the U.S. in the form of U.S. Treasury Securities which pays very low rates of return. So this is another angle when thinking about what capital account opening and accumulating foreign exchange reserve which until very recently was the main way China was investing abroad and may not make very much sense for China. So as you can see there are going to be many different inter-market networks about RMB

position in international trends because one needs to think about the building blocks starting from why China might go from capital account to why there might be domestic reasons to promote the RMB's role as an international currency. And as you can see, this is something that the government has actively encouraged for some time. The share for reserve accumulation and how much money China invests in the rest of the world through capital outflows and not just in the last year, but over a few years. When the share of private and other types of outflows has in fact been rising. So let's go back once we've dealt with the capital account opening issues to thinking about what the RMB's journey to becoming an international currency looks like. And again there was until about a year and a half ago, a huge amount of enthusiasm about how far the RMB had come along in its process of internationalization.

You know, offshore Yuan deposits had been rising very fast, trade settlements in yuan accounted nearly about 1/3 of China's trade and China accounts for about 12% of global trade. Taking into account both of those, China's currency accounts for payments and settlements were about 2% trade transactions. Yuan denominated bonds had been rising as well, so one question is whether the RMB is on its way to becoming a true international currency. The focus was very rapid, in fact if you look at any of these trajectories, this is very very impressive. It's starting from 0 first and rising very fast. But, the projections that this trend could go on forever clearly proved wrong. In the last two years, as pressures on the RMB started shifting from appreciation to depreciation and you saw it leveling off. The settlement of foreign trade and RMB started settling off. If you look at RMB bonds issued in Hong Kong, in fact the 2015 numbers, are just about the level of 2014 and if you think about the RMB's role in global as a payments currency, that number again went from basically 0 just about 5 to 6 years ago to about 2.5%. Now you might think 2 and a half percent is not much, but this was enough to move the RMB to the fifth ranking accounts payment currencies because the U.S. dollar turns out to be very dominant and there aren't that many competitors out there. Even with right now, the share is about 1.9% and the RMB has fallen down to the sixth rank, but it is trading places with the Japanese Yen practically every other month and I think this trend will continue. So if you look at some of these numbers, the share of the exchange markets

share of international bonds and loans and the amount of interest rate derivatives are small numbers.

But again, it's important to remember that you're starting from 0 and it's pretty rapid progress. So if you think about how much progress China has made in terms of promoting its currency as an international currency, China's sheer size has allowed it to gain traction and international use is increasing because the supporting infrastructure is increasing very rapidly. Right now, you have about 15 offshore financial centers and New York has been designated as an offshore center for the RMB. Just recently, China has its own cross-border payment system that has been set up and you're getting more integration of the offshore and onshore markets so I think although they say it's settling off now, the internationalization process will pick up once again and continue. So I think so long as China continues on this path where it takes on a bigger share of global GDP, global trade, the RMB is going to continue to begin a more important international currency. Then there is a question of whether it becomes a reserve currency. Now for the reserve currency, traditionally, there are some very standard criteria that are relevant: there is size -- whether the country has an open capital account, the market determination of exchange rate, or in addition in the book *Micropolicies and financial markets*. In financial markets I think are critical issues because ultimately again if you think about markets foreign investors both official and private need to have access to the denominated financial assets so they can move easily and in and out of those assets and they need to have good high quality Renminbi denomination assets. So you need to have an open capital account and you need good quality assets. In term of size, China is undoubtedly significant and accounts for 1/6 of global GDP. If you look at in terms of purchasing power, it's somewhat higher and accounts for 12-13% of global trade depending how you measure it and about 1/3 of global foreign exchange. So, I don't have to tell anybody in this room, China is very big, it's second largest economy in the world and it's contributed more to global GDP growth since the financial crisis than even the U.S. So, size is clearly not a problem and the currency has become more market determined over time. Of course quite a bit since 2005 when these are trade rated exchange rates on U.S. dollars, Sina-U.S. dollar exchange rate because I think this is a broader concept. As you can see, the RMB is relatively monetized as I mentioned.

But ultimately, financial markets are the key determinant for reserve currency status. Here again, China is not necessarily falling short if you add up the amount of high quality fixed term assets, whether these are high quality in China is still open to question, but if you add up the amount of outstanding government bonds and corporate bonds, that's over 5 trillion dollars. So China is already ahead of many other reserve currency economies including Switzerland, Canada, Australia, all of which have reserve currencies.

But, there is a long way to go. You need to have much broader range of financial instruments. Right? You need liquidity; you need to have a lot of those instruments and a fair amount of different dimensions. And in terms of those dimensions, China is moving forward, but I don't think it's quite there yet. And, you need a good trading infrastructure, regulatory trade for investors for traders to invest in a sensible and practical way. So, there are issues that still remain in terms of China's progress in becoming a reserve currency. Here's the interesting thing if you go back and look at the prerequisites, notice that China certainly has size, but China does not have an open capital account, it does not have a flexible exchange rate, its financial markets are developing, but it's still relatively underdeveloped. In terms of macroeconomic stability, there are still a lot of risks in China. But, who's to say that China has any worse macroeconomic policies than the advanced economies? But, when thinking about open capital accounts and flexible exchange rates, China doesn't have those. And here's where it can get remarkable. No other currency has been able to become a reserve currency without meeting these criteria. But yet, officially, today, the RMB is a reserve currency. The IMF has already designated the RMB as a reserve currency. It joins just four other currencies: the dollar, the euro, the pound sterling, and the Japanese Yen in the IMF's market currencies called the special drawing rights. And then, if you look at what the PBOC has done in terms of signing bilateral local currencies for cooperation with other central banks -- that is to say these arrangements give central market counterparts access to RMB liquidity meaning that all these central banks take it to have value to not just dollar rights of liquidity, from the 10 or big central banks like the ECB or the DOJ, but they want these small compliances under the PBOC. There's now 34 of these small compliances all of

which added together amount to about half a trillion dollars worth of RMB liquidity that foreign central banks have access to.

So this is interesting, this means the currency has become a reserve currency not just in what the IMF has said, but also in terms of how other central banks are treating the currency. In fact, the IMF estimates that about 1 and a half percent of global foreign exchange reserves are already held in RMB. So the markets are not waiting for what the IMF has to say. So this brings up an interesting question: First of all, is this process going to be stopped by any problems in the Chinese economy? And then we get to another even more interesting issue about whether if China doesn't meet the prerequisites of a reserve currency, when the day comes that China does have an open capital account from a more flexible exchange rate, maybe they could take over. Hold that thought for a second, let's think about what could go wrong. There are a lot of risks in the Chinese economy that we've talked about today. People keep estimating that China is going to crash but somehow it didn't, so maybe it will crash. There are a lot of risks, there are risks in the financial market. You saw the stock market melting down last year, we had an episode of significant capital flight, and there are more fundamental risks related to the policy framework. Stock markets are extremely volatile. If you look at what happened with the currency's value relative to the dollar, not matter what the PBOC tells us all about looking at the market, it still looks at CNY to dollar rate, that certainly took a beating in the last year and a half since August 2015. More recently, in the last three to four weeks, the RMB has once again depreciated by about 4% to the dollar. There are clearly tensions in the market if you look at the discrepancy between the onshore and the offshore rates between the CNY and the CNH rate, in principle, these rates should move very close together. But during the period of market tensions last year, a pretty significant gap opened up between these two rates and there is still a pretty gap between those two rates since it opened up. If you look at capital outflows last year, some capital outflows are not bad things. As I argued earlier, diversification is actually a good thing from the Chinese point of view. But, what the Chinese government and the PBOC are worried about is capital flight – money going out to unofficial or illegal channels. By definition, it is very hard to say how much money is going out to those channels; one indicator is the measure of what is not accounted for properly in the balance of

payments. We call that the net errors omissions. The point is when you can't measure something or can't understand something; you just give it a fancy name in the hopes that it makes it seem like we know what is going on. If you don't understand some part of growth, we call it total factor productivity so you apply ignorance to something. So net error omissions are at some level a measure of what we cannot measure. When net error omissions are negative, it means that money is flowing out to unofficial channels maybe to trade and invoicing maybe to gambling debts in Macau, maybe union pay cards being used multiple times in the same, usually in Macau again. During the period when the RMB was facing three seasons pressure, we had net zero omissions being positive because money was coming in through unofficial channels. But as you can see, the numbers once have reached 130-140 billion dollars and it's been this way for the past 2 years. This suggests that there are significant concerns about the stability of the Chinese economy. All of these are potential problems, so one can ask, are we in the situation where one could have the Chinese economy melting down which certainly would affect not just the Chinese economy, but this whole process of RMB internationalization. I would argue that there all the same buffers in China that would prevent meltdown. But this is a subject for a whole different seminar, but my sense is that despite all these risks the Chinese economy faces now, a financial meltdown is not the most likely scenario. A better way of phrasing the question is to ask how expensive is it going to be to fix the problems in China including in particular some of the loans in the banking system, some of which the loans are never going to be paid back. So many of you in this room are going to be stuck with it in one-way or another. The question is going to be how big the bill is going to be and when you will have to pay.

As a reserve currency, again, China seems to have arrived and made more progress based on these criteria. Going back to this other interesting question that I've posed, one can ask: If China doesn't meet the traditional criteria for a reserve currency and it's already a reserve currency, maybe when it does have an open account, a flexible exchange rate, better potential markets, then China is slowly moving in the right direction in all these areas. So maybe one day, as the Chinese economy grows, you could have the currency be a big enough currency take over other reserve currencies and maybe even the U.S. dollar. To that I answer, under present circumstances that

will not happen. Why is that? Here we have to make a distinction that before the RMB came up to this stage, did not exist at all. It's the distinction between a reserve currency and a safe haven currency. All the reserve currencies other than the RMB are safe haven currencies. These are currencies that investors turn to not just for diversification or yield, but for safety. So in times of financial market turmoil, you see investors running to U.S. dollar denominated bonds, Yen denominated bonds, Swiss-franc denominated bonds, etc. Until the RMB came along, these were identical concepts because every reserve currency was a safe haven currency. So what is the difference? I listed all these prerequisites for a safe haven currency and what is necessary for a currency to not just be a reserve currency, but also a safe haven currency? In my previous book which is on the dollar, I argue that in fact it is necessary a government needs to have trust of foreign investors. And what is necessary for trust? It's not just good financial institutions and markets, but you need a broader range of institutions. And what do I mean by institutions? I mean first of all, an open and transparent system of government with institutionalized checks and balances. Now I spend a lot of my time in Washington and you might say that I'm completely marking the view that the U.S. political system works well. But here's the thing, if it was any other country where there was the prospect of a president coming in to power who has said that they would walk away from some of the U.S. government debt, you would have panic. You would have people leaning away from the U.S., German government bonds, you would have the currency depreciating. What do we see happening in the U.S.? Nothing. Why is that? Because there is a system of checks and balances that we all rely on. I think there is a system of checks and balances that will prevent the government, or at least a specific arm of the government including the executive branch from doing anything crazy. You also need a cluster of independent central bank, and you need the rule of law. There are not that many countries in the world where the rule of law is so powerful, the government gets taken to court once in a while and quite often, the government loses. That is very important in trust for foreign investors that if they come in and invest in the country, they are going to be treated fairly according to the rules. They may not like the rules, but once the rules are in place, everybody, including the government has to obey.

If you think about since the global financial crisis, you might think the financial crisis started in the U.S. and that the dollar share of global reserves should have fallen. Of course you had a lot of problems in the U.S., but in fact, since 2008, if anything, the dollar share of global reserves has risen very slightly. This goes to show that power of these institutions... certainly in Europe, the story is not the same. Some of the basic institutions that are holding the Euros all together are being called into question. Here again you don't have completely their own bonds, there are some of the Euro institutional framework that are very strong, but the Euro has suffered as a consequence, but the dollar has barely been affected. If you think about all these advantages that the U.S. has, these are going to be very difficult to take over. So one question is whether the RMB, if it cannot become a safe haven currency, has reached its limit. I think not. I think as we are seeing from what markets are showing and from what central banks are showing, the RMB could be an important currency. I think as an international currency, certainly, within the next 3-5 years, the RMB will bring even more progress. If China plays its cards right with the more open capital accounts, more market determined exchange rate, and a broad range of economic reforms that stabilize growth, maybe not at the present level, but at a reasonable level, then I think the RMB is going to become a significant reserve currency by which I mean it could rival smaller reserve currencies like the Yen and even the pound sterling. It may be somewhere in the range of 3-5% of global range reserves. It could possibly move the share of Euro as well, but will it really become a safe haven currency that has the potential to dethrone the dollar's dominance in global finance? To that, my answer is it is conditional on there being broad institution reforms and what I see in terms of President Xi has made very clear both in terms of words and actions that there will not be broader political and institutional reforms throughout the day. My sense is that no matter if the RMB becomes a major reserve currency or not, the next 3-5 years are going to be very exciting years some for the right reasons because the RMB is going to become more prominent, but there are a lot of policy issues within China that need to be dealt with which will lead to a lot of opportunity. It's going to be a very exciting ride either way, so hold on to your belts and enjoy it while it lasts. Thank you.

Panelist Discussion

Guan Xin: Thank you Professor Prasad for your very inspiring speech that gave us a clearer picture of where we are now and the future direction of the Yuan's internationalization with a very specific timeline here. Now let's move on to our panel discussion. Please welcome our very distinguished panelists here: Professor Meyer, Profess Ben, and Dr. Xiang Songzuo. Welcome. Professor Prasad just raised a very important issue of Chinese Yuan's internationalization that is still a long way to go from an international currency to a reserve currency and a true safe haven currency, so I'd like to ask all of our four guests here: What do you think or how far should China go to make the currency a true global currency? Professor Prasad just mentioned that it's not going to happen in the foreseeable future that the Chinese Renminbi could rival the U.S. dollar, but what about other leading currencies including the Euro and the Japanese Yen? Do you want to start Professor Prasad?

Professor Prasad: I think maybe let the other panelists speak as I've said quite enough.

Dr. Xiang Songzuo: I never use the word rival for the U.S. dollar, I agree with Prasad yes the RMB has become more and more important as a national currency, but for the foreseeable future, I don't think the RMB will replace the dollar or Euro as the major international currency. But now I think the problem is for Chinese authority, it is a dilemma for internationalization of the RMB. How to manage the transition or the process? So, the classical criteria for international currency has two respects – one is so called capital account liberalization, the second being capital account convertibility. You mentioned several times flexible exchange rates, okay, but now the problem is what's the benefit? What is the benefit of capital account convertibility and flexible exchange rate? I'd like to raise this issue for all the panelists. Now with use of empirical evidence to demonstrate the flexible exchange at the full convertibility of capital accounts have produced any positive impact on any countries? Probably before... well, the Euro for U.S. they have a positive impact on economic growth. With the internationalization of any currency, we need the real growth. So I think that's a very deep philosophical question for any country. What's

the positive effect of capital account convertibility and flexible exchange rates? So in this sense, I agree with remarks Governor Zhou, we met several times in early October at the IMF annual meeting, he also mentioned that China will not proceed with the criteria of classical IMF definition of capital account convertibility. We will proceed with so called managing convertibility. How about exchange rates? I think the current problem of the world economy to very much extent has been due to mismanagement of our exchange rates. So flexible exchange rates is a very bad thing for a world economy. So now, how can China move towards a fully flexible exchange rate? I don't have a definite conclusion for this question. I have discussed with many officials here and it seems to me they are also confused.

Guan Xin: So you're not sure about your anti-global definition?

Dr. Xiang Songzuo: No I'm not anti, I'm just raising the question. If we want any currency to move toward the criteria of IMF to that extent, I doubt the consequences of this movement for the world economy not only for the Chinese economy, but also for the world economy. Why is the global economy entering the so-called recession or stagnation 8 years after the financial crisis?

Guan Xin: I think Dr. Xiao mentioned a very important debate in contemporary China whether the market economy or liberalized economy is the right solution for the Chinese economy?

Dr. Xiang Songzuo: We discuss all these issues under the classical framework of the IMF philosophy – convertibility. Well, flexible exchange rate. Well, we must answer the question of what is the benefit of convertibility and flexible exchange rates?

Guan Xin: Let's hear some foreign perspectives on this – do you agree that China has such concerns, Professor Meyer?

Professor Meyer: A couple of comments. First of all, just in this exchange, oh thank you so much for a wonderful presentation, it was incredible. Just in this exchange, it's the ghost of what, 1997? Remember what happened in 1997? Asian Financial

Crisis. Malaysia shut their windows. China's lived with that for a long time. I actually took away a couple of things here that I didn't expect other than your graphs and charts which I hope aren't copyrighted because I was photographing them. I'll ask for permission. A, Trojan Horse and stealth liberalization of currency. Again, my background is not finance it's not in economics, it was in swap lines which is kind of Trojan Horse in reverse. So the question is, look, will China again do what the rest of the world thinks is improbable? How could a bumblebee fly? No engineer could explain it. That is, if not getting the safe haven status, very close to reserve status without ticking off everything on the IMF checklist – a new model. That's on the one hand, and on the other hand, you try to tick off the checklist giving your penultimate comment about Chairman Xi no fundamental institutional reforms given my own observation of banks still account for 60% to 2/3 of the finance in China... more than that. Are they willing to move or be moved? Is the political strength of the system, the inertia that this is impossible? Those are a series of uncoordinated questions I have.

Guan Xin: Now to Professor Ben, do you have similar concerns or do you have some preference at this point?

Professor Ben: Thank you for having me here. Professor Prasad's presentation was brilliant and I don't think of that China should meet all these criteria. My colleague Songzuo has a point. By the way, I was a PhD student in the United States about 23 years ago and my original dissertation trying to focus on exchange rate economics and after I spent 6 months in the literary focus and I thought there was too much confusion and I was really confused. Eventually, I thought that this is not something economists can solve. We're giving economists too much the burden of responsibility to solve something like exchange rates. I think exchange rates are a lot more related to politics than it relates to military power. Honestly, if there's any political institution basis, it's gaining strength. That has nothing to do with economics. I personally feel that aspect is extremely important. You aren't really trying to solve a political or military issue based on the economic issue. As economists, we need to be a little more humble in our capacity for some of these issues. On the other hand, for Renminbi whether it can become an international

currency. As an international currency, I don't think we should try to compete with the U.S. Dollar. I don't think the Chinese Renminbi actually intends to do that. Secondly, if you look at the currency you can look at the currency as a trade currency, you can the currency as an assets currency, and thirdly as a reserve currency. I think what Chinese are missing most is the ability to become an asset currency because our own financial markets are not fully open, our exchange rates are not flexible, and our capital accounts are not open. Maybe our strength as a global currency is our ability to do trade with our real economy. We're the largest trade nation in the world, we are still growing significantly. We can become a good storage reserve currency. Capital account convertibility, I was asking myself, what's our definition of capital here? When you say capital account flexibility or convertibility, I thought China has convertibility on a trade account under real investment capital if it's a real investment capital – FDI, ODI, we have full convertibility. It's the so-called speculative -- they have hot money this terminology. For a hot money title convertibility, we don't need this and I think we'd be better off without it. So maybe with the definition of capital account or definition capital, we need to take another look at this. Okay thank you.

Dr. Xiang Songzuo: For Chinese currency to become real international reserve currency, the convertibility of capital account, exchange rate flexibility is one issue. A more market fundamental issue, I agree with Professor Prasad, for any currency to become a real international currency, the country issuing the currency must become so-called safe haven of global wealth. That means international investors are willing to deposit their money – their investments into this country. Yes, there are three preconditions for any country to achieve this. First of all, size. You mentioned size. China has size of course, it's one of the largest economies and maybe if we have good luck after 10-15 years, the Chinese economy will become number 1. You also mentioned democratic political institutions or jurisdiction or legal institutions. Well, President Xi and Communist Party Central Committee announced they will build up the so-called rule by law society of nation but not western style. What kind of legal or democratic institution is needed for international investors to put money in the Chinese market? There is some uncertainty here. More importantly, but certainly, are financial markets. Right now, in terms of outstanding or turnover, the Chinese stock market is almost number 2 only next to New York or London. The bull market is

reserve according to some estimation. However, SOEs dominate all these markets. I do not think in the near future, the Chinese government will privatize all these SOE institutions, but my doubt or question is if the financial market is dominated by SOEs, financial institutions, can we build up a financial market at the international level standard of regulated free markets? I have doubts, frankly speaking. So now we're talking about internationalization of RMB, replacement with RMB of US dollar issues, but to my understanding, I don't think the Central Government decision makers have real intentions to make our currency become the real international reserve currency. Well, the Chinese development is a gradual. How long will the gradualism take? I think that's the bottom line we must pay attention to.

Guan Xin: There is certainly a level of caution in China about the pace of Chinese financial reforms because there's a certain level of uncertainty if we open the capital accounts now, causing a very risk of capital outflows, capital flight risks are very strong. Professor Prasad, would you explain to us, in your opinion how should the Chinese government balance the risks and the benefits of financial reforms? What real benefits will the Yuan's international status bring to China?

Professor Prasad: Those are very perceptive questions and thank you for all the comments; they are certainly in the right direction. It is a fundamentally important question whether exchange rate flexibility and an open capital account given the level of China's development especially the development of its financial markets and regulatory frameworks are a good thing for China or not. I think the Chinese government and especially the key policy makers in charge of financial markets and exchange rate policies have been quite clear in why it is a nice thing for the RMB to play a bigger role, but the key is whether the markets want it and whether the markets will respond favorably. Ultimately, what the Chinese government says and what the IMF says it not as material as what foreign investors think the reality of the ground is like. There is a big risk to doing what China is doing as what Professor Meyer has pointed out. What the academic literature shows and what practical experience has shown is that if you open up the capital account without having good financial institutions in place and without having a flexible exchange rate, you get into a lot of trouble. And there's been a lot of pushback even within the Chinese

academic and policy community to the steps the PBOC has taken. I think there is a logic to what the PBOC is doing. It is a risky logic, but I think there is a logic to it. As I argued, if you think about capital account opening and going back to this comment about capital outflows, which is an important one, one question is why do you want capital out flows? There are two important collateral benefits that I've mentioned – diversification of opportunities for households and corporations is very important in giving them better returns in terms of their savings and better diversification opportunity which is good, but more importantly, forces the domestic financial institution to reform itself. If not, if you think about China having a national saving rate of about 50% of GDP that includes government and household savings, all of this flux mostly into their banking system because the stock market is a bit of casino. You can put some money in the real estate market that goes the most widely up and down, so what's left? The banking system and what incentive does the banking system have to reform itself? So this collateral benefit perspective is that allowing money to go out so that households can diversify their portfolios so that the central bank doesn't have to accumulate foreign exchange risks on its balance sheets in foreign exchange reserves and most important by prodding the financial system to reform itself, the Chinese government has, in my view, adopted this collateral benefit approach even to inflows. As I pointed out in one of the charts, most of the money coming into China has been in the form of Foreign Direct Investments. And it's a relatively small amount compared to the total amount of China's National Savings. So China does not actually need the money, but with the FDI comes good technology, you get better managerial and better corporate practices all of which are very good if you open up the corporate and government bond markets to foreign investors as China has done just a few months ago just early this year. That brings more liquidity and debt into the financial markets which allow it to develop and so that the banking system is not so dominant anymore. And if you think about what China did in 2007, bringing foreign strategic investors into the big Chinese banks, again, it's not that the Chinese government lacked the money, but having foreign banks come in and taking ownership stake in banks gave an incentive to introduce better risk management practices, better corporate governance practices into Chinese banks. So there are certainly some risks associated with capital account opening, but in China's case, given the way it's approached this in a very controlled and cautious way, in the way

saying that this is the way China approaches all its reforms... Once upon a time, I used to think that what China needed to do was move forward more aggressively, but I think there is a logic to moving even though China is seemingly getting the sequence back, putting the card before the horse, I think there is a logic to it. The problem of course is what other reforms are going in place with the financial reforms? If you look at the last year and a half, there's been a lot of pessimism about the Chinese economy and reforms, but in fact, a lot has been done. If you look at what the PBOC and what regulators have done, they lifted the lending capital interest rates, are completely developed in the banking system. There is an explicit deposit financial system in place. There's a move to a more flexible exchange rate. This year, the bond markets have been opened up to foreign investors, the qualified foreign institutional investors caps have been lifted, but notice one thing. Every reform I point to is about the financial system and all about the capital account. Two important sets of reform have not been moving forward – one is the reform to the side of the real economy especially state enterprise reforms. Second, even a less deep institution reform that is necessary for markets to work well. Let me give you a specific example. Last year, there was a lot of opportunity in the stock markets. The government seems to want stock markets to work well as a resource allocation mechanism, as a pricing mechanism, but where the markets rise widely first from their encouragement, then dropping widely, they intervene and this confuses markets even more. So the government wants stability and control there. But what is the problem in the stock market? The problem is that good framework to support markets working well. So what do you need for a stock market to work well? You need good corporate governance standards by firms that are listed, you need good auditing and accounting standards, you need corporate transparency. Without all of that and to say let's reform, does not give you good results. What we have seen is not necessarily the negative effect of these financial market reforms liberalization, but the fact that those reforms are proceeding in isolation without the real side institutional reforms that are necessary for those reforms to work well... I'll end with one comment on a specific issue that Professor Xiang raised about the exchange rate flexibility. So first of all, the capital account I think both of you are right, Professor Ben as well. Chinese government has indicated risks aiming toward 2020 also the IMF used to say in 2002, in 10 years we will have a fully open capital account. You

come back in 2003, in 10 years we will have a fully open capital account. Now there's a precise date of 2020, but what is the final end game going to be? It's not going to be a classically open capital account with no restrictions. It's going to be a capital account that is largely opened to inflows and outflows, but with certain administrative controls in place so that the government still has some degree of control especially over some of these speculative types of capital flows. Whether you can tell apart speculative or not speculative flows is an open question, but that seems to be the government's objective. But the exchange rate flexibility that I think ultimately is going to be good for China for a different set of reasons. What we know from the academic literature and experiences of emerging markets in the last few years during and after the financial crisis is having a flexible exchange rate acts as a buffer against external shocks and as emerging market economies such as China become more integrated in global trade and global finance, the flexible exchange rate does provide some degree of adjustment and response to some of those external shocks. But if you try to resist, if you think about what happened with the RMB, when Chinese economy was weakening starting in the middle of 2014, the RMB should have depreciated. But, because of the relatively tight management against the dollar, it did not depreciate and then when the depreciation finally happened, people assumed it was a panic as a move by the government and this set off all sorts of panic. The more important issue is from the PBOC's point of view – a more flexible exchange rate gives it more monetary autonomy, it can use monetary policy much more to accomplish domestic objectives rather than worrying too much about the exchange rate. It's true that economists don't know too much about exchange rates, but the one thing that we do seem to be able to say with a greater deal of certainty than we used to be in the past is that the exchange rate buffering mechanism does seem to work well – not perfectly in every circumstance, but by in large, it does serve a useful purpose especially for an emerging market economy that is getting more and more integrated in world trade and finance.

Professor Ben: Can I just respond, I think that response was brilliant talking about exchange rates, we have been focusing too much attention on the RMB and the dollar. Chinese government has been trying to accomplish the trade rate basket so the China Foreign Exchange system has already started heckling the RMB exchange rate index

against 11 currencies. So the end of 2014, it was like 100 basically. Now it's about 95 or 96. So it's in a broader basket of currencies, the Chinese currency has not actually depreciated that much, so I just hope that we focus more on these two things – Currency internationalization if it serves the real economy needs. That means when it trades with many other countries, when you're investing in many other countries, that exchange rate not just with the U.S. dollar, but with many other currencies. As Professor Prasad said, currency swaps for example – these are really between China and other emerging countries. To that extent, if there's anything we would really like to achieve, hopefully, when we talk about RMB exchange rate, we focus not just on the dollar to RMB exchange rate. Thank you.

Guan Xin: We've been talking about serving the real economies of the global trade as the driving rate of the internationalization of the Chinese Yuan in the past decade, but going forward, we're seeing a clear trend of Chinese companies going abroad. Chinese is also pushing ahead on a national level with its One Belt, One Road Initiative. So, what becomes the world driver behind the Yuan's internationalization in the future and how should Chinese business respond? Professor Meyer?

Professor Meyer: Absolutely. It's a great answer. You know just the scale of outbound investment has gone up enormously and I think outbound FDI exceed inbound in 2015 last year. Actually, I got the privilege of observing these very close-up and personal. Yeah, you're going to see Chinese companies abroad operating in different countries wanting to conduct a lot of transactions in RMB and that'll push along internationalization. It's simply going to happen. I'm going to divert that question a little bit because I want to go back to the relationship between financial reform and institutional reform outside the finance sector. Go back to 2006-2007, do any of you remember that? Chinese stock markets went up, encouraged by the government, shared conversion is going up to 6000 something and then boom goes down to 1800. I was actually out in Xinjiang then and I just knew it was a bubble when my interpreter was on the phone with my broker. This was in remote area of Xinjiang and it was possible through China mobiles and windmill powered cell phone stations, the government didn't intervene. What's the word from Hong Kong? Incursion. There was no major government incursion and no rapid recovery and the

market was a very slow recovery. The worry right now is the government encouraged the 2015 bubble and stories about the purchases of stocks, and then the government intervenes and it was an active buyer in stocks. But here's the point I want to make today in the Wall Street Journal that I don't understand is that buying of stocks of shares actually increased government control of listed firms. So trying to liberalize the currency, but actions taken by the government to stabilize the markets have the opposite effect in the real economy. It wasn't a huge effect, but it was noticeable. I picked that up in some anomalous data I saw published by the journal. The law of unintended consequences? I don't know what it is, but it is something important to be looked to.

Dr. Xiang Songzuo: Yes, I agree with you I think looking forward, foreign overseas investments by Chinese companies as well individuals will become a major driving force for internationalization of the RMB because the pace of the trade has been slowing down significantly. World trade and Chinese trade that Professor Prasad mentioned, China's percent of world trade is about 12%, but it's actually almost 50%. It's about 40.6% according to latest numbers. I think the share of RMB settlements will increase, but not as fast as previous years so overseas investments will become a major driving force in this regard. Talking about internationalization of currency and RMB inclusion into the SDR basket, I would like to raise a maybe surreal issue. After the inclusion of RMB into the basket SDR basket, maybe we can consider a possibility of reestablishing the framework to stabilize the exchange rates of major currencies. So we don't talk about or focus on the exchange rate of two currencies for world economies. We must take into account the multiple exchange rates among all the major currencies. I just read a paper in Financial Times talking about the slowing down of world trade. In a previous four years, world trade growing rate is much much slower than previous years and even slower than the world GDP growth. That is bad news for the world economy. It's already been mentioned for several reasons, but one reason, but no empirical estimation, is the international market exchange rates. If you look at the Japanese Yen, the Euro, the Sterling Pound, many other currencies, only one period of appreciation, but many periods of depreciation. All exchange rates are affected by the real economy, so that's why my really good friend Ben Shenglin didn't make his dissertation the exchange rates because it's very

difficult to figure out. Nobody can explain exchange rates right now. Maybe, after inclusion of RMB into SDR basket, with the platform, maybe after 10 years we can establish a framework that can manage the exchange rate among major currencies. That's my dream. It would be beneficial for the world economy as a whole.

Professor Ben: Can I just add a couple things? To support what Professor Prasad was saying, I think how far the Chinese currency can go in terms of internationalization, you talked a lot about the strengths of the financial markets and the strengths of the quality of institutions, I have some data to share with this group in comparison with the U.S. and China. For example we talked about the stock market. China's stock market primary market, we became the largest market already a few years back. Yeah IPOs, even last year, we had about roughly 200 billion USD in IPOs or equitable funds with new cash. The number I got from the US was 32 billion last year, but what sets China apart from the U.S. is China's stock market. If you look at the total market cap of the Chinese stock market, we have about 53 trillion RMB while the US is 27 trillion USD. So there's a difference. More importantly, however, the secondary market that means the trading side – the speculative trading we have 5 times the stock turnover ratio while U.S. and Japan has one time the stock market cap. So when we're talking about stock trading turnover, China was much bigger than the U.S. even. What we are missing is debt capital market that's even more related to exchange rate and interest rate. The primary market, China totals about 23 trillion RMB that's about 3-4 trillion USD. How much did the U.S. government raise last year? It was 6.4 trillion USD. In the second market where there's lower trading that means the US dollar is much deeper and more material that provides the ability to issuers or investors with a yield curve over the maturity curve while the RMB doesn't bring anything right now. We don't even know what a yield curve is. That's the problem we have. That's probably more over-shortage for China and it's an institutional issue. In OCT market, the total Chinese market is about 319 billion RMB. How much is the Yuan? 774 trillion USD. So there are abilities to make markets in secondary markets. There's no comparison. Allow us time. We need more patience in why we need to prop up the market right now, we don't need to. We are going to gradually do that. We need to strengthen our domestic market and our own institutional capabilities. Sorry for taking up so much time.

Guan Xin: It's definitely a big point that China needs to step up its own market construction in the future. I'd like to go back to Dr. Shiang's comment that the G20 countries need to manage their foreign exchange rates at least coordinate their foreign exchange rate policies in the future. There's some saying because the U.S. dollar is the world's dominant reserve currency so its monetary policy has too much spillover effect, especially emerging markets, what would you respond to that?

Professor Prasad: I think history indicates that there was a good reason for one system broke apart. There is little chance that the system can be revived without creating some problems in this economy. One situation could function well is if every economy had good policies, good fiscal policies, good monetary policy and good structural policies. If you had all that, you could have a fixed exchange system that works well. But, you don't have that. In that context, trying to manage exchange rates as we saw, the tension become too large for the system to bare. These days what we see, and Professor Xiang's desire may come from that, we see many countries try to play the same game of trying to use monetary policy to depreciate currency therefore make up for deficient domestic demand. But I think trying to call for coordination of monetary policy across countries is trying to fix the wrong problems. The problem is not that you need monetary policy coordination, but you don't have coordination of domestic policies. What happens in most major countries but advanced and emerging right now is most of the burden of supporting growth and sharing financial stabilities falls entirely on monetary policy. Monetary policy does have spillover effects. Every country is trying to use monetary policy as basically a first and last resort because basically fiscal policy takes more effort, requires political will, and structural reforms take even more political will. So it's easier to say let monetary policy do the work. So until we can get out of that lack of coordination of domestic policies, I think we are going to be stuck in a situation where exchange rate instability is the consequence of weak domestic policy. I think trying to ensure stability doesn't solve the fundamental problem could create even more tensions in the global system. So if one thinks about the primacy of the U.S. Dollar again, it's not that the U.S. has financial markets, it's true they're very large, they're very liquid. But, as we saw during the financial crisis, the U.S. has its own problems some of which have been resolved since the financial crisis, but many of them have not. But

in international finance, what is most important is it's all relative and relative to the rest of the world, the U.S. has the deepest regulated financial markets. So again, the fact that the U.S. dollar is in this dominant position is not necessarily an indication that the U.S. has a wonderful economy and wonderful financial markets, just that the rest of the world is in even worse shape than the U.S. I think again what we need to think again is fixing policy within each country and get around this instability in this international monetary system that often shows up in the system dependency on the U.S. dollar, it often shows up in the form of exchange rate instability, but those are not the problems, they're just the outcome of the underlying problems.

Professor Ben: I get really excited when you say something like that. I think the U.S. dollar is on credit, they are a global currency, and they have been in the global trade system, and so on and so forth. It's provided necessary public good in the global financial system. That's a very good thing, but in the mean time, what is probably a problem for us is why is it that the Federal Reserve decides the currency outlook based on U.S. domestic consent. They don't really take into consideration the rest of the world, which accounts for 83% of the global GDP. That's where there's a global governance, domestic priority, so that it's an international issue for a global currency. To that extent, we should nominate international committee members for a federal reserve. Who will represent the rest of the global economies? So the U.S. dollar continues to serve as the global currency, I don't think the Chinese currency or the European currency can compete with the USD. I'm not saying in the foreseeable future. As much as I'm patriot about China, I just don't see it, it would take a long time. Just like we're speaking English here, not many people in China like English, but English is like the USD. It's a global language. As a German or French person, you hate speaking English, but you have to. So we are held hostage to a certain extent and we are held hostage to the USD to a certain extent. To be realistic, we are not going to change this overnight, but it would take a long time. We need to make the system work better not just for the United States, but for the broader global good. That's my point, thank you.

Professor Xiang: Model for analyze this future of benefit and costs, so I pay special attention to your slides about the returns on liabilities and assets not only for China,

but for the rest of the world against the U.S. That's why there is an interesting argument by Professor Houffsman at Harvard University International Economy Research Institute – His argument is many people talk about U.S. having deficits, but that's wrong. The U.S. has surpassed the China deficit. Look at your return on assets combined together, every year, you get negative returns. That means if we take the very simple formula, the total balance of payments is negative. When people don't agree with his argument, but it does reflect the privilege of the exorbitant privilege of the U.S. Dollar and value privilege – not only monetary policy, but distribution of cost and benefits. I think that's the part of the real reason at least for Chinese economies to allocate internationalization of currency to change the distribution of cost and benefit and reduce the reliance on U.S. Dollar of our reserve, but it would take a longer time.

Professor Prasad: Just a point of fact by the way, turns out there's a weird situation of international returns it's only true for two countries – the U.S. and China. If you look at other countries that are creditors like Japan, Germany, or even a country like Russia, it turns out they all earn positive returns. The recent issue of why China is in this position is exactly based on the decomposition I showed you. If you look at what the composition of the assets and the liabilities, immediately you can see why this is so. It's because of FDI, returns are typically higher versus China's assets side of the balance sheet which is nearly 60%, and the number used to be closer to 2/3 until 2014, end of 2015 actually. So that immediately accounts in a mathematical sense of why China is losing money on its external position while the U.S. gains money, but all of the countries are in a slightly more normal position.

Professor Xiang: If you take the U.S. versus the rest of the world, with the rest of the world on one side and the U.S. on the other side, the rest of the world always gets next returns on assets. There is a very famous paper back in 2004 that calculates the half-century results on the returns on assets of the U.S. against the rest of the world. Their conclusion is flexible exchange rates U.S. dollar against rest of the currencies is much more beneficial to the U.S., so maybe that's why after 1976, the U.S. urged IMF to change its philosophy. Before 1976, the charter of IMF always encouraged member countries to adopt fixed exchange rates, but after that -- after the amendment

of the IMF charter, it changed to flexible exchange rate. I don't know if it's the real story, but according to their calculation, the flexible exchange rate helped break away the gap return on assets and liabilities for the U.S. and increase sharply.

Guan Xin: It's good to see more multilateralism in the future world economy and Chinese Yuan playing a bigger role in the world economy in the future and we have to wrap up discussion now and give time to our audience to ask questions and direct them to our panelists. Please clarify your name, organization, and to whom you're addressing.⁹

[Q & A]

Question #1: Thank you very much for your perspectives. I have a question on the conclusion that the U.S. dollar is going to remain the dominant currency and I just wondered how reliant that conclusion is with U.S. policy sphere. I guess with recent times, there's growing U.S. indebtedness to the rest of the world and I feel that especially in the aftermath of the financial crisis, the U.S. has become more concerned about this. Not only because the rhetoric around the financial crisis, but also in current account balances which is true, but you also see it like in 2010 with the U.S. and South Korea at the G20 Summit, would it possible to reduce current account balances to 4% of GDP, which other countries projected. So I guess I want to know what you think the prospects are as the U.S. dollar as the reserve currency in light of the tension and changes in U.S. policy.

Professor Prasad: In a normal world, what happened in the U.S. system in terms of the financial system imploding and the U.S. issuing a massive amount of public debt, should have led to people demanding higher returns for U.S. government debt, the U.S. dollar weakening... exactly the opposite happened. If you think about how much debt the U.S. issued since the global financial crisis at the end of 2007 to the end of 2015, it was about 6 trillion dollars. Who bought that? 60% was bought by foreign investors. In other words, the world was willingly buying up the debt at very low interest rates of a country that had started the financial implosion and here's the funny thing also, every time there is trouble anywhere in the world including in the

U.S., so if you have an emerging market crisis as we've seen many times recently, if you have U.S. debt being downgraded by standard, you have Russia threatening to sell U.S. debt in every one of these instances, the yield on government bonds, either stayed still or fell and the U.S. dollar strengthened. This is weird. In my previous book, I argue there is an explanation in a world where there is a lot of turmoil; there is a great demand for safety. Everybody wants safety. Central banks want a lot of reserves for safety, investors like you and me want to put our money in a safe place, banks are asked to hold more safe assets, but at the same time supply has shot because you don't want balance going into the economy, the Euro isn't what it used to be, nobody trusts corporate as much as they used to, so who's left? The U.S. government. So anytime there is trouble anywhere in the world including in the U.S., the dollar strengthens and government bond yields fall. I call it in my book a bizzaro world completely the opposite of what should be happening, but this happens only in the U.S. In China, last year, the Chinese currency by October the IMF had already made the decision that it would become a reserve currency but when there was trouble in Chinese financial markets, money flows out of the country. In Britain, when you have trouble because of Brexit, money flows out of the country. The U.S. has become even stronger in its role simply because the demand for safety has increased so much. So, I think we are very much stuck in position. The dollar has strengthened since the global financial crisis and this is not because the U.S. is great, but because everything else in global finance and in other countries is so messed up.

Professor Xiang: That is privilege and will continue for many years.

Question #2: I was wonder if the internationalization of the RMB is actually good for the domestic economic policy of China.

Professor Ben: Maybe I can just jump in. I think you talk about global currency; you have the costs and the benefits. You can always do a cost-benefit analysis, but the cost is you need to sacrifice some authority. That's what the U.S. needs to give up. We all need to think about the cost of becoming a global currency. Will that be outweighing the benefits? Because as a Chinese company, when I go abroad, if I can have my own currency as the currency for investments, then I actually am less

exposed to the exchange rate. So there are certain benefits and there are certain costs. The costs can be enormous if we don't get the sequencing right. I am absolutely against the capital accounts convertibility. Not now, and not in the next five years. I don't think we need that right now and finally I'm now focused on the think tanks in the past 2 years since I left the industry. I've been doing fintech and internet finance research, if there's anything that can strip the dominance of the U.S. dollar, it may be the technology and many other things that will fundamentally change the way financial transactions are conducted. I think that's even more of a serious threat than the Chinese RMB coming in as a global currency.

Professor Prasad: I think Ben pointed out that there are certainly costs and benefits and for China, it's a mixed blessing. Managing the currency's value becomes harder, opening the capital accounts has a lot of risks, but it seems like the PBOC has taken the position in my reading of the Trojan Horse approach is really important. Realistically, if you think about it, there were very few reforms besides financial reforms, and what forced the reforms last year was the desire of the government to get the RMB into the SDR basket. And, if you look at what was done last year, it came exactly off the checklist of the IMF. Now, I think these are ultimately good things for China, but they would not have happened because there are enough powerful vested interests that are happy keeping things the way they are, so it serves as a useful framework to think about what's happened this year. I mentioned the opening of the corporate and government bond markets lifting caps and so on... every one of those elements comes out of a different play list which is the MSCI playlist. In May, MSCI, which has been deciding, whether to get the Asia Pacific index put out its playlist and showed which boxes China has ticked off. I think we will see because the June review did not go well, the MSCI chose not to include the Asia in the MSCI index this year and has put it off for a few months or perhaps a year... But there are a few items remaining on those checklists and I'm sure those items will be met because that again provides a useful framework. Would all those things happen without the external pressure? No. With that said, the external pressures can sometimes backfire when the U.S. Treasury or the IMF tells China, "Make your exchange rate more flexible, let it appreciate," they resist. But, when there's a nice prize like the inclusion of the RMB in the SDR basket, including in the

shares in the MSCI index that turns out to be very powerful impetus. I think the reformers in China have recognized that while there are some risks in moving forward in this unbalanced way, it's a risk potentially worth taking because otherwise, nothing gets done.

Question #3, Question for Professor Prasad: In your presentation, you talked about the macro position of fundamental institutions for the rate of the RMB, and thinking about the macro position in the world economy and integration of onshore and offshore, do you think this offshore market may cause some problems? How do you feel about the integration? In terms of RMB internationalization, why have we made some missteps in this process... and now RMB internationalization will not have the same effect.

Professor Prasad: Ultimately, it's the macro fundamentals of a country and financial markets structures that determine what role a currency plays in international finance. Again, governments can push aggressively for this and institutions can say what they want, but the reality that people on the street face (traders, importers, exporters, financial market participants, etc.), that's what determines what role a currency ends up playing. And for that, you need good policies, but you also need fairly predictable policies. What we've seen in China in the last few months is ostensible measures to open up the capital accounts as I've mentioned, but at the same time, but there was concern about capital flight. So, there was some tightening of some aspects of the capital account especially in terms of the capital flight. That creates uncertainty in the mind of foreign investors. The MSCI issue is a perfect example of that. The IMF said, "Okay, you ticked off all the boxes we've said before. More or less you can have the RMB in the SDR basket." MSCI said, "Okay, you've ticked off all these boxes, but investors don't really believe that it's going to be possible for us to move invest as easily as you say it is, so let's wait and see how this works in practice." So ultimately, we talk a lot about the RMB's role in international finance, and I think some of the other panelists have alluded to the key issues are still really about China's economy. If China's economy does well, it has good financial markets, it has macroeconomic stability, that's really fundamentally going to determine the RMB's role. What has led to the RMB becoming so important is again

because China is such a big economy and that China has grown so fast and accounts for so much of global trade. China's increasing contribution to global GDP growth means that the currency is going to be seen as more important, we referred to finteach, but overall there are these broad developments taking place. The dollar is seen as an important global currency. When China trades with Russia, trade in Russia, the RMB is very limited. So having a currency like the USD when trades are very cheap makes a lot of sense. But now, you have a bilateral currency agreement so Russia sells oil to China, gets RMB, and uses that to finance its imports from China. The costs of trading currencies like the RMB and the Indian rupees is falling. So there is no reason why the U.S. dollar should remain dominant, but it's of historic value rather than a medium of exchange. The dollar still remains very strong because for that, you need a lot more than size, you need a lot more than even financial markets, you need these other things that are necessary for investor trust. Again, because of the RMB, we have this debate. This did not really exist before financial currencies compared with reserve currencies compared with safe haven currencies. And as you pointed out is one of the first emerging markets to become really prominent, and because of that, we are forced to rethink of these basic concepts. Unless you have good policies, these tensions are going to show up. The notion of keeping onshore and offshore markets insulated from each other while the capital accounts are becoming more open is not a realistic prospect. When the PBoC tries to resolve the internal tensions by clamping down, all the tensions become apparent. This is not sustainable. Ultimately, you're going to have policies that lead to integration of CNY and CNH markets and if you try to resist that, especially when there are pressures building up on the mainland, it's going to lead to a lot of volatility and it's just not worth the trouble in my view.

Question #4: My thesis is actually about exchange rate. I would like to ask one question to Professor Xiang. So you mentioned that there's a theory from 1966, there's a trade theory on international economics, do you have some sort of control on your exchange rate as well as capital account, then you immediately lose your monetary policy independence, so my question to Professor Xiang is if an exchange rate limited convertibility on your capital account, is it beneficiary to the country and

how would you implement the policy? How would your central government follow the mandate of limiting it?

Professor Xiang: I'll answer it briefly; yeah it's an impossible feat. It means you must choose two among three objectives. I think that's an issue of extent. So what do you mean independence of monetary policy and how large will you open your capital account and how flexible you will let your exchange rate to become? So that's a different scenario. For China, I think in the next 5 years or even a decade, PBoC will choose will two managements. One is convertibility and one is exchange rates. And of course, independent monetary policy, but there is no definition of independent monetary policy, it needs globalization. My reading is only the Federal Reserve can have independent monetary policy and even the Federal Reserve will take into account the reaction of spillover effects of the rest of the world. For Central Bankers, I don't think they have real independent monetary policies, so it's dependent.

Question #5, Question for Professor Prasad: You mentioned greater exchange rate opening capital accounts; my question is how can there be stability of current capital controls and more flexible exchange rates?

Professor Prasad: Logically, you have a fully flexible exchange rate. Typically, it goes with a capital account, but there is no need to restrict capital flows, but what capital flows you do go in and out, that determines the value of the exchange rate. So conceptually, it's perfectly possible to have a lot of capital controls and to have a very flexible exchange rate. You don't typically see that happen because countries that have more flexible exchange rates typically allow freer capital flows. But if you take a country like Thailand, for instance, it has an inflation-targeting regime with a fully flexible determined exchange rate, but there are still some capital controls in place, so the two are not inconsistent. In terms of how far China has come on the path to capital account opening, again it's taken a very cautious approach, which makes a lot of sense given the conditions of China's financial markets and given the state of the regulatory system. I talked about this collateral benefit approach and I think China is the perfect example of all the types of capital inflows and outflows and has control and are very specifically targeted at getting collateral benefits

through the FDI inflows, through foreign strategic investors into the domestic banks and so on. I think although it's gone much faster than many people would like, I think it's still being relatively controlled. At the moment, it's ramped up a good deal and I think what the government is trying to signal or the PBOC is trying to signal is that the financial system needs to prepare to become more efficient before it is opens for competition. There's a good analysis of the WTO where the idea was to open up to foreign trade and domestic producers become more efficient to get ready for foreign competition. I think of it really not so much as big benefits for China just from capital account openness, but what it does to domestic policies and the domestic financial system is really the key issue.

Guan Xin: Time is too short, if you have unanswered questions, you may approach our panelists after the session. I'm sure they'd be happy to talk to you. Thank you again to our distinguished panelists here and thank you for your time. Thanks to everyone for the support and thanks to our co-hosts Penn-Wharton Center and the International Monetary Institution. Please stay tuned for more events from the Brookings-Tsinghua Center.