THE BROOKINGS INSTITUTION

Brookings - Tsinghua Center for Public Policy (BTC)

Andrew Sheng Presentation Transcript

Andrew Sheng: From 1993 to Sept 98 I was deputy chief executive of the Hong Kong monetary authority. I was in charge of the reserves. In the earlier phase I was in charge of the Hong Kong Dollar, and I then was also in charge of […] which meant that I was the major interface with the regional central banks of trying to maintain regional currency stability. The timeline for the Asian crisis is very important. Because if you really look at it, all of it could go back to '85, when because of the Japan-US trade imbalance, very much similar to what is happening now, the Americans put pressure on Japan to revalue the yen. And the yen was revalued from 240 to 120. But once the yen gets revalued, as you know, Japan had no exchange control. There was a massive stock market and property bubble. And the Japanese market peaked in December 1989, when the Nikkei index reached 39,400. What is the Nikkei today? 10000. What was it at its lowest point? 6008. So, the Japanese stock market never recovered from its bubble. Now in 1994 there was a Mexican crisis. Mexico was overvalued, had far too much in terms of, what is called the "peso bono," which is basically the treasury bills in Mexico, and then the US had to lend a large amount of money to rescue Mexico. Then in 1995, the yen went all the way from 240 in 85 to 80. And then began to start its depreciation. By which time the Japanese banking system had already begun to have non-forming loans because of the massive drop in the property market.

Now, in 1996, exactly when the bubble started dropping in 1990, 1991, Japan adopted very similar policies to today. They injected large amounts of money into the banking system and dropped the interest rates to almost 0, and then created large fiscal expenditure. So the fiscal deficit went larger and larger and larger. By 1995 or 1996, Prime Minister Hashimoto decided the condition was ripe for Japan to exit the strategy, exactly like what we are discussing now in this crisis – "when do we exit?" Japan introduced a value-added tax in early 1996, and before they understood, the Japanese economy went into a downspin and that brought along massive changes in the whole global supply chain, which most people did not understand, and culminated in the July 1997 Baht crisis, which in six months led to a crisis in Malaysia, Korea and Indonesia. So by 1998 the Crisis had worsened, even with the help of the IMF. And on August 14, HK intervened in the stock market – the freest market in the world – I was there by the way. And we assisted in the intervention strategy in the

stock market to prevent the Hong Kong dollar and stock market from collapsing. It was the most successful intervention ever. Immediately afterwards, Malaysia introduced exchange control, by September the crisis had moved to Russia to Brazil, and then LTCM collapsed, and then the US lowered interest rates and stimulated the whole global economy, and by 1999 Asia basically recovered.

So what are the current explanations of the Asian crisis? A lot of books have been written by US policymakers and academics about the crisis. Most of this is about "I told you so." "It's the fault of the victims." "It's about the soft dollar peg and the impossible trinity." Soft dollar peg means that Asian currency is pegged against the dollar. And if you peg against the dollar and you have no exchange control, you cannot have independent monetary policy. So they violated the impossible trinity. There was accusation that there was badly sequenced financial liberalization, particularly in the case of Korea. There was crony capitalism. There was double mismatch. Double mismatch means: borrow short term money, invest in long term assets. Borrow foreign exchange, investing in local currency. Now when this happens, when the hot money goes in you have a bubble, when the hot money goes out you have a bubble collapse. So the fifth explanation is volatile capital flows. And all of this means there was very bad risk management.

Now to understand the Asian crisis, you need to understand the actual condition of Asia before the crisis. Look at the numbers. If you look at the 1990 nominal GDP, USA had 4.3 trillion in GDP, Japan had 3 trillion. Japan was only 70 percent of US GDP. Remember, look at China. China was not more than 1/8. Japan was 8 times larger than China in 1990. By 1995 Japan has now become 5.3 trillion, US 7.4 trillion, China is about 12% of Japan. Japan is larger than all of the rest of Asia put together. This crisis, if you just look at the numbers, you will realize that by 1996 – and why is Japan's GDP so large and the next year so low? It's because of revaluing of the yen. What it basically says in all this is that this crisis is not just the crisis of East Asia. It's actually the crisis of Japan. That is the special part of this book. It explains the relationship of the East Asian crisis as part of the Japanese crisis. Not just a crisis of Malaysia, Philippines, Indonesia and Korea. Because you cannot separate it from the Japanese crisis.

Now, exactly like what happened with this crisis, the wealth loss was very large. Professor Richard Ku, who actually formally worked with the New York Fed, and then he became Nomura Chief Economist. He said that the Japanese crisis is actually a balance sheet crisis. He is absolutely right. And he demonstrated that from 1989 to 1998 the Japanese economy lost 10 trillion dollars due to asset fall equivalent to 2.7 times Japanese GDP. Now just the equity market alone was 55% of GDP.

So the large loss was mostly in the land value. Now unfortunately, Japan does not have balance sheet numbers for the real estate market. That's why one thing you need to remember: a drop in the stock market, it can very painful, but it is not fatal. But a drop in the real estate market can be almost fatal. It's a very […] area that most people don't understand. And the reason is very straightforward. Because most of the collateral of the banking system is real estate. If the real estate collapses, the loan is larger than the real estate. The borrower says, please take back my loan. So the loss of the borrower is transmitted to the bank. And if the bank has the loss, because the state guarantees the deposit, ultimately the loss goes back to the state! So actually, a bank rescue is a quasi-fiscal deficit. It's something that you need to understand very well. So the Asian ex-Japan market capital loss was 66% between 96 to 98 percent of GDP. This is huge by any standard. But we don't have numbers to calculate the real estate loss. This loss was not just Asia. The foreigners also lost. How big was the foreigner loss? Maybe about 80-166 billion, according to the World Bank calculations. How big was it in Hong Kong? 300% of GDP. That was my calculation in 1998. So the real losses come from the real estate prices, that's how the big loss was not the stock market it is the property market. Now the property market in the six cities in Japan dropped 85% outside of Tokyo, which had a little bit of recovery. Most of the prices in Japan have still not recovered since 1990. So for those of you who think that prices never drop, look at the Japanese experience. Property prices are very much related to three things: inflation (because of monetary creation), the interest rate, and also demographically. Why are property prices in Japan dropping? Because most people are getting old. As you grow old you don't need new houses. In fact, your old house is too big for you. And there are much less younger people coming in. So these problems don't exist yet in China, but with the one child policy, if you have overcapacity, in the future, it could be a problem. Now in HK the stock market dropped 66%, in Thailand it dropped half, in Malaysia 1/3. And real estate prices were the biggest drop in the market. The bank losses were huge. How big? Indonesia 55 percent of GDP. In Korea, 28% of GDP. In Thailand, 35% of GDP. In Malaysia, 16% of GDP. In the Philippines, 7% of GDP. In Japan's case, nobody has calculated this, it is probably calculated at 25% of GDP. In the US, in the savings and loans crisis of the eighties, it was 5% of GDP. How big do you think the loss is now from the subprime? Probably around 3.5 trillion. Which means that if the US GDP is 14 trillion, we are looking at somewhere between 15-20% of GDP losses. But how big is the capital of the banking system? 10% of GDP. So if the losses are larger than the capital of the banking system, are you surprised that some banks collapsed? So what are the Asian stakes? Very clearly, weak corporate governance. Korean companies were grossly overleveraged. 400% of equity. 67% short term loans. 60 billion dollars in all […] without the knowledge of Bank of Korea.

There was a massive currency mismatch. Korean companies borrowed a lot of short term debt larger than the foreign exchange reserves by 3 times. Why were the foreigners willing to lend to Korean companies. Because in 1995, Korea just joined the OECD. So what is the world's predictor of financial crisis? Whoever joins the OECD is the first to have a crisis. Turkey, Mexico, Korea. OK? So after that, not many people are joining OECD. That's a joke.

Now the stock market property bubble, the banks are exposed to real estate up to 30-35% of their book. There is lack of transparency. In the Korea case: 60 billion dollars not reported by the Korean companies, borrowing mostly in Singapore and Hong Kong. And then in Thailand, the Central Bank, The Bank of Thailand, borrowed foreign exchange swaps, upwards of 24 billion that was not in the books. So even though the Bank of Thailand in July 1998 had reported reserves of 30 billion the forward book already had a liability of 24 billion, so net reserves was only 6 billion dollars. Unfortunately, with the exception of HK and Singapore's weak financial reserves, the capital flows were very very volatile.

What was the mistake of the Washington Consensus? Now the Washington Consensus was the views of the IMF and World Bank, and maybe even OECD, about how global development should be. And it's a very free market approach. You should liberalize. You should open up your capital account. You should have flexible exchange rate, flexible interest rates, low fiscal deficit, good macro management, good supervisions, etcetera, etcetera, etcetera. But this is an ideal, not reality. Most emerging markets are not there. So the trouble was they totally underestimated the volatility of capital flows. This is something that is now only just beginning to have a very good debate. I think it was Jagdish Bhagwati – most of you who are economists and who study free trade would have known that Jagdish Bhagwadi, one of the leading free trade economists currently at Yale or Harvard or maybe Princeton – he's the one who said that free trade in goods and services is good. Free capital flows – the question is open.

But the Washington Consensus said, "no, you should allow free markets, including in the capital flows." So it's a problem we need to think about. The major problem is that during the period when Japan brought the interest rates down to zero, they created a yen carry trade. What is a carry trade? A carry trade is, if I am a speculator, or any investment bank, or even a commercial bank, I borrow yen. Yen interest rate is 0 or very close to 0. Even in Honk Kong, if I wanted to, I could borrow yen at 0.5 percent interest rate. That's nothing, right? Then I take this yen, I change it into Baht, I invest in either Baht deposit (Thai deposit) or the Thai stock market. If I invest in the Baht deposit just before July 1997, it was around 10 percent. So 0 versus 10: I have a positive carry. My spread – the

very fact that I borrow and I invest in Thai Baht, I get 10, per year. But if I borrow yen, and I invest in the stock market, and the stock market rises 20 percent, I have a 20 percent return. But if the yen drops 50 percent – I have a 70 percent return. My liability drops 50 percent and the Baht rises 20 percent. So actually 70 percent! So it's a very profitable carry. So that's how the carry trade was invented. Because de facto, when one large economy lends to whoever is willing to borrow at their interest rate, if you are an investment banker, you don't need a lot of intelligence to make money. It's just a carry trade. So everybody underestimated the depth of banking fragility. Right until July 1997 the IMF had given good health to Indonesia and Malaysia! Thailand they're a little worried about, they say: "you may want to devalue by maybe 10, 15 percent." Nobody expected the Thai Baht would drop maybe 30, 40 percent and that the rupier would go from nearly 2000 to the dollar, to at one point, 17000 against the dollar. Now when the rupier drops from 2000 to 17000 against the dollar, what happens when you borrow 10 percent of your capital in foreign exchange? You still go bankrupt. So the real big problem in Asia was 300 billion dollars went into Asia, creating a big bubble, and then immediately the crisis happened, 200 billion dollars left. So how did the 200 billion dollars leave? Most people thought, at that time, it was due to SARS. SARS or the hedge funds. But it's not true. Some of it was due to hedge funds. A large part of it was due to the change in the bank loans. Basically, what I did in this book is try to explain how the Japanese bank loans to Asia helped create an Asian bubble, together with the momentum change of capital flows, or volume flows, and then when the Japanese banking system got in trouble, they pulled the money back, creating a vacuum, and the Asian asset bubble collapsed, creating an Asian Crisis. So each country had its own problem. The real problem was Asia was a dollar zone, but it had no dollar lender of last resort. Everybody thought – like Hong Kong for example, Hong Kong was the most classic example. It's pegged to the dollar. So therefore, monetary policy in Hong Kong is not conducted by the Hong Kong monetary authority, it is conducted by the Federal Reserve Bank. So when the Federal Reserve raises interest rates, Hong Kong lowers interest rates. When the Federal Reserve lowers interest rates, Hong Kong lowers interest rates. The trouble with somebody like Thailand, which is also soft pegged against the dollar – when the US lower interest rates and the conditions do not fit Thai conditions, you create a bubble. So this is a serious situation. Now when a bubble occurs, the banking system has no liquidity. When the banking system has no liquidity, you need dollar liquidity. But if the Fed cannot lend you, and the IMF will not lend you, it's a simple fact.

So let's look at the business cycle. The business cycle is highly synchronized. Everybody is moving in the same cycle. So essentially, this is the Asian global supply chain. Everybody is basically

linked together supplying goods for the United States. So the old story was, when the United States sneezes, Japan catches a cold, when Japan catches a cold, the rest of us catch pneumonia. But this time the United States caught more than a cold, and we got more than pneumonia. But what it is, nobody is quite clear about. Now look at the US current account deficit with Japan, and the yen dollar rate. The lower this line, the yen, even if the yen strengthens, it doesn't solve the deficit. So this is a very difficult problem. A strong yen – this is the big debate that's going on now about RMB – the history of Japan is that a strong yen does not solve that trade deficit. And unfortunately, the yen dollar rate is highly volatile. You can see how volatile it is. It reached 80 and then it was going toward 150 before the treasury […]. So the real problem is Asia was the structural design. Think about Asia as one real sector global supply chain. Unfortunately, it has two standards. The export side required a dollar standard. But Japan was lending a lot of yen out to try to keep the yen from appreciating. So countries like Thailand and Indonesia, somewhere up to 40 percent of their liability was yen. So when the yen appreciates, what does the dollar do? They have to pay. They have to buy more yen. So when the yen appreciates, it will appreciate even more. There is no stabilizing. And the Bank of Japan, once the interest rate reached zero, you have no interest rate to fine tune the exchange rate. So the yen became highly volatile across one net, when there are two standards moving in high volatility and the system is not designed for it, are you surprised the system did not collapse?

So now, we need to prove this. And the proof is in the balance sheet numbers. We didn't have these numbers in 1996, '97. If we had these numbers in '96, '97, we would not fall into this trap. What are these numbers? This is the negative net investment position. Your foreign assets minus your foreign liabilities, including foreign exchange. Foreign liabilities include FDI and foreign debt. Most foreign assets include your portfolio investments, your foreign exchange reserves, and your bank dollar holdings. Look at this. Every country: Indonesia, -56; Malaysia, -55; Philippines, -49; Thailand, -55. So every country with more than 50 percent net international position, battled with crisis. It's a very good predictor. Unfortunately, this data was not available before, because nobody understood it. The only one that is unusual is Korea. Which is a -9. So Korea should never have gotten into trouble. But Korea did not manage their reserves well. Because the reserves was not enough to be a foreign exchange liability. So after the devaluation of the crisis, look at how big the exchange rate dropped. Korea dropped 50 percent. Indonesia 50 percent. Malaysia 35 percent. Philippines 35 percent. Singapore 15 percent. Thailand nearly 50 percent. China did not change. So what it really was – remember I told you that 300 billion dollars came into Asia, and 200 billion dollars left. Where did most of the money come from? Japanese banking system. Withdrawn from

Asia was 200 billion […] so before the crisis, the Japanese Bank --- nearly 300 billion, and then after the crisis, 1998, it dropped very sharply. It was a massive put off. If you look at before the crisis, offshore deposits, deposit borrowing. Deposit Singapore, deposit Hong Kong, and then the lending, offshore loans, look at the reduction in Asia alone of the lending. There was a lot of money coming out of Hong Kong and Singapore, but it's not only HK and Singapore, also Thailand, Malaysia, Korea. So it was this.

So I perhaps need to explain a little bit. Why did the Japanese withdraw? It was due to what we call the Bazel Accord rules. In 1985 – 1990 the Japanese started expanding abroad, lending a lot abroad. So foreign banks said: Japanese banks are lending too cheaply in competition with us. To be fair, you must have the same capital rules. That's when the Bazel Accord fixed the 8 percent. Now the 8 percent, the Japanese said no, we don't agree with the 8 percent, we should only use 4 percent. And the Western Banks, US and European Banks, said we agree with the four plus four, because we will include the second tier subordinated debt. The Japanese said, the second tier, we need to include the unrealized profits of the shares that the Japanese banks own in Japanese corporations. Now remember, when Japan prospered, Japanese banks owned a lot of shares in their customers and in their related companies. Back in 1950, when MacArthur changed the banking system, it broke up what was then known as the "Zaibatsu" which are industrial conglomerates, and they became known as "Karetsu's," everybody owned 5 percent of each other. So Mitsubishi Bank owns five percent of Mitsubishi insurance owns five percent of Mitsubishi Heavy Industries, etcetera. So when the Japanese stock market rose, Japanese banks had very high profits, but they were not sold, so they were unrealized. So Japanese Banks had very big capital. But the trouble was that when the market started deflating, the Japanese banks started selling their stocks to take a profit to cover their non performing loans. The worst part was, the more you sell, the more the stock price dropped. The more the stock price dropped, the more you are short of capital. Correct?

Then on the other side, when the yen begins to depreciate, you have a worse situation. Because the more the yen appreciates when you have a loan, your loan is not so much in yen. Let me give you an example – I know some of you have a little bit of a problem. Suppose my bank has one hundred yen loan, and a one dollar loan. And if the yen was one hundred to one hundred, the total loan book is 200 yen. Correct? Suppose the yen now goes from 100 to 200. How big is the loan book become? 300. The capital of the bank is still in yen. So when the asset size becomes 300 you don't have enough capital. So what do you do? You must cut back your loans, but you will not cut back your loans in Japan, you will cut back your foreign loans, and that means the credit squeeze was when

the bank and the shortage of capital – you deleverage. It was that deleveraging that put a massive credit squeeze on Asia, right? So that's the relationship between East Asia and the Asian Crisis.

So now we are in a position to compare the Asian crisis and the current crisis. Was there excess liquidity? Yes. Was there excess capital flows? Yes. Was there an asset bubble? Yes. Was their excess leverage? [In the] Asian case, cooperation; In the American case it was the household as the financial center. Was there crony capitalism? Yes, but in the US […] capture. Was there financial liberalization? In their case in was liberalization in terms of excessive financial innovation. Was there lack of transparency? Most people didn't understand the complex instruments. Was their inadequate supervision? Absolutely. Was their moral hazard? Absolutely. […]. What was the difference? The difference was in the medicine. In the early IMF, when the crisis came, they said raise interest rates, cut fiscal expenditure. It made the crisis worse. Then, only after the Asian crisis did the IMF turnaround and say, yeah, you actually need to lower interest rates and you should increase the fiscal stimulus. This is exactly what has been done with the crisis. So now what is the world problem? The real problem is we have the whole world networked together in one massive financial network. Now this is what […] meant when he said: global banking is global in life, but national in death. Our problem today is that banks and financial institutions are global but they are regulated nationally. And even within one nation they are regulated by the bank regulator, the insurance regulator, fund regulator, central bank, ministry of finance, etcetera, etcetera, etcetera. So somebody like Citibank, like UBS, like HSBC operate in 150 countries in cooperation with at least 400 - 500 different regulators. And can 4 or 500 regulators regulate this huge elephant? They cannot. So this crisis should be viewed as a network crisis. Network crises have several special network effects. The first thing about network is winner take all. Most networks is – the top 2 or 3 account for something like what now today we call 20-80 effect. The 20-80 percent rule. That means 20 percent of the websites account for 80 percent of business. In terms of airline booking, there are only two – Star Alliance and One World – that formulate 8 percent of the global airline reservation. Credit cards: Visa Mastercard and Amex account for 85 percent of global credit card business. Global Financial turnover – there are 2 places, London and New York. Financial news, Reuters, Bloomberg, 80 percent of the information comes from Reuters and Bloomberg. So there's a huge concentration effect. Today 20 to 25 large complex financial institutions. HSBC, UBS, Allianz, etcetera – they account for more than half of global turnover. Too big to fail, they also become too concentrated to fail. The minute Lehman fails, AIG must fail. If they allow AIG to fail, Goldman Sachs, Morgan Stanley, etcetera, etcetera, would also have big losses. So they could not allow AIG to fall. They are highly interdependent. Because people thought that Lehman was only 600 billion

dollars of Assets. They forgot that Lehman including bellow the lines, was 1.2 trillion. But Lehman was not just 1.2 trillion, it was prime broker for many hedge funds and financial institutions. So the minute Lehman failed, many other institutions also had no liquidity whatsoever. The minute they have no liquidity, they don't lend to each other. The minute banks don't lend to each other, they don't give each other letters of credit, there is no trade. That's why trade collapsed simultaneously because of this very problem, It is all linked together. It is all linked together. So why is this crisis global? Because it started in the US. But look at the concentration of business in the US and Europe. Lehman – Europe was the major failure and triggered that intervention that then blows up global trade.

Now, networks have feedback effects. Those of you who are engineers know that all circuits have feedback. The mistake of traditional neoclassical theory is to assume the feedback is negative. Which means when you have volatility that it reverses slowly back to equilibrium. But as George Soros pointed out, and most engineers would know this, there is also a positive feedback effect, which is like a wrecking ball. It gets bigger and bigger until the whole system collapses. And that's exactly what happened. Now, how did all this happen? The more I thought about it the more I realized it is due to the unsustainable excess consumption which has to be financed by excess leverage. And basically what Wall Street has done in the last 10- 15 years was to create massive financial engineering that financed this excess leverage. And this is a very major problem. So, now we have two excesses. In the West we have excess financial engineering and in the East we have excess real engineering, excess capacity. Because that capacity is ultimately to give consumption to the West, and that is the real problem we're facing. Because that excess leverage can only be sustained, exactly like the Japanese crisis, with 0 interest rate. Because what did the Japanese do with their bubble? The deflation in the bubble collapsed, but private loss was replaced by a bubble in the government debt, which is now 200 percent of GDP. Now, about 200 percent of GDP cannot be sustained if the interest rate is 0. If the interest rate were to rise, the bond market would collapse and the fiscal debt would go out of control. So Japan is facing a liquidity trap that they cannot raise interest rates because if they raise interest rates the pension fund faces huge losses. Essentially, the bubble collapse, the price the cost is postponed into the future. Isn't that exactly what we have done now with the global crisis? We have lowered interest rates to 0. But the minute the interest rate is to 0, instead of the yen carry trade, we have created a *global* carry trade. Everybody thinks that the dollar is doing to depreciate, everybody borrows dollars and then invests in emerging markets. And that is now why we are seeing stock market recovery bubbles in all the emerging markets. No wonder Wall Street is making lots of profit. Because the interest rate is subsidized. So the trouble is

that the financial sector can make profit higher than the real sector because it does this through leverage. That means the leverage ultimately is subsidized. Nothing happens, nothing happens, nothing happens, collapse. And that loss is picked up by the state, because the state guarantees deposits. This is a free lunch. This is a free lunch for the bankers. Because the central bank is the investor of last resort, because the last few years the central bank has either doubled their balance sheets not only to buy up not just toxic assets, but also direct lending to the private sector. It's actually quasi-fiscal action. Because it's not paid by taxation, it's paid by […]. The central bank pays before its expenditure through what is known as […], which is interest free loans to the banks because of the currency issue. So now we face a major issue – do you solve excess leverage with more leverage? And the excess liquidity is actually hiding the insolvency issue. On Sunday I listened to […] who used to be the prime minister for Pakistan, and before that, one of the top executives of Citibank. And he used a number which I cannot verify, he said the total losses of this crisis, globally, is probably only 6.4 trillion, of which only 60% has been recognized in accounting terms, and 40% not yet recognized. Which means that the banking system is facing more problems.

So we now have the issue of how can we deal with this problem. And my answer is we cannot solve leverage through leverage, we have to solve this problem through taxation. And a token tax, as suggested by Lloyd Turner of the FSA, is the right way to go. Now, why do I suggest a turnover tax? Firstly, it is a user pay tax. The best tax is people willingly pay the tax. Secondly, it can become cyclical, the more turnover, the faster the turnover, the more you can increase the taxation to slow the excessive turnover. Thirdly, it equalizes the subsidized financial sector, because the financial sector will always go for excess leverage. So the turnover tax taxes them. The less profit for the banking system, the less incentive to take risks. What, essentially, neoclassical economists are suggesting, is frictionless financial markets. Frictionless financial markets means that you can have infinite derivation. Infinite derivation means that you can create a subprime mortgage. A subprime mortgage you can package into a CDO. A CDO can create a CDO squared. A CDO cubed. Can create a CDO to the fourth power, can create a CDO to the fourth power with a swap. There's no limit to this derivation. But do any of you understand this stuff? None of us understand it. But how big is the leverage? The leverage is huge. And when it collapses, who pays? Ultimately, the state pays. So it's a fundamental problem and there is also one fundamental problem which we now begin to understand. Most of the financial engineering was done in unregulated areas in the OTC area with no transparency and no regulation. No transparency no regulation, no taxation – but if you lose money, the state pays! How can that be? How can this be? So the right way, which all the regulators are now talking about, is to move all the turnover onto exchanges where can you monitor

it and you can also tax it. I am not recommending a very high tax. I am recommending a 0.000005 percent, which is very, very low. The idea is that if the calculation was at .0005 percent, you collect 15 billion dollars, US, for global public good. This is a huge amount of money, but for very little.

So to conclude, Asia learned very tough lessons from the Asian crisis. And we've realized that we are too much into the engineering side and we should move more into the services side. We have reduced the leverage of the corporate sector, we have improved our self insurance, our […] reserves, improved somewhat our supervision and our corporate governance. But we still face exactly the same problems of carry trade that faced the Washington Consensus, as a result. And these are macro-policy issues and a global bubble for which we don't have a global solution. Partial solutions don't solve problems, you need global solution. And that's why the G20 may be the right way to go, but it's still early yet.

On that note, let me thank you for your patience. It's a very complicated story, but I recommend you to read my book. My book is very easy to read. I wrote it that way. If you don't have time, read the first chapter and the last chapter. If you're interested in any specific country, go to the country chapter. Because it speaks lessons for itself. The way I wrote this book is to say, look, most of this Asian story was written by non-Asians. I am one of the few Asians to write. So my book is not about Andrew Sheng's view. Of course, the first and the last chapter are Andrew Sheng's summary, not my view of it. But every chapter I use– if it's for Malaysia, I use Malaysian economists, Malaysian politicians, Malaysians, and then I compare to other countries. If it is Indonesia, I use Indonesian sources. If it is Thai, I use Thai sources. In South Korea, I use South Korean sources. Even with the IMF I used independent evaluation of this view. So I tried to be as objective as possible. The reason I wrote this book, I am personally convinced that Asia's balance of power, the balance of power in the world, is for Asia to rise so that there is more equality. But Asia cannot rise if it is still maintaining its own. So Asia must go into a new model. What that new model is we don't know yet. We don't know yet. Because our problem is that, as we "cross the river," we thought, on the other side of the river, they know what they are doing. But now we're not so sure. Because across the river we think that there is a complete market, that there is a complete solution, but some things, we find, is not so simple. So are now into a very exciting phase of trying to rethink this global economy, because now we are now just are not just facing a partial Asian crisis, we are now facing a global crisis.

Let me stop there, I'd be very happy to answer questions. Thank you. -END-