Introduction by

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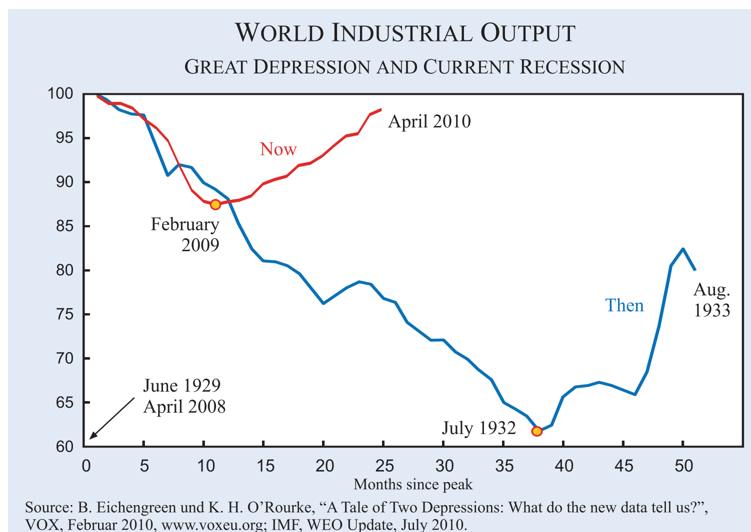
Dear President Köhler, dear President Trichet,
Ladies and Gentlemen,

The recession is over. The lowest point of the business cycle was reached in February 2009. Thereafter the economy began its recovery and has since followed an upward trend. Figure 1, compiled according to Barry Eichengreen, shows the collapse of the world economy between June 1929 and 1932 in comparison with the recent crisis. The figure shows that the first eleven months were basically identical. Fortunately, we did not have to undergo another Great Depression. Why? Because the governments of the Western World took decisive action, implementing bank rescue packages amounting to 7 trillion US dollars and Keynesian rescue programmes worth 1.4 trillion US dollars – gigantic amounts that we can hardly imagine. Before the crisis such a policy was unthinkable, but it was in fact what helped us.

* Text of the speech held on 29 April 2010. Data cover the period up to that date, corrected for recent revisions of the official statistics.

Figure 1



Source: B. Eichengreen und K. H. O'Rourke, "A Tale of Two Depressions: What do the new data tell us?", VOX, Februar 2010, www.voxeu.org; IMF, WEO Update, July 2010.

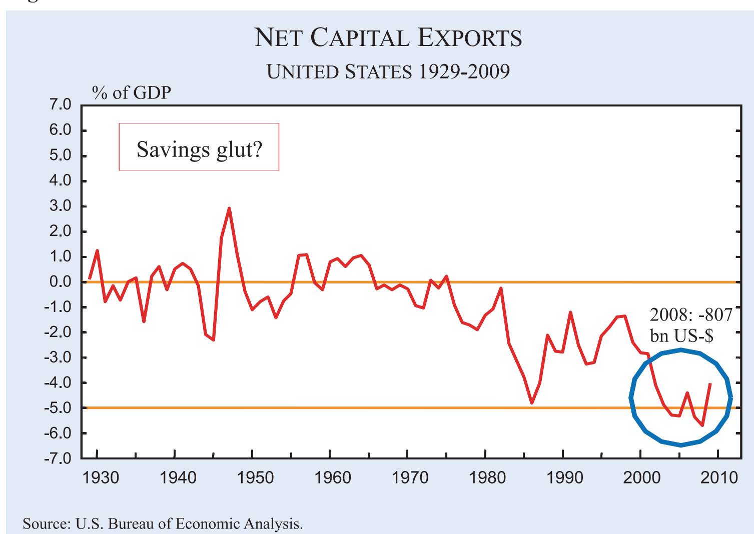
The problems of the United States

The damage that this crisis has caused – or even just made obvious – is gigantic. The United States, in particular, now has a huge problem. The real estate market collapsed – house prices fell by one-third. They are now showing a sideward movement, and it is not clear whether they will recover or fall further. Danger still lurks. In the commercial area prices are still falling, and in an official document prepared for the US Congress it has just been reported that hundreds of US banks may still go bankrupt because of the continued decline in the prices of commercial real estate. The construction industry also collapsed with a drop of about 80 percent in residential construction.

The main problem, which is closely connected with the real estate crisis, is the huge US current account deficit, with its parallels to Greece, which I shall discuss later. Figure 2 shows US net capital exports, or better imports, relative to GDP. In the last few years the net export share amounted to around – 5 percent, i.e. there were capital imports of 5% of GDP. In absolute, but also in relative terms, this share is the highest since the Great Depression. Even in 2008 – just before the crisis – net capital imports amounted to 808 billion US dollars, which, as economists know, is the same as a current account deficit of that size. Imported goods exceed exported goods; people live beyond their means and rely on credit to finance their life style. The Americans not only sold goods to finance this but also securities.

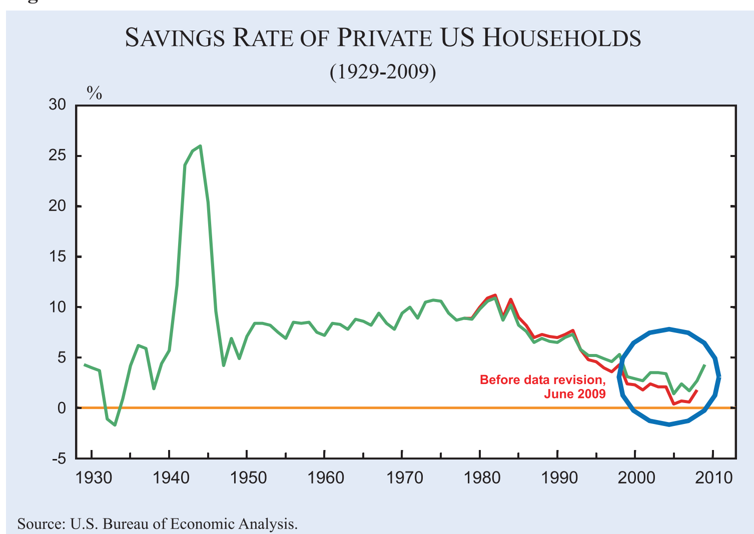
There are two possible interpretations of this situation. Ben Bernanke, the Federal Reserve Chairman, has said that there was a savings glut in the world. Investors wanted to invest and Americans generously opened their doors and let the investors come in, letting them participate in their superb investment opportunities, offering exceptionally good rates of return. That is the

Figure 2



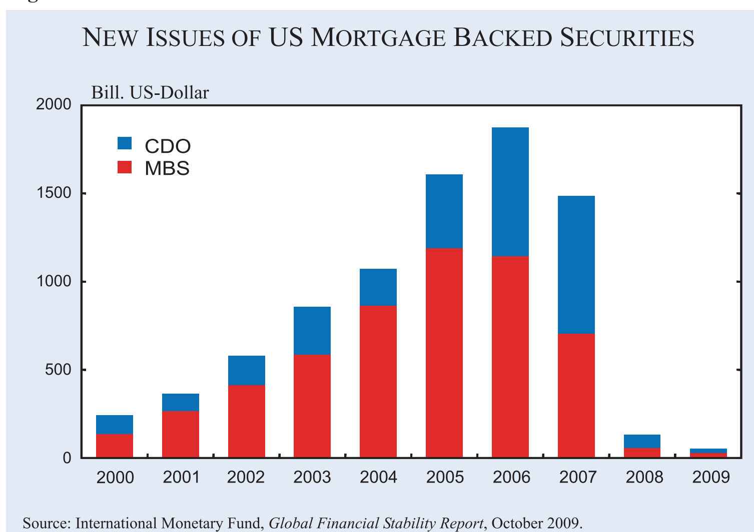
Source: U.S. Bureau of Economic Analysis.

Figure 3



Source: U.S. Bureau of Economic Analysis.

Figure 4

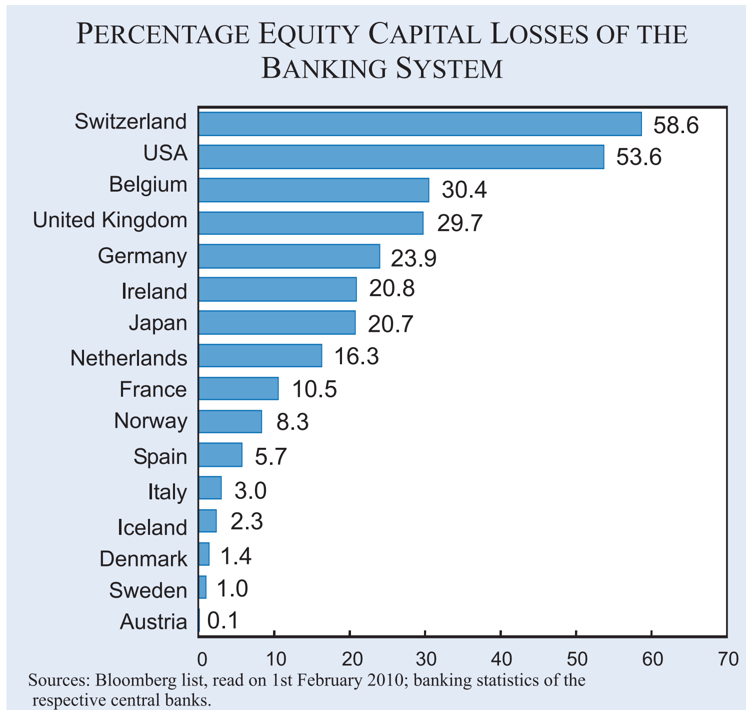


Source: International Monetary Fund, *Global Financial Stability Report*, October 2009.

so-called ‘savings glut theory’. In my opinion this theory was just propaganda. Figure 3 illustrates the savings rate of private US households from 1930 until now. For a long time, the rate of savings was around 10 percent, but since 1980 the rate has dropped dramatically, approaching zero in the years before the crisis. The Americans have not been saving at all, which is the reason why a lot of capital had to be imported. The US government needed money; US investors needed money and they could not get it from domestic savers. Instead the money came from the rest of the world via this huge current account deficit.

How were these capital imports achieved? To a large extent, by issuing mortgage-backed securities but also derivatives that were based on real estate – the so-called CDOs (collateralized debt obligations). In 2006, as Figure 4 suggests, there was an annual emissions volume of 1,900 billion US dollars! But the figure also shows that by 2009 the market had disappeared – there was a decline of new emissions by 97 percent. The entire market for mortgage-backed securitization disappeared. No other number reflects the US financial crisis as clearly as this one. If securitization is no longer possible, where does the money for real estate come from? It comes from the government. Three state-run institutions – Fanny Mae, Freddy Mac and Ginny Mae – securitize 95 percent of the real estate mortgages of the United States. They then sell them largely to the Fed that pays for them with newly printed money. There are hardly any non-securitized mortgages. We used to call an economy, in which real estate was financed to 95 percent by the state, socialist.

Figure 5



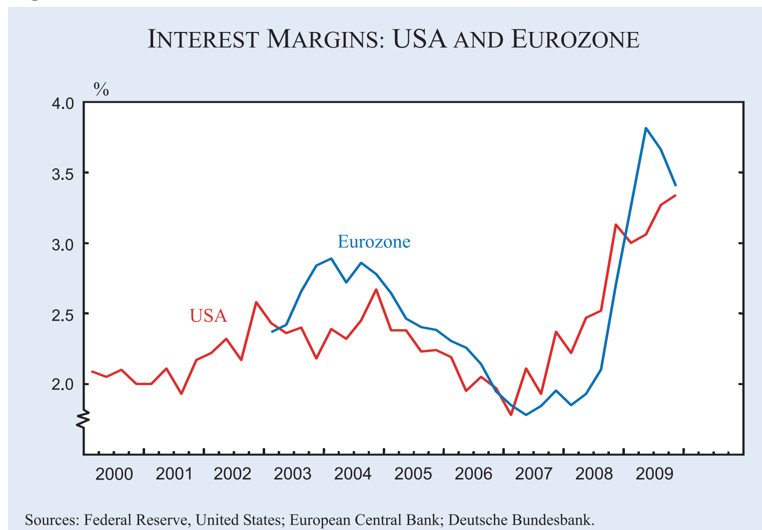
Sources: Bloomberg list, read on 1st February 2010; banking statistics of the respective central banks.

This may be provocative, but what is really provocative are the numbers.

The mortgaged-backed securities sometimes were not worth the paper they were printed on. Overly positive ratings by the agencies and complex calculating methods, which proved to be wrong, led to huge write-off losses in the balance sheets of investors and in particular in those of banks, which is why today no new securities of this kind are being floated. If we add up these losses, based on the Bloomberg list, divide them by the former equity capital of the American banking system or the banking systems of all countries, we end up with astounding figures. Switzerland, for example, lost around 59 percent of its equity capital, not net losses – new equity sources were found – but gross losses. In the United States, at the beginning of February 2010, the losses amounted to as much as 54 percent. In Germany the losses totalled 24 percent. And there will be more to come; there are still numerous losses that have not yet reached the balance sheets (see Figure 5).

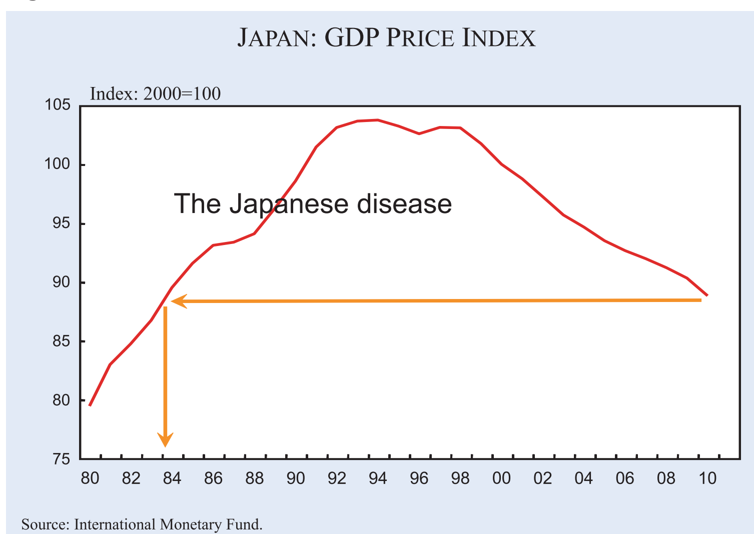
If the banks lose capital, they have to reduce the volume of their loans. The capital of Deutsche Bank declined from 2.3 to 1.5 trillion euros during the crisis, a drastic deleveraging with a negative impact on the amount of private loans given to firms. A credit crunch is thus a necessary consequence of such losses. The credit crunch does not mean that it is impossible to obtain credit from a bank but that the interest rate is considerably higher than it otherwise would have been with the same central bank policy. To measure the extent of the credit crunch, we can look at the interest margins. The interest rate for short-term credit provided by the American banking system less the interest rate that the central bank charges for its loans to the banks is at a historical high, as depicted in Figure 6. The same is true for Europe. The banks cannot handle all the loans demanded, because they do not have the required equity capital. Credit is tight and that means there are high margins and high rates of return on what remains of the banks' equity capital, with the consequence – the good news – that the banks are now gradually regaining the capital they lost and that they will later again be able to offer more credit. Of course, the credit crunch is not so noticeable if firms don't want to invest anyway but it is a potential impediment to the upswing that is now in progress.

Figure 6



Sources: Federal Reserve, United States; European Central Bank; Deutsche Bundesbank.

Figure 7



Source: International Monetary Fund.

It may also not be noticeable everywhere in Europe, as the interest spreads between the countries are also widening. Germany, for example, may not suffer from a credit crunch even though its banks are deleveraging, because the European confidence crisis is driving a wedge between the rates of Greece, Portugal and Ireland on the one hand and Germany on the other.

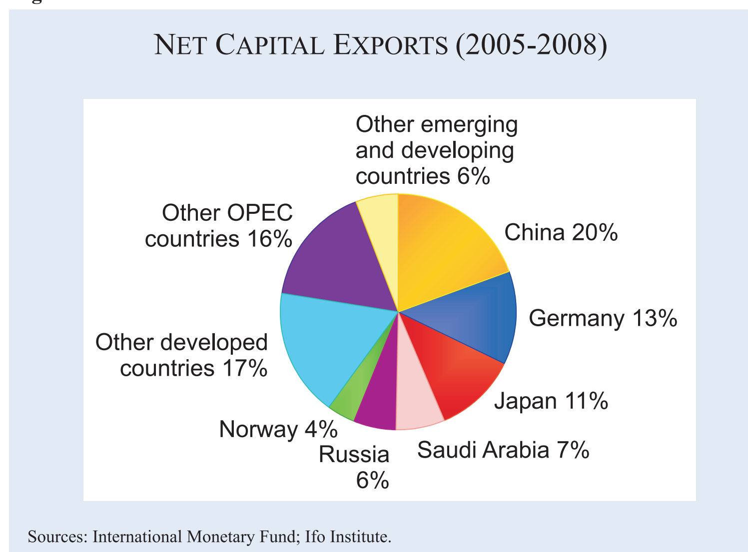
With that qualification, the situation is reminiscent of Japan in the1990s: when the real estate bubble burst, huge bank losses were incurred resulting in a credit crunch. A long recession ensued although, from 1997, an extremely easy monetary policy was implemented with interest rates falling to zero. In 1997/98 40 percent of the banks went nearly bankrupt and had to be nationalized, among them practically all the large banks. Despite these measures, Japan was unable to overcome the long-lasting crisis and since then has had the lowest growth rates of all OECD countries. Despite the fact that the Japanese central bank has flooded the country with money, Japan has suffered from chronic deflation. The GDP price index shows that since 1998 there has not been one year in which prices have not fallen (see Figure 7). The price level today stands at the level of 1984. Alvin Hansen, the great economist and contemporary of Keynes, once referred to this situation as 'secular stagnation', an on-going deflation, a downward spiral that is practically impossible to stop. I hope that this does not happen to us and this is not meant as a forecast; I merely want to point out that deflation is the true risk and not inflation, again with the qualification with regard to the interest spreads between the countries.

A crack in the German model

The German business model is the mirror image of the American one: where there is a deficit on one side, there has to be a surplus on the other side. The financial crisis has also had a negative impact on the German system. There is a crack in the German model. Germany also received strong criticism from abroad, especially from Christine Lagarde, the French Finance Minister, who thinks Germany has exported goods at the expense of its neighbours.

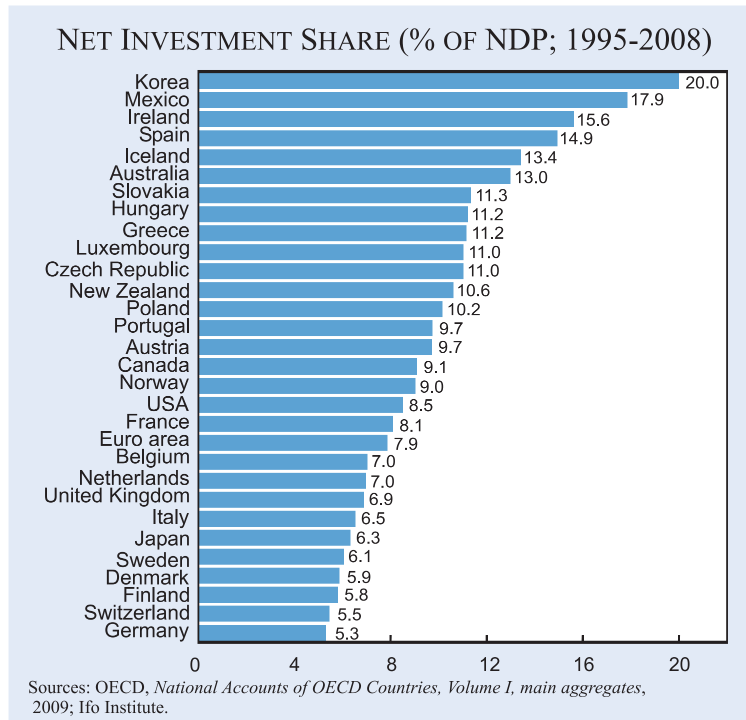
It is true that Germany has been the world's second biggest net exporter of goods after China in the years before the crisis. However, net exports of goods equal net exports of capital. Indeed, Germany was the world's second biggest exporter of capital in 2005–2008 (see Figure 8), because there was only little investment at home. In 2008 aggregate German savings calculated over all sectors, i.e. including firms, households and the government, amounted to 259 billion euros. Although so much was available for net

Figure 8



Sources: International Monetary Fund; Ifo Institute.

Figure 9



Sources: OECD, *National Accounts of OECD Countries, Volume I, main aggregates*, 2009; Ifo Institute.

investment in Germany, only a mere 92 billion euros was in fact invested. The largest share of German savings, 167 billion euros, went abroad. By definition this equals the surplus in Germany's balance on current account.

Only the naive consider this as positive. We are doing something wrong here. As Figure 9 reveals, Germany's domestic net investment share in net national product on average has been the lowest of all OECD countries in the period from 1995 to 2008. No other OECD country has spent such a small share of its economic output on the accumulation of capital and the expansion of its production capacities. Instead of selling German machinery to foreign countries on credit, these same machines could have been sold to domestic medium-sized firms on credit, which would then have increased their production capacity here in Germany. The machinery and equipment producers would have had the same number of orders, but jobs would have been created in Germany and, what is more, the investors, who provided the finance, would get their money back. Selling machines in exchange for Lehman Brothers certificates was not the right business model.

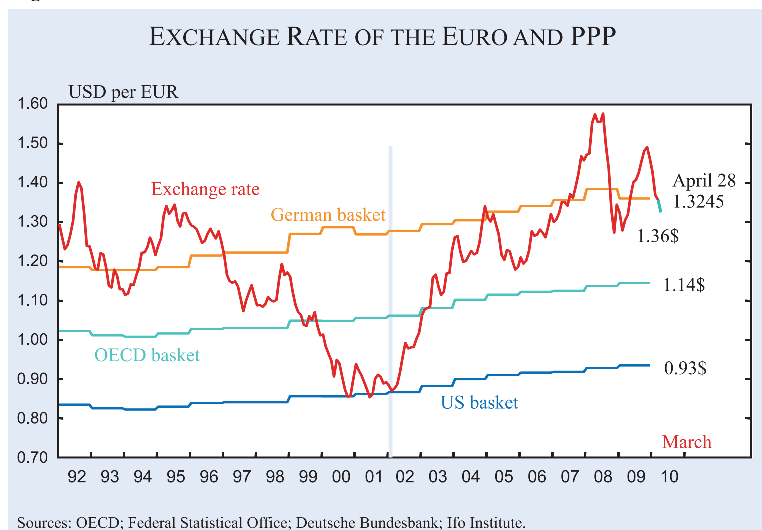
The euro in the financial crisis

Let me now turn to how the euro performed in this financial crisis. The good news is that during the crisis the euro has protected us against the risk of exchange rate turbulences. The eurozone offers its member countries monetary stability. During the deutschmark regime, Germany's inflation rate averaged 2.7 percent p.a. Under the euro the German inflation rate has averaged only 1.5 percent. And even in the entire eurozone, including the countries with weaker economies, the average rate of inflation was only 2.0 percent, and thus less than the German inflation rate under the deutschmark.

Despite the crisis, the euro has remained strong. Figure 10 shows that the value of the euro is high in terms of various purchasing power parities. The euro has retained its strength despite the Greek crisis and today is actually overvalued rather than undervalued.

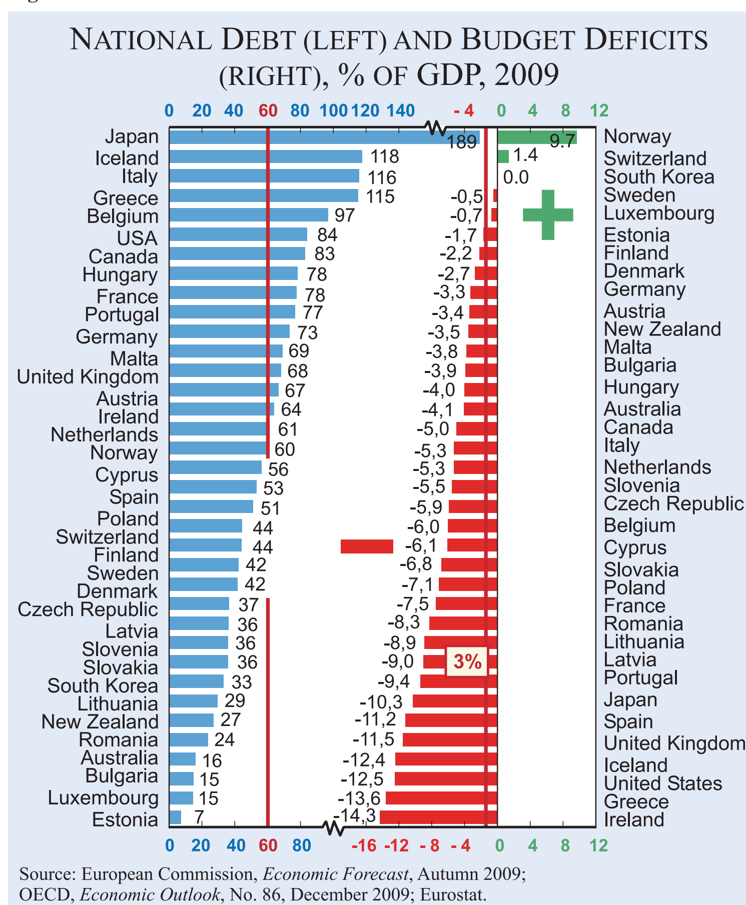
The bad news is that the Stability and Growth Pact was not taken seriously. Government debt is high in many euro countries, higher than the 60 percent of

Figure 10



Sources: OECD; Federal Statistical Office; Deutsche Bundesbank; Ifo Institute.

Figure 11

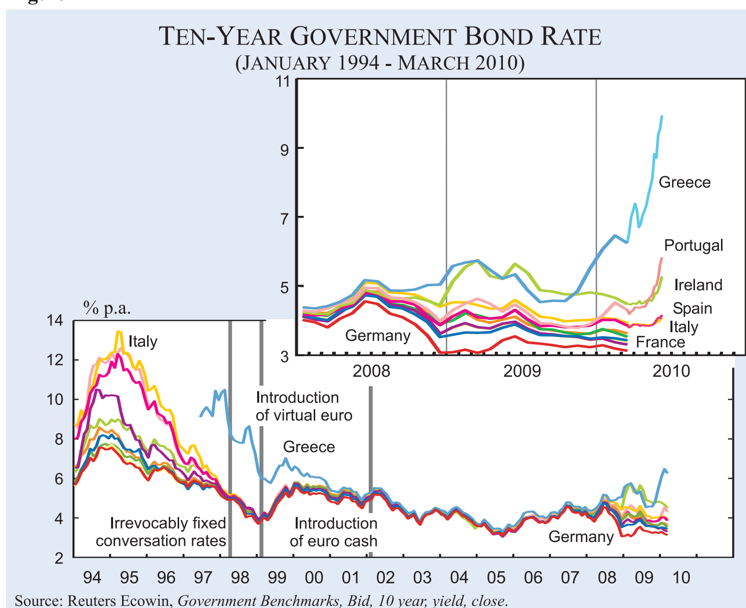


Source: European Commission, *Economic Forecast*, Autumn 2009; OECD, *Economic Outlook*, No. 86, December 2009; Eurostat.

GDP, permitted by the Maastricht Treaty. As Figure 11 shows, Italy's public debt amounted to 116 percent by the end of 2009 and Greece's to 115 percent. By the end of 2010 Greece will have a public debt in the order of 125 or 130 percent, the highest of any euro country. Germany's public debt amounts to 73 percent, still low compared to the US debt that will reach 100 percent in the not-too-distant future. Countries that live beyond their means cannot take on even more debt – they must begin to save. They did not do this in the recession, and rightly so, but now is the time for consolidation, and I hope that no new crisis in the Mediterranean countries will touch off a recession and prevent consolidation.

Figure 11 also shows the forecast, according to Eurostat, of government deficits this year (2009): 3 percent of GDP is allowed, but almost all euro countries are violating the 3-percent criterion, with Ireland and Greece at the top: 14.3 percent of GDP for Ireland, despite its promises to reduce it by 3 percent, Greece at 13.6 percent. The United States deficit is projected at 12.5 percent and Britain's at 11.5 percent. These figures are of great concern for the stability of the Western World and well beyond what the Stability and Growth Pact viewed as the upper limit of an acceptable deficit. The Pact was really never taken seriously after Germany exceeded the deficit limit three years in a row – no wonder the Greeks did not take it seriously either.

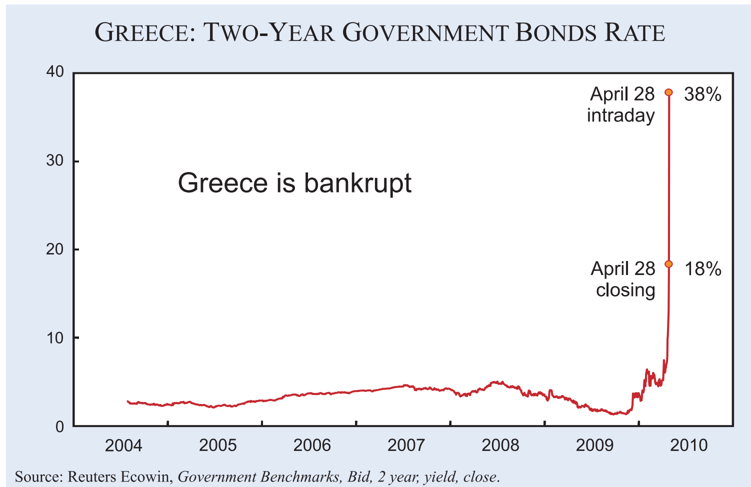
Figure 12



Source: Reuters Ecowin, *Government Benchmarks, Bid, 10 year, yield, close.*

The crisis manifests itself in the ten-year government bond rates. Figure 12 shows the rates before the euro was introduced on the left-hand side and the current rates on the right-hand side. In the middle it shows the introduction of the virtual euro, the irrevocable fixing of exchange rates, which led to a convergence of interest rates because there was no longer a risk premium for exchange rate fluctuations. Everything went well until the crisis, which we see on the right-hand

Figure 13



Source: Reuters Ecowin, *Government Benchmarks, Bid, 2 year, yield, close*.

side of the figure, and then the range widened again. Greece joined the euro later. The reference year was 1999, for which the Greeks claimed that they had a government deficit of 1.8 percent. But it turned out to be 3.3 percent, according to Eurostat. And even this number was revised. Today some say 6 percent, but there is no official figure. Eurostat has stated that Greece intentionally falsified the figures.

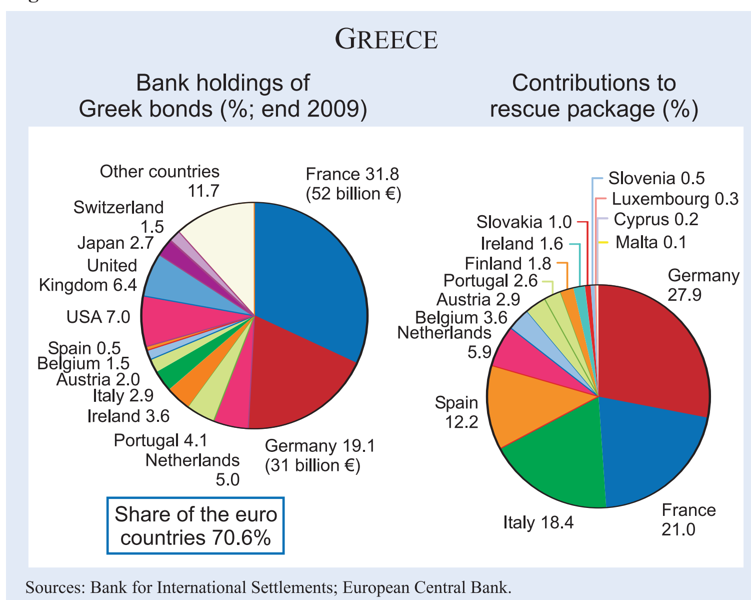
Looking at the right-hand side of the graph, the stable countries come first – Germany and France – followed by Italy, Spain, Ireland, Portugal and Greece. With a bond rate of around 10 percent for Greece, we have a span similar to what we had before the euro was introduced. The divergence is even more obvious when we look at the two-year Greek government bond rates: 38 percent interest in the afternoon of 28 April 2010, which by evening had fallen to 18 percent (see Figure 13). Nevertheless, the conclusion is evident: Greece is bankrupt. This must be accepted by policy-makers and insolvency proceedings should be started.

Greek bankruptcy

We will help – the decision has been made – but whom are we helping? Are we saving Greece's creditors or Greece? That depends on who will be serviced first. In bankruptcy proceedings it is usually the most recent creditor who has priority over old capital – in this case a haircut would have to be accepted – but politicians see this differently. They think the money that is going to Greece should be used to satisfy the old creditors. Where is the money going and who is paying? Figure 14 presents the distribution of bank holdings of Greek government bonds: 52 billion euros are held in France, 31 billion euros by German banks, and smaller amounts in other countries. The banks in the euro countries hold a total of 70 percent of Greek government securities. Those who are participating in the rescue package are primarily Germany, France, Italy, Spain and then, to a much smaller degree, the other euro countries.

Even if we solve the present crisis, we still have a long-term problem, namely that many of the southern European countries, especially Greece, do not have a business model. Figure 15 depicts the current account balances relative to GDP in the euro area. Greece is at the bottom with a current account deficit and thus capital imports of 11.2 percent of GDP. Portugal at a 10 percent deficit and Cyprus at 8.3 percent are also at risk. Spain is not so much endangered. The Greek share of 11 percent cannot be eliminated by wishful thinking or by reducing the budget deficit to zero. The problem will remain and there are really only three ways to overcome the situation, which are all problematic. The first possibility is to provide continuous transfers from the other euro countries to Greece, i.e. the

Figure 14

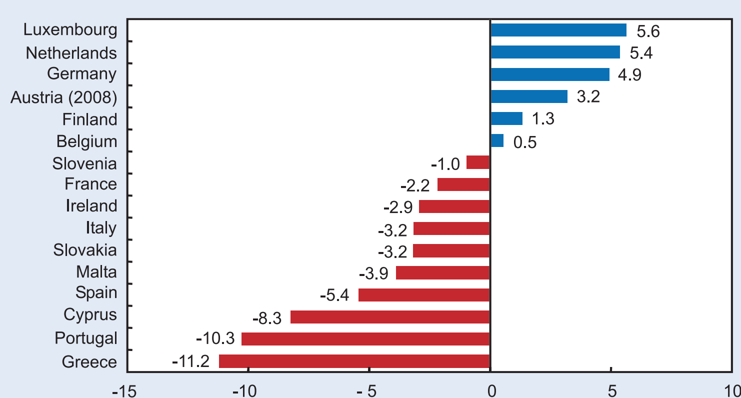


Sources: Bank for International Settlements; European Central Bank.

other countries give Greece the goods it imports in excess of its exports. The second possibility is that Greece remains in the eurozone but devaluates internally. Goods will become cheaper, the deficit in the current account will disappear, tourism will become more attractive and holiday apartments will be sold, which is always what happened in the past when Greece had problems. The third possibility is that Greece leaves the eurozone and then devalues its currency. This would lead to a bank run and destroy the Greek banks. It would, of course, also have serious implications for Portugal and other countries with large current account deficits. The second possibility, internal devaluation, i.e. a reduction of wages and prices perhaps by one third, is not really feasible as it would risk pushing Greece to the brink of civil war. Although the first possibility would be the most pleasant for Greece, it is not really an acceptable option for the rest of us. This means there is no real solution for Greece, which is a tragedy.

Figure 15

CURRENT ACCOUNT RELATIVE TO THE GDP IN THE EURO AREA (2009)



Source: Eurostat.

Greece and the EU have now decided on the second solution: internal devaluation by reducing wages and prices. But how can we ensure that Greece does not go into debt in the future? That is the decisive question. If Greece stays in the eurozone and we want a stable euro, then a new Stability and Growth Pact must be introduced that is more rigorous than the one we had.

What should this new Stability Pact look like?

- The maximum deficit-GDP ratio would have to be inversely related to the debt-GDP ratio. That means that if a country has a national debt of over 60 percent, it will have to accept a smaller budget deficit ratio. And *vice versa* if a country saves more and has less debt than 60 percent of GDP, then in a crisis it can have a budget deficit that is higher than 3 percent.
- There should also be an automatic enforcement of the Pact. We cannot have the offenders judging each other and deciding whether a penalty should be issued or not. The Ecofin Council is not the right institution to determine how high the penalties should be. We need a fixed formula for an EU penalty tax on excess debt. The penalties must be high and they should go to the non-offending EU countries.
- When the offending countries do not have enough cash, they can pay with covered bonds, collateralized with privatizable government debt.
- A European public prosecutor or enforcement agency is necessary to ensure that the authorities are working properly, that there is no deception as was the case in Greece, and that Eurostat does not turn a blind eye to the truth.
- We also need *ex ante* budget control for the offenders. If a country violates the debt criteria, it must have its deficit approved by the EU.
- An upper limit should be set on the help to countries in need. A maximum EU loan of 10 percent of GDP should be allowed. If that is not enough, the country would have to leave the eurozone.

Only a credible and absolutely reliable strategy, which determines how the EU should react to offenders, can prevent countries from becoming future offenders.