Globalization and Korea: Opportunities, Backlash and Challenges*

Martin Wolf

Introduction

It's a great pleasure to be here. I am stunned and shocked by the number of people who are up this early to listen to a presentation on a subject so grim. All I can say is if people are prepared to get up at 5:30 a.m. or 6:00 a.m. to struggle here in order to listen to something like this, then nothing can possibly go wrong with the Korean economy because the workaholic ethic for which Korea is famous is clearly very alive and well.

I have put together a presentation which really focuses on the world, not on Korea. I don't regard anything I could say on Korea as being particularly useful, but toward the end of the presentation I have some thoughts which bear a little bit on this.

Now let me just tell you roughly what I'm going to try to cover. I will cover, first of all, what I consider to be the long run economic opportunities that we have. I'd like to give a little light in the gloom, and there's going to be a fair amount of gloom in this presentation covering the next few years. So I'd like to give you some light. Then I'm going to discuss what was already happening—the dangers, the risks—before Sept. 11. I think we have to remember, and I'm going to explain why, that the world was effectively in recession before Sept. 11 ever happened. Then I'll discuss the situation after Sept. 11. Partly the short term repercussions, but also I will risk some speculations—and they can be no more than speculations—about the longer term implications of this tragic event. Then I'll talk very briefly of where I feel East Asia fits into all this, and there, in that context, I will talk about the position of Korea itself. And finally a brief epilogue.

So let me just start, if I may, with what I consider the longer run opportunities for the world as a whole. There are three determinants of long run economic growth in the world. The first determinant is the rate of productivity growth at the frontier: how fast productivity—new ideas, new innovations, inventions—improves in the frontier of the world economy. For the last century, in fact most likely more than a century, that frontier has been the U.S. economy. That, clearly, continues to be the case and I think it is one of

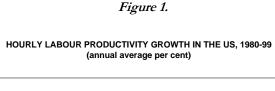
^{*} A presentation at the Distinguished Lecture Forum on November 11, 2001

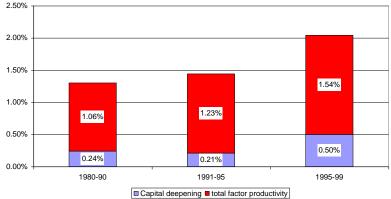
the safest bets that it will continue to be the case for the balance of our careers, quite possibly for those of our children. But certainly for the balance of our careers. The New Economy is the core idea here if we're talking about the rate of productivity growth.

The second driver is globalization: international economic integration. All periods of rapid economic growth in the world since the beginning of the Industrial Revolution two centuries ago have been driven by international economic integration. There has been no exception to that. The only period when the world was dis-integrating was the period between the wars, the two great wars, which was the worse period for the economy in the last two centuries.

The third element of growth is convergence, or catch up: the process whereby countries that have had relatively low levels of productivity in output catch up on the frontier. These are the three drivers of world economic growth. I'm going to go very briefly through these three elements and discuss, because these are long run, what they might mean for us.

First, the New Economy. We have big questions—particularly now with the great tech crash and the decline in investments—about the implications of the New Economy. Was it real? Was it important? And if it was, will it spread? My own view on these is that it was real, it was important and it will spread. But how big will the impact of the set of technologies which we relate to the idea of the New Economy, fundamentally information and communications technology, be? We won't really know until we get into the next cycle. But this is what we can say happened in the last one. Figure 1 is a picture of the hourly labour productivity growth—the growth of productivity—in the U.S., the frontier economy, over the last 20 years, broken down into the '80s, the early '90s and the second half of the '90s.

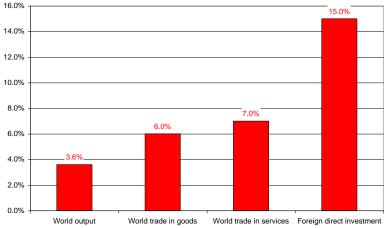




You will see that hourly productivity growth trend improved by about half a percentage point per year in the second half of the '90s. Now half a percentage point per year may not sound very much but for the world as a whole that's a very, very significant improvement. Cumulated over ten years, this amounts to a rise in the frontier productivity of more than 5 percentage points; more than 5 percent. How much of that will last as we get into the next cycle, we don't know. But quite a bit of that seems to be driven by what economists call total factor productivity, which is the upper block in the figure above. Total factor productivity is that part of the productivity improvement not explained by simple investment. So it seems to me plausible in these pictures to assume that there has been some improvement—we don't know how much—but some improvement in the rate of growth of productivity.

The second element I said was globalization. Trade, FDI and portfolio capital flows were all incredibly dynamic in the '90s. Again, we know that in 2001 the picture is very different, but that's quite normal in a recession year. It's happened before. But we should remember that in the period of the '90s as a whole, the volume of trade in goods, trade in services and foreign direct investment all grew much faster than world output.

Figure 2. INTEGRATION OF THE WORLD ECONOMY IN THE 1990s (per cent a year)



All these have been characteristics of the world economy since the '50s, increasingly widely shared. Until very recently, that is until 2000; this engine of growth integration seems to be as powerful as ever before. The '90s were quite exceptional in the

dynamism of international economic integration.

The second element looks good. There's a very good chance there will be an agreement in Doha to start a new round. Given the context, political and economic, this would be a remarkably important indication that the integration process, the underlying policy drivers and the technological drivers of the integration process, is intact.

The third element is convergence, the rate of catch-up, and the importance of the economies that are catching up on the frontier. If you think about economic growth of the last two centuries, the United Kingdom started modern growth, sustained growth, in the first half of the 19th century. There was then a catch-up process in Western Europe and above all in the United States in the second half of the 19th century, in the beginning of the 20th. The inter-war period was a very poor period, as you all know. In the post-war period, the great catch-up was Japan of course, and then countries like your own, Taiwan, Hong Kong and Singapore, spread throughout East Asia.

What sort of convergence catch-up process are we looking at now? Who will converge? What difference would it make? What I've done here is taken a chart in which I've taken the 12 largest economies in the world using the World Bank and IMF definitions, based on so-called purchasing power parity. (See Figure 3.) That measures GDPs to have some roughly comparable way of measuring the GDPs of countries with very different relative prices by valuing them at a common set of prices. We can discuss whether that is an accurate method, but these are the 12 largest economies. I apologize that Korea is the thirteenth. It should have been there. Korea's growth performance would put it right next to India.

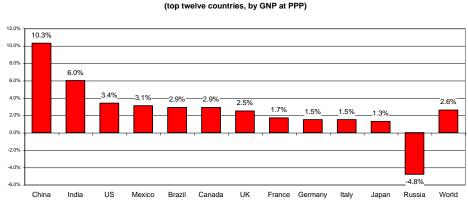


Figure 3.

AVERAGE ANNUAL ECONOMIC GROWTH, 1990-2000

(fon twelve countries, by GNP at PPP)

The reason I put these as the biggest is that they drive the total picture. The important point about this picture is that the three largest countries, with the largest populations in the world, were also the three fastest growing of these countries in the '90s: China, of course, India and the United States.

The growth of China is, as you all know, the most important global economic event of the last twenty years in terms of its long run implications if sustained. Again, the same is true with India's improvement in growth. That improvement can again be built upon in the coming decade, on which there are certainly questions.

The important thing of course about China and India, compared with all previous catch-up countries, is their size. Together they make up nearly 40% of the world's population. They are essentially countries with unlimited labour forces. China's population is larger than that of all current high-income countries together. The same is true for India. So the catch-up process, if it has really caught in these countries, is a world-transforming event. My own view is the only comparable event in economic history of the last two centuries has been the rise of the United States.

They grew faster than the rest of the world and if this would be sustained over next twenty years, particularly China's growth—and certainly as far as labour resources are concerned, there are other resource problems if sustainable—then this will clearly transform the world and it would make the world grow faster because their economy will have a bigger weight in the world and would therefore generate faster growth in the world exactly as U.S. growth in the late 19th century made the world grow faster.

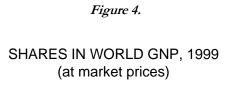
So those are my long-run optimistic stories about dynamism in the world. These huge adjustments implied by these changes, huge adjustment implied by the new technology and productivity growth, by trade, the trade integration and FDI integration and the catch-up process. But these are fundamental sources of dynamism. Provided these basic engines continue to operate, I suppose we can be moderately to reasonably optimistic about long-run prospects.

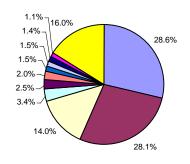
But first we have to get there. And we are, in my view, going to be in very considerable difficulties for some time. We are going through a cycle which could turn out to be the most comprehensive global downturn since the war, and it is certainly a very

significant downturning process.

To discuss this, I will start by explaining why I am focusing on the particular economies I focus upon. Who matters, from the point of view of demand—and recessions are about demand—who matters in the world? Then I'll talk about the gathering world recession and focus, above all, of the forces behind the recession. Remember, that in this section I am talking about what was in place before Sept. 11. What happened after Sept. 11 is another story.

I am going to talk about the risks created by the U.S. recession, as a focal element, and that is for a very simple reason. If we look at shares in world GNP, which is the same as world demand, in nominal terms because we're talking about actual money purchasing power, 29% of the world economy is the U.S., 28% of the world economy is the EU, 14% is Japan—I have got Korea in there, it's 1.5%—immediately after these come China at 3.4% and the other countries are indicated below. (See Figure 4.)





□ US □ EU □ Japan □ China ■ Brazil □ Canada ■ India □ Mexico ■ Korea □ Russia □ Rest

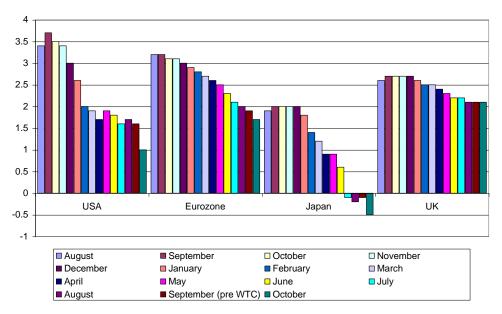
The crucial point, however, is that the U.S., the EU and Japan generate very nearly three quarters of the world's economy in market prices. Correspondingly they generate three quarter of world money demand at market prices, again, that is real demand. So in this presentation, since I don't have limitless time, I am going to focus on these three economies, and particularly I'm going to focus on the U.S.

I'm going to focus on the U.S. not only because it's the biggest economy in the world, but also because in the last five years or so, particularly during and after the emerging market crisis of 1997 and 1998, the U.S. generated an enormous part of incremental world demand. Very roughly, the U.S. generated 40% of incremental GDP growth and about 45% of incremental global demand growth—that is nearly half of incremental global demand growth—over the five years up to the recession in 2001. So we can safely say that as far as demand was concerned, the U.S. was the engine of the entire global system in the second half of the 1990s.

To put it another way, U.S. imports amount to 6% of the rest of the world's GDP. A significant decline in U.S. imports—and this has been much more important for quite a number of countries, particularly in this region, which are very dependent on technology exports to the U.S.—is a very significant shock. That's essentially what's been happening. In Figure 5, I show how completely the view people had about what would happen this year has been transformed in the course of the year. There has been a massive change, shift, in people's expectations.

Figure 5.

DECLINE IN CONSENSUS FORECAST FOR 2001
(GDP growth per cent)



People were far too optimistic at the end of last year. Remember that last August the consensus of forecasts for the Untied States—the consensus of professional forecasters—was that this year it would grow at 3.6%. By the beginning of this year, this was already down to about 1.7%. Just before Sept. 11, it was running at about 1.5. This was a decline over one year of 2 percentage points in expected growth rate.

But this was not only true of the U.S. As U.S. performance deteriorated, expectations deteriorated about every significant economy in the world. The Eurozone every single month has seen a decline in forecasts, a greater gloom about the prospects for this year. Again, the decline in the Eurozone was nearly one and a half percentage points before Sept. 11. Interestingly, in the case of Japan, the deterioration in confidence was as big as in the U.S. but from a lower base, so that initially a year ago people expected the economy would grow at 2%. Not, now before Sept. 11, which is just before the last bar, it was expected to shrink. So there's been a massive, massive over-confidence about what was going to happen this year even before Sept. 11. I will try to explain why that happened, and what had been driving it.

Let's look briefly at what this had meant for the economies around the world—where are we now? In Figure 6, I'm looking at the major economies of the world, the quarterly growth rates, through this year at an annualized rate. You will see that with the exception of China, which is also the main driver of Asia excluding Japan, there is no significant economy which in the second and third quarter has been growing significantly.

(seasonally adjusted annualised quarterly growth)

12.0%
10.0%
8.0%
4.0%
2.0%
4.0%
2.0%
4.0%

Source: JP Morgan

Note: figures for Q3 are forecasts

Figure 6.

The U.S. was stagnant and declining in the third quarter, the Eurozone was close to stagnant, the U.K. actually has been the fastest growing of the G7 economies, the first time for thirty years. Latin America is in recession. Asia excluding Japan is stagnant. Japan is in recession. The world as a whole was stagnant in the second quarter and declining in the third quarter. A recession—a true decline in the third quarter—this is an almost unheard of event for the world economy. Because remember: world population is growing about 2% a year. So if you have a decline in actual output, this is an exceptional event. It means a big decline in world output per head. A picture like this is very, very rare. Even the emerging markets were in recession almost certainly in the third quarter.

I've already talked about China and I won't go in detail into India, except to note that it's still growing reasonably strongly, as China is. Indonesia has had a recovery that seems to have disappeared in the third quarter. But if we look at Asia more narrowly, everywhere else looks dreadful, and Korea, in fact, looks one of the strongest of the Asian Tigers, of the Asian economies.

One of the most important features of this quarterly growth pattern is that among the worst hit were those countries that survived the Asian financial crisis relatively well, particularly Singapore and Taiwan. Singapore is in a very deep recession with quarterly growth rates annualized at minus 10% in the second and third quarter. Taiwan is also in a deep recession. There is, again with the exception of China which is also slowing, no significant Asian economy which is in any state of dynamism at the moment. This is an exceptionally widespread global recessionary period. Normally it is never so completely across the board. Even in the early '80s it wasn't quite as across the board as this recession is. So we are in the middle of a very significant global slowdown.

Now what drove this? I wanted to distinguish the proximate causes, the immediate triggers, from the underlying causes. I think the proximate cause, the immediate trigger, that was most important was probably the oil price rise of 1999.

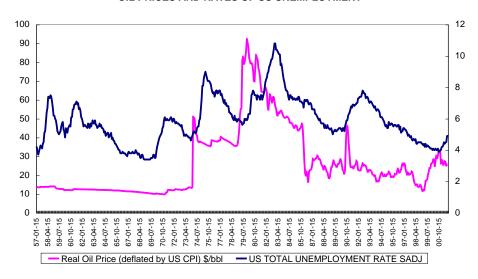
Figure 7 is a fascinating chart, I think. It's a very simple relationship, pointed out to me by a friend of mine, an economist, between the real price of oil and, in this case it would work just as well for the global cycle for the role of the U.S., and the U.S. unemployment rate.

As you will see, the oil shock of the mid-'70s and the oil shock of the late-'70s

both triggered about a year later a big rise in U.S. unemployment. The oil price fall in the early '80s was associated with a big decline in U.S. unemployment, just as the oil price weakness in the '90s was associated with a big decline in U.S. unemployment. And when the oil price started rising in the late 1990s—but to real levels still much lower than in the '70s, its important to remember that—again, just about a year later, the U.S. unemployment rate began to turn.

Figure 7.

OIL PRICES AND RATES OF US UNEMPLOYMENT



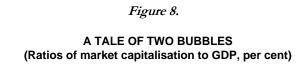
There are very good theoretical reasons why you expect there to be a correlation between the price of energy, which bears directly on profits, and levels of economic activity and unemployment. The correlation is extremely close. So I don't think it's that surprising that we began to see a turnaround in the cycle shortly after the oil price rise. And it's of course now weakening, which is one reason why we can expect this to even itself out in the next year or so.

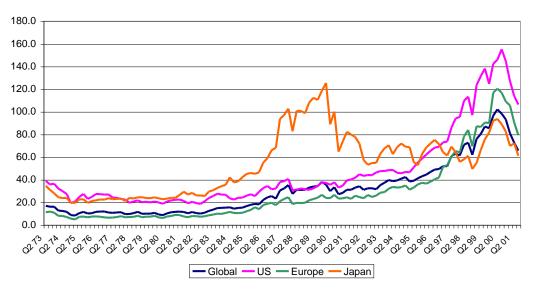
But there is another deeper factor, in my view, underlying what has been going on in the last year. This is the core of what I want to say today on the current situation. And that is the way the U.S. has been driven and what I consider to be the biggest stock market bubble in U.S. history, not excluding 1929. There has been extraordinary innovation in the U.S.. It has created great optimism and with great optimism go risks. This has already shown itself in the great difficulties Japan has found in dealing with its post bubble economy, which I will cover, but it is also central in understanding the nature of the U.S. boom in the second half of the '90s.

Europe, as I will show, is somewhere in between, which is quite encouraging because it means, in my view, that Europe is in relatively good position if the right policy steps are taken, and they have not been taken yet, to offset the demand decline elsewhere.

Now I've said that this was a huge U.S. bubble. Whether things are a bubble, of course, are always debatable and for the people who believe in efficient markets, bubbles are impossible anyway. All I can say is that on fairly basic measures what happened to the U.S. stock market, and therefore the world stock markets for it drove the world except Japan, is incredibly similar—incredibly similar—to what happened to Japan in the 1980s.

Now what is shown in Figure 8 is a very simple measure in which I've taken the ratio of market capitalisation—the capitalisation of the companies that produce output, produce GDP—and charted it in relationship to GDP itself.





There are reasons why you might expect this capitalisation ratio to change. One, is a big increase in the share of profits in GDP, expected to be permanent, and another could be, though it is more debatable, is a big change in the perspective rate of growth of GDP. There was a cyclical improvement in the share of profits in GDP in the U.S., but I should point out that at no point in the '90s did it match the share of profits in GDP of the '60s. And there was certainly some modest improvement in the rate of growth, though we now know, because the cycle is now over, that over the entire '90s the growth rate of the U.S.

economy was slightly above 3%, which was very similar to that of the '80s.

So we can explain to some degree a revaluation of the stock market. But what we've seen in the '90s, and mostly in the second half of the '90s, goes well beyond anything that could be explained in this way. Let me just go through the Japanese pattern.

At the beginning of the '80s the Japanese stock market was valued at 20% of GDP. In five years from '84 to '89, it rose from about 20-30% of GDP to 120% of GDP. It was a staggering revaluation of stocks in relationship to GDP. The bubble peaked in 1990 at the turn of the year. The market, as you all know, collapsed and lost about ½ to 2/3 of its value and has never recovered; it has wobbled ever after.

Now look at the U.S. Again, the valuation was about 20% of GDP. It was still well below 40% into the beginning of the 1990s after ten years of stock market recovery and quite good growth. The real revaluation started very recently in '95 when the valuation was 40% of GDP, and it peaked four years later at 160% of GDP. On every measure of stock market value of a fundamental kind, the value of the U.S. stock market in relationship to underlying assets, in relationship to underlying earnings and in relationship to GDP, at its peak, at the beginning of 2000, was higher than ever before. And in the case of the U.S. there are extraordinary good statistics which go back to the century before last. This is not excluding 1929.

But because the U.S. is so powerful, this same immense revaluation force which increased the market value of U.S. stocks by about \$12 trillion in 5 years, which is equal to 10 years of normal gross savings in the United States as a whole. So in 4 years the market value of the stock market in the U.S. increased by as much as 10-12 years of normal gross savings in the Untied States.

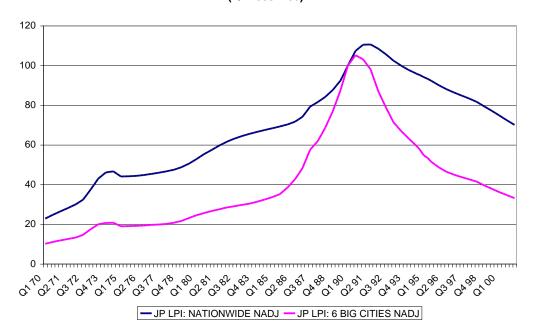
This of course drove a global boom. I've shown you Europe, which also had valuation levels close to that of Japan by 2000. And the world as a whole also had a very significant bubble. If we want to understand where we are now, we have to understand that we are, as was shown in Figure 7 above, in the down phase. The down phase is incredibly similar to the Japanese down phase. We are in a post-bubble economy. And looking at the world economy now, the question—the big question for analysts—is what is the nature of the global post-bubble economy? Will it be like or will it be very different from the post-bubble Japanese economy. The only truth is we don't know. I think it will be different. I

think the process of adjustment will be quicker and much more effective. But that is where, in my view, we are.

Let us remind ourselves what this did to Japan. I'm going to focus on Japan, not only because, obviously, it's a very important economy, but because its story is so salutary. Not only, of course, in Japan was there a huge collapse of stock prices, there was another element which was equally important, but not so important now in the case of the U.S. or Europe. That is the collapse in land prices. In Figure 9 I've put together some numbers just to give you an indication, again, of the colossal bubble in land prices. Land prices in the country as a whole as well as in the cities, which is the purple line, have been falling year-on-year now for 10 years.

Figure 9.

JAPANESE LAND PRICES
(Q1 1990=100)



What has this done to the economy? We're talking about demand here, and when looking at demand, the Keynesian machinery helps. One way of thinking about this is in the relationship between savings and investment. If you've got too much savings that has to go somewhere, if it's not absorbed somewhere relatively effectively, it will equilibrate through recession. That's the basic Keynesian idea. This, I think, is what happened in Japan: that very rare thing, an economy where Keynesian analysis is actually relevant.

The private net lending line in Figure 10 shows the net savings, that is to say the surplus savings of the Japanese private sector. Ever since the bubble in the 1990s, the Japanese private sector has been saving more than it has been investing by between 5% and 10% of GDP. It has a surplus of savings of between 5% and 10% of GDP. Recently, its been close to 10% of GDP.

JAPAN'S INTERNAL AND EXTERNAL IMBALANCES (per cent of GDP) 15.0% 10.0% 5.0% 0.0% -5.0% -10.0% 1986-93 1994 1995 1996 1997 1998 1999 2000 2001 Private net lending Public net lending —— Net foreign lending

Figure 10.

Where has this gone? What has kept this system afloat? The answer is very simple: the government's fiscal deficit. It has not gone abroad, because the world does not want to absorb Japanese excess savings, which would imply a huge account surplus for Japan. Instead it's gone into the fiscal deficit; the fiscal deficit has been running at between 5% and 10% of GDP. Basically, the Japanese private sector has been trying to save, hasn't found anywhere good to put its money, and its been pouring into the government sector which has been accumulating IOUs on the Japanese people, as it were, in an indefinite and, in my view, ultimately unsustainable process.

Now what lies behind that extraordinary private sector savings surplus? This postbubble savings surplus which has deflated the economy? To answer that question, I've gone behind it and looked at the balance between private savings and private investment.

Back in the peak of the bubble years, between '86 and the early '90s, private savings and investment in Japan were roughly equal at 25% of GDP. An enormous number for an advanced economy. And the truth was that rate of investment was entirely unsustainable in a country with a stagnant and then falling population which was pretty close to the frontier in its most successful sectors; it was already a high income country.

It was only sustained because the cost of capital in Japan became effectively zero in the bubble period. When the bubble was over, investment fell, as it was bound to do. Most of us feel that the current private investment rate in Japan, still 19% of GDP, is ridiculously high and completely inconsistent with earning a world competitive return on capital. And by the way, Japanese corporations have not earned a world competitive return on capital for about 15 years.

But it's nonetheless declined. The savings rate has also gone in the opposite direction because the Japanese are trying to make up for this huge loss in wealth which I've shown you above in the stock market and in land prices. So you take it all together: the savings rate has gone up to about 27-28% of GDP, the investment rate has declined because there simply aren't the investment opportunities in such a mature economy to earn high returns. The investment rate is even now as high as that of the United States. So they've been pouring capital into fantastically low return activities, but even so, the investment has tended to weaken.

JAPAN'S PRIVATE SECTOR SURPLUS IN THE SLUMP (per cent of GDP) 35.0% 30.0% 25.0% 20.0% 15.0% 10.0% 1986-93 1994 1995 1996 1997 1998 1999 2000 2001 Private Saving Private Investment

Figure 11.

The result, in the post-bubble phase of Japan, has been a chronic, and I mean chronic, chronic savings surplus in the public sector. There is no chance whatsoever this is going to go away. The overwhelming probability is that it will get bigger as Japanese companies are forced by the realities of the world market to cut their investment rates back to what is actually profitable. Most estimates I've seen suggest that that investment rate in the Japanese circumstance is about 12% or 13% of GDP, which would imply another big fall in the investment rate, and at that stage Japan goes into depression. It is possible that's where we are now.

Now, with that salutary warning in mind, let's look at what happened to the U.S. The U.S. in the bubble phase was the exact inverse of Japan in recession. The Japanese picture I've just given you is our fear for the future. It is what is beginning to happen, in fact, already in the U.S. During the bubble phase in the U.S., the private investment rate rose from about just over 15% of GDP in the whole private sector in the mid-1990s, to a peak of 18% in 2000. This was a rise of about 3 or 4 percentage points of GDP. Note, in 2001—these are IMF forecasts—this investment rate, just as in Japan, is already beginning to fall. Again, it's what you'd expect in a post-bubble phase.

Now look at what happened to savings in the U.S. This is not household savings, or corporate savings. It's both together. The assumption underlying it is that corporations are regarded by households that own them as saving for them. So the best way to think about it is to add the two together. The collapse in private savings in the United States from 17% of GDP in '95 to 12% this year is without any historical parallel in the U.S.' history. There is absolutely no doubt whatsoever that this massive decline in savings was driven by the massive increase in wealth generated through the stock market over this same period. If the stock market is doing your saving for you on such a spectacular scale, why bother to save yourself? This was a very reasonable question, so the American households and corporations decided, "We don't need to save. Just look at ourselves. We're getting richer every year by trillions of dollars. We can save less."

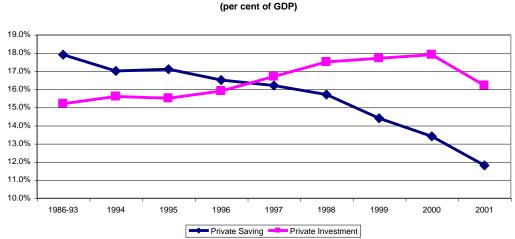


Figure 12.

PRIVATE SAVINGS AND INVESTMENT IN THE US BOOM (per cent of GDP)

The result of this, taken together, was to generate the largest savings investment imbalance, or deficit, in the whole of U.S. history. During the early '90s the private sector of the United States—which was aggregating these two flows together, the savings rate and the investment rate together, netting them out—was running a surplus of about 3% or 3.5% of GDP, which is normal. Normally in the U.S.—a mature economy, growing at about 3% per year—the private sector has run a surplus. But by the year 2000, this surplus had shifted to a financial deficit, a savings investment deficit more precisely, of 5% of GDP. It was a swing of 8% of GDP. The deficit is without historical parallel.

But this also has a dramatic effect on demand, because what we are saying is that private sector of the U.S., the biggest single machine in the world, has shifted from running a surplus of savings over investment of 3% of GDP, to running a deficit of savings vis a vis investment of 5% of GDP in about 5 years. This is the demand driver of the U.S. boom.

This was offset by a very big improvement in the fiscal position, which is now going to reverse—that's very encouraging, that's the purple line below—and a deterioration in current account, which is borrowings from abroad. Foreigners lend to the U.S. private sector and the government started running down its debt. This is how it balanced out.

4.0% 3.0% 2.0% 1.0% 0.0% -1.0% -2 0% -3.0% -4 0% -5.0% -6.0% 1986-93 1994 2000 2001 1995 1996 1997 1998 1999

Figure 13.

US INTERNAL AND EXTERNAL IMBALANCES, 1986-2001 (per cent of GDP)

This is a staggering shift for a mature economy. There is no mature economy that has gone through such a process in the last 20 years, and there are quite a number of them.

Private net lending

Public net lending —— Net foreign lending

Japan was one, though it never went into deficit. It merely went from surplus into balance. Britain was actually another in the late '80s. But no mature economy has seen, when a recession came, a dramatic switch back of this deficit towards surplus. And what does that mean? It means recession, because it means savings grows faster than investment. It means consumption grows more slowly than income. This is the process, in my view, that the U.S. is now in.

So what I am saying is, when the market turned in 2000, the wealth effects that were driving the savings-investment picture I described, were pushing investment up and pushing savings down, started to go into reverse. That is why the recession hit at the end of 2000, triggered by the oil boom. Investment went down first. The United States has been in a very weak investment picture, and now it is savings, savings that is going up, consumption is slowing, and the U.S. is going into a real recession.

Just to give you the final picture, the European Union is in a very comfortable position. It has no serious imbalances by the government, the private sector or on the external side. It is in a very easy position to expand demand if the right policies are taken.

THE EU'S INTERNAL AND EXTERNAL BALANCES (per cent of GDP) 8.0% 6.0% 4.0% 2.0% 0.0% -2 0% -4.0% -6.0% 1986-93 1994 2000 2001 1995 1998 1999 Private net lending Public net lending — Net foreign lending

Figure 14.

So, my story then is that the U.S. is beginning its post-bubble adjustment of investment and savings, or income and expenditure. That adjustment is incredibly powerful because the U.S. private sector went into a position of net borrowing from the rest of the world of about 6% of GDP. This wasn't sustainable, and it is now reversing. What the Fed

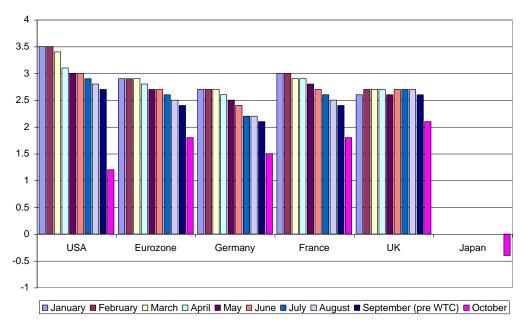
is trying to do is slow the rate at which it is reversing, and the fiscal position will go into deficit to be a direct offset to the extent to which it is reversing. It is unlikely, however, to bring dynamic growth back in the near future.

The situation then we have at the moment is Japan is the verge of a depression. Europe is slowing down because it has not offset the slowdown in the rest of the world by sufficiently aggressive monetary fiscal policy. East Asia has, of course, been hit by the byproduct of the collapse in investment, particularly in the technology sector. Remember that dollar exports from Taiwan, Japan and Singapore fell by 25%. These were the worst affected economies in East Asia in the first half of 2001. So the world was in a very significant slowdown even before Sept. 11. We turn now to Sept. 11.

Let met think about the immediate impact, the long-term effect on politics and the long-term effect on economics. First, I showed you above the picture of the consensus forecast for 2001. Below you can see what Sept. 11 has done to the consensus forecast for 2002. This is, in other words, what well-informed people operating in the markets, most of them are market forecasters, now think about the future.

Figure 15.

DECLINE IN CONSENSUS FORECASTS FOR 2002 (per cent per annum)

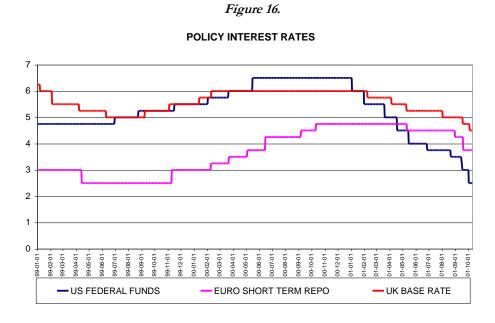


That is a reflection of general mood in the markets, and therefore general moods

in business, as well, obviously because they interact with each other. You will see that expectations for next year for U.S. growth have halved in one month, from an expectation there will be a strong recovery of 2.5% growth to a belief now that the economy will grow at just over 1%.

Similar declines, though not to the same degree, can be seen for the Euro zone, Germany, France and the U.K. In the case of Japan, this is only the first such forecast I've got. I haven't got any earlier consensus forecasts. The expectation now is that the recession this year will be followed by another recession next year, consistent with my picture of a renewed Japanese slump.

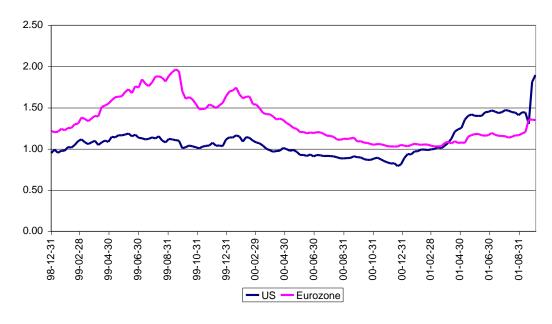
So Sept. 11 has been a massive shock to expectations, as you would expect. This gloom is feeding, of course, through into investment behavior and now into consumption. This has been offset by dramatic declines in interest rates, particularly by the Federal Reserve. The Federal Reserve has cut rates by a percentage point even since the Sept. 11 event. I think it is very likely to cut rates again this week. Even if, as many expect, it cuts rates to 2%, I believe, though I haven't checked fully, that this is the lowest rate by the U.S. Federal Reserve since before World War II. And this is not a flaw. I believe that U.S. monetary policy is likely to follow the Japanese pattern, and we could easily see in this post-bubble phase the U.S. interest rates in the 1% range if the economy doesn't pick up quickly. It is certainly possible, given the forces that I've outlined, that it will not pick up very quickly.



All major central banks have eased. I haven't put Japan in, because we all know that their interest rates are effectively zero, but the easing elsewhere has been more modest because the epicenter of the slowdown has, of course, been the U.S. adjustment process. This has created a very significant monetary easing in the U.S.

One way of looking at that, a very standard way, is the so-called shape of the yield curve, which is the ratio of the bond yield to the three-month rate of interest. You will see that there has been a massive change in this ratio, that the bond yield has remained roughly stable and the short rate has declined.

Figure 17. $\label{eq:Figure 17.}$ RATIO OF BOND YIELD TO 3-MONTH RATE OF INTEREST



So the Federal Reserve is indeed now pursuing an aggressively loose monetary policy. And the question, of course, is whether, in the context of the big balance sheet correction I have described, monetary policy is going to be very effective. Most economists think that in circumstances like this, even zero cost of money is not necessarily going to persuade households, worried about what's happening to their wealth, worried about jobs, worried about economic growth, to continue to borrow. It is only if people continue to borrow that the Fed fund rates really affect what they do. And obviously, businesses will not go and invest merely because money is cheap. They need to believe there's demand and there's growth. Money cheapness in these situations, as you've seen in Japan, only has a

very limited effect. But the Fed is trying. Of that there is no doubt. And it will continue to do so.

In addition to that, there is going to be a very significant fiscal easing. It may be 2% of GDP. That sounds like a very big number, but against the correction of this huge savings/investment imbalance in the private sector, 2% is not a large amount. It could easily be overwhelmed by the U.S.' private sector adjustment. The Euro zone is going to allow the automatic fiscal stabilizers, but its not going to pursue a more aggressive, demand generating policy. The U.K. is committed to a big expansion in public spending. It's too small to have a huge weight in the total.

In general, it seems to me quite clear that the effect in the short- to medium-run of Sept. 11 is to make the recession much worse over the next six months to a year. The only question we have is whether the enormous efforts of the Federal Reserve and the federal government to offset it will actually bring the economy back. We honestly don't know the answer to that question. But the parallels historical of a situation like this are not that encouraging. This is not like previous cycles where the Fed raised rates to stop inflation. This is a situation in which there was over investment, a collapse in demand for investment and a reversal of consumption, symptoms much more similar to what happened in some of the Asian countries after their crash. In these situations monetary policy, to use the famous description, is pushing on a string.

So that's where we are.

But there are long term questions about this. First, is this a phenomenon we are going to be containing? It seems to me the biggest single question about Sept. 11 is was it a unique event or is it going to be one of a series of such cataclysms? If it turns out to be a unique event, the world will clearly get over it, relatively easily, however painful and shattering the consequences. If it's one of a series of events, we're dealing with a totally different world, massively increased uncertainty, massively increased fear and it becomes a very significant event. How significant are the other threats? We read a lot about biological warfare, suitcase nuclear bombs, a tremendous number of fears have been put out there. Many us didn't think that something like Sept. 11 could happen at all. Given that it has, we have to ask ourselves about whether we're going to get further such attacks, particularly in the U.S. or in Europe. A huge question which this has raised, obvious in the course of the subsequent war, is how relations between Islam and the rest of the world develop. And it

has to be remembered that the world's most important oil fields, the world's most important reserves, are in the Persian Gulf region, the very heartland of the Islamic world. We simply don't know how this relationship is going to play out.

There is even a question of whether relatively friendly, or neutral Muslim regimes, particularly the two most crucial ones, Saudi Arabia and Pakistan, will survive and will be able to continue to provide at least tacit or overt support for the Western endeavor to control terrorism. There is one offsetting effect, that seems to me a benign effect of this catastrophe is a massive improvement in relations—on the principle that the enemy of my enemy is my friend—between the West, China and Russia. And of course in the West I include in this, if I may, our allies in this region.

But the truth is we have now a massive increase in uncertainty about the world. We simply don't know the answers to these questions. Now what does this mean for economics? If this is a one off attack and the war against terrorism is successful, then I think we only face a deep and prolonged slow-down, deeper and more prolonged than would otherwise have be the case. But we will get through this, growth will return once the U.S. private sector adjustment is completed.

If this is not a one off attack, and we begin to become, particularly again in America which is after all the focal point of the whole world economy, really frightened about the implications of the movements of people and the movements of goods, then global economic integration itself may come into question. If this goes on for the indefinite future, security will become a dominant concern inevitably in the U.S., and this will, in my view, affect willingness to contemplate free movement of people and goods across the frontier.

Can we keep the Gulf oil fields secure? The dependence of the world on the Gulf oil fields is enormous. It's going to continue at least for the next 10-15 years, there is a real question about their security. And if the not, do we have the means, in any reasonable time, to make them secure or to find alternative energy sources.

So what I've tried to stress here is that the immediate consequences of Sept. 11 are clear, but we face huge uncertainties, and it seems to me huge dangers, if it is not possible to contain this terrorist threat. And at this moment I think the only honest thing an economist can say is that we don't know whether we can.

Let me finally talk about East Asia. It seems to me that the growth of East Asia has ultimately been dependent through many indirect and secondary and tertiary channels on an export machine for which U.S. demand has been the most important, final demand source. It's the most important final demand source, which is why the U.S. slowdown is so significant. After its financial crisis it became still more dependent on U.S. demand. Inevitably, therefore, the region is in considerable difficulty as I showed, with exception of China also slowing, there is no significant East Asian economy that is not now effectively in recession, or in very, very deep recession. So the end of the U.S. fuel is very significant.

Asia is about two or three times as dependent on U.S. demand as Europe is. It is not surprising therefore, that is to say the ratio of exports to the U.S. to GDP of the region is about two to three times higher than for Europe. So its not surprising that its in great difficulty. In addition, of course, the East Asian countries have to cope with the rise of China as a competitor. Less important for this country. Very, very important in my view for the Southeast Asian economies. Ultimately, in the long run, if China's rise continues, it will force a reorientation of all East Asian economies. China will become, if this continues, to Asia what, of course, the United States is to the Americas: the dominant focal point.

It seems that the logical implication of this is that other East Asian economies have to find ways of complimenting China, seizing the opportunities created by China, not competing with its effectively limit-less supply of cheap labour. This must be much easier for a relatively advanced country like Korea than for most East Asian countries, except of course for Japan and Taiwan, which are in roughly similar positions to Korea. I think for a lot of the Southeast Asian countries, the basis of their competitive advantage is effectively being destroyed in manufacturing by the rise of China.

The starting point, of course, to make this policy of complementing China and seizing market opportunities successful, is the completion of domestic market-based reform. I don't think there's any alternative way of development for a country at the level of development of Korea. It may be desirable, in the very long term, to think about trade and currency arrangements, which are uniquely East Asian. At present in my view these are not politically practicable, but I'm interested in hearing what you have to say. At the moment, the best way, I think, for other Asian countries to deal with China is through the WTO and other global bodies in which other major powers are represented, above all the U.S., and which therefore provide a counterweight to China's rising power.

Let me then conclude. I've put down a lot of reasons for worrying about where we are now, but I would like to remind you that I do believe the fundamental engines of growth, provided we can manage the consequences of Sept. 11, are favourable. But of course the same was true in 1929. We still have to manage where we are now, and how we're going to get through the next year, two or three of massive adjustment to the consequences of both the readjustment of the U.S. economy, which I think is inevitable, and the post-Sept. 11 disaster. We have new technology, we have globalisation and convergence—all these processes look relatively powerful. But we have also very strong short-run counter weights; prevailing headwinds. The hard landing was in process before Sept. 11; remember the U.S. was effectively in recession before Sept. 11. The Sept. 11 shock has clearly made this worse. And now there is simply huge uncertainty.

There is no alternative, however, looking at this region, for the East Asian countries to becoming more competitive, more flexible and more market oriented. The world will never be an easy place, but it seems to me this is the only basis on which this region can compete. And, if I am right in believing that the world will come back in two or three years from now—the U.S. will comeback, its not going to be a repeat of the Japanese process, policy will be much more aggressive—then I think the longer run opportunities will come into play.

With this remark, I conclude my presentation. Thank you.

Questions & Answers

Q1: Of the charts you have presented, one of the most telling charts, in my mind, was the relationship between the equity capitalization of the U.S. versus the GDP percentages, running up to several times. Even with the fairly significant recent adjustments, it still is around four times as high as it used to be before it really started taking off. Now, part of that can be perhaps explained by the New Economy, or the productivity gains. In your rough opinion, how much of that four times can be justified by the New Economy factor, and how much more, therefore, is the residual portion which really has to come down.

A1: Thank you very much for this central question. I always answer these questions—I merely discuss directions—by saying that if I understood the answers to these questions I wouldn't do my job and I would be a very much richer person than I am. My only comfort in this situation is that the remarks I make have been made in a more folksy, amusing, but fundamentally the same way by Warren Buffet, and he's made these views known for some time about the state of the market.

I think there are but two comments or three comments that need to be made. First of all, it is worth stressing—I didn't have an even longer series because I wanted to make the comparison with Japan –that in the early '80s, at least by most historical measures, the U.S. stock market was clearly undervalued. And if you take the historic norm for the U.S. market, which suggests that the fair value—and this is based on the historic norms, and there may be reasons said to change it—but the fair value would be probably about 60% of GDP. So at its peak, it was about two and a half times over historic averages. On some measures it was three times, but let's say two and a half times. And basically its done about half the correction. So on that basis it has another 35% to 40% to fall, going back to historic norms.

This, by the way, applies to the P/E ratio, which is another standard cyclically adjusted. Again, that's available back to the late 19th century. At present levels, it is however lower than it was in 1929, which is encouraging, though it is not actually not that much lower than it was in '29 on those measures.

Now Microsoft is a genuine, bona fide monopoly. However, genuine bona fide monopolies in the New Economy are very difficult to find. And not everyone's going to be Microsoft. Lot's of telecoms companies thought they were Microsoft, and look at them

now. So my view there is no reason whatsoever to believe that profit shares and GDP will rise from where they are. On growth rates, there is some evidence that the growth rate of the U.S. economy may be about half a percentage point per year, perhaps a little more, faster than it was in the '80s. That's good, but it's not enough to justify these valuations.

So you have to have some very special reason to believe that even current valuations are sustainable in the long-run. And I, myself, think that the stock market bounce, which has been markable, has occurred almost entirely because of false optimism about the recover, and more importantly the fact the money is now free. When money is free you will buy stocks. We know that. But that, I don't think, is a sustainable recovery, and I do believe that the historic norms in the long-run will apply and the market is more likely to weaken than strengthen from current levels, though about half the adjustment has now taken place.

Q2: I have three questions. Do the ladies read your books more than gentlemen for the sake of your name? In your view, how soon do you think the so-called Asian Economic Community, or Asian Union, will be realized? And my last question is, which countries are expected to be the members of the Asian Economic Community? Will it include India and North Korea? Are they prepared and eligible to become a member?

A2: On the first question, my immediate instinct was to pass, except to say that for some reason that I've never fully understood there seem to be far more men than women interested in economics. It's a great pity; it's one of the problems of who one meets when one does this. But the result is, I'm afraid, that it's probably dominantly men.

Now on the other two questions. I have to say that I've always been very skeptical about an Asian free trade area and I've been so for two reasons. The first is I'm looking forward to seeing the liberalization of agriculture in Japan and Korea. But more profoundly, because it seems to me that there are two conditions required for an effective free trade area. Either you have a dominant country around which all the others wish to congregate because that is their most important market and they wish to stabilize conditions of access to that market and that's clearly been the driving force behind NAFTA and will be behind the free trade area of the Americas is it happens. Or you have a large number of roughly equal sized countries which for political reasons, but also for economic reasons, recognizes their extreme mutual dependence and are not worried by the complete domination by one over all the others. That is the case for Europe.

The problem in Asia, it seems to me, that neither of these conditions apply. That there are two regional great powers which are deeply mutually suspicious and a third power which is effectively a regional great power which is not in the region. And the result, it seems to me, has always meant that it has been more sensible for these countries to pursue liberal policies within the global context than within the regional context. This does not exclude ASEAN which as an economic as opposed to a political entity in my view is quite irrelevant. We can discuss that if you like, but the trade effects of ASEAN are really quite unimportant compared with their political implications.

So my view, and I tried to implicate that gently, is that if you create such an Asian Economic Community I think that would be wonderful, but I have to say, completely as an outsider, that I have always been skeptical of the ability of these countries to do this.

I should add one other element which is obvious, but it also applied in NAFTA. And that is the enormously different levels of development in the countries concerned and the desire of many of them to promote the industries that the others already have a competitive advantage in, which makes it also very difficult. Mexico, by the way, has also given up that hope. That's very important. I am not at all clear that Asian countries have done so. So for this reason I would add that I must say that I am very skeptical about this and I do hope that whatever the Asian countries decide to do regionally they do not forget the enormous benefits the global system, particularly the WTO, has brought them and that they continue to play, or even play a bigger part in that, than in the past. By the way, my previous lecture here, which must have been seven or eight years ago, a great part of the burden of that lecture was to argue that Korea in particular and Asian countries more generally needed to play a more aggressive leading role in the GATT then and now the WTO. I regret to say that that still is not the case and to a large degree discussions about how the WTO should develop have been predominated by the U.S. and Europe. I think that's a pity, and I would certainly encourage you to not let regional cooperation turn your eyes away from the huge global stake that the Asian region has.

Q3: The comparison of market capitalization to GDP is useful but it does have a limitation in that there's a factor going on behind the surface. If you have an economy with more and more of its companies that get listed on the stock market you can grow the market capitalization without any change in GDP. You simply got more companies that are

participating in a publicly listed market. I've done a similar analysis going back to 1940 using the index rather than the capitalization in a raw sense and have perhaps a less pessimistic view about the prospects for the U.S. stock market. I think it's fairly valued at the moment, but that's wholly another discussion. I think many people here in Korea have seen my presentation on that. But I think it's important to recognize that increased participation by companies in stock markets has been a huge phenomenon in the U.S., and does tend to distort that particular comparison.

The second subject I'd like to touch upon and ask for Dr. Wolf's comments, is that the one topic that he left out of this wide ranging discussion—one significant topic—was the challenge as I see it of exchange rates which represent a huge friction in the world and create huge risk and uncertainty, in mind quite unnecessarily for the largest part. Does he have any comments on that and what would be the sound directions to try to pursue that going forward?

A3: Let me just comment on the first one. Clearly you're right. Formally, a widening of the index would have a big effect on this. That's actually been, as far as I can see, more significant for Europe than for the U.S. since there's been a really big amount of floating. But it is important to stress that nearly all the increase in market capitalization to GDP in the U.S. occurred in a period of 5 years, between 1994 and 1999 and into early 2000. Over that period there's no doubt that the valuation effect, which is shown in other ratios like the P/E ratio and the Q ratio, was much, much bigger than the index widening effect. It's a very short period in which this happened. And it's not significantly distorted in my view by the index widening effect over that period. There was an exception in that period because of the New Economy. But even then, most of them had been around and became really highly valued in absolute terms in that period, like Microsoft, Cisco and such; they had been around before '94, active in the market.

Now on the challenge of exchange rates, I didn't cover that because, as you said, it's a huge subject on which I have written extensively. There are two questions. They are closely related, but they are not quite the same question. The first question is the relationship between the G3 currencies, because most of the turmoil that affects everyone else really is a byproduct of movements between the G3 countries. Then there's a secondary question, which is, given what will happen between the G3 countries—of course that's the Eurozone, the U.S. and Japan—what should be the optimal policy of other countries vis-à-vis their exchange rate. And I think that has to follow from the former,

because what makes sense really depends on what's going to happen between the G3, and I'll explain why.

Now I take the view, and its very, very simple and I've taken this view consistently for 25 years, which is that the only policy that can be made operational between the G3 countries is a managed, or dirty float which is basically what we've had since '71. The reason for that is very, very simple. If you're going to have a managed float, which has target zones or any other specific commitments, this implies by definition that when you reach the limits of your zones or targets, that monetary policy formation will have to be conducted jointly. Somebody has to agree which country's going to tighten policy and which country's going to loosen policy because pure intervention is usually ineffective. You require so-called unsterilized intervention which is a change in monetary policy. This amounts to a condition in which one or other of the countries is prepared to support and aid the monetary policy of the others.

But within the G3 they are not prepared to do that. Japan might be willing to do that, but the others won't let it, and the U.S. and Europe are clearly unwilling to do that under any circumstances whatsoever. It is impossible for the Federal Reserve effectively to say, "We will tighten monetary policy or loosen monetary policy regardless of domestic conditions, merely in order to stabilize the exchange rate." It has never been willing to say this. It has never done it. And the Eurozone won't otherwise. So we must assume the floating rates between the G3 will continue.

If we assume that, it has, in my view, very dramatic implications for most emerging market economies. They then fall into one of two broad categories: countries which have a natural anchor currency, that is to say countries which do the predominant amount of their trade, investment and so on with one or another of these three. So if you're Mexico, the anchor currency is the dollar. If you're Estonia, the anchor currency is the euro. If that's the situation, you may as well just fix yourself to that currency. If Mexico went into a currency board in the dollar I don't think there would be any great problem. I don't think they have to do it, but it's a fairly straightforward proposition. It does nearly all its trade with the U.S., as Canada does and as do the European countries with the Eurozone.

Asian countries, and this is why I think the Asian fixed rated prior to '97 were such a catastrophe, are not in this situation. As far as the Asian countries are concerned,

they are deeply affected by the cross-rates between at least three currencies if the yuan floats, and at the moment by two, namely the yen and the dollar. If the yen and dollar move significantly against one another, it has dramatic effects on the competitiveness of the Asian countries and therefore to be fixed irrevocably to one or the other seems to me to be a deep error. So the sensible policy for countries in such a situation, in my view, is a managed float and the only exception to that would be if you want to adopt a hard currency peg to the dollar of the Hong Kong type, you have to have a country in which domestic nominal prices are extremely flexible up and down. If you want see what can go wrong with a country with a hard currency peg that doesn't have flexible nominal prices look at Argentina. It is now in the fourth year of recession and there is no end in sight. So in my view, because the G3 countries are going to continue with a dirty float, a dirty float is sensible for most other countries unless they have a natural anchor currency, that is to say they do the overwhelming bulk of their trade and are affected predominantly by the economic conditions in one of the G3. This is not the case for Asia and that is why I think peg rates in Asia are a very deep error.

May I say in passing that I've always found it one of the most extraordinary things that Mr. Mahatir, who is a notorious anti-American, has consistently decided that the one thing he must do is fix his currency to the dollar.

Q4: In Korea, there's no easy way to ride a single elephant, unlike Mexico's case. You've got a piece of rope attached to each of those three elephants and you've got to careful you don't get pulled apart by the opposing forces that they represent.

A4: There are no simple rules, in other words, for a country like Korea. If Korea realizes that I think it will be able to solve its problems.

Q5: Historical experience shows that a good policy prescription is absolutely useless unless you do have right kind of political leadership that is capable of implementing that. Now, from that perspective, how would you evaluate the quality of political leadership in the United States in the first place, and then in Japan in the second place.

A5: I wrote extensive articles, one published in an American magazine, before the crash saying that what is now going on in the American economy would happen, I believe that Alan Greenspan deserves some significant blame for the situation in which

the U.S. now finds itself, though he's not the dominant source of the blame. Not because what he's done in the last year but because of what he did before, in particular in 1999 when monetary policy in the U.S. was far too loose. Again, this is not hindsight. I said that at the time. The result has been to add monetary fuel to a raging fire. This was completed with the Y2K monetary expansion which was unquestionably crucial in driving the tech bubble in the early part of 2000 when it passed the point of insanity to reach points so far beyond insanity that they were truly indescribable. I think it was the biggest stock market bubble in the last three centuries, what happened to tech stocks in the U.S. in 2000; that is to say infinite P/E ratios as a norm. So Greenspan bears some of the blame for that.

Nonetheless in a situation like this when there are recessionary dangers, Greenspan has shown himself consistently to be a man of extraordinary flexibility and vigour and he has reacted with a speed which is impressive. In doing that, by the way, he is very much influenced by what happened to Japan. Whatever they may say in public they know that what happened to Japan is a lesson and a warning for them and they are frightened of it. I think the Fed will act well. On the fiscal side, I think the U.S.' policy makers are determined to give a big fiscal boost. Unfortunately, because of the ideological proclivities of the Republicans, my feeling is their going to give it in an extremely inefficient way, both short-term and long-term in terms of the fiscal policy changes that are going to occur. But there will be a fiscal boost. So I'm modestly confident that the U.S. policy makers will show the flexibility needed to get through this, and I think, more importantly, the underlying dynamic of a country with a still rapidly growing population compared with Japan, with the large investment opportunities that are associated with that, with its technological leadership, without a huge land price bubble, altogether suggest to me that this adjustment will be got through in the next few years and we're not going to see a long-term stagnation or anything like Japan.

In the case of Japan, alas, it is clear now for ten years that they have been floundering. That they cannot put together a consistent and coherent set of policies to deal with the crisis they face. I don't believe this has changed. For that reason I am, alas, very pessimistic about the ability of the Japanese to come out of their spiral. They are certainly now facing the most severe of their recessions; they are now in their fourth in eleven years, of the recession's they've had in the post-bubble period. But even so, there has been no fundamental change despite the rhetoric in policy in Japan. The great difficulty in dealing with the Japanese crisis is that in order to deal with it,

they have to do several things, all of them very difficult, all at the same time. Doing several things, all of them very difficult, all at the same time is an extremely challenging task and it doesn't seem at the present likely that the Japanese will achieve it.