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Tape one

US Session 1

Fukao (Moderator): Good morning. Since already we are five past nine so I would like to start the morning session. Today, we have the US session with two speakers. First, Barry Bosworth will make a presentation on the budget crisis. Today we start a bit earlier than yesterday, so Barry Bosworth will have, say 20 to 30 minutes, to make a presentation.

Barry Bosworth: Thank you. What I wanted to do today was talk about the US budget deficit. This title actually comes from a famous American baseball coach who asked about some event that occurred in a baseball game years ago. And it reminded him of the past and he says "it's just déjà vu all over again."

And that's really the theme I wanted to take for the US budget. That what we've been through is some really dramatic swings in American fiscal policy starting in the early 1980s. And what I want to do is actually divide this up into sort of three periods that I'd like to talk about a little. From 1980 to 1995 was this period where the United States just had these huge budget deficits year after year, nothing changed. We spent all our time talking about them, it completely dominated American political discussion, but nothing ever happened. And then suddenly, in 1995 to 2000, the budget deficits just vanished and the US went to a forecast of what was projected to be really large budget surpluses. Well, back in the 1980s the phrase used for that by a man who worked for Ronald Reagan as his budget director was that you were going to see budget deficits as far as the eye could see. Then in the Clinton years, the one that got a surplus a budget director for President Clinton said "we're going to have budget surpluses as far as the eye can see." And 2 years after he said that, the budget deficits had all vanished. And we're back in deficits. And today we're back in budget deficits as far as the eye can see. And it does look a lot like a replay of the 1980s and what I'd like to go through a little bit in looking at this is what's happened, and is what the situation today, simply a replay of the 1980s. If you're an optimist you can say, well, then the 1990s will repeat themselves all over again too and it will just go away one day and we just shouldn't worry about it too much. I guess that was some advice that Barry Eichengreen got, don't worry too much.

This is a little picture that shows you US budget deficits. One of the points I'd like to make, keep in mind, the United States has always had budget deficits. The last time, before the late 1990s that we ever had a surplus was back in the early 1960s. But what used to typify the United States budget deficits, a lot of words and rhetoric about them, but they were always small. And then, you can see starting in the early 1980s, the United States went through a period of not just budget deficits, but large budget deficits. The outline of the paper I'd like to do, is broken down into three things. One is to go back over this history, a little bit of the budget history, quickly if I can. But I think there are some lessons to learn from US budget experience. Breaking out these three periods of fiscal stalemate in the 80s, consolidation of the budget situation after 1995, and the reemergence of budget deficits in 2000.

The second one that I think is more interesting to people, but I think the past bears something on the future, is what's the budget outlook for the United States, distinguishing between the short-term situation over about the next decade and then if you go beyond that what the situation looks like, which brings us into the issue of population aging, which is a little bit different in how it will impact on the US, compared to other countries.

Then I'd like to conclude and say a few things about what we could do. Some people see the problem of budget deficits and the difficulty of controlling them as a problem of process. And somehow if you could just reform the budget process you'd make these conflicts go away. And I wanted to outline some of the ideas that they have on that particular front. Here I think you can really date the revolution of American fiscal policy with the election of Ronald Reagan in 1980. And the reason is, I think in political processes, various people play sort of institutional roles. And in the US for a long time, the institutional role of the Republican party was to oppose all new government programs. And so the Democrats were free to be the optimists, the ones who appeal to the public and they would advocate new government expenditure programs and then the Republicans' job was to come along and say it's too expensive we can't afford it. And they would usually be modestly successful, the Democrats would get their program but the Republicans would scale it back a little bit, maybe even pay for it with tax increases and the outcome would be a small budget deficit. But it did leave the Republican Party definitely in the minority in the United States. In the re-election of Ronald Reagan I think the whole approach fundamentally changed. Instead of being naysayers, the Republicans decided to be activist and propose programs and mainly what they proposed was "you deserve a tax-cut." And Ronald Reagan's whole pitch was, just to advocate tax reductions, don't worry about the budget deficit, you'll create a budget deficit, that's the Democrats' problem. The Democrats got put into the old position of the Republican Party, they became the naysayers: "we can't afford this tax-cut". They fought to kind of scale them back a little bit, the result was budget deficits. Republicans came to see that the budget deficit is a useful political tool to reduce the size or at least limit the growth in government. And so, budget deficits from that perspective are not bad, they're good because they helped as a tool to hold down what would otherwise be inevitable growth in public expenditures.

And the second key feature of that one was that we went to index the US tax system for inflation, meaning that when you had these 10 percent inflation rates, which emerged when I was in the government, and was supposedly responsible for inflation, that pushed people into higher tax brackets, since we have a progressive tax system. And the elasticity of tax revenue with respect to income in the United States in those days was about 1.5. So if you just sat there and did nothing, if there was a stalemate in the Congress, the result of stalemate was an effective tax increase. And stalemate meant you would push the budget back towards surplus. In the 1980s, we indexed the tax system for inflation, we still have some bracket creep due to real income growth, but the inflation effects got away. And that means now inaction and stalemate doesn't really do much to the budget deficits, it shrinks a little bit over time, but it would take a long time. And so I think that it's those two significant changes in the Reagan administration that dramatically that altered the whole politics of budget negotiations in the United States.

Another thing that I just want to spend a couple of minutes about is, I think we can learn from two episodes where they did try to deal with the budget deficits, 1990 and 1993: one in the Clinton administration and the other one in the first Bush administration. And why they didn't work, to learn some lessons going forward to the future about how seriously to take these projections of budget deficits. This here is just the public debt in the United States. I knocked off the first part. After World War II, we had a public debt to GDP ratio well over 100 percent, much higher than what Japan has today. We ran, as I said, budget deficits but they were so small that debt as a share of GDP steadily came down. And you can see it's falling even against that backdrop of deficits up until the 1980s. But then the deficits became so large that the public debt grew and it grew all the way up to the mid-1980s. You see this leveling out and then a sharp decline in the public debt up to 2000. And now we're back into an episode of rising public debt again.

This is another picture sort of showing this thing about splitting out outlays and revenues. There I think you can see sort of the effect of the Ronald Reagan administration on both sides of the budget. In the early 1980s there was a big increase in US defense spending, to try to bring more pressure on the Soviet Union. Some people say that had a lot to do with the collapse of the Soviet Union, other people say it had nothing to do with the collapse of the Soviet Union. But certainly Reagan and his supporters believed that it did. And second you see this cut in the revenues the sharp decline there in the 1980 to 1985, but notice the period before that, how the inflation of the late 1970s was actually pushing the tax system up into higher effective tax brackets. So a lot of what Reagan really did on the revenue side was just offsetting some previous growth.

Then, what I want to make use of, is recently the Congressional Budget Office has released a whole lot of historical data and put it together in a very nice form to sort of work with. And that is that since the early 1980s, they have been making budget projections every single year. Originally, they went out for five years. They made these projections, they're not forecasts, they're projections of the budget outlook, if the economy grew at sort of the rate of growth of potential output and they do it on the basis of current law. So if you don't have any legislative action, what would happen to US expenditures, and if you don't have any legislative action, what would happen to revenues. And they make those projections and then every year they update their forecasts, or their projections from the prior year distinguishing three events. One is there can be some new legislation that took place since the prior year, so you get legislative changes in the fiscal outlook. Economic, they mean macroeconomic. To what extent has the situation changed because they made mistakes in the projection of GDP and taxable income, it wasn't what they expected it to be. They call those economic changes.

And then technical is things that gave rise to changes in the effective tax rates. So it's not just the fact that GDP grew faster, that would be economic, but the taxes grew faster than GDP. The biggest sort of technical change you get on the revenues side is capital gains. Nobody can predict the stock market. In the US, we tax capital gains if they're realized. So if the stock market goes up, the effective tax rate goes up. And that creates the technical changes. The second one is in program cost, we have entitlement programs, that Congress does not set the budget every year, it just sets the rules for access to the program. If healthcare costs go up rapidly, faster than they anticipated, then expenditures rise because it was just wrong about what they thought the cost of healthcare would be. Those are all called technical changes.

So, this means that you can divide the budget up and see when it changes over time, why did it change? Did it have anything at all to do with actions of the politicians, so to speak, any legislative changes, or is it just what I would label "accidents." Favorable economic outcomes, or unforeseen changes in the stock market for example. Here's an example you see of this. This is a five year projection for the 1995 budget. So this is a projection of the budget deficit in a specific year, 1995, made starting in 1990. And in 1990 you can see, that would be the first Bush administration. There was an agreement, despite the fact that the president had said "read my lips, no new taxes" he agreed to new taxes. There's a fairly substantial increase in the taxes, about 160 billion dollars there. But note that what happened to them is that they never anticipated the 1990- 91 recession that occurred in the United States. So for unexpected reasons, revenues fell far short of what they anticipated. So the economic changes which are negative, and the technical changes which are negative, completely wiped out the effects of the tax reduction. So they had started with a budget deficit which was originally forecast at the end of '89, by 1995 they thought it would be 110 billion. And they got all done with this, and 2 years later they got a forecast of 194 billion, it actually got worse. This creates the impression that nothing was done during that period, but the legislators did do something it just got wiped out by other changes.

Then in 1992-93, Clinton administration comes into office, they agree with the Congress to have a second round of tightening up of the budget, particularly tax increases. Actually nowhere near as big as what was done under the Bush administration, only 54 billion annual effect for 1995, but notice that the economic and technical changes now tended to augment that and the budget deficit starts to decline. And that's what I mean that you can use this data from CBO to sort of distinguish where do these changes in the budget situation come from? And this particular period, fairly large positive changes on the budget were taken by legislative actions to cut the size of the deficit, but on balance, most of them got wiped out by economic changes and so very little happened.

Then in 1995 and 2000 we have a big change. There's no more tax increases. So the point I want to make, this is all going to be luck and not policy. As you'll see, there's no change in any legislative actions, it's all due to unforeseen growth in the US economy and technical effects of the stock market boom that drove taxpayers into higher tax brackets than they anticipated. The accelerated growth shows up in three areas. One, a productivity resurgence in the United States, so we get higher trend economic growth of about a half of a percentage point a year. Second, equally surprising to me and I think to most economists who got used to saying full employment in the United States was 6 to 7 percent unemployment, anything lower than that would just touch off inflation. The US was able to push the unemployment level down to 4 percent by the end of this period. Those gains and utilization give rise to hugely higher levels of incomes and tax payments than were previously anticipated. And then the third one is the stock market. Not just that you had bigger capital gains, but the whole boom in the stock market lead corporations to start giving out bonuses and stock options to their executives. And both of those have the effect, for any given level of income, they raise the amount of income that individuals report for tax purposes, they paid more taxes. So all three of those effects: capital gains, bonus payments were bigger than in the historical past, and the stock options all contributed to a rise in tax revenue.

One way to see this: this is a budget projection. In 1995, they started making them out 10 years into the future to give the Congress some guidance as to where things were going to go. As I said earlier, in March of 1995, the one down there at the bottom, that's when they are telling everybody "budget deficits as far as the eye can see." By the year 2005, we thought that the budget deficit would be 500 billion dollars a year. Just 2 years later, January 1998, we're now forecasting that the budget is going to have small surpluses every year for that ten year period out into the future. By 2001, we're forecasting budget surpluses of half a trillion dollars a year as far as the eye can see. So in those periods of time, our projection for a given year moved by one trillion dollars per year of revenues. Just a tremendous revision in the budget outlook. And some say, it just reflects the enormous success of the Clinton administration and the Congress in sitting down and dealing with the budget deficit.

The last one that I'll talk about in a minute, but note that by August of 2005, we're right back where we started from. It turns out that if you had just left everything alone, they were amazingly good at the Congressional Budget Office in forecasting the budget deficit ten years into the future. They got it almost exactly right, because the actual one turned out to be a little under 400 billion dollars. But in the meantime, they'd gone all over the map. Here you can see where this all come from. Between 1995 and 2000 the budget went from an initial 405 should have been negative, then the 433 positive revised balance. But see the legislative actions during that period, there was no major tax increase, there was a couple of cuts in expenditure programs below what they anticipated, came to 40 billion dollars a year. Doesn't get you very far. The changed economic outlook, faster economic growth than we anticipated, lower unemployment rate than we anticipated was worth 400 billion dollars a year of unexpected government revenues. And another 400 billion dollars a year from the stock market boom. What did I do? There. So you can see the economic and technical revisions during that period that just pushed the government up into higher revenue levels.

Then we get to the next period of 2000. They start it, they think they have a budget surplus of 400 billion dollars a year. Going forward they think those budget surpluses are permanent and so there's a huge tax reduction: 540 some billion dollars. And that's the one that gives rise largely to the disappearance of the budget surplus, over on the right hand side, the 213, that's the stock market crash. When the stock market crashed, then the effective tax rate went back down again. And so you see it's just the exact reverse of the prior period only this time most of the deterioration of the budget is due to legislative actions by the Congress. And so this whole period of re-emergent budget deficits in the US, I think was driven by two big things. One is that the Congress believed, the President certainly believed, that you were going to face budget surpluses as far as the eye could see and they could afford tax reductions.

A second, more smaller one in that was Alan Greenspan played a particularly important role during this period which he doesn't like to talk about too much anymore, was that he raised the fear that the US was going to run out of public debt. If we continue on this path, the big budget surpluses, there's not going to be any public debt left. Some economists said well then, how are you going to conduct monetary policy, we don't have any bonds to buy and sell. That's not really a serious problem. But Greenspan was worried that if you went into budget surplus, the government would start repurchasing all the debt, they'd run out of debt to repurchase so then they would start buying private securities. And in fact, there was during the Clinton administration advocates for the retirement program that they should accumulate a big trust fund surplus. Greenspan was highly opposed to that, so he spoke up and said this is a very dangerous situation.

That gave a lot of people in the Congress confidence that this forecast of permanent budget surpluses was correct and so they went ahead and supported the President's request for a tax reduction. Then right after they did it, the stock market crashed and the whole situation changed in the US. I think one part of this that's not attracting enough attention though, that people notice, and I admit it's an accident, it was not the intention of the Bush administration, but this is probably the best designed fiscal policy in history from a stabilization perspective. Just as the US economy collapsed, there was a great big tax reduction and an action of fiscal stimulus. I think because these were so closely timed, people don't realize how severe this recession really was. It was a huge collapse of business and investment in the US because of the end of the high tech bubble. And monetary policy, remember, kind of resembles that of Japan during the period. We drove our interest rates also, almost to zero and there's no evidence that the monetary policy was having any stimulative affect on the economy because it should have worked through business investment. Business investment never recovered. Instead what was held up during this period was consumer spending because of that big tax reduction. And although it was an accident, it turns out to be perfect fiscal policy from that perspective.

In addition, if you thought you were going to do stabilization policy from the fiscal side, you'd want to make the tax cuts temporary. And if you think about it, the US tax cuts were temporary, kind of long temporary, but they were supposed to expire after ten years right? So another interpretation, unintended mainly, is that the US and the world economy has done very well in recent years precisely because of what you might call a mistake but a very fortunate mistake of American fiscal policy. I think looking back if you had tried to maintain a balanced budget or surpluses you would have dragged the economy down into a much, much more severe recession in the US and if that had happened, I think the rest of the world would have followed us down. So this tax policy, I think in retrospect, looks quite positive from a purely economic point of view, if they would just now follow through with the rules and reverse it.

You can see here what we've been talking about and what they did. Note in the period from 1995 to 2000 there was a big reduction in outlays as a share of GDP. In 2001 that comes to an end and that starts going back up again, that's the Iraq war. When that broke up, that's the change on the expenditure side. But notice that huge change in revenues as a share of GDP. During the boom of the stock market from 1995 to 2000 there was never a change in US tax law. It stayed exactly the same. But look at the magnitude of the increase in revenues as a share of GDP going from something a little over 17 percent up to 21 percent of GDP. And then just in a two year period it goes down to just 16 percent of GDP. It just collapses just very, very fast during that period. And the fact that afterwards in the projected period it's going back up, this is the thing when the tax cuts are supposed to expire and if they do, it will climb back up again.

The short term outlook I think on the fiscal outlook then for the US is actually just completely dominated by this issue. What are you going to do about the tax cuts? If the tax cuts are in fact not extended and they expire the way they're supposed to the US will gradually but importantly, rise right back up to a balanced budget again. The whole problem will take care of itself. You wouldn't want to do it much faster than we're doing it because the world economy is not that strong. So I think you want a gradual adjustment in fiscal policy. If you just leave things alone, the Congress can't agree to do anything like the old days. If that was true, paralysis in government will give rise to a great fiscal policy in the part of the US over the next five years.

I think the problem is that almost everybody discounts the probability that this will ever occur. Until a recent drop in the President's popularity, people just assumed that the president would just win the political argument to extend the tax cuts. I think now, it really is an open question, what will happen with the tax cuts, whether they'll be extended or not I just don't think we really know.

The other one is that there is just no pressure to do anything about the budget deficit unlike say, the situation 10 or 15 years ago. One is on the foreign side, these deficits have been extraordinarily easy to finance. There's been no problem from them. I think Barry Eichengreen will talk about that more later. But there's certainly no pressure on American interest rates, there's no crowding out of anyone else's investment it's very much from an economic point of view, what's the problem? So there's really not much pressure from that perspective to do something and politically, I think these economic situations show up politically. There's no political pressure in the US to deal with the budget problems, it's just not a big subject of debate right now. If you had to vote right now almost as many Democrats would vote to extend the tax reduction as Republicans do. So it's not even really a conflict between the two parties in the short run. But I think, as we go forward, the president's power stays weak, it's very hard to predict what we'll do there, but I think in the short run, it's just a very simple thing about US fiscal policy, will the tax cuts be extended, if they are we're locked into long run permanent tax reductions for some time to come.

A second issue which comes up that we have in the US is an alternative minimum tax. The alternative minimum tax was designed because lots of people could avoid the income tax. Particularly, by generating a lot of tax deductions. So the alternative minimum tax eliminates most tax deductions in the US. In particular, it eliminates things like you can deduct state and local taxes from your federal taxes when you measure your taxable income. You can't do that under the alternative minimum tax. It is also not indexed for inflation. So just the passage of time, the alternative minimum tax becomes more and more important. It really only effects people who itemize their deductions which means it affects the top half of the income distribution. It doesn't affect the very rich very much because deductions aren't very important to them. That's not the way they keep their tax bills down.

If you extend the Bush tax reductions go on forward, then it turns out that in about 2 more years, the most important income tax in the US will be the alternative minimum tax. The other tax won't be as significant anymore. We'll switch from an income tax system based on the old indexed system to a tax system based on un-indexed. So if you extend the Bush tax reductions, a lot of middle income people suddenly start paying a lot of taxes under this one. Who does it affect? People who have lots of deductions. Basically, homeowners in blue states, as they call them. States that have high levels of public expenditures and therefore lots of tax reductions. If you try to fix this after the Bush tax reductions have been extended, it gets extremely expensive. If they try to do both, they will end up with budget deficits of about 500 billion dollars a year. If you don't extend the Bush reductions, then all you got to do is stop this tax to correct the index effects of it, that's not very expensive. Because since most people are on the other tax system, changing this tax system doesn't cost much. So it's easy to do something about it but not once they extend the taxes.

I think peculiarly, if they extend the Bush tax cut, they've almost set themselves up for a second round of tax reductions, that they'll be forced to do for political reasons. And that will mean very large budget deficits extended out over the future. If you take these sequentially, it seems to me the overwhelmingly important political issue is are you going to vote to extend those tax cuts to make them permanent. If that happens, the US fiscal situation will unravel very quickly. And it will be very difficult to find anybody to deal with it until there is some crisis of financing. And I think that's where the current account issue comes in politically. As long as we can keep financing these big budget deficits, it's easier to let them run than it is to do something about them. And so, I regard this by far as the most significant decision the US will make in the next couple of years.

The long run outlook is the same thing that everybody else has, it exists here in Japan as well. There are rising costs of the entitlement programs in the US, due to population aging because most of our entitlement programs are aimed at the aged. We have two big ones, the public pension program and Medicare. Unlike most other countries, we do not have national health insurance except for old people. They got national health insurance. So as they age, the public medical care is a very large problem in the US. It has a big effect on the public program. So I agree that this is a big issue for the US. Keep in mind, we have less population aging than other countries, our pension program starts out to be pretty cheap to begin with. So the pension's not a big deal despite the fact that everyone wants to talk about pension reform, it's kind of a minor cost item. The big deal is medical care and nobody wants to talk about medical care and medical care reform. I think for a very simple reason. When we talk about pension reform it usually runs along the line "give me my money back and I'll invest it myself." And that sounds interesting and fun to a lot of people particularly younger generations could manage their own retirement account. Medical care, the only alternative people have is some kind of rationing of health care and that doesn't sound very attractive politically. And so it's just not discussed much in the US.

Here is a presentation first of the short run, here's the situation, what I did was put in 2005 where we are now. We got a budget deficit that's about 2.7 percent of the GDP and you can project it out for about ten years. If the tax cuts expire, the budget deficit would come down to about 50 billion dollars or only about three tenths of a percent of GDP effectively a balanced budget for all intents and purposes. If, on the other hand, the tax reductions are extended on forward, that will push the budget deficit up by about 430 billion dollars in 2015. And then as I mentioned, the alternative minimum tax is kind of expensive, on top of that is another 140 billion dollars a year. If you don't do the first, the second one is only about 30 billion. Because if everybody is over on the income tax then changing the alternative minimum tax doesn't cost much.

Discretionary spending adjustments. Some people don't believe that you can stick to these strict expenditure targets that they now have and therefore they argue, that expenditures will inevitably be driven up to be something like a constant share of GDP. If that happens, it would add another 120 billion dollars. That's how you get unified budget deficits forecast by a lot of people outside the government at basically 750 billion dollars a year or about 4 percent of GDP. That does sound like déjà vu, right back where we were in the 1980s, if anything, a little worse. This is simply a presentation under current law, what are we saying would happen to government expenditures as a share of GDP. Note down at the bottom, yes, social security, that's our public pension program, will rise in cost but not very much. If that's all there was to it, it would not be a big issue.

But look at the Medicare program. The Medicare program is the basic healthcare program for the elderly. It's expected to grow and become bigger than the retirement program by the end of this 50 year period. The one on top is Medicaid. Medicaid is supposed to be a program for the poor but half the money for the poor goes to the elderly because that's how we pay for nursing homes. You wait until your parents are destitute, then you put them in a nursing home and the government pays for it. And so as the population truly ages and you get some large numbers of very, very old people, then the number of people in nursing homes starts to go up rapidly. That's paid for under the Medicaid program. The other programs just have these unrestricted rules, but they're assumed to shrink a little bit as a share of GDP. You can see that the problem of the aged, so to speak, Medicare, Medicaid and Social Security just dominates the long term situation for the US. But if it wasn't for Medicare, the US does not have a serious problem. So it's really more correct to say, not so much we have a aged problem, but we have a medical care problem in the US. How are we going to bring the system for medical care under control?

Then in trying to do this, I thought I would just finish with a couple of things people have discussed ways in the past they thought they could solve the problem by setting various procedural limits on how Congress goes about doing the budget. One of them was called Graham-Rudman-Hollings. Back in the 1980s, they tried to set a target for the budget deficit and say if you exceeded it, they'd cut spending automatically. As best as you can tell, it had absolutely no effect, they avoided the whole intent of the program when push came to shove. They never cut a thing.

Then they came back with another one called the budget enforcement act where they put what we still have to some degree, these expenditure caps on, that grew in line with inflation and population growth for the discretionary programs. And you couldn't change the entitlement programs or taxes. You couldn't propose a change unless you could come up with some way to pay for it. So if you wanted a tax cut, you had to cut the entitlement programs to pay for it. If you wanted an entitlement program increase, you had to increase taxes to pay for it. There's some evidence that that had some modest effect in stopping new programs. So during the Clinton administration you get two terms of a Democratic president, not a single new social program proposed during the entire 8 year period. A lot of it is because of this budget constraint, people argue as an effect. People still argue though I think, in any case, it's expired. This mechanism does not exist anymore.

When the Republicans won the Congress in 2000 and they wanted to have tax reductions, they got rid of this because they had to get rid of this because they had to get rid of PAYGO in order to be able to enact the tax reductions. Another one I think, that I just added in here, that I think the US might think about, because it's been so successful here in Japan. That is to have periodic review of these programs. From an outsider's perspective to find out the extent to which Japan has cut back on the public pension program on these five year reviews where it was sort of determined "you can't afford it." And you scaled it back. To the point where I would argue that Japan, in one respect, is very much like the US. There's really no pension problem in Japan anymore. There's a medical care problem, but there's not much of a pension problem anymore. It's gone from being a very expensive pension system to a fairly cheap pension system in the course of about ten years. Maybe the US should think of something like that, something that forces budgetary review every ten years. That you have to look at these programs again, in light of changing circumstances. I don't know if it would help us as much. We don't have the same ability to act decisively on budget issues because of the way our legislative system is set up. But it might be helpful.

A final one that is now being argued about and discussed a lot in the US, is people want to go to accrual accounting, sometimes called generational accounting. But the idea is there, politicians don't understand that the current programs are giving rise to lots of commitments to make program payments for the future, say for a pension program. You work today, you pay taxes today, but you have to provide benefits in the future. And so the emphasis is on trying to come up with some present value of future benefits, less the present value of the future contributions that would be paid. The ones that I'm going to show you are done for an infinite horizon. You have to do this stuff forever out into the future because otherwise if you chop it off at any point in time, you've got the benefits but people in that time period that pay taxes to cover the benefits of earlier generations but they don't receive anything afterwards. So it's always a biased view. You leave out those future commitments. So you if you extend it all the way out to infinity, you get some sort of measure. It's just some crude method of taking account of them.

The important thing I want to show you in doing this is number one, this is the presentation for social security system, the retirement system. One of things you always remember, you get huge numbers because if you take the present discounted value to infinity, these things are always very big. But so is this GDP. So instead focusing on the percent of GDP. And down there at the very bottom, the unfunded liability of this system of benefit payments in the future that's not covered by the existing tax system, is about 1 percent of GDP. That's what I meant when I said it's not really a very big problem. It's a problem but it's a manageable problem. But the other interesting thing about it is, look at the future costs less benefits of current and past participants, 13 trillion or 1.5 percent of GDP. And then future participants, the number is negative. That means that for our children, so to speak, going forward, the tax rate they're paying is enough to pay for their pension. If the money that they paid into taxes were put into an account and kept for them, it's enough to cover their pension cost.

The problem is, they put their taxes into the account and then it has to go back out to pay for higher benefits. That problem arose with our decision in the US to give a full retirement account to elderly people who had never paid into the system. Basically people who aged after World War II. It maybe wasn't a good decision. We gave a full pension benefit to our grandparents and our parents even though they didn't work under the system for their whole work life. But the money is gone. There's nothing you can do about it. This is what you'd call old debt. All we're arguing about with the social security is, we made this decision, we spent the money, now who's going to pay for it? The current generation or the future generations? That's just the debate over the distributional consequences of it. I don't think it really matters very much. Because going forward, future participants in this system are going to pay a tax under current law that is enough to cover the cost of their benefits. So there's not really a big problem there.

That's not true of the Medicare system. First of all, the Medicare system is much newer. And therefore, there's just not quite as much money paid out in the past. Although the current generation that are going forward, that are still alive, it's true, they pay quite a bit. But look down there, future costs of future participants, 4 percent of GDP. The problem with the Medicare program is that the future costs are extraordinarily high and nobody, current generation or future generations is paying a tax rate high enough to cover the cost of it. The difference with Medicare is the cost is really enormous, it's 7 percent of GDP, by any measure, that's a big tax increase. And its cost in the future, its costs you can still do something about, you haven't spent the money yet, the pension, you spent the money, Medicare is in the future.

Part A and B and D is just interesting. Part A and B. Part A is the physician payments for elderly people, part B pays the hospital payments for elderly people. They're pretty big, but just a year ago in the midst of this crisis that we have no money to pay for the retirement programs, the Congress and the President created a new one. Part D. Part D is a drug benefit that they just started. It's just being introduced this month in the US for elderly people. And if you look at that, it's got a present discounted value deficit, 18 trillion dollars, which is twice the size of the entire pension program. And it's that sense that the medical care program they created a brand new program twice as big, in terms of its future fiscal consequences, as the existing retirement program. So I think in the long run as you go forward, what you learn from this, is the US budget program is simply one of problems, is simply one of medical care.

The lessons I walk away with from this review are, first, there's almost no pressure in the US to resolve this budget situation. There's no pressure being brought on us from outsiders; I see no evidence of rising interest rate premiums or anything like that being charged to Americans. Second though to remember, the budget projections are extremely uncertain. That's what you walk away from this last decade, this wild variation, of how hard it is to make reasonable projections of the budget because of unforeseen economic events. Long run outlook is dependent on reform of the medical care, short run outlook is largely one of what are we going to do about the current taxes and whether or not we're going to extend the current tax reductions. Thank you.

Fukao: Thank you very much. So, next we'd like to have two comments. First, by Anwar Nasution.

Nasution: Thank you Mr. Chairman. Well again, I learned a lot from this paper to understand what's going on with the prospect of the US budget. The paper basically said, that over medium and long term the US faces a large, growing and unsustainable structural budget deficit.

The steady rise in the budget deficit and the persistent decline in the personal savings have reduced national savings in recent years. The economy has continued to grow because the US was able to invest more than it saved by borrowing overseas, as indicated by an ever larger current account deficit that grew from 3 percent of GDP, to over 6 percent at present. The persistent US account deficit in recent years increases the nation's indebtedness to other countries. A portion of the income generated by foreign-owned assets in the US must be paid to foreign lenders. The interest burden of the public debt was reduced as the Fed funds rate was cut 12 times from a peak of 6.5 percent in early 2002.

Dr. Bosworth used a CBO, long term simulation model, and the model indicates that the fiscal structure problem is too big to be solved by economic growth alone. And proposes that reducing future fiscal burden also requires substantial changes to existing federal spending and tax policies, including measures to increase private savings and investment. The paper is in favor of raising revenues among others, by making the recent tax reduction temporary expiring as scheduled at the end of this decade. Bosworth blames that costly military campaigns in Afghanistan and Iraq is the main source in the increase of government revenue in recent years.

The paper also provides two reasons why the fiscal burden due to demographic trends and rising health care costs will be relatively less a fear in the US as compared to other major industrialized countries. The first reason is the US population will not be declining as it addresses the problem of an aging population because the US birthrate has remained near a replacement level. The second reason is the US public pension program is less costly and relies more on alternative sources of income for the elderly than in most other industrial countries. The government-provided medical care in the US, for example, is only available to the aged and through a limited program for the poor as compared to more generous programs in other developed countries. Those who are not covered by the national healthcare program in the US are covered by a variety of private systems.

Well as a layman to US public sector, I have two questions to Dr. Bosworth's work. The first question is related to the population and workforce in the US and the second one is related to the soaring military expenditure. On the first question, what are the impacts of the tightened immigration policies after the events of September 11th 2001 on the population and workforce in the US? Liberal immigration policies prior that event, including worker and student visa programs, had drawn immigrants from all over the world to the US. As we are all aware, that almost the US used to be the most liberal country on earth coupled with American global preeminence in higher education and science. This inflow had addressed the US need for workers at productive ages with technical skills. Not so many countries can do like the US. But after September 11th, the authorities tightened domestic homeland security, not only for border and transportation security, now you have to open your shoes when you enter US shore and implemented immigration policies which reduced the flexibility of the labor force.

On the second question, as the military campaign in Afghanistan and Iraq are public goods at least for the oil-rich neighboring countries. Can they share the burden of the costs as was the case during the first Gulf War in 1991? Thank you

Fukao: Thank you for very clear comments. Tsutomu Watanabe, please.

Watanabe: Well, I enjoyed this paper very much. And I often think about Japanese debts, public debt situation but this time I learned very much about the US situation and the paper was very informative to me. My comment focuses on two specific points. The first one is the reliability of the prediction about the budget surplus or deficit. The second one is about the new role of fiscal policy in a very low inflation environment. Dr. Bosworth says in his footnote on page 9, there has been some resurgence of interest more recently as concerns the demand about the efficacy of monetary policy when interest rates approach the zero limit. And I will talk about it a little bit in the second comment.

Also, I think most of the discussion in the paper was based on the new database provided by CBO. And I also get the same data set from the website to know about the reliability of the prediction. And this is a result I got from that kind of exercise. And here I have primary surplus, this is the actual primary surplus in the US starting in 1988 until 2004. And here these bars represent actual minus projections which was made in year T minus 6. So six years earlier the CBO made a projection about primary surplus in the future and this is the difference between the actual and predicted value. OK? So, these bars can be interpreted as prediction error made by the CBO and of course we expect that these prediction errors should be random but you can easily see that these are not random errors and it is very easy to see that there is a systematic relationship between the prediction errors and actual fluctuation of the primary surplus. OK?

If you look at it very closely, here you have a bottom of actual primary surplus and again you have a very large negative prediction error which means that too high projection relative to actual. OK? The important thing is the timing of the turning point coinciding with each other. And the same thing you can see, here we have the peak of actual primary surplus and again here you have the peak of prediction error. So these two things are very closely related with each other and this suggests that prediction errors are not, you know, rational or the CBO made a forecast based on rational expectations rather than, probably rather than adaptive expectations or kind of static expectation. So I think this is very nice data set and tells a lot about CBO expectation or probably many other people did the same expectation so we should not blame CBO but we learn something about this feature of prediction errors.

And because the prediction seems to be based on adaptive expectation, we can learn something about the fluctuation, I'm sorry, something about the future primary surplus, just looking at how it has been revised very recently. And so, this is a US figures projected by the CBO and you can see that this is the projection year and this is projection for 2005 and you can see that it started 75 billion dollars I guess and now it's lower, to minus 368. So expectations or predictions downward updated very much from the beginning in 1997 or 1998. So here we can see that predictions are updated toward downward which probably implies that we should observe more decline in the primary surplus in the near future. That's the one thing we can learn from the relationship between prediction error and actual primary surplus.

And we can do the same thing for the Japanese economy although we don't have any good institution like the CBO, but we still have a nice private center, the Japan Center for Economic Research which is now headed by Fukao-san. And that is called JCER and I used the prediction made by JCER to do the same exercise. And you can see that, for example, for the year 2003, we see that in 1998 many people expected a very bad situation in 2003, but the expectation were updated, though still negative, updated toward the end of 2003. So this is one episode. And if you look at 2005, you can see that expectation is still negative but seems to be very stable which implies that future primary surplus should not be, not continue to be worsening in the near future if I use the relationship between prediction error and actual primary surplus.

And the last thing I'd like to say about predictability, this picture is taken from the CBO's paper in February 2005, it is not my invention and this is a budget surplus or deficit as a percentage of GDP starting in 1989 till 2005. OK? And according to the CBO, this is a prediction by the CBO and this dark blue area represents their point estimate, so they're estimating that it will recover from minus 4 percent to minus 2 percent, or something like that, until 2010. And here, you should realize that here we have a huge confidence interval, this is a confidence for 90 percent so if you are very risk averse and you want to say something within the interval of 90 percent, you have to say that what will happen, yes we will and probability that our US primary surplus is staying, between minus 6 and well, little bit over 4 percent, is 90 percent. OK? That's the best thing we can say and which implies that it's very difficult to make a reliable prediction about the future, probably because of economic situation or because of political process and so on. Anyway, it's very difficult to make a precise prediction about the future. And by the way, I think Dr. Bosworth's prediction is of course, within this area, range. But that's a very nice thing. But still we have to say that it's very very dangerous to rely on some specific scenario for future of budget surplus.I guess one lesson we can learn from here is that we should keep everything very flexible and we should not tie policy to the future prediction of fiscal situation.

And the next comment is about the new role of fiscal policy. And Dr. Bosworth provided a very nice example in US situation just after the collapse of the bubble and that's a very informative and very interesting to me. But usual arguments go like this, the natural rate of interest, this is the same thing I said yesterday, but natural rate of interest falls below zero and but the central bank cannot lower nominal interest rates below zero so the real interest rate, I mean the nominal minus expected inflation is higher than the natural rate counterpart. And then monetary policy faces a very difficult situation, it seems to be ineffective and many people say that we need some help from fiscal policy.

That's I think argument about the new role of fiscal policy. And as far as I know, there's no consensus on this issue and but some argue that the government should become, what we call, non-Ricardian, and Ricardian means the government with very strong fiscal discipline, and non-Ricardian is the opposite thing. The logic goes like this: the lack of fiscal discipline, if the government become non non-Ricardian government, then, you know, what we call the transversality conditions for the government budget constraint is not satisfied without the positive inflation. OK? And positive inflation implies, means, immediately means that successful escape from the liquidity trap. So this is a kind of argument to justify the non-Ricardian behavior of the government in a situation of liquidity trap. And maybe this might be very nice to understand what happened in the US in early 2000 or 2001, but if I look at the Japanese case and the Japanese government has been sticking to fiscal discipline and this point was made by Posen and Kuttner and some other people, and because of that, we don't know much about what would happen if the government deviates from the Ricardian fiscal policy. So in theory we don't have much information about what should be the new role of fiscal policy. Also, we don't know much about empirical evidence to support that kind of idea.

Fukao: Thank you. So I would like to invite you to make comments and discussion. So, first, Barry?

Eichengreen: So I thought this was a very clear presentation of the US fiscal situation from which I plan to crib shamelessly when asked to talk about this. I have to questions.

One was yet again about the "starve the beast" rationale for tax cuts. Have we learned that this doesn't work or is there a little bit of action there? I have in mind the simulations going forward under the scenario in which the Bush tax cuts are not extended, what will happen to spending, the benchmark doesn't extend assume that spending is contingent on that decision but it could be.

The other question is about comprehensive tax reform. So there have been a couple of plans in the news recently that what we really need to do is simplify the tax code and do away with all these deductions which give rise to the conflict between the regular system and the alternative minimum tax, could that provide cover for raising more revenues?

Aglietta: I was surprised about your judgment about the ineffectiveness of monetary policy and the effectiveness of fiscal policy in the counter cyclical response to the stock market crash because fiscal policy, that is tax cut, was really targeted to the higher income strata that have a low propensity to consume, a relatively low propensity to consume. Instead, the Fed succeeded in transferring massively the debt from the corporate to the household sector with a much larger effect. As you remember, every time there was a tax cut, there was a round of renegotiation of debt which is so called liquefying of household wealth and a new round of consumption and acquisition of households. It seems to me that it was a rash success in succeeding in avoiding a very deep recession that could have occurred because of the balance sheet reconsolidation of the corporate sector. So one question, much more technical, you demonstrated that social security was a manageable problem, but did it include the cost, the transitional costs of partly privatizing social security?

Fukao: Catherine Mann?

Mann: Terrific paper. Great presentation. Extremely clear. So my question is actually for Professor Watanabe. And that is, your first chart on relating the T minus 6 prediction or trajectory errors to the primary surplus, does that tell us something about the time for fiscal policy to take effect? Because you're plotting actual, your T minus 6, they're not quite prediction errors, but anyway, your T minus 6 against the primary surplus and so the correlation there, does that tell us something about how long it takes fiscal policy to have an impact and can we use those data in an interesting way that way?

Fukao: Let's first get reaction from Barry. Barry Bosworth. Please use the microphone.

Bosworth: On immigration policy, it is harder to get into the United States but the total number of people coming into the United States is the same. We have, we just make them dance through more hoops and we ask them about their religion more than we used to, I guess, I don't know. There's not much evidence that this is having a significant effect on total immigration flows into the US, which historically have been for the last 20, quarter century now, very high in the US by historical standards. So immigration is a significant feature in the labor market projections. I just don't think it's going to change too much. Right now we assume that it will stay at around a million a year in our projections.

Cost-sharing of the war, I don't think that's practical, we can't even get anybody to keep sending troops. It doesn't seem to me that anything is going to happen with that. This is not like the 1990 war, where there was a coalition built up of people who agreed.

Reliability of projections, I completely agree except in the chart that was put up, remember that you have five years in common. Most of the reason that you have that auto-correlation is something happened and then if you go back for each year, you show the forecasts six years earlier, there's an auto-correlation in the budget deficit. So it looks, any time you take overlapping years you're going to get auto-correlation in the forecast. If you did it instead, six years, then waited six years and did another projection six years forward, then you get the opposite conclusion: they way overshot in the late 90s, then it looks like regression to the mean.

And my primary objection to the fan shaped chart you had is exactly that point, is that the CBO projections, it looks like you just can't guess anything. Well, why can't you, if you look at US government spending, it's a constant share of GDP for almost 50 years. Why the hell can't they forecast that? Revenues is a constant share of GDP for 50 years, because the capital gains and things like that drive it above the mean, then the thing collapses and it comes back to the mean. There's no long run trend in US revenue share or expenditure share. So I think the point is very well taken, there's just a bit of an exaggeration when we say this a little bit about how bad they are about making projections.

Low inflation and effect on monetary policy. I realize now that what I said may have gone too far. All I meant to imply on monetary policy, I think there's a new feeling in the US that in the 1990s, I, among others, would say we don't need fiscal policy for stabilization any more. We should use fiscal policy for long run structural objectives like promoting economic growth by running budget surpluses etc. Monetary policy can have the stabilization function and do it well. I think that in light of this experience, we've learned it does just fine regulating on the upside. But it has a little bit of a problem on the bottom side and it needs supplemental. I think two papers that reflect that, one is by Alan Auerbach and the other one is by Alan Blinder. Both have gone through this recent experience and end up a little bit more favorably inclined towards fiscal stabilization policy.

"Starve the beast", does it work? Yeah, I think, in fact, the evidence is, it does work. If your objective is to stop the growth of government, creating budget deficits does prevent new programs. I don't think the Democrats would be in the same position today. And you're quite right, I should have made the expenditures endogenous because just think back to the 2000 election. Bush wanted tax reductions. That's true. But Gore wanted expenditure increases. Both of them were going to spend the surplus, one way or another. The only one who wanted to save the surplus was Clinton and he was going out of office. So I think that is well taken, that this is an endogenous process and it would affect people.

Comprehensive tax reform. Just remember that comprehensive tax reform, as put forth, assumes that the president's tax cuts will be extended permanently. He made that a condition of setting up the commission. They weren't allowed to consider the alternative. Well, it's very hard to have tax reform in the US unless you pay off the losers. So the old rule used to be, tax reform costs you money because you got to pay bribes to the big losers. It's very hard to have tax reforms and raise revenue net balance. Think of the 1986 tax reform in the US. So I think it's hard to combine the two. And there's just no atmosphere for it in the US. Most of the people in favor of comprehensive tax reform see it as way to have another big tax reduction. And that doesn't seem to me practical to resolve the budget thing. I would look more for something that puts pressure on the US to change our ways. But to me that means something like much higher interest rates or something like that. But that's about all I had to say about those points.

Fukao: Tsutomu Watanabe, do you want to add something including the first picture you showed.

Watanabe: Very nice. We enjoyed with Fukao-san. And I recommend you to visit here. We did this, I did this thing in T minus 5 or T minus 4 something like that. And I got almost the same picture as this one. So I think, it is possible that time lag of fiscal policy might be related with this issue but I can't see that in the data.

And also it should be emphasized that this includes everything, I mean discretionary expenditures as well as non discretionary ones, so maybe we could get a different picture if I use discretionary parts only. And the second thing is that yes, my data overlaps with each other because I take T minus 6 and we can do that and say, every six years, but still we can see prediction error like that and which implies that at least we can say that this is not a rational expectation and it seems to be very close to adaptive expectation. So my finding might not be different if I use every six years. Thank you.

Fukao: So, we'd like to have 10 minute coffee break and start at 35.

So I'd like to ask Barry Eichengreen to make presentation on The Blind Man and the Elephant for 20 to 30, at most 30 minutes.

Barry Eichengreen: I am going to try to be brief. I was speaking to the organizers, some of the organizers last night about what a nice conference this is which is my way of saying thank you to all the organizers. And I said, but it's a pity that we don't have more time for discussion. To which they rightly responded, well you can do something about that by keeping your presentation brief. And Paolal and I were just talking about the Tokyo Club tradition of trying to move toward policy recommendations at the end of the two-day seminar. So, that might be something else for us to talk about as well.

This paper might have gone better at the beginning of the conference, than at its end because many of the issues that I talk about here from the connections between fiscal deficits and current account deficits, to the so called global savings glut, have come up already in our discussions. So what I'm going to do is to briefly set out how I see the connections between these different ways of viewing global imbalances. This is turning into a long introduction.

The other observation I have about the paper is that this is not the kind of paper that makes an economist famous. I guess you become famous when you have a very strong thesis and a very strong line that you're trying to push and I'm not trying to push a particular line here, but rather to show how the different views of the problem of global imbalances both how they've arisen and how they might play themselves out are connected to one another. They're more complimentary than they are rival interpretations. The most obvious way of seeing that is of course to recall that the current account is the difference between savings and investment and ignoring the global current account discrepancy which is a statistical artifact that our current account balance is the inverse of that of the rest of the world. So you immediately begin to think of those four variables, US savings, US investment, rest of the world savings, rest of the world investment. The four points of entry into this discussion and in my view, 4 dominant interpretations into the genesis of the problem.

So starting with US savings, we've heard already about the deficient US savings view. The point of view that emphasizes the decline in US gross savings rates which have fallen, which averaged about 17 percent of US GDP in the 1980s and 1990s which are now down to 14 percent of US GDP by the IMF's measure. At that level, barely half the gross national savings rates prevailing in the rest of the world. So the issue is where to lay the blame for these developments. The obvious place to start where the previous session left off with the swing in US fiscal policy which amounts to about 5 to 6 percent of US GDP between the beginning of the present decade and today. And obviously have, as well, the temporal coincidence of the decline of US gross savings and the rise in the US current account deficit since 2001.

The problem with this view, is that the weakness of the evidence of a strong correlation between the budget balance and the current account balance. Of course we know that this is a *ceteris paribus* relationship and that the connection will be affected at the same time by other shocks. The one that I think is important and the one I emphasize in the paper is US monetary policy.

The argument then is the Fed aggressively cut interest rates whenever asset prices have shown a tendency to decline. This so called “Greenspan put” has reduced the perceived riskiness of investment lowering real interest rates. Less risk requires less precautionary savings on the part of the US households, while lower interest rates reduce the cost of borrowing to finance consumption. Low interest rates and ample liquidity also stimulates housing price inflation and asset price inflation generally, and the resulting increase in real estate and financial wealth further encourages households to consume. So that’s the first of the four views.

The second, the so-called new economy view argues that the US current account deficit reflects the attractions of investing in the United States and the consequent large capital inflows toward the country that finances its current account deficits. US current consumption exceeds current production because Americans disproportionately benefit from the high returns on investment, high expected returns on investment in the US. Americans consume so much to put it bluntly, because they’re so rich. The high returns, these high returns have nothing to do with monetary policy, per se, but in fact, reflect the productivity miracle of the last ten years. This point is made and as I emphasize in the paper, largely in comparison with Europe. So people like Dooley, Landau and Garber, about whom we will hear more in a moment, contrast America’s flexibility with Europe’s rigidity, and argue that the dearth of attractive investment opportunities due to stagnant productivity growth in Europe explains why, and other parts of the world, explains why so much of the world’s savings flow toward the US.

I think the important point to emphasize in this context is the fragility of the data, the weakness of the evidence on the so called new economy. So it’s clear that the US exhibits faster productivity growth by comparison, in the computer producing sector. But the computer producing sector is way too small to matter in the aggregate; it’s what, 5 or 6 percent of US GDP. If you take what I think are the most convincing international productivity comparisons by the people in Groningen, they suggest at most, a one half of one percent per annum productivity differential between the US and Europe, which in my view, is too small to be definitive and too small to drive a 6 percent of GDP swing in the US current account balance. And even if this story holds for the comparison between the US and Europe, it’s not obvious that it carries over to other parts of the world, to Asia in particular where productivity growth currently and going forward is likely to be strong.

The critics also object with some reason that the vast majority of recent net financing for the US current account deficit has been provided not by private investors, who are those presumably motivated by productivity differentials and their implications for investment returns, but by foreign central banks with rather different motives. And this remains the case today. So there are large FDI and equity flows into the US and equally large equity and FDI flows out of the United States and the net financing for the current account is all debt financing and on balance it’s all coming from foreign central banks over the last 12 months.

The critics also contend that for, and I’m sure my discussants will address this further, that in order for the current account deficits of prevailing magnitudes to reflect profit oriented foreign investment in the US, American economic growth and the country’s profit generating capacity will have to accelerate quite dramatically. For a current account deficit of 7 percent of GDP, which is what we are running now, to produce an external debt to GDP ratio of 100 percent, no more than 100 percent, in a steady state, still a much higher level than we’ve ever seen for a large mature industrial economy. US economic growth would have to accelerate to 5 percent assuming a 2 percent annual inflation rate, you’d have to have 7 percent nominal growth to balance out that 7 percent current account deficit and end up with a 100 percent debt to GDP ratio in the steady state. I don’t think we have evidence of that, I don’t think such a rapid growth of real GDP is plausible. So even if there is something to the new economy investment boom-interpretation of the US current account deficit and there may be something, it's still the case that significant narrowing of that deficit will be needed to avoid explosive debt dynamics.

The third of these interpretations is the global savings glut view which gets more attention now than ever nowadays, I suppose, because it's associated with the name Bernanke, that's the view that a combination of demographics, rapid growth, high oil prices, and financial development have boosted savings rates and they've boosted savings rates outside the US, in particular. You know this story, we've talked about it in passing yesterday, the problem with it at one level is rhetorical. There is no global savings glut. Global savings rates as computed by the IMF or the BIS or whomever you prefer, haven't budged in the last 10 years, they've remained quite steady in the neighborhood of, gross savings rates of 25 percent of GDP.

What we're looking at is not a global savings glut, but a re-distribution in the location of savings from the US to other countries. So there's a little bit of empirical work in the paper asking, how easily can we explain those recent trends in savings rates? The panel regressions in the paper go someway toward explaining them. So, rapid economic growth is associated with high savings rates, contrary to the life-cycle model, but consistent with the idea that it takes time for people to adjust their consumption and living standards to higher incomes. Savings rates are negatively associated with financial development. We were talking yesterday about mortgage markets, consumer credit markets and so forth, their importance shows up in the data and demography, the old age dependency ratio is an important negative determinant of savings rates in cross-section and time series as well.

Where this analysis falls down of course, is going from the savings rate to the current account deficit, especially when you think about the kind of demographic arguments that we were emphasizing yesterday afternoon. So let me just flag this point. When you run, you know the current account is the difference between savings and investment and when you look at the impact of demographic variables on savings, they show up strongly. They also have strong effects working in the same direction in investment equations. So I found this in a bunch of different data sets. Other people have found it too. And I just want to flag this observation and ask you, is there really a negative effect on investment in a country of a higher old age dependency ratio. So that when you have more old people, you save less and invest less and there isn't much implication for the current account. Or are we just rediscovering that Feldstein Morioka puzzle that we know current accounts are small so anything that will shift one of those two, the savings equation, has to shift the other one as well. So, I'm uncertain of whether there is an economic relationship here. I can make an academic argument for whether this is a statistical artifact that keeps showing up in the data.

Finally, the fourth of these approaches to thinking about the global imbalances is the Breton-Woods II hypothesis, or the Sino-American Co-dependency view. This is the view that the trans-Pacific current account balance, imbalance, exists because everybody is happy to see it happen. The US is happy to live beyond its means. Asian countries are happy to be on the other side of this financial ledger. So this view has a number of different variants I guess. The way I see it, whenever you try to nail one of the proponents of this view and say your argument doesn't really hold water, they say OK, but how about this other motivation for the undervaluation of Asian currencies and persistent Asian current account surpluses. So the traditional interpretation of this view and still the one I find most convincing, is that the export sector is the locus of technological change and economic growth and because of other distortions affecting the Chinese economy, in particular, using an undervalued currency to channel more resources into the export sector, is good for growth.

Those arguments of course, provide a rationale for undervaluing the exchange rate, they don't provide, on the other hand, for undervaluing the dollar exchange rate in particular, or for maintaining a daily limit on currency fluctuations against the dollar. Nor in my view do they necessarily imply the indefinite persistence of current imbalances. My argument would be that Chinese managers and entrepreneurs are rather quickly gaining the organizational knowledge necessary to run modern export-oriented manufacturing firms. And that the productivity effects from learning by export are internal to the firm, like they are heavily internal to the firm, like they are in other countries, so that the externalities, domestic distortions, rationale for undervaluing the exchange rate and pushing more resources into export sector is unlikely to continue to hold water. So you make those kinds of objections to people who advance this view, and they say, well if you don't like this version of the story, try this one.

TAPE II

This one being that it's the inefficiency of the Chinese financial system that is at the root of the imbalance. So we heard a little about this yesterday in Professor Yu's presentation. The notion being that China ends up with a more efficient allocation of financial resources if it takes its savings and invests them in the US in US Treasury bonds enabling US corporations to turn around and choose into what sectors to do FDI. So the United States is the banker or the financial intermediary to the world. I don't think that variant of the argument holds water because it doesn't explain the imbalance. There's no reason why those two flows shouldn't be equal in magnitude. The Chinese take N billion dollars and invest them in US treasury bonds and the US takes N billion dollars and invests it in the form of direct investments. In China, the story could explain the composition of capital flows but not the persistent imbalance.

So you say that to the proponents of this view and they say well, you have to add the importance of collateral. The idea that US corporations will only do FDI in China if they know that the Chinese are holding even larger financial assets in the United States that the US government can seize on their behalf if their foreign investments are expropriated. So I don't find this version of the story particularly plausible either. As we heard yesterday, only a small minority of FDI in China comes from the United States. I don't think it's plausible that the US would intervene on behalf of all foreign investors. I haven't heard US corporate executives saying this is why they are prepared to do FDI in China. I go on and do a little bit of empirical work trying to see if this really could be the explanation for the massive build up of Chinese and Asian reserves, more generally, and the bottom line is that the story doesn't seem to hold water.

So, policy implications. The policy discussion that we would like to have. I find it increasingly difficult against this backdrop to envisage a happy resolution of these imbalances that doesn't come about partly as a result of a difficult adjustment and a recession or at least a significant growth slowdown in the US with strong negative implications for the rest of the world. After Barry Bosworth's presentation that didn't make me more optimistic about the US fiscal situation. I continue to find it difficult to see that the US will take action to address the domestic sources of this imbalance. And absent that, it's not clear to me why our partners and the rest of the world will be prepared to initiate the relative policy adjustment. So there there's a nice policy package out there whose contours everyone is familiar with where the US uses monetary and fiscal policy to slow the growth of consumption and boosts national savings rates. Asian countries offset that by using fiscal policy to increase domestic absorption and real exchange rate appreciation of Asian currencies is what allows this change in the composition of global demand to take place. I don't see that kind of cooperation happening, absent contribution from the US .

That leaves me with an unhappy scenario, the one in which eventually, Asian central banks get fed up with accumulating more US Treasury and agency securities. They worry about the inevitable fall in the dollar and either quietly individually they begin to diversify out of dollars or as a group they decide that they've had enough. That leads to a fall in the dollar import price inflation. The Fed has to raise interest rates faster than we've been anticipating in response to those inflationary pressures and it's that change in the level of interest rates that brings about the decline in consumption and investment that brings US absorption down toward the level of US production. That's an antiseptic way of saying a sharp slowdown in the growth of demand in the US could be recessionary and that's my, remains my worry.

So let me leave you with a paradox. The paradox is that on the real side, everything continues to go swimmingly. So both in the US and globally all the signs in terms of economic growth are positive and increasingly positive. The more positive they are for the US the stronger the dollar becomes. The stronger the dollar becomes the wider the current account gap rose. And the more alarming, the debt sustainability arithmetic, the larger the sharp real exchange rate adjustment that will have to occur in the future. So the happier things look now, the more difficult the adjustment becomes down the road. Thank you.

Fukao: OK, thank you. Next, comment by Ms. Catherine Mann.

Mann: OK. So we're down near the end here and I've had the opportunity to discuss the Asian situation and the European situation and I said I was going to be equally aggressive about the US situation and that's what I am going to do. But I think the subtitle here, is really the point. For whom will adjustment be most difficult when the inevitable adjustment indeed takes place? And I'd like to talk about this using the vocabulary of habits, and policies.

But first, recapitulate the paper and make just a couple of points I don't want to discuss at length but make a couple of points. So, Barry has four views of the elephant. The deficient US savings view, but he says the problem with that is the fiscal-current account covariance is relatively low. I'm going to make a particular comment on that. He's also noting that interest rates are low, not high. So there are some problems with the deficient US savings view taken alone.

Then he reviews the new economy view and his comments there are the productivity trends between the US and Europe are not that different. Now, I would disagree with that point. I showed a table yesterday that decomposed the US and European sectors into quite a different variety of categories showing that the relevance of the computer sector for productivity growth is really not the point. Much more important is the relevance of productivity growth in the computer using, information technology using sectors, particularly in the services arena and that if we consider that aspect in the productivity trends between the US and Europe are quite different. Nevertheless, I agree that the new economy view by itself is not a good rationale for continuing on the trends that we are on. And I'm also going to make a comment on his comment that the current account financing is not generally from private investors but I'm going to make a little more comments on that.

The global savings glut view, he made the point that most regions are not saving more and I agree with that entirely. Most of the current account to GDP surpluses are coming from less investment not necessarily from savings, and then he spends some time talking about whether or not this global savings glut, even if it is not true, whether or not it won't persist because of demographics.

And then finally, he spends a lot of time talking about Sino-American codependency which as you can see, I didn't try to summarize, I just noted that he just spent 2 and half pages talking about deficient US savings, 2 and a half pages talking about the new economy, 3 and a half about global savings, and 7 pages on American- Sino codependency. So, I'm not going to try to summarize that. Also, that's what he said last so I surely don't need to do that.

So now I'm going to talk about what I want to talk about which is this codependency of habits and policies. And I might note that I think codependency is the word that I used in early 2003 in an article and that has been purloined by many other people since then. Although I'm sure I'm not the only person to have ever used it.

OK, habits and policies. The US and foreign habits are codependent. These are stylized facts, foreigners desire to save to produce for export and therefore they have to end up buying US Treasuries and other assets. The US has a habit of consuming, importing, and therefore we have to sell US Treasury securities. I think the most interesting point to develop here though is that at times our policy choices and the policy choices made abroad exacerbate these habits. And that's what I'd like to get down to at the end, to address these policy choices that we and other policymakers are making.

And then there are these vulnerabilities which you've all heard about, there's the financial market, financial side of the vulnerabilities, the misallocation of resources which I talked about in the context of Mr. Yu's paper with regard to too little foreign investment in the non-traded services sectors, talking about US consumption right now. And then in the end, the cost of adjustment to sustainable path is vulnerability and ought to be thought of in those terms. OK.

Now, on the habits and policies for the US: a couple points I think it's useful to make. The question is always, is the trade deficit due to the fiscal deficit. And I'll explain the chart in a minute, but the bottom line is, there are times when the fiscal budget deficits are twins in the boxes of the green, where we've got savings and investment lines up above, the fiscal deficit in blue and the trade deficit in pink. So there are times when the fiscal deficits are twins, the areas in the green box, and times when they are not. So overall savings and investment is key for driving the trade deficit, it's not the fiscal deficit alone.

However, if we look at more details in the national accounts, these habits and policies are reflected in the national accounts and in the relationship between the national accounts on the domestic side and the national accounts on the foreign side. What I've done here is add in the household savings rates in red, corporate savings in white going back to 1980. And what is most apparent in this diagram and what other people have already said, but I always think it's useful to show pictures, is that the trend of depreciation or the trend of deterioration in the trade deficit is highly related to the trend to the deterioration in the household savings deficit. And yes, there are times when the two of them diverge and in particular in this period of time when the fiscal policy, or the fiscal deficit was in surplus, the 1998 -2001 period, consumer spending continued to fall, based on a lower household savings rate, but it was augmented, that falling habit of household savings, was augmented in consumption by various policies, particularly, tax cuts at various times and outcomes of the fiscal monetary policy choices, specifically as reflected in the equity markets and the extend to which that supported consumption, and most recently in terms of housing wealth. So you can see here a habit which is a declining household savings rate in the red bars, but you can also see the consumption, the impact of policies in the declining trade deficit in pink.

Now I want to get into this a little bit more because we're talking about here is a situation where policies have exacerbated our habits. If we decompose the trade deficit into its component parts, and here I give you four components as well as the overall. The components are capital goods and industrial supplies and materials excluding energy, autos, consumer goods, other in the blue which is agriculture and energy, and then private intellectual property and private services and what not, I don't show you lines. The point to take away from this chart, again, going back to 1980, the trend deterioration in the US trade deficit which is the solid black line, is dominated by the consumer sector and the behavior of the net trade in the consumer sector. This is despite the fact that consumption goods and autos are not big shares, or not the biggest shares, of the total trade flows, which is what you see in the tables. So capital goods and industrial supplies and materials being the biggest component of what we trade is actually a global pro-cyclical share of the current account. So the habit of household savings as augmented by the policies of both fiscal and monetary side is reflected in the overall trade deficit. And making those links I think is important to think about the resolution of the global imbalances.

If we go one step further and really explicitly link the policies and the habits, and this is a presentation in graphical form of something that you saw in numerical form in Barry's Bosworth's presentation, is that the fiscal policy choices from the surplus in 2000 to where the projection starts between two alternative scenarios in this Congressional Budget Office's budget scenarios. From the surplus down to where we go into large deficit, looking at the red over in the table or in the text, according to the Congressional Research Service, 61 percent of the changes in revenue over that time period, that is a fact, was due to a change in policy. And that's pretty much exactly what Barry has in his numbers. And going forward if we extend the expiring tax cuts and or form alternative minimum tax so that it doesn't capture like middle income people, then you get the green line which suggests a lot more consumption demand coming through the pipeline through this channel of imported consumer goods. We will have a bigger trade deficit going forward, we'll need to sell more assets, more US Treasury assets in particular.

OK now, you've seen this chart three times now, but I think it's useful just to put it up again, that there are habits and policies and habits abroad as well. The habits in terms of the current account and GDP, the dependence on the US market in particular. I want to talk a little about the linking of policies and habits abroad as revealed in composition of financing of the US current account. Again, going back to 1980, I think this is relevant to look at. The yellow components are official purchases of US Treasury securities; the green is private purchases of US treasury securities. It is very clear that financing depends on foreign official purchases of US treasuries, particularly dramatically in 2004 and the two quarters that you see there of 2005. But the point of going back to 1980 is to reveal that this is not new behavior. Every single time that there is a period of time when the dollar faces depreciation pressure, it is in the mid 1980s, well we know there was a big falling dollar in the end, the mid 1990s, foreign central banks swoop in buying US treasury securities in order to alter the extent of the depreciation of the dollar. So foreign central banks through their policies have exacerbated or supported their country's production habits.

Now, there are alternative approaches to getting out of this exacerbation of policies and habits and there are alternative ways of getting at this, but I put this chart up here, again 1980 up to the present, revealing the relationships between the dollar, this is the Federal reserve broad index of the real dollar in the red, and then the trade deficit in the current account. So based on history, beware of what you wish for. We had a small deficit in the early 1990s, but this was also a period of the last major recession and that followed a big drop in the dollar. So the question is, do we want to see a repeat of the 1990s experience. Does the world want to see a repeat of this experience?

So you saw this adjustment scenario based on growth alone already and I just put it in here in case we want to talk about it later. But it basically says that stabilizing the US trade deficit is most fundamentally dependent on a moderation in US growth. That the rest of the world growing gangbusters is very important for them but that's not going to be the key to resolving the US side of the global imbalance.

What I'd rather spend a little bit more time on is talking about the alternative way, the alternative way to get to an adjustment and that is an adjustment scenario based on a real dollar depreciation. So Ted Truman, my colleague Ted Truman, whom some of you know, has a paper, an IIE working paper titled Postponing Current Account Adjustment, it's in the IIE website, and among the things he does in that paper is look at alternative strategies of achieving a 25 percent dollar depreciation. The first column is if the Euro is principally the currency to achieve the, is the one to do the adjusting, so Paola was talking yesterday about consequences of that, the other mechanism is if the Asians, including China, move, and as you can see in the Euro scenario, the Euro is moving 84 percent real effective terms, if the Asians move, the Euro only gets 20 percent of real effective change and the Asians get 41 percent real effective appreciation. Of which, interestingly for China, this is in Ted's paper, I didn't put it up here, but nominal effective rates for China in the Euro example, represents a depreciation, and then of course it's an appreciation in the Asian, if the Asians are the ones to move.

So here are two alternative scenarios for what might happen if financial markets decide to discipline the US economy. One is that the Euro bears a huge brunt and the other one is that it's distributed and the Asians decide to take some of the hit. Now taking those exchange rate changes and running it through some pass-through equations and some relative price equations, generates the change in net exports given one or the other of these scenarios which is in the next set of 2 columns, in dollars in billions, as well as share of GDP. So if the Euro is the one to take the big hit, we got the Euro being the adjustor, big change in net exports, significant share of GDP that is going to have to be reallocated in order to maintain GDP growth in Europe or else everybody goes through a recession. Asians, if they take the big adjustment, they have a huge change in their net exports and that really shows the dependence of the Asian region on net exports to the US. Having to move 7 percent of GDP out of the net export sector, the external sector, into domestic demand, 7 percent, is a big, big number. So these are just sort of flavors for orders of magnitude of how challenging the adjustment might be if the financial markets are the ones who discipline the US and others' spending.

So, I'm just going to conclude here on this topic of habits and policies. The first point is that they've been in place for more than a generation. These habits and policies have been in place for more than a generation. Consumers, investors and policy makers and politicians, here and abroad, not just in China, not just in the US, across the board have enjoyed this quote, quote stability of a codependent relationship and policies that have been put into place exacerbate our habits.

Now, the policy changes could ease us out of this codependency and these are exactly the ones we have all been talking about. We can sunset the tax cuts which reduces the augmentation to consumer spending. We are seeing rising interest rates which reduce the augmentation to spending coming from housing equity. So at least on one score, the US is actually having a policy change that is moving in the right direction to alter the spending habits. Exchange rate policy changes abroad make this expenditure switching actually happen. The key point is Barry used the word 'cartel,' I call this a prisoner's dilemma. Because it's really easy for us all to not do anything and ultimately end up in the wrong corner where adjustment is very difficult.

So, without any changes in policies we get the same habits being revealed and we have business as usual but the question is for how long. Financial discipline- I told you a scenario there that was not very attractive- what I think is likely, because I think financial discipline is going to be offset by policies, I think much more OOO and I think I agree with Barry, is that there's a global slowdown in the works, at some point in time. US consumerism is going to run out of steam in part because of the monetary policy changes we have observed to date and going forward and foreign domestic demand is not going to be able to pick up the slack. And that's what I see happening. So in that case, it is déjà vu all over again of the early 1990s.

Moderator: Thank you. Then, Ms. Vanessa Rossi.

Rossi: Well, I think it's beginning to sound as if sort of the US situation is almost like Argentina of a few years ago except with the very nasty implication that if all these horrible adjustments are going to have to take place, it's going to be not very pretty for the rest of us. But it just made me think of this, because we do also have to haul ourselves back a bit and say, hey, you know, there are things about the US that are not quite Argentina, you know. When you have a problem of imbalances of the kind of Argentina, to be frank, by the time it got to late stages, there was absolutely no hope that anything there was going to be corrected except by having a big collapse in imports. And this is very typically the way that small emerging market economies have to adjust when they get into these pickles. But in this case, you don't bother worrying about Argentina, you just start worrying about what aid you're going to give to Brazil and the rest of the Latin Americans in order to avoid problems spreading.

But in this case, fortunately, we're not quite Argentina. I think there's lots of responses and positive stories we might tell about this that makes us not quite so glum about it to the rest of the world. Now, I think Barry really did us all a great favor, at probably great expense to himself, as he pointed out, in a way you'd make yourself much more popular in economics if you can find a magic bullet that you can sell the story on. This of course goes down well with our friends the politicians, because a nice simple one line story is easy to understand, it gets you in the headlines for a while and with a bit of luck you know, you've made your money, headed out of the profession before it all goes wrong. Now as Barry pointed out, this isn't what really goes on, there's lots of things involved here in the problem and that means there's lots of adjustments as well.

The problem with these adjustments is well, the one that probably could pull you around very quickly we really all don't want. And that's the story of the collapse in US imports and the recession story because it wouldn't be terribly pretty either for the US or the rest of us. And in fact, since it's more likely to drag the world into recession, ironically, it probably wouldn't help the US current account either so it doesn't really give us much of a solution to anything except another crisis we've got to muddle through. So in terms of what's the best option and what seems to be fortunately, emerging and happening, is all sort of Barry's stories compounded where you've got a little bit of this one a little bit of that one and you would hope that you're persuading these global imbalances to gradually unwind over time and every little helps, and everyone must try harder and that's why everybody is part of the picture. However small some of these numbers seem, you've got to keep on incrementally adding them up. And of course we don't have much help at times when some things seem to edge off into the opposite direction as with the recent excursion towards a stronger dollar which is possibly going to lead us into a few more problems next year if it continues, but you know, this isn't driven by China deciding it's a policy, it isn't driven by the reserves build up in China, Asia or Japan. These are the financial markets out there doing it. And this is true both against the Asian currencies and the Euro and I'm afraid it's back to the US, quite a lot of the action here comes from your financial market people, so hey don't blame China all the time for these things.

So, counterparts to these US problems, clearly we've all focused on the China trade surplus on a bilateral basis, that's the big one. But everybody plays these parts. I think it was important to remember that there's problems in Europe that don't help us and there are some things in all markets that I'd like to just bring into the equation partly because we really haven't touched on this and yet we probably should do so if we're thinking of world imbalances and changes in current accounts and capital flows.

Now Barry points us back to this point of remember everything's simultaneous in this world and certainly in terms of headlines and descriptions, we have fashions come and go. Back 20 years ago or so, of someone coining a beautiful phrase, interdependency in a multi-polar world. You know, Catherine's now got co-dependencies. I probably would dare guess that in another few years' time, we'll have something like multi-polar dependency in an interrelated world, I mean these things just shift around, but basically we're all saying the same things that there's a lot of simultaneity in our system here.

What I'd like to hark you back a wee bit further on is let's go back slightly on the economic history. Do we remember Adam Smith, do we remember the invisible hand? I would have to say that one of the things Ronald Reagan seemed to grasp very well, in a way, was the invisible hand. Hey don't worry about these things, folks, there are things out there that take care of it. And yet as an economics profession, we sometimes are not as confident about these things and we worry a lot about how things will adjust and what will happen. So I just want to point you to a few things that may actually be happening while we're worrying away about these US figures, while we're worrying away about the imbalances in trade between Asia and the US. There may actually be some other things happening out there that we need to take account of and maybe they'll gradually ease us through one or two of these adjustments.

Now first stop here, I have to admit, this is a little of the old bit, and certainly in terms of the US story, what I'm trying to draw your attention to. I'm drawing your attention down here firstly to the US. And we do see how we have 2000 to 2003, I really should have 2005 penciled in here, and I'm sorry I didn't get to it, but what we basically see is that the US savings rate, unemployment rate, performs a little mini-cycle here. And I think probably, typically does so. We move back into slightly lower unemployment rates and actually at the moment we're moving down a bit on the savings ratio. Well if we do think there's a cycle going on here, then possibly quite naturally we'll start to see the savings rate rising a little bit, so we just continuing performing little loops here. It's the permanent income hypothesis in action, folks. The US fortunately learned some of this story from the Chicago School. The rest of these types up here, don't know about it. I mean they don't behave like this and to be frank, the overall tone of pessimism and worries about unemployment, push these guys way up into the corner up there and cause lots of the problems that Paola Subacchi was talking about I guess today. So this is part of the adjustment and yes, we could see the US bringing it round a little bit into slightly higher savings and that would ease a little bit of the imbalances as well. If we could even get these other guys even motivated to think about unemployment as a problem and do something that could pull them into the equation as well.

What else do we have going on though? Well, don't let us forget the oil market in here. We've actually seen some massive changes in the world's trade positions over the last couple of years. These are the surpluses now bulging out for not only OPEC but also the other oil producers, like

Russia. And to some extent, what's happening here is at the expense of Asia. So we're spending a lot of time talking about these Asian surpluses. Some of these Asian surpluses are actually disappearing on us. And we should remember that effect, if not for China because there are some very peculiar special things going on this year for China in the trade figures. At least for these other Asian economies, this trend is quite important. I think we all do not believe that oil prices are going to slump any time soon, they could back off a bit, but not a lot. And other raw material prices as well, have been pretty firm. So some of the movement we're seeing here is shifting the surplus out of Asia and into these guys.

Here we can see those impacts in some other Asian economies. Of course those that have oil like Malaysia are a little more fortunate in a way. They're not getting the hits from this. But the changes you can see for Taiwan and Thailand are very typical of a number of these oil importers. I think also in Japan you've seen a swing around off the back of these higher oil costs. The only one that stands out like a total sore thumb of course is China. And this is not because they don't have a higher oil bill, but because other things have been happening here. And it's clearly worrisome to people to see this happening but I think you should be a little bit careful about extrapolating that trend.

There have been some very peculiar swings here in both 2004 and 2005 in import habits. Very little break in trend on the export side, if anything a bit softer. And some of this has to do with quite peculiar swings on the imports. Very high in stock building in 2004 and down in 2005 that pushes up the trade surplus. Chances are that next year this is going to come down quite a lot without anything to do with exchange rates, US adjustments or anything else. But it does unfortunately make that problem of China and the US look worse for the moment. Not only that but if we actually look at what's happening to those OPEC surpluses, it takes a while to recycle. But they are actually increasing their imports and that's part of the adjustment mechanism that will come through and will pull those surpluses down. And low and behold, here's China sticking out in front again, this is just the example for the UAE, is the biggest trader in the region of the Gulf, but the others look very similar too with very high growth for China. A little bit of hope in here though. Those US figures are going up pretty sharply. So in terms of moving these surpluses in trade around to the Gulf region, the US may actually get a slightly better slice of the action, if it can wait. At the moment of course, you're suffering from the high oil price rise, so that hasn't made things look much better this year, it's made it look worse. But if we move through from 2005, 2006, 2007, looking at those imports being sucked into these OPEC countries, into all the oil countries, then you may actually see a chance of that US trade deficit easing back a little bit because of the imports of these regions. So there's a little bit going on here that looks slightly optimistic. Of course, the other thing from this region is that they again, the OPEC and Russia group, are contributing to the rise in the world's reserves, largely held in dollars, although they're no where like the size of the Asian reserves. But if you also do the add up on those accounts, it's quite clear that there's a lot of private capital moving out of these countries too and probably lots of this is going into dollar homes as well.

So we've really got a problem here, not so much of the reserves position, but the thing that makes us nervous, is that we got a lot of cash around in the system. We have a move towards liquidity both in terms of the treasury holdings Forex reserves and also in terms of some of the private sector holdings which are also in these instruments. And everyone gets rather nervous if you know that a lot of the assets are being held in cash at any one time, because liquid assets can be moved around very quickly and that of course is part of the root of our worries about how much you could get dollar swings, 30 to 40 percent swings even, off the back of relatively small moves in these numbers.

So, final questions: what are we doing in terms of this crisis position? Well, there's always this phrase used about this US account as being unsustainable. And I don't really like this phrase anymore. These kinds of deficits have been around now for quite some time. It looks quite likely that any adjustment mechanism we can see is going to mean that the deficits will be around for quite a bit further time. So maybe we should just get rid of this unsustainable tag because it just makes us all worry about the wrong things in terms of what's actually happened and what's likely to happen. But it is true, that on a long term view which we would see some changes in these trends and that we have to look at in terms of what it may do to the rest of the world, in terms of Catherine's question of who's it going to hit if it happens. In terms of sustaining these trends though, this point about well, if it's going to happen tomorrow, are we going to see any sharp breaks tomorrow?

Well, it doesn't really necessarily look likely and why not? If we look at some of the US figures, I was rather hoping that Catherine was going to chuck some of these up because it would save me having to do it, and particularly because I'd be slightly worried in case I've got these numbers all corrected for the latest numbers from the US. So I hope there's nothing too debatable about these. But all I'd roughly like to show here, is that in terms of recent accounts for the US, this is the current account position, I draw your attention to the lines which are, sorry, I've lost one. I'm sorry. I thought I had the current account figures in here. The current account numbers here, would suggest that although people have worried a lot about the likely outflows of money related to the US build up of debts abroad, the current account at the moment is really showing no signs of this happening, both in terms of inflows and outflows on those interest and profit payments. There's not really a sign that the current account is suffering from this yet. So you also have to be slightly skeptical about what this build-up of US debt is really about and what sort of flows are being generated from it.

The other part of the account is the financial account that's shown here and in this case, in terms of the asset and liabilities position, I just wanted to point out that it just is not true that this is all treasury buying of US assets. There are a lot of private sector investors still buying dollar assets. And this is not just in terms of the treasury securities, it's also in terms of other investment strategies as well, equity holdings and FDI flowing into the States is still quite strong.

What does this imply for the background build-up of assets for the foreign holders of US assets? Well, we're not really quite sure. This is a chart that we've been using for a little while to try to at least put in perspective the issue of how sustainable are these US deficits. If you project these forward, this is the US current account deficit projected forward. I'm putting on top of that estimates of what we think the initial holdings of US assets are and where it would take you in terms of a portfolio allocation. We really don't know whether foreign investors would like 7 percent of their wealth held in the US, or whether they'd be quite happy to have 12 percent of their wealth held in the US.

To be frank, we don't really have a strong opinion on this one as economists. I would take a fair guess that they're not going to want 50 percent of their assets in the US. I think we know that there's going to be a limit here, but it's quite likely given the uptrend in this position over a long period of time, that you could actually have an increase from the current rate of about 7 or 8 percent to something rather higher. And in these circumstances, supporting at least for the moment, current account deficits of 3, 4 percent of GDP, seems more feasible if you think about this type of equation, than it did to people back in the 1980s. If you remember even in the 1990s, people were talking about scare stories over the US deficit when it was 2 or 3 percent of GDP. Now we think 2 or 3 percent of GDP is perfectly acceptable, no problem financing that, that's more or less equilibrium. And I would dare suggest that as we move on over time, it will probably be true, partly due to the role of the dollar in trade finance reserves and so forth, and partly due to this asset allocation issue, that the percentage that we see as acceptable will move up again and maybe will be 4 or 5 percent of GDP. Now it still leaves us with a little bit of difference compared with the 7 percent of GDP that we've got at the moment, but it does suggest that case is not quite as problematic, not quite as big a problem as some people feel.

And I hope I've suggested one or two ways in which we could be seeing some movements in the world economy which may actually help to compensate a little bit for these problems. I think just lastly, the point I would just draw out of this kind of analysis though, is that I've already mentioned the liquidity problem. Lots of these assets being held in liquid instruments means that very small changes in asset allocation could create quite large turbulence for the dollar. I don't think there's any magic about this one, we know how big financial market swings can be and we know how big the swings in exchange rates can be. So we don't know if this may or may not happen, so far if anything, we are presently seeing the trend move the other way. Contrary to the worries about the dollar collapse, the dollar is a bit firmer. So again, we have to see this as the difference between some very big balances here.

In terms of stabilizing though, the key feature here is not really the dollar. I'm sorry. We have actually run with our economic models many, many scenarios. You can imagine the requests we've had for this over the last few years. Many scenarios looking at the outcomes under alternative dollar scenarios. One of the big problems of dollar scenarios especially if you don't look at a global solution, is that you tend to come out with rather bigger stories for how much it impacts on the current account deficit of the US, you have a much greater affect on the US current account deficit if you look at it from a US only perspective. If you look at the rest of the world's sort of the impact that it has on the rest of the world, what it tends to do, is unfortunately make devaluations of the dollar look rather less powerful in adjusting the US current account deficit than some of the stand alone calculations suggest. So we're a little skeptical about how much dollar swings will do for the US current account deficit.

What's important in terms of the overall world effect, though, is really not so much the dollar. It's how you stabilize interest rates. The US performs a very key role for the world as an economy as a whole, in terms of providing a sort of lynch pin for interest rate-setting. And if you have a turbulence in the dollar that does impact on interest rates, that impact around the world and particularly if you start to have turbulence in bond markets as well as short term interest rates off the back of this kind of move.

So the danger I would see here is not strictly the exchange rate movement, it's actually the danger for the turbulence of interest rates and in that connection, we do actually know that we can do things about it. We do actually have policy mechanisms which can help to smooth financial market problems, we do actually know that central banks also have very large stocks of reserves which they could use to help stabilize the markets in the event of turbulence that would be severely damaging. So we should grasp that positive message. There's a few things going on from the invisible hand and there are a few things that could help us out as an extra hand from policy actions if it comes to the worst. Thank you.

Fukao: Thank you. We would like to get comments from you, yes, please.

Subacchi: Thank you. Well, I take a bit of comfort from Catherine's presentation because it seems that any relevant region with an undeveloped bond market like Europe has actually a role to play if the financial markets get nasty. By the way, I'm not Paula, but my name is Paola, it's one of those peculiar and weird European names.

But anyway, down to Barry's paper which I very much enjoyed reading. I would like to see some assessment actually on facts that have so far kept the system in balance. Because after all, we have been analyzing all the causes of the imbalances but this is the state here. But in particular I would like to see the role of the dollar as a reserve currency. And the exorbitant privilege that the US still enjoys. So it is a bit like Vanessa's presentation but you know that it seems to me, then again, despite the number of arguments, there is still a big strong point here in the role of the dollar. It might not last for very long but it's still the case and it keeps the system in balance.

Fukao: Thank you. Let me….

Woman II: I have a question. Even if most of the current account financing is not coming from private investors, what comes from private investors is expecting well, supposedly, high returns. What can we say about the returns they are getting from the US?

Moderator: OK. Mr. Nasution?

Nasution: Yes, I have a question to Barry. Recently, the prospect of shifting portfolio from dollar to Euro is one of the possible problems as discussed by Paola yesterday.

Moderator: Mr. Yamaguchi?

Yamaguchi: Thank you Mr. Chairman. I very much enjoyed reading Barry's paper. And to his assertion that this kind of paper is not a way to make an economist famous, I would say you are already famous.

Barry started his argument with a simple saving investment identity in the US and in the rest of the world. And there are obviously four variables. And what does not appear in this identity is the exchange rate. And I'm pretty sure that when one of these four variables makes a large swing to effect the movement of the other three, then we would likely see a significant shift in the exchange rate as well.

My question to Barry, as well as to Catherine if I may, is do you think that when savings investment imbalance in the US as well as in the rest of the world move toward restoring a more acceptable equilibrium to all parties concerned, then in that case, do you think that it is impossible to avoid a substantial swing in the exchange rates? Or do you alternatively think that given the already pretty large imbalance that exists between the US and the rest of the world, the substantial realignment of major currencies concerned including the Chinese RMB is inevitable because that is a concrete market mechanism to translate the desirable saving investment movements in both areas of the worlds. I'm inclined personally to take the latter view, but I would be very much interested to hear your views.

I have a lot of questions on my mind, but I just finish my remarks by sharing with you my sense about the exchange rates, to what extent they in fact might affect the economic activity and prices. Only a year and a half ago, Japan's yen appreciated rather significantly and the Ministry of this country tried to defend the yen dollar rate at 105. And I think they succeeded in their efforts but without the huge interventions by the Japanese ministry, I suspect that the yen would probably have gone beyond 100. But today, by a sheer market mechanism, the yen is depreciating and it is pretty close to 120 so in a matter of 18 months or so we have experienced quite a significant swing in the yen of about, how much is it, more than 15 percent. And in the past, twice in the recent Japanese economic history in the 70s and in the late 1980s we made a big fuss about the exchange rate appreciation and in each case, in the 70s we ended up with hyper inflation, and in the late 80s we ended up with a huge financial bubble in the asset market. So we have to be very careful in dealing with the possible effects of exchange rates, to be sure that substantial appreciation in the exchange rate would affect economic activity in an important way but those effects in most case would probably be dealt with effectively with macroeconomic tools that you have in your hands with the exception that the economy concerned is caught with the kind of liquidity trap which Watanabe-san discussed yesterday and today. And in that situation, in my view, monetary policy would lose its effectiveness. But my point is that the exchange rates certainly matter but it is not that big a deal as is generally conceived. Thank you.

Ujiie: I would just like to thank Barry for showing a very clear and easy to understand core point of elephant by using very simple elegant identity. You said that we should look at not just only foot, but also trunk and ears and so forth. And among those things, among four things you mentioned, the last one, the fourth one, Sino-American co-dependency. That one, you know, since I was a little bit confused and also American OOO. When you say that this is especially like Bretton Woods II and some variant of this FDI producer consider that US Treasury as a collateral and if you OOO that many Japanese management who invest in FDI in China, without any collateral. I'm not really sure, and I would really wonder that American managers who put large investment and FDI investment in the US are really considering the US treasury held and in China as a collateral. I have some doubt about it.

And second point which is related to this point is, of course, there are various reasons that the Chinese government ended up and accumulating the highest foreign reserve. And it is also true to say to say that in the next few years, to say that US interest rates would likely go up rather than go down and then the dollar at this stage may not be very attractive for the long time period. Is there any argument that Chinese government accumulating this dollar denominated reserve to purchase various things which may not be purchased without using very liquid dollar denominated instrument. I mean that they would like to buy the OOO from OO they would like to buy gas from Indonesia, they would like to buy Boeing from you, and they are part from Europe and so forth. So that accumulating that one, can you try the various strategic ways so that the purpose of accumulating foreign reserve in terms more strict with the currency. It might be a little different from this problem you have been discussing. I just would like to know from your view. Thank you.

Fukao: So, finally. Barry?

Bosworth: I like this paper mainly because I was not too sure exactly what the answer is. It seems to me that I agree very much that there's a little bit a truth in every story I've ever heard about the US current account. I'm very uncertain about what's going to happen.

What I wanted to ask Barry a little bit more about was the story about US savings and the sustainability. I guess I'd place a little less emphasis on the government budget deficit. I'm struck by something that Catherine was actually the big decline in the household savings rate because the current account deficit greatly precedes the recent collapse of the budget deficit. In fact, it's sort of surprising the budget deficit didn't move the current account very much because investment collapsed when the deficit reemerged so there wasn't a big change in form.

What kind of struck me a little bit was an analogy, I thought, to the Rockefeller family. A rich uncle-type hypothesis, if you like. There was a huge surge in this family's wealth and they decided to go out and spend it. And everybody tells them, you can't do this forever. And they're right, they can't do it forever but they can do it for a damn long time until they run down this wealth.

And if you look at this wealth, it seems to me that one thing that's happened is in the mid 1990s, we had a big acceleration of productivity growth in the US, in the business sector. What does that do? It raises the value of those corporations. The wealth-income ratio goes up in the US, not because of housing to start with, it's real, an expectation of a much larger future stream of income. And if you're richer, you say, well, I guess I'll go spend a little of it. It does look like the savings rate dropped, but if you think that consumption is a function of wealth and income, the funny thing about the US is, national wealth is still growing rapidly. We are not liquidating our wealth abroad despite the magnitude of this current account. If you look at it that way, do you think it could just go on for a much longer period of time?

I don't know that the notion of the denomination of the rest of the world's wealth in American dollars really matters much. American corporations sell in the global market. If the dollar depreciates and I'm holding American corporations, do I think I've lost or gained? I think it's very hard to figure that out. I don't know if there's much currency preference in other words, that may drive this.

Do you think it's possible, number one, that it could just go on a lot longer? And second, why if there was a correction, wouldn't it look like the late 1980s. It ended in a recession but that recession had nothing to do with the current account correction. It just had to do with business investment after the tax reform of 1986 gradually collapsed. I think mainly because we took away all the tax gimmicks that was driving investment up to that point. Do you think, one, that it could go on a long time yet? And two, could the adjustment, in fact, be quite benevolent from an American point of view, since we don't borrow in a foreign currency?

Man: INAUDIBLE (microphone not used)

Mann: I thought it might just be useful to comment on several pieces of data that people wondered about. One was with relation to the private investment return and what was happening to that net investment service component of the current account. It has gone into deficit, but it's not a big adjustment, but if you look at the quarterly changes over the last five quarters, there's a pretty significant trend downward.

More importantly, if you look at the composition of the net international investment position on both sides, the foreign ownership and the US ownership of foreign assets, the FDI component of it, of which there is this big differential in favor of US FDI abroad. And that is what has kept our, the current account part, the interest service positive in the past. The FDI component first, the favoring of the United States has narrowed but more importantly, on the non FDI component the rates of return that foreigners get in the US and US get abroad are almost identical. So as interest rates start to rise in the global context, this differential that has been in favor of the US and has therefore masked the big gap in foreign ownership of US assets. That that differential is going to be unmasked and the tipping point where we start having to pay a lot on our net international position, that could tip very quickly as interest rates start to rise abroad.

The second point was on the question of the reserves shifting to the Euro. I commend to you the paper already referenced by Ted Truman, where he goes into very great detail on all available information about what in fact has happened to official reserves, the currency compositions of our fiscal reserves for a broad range of countries for the period 2000 to 2004. What he finds, and I just briefly looked at it last night or this morning or some time period like that, for all of the great discussion and media talk about shifting into the Euro, the big shifters were Canada, which I find to be very interesting, but the other ones are Lithuania and Romania, not a big deal there. And the UK is also a pretty big shifter too. But for specific data on that you know, if anybody is going to do a good job in figuring out that stuff, Ted will do it. And I suggest you go read his paper.

On private investor appetite for US assets I commend to you a paper by Carol Burtow and Linda Kohl at the Federal Reserve Board, an International Finance Discussion Paper, that does a very extensive analysis of the foreign holdings, or what all sorts of foreigners hold of US assets and other assets. I'm looking at a big table here that has all the different kinds of assets on horizontal and all the countries who you might care about on the vertical and every single cell is filled in so if you want to know about what private investors are holding of US equity assets and other types of assets then go to their paper.

On adjustments which I say policies to avoid exacerbating habits, the global economy is in pretty good shape now. I mean it's not great, it was better 2 years ago before the oil prices started to rise. It's far better to adjust policies in a period of relative stability and calm than to try to do it while they're in the middle of a disaster. So this is the time. It is the time to make these adjustments. It doesn't get any better than kind of two years ago. That's passed, we can't do it, two years ago. But we still have the capacity to do it now before there becomes some nasty adjustments. Nothing new to that statement, it just is.

Fukao: Do you want to respond?

Rossi: Thank you. It's nice to have the last word. And in that case, I'll thank everybody for such a great contributions as well over the last couple of days. And the time you've given us all to talk about it as well. Thank you very much.

But just for this last point, I'd like to say, let's hang on to our hat here. It could be a bumpy ride as they say. But the difficulties with the policy adjustment side I'm trying to address are that it sounds as if for all the prognostications, we're not getting a lot of change in here. And for various reasons, whether it's policies, politics whatever, you know we just have to accept there's maybe not going to be a very radical treatment. And that's partly why I'm trying to push you in the direction of saying, A- these things could actually hang in there for a while. Maybe the kinds of worries we have about crises and turbulence doesn't happen it could get pushed out and if you push it out to 2015 or so, Barry, you know there's loads of other things that could change by 2010, 2015. And financial markets have funny habits with these kinds of things. One minute they worry about 2050 and the next minute they're worrying about next week. So you know, we could see lots of turbulence on the way. I think it's just a great recipe for expecting quite a lot of volatility in financial markets in the next few years.

And my final point here is really trying to say, hey, you know if these things do happen, don't be surprised if we get that volatility and fortunately, we've got a few policy levers that can be pulled out of the bag. I'm not saying those are my greatest preferences, I'd like some of the old things maybe to be there, but you know, by default, there are a few things we know about and we can tweak. And I'd have to say fortunately from the US point of view, you seem to have guys who are willing to tweak them you need to tweak them. I wouldn't be too reliant on what we get out of the ECB unfortunately. They're about to raise rates on us again and that doesn't really seem helpful and if you expect them to move in a crisis.

Fukao: So thank you very much for cooperating with me to keep time. And also, I would like to thank the organizer for having this opportunity to hold this discussion, intensive discussion on very important topic, world capital movement. And I'd like to pass the chair to Ujiie-san to have a closing remark.

Ujiie: Since we are a little bit behind schedule, so I'll try to really make it short. Before we adjourn, I would like to say a few words. And first, I want to congratulate and thank all the authors and discussants. You prepared some thought-provoking papers and contributed to a stimulating discussion of the future pattern of international capital flows.

For the last day and a half we have viewed the elephant from many different perspectives. We have not already recognized it, but surely we realize now the complexity of factors that will determine the direction and volume of capital flows among countries and regions in the years to come. As I said at the beginning of the conference, there is no single solution to the current global imbalances. Likewise, there is no single deterministic path to the future of international capital flows. New technologies arise, new countries join the ranks of rapidly growing economies, et cetera, et cetera.

In any case, we need to be mindful that global disequilibria, as manifest in drastic and persistent imbalance, often trigger dramatic events, is a crisis such as Asia witnessed in 1997 for policy reactions such as closing the gate to foreign capitals. A nice outcome is good for the global economy and for this reason we should continue to jointly strive to understand the mechanisms that drive the global economy and restore balance.

In closing, I would like to repeat how glad I am to have been a part of this meeting over the last day and a half. And to those of you who are around this table, who must rush off to catch a flight, I offer my sincere thanks for your contribution to this conference. I hope the rest of you will move next door for lunch and if you wish, you can continue to discuss this heavyweight discussion.

I hope you will all join me later this afternoon as well as we refresh our minds, with a walk around the garden of Nomura Villa and enjoy various Kyoto cultural offerings before closing. And let me say to you again, thanks to all of you.

Then I think that let me just say, this afternoon I think starting visiting garden. I think it's going to be fairly cold so we have tea ceremony and after that walking around the garden and traditional Japanese dance utilizing Noh stage. The Noh stage is open stage so it's fairly cold. Therefore, I would highly recommend that you put every warm thing you have, and ladies better to have the pants rather than the skirt.

Fukao: Thank you very much for hosting this event.