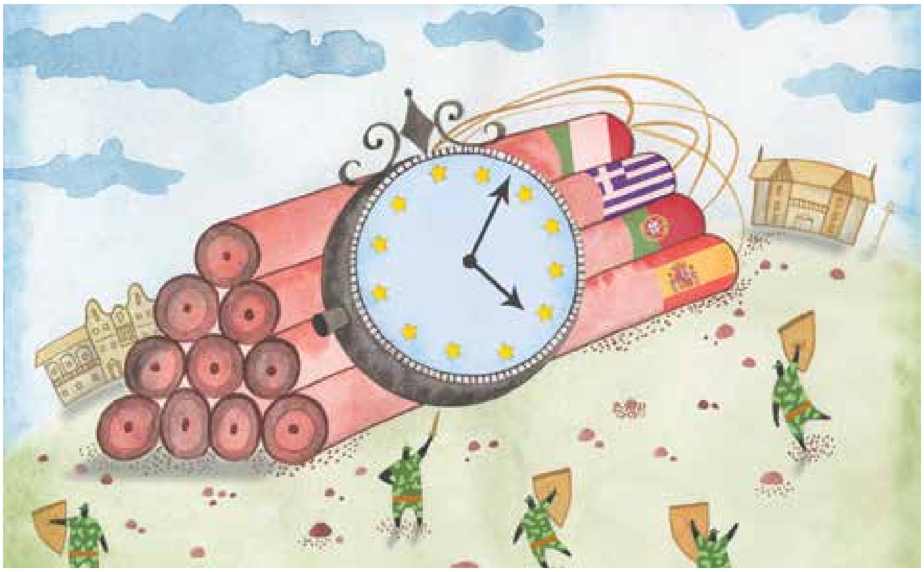


The Emperor is Naked - How to get out of the debt crisis?

Part 2: Can we solve the problem with unconventional measures?

By Daniel Stelter, Ralf Berger, Veit Etzold & Dirk Schilder

In Hans Christian Andersen's short tale "*The Emperor's New Clothes*" nobody dares to tell the emperor that he is naked. Today's developed economies are also naked and like at the court of the Emperor we are refusing to accept a simple reality: debt levels have become too high and the problem cannot be solved with even more debt.

In the previous issue of *The European Financial Review* we explained why current debt levels have become a problem for all major developed economies[1] and why we believe that it is too late for the two conventional solutions to reduce debt levels to normal levels.[2] Growing out of the problem will not work as the western world currently faces several headwinds that prevent a return to real growth rates of 3-4 per cent. Saving and paying back – also known as austerity – is the second conventional solution to a debt crisis. It has caused the Great Depression of the 1930s and the first of the Lost Decades in Japan and is a recipe for a long, deep recession and social unrest.

We are left with the two rather unconventional measures, which we will discuss in this article: generating inflation or even restructuring the debt. These two options would mean significant losses for all of us, as bank account owners and holders of financial assets that would lose value. In the case of inflation, this loss in value would be slow. In the case of a debt restructuring, it would be very sudden, as bank account holders in Cyprus have recently experienced when they were bailed-in by a state that was not able to borrow enough to rescue the island's banking sector.

Option 3: Inflation

William White, chairman of the OECD Economic and Development Review Committee, asked for "a plan B to curb the debt headwinds."[3] White described why inflation might be the only solution but also worried that it would be difficult to achieve a "controlled" inflation. He even saw a certain risk of hyperinflation. We tend to share his view: once started, inflation is hard to control—rather like trying to control the flow of ketchup after shaking the bottle.

There is a "softer" version of the inflation solution called "financial repression," which refers to the approach taken by the U.S. and the U.K. to lower their debt burdens after World War II.[4] Legislation forced investors to invest in lower-yielding government bonds ("risk-free assets"). With the nominal growth rate of the economy higher than the interest rate on the government debt, the debt-to-GDP ratio came down significantly, on average by 3 to 4 per cent of GDP per year. Recent regulation of banks and insurance companies—Basel III and Solvency II—goes in the same direction. Banks and insurers do not need to provide equity for their holdings in government debt, be it German or Greek. This provides a very strong incentive to invest in government debt.

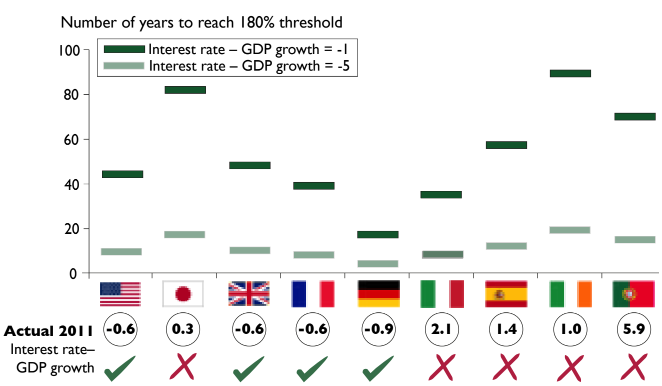
But could financial repression work today? To assess this, we assume that a sustainable total debt level for economies is 180 per cent of GDP. This is based on the criteria defined in the Maastricht Treaty, which set a debt target of 60 per cent and a deficit target of 3 per cent of GDP per year for governments. Both targets followed an economic logic: in an environment of 5 per cent interest rates and 3 per cent GDP growth, a 60 per cent debt-to-GDP ratio is sustainable (as 5 per cent interest incurred on 60 per cent equals a 3 per cent interest burden incurred on total GDP). Higher debt ratios are sustainable only if either the interest rate is lower (as in past years) or the growth rate of the economy is higher.

Applying the same logic to private households and nonfinancial companies seems reasonable.[5] It is not necessary for the debt load to be equally distributed among all three sectors, because a more highly indebted government could use funds (taxes) from a less leveraged private sector. Still, breaking the 60 per cent threshold is a strong sign of a potential build-up of imbalances that could lead to economic difficulties in the future. Indeed, as the experience of recent years shows, countries like Spain and Ireland are under significant economic pressure in spite of relatively low government debt—because they suffer from relatively high private-debt burdens.

Assuming 180 per cent of GDP to be the sustainable debt level for countries, Figure 1 shows a simulated financial-repression solution on the basis of three scenarios in which nominal GDP growth exceeds the interest rate of the economy. The greater the difference, the faster the relative deleveraging. Even in the relatively optimistic scenario of a 5 percentage point difference between nominal growth and nominal interest rates, it would take between 4 years (in Germany) and 19 years (in Ireland) to return the debt load to sustainable levels. This scenario is quite optimistic because it assumes that the total debt burden only grows by its interest rate (that is, this scenario does not include additional debt to fund stimulus programs or to cover other expenses, such as the increased costs of demographic aging). If we assume a modest repression of 1 percentage point then the period of financial repression needs to be much longer—between 17 years in Germany and 89 in Ireland.

In 2011, Germany, France, the U.K., and the U.S. managed to achieve a nominal growth rate above the interest rate, mostly thanks to higher inflation, with real economic growth remaining sluggish. But virtually all the major Western countries are still struggling to achieve a positive growth-to-interest rate gap of more than 1 percentage point.

Figure1. Financial repression needs to be significant



Note: 2011 data, Portugal interest paid as of 2010
Non-consolidated total liabilities of governments, households, and non-financial corporations (loans only) at market prices **Source:** OECD; BCG analysis

> Successful financial repression requires tangible inflation. The greater the gap between interest rates and growth, the faster the financial repression.

In today's low-growth environment, an excess growth rate over the interest rate can only be achieved through higher inflation levels while keeping average interest rates at historically low levels for all sectors. The Federal Reserve, like the ECB, aggressively lowered interest rates following the financial crisis of 2008, leaving interest rates at record low levels—notwithstanding small steps taken by the ECB to increase rates. The key precondition to achieving low interest rates is creditor trust—trust in the central bank's ability and willingness to fight inflation and trust in the debtor's ability and willingness to pay its debts. For countries such as the U.S. and Germany, the market assumes no credit risk. It seems highly probable that these countries will be able to hold their interest rates low. For other countries in the euro zone, however, we see a significant risk that it will not be possible to lower interest rates enough for financial repression to work, unless the ECB continues to buy these countries' bonds in large volumes—in effect, monetising government debt. This would increase the probability of significant inflation.

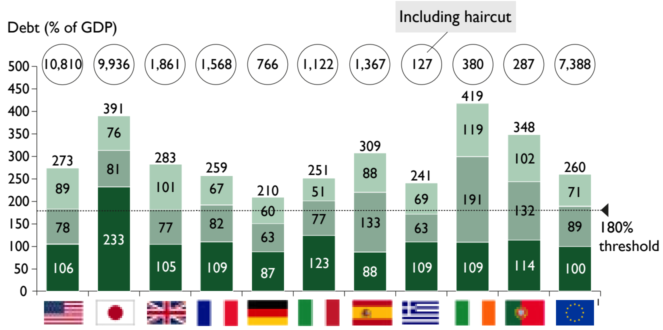
In other words, successful financial repression requires tangible inflation. The greater the gap between interest rates and growth, the faster the financial repression. Let's look at the math. Assume that an economy takes on 2 per cent of new debt in addition to its interest payments, that the nominal interest rate is 3 per cent, and that real economic growth is 1 per cent. In order to achieve a 3 per cent financial repression, the rate of inflation would need to be 7 per cent.[6]

Financial repression would have to be significant and would require close political coordination. Governments would have to intervene significantly in financial markets, including banning cross-border capital flows and imposing strict regulation on how savings have to be invested in order to secure low interest rates across all sectors. Still, it will be difficult to control inflation, just as it is difficult to control the flow of ketchup after shaking the bottle…

Option 4: Debt restructuring

As discussed, financial repression will not be easy to achieve and will take many years. If the overall debt load continues to grow faster than the economy, at some point the politicians might conclude that debt restructuring is inevitable. Such a

Back to Mesopotamia?
Necessary haircut to achieve ~ 180% threshold



1.Total for Euro zone **Note:** Debt data as of 2011
Non-consolidated total liabilities of governments, households, and non-financial corporations (loans only) at market prices
Source: Eurostat; Federal Reserve; Thomson Reuters Datastream; BCG analysis

Private households
Non-financial institutions
Government
Debt overhang in B€

course of action would not be new. In ancient Mesopotamia, debt was commonplace; individual debts were recorded on clay tablets. Periodically, upon the ascendancy of a new monarch, all debts would be cancelled: in other words, the clay tablets were destroyed. The challenge facing today's politicians is how to implement a similar debt cancellation.[7]

How much money are we talking about? The amounts are extraordinary. The threshold for sustainable government debt is a debt-to-GDP ratio of roughly 60 per cent. Applying that threshold to non-financial corporate debt and private-household debt as well, gives an overall "sustainable debt-to-GDP ratio" of 180 per cent. Under those two assumptions, the current debt overhang is approximately €7.4 trillion for the euro zone and $14.1 trillion (€10.8 trillion) for the U.S. (see Figure 2).[8] The challenge for politicians would be how to implement the write-off.

Implementing the Write-off. In Europe, the European Stability Mechanism (ESM) would probably need to assume the lead, providing the necessary funding for haircuts and restructuring funds, and supervising the implementation. For countries like Germany, the write-off would be relatively simple to organise: cutting government-sector debt alone would achieve the target total debt load of 180 per cent. This would imply a haircut for owners of German government bonds, leading to a loss of about one third.

In a similar way, excessive private-sector debt would need to be reduced. The most obvious target for debt reduction would be the mortgage market, since these loans are closely linked to the real estate market. Consumer loans would be cut by a fixed percentage. In the corporate sector—where credit problems are most acute in real estate companies—orderly restructuring would be required.

These write-offs would have to lead to a real reduction of the debt burden of the debtor, and not just to an adjustment on the creditor's balance sheet. If governments chose this course of action, only true debt relief (and thus an end to the painful deleveraging process) could lay the foundation for a return to economic growth. To follow this path, they would need to convince themselves that the overall benefit of an economic restart outweighed the risk of moral hazard.

Acknowledging Losses at Lenders. Writing off more than €7 trillion in the Euro zone would have significant implications for lenders. Just look at the numbers. Assuming a proportional distribution between banks and insurers, banks in the euro zone would have to write off more than 10 per cent of total assets (€3.7 trillion out of €33 trillion in total assets).

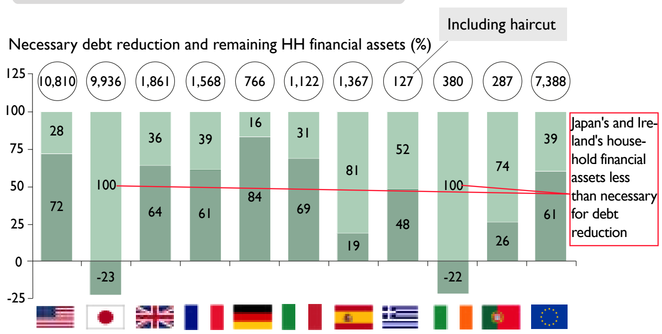
Banks would need to write down their exposure to the different sectors and countries of the euro zone on the basis of the action required to reach the 60 per cent target level for each category of debt. For example, a bank with exposure to the German government would have to write off 31 per cent (calculated as current government debt—which is 87 per cent of GDP—less than 60 per cent target level stated as a proportion of current debt), and a bank with exposure to the Irish corporate sector would have to write off 69 per cent.

If politicians pursued this course, the losses would almost certainly exceed the equity of the banking sector—making it insolvent at an aggregate level. Of course, different banks would have managed their exposures differently, and some would not be exposed to such heavy write-downs. But for many, existing shareholders would be wiped out and the ESM would need to recapitalise. The governments of the euro zone would, in effect, own the banking sector, and they would need to undertake an overall restructuring of the sector before re-privatisation.

The majority of insurance company assets are managed on behalf of their customers. All losses of the insurance industry would be covered by the ESM directly by taking them over and guaranteeing full payback.

Funding the Restructuring. Restructuring the debt overhang in the euro zone would require financing and would be a daunting task. In order to finance controlled restructuring, politicians could well conclude that it was necessary to tax the

Required one-time wealth tax
Necessary debt reduction to reach sustainable debt-to-GDP ratio



1.Total for Euro zone **Note:** Debt data and financial asset as of 2011;
100% = total financial assts (households); non-consolidated total liabilities of governments, households, and non-financial corporations (loans only) at market prices
Source: Eurostat; Federal Reserve; Thomson Reuters Datastream; BCG analysis

Household financial assets needed for debt reduction
Remaining household financial assets
Debt overhang in B€

existing wealth of the private sector. Many politicians would see taxing financial assets as the fairest way of resolving the problem. Taxing existing financial assets would acknowledge one fact: these investments are not as valuable as their owners think, as the debtors (governments, households, and corporations) will be unable to meet their commitments. Figure 3 shows the one-time tax on financial assets required to provide the necessary funds for an orderly restructuring.

For most countries, a haircut of between 16 to 48 (!) per cent would be sufficient to cover the costs of an orderly debt restructuring. Only in Spain and Portugal would the burden for the private sector be significantly higher; in Ireland and Japan, it would be too high because the financial assets of the Irish people are smaller than the required adjustment of debt levels. This underscores the dimension of the Irish real estate and debt bubble.

In the overall context of the future of the euro zone, politicians would need to propose a broader sharing of the burden so that taxpayers in such countries as Germany or France would contribute more than the share required to reduce their own debt load.[9] This would be unpopular, but the banks and insurance companies in these countries would benefit. To ensure a socially acceptable sharing of the burden, politicians would no doubt decide to tax financial assets only above a certain threshold—€100,000, for example. Given that any such tax would be meant as a one-time correction of current debt levels, they would need to balance it by removing wealth taxes and capital-gains taxes. The drastic action of imposing a tax on assets would probably make it easier politically to lower income taxes in order to stimulate further growth.

Additional Fiscal Measures. Although the tax on financial assets would reflect the hidden losses of those assets, governments would need to implement an additional tax on real estate to ensure that property owners contribute to the overall restructuring. In contrast to the one-time wealth tax, this tax would likely be on capital gains as well as on income from real estate. (Politicians would probably argue that the measures to deal with the debt overhang reduce the downward pressure on real estate prices in markets like Spain.) To stimulate necessary additional investments, governments could create a further incentive for companies to invest in new equipment and R&D by imposing higher taxes on profits not reinvested.

Implementing Structural Changes. The program outlined above would not be very popular, although taxing the wealthy could well garner populist support. Moreover, the reduction of debt alone would not be sufficient to ensure the future stability of the euro zone. Any debt restructuring would need to be accompanied by some additional measures:

- A clear commitment of governments to stick to the 60 per cent debt ceiling and the 3 per cent maximum annual deficit going forward. There could be pressure to make such commitments part of the constitution of the member states, with EU institutions having the power to enforce compliance.
- The funding of all European government debt would be done with Eurobonds. (EU-wide Eurobonds would not be a solution today: they would only postpone the problem and reduce the pressure to adjust public deficits in the countries of the periphery.) A government could borrow only via the ESM, thereby ensuring compliance with the 60 per cent rule.
- Establishment of a mechanism to control the growth of debt in the private sector to avoid new debt bubbles in the future. This would probably be achieved with differentiated interest rates and capital requirements.

What will happen?

We believe that it would be preferable to stop the vicious circle of too much debt leading to more debt by executing a program of structured workouts and write-offs. Creditors would need to accept that they have lost a sizable portion of their money. The longer the day of reckoning is postponed, the more money will be lost.[11] The effect of compound interest is not well understood in either economics or politics. At a 5 per cent

How to fix the Euro zone?

It is a well-known fact that the countries of the periphery have lost competitiveness compared with the countries of northern Europe, notably Germany. A precondition for reducing their debt loads would be the ability to generate a trade surplus, which would require significant (and painful) lowering of unit labour costs.

The single currency amplifies the problem by taking away the option of devaluation. Regaining competitiveness by lowering salaries and increasing productivity would push these countries into a severe recession, making it impossible to reduce the debt load—and simultaneously increasing the risk of social unrest. Reducing the debt burden and increasing competitiveness at the same time seems to be an impossible task.

A debt restructuring would help avoid a repetition of the euro zone debt crisis. But it would be insufficient to rebalance trade flows. Unable to devalue their own currencies, Spain, Portugal, and Greece—but also Italy and France—will have difficulty becoming competitive again. Unit labour costs are 10 to 30 per cent higher than in Germany. Both a reduction in wages and high unemployment would be needed to internally devalue these costs, which would take time. Facilitating the process of adjustment would require a policy mix of higher inflation, economic coordination (allowing salaries to rise faster in Germany than in the periphery), and the establishment of a fiscal union—thereby allowing for continued transfers from the stronger to the weaker economies. Germany would need to stimulate its domestic consumer demand and discourage the current high level of savings.

What are the other possibilities? Apart from another crisis, European governments might face the dissolution of the euro zone, with the introduction of national currencies or of smaller monetary areas. Splitting apart the euro zone is no solution to the debt crisis itself, as it would not address the debt overhang in an orderly way but would create the risk of financial chaos with even higher costs.[10] However, it would be an option after a debt restructuring if closer economic coordination and a fiscal union could not be implemented. The managed-exchange-rate mechanism of the European Monetary Union, which existed until the introduction of the euro, facilitated the process of adjustment in light of different developments in unit labour costs and was quite successful.

The longer we postpone the necessary write-off of debt, the more volatility we will see and the more intervention by governments. The final outcome, the devaluation of debt, can be postponed but is unlikely to be avoided.

interest rate, the amount of outstanding debt doubles every 15 years. The problem gets even worse when the cost of aging societies is included. Politicians shy away from telling the public the bald truth. This is understandable, since the prospect of reduced pensions, negative returns on savings, and outright default would not be popular. For this reason, we believe that governments and central banks are most likely to resort (eventually) to a policy of aggressive financial repression: that is, high inflation.[12]

It is obvious that doing nothing and simply counting on the passage of time cannot solve the debt problem—it just grows bigger. With every new softening of the economy, the pressure on central banks to intervene one more time will increase. Every rise in interest rates driven by creditor worries of default—like for some countries in the euro zone—will lead to pressure on the central banks to intervene. The longer we postpone the necessary write-off of debt, the more volatility we will see and the more intervention by governments. The final outcome, the devaluation of debt, can be postponed but is unlikely to be avoided.

Politicians will be loath to acknowledge that default and restructuring are inevitable. So they will continue kicking the can down the road. The restructuring proposal we have outlined would be drastic. It would not be popular, and it would require broad political coordination and leadership—something that politicians have replaced up until now with playing for time, in spite of a deteriorating outlook. "*We all know what to do, we just don't know how to get re-elected after we've done it*" stated the Prime Minister of Luxemburg, Jean Claude Juncker some years ago. We cannot afford politicians to continue this way. It is time to act.

The article is based on their book "*Die Billionen Schuldenbombe – The Trillion Debt Bomb*", issued by Wiley Germany in April 2013

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