

Balance Sheet Recession: Japan's Struggle with Uncharted Economics and its Global Implications

by

Mr. Richard Koo

Richard Koo: Thank you very much, Professor Ikenberry and good afternoon. Talking about the Japanese economy these days is not a very pleasant experience, partly because the economy is doing so poorly but also because in my view, there is so much misunderstanding on what causes the economy to weaken so much for so long.

The common view is that it is a structural problem and that without structural reform, nothing can happen. And as part of the structure argument, people talk about the banking problems, that without fixing the banking system, there is no future for Japan's economy. What I have to do is to dispel some of these notions about the structural reform and banking.

There is no question that there is a tremendous structural problem within the Japanese economy. In fact, I'm one of the first persons in Japan who argued for structural reform. I had quite a bit of input into the SII, - the Structure Impediments Initiative, back in the first Bush administration. Of course, there is a huge banking problem in Japan as well. In fact, on the banking issue, I'm also the first economist in Japan who argued that we have to fix this thing before it gets out of hand. In 1992, when Prime Minister Miyazawa argued for public funds to fix the banking system, I was the only person in public who argued in favor of using public funds to clean up the mess; everyone else was against it. But at the moment, I am saying that even though these are the problems, they are not the main drivers of the Japan-

ese recession. I say this because when people talk about structural reform, and particularly when the Koizumi government talks about structural reform, they are talking about the supply side reform. And even though there are a lot of supply constraints within the economy, I'd like to put this into perspective because I remember what it was like when the supply side reform started in this country twenty-some years ago.

I was just entering the New York Fed at that time and for those of you who are old enough to remember what it was like twenty-three years ago, the short-term interest rate was 22%, the long bond rate was 14%. I bought a house across the Hudson River on the New Jersey side with a 30-year fixed rate mortgage. The interest rate was 17%. Strikes were going on everywhere—including the air traffic controllers—and inflation was a problem, a massive problem. The dollar was falling like a rock, and the U.S. was suffering a huge trade deficit.

All of that suggested that that's an economy with demand and no supply. That's why all the supply was eaten up by the imports, that's why the dollar was falling and people were chasing goods as quickly as possible, that's why there was inflation, and why people were trying to grab money as fast as they could. That's why the interest rate was 22%.

Japan's Supply Is Stronger Than Demand

How about Japan? Every indicator is just the opposite of what it was like in the United States twenty-some years ago. Short-term interest rates, long-term interest rates, house mortgage rates, even bank lending rates—they're all the lowest in the history of mankind. There have never been any rates lower in any part of human history. Furthermore, there are no strikes, people are, I don't know if they're happily working, but they're still working, with a very low increase in pay, if not decrease in pay. There is deflation instead of inflation. Japan is still running the largest trade surplus in the world even though the Chinese are catching up rapidly, and the yen is still a relatively strong currency, not a weak currency by any stretch of the imagination. So everything is the opposite of the U.S. case twenty-some years ago. This is the case of an economy with a lot of supply, no demand. That's why Japanese companies have to export their way out. That's why Japan's surplus is still so large. And look at the company results: they are all making money in foreign markets, not in Japan.

And so, first I want to question this notion that without supply side reform, the economy won't move forward. I think the emphasis is misplaced.

How about this banking issue? Well, as I indicated earlier, there is a major banking issue. There's no question about it. But whether that is the constraint on economic growth in Japan is a separate issue.

When we look at a banking crisis, a good example of a banking problem constraining the economy was in the U.S. from '91 to '93. For those of you who remember the '91 to '93 period, there was a nationwide

credit crunch in the United States and that's the one thing that killed the reelection campaign of George Bush, Sr. Remember the term "It's the economy stupid;" it was the banking crisis. It was the nationwide credit crunch. At that time, what was happening in the U.S.? Well, bank lending rates stayed very high even though the Federal Reserve brought the federal funds rate down all the way to 3%. The bank lending rate stayed at 6% and it was moving higher. Furthermore, because companies could not raise funds from the bank, they were all going to the capital market, so there was a massive issuing of corporate bonds during that period. Foreign banks were having a field day enlarging their market share in the United States. At that time as much as 30% of the U.S. corporate lending market was taken over by foreign banks, including Japanese banks. And lastly, those U.S. executives who couldn't get enough funding at home were traveling to capital markets, financial markets around the world to secure funds. And I remember in the '91 to '93 period, my classmates from Berkeley, Johns Hopkins, who were now in responsible positions in U.S. corporations would suddenly call me in my office and say, "Hey I'm in Tokyo." And I'd say, "What are you doing in Tokyo?" And they would say, "We just lost our credit line with American banks so we're establishing those lines with Japanese banks." They were in Otemachi, they were in Marunouchi, two blocks away from my office, begging Japanese banks to establish a credit line that they were losing with the American banks.

That really shows that it's the banks that are constraining economic growth. If the banks could lend more, all of these investment projects would have materialized and the economy would have done much better than George Bush Sr. actually had to face. How about Japan today? Do you see any of

those four phenomena that I just mentioned to you? That is to say, the lending rate of the banks staying high and then going higher? No. The lending rates of Japanese banks are also the lowest in the history of mankind and they've been falling like a rock.

How about the corporate bond market? Well, Japan has 3,500 listed companies, so if the banks cannot lend them money, they can go to the corporate bond market to raise funds there. When you look at the corporate bond market, however, there are more redemptions than new issuances in this environment of zero interest rates.

Then you ask about foreign banks. Are they expanding their business like crazy in Japan? We only hear retreats, no expansion of corporate lending business among foreign institutions. Do you hear Japanese corporate executives coming to New York begging the New York banks to open credit lines or something similar in Hong Kong or Taipei or other places? There are banks that are perfectly willing to offer yen lending to Japanese companies. The answer is no. No such signs anywhere.

Japanese Banks Are Not Constraining Japanese Economy

What this suggests is that Japanese banks do have a problem, huge problems. But they are not the constraint on the economy. If that's the case, we should be at least seeing one of the four signs that I just mentioned to you earlier, such as increasing foreign bank penetration in the Japanese market, much more activity in the corporate bond market, higher lending rates by Japanese banks, or Japanese companies going abroad to secure funding. The fact that none of these are happening means that the bank is

not the key constraint. They are a problem, but they are not the key constraint.

Japan's Economic Problem Has Never Been Seen Before

So what is the problem in Japan? I argue that what's happening in Japan is something that no one has ever seen before. It's certainly not in economic textbooks anywhere, and not in business books either. What we have in Japan is that 70-80% of Japanese companies - that means a couple of million companies - are actually paying down debt in the world of zero percent interest rates. And when you think about it, companies paying down debt in an environment of a zero percent interest rate defies the logic of a firm. Companies are supposed to exist because they can make more money than the average person, so they take the money from the average person, make money, and then bring the money back to the public. That's what the companies were supposed to do, but we now have a completely opposite situation.

They are paying down debt in an environment of zero percent interest rates. That's why in the corporate bond market, you see more redemptions than new issuances even though rates are almost zero.

Why are they doing it? Have they all gone crazy? Well, there are always economic reasons for this kind of economic phenomenon. I hope you all have this handout. It has the same title as my book: *The Balance Sheet Recession: Japan's Struggle with Uncharted Economics*. If you look at the first page of my handout, you notice how much asset prices have fallen in the country after the bursting of the so-called bubble. Share prices are down 71% from the peak, and this one is down only 71% because foreign investors have kept this market up

for the last ten years. But those markets where foreign investors did not come in—such as commercial real estate and golf club memberships which are important in the scheme of things in Japan—are down 85%, down 95%. And people do not buy these assets with cash. Typically, they buy these with borrowed money.

Japanese Type of Bankruptcy

So people or companies borrowed money to buy these assets, but what are they facing now? The asset prices have fallen; the liabilities are still on their books, which means they have horrendous balance sheet problems (**See Exhibit 1**). Many of them, if you take a snap shot of them, actually are bankrupt. They are under water. But there are actually two types of bankruptcies. If you made a mistake in your main line of business, you produce a wrong car, wrong camera, and no one bought your products, and then your financial conditions deteriorate, you go bankrupt. That's the usual bankruptcy that we think about. But there's actually another type, and that is the Japanese type. The Japanese type is that your main line of business is good, you still have good cash flow, but because of what happened to asset prices at home, your balance sheet is completely out of whack.

And in the second category, if you are running one of those companies, what would you do? I think there is only one thing you would do under the circumstances: you use the cash flow to pay down debt. I'm sure your shareholders want you to do that. Your credit rating agency wants you to do that. Your bankers want you to do that, as long as you have a healthy cash flow, a good product line, a large market, you use the cash flow to pay down debt. And if you continue to pay down debt, since asset prices never go negative, at some point

your balance sheets will be balanced again. And when that point is reached, you say, "Whew, I'm out of this problem. Now I can go back and start getting really aggressive against those Americans and Chinese all over again."

But when you are in this process, what do you do? You keep your head low, make sure no one pays too much attention to your balance sheets, and you tell everybody outside that everything is fine, you have a new product out next year and this and that. But quietly you pay down debt as quickly as possible because you don't want too many people to pay attention to your balance sheet and say, "Hey, your balance sheets suck, your company's actually under water." Because if journalists and analysts write something like that up, you are in a horrendous mess the following day.

Companies Emphasize Repairing Balance Sheets Instead of Maximizing Profits

So that's basically the Japanese economy in a nutshell. Seventy to 80 percent of the companies are paying down debt in the environment of zero percent interest rate. And that's why we have lending rates down so low. We have more redemptions than new issuances in the corporate bond market, no foreign banks have any interest in the world where all the responsible companies are repairing balance sheets instead of borrowing money and, naturally, they have no interest in going to New York or Taipei to secure funding because their main emphasis now is repairing balance sheets instead of maximizing profits.

Then the problem is, you have a corporate sector at the individual level acting very responsibly. You want those corporations to be paying down debt. But if everybody

does that all at the same time, what happens to the economy, especially when the household sector is still saving money as before? Any national economy, whether it's the United States, Japan, Taiwan or China, where you have a household sector saving money, you also have to have a corporate sector borrowing money: that's how the economy runs. In between, we have securities houses like Nomura, or the banks moving funds from one sector to another, intermediating the flows. In Japan, we have a household sector still saving money as before, whereas the corporate sector is now a net supplier of credit to the capital market and to the banking system to the tune of 20 trillion yen a year. That's 4% of GDP. So you have a household sector saving money, the companies paying down debt, the sum of the two becomes the deflationary gap for the economy. Furthermore, this is all happening in an environment of a zero percent interest rate. If it's happening at a 6% interest rate, maybe the Central Bank can bring the rates down to three and the companies will change their behavior from paying down debt to starting to borrow money again. But when this is happening at zero, you're stuck.

This is all shown in the bottom of page one (**See Exhibit 2**). This is taken from the so-called flow of funds data and it's put together in the following way: There is a horizontal line going across as zero; above zero are the people saving money; below zero are the people who are borrowing money. And when you put them all together, it is supposed to add up to zero. And there's supposed to be five lines, five major sectors in any economy. I skipped one and that's the financial sector, because the financial sector in the medium- to long-term is neutral, so in the interest of clarity I only have four lines.

But when you look at this, you notice that the household sector remains healthy savers all the way until about a few years ago. From 1990, the top of the bubble, to 1999, the bottom of the pits, the Japanese household sector really didn't change their behavior. They kept on consuming and saving almost the same amount year after year after year. And so all these arguments that the Japanese are so worried about the future and therefore they are not spending money are just not true. They are saving and consuming almost the same amount year after year.

Japanese Saving Rate Not Causing Economy to Weaken

In the recent few years, this number actually came down, and the numbers coming down means they are saving less. That's good news for the macro economy in terms of the smaller deflationary gap but they are saving less because they have less income now. The economy is weakening, they're losing jobs. So even if the people who have jobs are saving as much as before because we now have all these people who are losing jobs, the numbers show a decline. But the point here is that it's not that the household sector is so afraid of the future and not spending that is causing the economy to weaken. They really didn't change their behavior; if anything, the savings rate is coming down.

So, who changed the behavior that made such a strong economy back in the 1980s weaken so badly? Well, you look at this heavy black line, the corporate sector. The corporate sector in 1990, at the height of the bubble, was borrowing an equivalent to 10% of GDP, that is about 50 trillion yen, investing in all sorts of assets, thinking of course at that time that they're going to make tons of money with that investment.

But in 1993, people began to realize that given what happened to asset prices, they say, “Oh my gosh, we have balance sheet problems to repair, the Imperial Palace in the middle of Tokyo is not worth the state of California after all,” and that real estate prices are not going to go back to those levels in the near future. Once that sense began to sink in among Japanese executives, we had this term in Japanese, - “balance sheet scare syndrome.” And suddenly all the corporate executives began to look at their balance sheets and said, “Oh my gosh, we have to do something about this.”

Tremendous Deflationary Gap Developing in Japan

So starting around 1993, this massive procuring of funds by companies began to shrink. Of course, some companies always are borrowing and some are paying back debt, but the numbers began to shift. By 1998 the corporate line is on the positive area which means there are more companies paying down debt than procuring funds. The fact that companies are now on the positive side, positive 4% of GDP, means the corporate sector as a whole is a supplier of credit to the banking system, to the capital market. When you have a household sector saving money while the companies are also saving money by reducing their debt, you have a tremendous deflationary gap developing in the economy.

In simple terms, it's like this: If I have a thousand dollars of income and I spend nine hundred myself or my wife spends it, and then I save a hundred dollars. In the old days, banks or the security houses would quickly take this hundred dollars and lend to the companies. The companies then spend the hundred dollars. From my initial income of a thousand dollars, there were

nine-hundred of spending, plus a hundred dollars of borrowed spending, and the economy moves forward. In the current situation, if I have a thousand dollars, I spend nine hundred, one-hundred dollars goes to the bank or to the securities houses, and no one comes in to borrow this hundred. It just sits there. And this happens at zero percent, which means you cannot bring interest rates down to find someone to borrow this money. And how much money is actually spent in the economy? Only nine-hundred dollars, which means the economy has contracted by 10%. When nine hundred is spent and the household sector says, “Aha, we have to save ten percent.” Then what happens? Ninety dollars go into the banking system and sits there, the economy goes into the size of 810, and then the household sector saves another 10%, you go to 730, another 10%, 600 or something. The economy continues to contract once you are in this kind of situation. And this is exactly what happened from 1929 to 1933 in the United States, what we call the Great Depression. And you know how the whole thing started.

In those days, Americans were buying New York shares with borrowed money at margin, and when the New York share prices collapsed, they were left with liabilities but no assets to show for it. When everybody is trying to pay down debt all at the same time, the economy weakens, corporate profits fall, share prices fall even further. People those days did not just walk into Chapter 11. They said, “Oh my gosh, we have to pay down debt even further.” And that just got worse and worse and worse until by 1993, U.S. GDP was exactly half of the 1929 GDP.

In Japan, the same process is in place. Everything is identical. The amount of wealth lost as a result of what happened to

asset prices in Japan is three years worth of Japan's GDP of 1989. We lost about 1400 trillion yen of national wealth as a result of what happened to asset prices. You look at the United States in 1929 to 1939, the amount of national wealth lost in the United States was equivalent to one year's worth of the 1929 GDP. So Japan's problem is actually three times worse. And you see the companies doing exactly the kind of behavioral change that I mentioned to you earlier.

When you think of all this, it is amazing that Japan is still there. It should have disappeared from the economic map long ago. The damage to Japanese balance sheets is three times worse than the Great Depression. Companies are becoming a net supplier of credit, the most ridiculous thing on earth but the economy is still somehow managing to chug along. How could something like that be possible? That's the miraculous part of the last ten years of Japan's experience.

But there's an answer to this, as shown in the bottom of page one, and that is that the general government did the exact opposite of the corporate sector. We just happened to have these very pork barrel politicians of the LDP running the show and as soon as the economy weakens, they love to spend money. So they built bridges to nowhere, roads to nowhere, and called that an economic stimulus package. What they were in fact doing was taking the money that the household sectors saved but the corporate sector did not borrow, and then spent it themselves. But if someone came in and borrowed the hundred dollars and spent it, then you have 900 plus 100, a thousand dollars again and the economy stabilizes. The next year, the same thing happens in the sense that the household sector is still saving money and the corporate sector is

still not borrowing. Why does the same thing happen? If you look at how much asset prices have fallen - commercial real estate prices are down 85% - one or two years of paying down debt by the companies is not sufficient to repair balance sheets. It might take three years, five years, and if you're unlucky enough to have bought the assets at their peak, I'm afraid you may have to pay down debt twenty years before your balance sheet is clean. But as long as you have a healthy cash flow and good business, you could do that.

Government Spending Prevented Depression

So next year, the same thing happens: the economy begins to weaken as soon as the fiscal stimulus is removed. Then the LDP, being the LDP, says, "Oh, we have to do one more economic package." They do it, the situation is stabilized. Next year, the same thing happens, they do it, and it is stabilized. That's how we managed to stay where we are. As you can see in the bottom of page one, the general government goes exactly the opposite of the corporate sector. We used to have a large surplus in the early 90s, but now we have a huge deficit. But it is this government action that distinguishes the Japanese experience of the 1990s from the U.S. experience after 1929. In the U.S. experience in 1929, we had President Hoover and Treasury Secretary Mellon who said, "Well, these guys who screwed themselves up in the New York stock market, they deserve the punishment, and if these poorly managed companies have to die, let them die." Basically, that's the attitude they took and the government refused to put in the fiscal stimulus. So the gap was allowed to stay the hundred dollars, and then it was allowed to grow and then the GDP went to half of the original size. But in the Japanese case, every time the gap began to grow, the

government filled it, and the economy stabilized. The next year it happened, it was filled again, and that's how Japan managed to come all the way without experiencing a major depression.

This is the first time in the history of mankind that something like this was done from the very beginning. There are a lot of experiences of economies falling into depression, and after the government pumps in a lot of money, usually military spending, these economies recovered. But this is the first time in the history of mankind that the government was spending the money from the very beginning and kept the economy from falling into a depression, in spite of what happened to asset prices, in spite of the amount of national wealth lost in the process.

Fiscal Stimulus Is Necessary to Fuel Economy

So, contrary to popular belief, I believe that fiscal stimulus played a huge role in keeping the economy going, and that the current government's view that fiscal policy is largely irrelevant, wasteful and therefore should be cut, is dead wrong. It's one of those instances, perhaps once in seventy or eighty years, that you have to have fiscal stimulus because the government cannot tell the companies not to pay down debt. The government cannot tell the companies not to repair their balance sheets because at the micro level they are doing the right thing. But if all of them do it at the same time, and if the government takes no action, the economy will continue to contract.

This is the fallacy of composition problems. They are all doing the right things, but the result is the opposite of what they are hoping to achieve, and in that circumstance, since the government cannot tell them what

to do, the government has to do the opposite of the private sector. In that way, the government can stabilize the situation, allow the companies to pay down debt. At some point of course the balance sheet will be clean, and once it's clean, the companies will go back to the normal profit maximization mode instead of the debt minimization mode that they are in at the moment. When that happens, it's the time for government to cut the budget deficit because if the private sector starts borrowing money again and the government is also trying to borrow money, then you're going to get into the crowding out problems of higher interest rates, misallocation of resources and all of that stuff.

I'm afraid we are not there yet, so where are we now as far as a clean up of balance sheets is concerned? If I may ask you to look at the top of page two, it shows the debt levels of Japanese companies (**See Exhibit 3**). The top chart shows that the companies have made quite a bit of progress. They are by no means complacent and they reached a point that's already beyond the past trend line. However, the fact that land and equity values are back to early 1980s levels means that corporate executives are probably not very happy even at the current level of debt. They probably want to pay down debt a little more. But the point is that they have made tremendous progress under these most difficult circumstances. The bottom chart incorporates the asset prices directly into the analysis by looking at the ratio of net assets to total liabilities. The Japanese government publishes the data where it shows the net assets and liabilities position of all major sectors of the economy about two years after the initial GDP numbers are released. I have used that data to construct what's on the bottom of page two (**See Exhibit 4**). This shows that during the bubble days, indeed this ratio

improved dramatically and came crushing down after the bursting of the bubble. Around 1997 was the worst period, but the rush to pay down debt, together with a little bit of the IT bubble in 1999 brought this ratio almost back to the so-called pre-bubble average.

The Japanese corporate balance sheets therefore, are in far better shape than they were, for example, five or ten years ago. But repairing the balance sheet is like being drowned in the water as if you were thirty meters under water. Now, you are back to about three meters under water, but you still cannot breathe, right? You have to get above water before you can say, “Whew, I’m out of this mess.” So they have made tremendous progress, but they are not out of the woods yet.

An Invisible Recession

One of the problems with this balance sheet recession is that this is an invisible recession, an inaudible recession. I say this because no one wants to talk about it. No company executive will say, “I have a balance sheet problem, I have a balance sheet problem.” No, they won’t do that. If you have a reasonable cash flow, you have a reasonable product line, you keep your mouth shut and you pay down the debt as quickly as possible and as quietly as possible.

A very highly respected entrepreneur in Japan once said to me, “Mr. Koo, your balance sheet recession is really a banker’s and manager’s recession.” And what he meant by that statement is that only those two types of people are really aware of the real driver of the recession because only those two know what a corporate balance sheet really looks like. But they are most ill-disposed to share that information with the

average public. So the journalists, the analysts, those people who don’t pay attention to this part will never notice all of these things. Most macro-economists, I’m afraid, are never trained to look at corporate balance sheets or the debt levels and things like that. They are trained to look at, for example, industrial production, housing starts, employment figures, GDP, but not corporate balance sheets. Economists are particularly poor-equipped to analyze the situation where companies are actually minimizing debt instead of maximizing profits, because for those of you who studied economics, I’m sure you remember that everything is predicated on the assumption that corporations are maximizing profits. The entire economics is built on that assumption. When you have a situation where that is no longer the case and the companies are actually minimizing debt instead of maximizing profit, then the old economic theory and its policy implications, I’m afraid, will have to go out the window. And you have to rebuild from ground zero what to do with this kind of situation.

So my point here is that unless you pay particular attention to this issue, you never notice that these are the main drivers, but once you understand it, you can see why. For example, the interest rates in Japan are so low; the foreign banks have no interest in Japan; there is no issuance of corporate bonds; all of these phenomena now make sense to you because the corporate priorities are now different.

So how long will it take for this balance sheet recession to end? Well, I’m afraid Mr. Koizumi’s 30 trillion yen limit on Japanese government bond issuance, one of his election promises, made the situation a million times worse, because the deflationary gap I see is about 40 trillion. He decided to fill only thirty. Of course, thirty is better than

nothing but that still left about 10 trillion and that allowed this vicious cycle to start and worsen. As a result, ever since he took office, we've lost another 200, perhaps even 250 trillion yen of national wealth ever since Mr. Koizumi took office. Losing 250 trillion of national wealth at this juncture makes everything so much more difficult. Losing 250 at the top of the bubble is no big deal but losing 250 when you are down to the very minimum hits companies and banks very, very hard.

And what that means is that since repairing balance sheets is relative to the level of asset prices, if you allow asset prices to fall, the goal will be moving farther and farther away from you. And then you will say, "Oh gosh, we have to pay down debt even faster." And as they try to pay down debt even faster, the economy gets weaker and the goal moves farther away. That's where we are standing at the moment. And so I'm very concerned that Mr. Koizumi, not realizing that this is the disease we have contracted, is trying to treat something else altogether, such as structure issues, privatization, and all of that. Those are all problems, but those are not the problems that brought Japan to where it is today. And some of the problems like postal savings and the road agency, those problems have been with us for the last fifty or hundred years, they're nothing new. But why, from 1990 onwards, did the Japanese economy lose so much of the momentum? The key difference is the balance sheet. Before 1990, all Japanese banks and most Japanese companies enjoyed triple A ratings. Where are they now? What happened to all those ratings? That's the key.

In terms of this rating issue, if I may ask you to look at the top of page three, this shows the leverage ratio of Japanese companies relative to the U.S. companies (**See**

Exhibit 5). Leverage, as you are aware, is the ratio between your capital and how much money you borrow. When you look at this chart, you notice that in the 1970s and 1980s, Japanese companies were really highly leveraged. They were borrowing money like crazy for the little capital they had. But in those days, the fact that Japanese companies were so highly leveraged never bothered anyone because they had more assets than debt, and asset prices were rising. They were all enjoying very high growth also. And as a result, Standard and Poors, Moody's, all these international rating agencies were giving Japanese companies triple A's routinely, and the banks as well.

Reduction of Leverage Ratios Also Contributes to Weak Economy

However, starting in 1990, the world was turned upside down (**See Exhibit 6**). We had falling asset prices, super slow economic growth and, soon enough, people began to notice this leverage ratio and said, "Oh, we have a problem." And it was about three or four years ago that major companies began saying to themselves that in addition to the balance sheet problems coming directly from the falling asset values, they had a leverage ratio problem to match the slow economy and low asset values. That's the second balance sheet adjustment. The first balance sheet adjustment came directly from the fall in asset prices. The second one was because they wanted to reduce the leverage ratios. Both of them mean paying down debt. And that's why companies are paying down debt like crazy, and that's why the economy is in such a sad shape. But that means we are moving closer and closer to the goal. If Mr. Koizumi hadn't screwed up like that, and if he had kept the fiscal stimulus at the level of Prime Mini-

ster Mori, we should have been out of this balance sheet recession by now.

But now, after Mr. Koizumi came on board we lost about 250 trillion in national wealth. As a result, it might take a few more years before we can come out of this balance sheet recession. I would very much like to see if at all possible that Mr. Koizumi understands this problem. I tried to make him understand and many of his advisers understand. I think Mr. Takenaka understands a little bit although he refused to show that in public. Mr. Koizumi has no interest in economics, period. And so, these kind of issues never get his attention. But if something happened and Mr. Koizumi did three things, I think the Japanese economy will turn around very, very rapidly.

Three Ways to Make the Economy Turn Around

First, Mr. Koizumi or whoever the prime minister is, says, "Okay, if the deflationary gap is 40 trillion yen, we'll fill 40. If the gap is 42, we'll fill 42."

Second, explain to the public why they are filling it, why fiscal policy is put in place (**See Exhibit 7**). If the government doesn't do that, the people who have no idea about this balance sheet issue - that means most mass media - will start bashing him by saying, "Ah, so he was finally defeated by the reactionary road lobby and the construction companies and all of that." Japan needs fiscal stimulus, not for the construction companies, and not for the road lobby. Japan needs fiscal stimulus because it's in a macro-economic emergency with the household sector saving and the corporate sector not borrowing, even with a zero percent interest rate. Just having these three things - the household sector saving, the corporate sector not borrowing and zero

percent interest rate - is enough to put any economy into this mess.

And Japan happened to be the only country that was suffering from this recession, but most recently I have seen parts of the United States, Taiwan, Thailand, the Philippines, and many parts of Europe beginning to contract the same problem. This macro-economic emergency has to be explained to the people because the average public could never understand. This is the fallacy of composition problem in that the average public is doing the right thing, trying to repair their balance sheets, cleaning up their financial houses, trying to reduce the non-performing loans, and all of that. But taken altogether, the economy deteriorates further and further. This has to be explained by the leadership. If it's explained to the people why we have this mess and why the government has to do the opposite of the public sector, I'm sure the public will understand it, because it is the Japanese themselves who are paying down debt. Yes, I'm paying down debt; yeah, he's paying down debt; that guy's paying down debt. If everybody is paying down debt and no one is borrowing money while the household sector still saves, the economy will contract like crazy. It's not some Martian paying down debt, it's the Japanese themselves that are paying down debt. But once this point is explained to the people, I think there will be a big difference in the way people look at fiscal stimulus and its role.

And the third point that he has to do is to make sure that this policy stays in place until, for example, 70 to 80% of the companies are finished with their balance sheets, which may take another two to three years. And I say this because in the past, as all of you are aware, Japan did put in a lot of fiscal stimulus, altogether 140 trillion yen worth. But it was always behind

schedule, always “behind the curve,” as we say in the market. So when things began to deteriorate we said, “Ah, we need a fiscal stimulus,” and we did it. But by then this vicious cycle had already started and that means you need that much more fiscal stimulus than before. It’s not 100 dollars, but maybe 190 instead. Of course when you put it in, the economy stabilizes, but as soon as the economy stabilizes, what happens? The minister of finance starts saying, “Oh, we have an aging population, we have a huge budget deficit, let’s cut the budget deficit.” You don’t cut the budget deficit when the household sector is saving but the corporate sector is not borrowing. But they cut it anyway. As soon as they cut it, the economy nose-dived and the asset prices fell, with the goal moving away; and the situation is sometimes more worse than when we started.

A lot of people lost money in the process as well. As the chief economist of Nomura, the largest of the Japanese securities houses, I am advising institutional and other professional investors all around the world and they all tell me this: “Yes, Mr. Koo, we fully agree with what you say, but how do you make sure that the Ministry of Finance will not remove the ladder. That’s a Japanese expression, to “remove the ladder,” *hashi go wo hazusu*. So many people have lost money as the government removed the ladder. Those people who thought Japan had hit the bottom brought money to Japan, but lost money as a result. I think we have to have this promise in place: that until 70 to 80% of the companies are finished with their balance sheets, the government will continue with this fiscal support. I say 70 to 80% because 100% is impossible. There are some hopeless companies that have to disappear and we can’t look after the interest of all of those guys. I think 70-80%, however, is minimally necessary because when

you think about it, if 70-80% of the companies are in a sense looking backward, only 20-30% are looking forward – there’s no way in the world that such an economy will ever enter self-sustaining growth.

In order to have a self-sustaining growth for the national economy, 70-80% of the companies must be looking forward at the minimum; maybe 20-30%, because of their past mistakes, may be looking backward trying to repair their balance sheet. But you have to have a majority looking forward for an economy to move forward. In Japan we have the ratios reversed: a majority looking backward and only a minority looking forward. In that kind of situation, even God cannot bring about self-sustaining growth. So the minimum thing is to change this ratio to bring some of the companies from the backward-looking camp back to the forward-looking camp. And for that, I think we need about two to three years. But once that point is reached, and companies with cleaner balance sheets begin operating as they appear in the textbooks, then the government should be cutting down budget deficits because we will have to worry about the crowding out problems – government trying to borrow money and the corporate sector trying to borrow money at the same time. That’s not very nice. So if this sequencing is properly explained, I’m sure people will understand. I think the bond market would understand as well. That’s basically what has to happen in Japan.

I wrote this book in English that was introduced earlier because, as I briefly touched upon earlier, I began to sense the same thing happening in the United States, in parts of Europe and many parts of Asia as well. Interest rates here of course are the lowest since the 1950s, interest rates in Taiwan are the lowest since the founding of the Republic of China in 1911, in the Philip-

rates are the lowest in living memory, and in Thailand as well, because all these people are beginning to look at their financial health instead of just maximizing profits.

Greenspan Cannot Turn Economy Around

You know what's happening in this country. Greenspan lowered rates to very low levels, but only the housing market is responding. The corporate sector is not responding at all. And not only that, you see the household savings rate increasing in this country. The household savings rate increasing in a world of an almost zero percent interest rate is not in any U.S. economic textbook either. So this is a very different world, it's not an extension of the past. We are entering a balance sheet recession, and once you enter this thing, relying on Greenspan to turn the situation around, I'm afraid, will not do much good. Well, the housing is holding and in the Japanese case, housing is holding as well, but the rest is going in the opposite direction. I very much would like to see more active fiscal stimulus from the White House side. Of course, we have a Republican administration who doesn't want to use too much fiscal stimulus, but this is one of those few situations where fiscal stimulus is absolutely essential not only in keeping the economy going but, when you think about it, in keeping the money supply from shrinking. Those of you who study economics, in particular how monetary policy works, are aware that in order to have a money supply growth, you have to have someone borrowing money from the commercial banks. That's absolutely the minimum.

What happens when no one is borrowing money and the whole corporate sector is actually a net supplier of capital to the

banking system? If you do nothing to the situation, the money supply will begin to contract, no matter how much money the central bank pumps into the system. And when you go back and look at 1929 to 1933, when President Hoover refused to put in a fiscal stimulus, the U.S. money supply shrank by 40% because there were no borrowers out there and the government refused to borrow and people were all paying down debt, so the money supply shrank like crazy. And of course the economy went down with it. So this is the world exactly the opposite of Milton Friedman's world, who argued that monetary policy is almighty and that if you put in a right monetary policy, things will turn around. It's not going to turn around in this environment. In the 1930s, the New York Federal Reserve had tried everything to get the economy out of the great depression. But nothing worked so they came up with this new term "liquidity trap." But now we know after the Japanese experience how we get into a liquidity trap.

Liquidity Trap Weakens Economy

A liquidity trap happens the moment companies move away from profit maximizing to debt minimization. The moment it happens, whatever the level of interest rates, they are not going to respond to interest rate signals because they have a balance sheet problem to repair, which is the first priority. But when that happens, the economy typically weakens as a result. The central bank looks at that weak economy from the macro side, not from the balance sheet side and says, "Oh my gosh, the economy is weak, let's bring interest rates down." So the central bank lowers interest rates but nothing happens because these guys are no longer interested in borrowing. Then the central bank panics, brings interest rates down even

further, but still nothing happens on the corporate side because they're not interested. The central bank then brings it down, down, down, until rates cannot go any lower, but still nothing happens. And then we look at that world and call it a liquidity trap. But a liquidity trap actually happens the moment the corporate shift takes place.

On page five, I have the U.S. economy on two graphs, and it shows at the top that the savings rate has been rising in this country as share prices fell (**See Exhibits 8 and 9**). I have Wilshire 5000 instead of the New York DOW because it has been said that Greenspan loves to look at the Wilshire 5000 instead of the New York DOW. The bottom chart shows the federal funds rate, the outstanding debt of U.S. companies, and you can see that even though short-term rates have come down dramatically, companies are basically refusing to borrow, or borrowing only very small amounts. Now, if you look at the bottom of page five, in 1991 you see the corporate debt falling into the negative range. This is the credit crunch that I mentioned to you at the very beginning. Between 1991 and 1993, there was a nationwide credit crunch. That credit crunch was an involuntary one for the companies in the sense that the banks suddenly realized they have a capital problem. They could not lend and as a result there was a credit crunch. If it's an involuntary one, driven by the supply side constraints, it's very much easier to deal with than the demand side problem because this is driven by banks. So you fix the banking system and the problem goes away.

When it's on the demand side, which is the current situation, it's much harder to deal with because this is all about companies, millions of companies, operating in this way, which makes it harder to deal with. And as a result, I'd very much like Presi-

dent Bush or his economic advisers to take the situation a little more seriously than just thinking that in the second half of this year everything will be fine. I wish that that's the case, but if my analysis is correct and companies are very worried about their balance sheet, especially after the bursting of the IT bubble and the Enron affair and all of that, the U.S. might need an additional fiscal stimulus to make sure that its economy won't fall into Japanese-like difficulties.

Economic Problem Does Not Appear in Textbooks

Unfortunately, this type of recession is not in economic textbooks anywhere in the world. We never thought of a world where a majority of the companies are looking backwards instead of looking forward, and so average journalists, average economists, will find it very difficult to grasp these ideas. But I think the numbers are pretty clear and when you go back to the 1930s, there are plenty of similar examples. Furthermore, if you look at Europe today, which is shown on the top of page six, the European share prices have come down also quite dramatically (**See Exhibit 10**). The German index is down 73%; it's no wonder the Germans are having the greatest of difficulties. I have talked to a lot of German investors and they all say Germany in some ways is like Japan. They don't want to put everything out in the open, but after I deliver a speech like this, people quietly come forward and say, "Yeah, we have the same problem." So the whole world is experiencing something similar although probably not as serious as in the Japanese case (**See Exhibit 11**).

In the U.S. case, we have to be a little careful, because in Japan the consumers never changed their behavior, it was the corporations. But in the U.S. case, it's the corp-

orations and the consumers. Consumers are raising savings rates and companies are cutting down on investments. That means it's getting hit from both sides. Of course, the U.S. has a very strong housing sector and that's the one piece that's keeping everything from collapsing, but if the housing sector begins to lose steam and if there's no other part to pick up the pieces, the U.S. could see something very similar to what happened to Japan.

Attempts to Reduce Budget Deficit Could Increase It

So I'd very much like people around the world to pay a little more attention to this possibility even though it's not in economic textbooks. As I said earlier, it only takes three things to happen: low interest rates, household savings, and corporate non-borrowing. Only these three, and you are in this mess. So it's not such a farfetched world; when we look around, I think many of you notice that something similar is happening here as well. And in this environment, if you try to reduce the budget deficit, you actually end up increasing it. In Japan, as I show on top of page seven, poorly timed fiscal reform actually increased the budget deficit.

Prime Minister Hashimoto in 1997, listening to the IMF, the OECD, those people who know nothing about Japan, told Japan to cut its budget deficit (**See Exhibit 12**). When Hashimoto tried to do that, the budget deficit not only did not shrink, it expanded to 38 trillion from only 22 and the economy collapsed as a result which actually proved that fiscal policy was working. Other people argued that, "Well, if you do the fiscal stimulus, the interest rate can go sky high and given the large size of the budget deficit, this option is not available." That's the line that Minister Takenaka loves

to use, but the U.S. experience of the 1920s and 1930s shown at the bottom of page seven shows how long it took for the United States to actually recover the level of interest rates that existed before the balance sheet recession (**See Exhibit 13**). It took 30 years for U.S. short-term and long-term rates to recover to the level of 4.1% which was the average of both short- and long-term interest rates during the 1920s. Only 4.1, it took 30 years because the household sector was still saving money and the companies were not borrowing. And in these thirty years there was the New Deal, World War II, the Korean War, and still the rates did not go up because the private sector was still devastated by the debt problems.

The size of the budget deficit of course is very large in Japan, 140-150% of GDP, but the United Kingdom after World War II had a budget deficit of 250% of GDP and the country is still around. At least, the last time I saw the map it was still there.

So the size of the budget deficit itself is not an issue. It's how it is explained to the people, how people understand the situation, and working in the bond market every day, my sense is that the market fully understands it. That's why it gives such a low level of interest rate, 0.5% for ten-year government paper. That's ridiculous. But when you think about it, it makes perfect sense because the private sector is not borrowing money. My guess is that U.S. interest rates, unless something crazy happens, will continue to go down as well if this trend is allowed to continue.

Lastly, for the United States in particular, I'm sure there is a tremendous incentive to use foreign demand to strengthen the economy before the November election next year, meaning bring the dollar down. I have

already talked to a few people in this town and everybody says, “Yeah, we’re going to bring the dollar down.” Well, bringing the dollar down using foreign demand is one way to get out of balance sheet recession. There’s no question about it. But first of all, Japan cannot use it because Japan is already a surplus country. A surplus country like Japan trying to bring the yen down and trying to export its way out, you know what happens in this town. The USTR, the Congress, the Commerce Department, all raise hell and as soon as that voice is caught in the newspaper, the front page carries this displeasure, the yen goes sky high as we have seen in so many occasions in the past. Most recently, in June of 1999 when Mr. Sakakibara tried to push the yen down, Larry Summers said “No.” One word like that from Washington and then it was 100 yen to a dollar in no time.

And so for a surplus country like Japan, bringing the exchange rates down I don’t think is a wise option unless its trading partners agree to it. But for the U.S., being a huge deficit nation, the largest deficit nation mankind has ever seen, the temptation to bring the dollar down I think is very strong. At the micro level, at the individual country level, it’s the right decision to take. However, now we have Japan, part of Europe, the United States, part of Asia, all in this what I call a “balance sheet recession.” The last time we had anything like this was in the 1930s, the last great global balance sheet recession. The lessons from the 1930s is that they all tried to use foreign demand. As a result, everybody tried to bring currencies down and we got into this competitive devaluation. That got so bad that people then started raising tariffs and that completely destroyed world trade and got the whole world into a great depression.

The International Monetary Fund (IMF) was put together in 1945 precisely to avoid that, because a fallacy of composition problems inside the country can be dealt with by the government doing the opposite of the private sector. For a fallacy of composition problems in a global scale, since there is no world government, there is nothing that can stop the world fallacy of composition problem from getting out of control. And the IMF was put together precisely to put a stop to that. I don’t know how many people who work in the IMF today remember what the original purpose of the institution was; what worries me is that these guys seem to be doing everything opposite of what they’re supposed to do in the world of balance sheet recession. But I’d very much wish to see - if my analysis is even halfway correct - the IMF and the United States, being the leaders of the world economy, to say, “Let’s try to contain all such balance sheet related deficiencies in domestic demand within each country so that the international fallacy of composition problem will not arise.”

And how do you do it? Well, the United States, the Bush administration, could start telling the Europeans and Japanese that we, the U.S., has the right to bring the dollar down; that’s also the right thing for a deficit country like the U.S. to do. But if you guys - meaning the Europeans and the Japanese - put the proper fiscal stimulus in place, we will keep the dollar from falling and we, too, might do some fiscal stimulus so that the whole world will be spared the 1930s type of consequences. And if proper fiscal policies are put in place in all major countries, in a year or two I think we’ll all be out of this mess, and I think that’s the best possible world, given the challenges we are facing today. Thank you very much.

Arthur Alexander: Half the time when I'm hearing Mr. Koo speak, I think, "I wish I'd said that." He puts so many things so well, and so clearly, and makes it understandable. Other times, though, I wonder, "How could he have said that?" And I question some of the things he says. Today there is a share of both of those thoughts, plus some interpretations of his remarks.

I did not have a chance to look through his book before tonight. I'll dwell on – I do not want to say disagreements – interpretations, because a lot of what he says is clear, obvious and solid, but there is a level of interpretation that may add to what you heard from him. I think the main point that I would interpret – the central point – is whether the cleaning up the balance sheets is Japan's central problem today.

Let me go back to an anecdote. About 25 years ago, I guess it was, when I was still at the Rand Corporation, I was doing a study for the U.S. Air Force, estimating the cost of jet engines. I had a data set of jet engines from around the world for the history of jet engines, the cost, the characteristics, and so on. We came up with some interesting findings, among which was European companies and British companies were less efficient producers of jet engines than Americans. We were in the middle of this when Rolls Royce, the British engine company, went bankrupt; about the day before it was publicly announced, we got a distress call from Lockheed. Could we come out there and tell them about what we were doing? They said, "Rolls Royce is about to announce they're going bankrupt." They said, "We have been buying engines for one of our airliners. We had this iron clad guarantee they were going to sell them to us at \$700,000 a piece. Now they're going bankrupt, and that contract is going to be rewritten. What does your data have to say

about this?" And we'd already had something to say. We had looked at this just before leaving our offices and said, "These Rolls Royce engines, according to our purely statistical estimates, were costing a million dollars a piece, but they were selling them for \$700,000." Lockheed replied, "Of course, this is why it was such a deal that we had." Well, the auditors went in to Rolls Royce and they found the same thing. They said, "You know, you're selling this for \$700,000, but it's costing you a million. You're losing \$300,000 on every engine; if you multiply this out times the length of the contract, you have used up all your capital, you are in an insolvent situation, you're bankrupt." The next day, the auditors forced them to declare bankruptcy.

What they did was rewrite all their contracts. Lockheed and their iron clad contract, which did not contemplate bankruptcy, started having to pay the true cost of the product; the stockholders lost all their value; the company was reorganized; the bankers and other creditors ended up having to take a big hit. There was a workout on the debt. That's one way of dealing with insolvency. The other way is through forbearance, what we tend to see in Japan (**See Chart 1**). We have the regulators, the bankers, the creditors, and the contractors saying, "Take your time, work it out, pay it off, and eventually, you might get out of this." This is just to say that there are other ways to deal with the balance sheet problem. If there is insolvency, go and clean it up immediately and get on with it. As Richard says, a lot of good companies have good products, can generate good cash flow, but not at the level required to service the debt that they have incurred. When I first started looking at this problem in Japan and talking to Japanese bankers about workouts, they thought that I was talking about going to the gym and lifting weights.

I literally explained to them the idea of debt workouts, where all lenders take a hit in order to keep the company going – and it wasn't that long ago, in 1996, 1997, 1998 – and this is what they told me, “We don't take haircuts, we don't take losses, everyone has to pay up.” And this is what the Japanese companies have been faced with.

Declining Assets Have Negative Effect on Economy

If we consider total assets as well as liabilities, there is something that Richard alluded to but didn't focus on: the asset side of things (**See Chart 2**). There has been a huge amount of investment in Japan over the years. Assets have built up and only in the last year or two have we begun to see assets starting to decline and as I'll show in a minute, it's not the kind of assets we'd like to see decline. Most of the assets that are declining are financial assets and land – land and shares held by companies. Physical assets have continued to rise even during this period of stress in balance sheets. Leverage, as Richard noted, is the ratio of liability to shareholder equity, and was rising very, very rapidly to unsustainable levels until about 1980 or so, and that has been coming down since then (**See Chart 3**). It has been driven down by a whole number of reasons, some of which are the explicit behavior of Japanese companies, others simply because the numbers' underlying ratios are changing by themselves. Liabilities, as I showed you in the last chart, have been going up almost steadily, then leveled off and are just beginning to come down in the last year or two. What has been happening has been driving down leverage, which Richard has very nicely on his chart shown with the American level, which is considerably below the Japanese level. What has been happening is that equity has been rising, and equity is rising not because

they're floating more stocks but because of retained earnings.

Japanese Companies Flushing Away Shareholder's Money

Now, this gets at my reinterpretation. Now we're beginning to hit the interpretive part of all this. What I see happening here is that shareholder equity has been rising very stably (**See Chart 4**). This is the amount at book value that investors actually are putting in over time. It includes pension reserves and retained earnings that are really driving that value of shareholder equity. What has been happening is that companies have been holding onto the money that they make. They're not turning it back to the shareholders, they're investing it, and that's why we see that assets have been continuing to rise. The capital has been going up, but the rates of return are falling very, very rapidly and very substantially. So what we see going on here, as I would put it, is that companies in Japan are pissing away the shareholders' money. They are investing it at very low rates of return and I would say that that is the central issue

That is a counterpart or another phase of the balance sheet problem because opposite the assets are liabilities plus equities, and the liabilities have been rising, equity has been rising, the assets have been rising and rates of return have been falling very drastically. This chart shows that the companies are continuing to invest – it shows the kind of assets that Japanese companies hold (**See Chart 5**). Produced assets, equipment, structures and so on, have actually been continuing to rise, and equities that they hold have been falling. This is in percentage of total assets. So the equities are now about half of what they were back in 1990. Land is considerably less, but produced

assets are actually continuing to rise up through the last date of 2001.

Japanese Companies Not Investing Enough to Produce a Vibrant Economy

So Japanese companies are actually doing investment, not as much as needed to produce a vibrant economy as was clearly noted before, but the decline of assets that we've had in the national income accounts has been quite substantial. The decline of assets has been because of the falling prices of land and financial assets, not because they have been writing down or bringing down the value of their produced assets. And as you might think, the rate of return has been falling. This chart is from Ministry of Finance data on Japanese companies (See Chart 6). And what we see clearly is that the rate of return on total assets has been on a constant downward trend. There have been cyclical ups and downs and I've been looking to see whether there's been any recent increase and I've looked at all classes of companies. You can see it at the individual company level but not on aggregate data. The interesting thing about this is that if we compare Japanese returns to other countries – and this is my last chart – what we see is that Japanese rates of return, which you expect to decline as the country invests and matures and accumulates more capital, are lower than the U.S. by about half; lower for Western European countries. The UK, Germany, France are all around the U.S. level. Japan is a third to 50% less.

A Rate of Return Problem

My interpretation of the data then is that this is a rate of return problem (See Chart 7). Companies don't invest enough to stimulate the economy because the returns are so low. They also don't invest because they borrowed so much, and their leverage is

high. They have to write down some of that capital or somehow they have to lose the capital.

You can raise rates of return in two ways. Remember the rate of return is profits over assets. You can increase your profits, which Japanese companies are striving to do and this is what structural reform can do – bringing in more competition, less regulation, and a more active market place. Or you can work on the asset side. To work on the asset side means doing what Rolls Royce did – write down the value of the assets by 50%; this can be done through mergers and acquisitions, purchases that revalue company's bankruptcies, workouts. There's a whole variety of ways of bringing down the value of assets. But according to my estimation, Japanese firms are overvalued by roughly 40% or 50% if Japan were to get its rate of return to internationally competitive levels. Richard Koo's balance sheet problem is the other side of my balance sheet problem, because when assets are too high, liabilities are too high, because they must necessarily balance.

Japanese companies have held on to their shareholder earnings rather than paying them out in dividends. What we need to see is an increase in the rate of return partly driven by assets, partly driven by the decline of liabilities. I'm a little more pessimistic than Richard that it's going to take two or three more years, because I don't see things happening fast enough on the asset side. I don't know what policies would encourage that. Structural changes, competition, deregulation, more foreign direct investments certainly would, but they also could have negative effects in the short term that have already been mentioned. A lot of restructuring and reorganization implies a lot of pain. What it means is that

Japan is not yet out of the woods; it has a long way to go. Thank you.

John Ikenberry: Thank you very much, Arthur. Richard is going to just make a quick response to several of your points and then we're going to open it up. Go ahead.

Koo: This return on capital in Japan, I think, is one of those issues that bothers a lot of people. First of all, this data thing, I can never find why we have two different sets. I don't think the Ministry of Finance published different numbers in English and in Japanese.

Alexander: Mine looks so close to yours for some of the way but not others of the way.

Koo: Right, and so at the very fundamental level, I don't know how to reconcile because the data is different. First of all, it was mentioned that produced assets is increasing. It is increasing; there's no question about it. But from the macroeconomic perspective, from the policy of composition issues that I'm dealing with, the produced assets are not increasing with borrowed money. It's all from the retained earnings and in Japanese, when you say cash flow management, it doesn't have the same meaning that English cash flow management has. Japanese cash flow management means to do every investment within your cash flow. That's what the Japanese cash flow management is and you can go to any Japanese bookstore and you see tons of such books. So there is this complete aversion to borrowing now, which is the macroeconomic problem.

So at the micro level, U.S. companies are doing in a sense the right thing – the rates of return might not be as high as they should be, but the macroeconomic problem

in my view is a totally different world. For example, a company like Toyota: a lot of people think it's a great company; even if the rate of return to the shareholders might not be the greatest in the world, it certainly enriched the human race in no small way. After all, they're the people who first taught us how to build cars that don't break down. Toyota never borrows money, that's why it's doing so good. It was burned how many decades ago by the bankers, so there is this philosophy not to borrow money again. I'm very close to Toyota; I do a lot of seminars for them, and every time Chairman Okuda or President Cho is there, I say, "Toyota, a company like this, you have to borrow a little money to save the economy." And they all say, "Yeah, yeah, I kind of understand what you're saying but we are Toyota, we go our way."

Companies Are Not Investing

And so this is the macroeconomic problem that is distinct from the microeconomic problem. As long as the household sector is saving money, you need a corporate sector borrowing money. And the lower interest rate in Japan means, even with the lower rates of return, the whole thing should turn. If you have high rates of return, the discount factor would be higher; you need higher rates of return to make everything work. The fact that Japan has as low a rate of return, in some ways – excuse is the wrong word – but it gives a reason to invest even with rates of return that will not be acceptable in a country with higher interest rates. But they still don't do that. I'm very worried about that point, especially after the U.S. experience, when the Americans went through the 1930s. Those people who lived through the '30s, after paying down debt, they never borrowed money again, right? This depression mentality of those people in the '70s and '80s, even in this country

who've gone through that experience, they just refused to borrow money. And everybody in Japan entered that kind of mentality. The country would need fiscal stimulus forever and that's the worst possible outcome. That's why I argue strongly for structural reform because it will make sure that companies would be interested in borrowing money to invest.

Another point about low rates of return in retrospect is the strong yen. When Japanese companies bought all these assets to make better cars or make better semiconductors, of course they were assuming one exchange rate. But by the time they come upstream because everybody else was doing it at the same time as the trade numbers began to grow, the yen goes high and when the yen goes high, and then you look at the return on capital at that point, it's much lower than what you started out with. And this is also a macroeconomic problem in the sense that Japan at least until recently was fairly a closed economy. Foreign goods could not come in as easily, so when Japan increased its exports, it almost automatically increased its current account surplus which then caught the attention of the USTR, the U.S. treasury department, and then the yen went higher, and then that came to haunt the Japanese companies.

Higher Yen Prevents High Rate of Return

As a result, many Japanese companies said, "This is crazy. Every time we make a right decision, at the end it turns out to be a wrong decision." So that's why there are so many Japanese companies building plants in the United States, China, Southeast Asia - because they are sick of this experience. They thought they were making the right decisions, demanding high rates of return from their investments, but at the end of the

day you don't get this because the yen goes up higher. We started from 360 yen to the dollar; it went to 80 yen to the dollar. Anyone who's gone through this experience will have to become very careful. And so now, they don't want to invest in Japan partly for that reason; they want to do it outside. But if, for example, someone said, "Okay, the yen-dollar rate would be 120 forever," then maybe those guys will start investing in Japan again, who knows. This exchange rate instability and uncertainty, I think, is a very large part of this equation.

One time Mr. Takenaka was in an OECD-sponsored meeting in Tokyo with myself and he said, "Our Japanese productivity has really never grown since 1985 because the Japanese share of exports didn't really grow after 1985." And I said, "That's the problem with academics. In 1985 the yen-dollar rate was 260; ten years later, it was 80, and the share of the exports not falling shows how productive these guys actually are. If the share actually grew with the exchange going from 240 to 80, we're in real trouble; the whole world will be in trouble. But these people did not look at the exchange rate side. They just looked at the export numbers and rates of return without looking at the exchange rate. When we have an exchange rate upheaval of that magnitude, we have to put all of these things into perspective."

Q & A

Ikenberry: Okay, questions. Please identify yourself.

Questioner: Thank you very much. First, I want to congratulate both speakers. This is one of the most stimulating events on Japan that I have attended in a long time. First, I want to make a comment on Mr. Koo's address. Mr. Koo said there is no textbook

that addresses the issues as they presented themselves in Japan. It may not be in a textbook, but the general theory, which Keynes wrote in 1936, addresses precisely this problem.

Koo: I read the whole thing again before I wrote this book and I couldn't find this mechanism. This mechanism works from the lowering of margin of efficiency of capital which is a totally different mechanism from the one I'm describing here.

Questioner: But it seems to me as you apply the recommendation of fiscal stimulus as the essential route to recovery, we need to deal with some of the major problems that that entails. We see it in the U.S. – fiscal stimulus can be achieved not only by increased spending but by tax reduction, and we see the kind of controversy as to what the nature of that operation should be. Who wins and who loses by it, the difference between the short-term stimulus effect and the long-term adverse structural effect, and those are issues that I think do have to be dealt with and they are often confused, particularly the short-term and the long-term.

My second comment has to do with the opposition in your presentation between profit maximization and debt minimization. I'm wondering whether there isn't perhaps a confusion of gross and net here. I can well conceive of a company pursuing both policies simultaneously, trying to minimize debt and maximizing profits. It can reduce debt through applying earnings to debt reduction, and attempt to maximize those earnings. So I'm a little confused by putting those two things on opposite sides.

Keynesian Economics Not Appropriate for Current Economic Situation

Koo: In general theory as I said, I was so intrigued I read the whole thing over again, but it's very shocking that Keynes actually never considered this possibility of household savings, the corporate sector not borrowing, and a zero percent interest rate. His liquidity trap argument, if you go back and read it - I have quoted all that in this book – comes from totally different reasoning. His “dig the ditches and filling them up” comes from marginal disutility of labor. I think one of the problems of the Keynesian economics is that he never said in his book or in his life that fiscal stimulus should be put in place only when the economy is in this mode – the Japan recession mode. And because it was never stated, and since Keynesian economics did do wonders in the 1930s, all the practicing economists around the world after 1945 thought Keynesian economics was almighty and they applied it in countries where most companies are looking forward instead of looking backward, thinking that it should also work in those environments and be able to fine tune the United States.

But fiscal stimulus should only be used when the private sector is heading in the opposite direction and you try to use the fiscal stimulus when the companies are looking forward. You're going to all the points you mentioned: misallocation of resources, high interest rates, and inflation. I think that's the reason why Keynesian economics lost its credibility – because it was applied in a wrong context. If Keynes wrote clearly in his general theory that this policy should only be used by a large portion of the private sector which is looking backward instead of looking forward, then the mistakes that Keynesians made in the '40s, '50s, and '60s could have been avoided because the con-

ditions were obviously not met. And then when Japan entered that world, people would have accepted the Keynesian prescriptions much more easily because then the conditions are all there. But Keynes never wrote it that way. That's why I think it was misused by the Keynesians in the '40s to the '70s and then eventually was shut down by the monetarists. Now, today, when you look at the U.S. college campuses, there are so many monetarists, so the Keynesians left. And so it's difficult for a lot of economists to shift back to this kind of world.

Profit Maximization and Debt Minimization Are Not Contradictory

Yes, profit maximization and debt minimization may not contradict each other. They need not contradict in the ordinary world, definitely not in the ordinary world. But if your company has huge balance sheet problems, you are not in the ordinary world anymore. And if your balance sheet is already close under water or is already under water but you have a very good main line of business, you can do both and you try to do both, but which one has the upper hand in a sense of priorities? I think that once you are in this kind of situation, if the situation is such that you have to choose between the two, you end up choosing reducing the debt instead of maximizing profits.

The rating agencies often mention these points as well. Some very profitable companies end up having a very poor credit rating because they are taking that much risk in trying to maximize profits and even though the company might be doing fantastic on the profit side, from the rating agency's perspective, they have to be rated lower because of the amount of risk these guys are taking. When the risk taking ability of those companies drop, they have to

watch what the rating agency says, what other analysts are saying, so they end up putting emphasis more on this side instead of maximizing profit. So in ordinary circumstances there is no reason why these should contradict each other, but when the point reaches a certain level and gets beyond that level – when your balance sheet problems get so big – I'm afraid we are not in the ordinary world and sometimes the priorities have to be changed.

Questioner: I am a bank consultant here in town and I might add an early predictor of the U.S. S and L crisis and the banking problems. You talked about, and your chart suggests this offset of the corporate sector deleveraging itself and the government taking on more debt, but if you take a look at a total non-financial sector debt in Japan, that is, household business and government debt, that ratio has been rising as a multiple GDP from 3.6 in 1993 to almost 4 times the GDP in 2001. That ratio, I might add, is roughly double what the ratio is in the U.S. So in the aggregate, we have seen an increase in the amount of domestic debt within Japan, albeit a tremendous mix in who holds it. The other thing that we see when we look at the growing deficit is the fact that a greater part of the deficit growth in Japan that is of the national government is due to declining revenues rather than increased spending. My figure suggests that national government spending as a percent of GDP has risen by almost two percentage points since 1990, whereas revenues have declined almost 5% as a percentage of GDP. In other words, when we take a look at the deficit, it is more of a revenue problem than a spending issue.

So I tie this together into this question: How much longer can Japan keep on running these huge deficits that are going to be tough to cure on the revenue side as its

domestic indebtedness builds up? To come back to Arthur Alexander's example, isn't Japan possibly a Rolls Royce with many more zeros added on, that things will get to the point, particularly if the credit risk element of interest rates started to kick in where the only way out of Japan's debt predicament is in effect a major debt haircut or, if you will, a domestic debt crisis? How much longer can Japan keep going on this tract it's on, now that you've illustrated very well that before it gets to the point where the domestic economy is just overloaded with debt, the household sector has claims on the non-household sector that just far exceed whatever the face value of these claims might be?

Koo: The deficit problem is definitely a problem. However, I think you pointed it out very correctly that it's the revenue problem more than the spending problem. And that's exactly my point. If you do nothing about this thing, it would just get worse and worse and worse.

Pro-Active Fiscal Stimulus Necessary

This is why I say we need a pro-active fiscal stimulus kept in place without removing the ladder until we overcome this Japan block, as it were. We could have done it so many times in the past, if it were not for the Ministry of Finance coming in and torpedoing the whole effort. In 1996, for example, the whole of Japan was flooded with overseas Chinese investors, asset-strippers from New York – I had to see tons of those because they thought by hooking up with Nomura they can make big deals – they all came to Japan because the rent and the real estate prices have fallen to a level that makes sense for them to repackage those assets and sell them back to the New York investors. At that time, if the fiscal stimulus was maintained, for example, for three

more years, since asset prices... that will be at the bottom, and once the bottom is reached, companies can plan ahead. My company will have to pay down debt for three more years, but after that, I can go back to a normal mode, then I can plan for the fourth year and beyond. So if Prime Minister Hashimoto did not try to cut the budget deficit in 1997 by raising taxes and cutting spending, we would have been out of this mess definitely by now, or if not, three years ago, because all these foreign investors coming in to provide the flow for the asset prices meant the only thing needed was for the Japanese to finish the job.

If they kept on buying, there's no more reason for asset prices to fall, and if so many foreign investors – even the stingy Chinese investors were coming in – that shows that return on assets was already right at the international level. Then Hashimoto came on board, cut the budget deficit, the whole economy collapsed, asset prices fell, and then all these overseas investors just ran away. They ran away because the economy was collapsing. How do you do due diligence in a world where the economy is collapsing? You cannot even have a halfway reasonable revenue forecast. As a result, what we are today is still well below the 1996 levels in almost all economic indicators.

So this shows how dangerous it is to try to reduce a budget deficit in this kind of environment. Whereas if at that point Prime Minister Hashimoto did absolutely nothing, taking a nap, making plastic model airplanes or something – that's his hobby, the only thing I have in common with him – we would be finished with Japan's problems, we'd be moving forward and then we would be repairing our budget deficit problems.

The way we have done this in the past is the worst. If you have to treat a patient with some disease, you give him the right amount of medicine, right? And then suppose you give him one dose and there was a slight improvement, you immediately stop your medicine. Then he deteriorates again. Then you give another dose, he gets a little better, and then you immediately remove the medicine. That's what the Japanese have done. Then pretty soon, people stopped responding to the medicine even though that's the only medicine available. Then you have to do tons more before you can turn the situation around. That's the danger I see and so I'd very much like to see a much more concentrated, proper treatment until, for example, 70% of the companies are finished with their balance sheets. Of course, Professor Alexander has a slightly different view, but talking to Japanese companies, their balance sheets are much cleaner. Some of the companies are now coming out and said, "We're finished with the balance sheet problems and now we're going to move forward." As more and more companies come into this category, then the government can start reducing the debt.

One last point to add is that projecting a revenue growth from where we are now at this worst point in the Japan recession is not a very good projection. When President Roosevelt started the New Deal policy, he doubled the federal expenditure. What happened to the tax receipts? They tripled in the United States. As a result, the budget deficit never really grew all that much in his New Deal days, and many people who just looked at the budget deficit of the Roosevelt days said, "Hey, maybe Roosevelt wasn't doing all that much in the fiscal stimulus if you just look at the net budget deficit." But actual spending was doubled; only the tax receipts tripled. So if you start

from a very low level of economic activity like the one in Japan today, and if you get the economy moving, my guess is that the tax receipts will grow much faster than they're often projected, based on where we are today. And I think that's the only way out for us.

Questioner: Thank you. I found your argument, Mr. Koo, very cogent once you get in the situation that you described of asset prices going down and companies not borrowing. You did not go into great detail as to why Japan found itself in that situation – whether it was an effect of accords or an effect of simply not finding the investment opportunities that Arthur was referring to. What leaves me wondering is that this phenomenon which you described is unprecedented in the history of the world, you also seem to be discovering now in the United States and in Europe and other economies, leaving me with the question whether you see the same factors at work in bringing on this Japan situation. Surely, the presence of a bear market doesn't in itself bring on a unique situation in the history of the world, but what is it that makes the situation both unique and universal at the same time?

Koo: The first question is how the bubble started. Just like the IT bubble, when you are in the bubble and you think it is a bubble, it will never be a bubble. The bubble happens because most people think it's not a bubble. Remember just a few years ago when so many people thought the IT bubble was not a bubble? That was a revolution, and the whole world had almost infinite productivity possibilities in the coming years.

Ikenberry: The only people who didn't were the Japanese.

Beginning of the Bubble

Koo: Right. And in the last '80s, if you look at all these textbooks on businesses, they all said Japanese management got everything right, the Americans got everything wrong. At that time, Japanese people usually were very cautious people, extremely cautious people, but when they were told that they did everything right and the almighty Americans did everything wrong, and all these people from Harvard Business School and everybody were constantly visiting Japan, visiting companies, asking questions, how did you do it? Well, some people got a little excited and Goldman Sachs, Morgan Stanley, they were coming in to set up operations in Tokyo. They will pay any amount of money to get prime offices. And when they started paying these unbelievable sums to get the best prime offices, the Japanese started saying, "They must know something we don't know, and maybe this real estate is really worth something." And that's how the whole thing started.

So the monetary policy that followed had something to do with it. I think a lot of the bubble could have been prevented had the Bank of Japan and the Ministry of Finance bank examiners told bankers who were financing some of these land speculations that just because land prices did not fall in the last forty years, doesn't mean they're not going to fall in the 41st year. But most of the time, when bank examiners told the bankers, "You should be more careful with real estate lending," bankers typically said, "But for forty years the land prices never fell. What kind of tract record do you want for collateral?" And once that question was posed back, most bank examiners couldn't answer. So in a sense, it was almost impossible to stop after forty years of continuous increase in land prices when people

kind of built that hope of price increase into the calculations. So in a sense that was unavoidable, but unfortunate.

You said, "How about the same factors affecting the U.S. and possibly Europe, or Asia." Well, Asia had a little bit of that, too. If you remember what's written, for example, the World Bank saying the 21st century belongs to Asia, all these wonderful pictures that were painted by some very intelligent people, and then Asians, Indonesian businessmen who never got much attention from world investment bankers – if suddenly all these top bankers from Europe and the United States were coming in and giving you money at the lowest possible interest rates, would you borrow that money to spend it? And then you get carried away, and then the bubble is created and when it bursts, when people realized that Indonesia – well, even though it has plenty of potential – was actually beginning to run a trade deficit and so forth, and people started moving away and the whole thing burst. And after that, people are left to pick up the pieces and that's the balance sheet recession.

Asian-type Recession Could Happen in the U.S.

I think it can happen here; I think it's happening here already because of the people who went crazy on the NASDAQ and so forth. The common thing is that there is a valid reason, some very good reasons for the bubble to start and it's only after the bursting of the bubble that we realize that was a bubble. That's the late '80s case in Japan too, the IT bubble in this part of the world as well. Once something like that happens, the balance sheet problems will be everywhere, and if they are widespread enough, then we might need a fiscal stimulus to deal with it. If it's a fairly isolated

event, an isolated location where just the Washington-area real estate went crazy and went down, it's not a big deal. But if it's the nationwide real estate that's going up and down – Manhattan prices down 85%, San Francisco prices down 85%, you need some government help, and that's basically all I'm saying. In the Japanese case, because companies were very cash rich when asset prices fell, they were able to withstand a lot of that shock. U.S. companies, typically during good times, give out all their money, and during the bad times, they start cutting heads off, laying off people. In an ordinary recession, a quick operation like that – get rid of the excess part and then move forward – is the right thing to do. But in this kind of environment, if it's a nationwide problem and when everybody starts cutting at the same time, you could easily fall into a vicious cycle and the whole pie gets smaller and smaller.

So I think we have to distinguish between an ordinary recession, which is fairly temporary and you just get hold of your inventory problems, adjust your employment and so forth, and you can move forward. But if it's a nationwide problem, particularly hitting the balance sheets, I think you have to take a different action.

Questioner: I think you are the best economist in Japan, so our prime minister should listen to your advice. You mentioned the very negative and pessimistic side of the Japanese economy. There is an excellent opportunity for the Japanese economy to recover – that is the Hanshin Tigers which is a Japanese baseball team. They are incredibly strong this year. The winning rate of the Hanshin Tigers is 70%. The Kansai people are a business-oriented people and they like to spend a lot of money. I think if the Hanshin Tigers continue to win, I think the

Japanese economy will recover. I want to get your opinion.

Questioner: Thank you very much for the lecture and I'm looking forward to reading your book. I have two questions. I'm curious about your opinion on President Bush's tax reform proposal, especially on dividend tax cuts. The second question is I want to ask your comment on what U.S. investors should do in case of asset deflation which is similar to the Japanese asset deflation.

Ikenberry: Anybody else with a question?

Questioner: I am with U.S.-Japan Research Services. I sense that there's a gap or discrepancy between practice and theory. I see Arthur seems to feel that gap or resolving this gap through the interpretations of the phenomenon. I'm wondering if there is any way we can resolve this conflict or discrepancy between theory, which is the conceived notion, and actually what is happening in the case of Japan, for example. For many, many years, this situation continues. If you look at the cultural differences, just a short comment is that in America, to rent a car you have to show you are in debt, which is the credit card. In Japan, if you have an asset, without a credit card, you can probably rent a car but unless you can show a history of your debt, which is fulfilling your responsibility, you may not be able to perform well in the society. I wonder whether this gap can be somehow attributed to the interpretation that Arthur seems to indicate, or data which may be still kind of debatable.

Koo: Well, I'm a Tiger's fan too. I was born in Kobe, but I think that the other one will be enough for the Japanese economy to turn around. Tax reform, dividend tax cuts and so forth – they are, I think, better than

nothing, but once you are in a balance sheet recession, suppose you have a hundred dollar gap to fill, if you do a tax cut to fill this hundred dollars, how much of a tax cut do you have to do? So it's a huge uncertainty. Maybe you have to do three hundred; maybe you have to do four hundred to make sure the hundred dollars is filled. So, from the budget deficit perspective, it's rather an inefficient way of filling it. If you reduce public spending and if you know the gap is a hundred, you do a hundred dollars and then you're finished, and you can promise the voters that you are doing it.

So for both the uncertainty purposes as well as for efficiency reasons, in a balance sheet recession, I much prefer public spending, although I know that public spending has very poor connotations. But in Japan, since I'm arguing like this, I'm often asked, "So what are you going to spend your money on?" And I'd say, "Well, that should be decided by the people, not by one economist like myself." But supposed you line up all the desirable projects and you only have 7 trillion yen worth of desirable projects and the gap is 10 trillion, what are you going to do with the remaining three? And I'd say, "Even if you have to dig ditches, you have to do the three, because this is to save the macro economy, not for micro purposes."

Culture Should Not Be Used to Explain Economic Practices

The theory and the practice part: I hate to attribute anything to cultural differences. I think economists should be able to explain with economic reasoning instead of saying "Oh, Japanese are like that and therefore they are different from us." In that sense, I was very disappointed by Chairman Greenspan's May 21st testimony when he alluded to the Japanese in so many cultural contexts

– why Japanese only buy yen denominated assets and therefore Japanese numbers do not fit the Federal Reserve studies. Did he forget that just ten years ago, Japanese were buying every office building in Los Angeles and everything else? It's shocking that someone often forgets these facts, and if their numbers do not match the model, they try to use cultural factors. I think it's very bad practice as an economist. I'm shocked that the chairman actually said something like that.

Of course, there are institutional differences that some of you alluded to. It's important to know how those institutions evolved and you have to take, for example, why it is so difficult for Japanese to write off problem loans. It's because the tax law is so much against it. You have to know that before you can understand why Japanese bankers are doing what they are doing. But once you know that, then you can see what kind of economic logic follows to get the results that we are trying to explain. I do my best as a Chinese, Japanese, American Taiwanese; I try to get rid of the cultural factors as much as possible and try to understand the real driving economic forces.

Alexander: Just one quick point. I see a tendency, not with Mr. Koo but with many analysts who work in the private sector, to over-generalize from their specific evidence before them. They'll see their clients, the companies they're working with, the assets that are flowing across their desks, to see that some companies are doing certain things and to generalize from that that the whole economy is moving in that direction. I don't know how many times I've seen the statement that the Japanese investment in the rest of the world has dried up because some broker has seen some account of his stock when Japan had continued to run a trade or current account surplus of 160

billion or 200 billion or whatever a year, which means that there are huge flows out. And it was actually Adam Smith who noted this – that businessmen tend to generalize about things that they know very well to things that they know virtually nothing about when they talk about the macro economy. So when we think about practice and theory, what we tend to see in the

business pages is very narrow views of very specific kinds of behavior over-generalized to the economy. And I think that is where we do find a gap.

Ikenberry: Well, on that cautionary note, would you join me in thanking our two panelists for a terrific session. Thank you very much. (End)

About the Panelists

Main Speaker

Mr. Richard C. Koo is Chief Economist of the Nomura Research Institute, the research arm of Nomura Securities, Tokyo. Before joining Nomura in 1984, Mr. Koo, a U.S. citizen, was an economist with the Federal Reserve Bank of New York (1981-84). In addition to conducting financial market research, he has been appointed by several Japanese prime ministers to a number of key committee positions to study the future designs for the Japanese economy. Mr. Koo has also spearheaded the national debate on how best to save Japan's ailing banking system through his frequent TV and parliamentary appearances. Since 1998, he has been a visiting professor at Waseda University in Tokyo. In addition to being one of the first non-Japanese to participate in the making of Japan's 5-year economic plan, he is also the only non-Japanese member of the Defense Strategy Conference of the Japan Defense Agency. In financial circles, Mr. Koo was ranked 1st among over 100 economists covering Japan in the *Nikkei* Financial Ranking for 1995, 1996 and 1997, and by the *Institutional Investor Magazine* for 1998. He was also ranked 1st by *Nikkei Newsletter on Bond and Money* for 1998, 1999, and 2000. Mr. Koo holds a B.A. in Political Science and Economics from the University of California at Berkeley, an M.A. in Economics from the Johns Hopkins University, and was a Doctoral Fellow of the Board of Governors of the Federal Reserve System. Author of four books on the Japanese economy, he writes regularly for various publications, including the *Los Angeles Times*.

Discussant

Dr. Arthur Alexander is a Visiting Professor at Georgetown University. Previously he was president of the Japan Economic Institute, where he conducted research on the Japanese economy, industry, technology and innovation. He was also a member of the research staff of the Rand Corporation in Santa Monica, CA and was the associate head of its economics department. He has also taught at UCLA, George Mason University and SAIS. Dr. Alexander was a member of the U.S. Army Science Board for five years, chairing studies on policy analysis, weapons acquisition, and labor requirements. In 2001, he received an award from the Japanese Foreign Ministry for "distinguished service" in promoting understanding of Japan. Dr. Alexander received a Ph.D. from the Johns Hopkins University, a M.Sc. from the London School of Economics and a B.S. from MIT. He has published a book on the Japanese economy, *In the Shadow of the Miracle* (2002).

Moderator

Dr. G. John Ikenberry is the Peter F. Krogh Professor of Geopolitics and Global Justice at Georgetown University. In addition, he has been a Senior Associate at the Carnegie Endowment for International Peace and a Fellow at the Woodrow Wilson Center for International Scholars. He earned his Ph.D. at the University of Chicago. Dr. Ikenberry is the author of numerous publications, including, *State Power and World Markets: The International Political Economy* (2002), *After Victory: Institutions, Strategic Restraint and the Rebuilding of Order after Major Wars* (2000), and *Reasons of State: Oil Politics and the Capacities of American Government* (1988).