

Competition, Coordination, and the Crisis

Paul Krugman speech

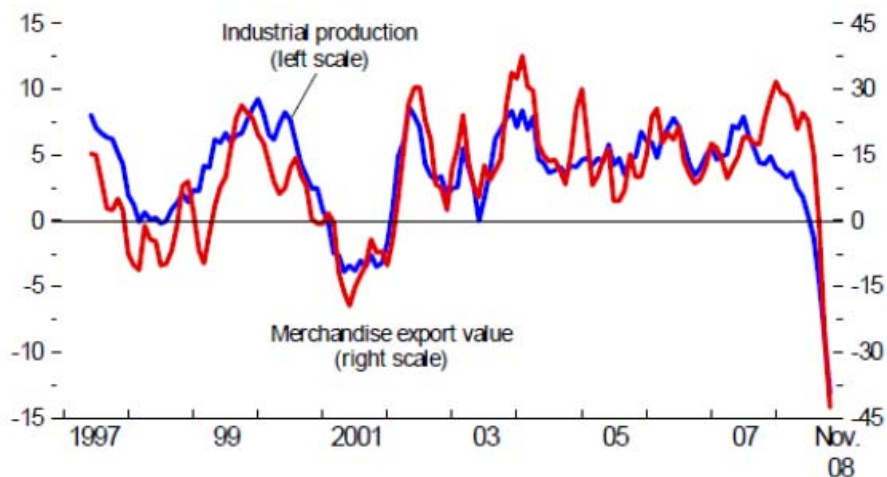
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Good afternoon, I guess it's a good afternoon, but it's not a good year. Something extraordinary and unpleasant has happened to the world economy. What began as a relatively mild recession at least in the USA, has now turned into a major plunge in output.

Taking a look at recent indicators of industrial production for the world as a whole and world exports, we are looking at 1930-like numbers.

A terrifying global slump (annualized three-month % changes)

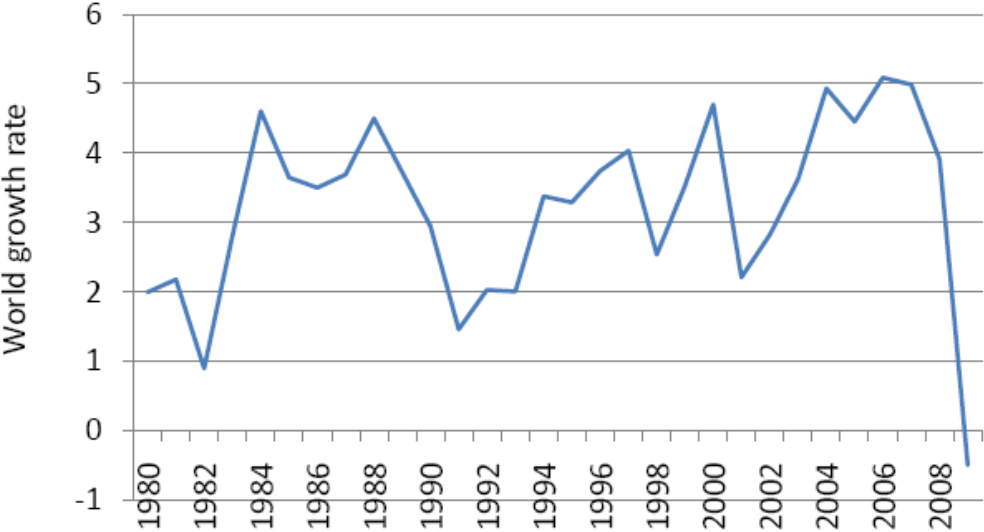


Whilst even I don't believe it's going to be a second great depression, it is clearly extremely severe.

This is a coordinated global slump in output. It is not clear that growth this year will be the worst in most countries since the Great Depression, but it is happening everywhere. All hypotheses about decoupling turned out to be wrong. This is going to be a slump that leads

almost surely to the first declining world-wide product since the Great Depression. It is an extremely severe slump.

The first global output decline since the 1930s

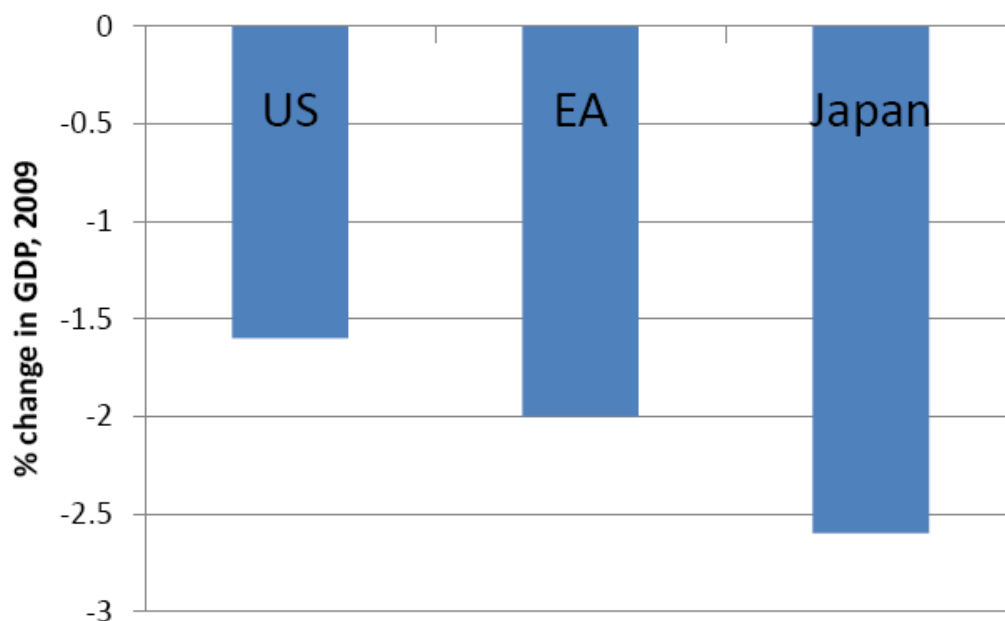


These are the 2009 growth predictions from the IMF¹: US -1.6%, Euro area -2.0%, Japan -2.6%. For what it is worth, I think it is going to be worse than that in the USA. I don't have an independent judgement for Europe or Japan. What is extraordinary is that the slump looks worse in Europe and in Japan than in the USA, even though the crisis is widely held to have originated in the USA - and certainly the first inklings that is going to be a major financial crisis came in the USA.

Why does the slump look worse in Europe and in Japan than in the USA? A number of answers could be given. One answer is simply that this is the crisis that is hitting manufacturing especially hard and since the USA is relatively more of a service economy, it is a little bit less hit. Another answer is that the USA is being more active in its policy response. Our automatic stabilisers are weaker because we have a smaller welfare state but we have undertaken more deliberate policy action than the other major advanced countries.

¹ IMF WEO Projection, January 2009.

The crisis is hitting everyone ...



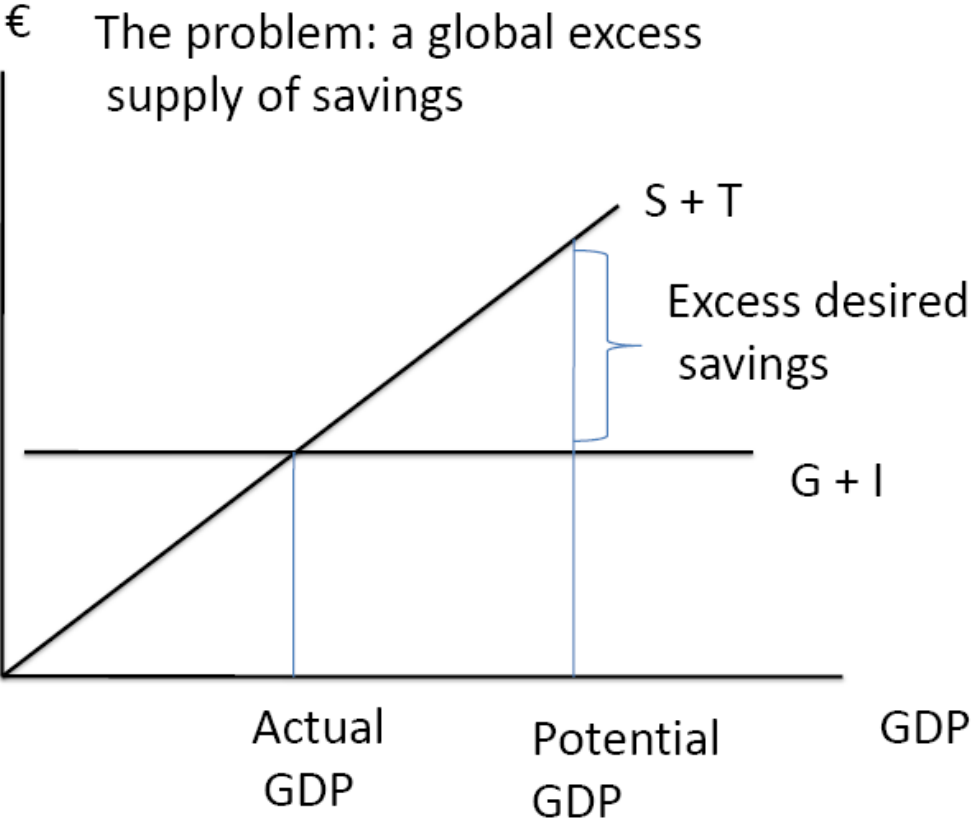
What is going on? There is a great temptation, which I sometimes have fallen into as well, that when you are trying to explain an economic crisis of this kind that you turn it into a morality play. You dwell a great deal on the excesses that led to the crisis. Of course, this is important for preventing the next crisis: we really want to know what it was we did wrong and want to understand. We want to look at the mistakes made by the banks and mistakes made by investors. But there is a trap in that kind of emphasis, of focusing so much on the excesses of enthusiasm in particular that led you into a crisis. It tends to make you think that the most important thing is to undo the excesses. That somehow the crisis is a punishment for the “excessive exuberance” of the past and therefore that the most important thing to do is to curb our excessive enthusiasm, the immorality that got us into the crisis. But then you lose sight of the question: “what do we do now?” Not: “what is it that got us into this problem?” but “what do we do now to get out of it?”

As people know I am a great devotee of John Maynard Keynes - not as a holy writ but as the best guide we have to the understanding of what is going on. One of the crucial things that Keynes did in 1936 in his “General Theory” was to say, look, we should not talk so much

about where this depression came from, about the animal spirits and what drives them up and down. The question is not understanding how it was that excessive investment etc happened in the past, but rather how can we stop that turning into mass unemployment.

And the really crucial thing right now is, in fact, not yet one more analysis of the errors of securitisation (though that we certainly do need to understand how that happened), not further outrage at the bankers who made the mistakes that got us here (though the mistakes were very large) but: ‘What do we do now? How do we get out of this crisis?’

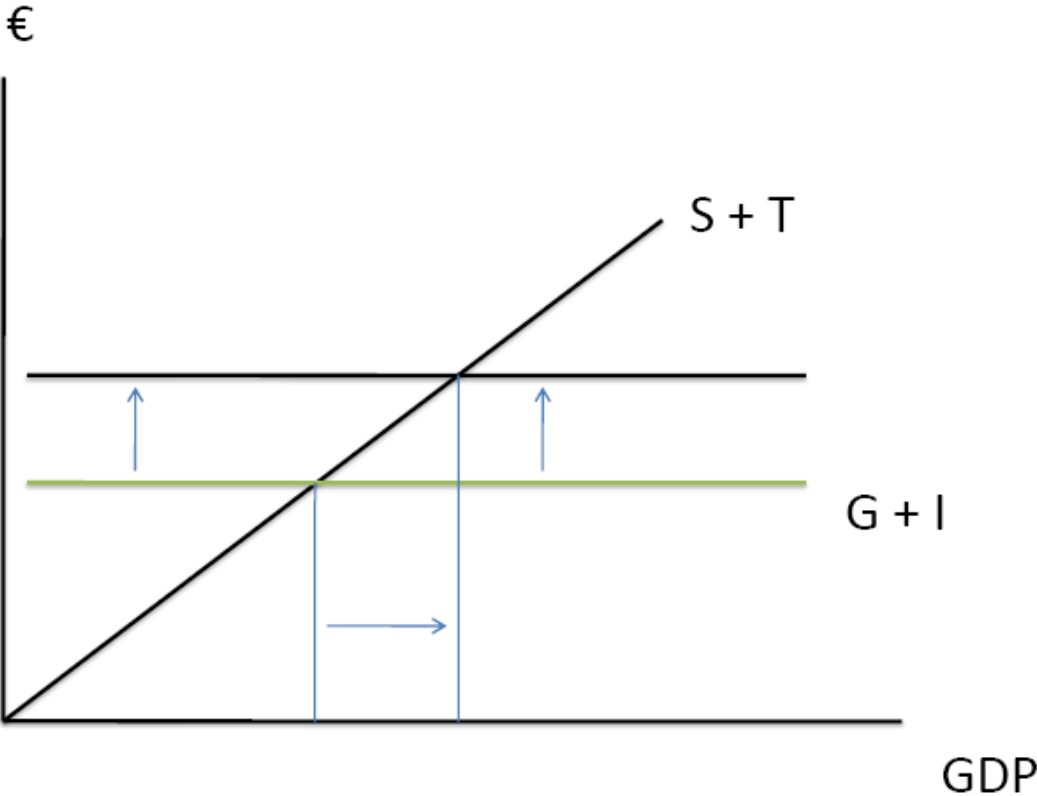
We need to go back to the old fashioned textbook picture of macro-economics.



Although this used to be basic Economics 101, I am not sure people actually still teach this stuff. But what is terribly important right now is the *accounting identity* that for the world as a whole that investment plus government spending equals savings plus tax revenue. This is not true for individual counties because of international capital flow, but it must be true for the world as a whole.

What makes the identity hold day by day is in fact inventories. If desired savings is greater than desired investment, what happens is that undesired investment takes place. That is that inventories build up, which leads to a fall in production. The world economy tends over a very short period to make desired investment and government spending equal to desired saving plus tax revenue. Within a very short time horizon what will happen is that output will fall or rise so as to make this true.

Where we are now is that we have a global economy with insufficient demand. One way to think about that is to think that the desired world savings, the desired amount that people in the world would want to save if we were at potential GDP, is greater than the amount that business want to invest. And as a result we have a depressed world economy, depressed enough to bring us down into a situation where actual GDP is well short of its potential.



Now this is of course a conceptual diagram, but it basically represents the situation in the world economy at the moment. We have an excess of world savings with no place to go. And that is the core of our problem. The answers to the problem, the solutions whatever they are, must ultimately involve doing something to shift either desired investment and government spending or desired savings plus taxes. And for the most part we are trying to shift that

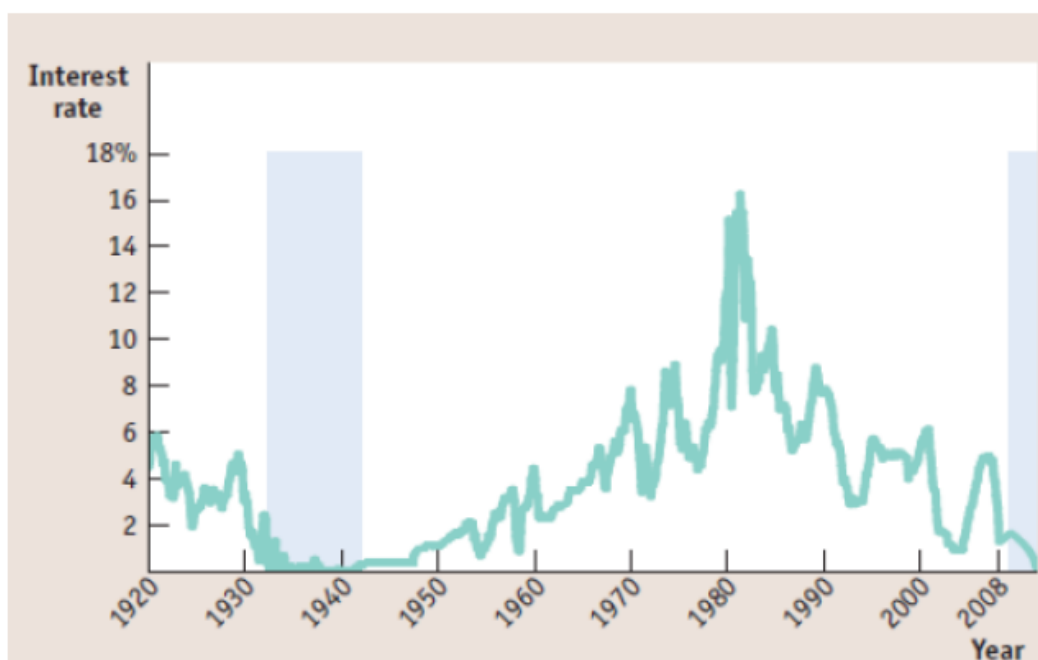
investment and government spending (the G+I line) upwards, we are trying to increase the desired amount of investment or possibly government spending in order to expand demand.

All recovery strategies are about doing something along these lines. Where they differ in is specifics, in exactly what you might do. What we ordinarily do is to shift interest rates. Normally we would say to Mr Bernanke or Mr Trichet: do something to cut interest rates. And for almost 70 years that would have been sufficient, and has been all there was to the answer. In fact a little over ten years ago if you'd asked me, I would say that's always sufficient. Actually, I have a compiled list of embarrassing quotes from people who did not think that what we are going through now is possible - and some of them are from myself from the mid 1990s, I said that the unemployment rate two years from now will be whatever Alan Greenspan wants them to be plus or minus a random factor reflecting the fact that he is not quite God.

Ordinarily we have been able to rely on central banks and on monetary policy. Indeed I might say that the whole intellectual basis for the euro rests to a very large extent that the belief that monetary policy can do the job, because you have set up a multinational entity with no single fiscal authority. The only centralised decision making economic authority is the European Central Bank. You were relying on the ECB to stabilize the economy, relying on technocrats to stabilize the economy by taking monetary policy essentially out of the political domain. And that seemed good enough, except now it is not...

To see why, consider US interest rates that were at 0.03% in December. The ECB has not gone as far yet, although I would be very surprised if it does not eventually. I take short term 3-month Treasury Bill rates, but these are essentially indistinguishable from policy interest rates now. The USA in the 1930's was a zero interest rate-country, back in 1936 the treasury bill rate was 0.3%. I actually remember reading the historical statistics and thinking that nothing like that is every going to happen again. But in recent months, interest rates have been as low as that and even negative for brief periods.

Normally, we raise I by reducing interest rates – but for the first time since the 1930s, this isn't possible



We are now hard up against the zero lower bound. We cannot push for any lower interest rates because at that point the monetary base becomes an asset that dominates government debt. The limits are actually quite visible. This is a little bit complex because there has been some changes in the policy of interest payments on reserves, but the money multiplier in the USA is now less than 1. The monetary base actually exceeds M1! That's partially because banks are holding enormous excess reserves, it is also because households are holding on to cash. Japan was in this situation during the 1990's and we all thought that was remarkable. Some of us thought it was an omen for things that might happen elsewhere. I was told at the time by Japanese economists that the only consumer durable that was doing well in Japan at the time was safes. The same thing really is happening in the USA right now. There is large accumulation of household cash. We have reached the limits of conventional monetary policy.

And however we got into this, that is the main point now. Our central bankers, Trichet and Bernanke, are not able to use the conventional monetary tools to deal with this slump. This might be less disturbing if we thought it was going to be brief, if the economy had already

stabilized. But in fact of course things are still falling rapidly, there is no end in sight and conventional policy has lost all traction.

This did not come completely as a surprise. A number of economists did look at the Japanese experience and did not see it just as a verdict on Japan, but as a warning sign. If it could happen to Japan, a large politically stable advanced country, perhaps it could happen in the USA and Europe as well. Among those were a little nest of people at Princeton, where we were quite worried about this. The Federal Reserve has spent a long time thinking about what it would do if the USA ever started to look like Japan, but what we are learning is that the proposed remedies don't work that easily as we thought.

Overall there are three types of policy option:

One option is unconventional monetary policy. This was Ben Bernanke's central focus in his personal research for much of the early part of this decade. When the policy interest rate hits zero this is another way of saying that the central banks purchases of short term government securities have reached saturation point. Government securities yield no more than the monetary base. There is not more you can do.

But central banks can also purchase other things. So you can do "quantitative easing". For the monetary experts here today, this is a term which I previously used to mean just putting of lots and lots of cash into the system and hoping it went some place. But now it has come to mean buying unconventional assets, buying private sector paper, buying longer term bonds, lending money in various ways etc. That is certainly one thing you can try and I will show in a second this has in fact been done in the USA and has now been done to some degree in the UK, although not at all yet here [in the euro area].

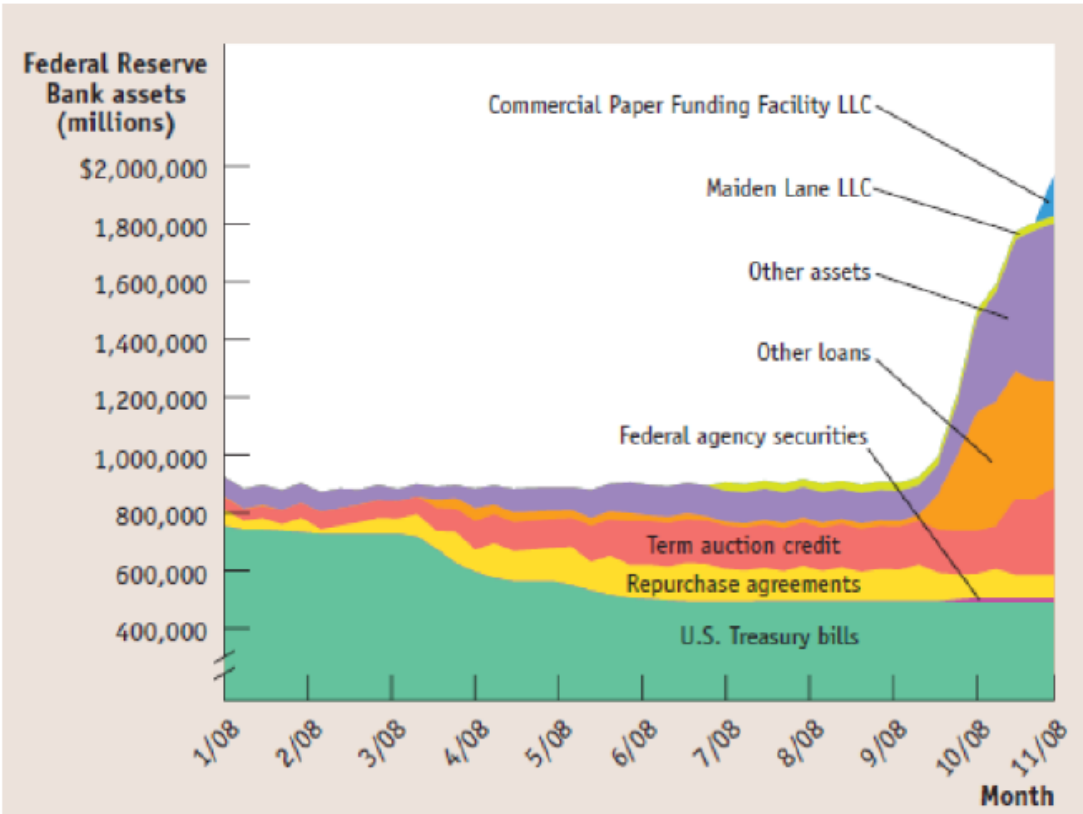
The second thing you could do, to the extent that you think the problem is in the banking system are at the core, is try to fix these problems. These are both ways of saying raising desired investment ("I"). The crucial thing, often lost sight of in these discussions, is that ultimately these things only work if they lead to higher investment spending, higher demand for goods and services for investments. So if you thought that fixing the banks is going to solve the problem, that's not an alternative.

And then of course the last option is to go out and have the government provide a lot of demand which we hope will stimulate the economy.

Just to say, I will come back to this in a second, there are major international spill-overs from all three. If the fed through quantitative easing reduces risk spreads in the market, that's a benefit across the board, not just for the US economy. With bank rescues, European financial institutions have gained as counterparties e.g. from the AIG bailout. Likewise with a fiscal stimulus. Above all, within the European Union, whatever Germany does to stimulate its economy will convey much to the benefits to France and Italy and vice versa. The spill-overs with very high trade shares become very large.

What is actually happening is, as I mentioned, quantitative easing. The Federal Reserve has about tripled the size of its balance sheet with the proportion of original standard safe assets such as Treasury Bills becoming much less through the enormous growth of the exotic things that the Fed is doing at the moment.

One answer: quantitative easing



The Fed's assets are all becoming part of the "alphabet soup" like TALFs² and MMIFFs³ etc. The unfortunate revelation has been that these things seem to help but not as much as we thought. They do produce some reduction in risk-spreads but it takes a lot of intervention to produce modest effects. So the best going estimate right now is from Goldman Sachs, which is trying to assess the apparent market effect of Fed intervention and their estimates are between 1 and 1.6 trillion \$ of quantitative-easing produces the same effect as a 100 basis points cut in the Federal Funds rates. That is a lot of intervention to achieve a fairly modest goal. Goldman Sachs also estimates that a standard Taylor rule would say that the Fed ought to cut the Fed rate to -8% by the middle of next year. You thus have some idea of how far short we are falling in dealing with the crisis.

Considering fixing the banks, that is really off-beat. We talk a lot about Japan and Japan's lost decade as a model for what happened to all of us now. And the story you often hear is that Japan was stuck because it failed to come to grips with its banking problems. And it was not until Japan finally owned up to the size of non-performing loans problem and poured very large amount of capital into the banks, actually about \$500 billion - relative to the size of the economy that would be \$2 trillion for the US. It is true that after Japan fixed its banks, it finally did recover. But if you actually look at the sources of the recovery it is not clear that it was the bank rescue that actually did it. When Japan did its recovery, I remember bank rescue was supposed to work through increasing investment. But if you actually look at what drove the Japanese recovery, it was not through investment, it was through a big improvement in the trade balance driven largely by exports to China. It is not clear how much that had to do with Japanese policy at all. And certainly it was not clear how much this had to do with fixing the banks. It was more driven by the expansion of demand from neighbours. This is a cautionary tale to people who think that if we fix the banks everything will be all right, since fixing the banks did not seem to do it, something else did. It is also a cautionary tale for those who are looking for an end to the downturn. I would say in general the Japanese experience is so often held up as a model of what not to do and how we won't be like Japan. But so far we're being exactly like Japan. We are dawdling on bank rescue, we are doing fiscal stimulus, but too little too late. On the whole, we are following exactly the path Japan followed in the 1990s. But also when Japan finally did achieve a convincing recovery, it was achieved in a large part by finding nearby a rapidly growing country to export to. And since we now have a global

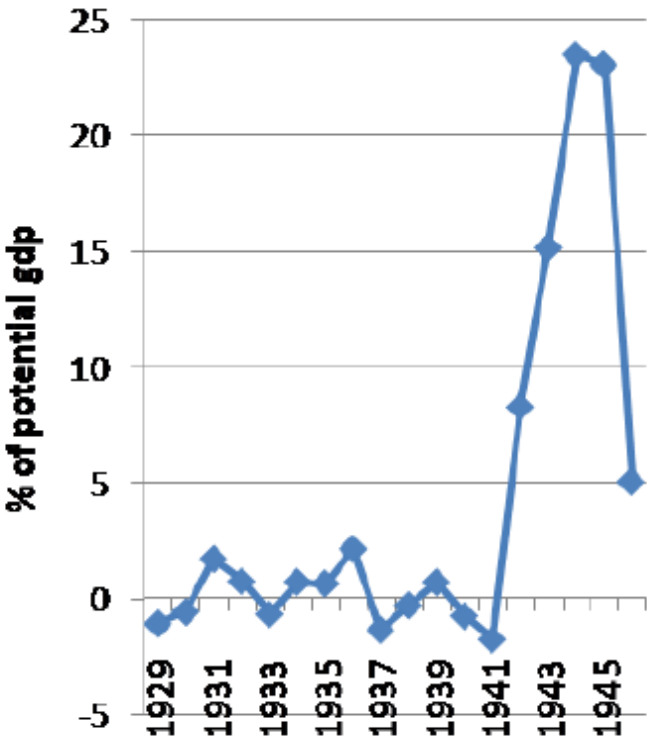
² Term Asset-Backed Securities Loan Facility

³ Money Market Investor Funding Facility

version of Japan's lost decade taking shape we would need to discover another planet to trade with to follow that solution! We don't really have that option.

The third possibility is fiscal policy and I have to say that it is a little disturbing that the only real role model we have for exiting crises like the one we are in is in fact the end of the Great Depression. This was the result of a very large public works programme known as World War II. It is worth just getting a sense of scale from taking a look at our last great depression. In the USA there has been this huge debate on the New Deal whether the policies of Franklin Roosevelt worked and whether his fiscal expansion ended the great depression. But fact of the matter is, looking at the US full employment deficit as % of GDP in the 1930s

US full-employment deficit, 1929-46

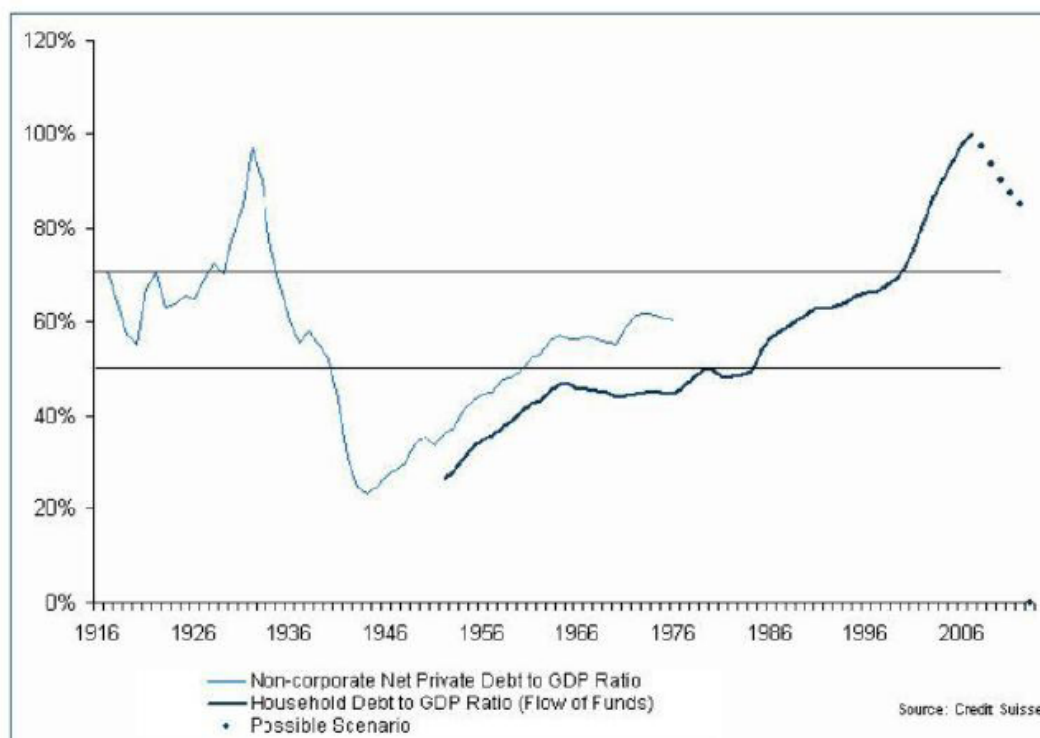


You can hardly see the impact of the New Deal: it is in fact the trivial little wiggles at the bottom of the chart. For what it is worth, when they reversed the fiscal expansion from 1936 to 1937, the economy actually took a major hit. So the lesson of the New Deal seems to be that fiscal expansion works and fiscal contraction hurts. But that it took huge deficits, full

employment deficits of more than 20% of GDP, to actually boost the economy out of the Great Depression. Now we are not currently experiencing anything like Great Depression levels of unemployment, so it would not need to be that big, but if our idea of what it takes to recover is something along those lines, it would have to be really big.

Let me say one more thing: the process of recovery. The big question about World War II has actually not been why the economy grew during the war, because that was an enormous fiscal stimulus, but rather why didn't the economy lapse back into the Great Depression afterwards. Why was the expansion successful in "pump priming" the economy. (This is an unfortunate term, because nobody in modern America and hardly in Europe knows what it means, to prime a pump anymore.) Why did the economy keep on running? A lot of it is explained by the shift in the share of household debt in GDP

Does permanent recovery require restoring household balance sheets?



The curious thing is that household debt was very high in 1929 and was greatly reduced during the 1930s and especially during the Second World War. During the post war period and especially since 1980, it has risen rapidly again and on the eve of the current crisis was right back to 1929 levels.

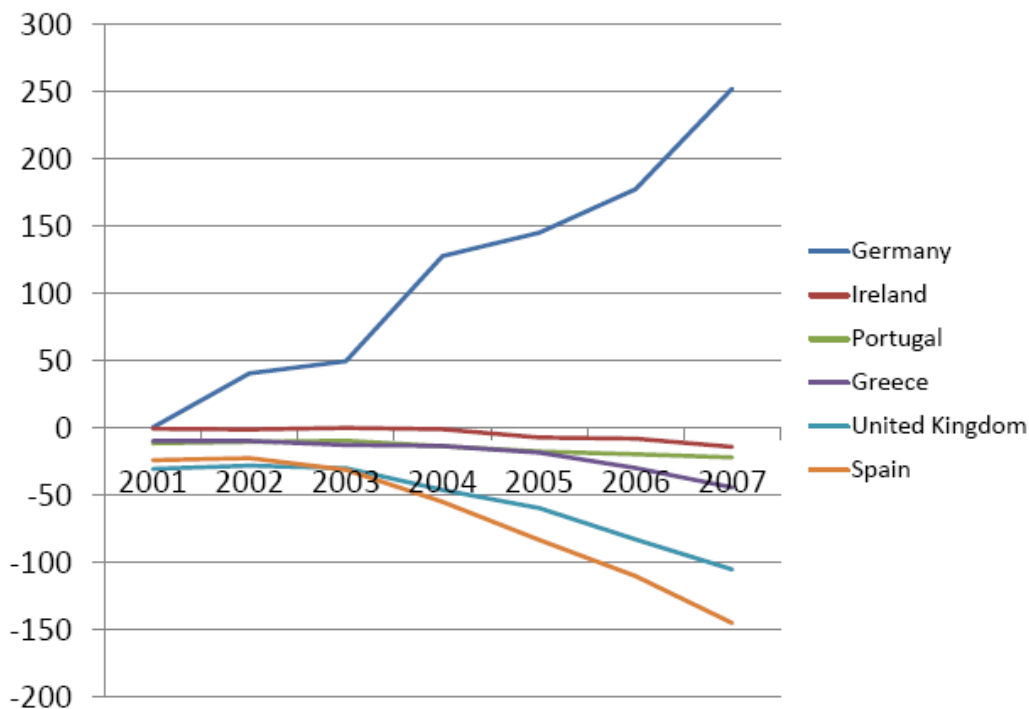
What the War did was permit a sharp reduction in household debt, a sharp reduction in household balance sheets, partly because there was a period of high income but no consumer credit. This was partly because there was substantial inflation which inflated away a good part of the debt. That would suggest that we need now is not just a large but also a very sustained stimulus of some kind to get out of this crisis. I am really concerned about this. There is a lot of talk about recovery later this year, I would not be surprised if industrial production picks up, because we have right now an inventory cycle which will eventually come to an end. But a true exit, a true return to a sustainable prosperity, looks like a long time coming. The major problem is that everyone is acting inadequately.

Europe has all of these problems, like the USA, plus you have an additional problem.

Let me talk about the European competitiveness issue. We talk about competitiveness a lot and some of you may know that some 15 years ago I went after that, because I thought that it was a deeply misleading metaphor for countries and I think it still is. We are not worried about the competitiveness of the EU vis-à-vis the USA or Japan, actually we are not in competition. If there ever was a time where we were not in competition with each other, it is now. We all hope for maximum prosperity in the rest of the world, but what we really need is expansion so that there are spill-overs. The more that we can get an expansion, the better. The world as a whole is in big trouble, and that is not because the world as a whole is uncompetitive but we really have a situation where expansion is in everybody's interest.

But there is a real problem of competitiveness or, if you want, of misalignment within the euro zone. Let's look at the behaviour of the current account balances of a number of EU countries from 2001-2007 including the UK

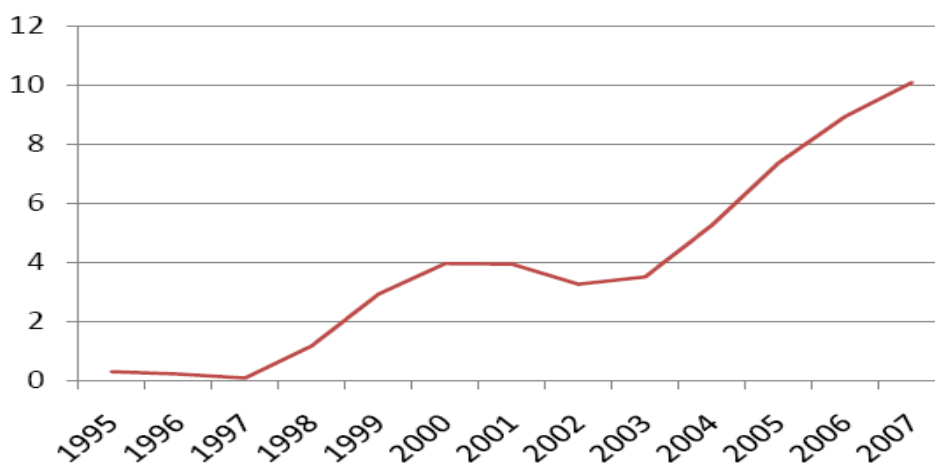
European current accounts (\$billion)



This is a familiar story, similar to a chart much talked about in terms of global imbalances. There is another standard chart that looks quite a lot like it except that it has China and the oil exporters (with large surpluses) and USA (with a large deficit) on it; the EU does nothing much in that chart.

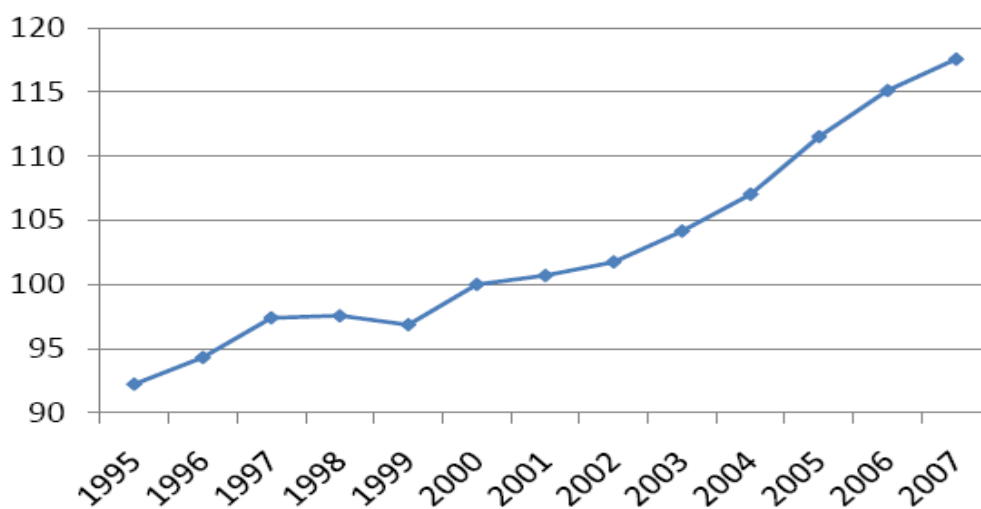
But within the EU in effect, the EU replicated in miniature what was happening on the global scale. There are some very large imbalances between Germany, as the surplus nation and a number of deficit nations. Much of this is tied to housing and construction booms in southern Europe and to some extent in the British Isles. I have not shown you the eastern Europeans here, their current account deficits were spectacular as a share of GDP but less so in dollar terms, being quite small economies. The bubble, clearly in its own way a counterpart of the US bubble, has burst and now everyone needs to adjust. The problem is, there is no easy adjustment mechanism. So looking at Spain,

Spain: current account deficit, % of GDP



here is Spain's current account deficit during that period of expansion as a share of GDP. This is no longer sustainable. People don't think of it that way. The good news is, once you are a member of a currency union people stop obsessing about the balance of payments figures, but nonetheless, the fact is that those large capital inflows will not continue. There has to be a change. Spain is now uncompetitive, when it can no longer sell holiday homes, as a way of paying for its imports, and it's now uncompetitive in other sectors.

Spain: relative unit labor cost, 2000=100



Looking at OECD unit labour costs in manufacturing for Spain, we finally come to address the issue of competitiveness and industry. I don't know what the right number is exactly, but clearly Spain has moved way out of line in terms of costs from the Euro zone average, meaning that something almost certainly it has to retrace a good part of that. And this is I think the great European special problem. Of course, if I were going to do the unemployment chart for Florida or Southern California, it would look quite a lot like Spain. But the wage, relative wage increase would be nowhere near as large, and the adjustment processes are very different. If we are looking at regions within the US, we essentially give approximately 5 years to have infinite labour mobility. Within the US people move. Our adjustment will simply be that many people who went to Florida in search of their fortune will move back to the Mid-West.

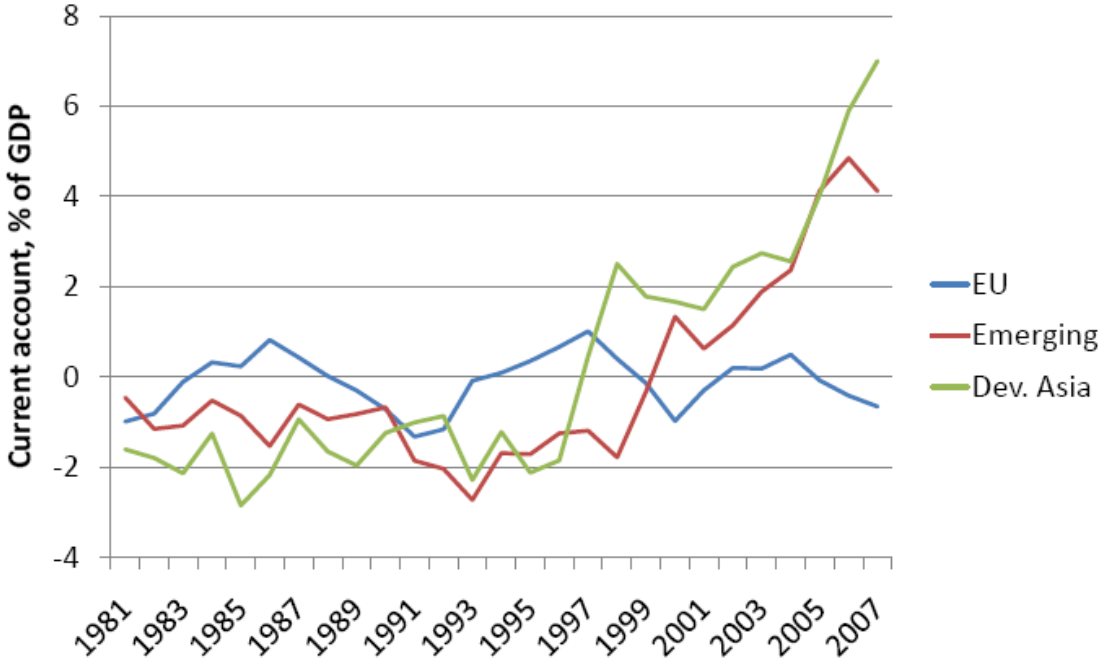
In Europe, it's not so easy. And there is a terrible adjustment problem now facing the countries that ran large deficits during the good years. There are no easy answers there. Higher relative productivity will certainly help these countries and a strong euro zone economy would help these countries. It would be a lot easier to make this adjustment if the European economy was doing well and if Europe did not have deflation, but instead had modest inflation. It is going to be very very hard to get through this adjustment otherwise. One thing that one would do of course, I would recommend devaluing the peseta, if there still was one. And I think the initial reaction to this crisis particularly looking to the difficulties UK was saying what a terrible mistake they made, by not joining the euro. But little by little, as the size of the acquired adjustment is sinking it in, it is starting to look like it may be actually for the time being at least that having their independent currency is not such a bad thing after all. This might be quite helpful.

Finally, I was asked to comment on long term competitiveness issues: the long view. And what we are all worried about in the common discourse is: can manufacturing survive in the long term given the rise of the emerging economies.

When people take a look at the very low wage rates in China, and in fact some industries are migrating from China into places like Vietnam with still lower wages, what will the world look like for what we still call the industrial countries? The crucial thing to say - and here I can once again be like a conventional "don't-worry-yourself-to-much" economist - the balance of payment always balances. It is not going to be the case that all production will

move to the low-wage countries. If a country is more competitive on everything across the board, something will have to give. What is going to happen is that wages are going to rise. . The perception that advanced countries are completely uncompetitive in manufacturing is not going to happen. It really is an artefact of a very special set of financial events.

An unbalanced future?



So if we look at current account balances as percentage of GDP, the two lines that head off for the sky are the emerging markets as a group and developing Asia in particular. These were actually current account deficit regions until the mid-90 and then in the late-90s moved into these huge surpluses. And that is not because they were super competitive, but because they were terrified by the financial crisis and thus began accumulating enormous reserves. That process has gone on to a greater extent than any of us imagined possible for a reaction to a temporary event. The Chinese are always starting to wonder exactly what good their \$2 trillion of treasury bills are to them. One way or another this will solve itself.

Now that does not mean that everything will be fine for manufacturing, because if you look the EU has actually gone through this whole period with an approximately balanced current account. So, if your perception is that competition has deindustrialised the EU, then, whatever

is driving that perception will not go away just because the Asians finally stop running such enormous surpluses. What is happening I believe is that the actual impact of trade on the size of the manufacturing sector in Europe as opposed to the US has been relatively small. In the US, we were primarily the main counterpart of this great Asian surplus and we will probably reindustrialise to some degree as it unwinds. The EU has made roughly a balance. But what is happening is the ever growing international division of labour just keeps growing. The breaking up of the production chain, the ability to slice off the labour intensive pieces of production and do them in one part of the world and then bring the more skilled intensive or the more location-sensitive pieces of production and do them in the first world keeps growing. So you see a lot of displacement and rearrangement within the manufacturing sector.

On top of that one sees a gradual reduction in the share of industry in total employment, which one sees everywhere, even in Asia. This is simply for the same reason as the steady reduction in the agriculture share of employment in previous generations: differential productivity growth rates. It takes less farmers to feed us and over time it will take us less manufacturers to provide us with “stuff”. But that is a large transformation that takes place over time.

The bottom line is: do not worry about the overall competitiveness of European industry. That is something where the invisible hand will take care of things. The big problem is the differential competitiveness within the euro zone and over and above that, this horrific economic crisis with, as far as I can tell, no end in sight...