CPB Netherlands Bureau for Economic Policy Analysis

Recovery still fragile | *Focus on the long run*

CPB Policy Brief | 2015/09

Lessons learnt from seven years of stagnation in the Eurozone

Jasper Lukkezen
Clemens Kool

Summary

Three lessons may be drawn from seven years of financial crisis. First, to prevent is better than to cure, and this applies particularly in the case of excessive debt problems. Second, the individual economies within the eurozone should be sufficiently robust to withstand shocks. This means having a flexible economic structure and public finances with a healthy foundation. Third, more attention must be paid to the balance between national and supranational policy frameworks. As a result of the financial crisis, the European frameworks for banking supervision and budgetary and monetary policies already have been modified, substantially. Whether this will prove to be sufficient to accommodate new large shocks without leading to another great recession warrants further investigation.

The eurozone economy today is as large as it was at the beginning of the financial crisis, seven years ago. This long period of low growth will likely lead to permanently lower income levels, because investments are lower and the long-term unemployed are losing their working skills. However, it seems less likely that growth will remain at this low level in the longer term. After all, over the long term, factors such as demographics and technological development will dominate. Balance sheet problems will probably solve themselves without outside intervention, albeit at a slow pace and at high costs.

It is, however, too early to conclude that this period of very low growth has definitely passed. To reduce this downward risk in the eurozone structural reforms should be implemented where necessary. To reduce the negative impact of reforms in the short run it can be sensible to utilize the space available within the Stability and Growth Pact (SGP). Likely candidates for reform are the labour and product market reforms and measures that help to address balance sheet problems. In the current situation, this also applies to moving up public investments that would have a positive net present value, both in individual Member States and on a European level. The Juncker Plan has been set up for this purpose. It is still too early to assess the effects of the quantitative easing by the European Central Bank.

1 Economic stagnation in Europe

Due to the Great Recession, there has hardly been any real growth in the economy of the eurozone between 2007 and 2014. Income per capita even declined over this period. Losses compared to a simple pre-crisis trend amount to around 12%. Figure 1 shows the GDP development in the eurozone.

Figure 1 No growth in de eurozone since 2007

Data obtained from Eurostat.

The unusually long and deep recession has triggered debate among economists about the question of whether we have entered a state of permanent – or secular – economic stagnation.[1] Summers (2014) relates this to the fact that real interest rates cannot decrease by as much as would be necessary, Koo (2011) couples it to the need of many households and firms to repair their balance sheets after a period of excessive debt increase, and Gordon (2012) links it to slower technological development.[2]

Projections for the coming years suggest recovery, but no clear catch-up growth. The European Commission, for example, expects a respective 1.5% and 1.9% growth in the eurozone GDP for 2015 and 2016 – in part motivated by the low oil price and the depreciation of the euro.[3] This seems to reduce the urgency for taking far-reaching measures. Yet, too much optimism would be premature as there are substantial downward risks. In addition, there has been no solution for the various problems that have been slowing down recovery, such as the debt level of households, firms and governments, the imbalances between eurozone countries, and the relatively high real interest rates.[4]

How have these factors slowed down economic recovery, what are the consequences, and what lessons can we learn with respect to long- and short-term policy? The focus in

[1] This debate is motivated by developments in the United States as well. This policy brief focuses purely on the eurozone.
[2] For an overview, see Teulings and Baldwin (2014).
[3] See the 2015 Spring Forecast by the European Commission, Table 1, page 1 [link].
[4] See Gelauff et al. (2014) for three individual economic scenarios of the future.

answering these questions will be, where possible, on the eurozone as a whole, and discuss internal imbalances and structural differences only marginally.[5]

2 Recession deeper and longer due to balance sheet problems and zero lower bound

The duration of a recession various between countries, but usually is around 1.4 years (Cerra and Saxena, 2008, p.19). In the eurozone, however, there has been no recovery for seven years now. There are three main causes for this deviation. Together, they form a plausible explanation for the lack of economic growth since 2007. The first cause seems to be the persisting balance sheet problems within the eurozone. The second relates to the double dip that the eurozone is experiencing; following the global financial crisis, Europe was also faced with a debt crisis, which started in 2010. The institutional policy framework proved to be insufficiently geared to cope with the asymmetrical consequences of this second crisis. The third main cause is the fact that the eurozone is faced with the natural lower bound of the nominal interest rate of zero per cent, the so-called *zero lower bound* (ZLB).[6]

In a normal business cycle, recovery takes place as follows: during a recession, the economy falls below the long-term growth pathway and does not fully utilise its potential. An *output gap* thus emerges. This output gap will gradually close again when lower real interest rates and real exchange rates cause an increase in demand, while lower wages and prices lead to an increase in supply. In this way, actual production rises again to the potential production level.

In a so-called balance sheet recession, however, public and private parties have such large balance sheet problems that these can hardly be solved through a decrease in prices. The zero lower bound means adjustment via real interest rates does no longer take place.[7] This works as follows.

Balance sheet problems are created by too much dependence on debt financing. This dependence then leads to a greater susceptibility to – negative – shocks, such as a strong decline in share prices or real estate prices, bankruptcy of one or more large banks, or a loss of producer and consumer confidence that leads to lower spending levels. Following a negative shock in demand, company profitability decreases and unemployment increases. This causes the debt service to carry more weight. For larger debts, this causes a stronger decline in spending. If then the prices of financial assets (shares) and non-financial assets (real estate) also drop while the value of the nominal debt remains the same, a negative asset shock is created. This has a negative impact on spending – partly due to lower incomes and partly because it then becomes more difficult to obtain credit. This is the reason why a

[5] For a discussion on the relevance of internal imbalances, see Teulings et al. (2011b).
[6] Zero is not the actual lower bound. In practice, money market interest rates and even capital market interest rates can be seen to drop slightly below zero. Hall (2015) suggests an absolute lower bound or around -0.7%.
[7] See Lukkezen, Kool and Jacobs (2015) for a more analytical and modelled description of this process.

balance sheet recession is deeper than a regular recession; it also lasts longer because decreases in price further increase the debt problem. After all, a decreasing price level means an increase in the real value of debt, which in turn increases the pressure to save and/or repay debts, and causes a further decline in GDP. This greatly hampers the usual adjustment mechanism out of a recession.[8]

Over the decades preceding 2008, banks, governments, non-financial firms and households became more dependent on debt financing (Gelauff et al. 2014, Ch.7). As a result, the ratio between equity and borrowed capital became increasingly skewed. The vulnerability of this situation came to light at the beginning of the financial crisis; all over Europe, systemic banks had solvency issues that were so large that they needed direct or indirect government support in order to survive.[9] The solvency issues, in combination with more stringent regulation, resulted in a large pressure on balance restructuring. Banks, therefore, became reluctant to provide credit to the private sector. Although the process of deleveraging has not yet been completed, the ECB's Comprehensive Assessment and the subsequent formation of the European Banking Union are important steps in the right direction. In the first place, this has reduced the probability a systemic bank files for bankruptcy and, secondly, should a bankruptcy still occur, it will potentially be easier to deal with the consequences.

Households and non-financial firms are faced with similar balance sheet problems. The IMF (2015) shows that the household debt ratio in the eurozone as a whole increased from around 45% of GDP in 1998 to 65% in 2007. For firms, this ratio increased from 75% of GDP to around 105%, over the same period. For individual countries within the eurozone, these ratios can be substantially higher. For example, in Portugal and Spain, private debt ratios are relatively high – and this is also true for households in the Netherlands – while in Germany and Austria, they are relatively low. Since the beginning of the crisis, ratios have stabilised close to their peak levels. This is indicative of the efforts required to reduce debts that were incurred in the past.

The balance sheets of national governments also paint a heterogeneous picture. This was already the case at the start of the financial crisis and has been further intensified by the impact of the crisis. Countries have been affected to varying degrees, depending on their economic structure, the strength of their banking system, and the level of flexibility of their economy. In nearly all cases, the government debt ratio is higher today than it was in 2007, and even dramatically so in countries such as Spain, Portugal and Greece. This substantially reduces the room for manoeuvre and borrowing capacity of the various national governments.

The crisis in Europe presented challenges in some areas that could not be dealt with by national policy frameworks, while the institutional frameworks on eurozone level were not yet sufficiently developed to do so. As a result, it proved to be difficult to bring the eurozone economy back on track. In practice, much time and energy was spent on creating these

[8] When debt problems are overpowering, this may lead to a debt–deflation spiral, in which lower prices cause higher debts and higher debts increase the pressure to save and thus cause lower prices.

[9] A systemic bank is a large bank that has such a central position in the national – or European – financial system that its bankruptcy could cause severe damage to the total system and the real economy.

necessary frameworks, rather than on solving the economic problems. This process created much uncertainty about the future of the euro and the eurozone. The following three aspects warrant special attention.

The combination of internationally operating systemic banks and nationally organised supervision and lender of last resort mechanisms meant that it was virtually impossible to effectively address the solvency issues within the banking system on a European level.[10] This in contrast to the situation in the United States, where, soon after the crisis began, the most important banks were forced to clear up their balance sheets and to recapitalise, under pressure of and controlled by the US Federal Government. In Europe, such an approach proved unfeasible, which meant a large amount of time was lost. This was even more problematic, because the eurozone lacks sufficient alternative means to finance the private sector.

Something similar applied to the liquidity problems of EMU governments as well. They no longer had their own currency and thus lacked a national lender of last resort. This led to large tensions on the financial markets for government debt, and ultimately to the construction of an emergency fund, purchasing programmes for government bonds and the ECB's assurance that they would do whatever it takes.

At the start of the financial crisis, many EMU members had a deficit that considerably exceeded the 3% limit on government deficits of the Stability and Growth Pact. The Stability and Growth Pact granted a temporary exemption. In the years after 2009, they could not use this exemption any longer and budgetary policy of the EMU Member States was focused more on long-term sustainability of government finances than on the short-term problems. This led to a budgetary policy that was tighter than, for instance, that of the United States. For Member States that were subject to the Excessive Deficit Procedure, this tightening was even greater (Dicou and De Jong 2014).[11] In hindsight, this does not seem to have been an optimal situation, even more so because the consequences of this tightening were underestimated (Blanchard and Leigh 2013).

And, finally, the zero lower bound also plays an important role. During a normal recession both nominal interest rate and inflation go down, but the former decreases more than the latter, so that real interest rates also go down – partly as a result of anti-cyclical monetary policy. Household consumption and firm investments become more attractive under lower real interest rates. However, if the nominal interest rate is already as low as zero, it cannot go down any further. Stimulating the economy by lowering policy rates is no longer possible. Lower inflation then leads to an increase instead of a decrease in real interest rates, which is counter-effective. In other words, at the zero lower bound, the regular adjustment mechanism during a recession no longer functions properly, as a negative supply shock

[10] The pressure by the European Competition Commission could also have been a reason why national authorities were hesitant to impose recapitalisation and the use of public means to do so.
[11] Countries with a budget deficit and government debt that cannot comply with SGP standards end up in this Excessive Deficit Procedure. They are then required to comply with additional objectives for their government finances, in order to bring those back within the regular framework. This implies implementing spending cuts and/or tax increases.

cannot be compensated by a lower real interest rate. Instead, the entire adjustment needs to take place via the labour market and goods market. This takes longer and is more costly.

Since early 2012, the eurozone has a nominal interest rate of close to zero. Long-term interest rates are also historically low, partly due to the ECB's quantitative easing programme. Moreover, inflation in the eurozone has also gradually decreased and is now close to zero per cent. Many parts of southern Europe have been experiencing deflation for a number of years now.

3 Consequences are permanent, but stagnation will not last for ever

Economic cycles, normally, hardly have an impact on the structural growth path of an economy. However, this appears to be different for recessions that either involve or are the result of a financial crisis. In such cases, there may be a long-term impact.[12] A distinction must be made between a permanent effect on the level of GDP and a permanent effect on the growth rate of GDP. In case of a permanent effect on the level of GDP, the damage in terms of GDP will never be restored, but the economy will eventually achieve growth rates similar to those before the crisis. A permanent effect on the growth rate implies not only that the level of GDP decreases, but also that in the long run growth will remain lower than before. In the extreme case of long-term growth dropping to zero, this is called permanent (secular) stagnation.

There is convincing empirical evidence that, following a financial crisis, a permanent drop in level of GDP may occur. On the basis of a historical analysis, the IMF (2009b) has calculated an average loss in output of 10% of GDP 7 years after the start of a banking crisis, but also states that such a loss would not be unavoidable. There are examples of countries where an initial loss in GDP was more than recovered in the medium term. Cerra and Saxena (2008) report average output losses of 6% for developed economies. The IMF (2015a), on the basis of recent data, has estimated that the permanent output loss as a result of the recent financial crisis has come to around 10% of GDP for the group of developed economies.

This permanent economic loss can partly be explained by the strong decline in investments over the 2007–2014 period, compared with pre-crisis projections (see IMF 2015a; 2015b; and Lanser et al. 2015). According to the IMF, investments have decreased due to 1) lower expected sales, 2) higher financing costs and growing problems to finance investments, and 3) greater uncertainty. Lower expected sales can become a self-fulfilling prophecy. Credit restrictions play a key role in cases of balance sheet problems; both on the demand side (non-financial firms who invest) and the supply side (credit providing banks). A permanent decrease in the level of GDP also increases balance sheet problems, as debt ratios will rise.

---

[12] The literature distinguishes between banking crises, currency crises and a combination of both.

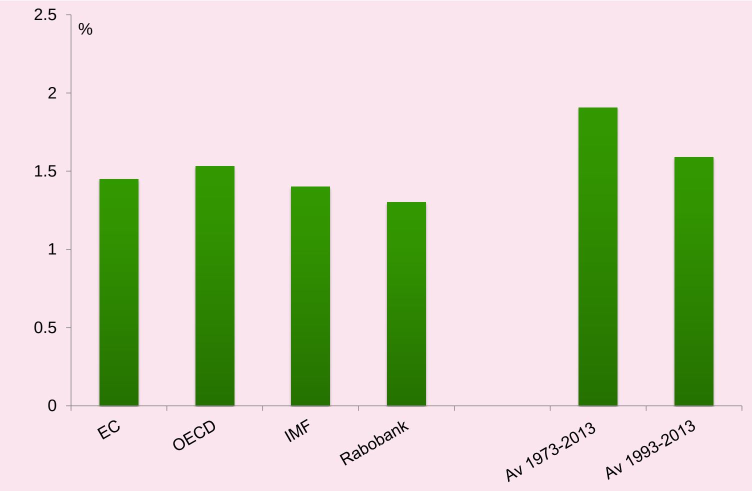
Another part of the explanation is related to the labour market. When GDP levels are low for longer periods of time, unemployment is high and lasts longer. This can cause workers to become discouraged, to lose some of their skills, or to become stigmatised as being long-term unemployed, which makes them less employable. The risk of this happening in the eurozone is substantial, as shown by Machin and Manning (1999). Structural unemployment may also rise when labour is transferred between economic sectors and causes specific human capital to be lost, in turn leading to a decrease in productivity.

The following question is whether, in a balance sheet recession, in addition to a permanent loss in the level of GDP, there can also be a permanent loss in the growth rate of GDP. In the long term, the growth rate of the economy is determined by the growth in the production factors of capital and labour and in their productivity.[13] Financial crises do not affect productivity growth in the long term. The IMF (2009b) conducted an extensive analysis of financial crises that have occurred since World War II and concludes that, over time, productivity growth is restored to around the growth rates that prevailed before the crisis. This is also true for Japan, the most recent and well-known example of long-term stagnation, where, following Japan's 'lost decade' from 1991 to 2000, over the 2000–2007 period growth rates once again were comparable with those in other OECD countries if corrected for differences in population growth (Neuteboom and Lukkezen 2015). Another study by the IMF (2015a) shows that projections of productivity growth between 2013 and 2014 for most countries were back to the level of before the Great Recession.

Projections of structural determinants of economic growth suggest that economic growth in the eurozone over the coming decades will be slightly lower than in the previous decades. This is not due to the crisis, but is largely caused by the slowdown and subsequent shrinkage of the potential labour force and the declining rise in labour participation of women. The contribution of productivity growth over the coming decades is surrounded by much uncertainty. It is difficult to say if this growth in productivity is likely to change, compared to the previous decades.[14] However, if the trend found by the IMF (2015a) for the past decade continues, productivity growth will also be slightly lower. Figure 2 shows an overview of the projected annual growth for the eurozone, from 2030 till 2050, from various long-term growth studies. The average annual growth according to these studies will be 1.4%.

[13] There is much debate within the literature about the exact relationship between these factors and economic growth, but not about that fact that each makes a positive contribution. Neuteboom and Lukkezen (2015) discuss economic growth theory and the factors mentioned above, in greater detail.
[14] Gordon (2012), for example, projects little additional growth through ICT innovation, while Brynjolfsson and McAfee (2014) predict a new breakthrough for NBIC technologies (nanotechnology, biotechnology, information technology and cognitive science).

Figure 2 Projected GDP growth in the eurozone, 2030–2050, 1.4% per year



EC = EC (2015), OECD = OECD Economic Outlook, IMF = IMF World Economic Outlook, Rabobank = Stegeman et al. (2013).

A situation of semi-permanent or permanent zero growth and economic stagnation, therefore, seems unlikely. The analysis above suggests that the eurozone economy, in the long term, will see growth, and that the opposing forces that have been slowing down the recovery will not be active for ever. Balance sheet problems will be solved in the end, albeit against higher costs and the real interest rates will rise again in the longer term (Goodhart and Erfurth 2014). Then the zero lower bound is no longer binding.

4 Current policy challenges

The current recovery is still fragile and uncertain. There are substantial downward risks; part of the eurozone is plagued by persistent balance sheet problems, and the zero lower bound also continues to be a problem. Growth in certain countries is structurally hampered by a lack of flexibility and competitiveness. This makes it difficult to predict whether the current upturn is truly the end of 7 years of economic stagnation, or if it is a temporary phenomenon. This leads to the question of what national and European policymakers could do to facilitate higher growth.

Policy that is focused on increasing and improving the structure and flexibility of the economy is good for economic growth in the long run. This involves making labour and product markets more flexible, as well as implementing efficient and effective mechanisms for cleaning up weaker balance sheets and organising bankruptcies. There is a great need for structural reform within the eurozone; particularly in countries that are experiencing a relatively deep and long recession and have relatively weak government finances.

As reform, in the short term, comes at a cost – among other things in the form of higher unemployment – it is best, from an economic perspective, to implement it in times when things go well. However, timing reform in such a way that the negative effects take pace in good times is difficult to do. In addition, during a recession, the urgency to reform is felt stronger and the willingness to implement it is greater. Current economic circumstances, therefore, do not provide a strong argument in favour of postponing such reform. Also the revised SGP frameworks offer additional leeway for accommodating budgetary policy to mitigate the negative impacts (also on spending) of such structural reform. Combining reform with budgetary accommodation reduces the risk of lengthening the period of low growth and promotes growth in the longer term.

Furthermore the government could consider moving up national-level public investments of which the long-term benefits would outweigh the costs. This may contribute to recovery – in the short term, because it would create more demand within the economy and indirectly would lessen the constraints on private parties, and in the long term, because it would improve the economy (IMF 2014). In Europe, an ample number of projects seem to be available with a positive net constant value (Benink and Van Tilburg 2015). There is, however, the issue that countries for which such an impulse would have the greatest impact also are the most budgetary constraint, while countries with sufficient budgetary space hesitate to act. A European investment impulse in the style of the Juncker Plan, in principle, could contribute to solving this issue, because a substantial share of European investments are made in countries that do not have the budgets to invest themselves.[15] Nevertheless, the effectiveness is uncertain. Moving up infrastructural investments is not easy on a national level, and on a European level this also involves additional institutional and operational restrictions. Moreover, the long-term impact of such investments on the economy as a whole also takes time. The output gap in a number of southern European countries remains negative to such a degree that the Juncker Plan may still have an impact on the path towards recovery in case of delays.

On the monetary side, the ECB, following earlier unconventional measures, recently started quantitative easing in order to possibly prevent deflation. This is expected to have a moderately positive impact on inflation and on growth in the eurozone, largely through a depreciation of the euro. The inflation effect will bring real interest rates closer to the equilibrium interest rate and will reduce the negative impact of the zero lower bound on the economy. It will however also involve certain risks, the impact of which is discussed in CPB (2015). Other policy options for quickly leaving the zero lower bound behind seem to be lacking.

The balance sheets of the large banks in the eurozone today are in a much better shape than they were a few years ago (Van Veldhuizen and Kramer 2015). Currently therefor, there are no obvious new generic measures for solving the remaining balance sheet problems in the eurozone. There are great differences between eurozone countries, regarding the degree to which private debts are a problem and in how far the institutional national framework enables a rapid deleveraging. These problems will have to be solved via the slow route of

[15] The Juncker Plan was announced late 2014 by the European Commission. Its aim is to establish a European Fund for Strategic Investment of 315 billion euros, in order to finance strategic investments with a high risk profile within the European Union, in collaboration with the European Investment Bank. For example, in physical infrastructure, but also in sustainable energy and energy networks, digital infrastructure, education and health. The largest share of funds will come from the private sector.

repayment and economic growth. In cases where national governments are faced with a debt problem, there is no clear framework for restructuring. At the moment, this particularly applies to Greece. Despite earlier restructuring, the Greek government debt again seems unmanageable, and a solution must be found in the short term. A Grexit and disorganised restructuring of the Greek government debt becomes likely, should this fail. A Grexit and disorganized restructuring probably also involve higher costs (see Teulings et al. 2011a).

5 Lessons for the future

Three lessons can be learnt from the Great Recession. The most important one is not new, but cannot be repeated often enough: to prevent is better than to cure. It has once again become clear that economic growth driven by excessive, pro-cyclical provision of credit and accumulation of debt ultimately leads to higher vulnerabilities.[16] Preventing excessive debt accumulation by households, non-financial firms and the financial sector, therefore, is the number one priority. Fiscal incentives that stimulate borrowing, for example, could be reduced, and eurozone regulation could limit the maximum amount that could be borrowed against collateral or income. Furthermore, policymakers could develop a vision on alternatives for debt financing of risk-bearing investments. Banking supervision could keep a closer eye on pro-cyclical elements in the banks' financing, and it may be wise to raise the minimum liquidity and solvability ratios. Steps have meanwhile been taken within the eurozone, both on national and supranational levels, to develop sensible macroprudential policies, and to tighten supervision accordingly; for example, the Macroeconomic Imbalance Procedure.

Monetary and budgetary policies may also contribute to more economic stability. The monetary policy framework – if implemented correctly – appears to be satisfactory for regular economic cycles. This would require that the nominal interest rate in a neutral economy equals the projected real equilibrium interest rate plus the ECB's inflation target[17], and the anti-cyclical policy is followed symmetrically in up- and downturns. Thus, monetary policy must be sufficiently conservative when times are good. This reduces the boom–bust cycle and increases the scope for adjustment, in case a strong set back occurs. The relatively low real interest rates over the 2002–2006 period have shown that the monetary policy in the run-up to the Great Recession was too relaxed (IMF 2009a). In this respect, attention should be paid to the exclusive focus on inflation in goods and services of the ECB. This has a positive impact on the establishing stable inflation expectations and central bank credibility. On the other hand, it may also lead to a situation where growth in money and credit and related developments in the real economy or on financial markets are insufficiently being taken into account in monetary policy. It is as yet unclear whether the newly developed complementary macroprudential policy is able to sufficiently address these.

[16] The consequence of limiting credit-driven growth in good times is of course that growth will be less high. However, it does seem worth doing, as it would reduce the risk and level of credit crises.
[17] Should the projected equilibrium interest rate remain low also in the longer term, then this implies a relatively low nominal interest rate under the current ECB inflation target. This increases the risk that, in a recession, the zero lower bound again is reached. In such cases, it would be wise to investigate whether the inflation target should be raised.

The SGP framework, in principle, is adequate for national government finances, and its application should lead to a structurally healthy starting position of budgetary policy. Supervision in 2007, however, was found insufficient to correct for deviations. Although before the Great Recession national governments within the eurozone did follow the SGP to the letter, they did not act in the spirit of the SGP. Policy during the years of high growth, therefore, should have been more stringent.[18] With respect to the future, this is taken into account on a European level via the medium-term objectives (MTOs) for the national budgets. The challenge will be to pursue them in practice.

Despite a variety of precautionary measures, a new particularly severe recession in the longer term cannot be ruled out. The second lesson, therefore, is that individual economies within the eurozone must be sufficiently robust to adjust themselves quickly and effectively. On the one hand, this requires a powerful and flexible economic structure, with on the other hand sufficient scope for – unconventional – budgetary policy. Such policy scope will largely emerge automatically under proper structural budgetary policies. Although the SGP already provides greater scope to governments in certain circumstances, namely during a large crisis and to alleviate negative spending effects of structural reform, such exemptions are only valid for a relatively short period. This has led to a tight budgetary policy, which was not an optimal situation. Stretching the period of time within which deviations from the regular SGP criteria are possible, therefore, warrants further investigation. It goes without saying that this should be accompanied by binding agreements on bringing this within the framework of sustainable government finances, in the longer term.

Extending the duration of SGP exemptions can also be important in cases of large balance sheet problems in the private sector. Obviously, the first-best solution would be to prevent such problems. But once they do occur, a simultaneous balance sheet reduction via repayments made by all parties, on a macroeconomic level, may lead to a downward spiral, as all sectors would be implementing their reductions and savings at the same time – in turn leading to a deeper recession. The obvious thing to do would be for the government to hold off with spending cuts and savings until a later date. After all, it will be difficult to tempt private parties into increasing their spending when they are not doing well, and the private sector in most cases is being confronted with credit restrictions to a larger degree than the government.

The need for structural reform has already been addressed in the previous section. It appears to work both ways; not only will reform lead to a better functioning economy with a higher level of GDP, but it will also ensure that the economy is more resilient against negative shocks. In relation to a balance sheet recession, an important role is played by national reforms of bankruptcies procedures and clearing up the balance sheets of households and companies. After all, during a balance sheet recession the first priority is to reduce the most constricting balance sheet problems at banks, households, companies and governments. This can be done through repayments, higher growth and inflation, via

[18] The economy-neutral financing deficit is a function of structural economic growth, long-term real interest rates and government debt. Changes made to these factors should lead to adjustments in budgetary frameworks. For prudent budgetary policy, also see Lukkezen and Suyker (2013).

restructuring, hair-cuts, and increasing equity capital. The longer it takes the deeper and more severe the recession will be. There are large differences in efficiency and effectiveness between countries, in this respect. The IMF's call (IMF 2015c) for adequate, legal and institutional frameworks and procedures, therefore, deserves to receive serious attention.[19]

A third lesson can be derived from the fact that the Great Recession in certain areas presented a number of challenges that went beyond national policy frameworks, while the institutional frameworks of the eurozone were insufficiently developed to address them. Meanwhile, a new and better balance has been struck in various areas, between national and supranational authorities. It is however unlikely that the current equilibrium is the final one. Attention for further improvements is warranted, and should be paid to the following points:

- The frameworks for addressing balance sheet problems of banks and national governments;
- Budgetary policy;
- Monetary policy.

The recent formation of the European Banking Union enables supervision and helps solve the problems at the banks that are active in Europe. Supervision of large systemic banks is now in the hands of the ECB, as is a resolution should problems occur. This is certainly a step in the right direction, but the execution in detail is still incomplete and deserves more attention, as is also argued by Kool (2014).

Nearly all countries have clear regulations and procedures for debt restructuring of public bodies and lower governments. Still lacking however is a permanent framework for restructuring of national government debt in the eurozone – think of Greece.[20] Partly due to the lack of such a framework, it is currently a possibility that Greece will exit the monetary union.

Furthermore, there is the question of whether, in situations such as those over the last years, the budgetary policy frameworks on national levels are adequate. After all, the countries that urgently needed an impulse either did not have or could not use the budgetary space, while countries that did have such possibilities, such as Germany, were hesitant to make additional investments. At the same time, the strong interwovenness of the eurozone economies means that national budgetary impulses largely spill-over to the rest of the eurozone (Holland and Portes 2012). This may cause the budgetary policy on eurozone level to be suboptimal. A fiscal impulse on a European level may then, in certain cases, play a positive role in stimulating demand. As a supranational framework for additional government spending is lacking, it seems sensible to consider expanding the budgetary framework up to eurozone level, under special circumstances. Expanding this framework may however involve a further transfer of authority to supranational level, with politically sensitive repercussions for national autonomy. The current Juncker Plan in fact is an experiment in this direction that may yield some useful experience.

[19] For household debt, Van Beers and Bijlsma (2013) provide an overview of the options and the role of the government.
[20] Corsetti et al. (2015) make some interesting suggestions in this respect.

The monetary policy framework within the eurozone is of course supranational. It was insufficient for another reason, namely in its limitations to support individual Member States in a monetary sense. For this purpose, the European Stability Mechanism was designed. Also in this case, experience will show whether it will be sufficient.

References

Van Beers, N. and M. Bijlsma, 2013, Afbouw van consumentenschuld - welke rol voor de overheid? [Reduction in consumer debt and the role of the government (in Dutch)], CPB Background Document. [link]

Benink, H. and R. van Tilburg, 2015, Naar een duurzame euro, Sustainable Finance Lab (Towards a sustainable euro).

Blanchard, O. and D. Leigh, 2013, Growth Forecast Errors and Fiscal Multipliers, *American Economic Review*, Vol. 103(3), pp. 117–20. [link]

Brynjolfsson, E., and A. McAfee, 2014, *Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*, Norton & Company.

Cerra, V. and S. Saxena, 2008, Growth Dynamics: The Myth of Economic Recovery, *American Economic Review*, vol. 98(1), pp. 439–457. [link]

Corsetti, G., L. Feld, P. Lane, L. Reichlin, H. Rey, D. Vayanos and B. Weder di Mauro, 2015, *A New Start for the Eurozone: Dealing with Debt*, Monitoring the Eurozone 1, London: CEPR. [link]

CPB Netherlands Bureau for Economic Policy Analysis, 2015, *Central Economic Plan 2015*. [link]

Dicou, D. and J. De Jong, 2014, Aan schuld geen tekort [No shortage of debt (in Dutch)], *Tijdschrift voor de Openbare Financiën* [*Journal for Public Finances*], vol. 46(3): pp. 156–166. [link]

European Commission, 2015, The 2015 ageing report. [link]

Gelauff, G., D. Lanser, A. van der Horst and A. Elbourne, 2014, *Roads to Recovery*, CPB Book 11. [link]

Goodhart, C. and P. Erfurth, 2014, Demography and economics: Look past the past, voxEU.org column 4 November 2014. [link]

Gordon, R., 2012, Is US economic growth over? Faltering innovation confronts the six headwinds, NBER Working Paper, no. 18315. [link]

Hall, R., 2015, Macroeconomics of Persistent slumps, mimeo, Stanford University. [link]

Holland, D. and J. Portes, 2012, Self-Defeating Austerity?, *National Institute Economic Review*, vol. 222. [Link]

International Monetary Fund, 2009a, Lessons for Monetary Policy from Asset Price Fluctuations, World Economic Outlook October 2009, Chapter 3. [link]

International Monetary Fund, 2009b, What's the Damage? Medium-Term Output Dynamics after Financial Crises, World Economic Outlook October 2009, Chapter 4. [link]

International Monetary Fund, 2014, Is It Time for an Infrastructure Push? The Macroeconomic Effects of Public Investment, World Economic Outlook October 2014, Chapter 3. [link]

International Monetary Fund (IMF), 2015, Where Are We Headed? Perspectives on Potential Output, World Economic Outlook April 2015, Chapter 3. [link]

International Monetary Fund, 2015, Private Investment: What's the holdup? World Economic Outlook April 2015, Chapter 4. [link]

International Monetary Fund, 2015, Global Financial Stability Report, April 2015. [link]

Koo, R., 2011, The world in balance sheet recession: causes, cure, and politics, *real-world economics review* vol. 58. [link]

Kool, C., 2014, Ontwerpfouten bij oprichting Europese Bankenunie [Design faults in the formation of the European Banking Union (in Dutch)], *Economisch Statistische Berichten*, 99 (4684), pp. 262–265. [link]

Lanser, D., M. Ligthart and J. Rhuggenaath, 2015, Investment in the OECD: pre- and post-crisis developments, CPB Communication, 19 May 2015. [link]

Lukkezen, J. and W. Suyker, 2013, Naar een prudent niveau van de overheidsschuld [Towards a prudent government debt level (in Dutch)], CPB Policy Brief 2013-05. [link]

Lukkezen, J., B. Jacobs and C. Kool, 2015, Macroeconomics of balance sheet and liquidity issues, CPB Background Document, forthcoming.

Machin, S. and A. Manning, 1999. The causes and consequences of long-term unemployment in Europe, in: O. Ashenfelter and D. Card (ed.), *Handbook of Labor Economics*, vol. 3(47), pp. 3085–3139. [link]

Neuteboom, N. and J. Lukkezen, 2015, Structurele determinanten van de groei in de Europa [Structural determinants of growth in Europe (in Dutch)], CPB Background Document, 5 June 2015. [link]

Stegeman, H., M. Badir and M. Weernink, 2014, Het groeiperspectief van de eurozone [The growth perspective of the eurozone (in Dutch)], Rabobank Special in Kennis en Economisch Onderzoek, 19 September 2014. [link]

Summers, L., 2014, US Economic Prospects: Secular Stagnation, Hysteresis and the Zero Lower Bound, speech delivered to the National Association for Business Economics' Economic Policy Conference, 24 February 2014. [link]

Teulings, C. and R. Baldwin, 2014, Secular Stagnation: Facts, Causes, and Cures, voxEU.org book. [link]

Teulings, C., M. Bijlsma and J. Lukkezen, 2011, Nederland en de Europese schuldencrisis [The Netherlands and the European debt crisis], CPB Policy Brief 2011-03. [link]

Teulings, C, M. Bijlsma, G. Gelauff, A. Lejour and M. Roscam Abbing, 2011, *Europe in Crisis*, CPB Book 4. [link]

Van Veldhuizen, S. and S. Kramer, 2015, CPB Risicorapportage Financiële Markten 2015 [CPB Risk Report on the Financial Markets (in Dutch)], CPB Notitie 5 June 2015. [link]

Publisher:

CPB Netherlands Bureau for Economic Policy Analysis
P.O. box 80510 | 2508 GM The Hague
T +31 70 3383 380

June 2015 | ISBN 978-90-5833-694-1