Hansjörg Herr

## 1. Introduction

Germany, Europe's biggest economy, accounted for 20% of the nominal gross domestic product (GDP) of the European Union (EU) in 2015, followed by the United Kingdom (UK) (17%), France (14%), Italy (11%) and Spain (7%). As for the EMU, Germany's share – 29% – is even higher (IMF 2016). However, the German economic position cannot be correctly estimated only by looking at its GDP shares.

Germany has been playing a dominant role due to its export success and its "stability culture" which has also been followed by some smaller northern EMU countries. Before the EMU's creation, the D-Mark dominated the European Monetary System (EMS), which was created in 1979. Member countries of the EMS (and other European countries) pegged their currencies to the D-Mark. The German

Bundesbank dictated the interest rate level of the EMS whereas Germany had the lowest nominal interest rates. Central banks of other EMS countries had to enforce higher interest rates to keep their exchange rates stable vis-à-vis the D-Mark. The system worked because exchange rates were frequently adjusted. In 1992, the UK left the system, while Italy depreciated substantially and temporarily left the exchange rate mechanism. In 1993, further turbulences led to a widening of the band around the agreed fixed exchange rates from +/-2.25% to +/-15%. Overall the EMS showed many tensions and fragilities which in the end led to several appreciations in the D-Mark.

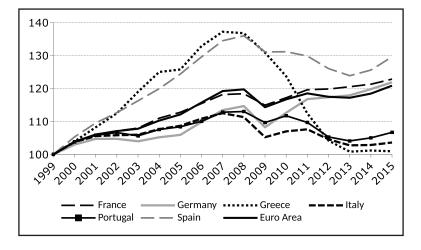
The major problem for EMU is that these tensions and fragilities did not disappear after the creation of the euro in 1999 – despite the fact that exchange rate adjustments and other national policies were no longer possible. In Section 2 developments in the EMU before and after the Great Recession in 2009 are discussed. Section 3 analyses policies to solve the crisis. Section 4 concludes.

### 2. The overall development in the Euro Area

Real GDP growth rates differed substantially within the EMU (all data if not otherwise noted come from OECD 2017). Between 1999 and 2008 countries like Spain and Greece realised much higher growth rates than the average; France was close to this average; Italy, Portugal *and* Germany underperformed. All EMU countries were severely hit by the Great Recession. The recovery in 2010 was relatively quick, but the Eurozone slid into a double-dip depression

with shrinking GDP in 2012 and 2013. Since then there has been no significant recovery – a unique situation since World War II. The next cyclical downturn will hit the zone in a very poor condition. After the Great Recession, in terms of GDP Germany became one of the best performing countries. Greece, Italy, Portugal and Spain suffered massively from the crisis (see Figure 1). Ireland showed high GDP growth before 2008, a deep recession and quick recovery. But Ireland is a special case economically dominated by multinational companies and aggressive tax dumping.

# Figure 1: Real GDP growth in selected EMU countries, 1999-2015, 1999 = 100

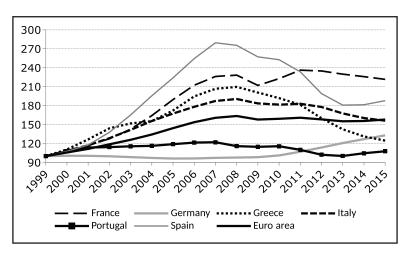


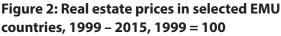
Source: OECD (2017)

The official EMU unemployment rate in 2016 was above 10%, in Greece around 25%, Spain 20%, Italy 13% or Portugal 12%. For these countries, the figures show a lost

decade. In Germany, the unemployment rate was slightly above 4%. However, the volume of hours worked did not increase by much in Germany, only from an index value of 101.7 in 2000 to 103.5 in 2015 (Stat 2016).

One factor to explain the different economic performance within the EMU until 2007 is the development of interest rates. Since the announcement of the European Council in 1992 that the Euro would come into being, short- and longterm interest rates began converging towards the low level obtaining in Germany. For the southern EMU countries low interest rates were a big birthday gift from the Euro.





Source: OECD (2017)

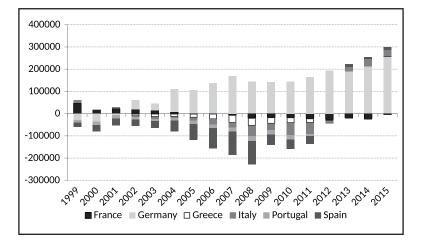
The low interest rates together with available credit and lax regulation triggered in most EMU countries real estate bubbles. Between 1999 and 2007 real estate prices in Spain almost tripled, in Greece, France and Italy they more or less doubled. In Portugal, they increased slightly more than 20%. The bubble imploded when the shock of the US-subprime crisis hit the world economy. Spain and Greece in particular suffered from falling real estate prices, but also Italy and Portugal (see Figure 2). In countries with bubbles before the crisis the real estate sector had become an important engine of growth. Not only the construction sector was booming but also consumption was driven by income created in that sector and the positive wealth effect of increasing real estate prices.

Germany did not experience a real estate bubble following the Euro's birth. Only after the Great Recession did real estate prices in Germany start to increase. This has to do with the fact that there was no interest rate shock in Germany and the German financial system is relatively conservative (Detzer et al. 2017). Most importantly, Germany followed policies which did not stimulate domestic demand that could then spill over into a higher demand for real estate. Germany suffered rather from a lack of domestic demand. The red-green government (1998 -2005) under Chancellor Gerhard Schröder implemented a number of labour market reforms given the name of Agenda 2010. In essence, these reforms enabled a sharp expansion of precarious jobs and of a low-wage sector and a decrease in social benefits for the unemployed. Only in early 2015 did Germany introduce statutory minimum wages.

In Germany demand was almost exclusively driven by increasing exports. Coming from a constellation of current account deficits, an exceptional outcome caused by German

unification in 1990, with the start of the EMU the country quickly began generating increasing current account surpluses. It manoeuvred itself into a mercantilist constellation with current account surpluses as a main growth engine (Hein et al. 2016). Current account imbalances in the EMU increased sharply until 2007 (see Figure 3). Greece, Spain, Portugal and Ireland in particular produced high current account deficits measured in per cent of GDP. But Italy slid too with EMU into high current account deficits. There are several factors which explain the imbalances.

# Figure 3: Current account imbalances in selected EMU countries, 1999-2015, (million Euro)



Source: OECD (2017)

First, growth differentials. Germany with its relatively poor growth performance was characterised by relatively low imports whereas high growth in Spain and Greece, for example, led to high imports and current account deficits. The reduction in the current account deficits of the crisis countries after 2008 has been mainly caused by lower imports as a result of low growth.

Second, price competitiveness explains the relative performance of exports and imports. In a Monetary Union to a large extent this depends on the relative development of nominal unit labour costs. Figure 4 reveals that German unit labour costs stagnated from the mid-1990s until the Great Recession. Indeed, between 1998 and 2007 the increase in German unit labour costs was zero. To realise the target inflation rate of the central bank, unit labour costs should have increased according to trend productivity development plus the target inflation rate – which is in case of the ECB is (close to but below) 2%. In contrast to Germany, with its ultra-low wage increases, in southern European countries these were too high, while for example French wage increases were very much in line with the ECB inflation target. Until 2007, for the EMU as a whole, average wage increases followed more or less the inflation target of the ECB which led to an EMU inflation rate of around 2% (Herr and Horn 2012). These developments increased German price competitiveness within the EMU substantially and reduced it for other EMU countries. In 2001, nearly 45% of German exports went to the Euro Area. This means the changes of price competitiveness within EMU fundamentally affected German trade. After the Great Recession, mainly as a result of the crisis in the southern European countries, this percentage dropped to around 36% (2015). Germany managed to shift part of its exports to the rest of the world, largely thanks to a weak Euro.

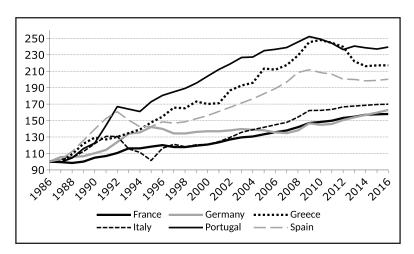


Figure 4: Development of nominal unit labour costs in selected EMU countries 1999-2016, 1986=100

Third, non-price competitiveness plays a role. Based on its high-quality products, Germany is seen as a country with low price elasticity in international trade. However, it has been calculated that a 10% reduction in price competitiveness reduces German exports by 6%. For imports, the reaction might be higher (Thorbecke and Waseda 2012).

Current account imbalances are only possible with corresponding net capital flows. Not surprisingly, before the Great Recession, current account deficit countries realised high net capital inflows and current account surplus countries high net capital outflows. Between 2003 and 2007 German net capital outflows were 45% of GDP, compared to net capital inflows in Spain of 29.1%, in Portugal 36.6% and Greece 37.5% of GDP. Most of the capital flows were

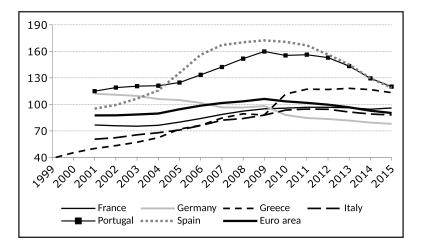
Source: AMECO (2017)

credit. In 2007 EMU countries had accumulated very high gross stocks of foreign debt in relation to GDP, for example Italy 111.4%, Greece 144.2%, Spain 144.8% and Portugal 202.1%. Germany and the Netherlands, as platforms of international capital flows, had gross foreign liabilities of 135.7% and 290.4% of GDP respectively. The boom phase of cross-border private capital flows (intra-area flows and extra-area flows) in the EMU peaked in 2007 with 40% of area GDP. Then it collapsed to below 5% in 2009 and remained below 10% the following years (Lane 2013). This means that debtors in current account deficit countries were suddenly cut off from credit supply and could not roll over due credits. In emerging markets, where boom-bust cycles became frequent from the 1980s onwards, such a situation leads to twin crises - an exchange rate crisis and a domestic financial crisis. In EMU current account deficit countries cannot utilise devaluation. However, economic units in these countries (financial institutions, firms, governments, private households) were brutally affected by a freeze in capital inflows.

Not only did the cross-border financial flows stop working, crisis countries like Spain and Greece were additionally affected by asset price deflation in the real estate sector that brought about non-performing loans. Financial institutions in the Euro Area which had invested in debt securities and other products that turned toxic with the sub-prime crisis (for example US mortgage-backed debt securities), had their balance sheets adversely affected on top. Finally, the Great Recession and the long stagnation or even shrinking of economies added to non-performing loans. As a result of these developments, financial markets in most EMU coun-

tries did not start working again. Crisis countries suffered from a so-called balance sheet recession (Koo 2011). Figure 5 shows that credit expansion in the EMU to the private sector after a period of high growth stagnated from 2008 onwards. Especially in Spain and Portugal, credit to the private sector as a per cent of GDP decreased substantially. Figure 6 shows that since 2008 gross capita formation in per cent of GDP in most EMU countries has been shrinking or stagnating while, at the same time, Germany's investment performance has not been good. This to a large extent also explains why credit expansion as a share of GDP has been decreasing there.

# Figure 5: Credit to the private sector as a share of GDP in selected EMU countries, 1999 -2015



Source: World Bank (2017)

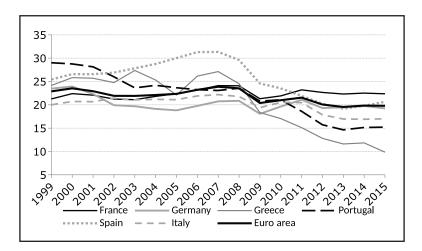


Figure 6: Gross capital formation as a share of GDP in selected EMU countries, 1999 -2015

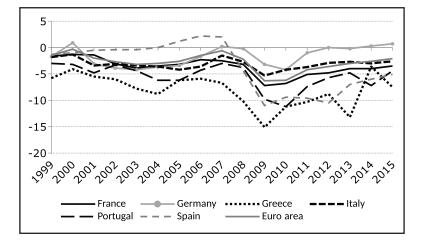
Source: World Bank (2017)

In Germany, in contrast to many other EMU countries, the financial system continued to function normally. Banks ran up losses abroad, but were quickly bailed out by the federal government. There was no debt problem inside Germany. Investment there after 2008 was not good, but it did not suffer from any disastrous development as in other countries. After 2011 German real estate prices started to increase substantially, adding to demand. Together with the high current account surpluses this explains the country's relative good growth performance.

Low growth rates after the end of the internet boom in 2001 led to increasing budget deficits in most EMU countries of between 3% and 4% of GDP. During the economic recovery deficits had dropped below 1% of GDP in 2007. There were

some outliers. Spain, for example, was a model pupil with high budget surpluses. Greece had high budget deficits despite high GDP growth, as did Portugal (Figure 7). Except for Greece and a certain extent Portugal there was no fiscal misbehaviour in EMU's first phase. In 2009 and 2010 budget deficits in the EMU sharply increased to a level over 6% of GDP, in Greece to over 15% and Portugal and Spain to over 10%.

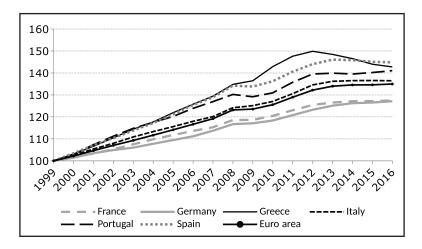




Source: Eurostat (2017)

In contrast to the rest of the world, the "Keynesian phase" in the Eurozone was relatively short. In 2010 policies changed completely and followed strategies in the tradition of the Washington Consensus, including fiscal austerity. Budget deficits in the EMU were slowly reduced but it has been a long and rocky road. Government debt to GDP,

meanwhile, increased in the EMU from around 65% in 2007 to over 90% in 2016.



#### Figure 8: Consumer price index, 1999 – 2016, 1999=100

Source: OECD (2017)

Let us come to the last important indicator, the inflation rate. Unit labour costs are the most important factor determining the price level (Herr 2009). This is the explanation why Germany for most of the year achieved the lowest inflation rate in the EMU whereas Spain or Greece with relatively high increases of unit labour costs saw relatively high CPI inflation rates. Until 2008 the EMU inflation rate was around 2%, then in 2009 it dropped sharply, but recovered quickly again to 2%. After 2012 inflation rates became very low and stagnated below 1%. Some member countries – Spain and especially Greece – have seen falling price levels (see CPI development in Figure 8). The EMU

as a whole stood on the edge of deflation. In 2017 CPI inflation increased, but core inflation rate remains below 1%.

#### 3. Policies adopted to solve the crisis in the EMU

Financial systems in some of the EMU countries were affected by high-risk and speculative activities in the global financial system and their consequences, including the collapse of Lehman Brothers in September 2008. Europe suffered from the negative financial effects and by a shrinking global economy. But there were homemade problems, too. Real estate bubbles came to their end and burdened financial systems. High budget deficits were caused by decreasing tax revenues, higher public spending related to the crisis, bailout costs of financial institutions and programs to stimulate demand.

Expansionary fiscal policy in the EMU was challenged by the sovereign debt crisis. In early 2010, refinancing costs for public households increased, especially in Greece, Portugal and Ireland. To a lesser extent interest rates for government bonds also increased in Italy and Spain. In Greece it became clear that past budget deficits were higher than officially reported. Confidence in the ability of the Greek and other EMU governments to remain liquid and solvent eroded. No clear statement that EMU governments or the ECB would bailout governments in trouble emerged. The opposite was the case; there was officially a no-bailout-clause as part of EMU fiscal rules. Help for Greece was delayed and only in May 2010, shortly before the collapse of the Greek public budget, was the European Financial Stability Facility

(EFSF) created with a volume of €690 billion by the EMU countries as a temporary crisis resolution mechanism. Greece was bailed out with a €110bn package. Negotiations with crisis governments were carried out by the so-called Troika which represented the International Monetary Fund (IMF), the ECB and the European Commission. However, final decisions were taken by EU finance ministers or government leaders. In November 2010, Ireland was bailed out to the tune of €85bn, followed by Portugal with €78bn in May 2011. Meanwhile, in early 2011, in addition to the EFSF, the European Stability Mechanism (EMS) was planned as a permanent bail-out fund – worth about €500bn – and established in 2012 (later its firepower was increased to €800bn). In July 2011, a second bail-out package of €109 billion euro was required for Greece. Interest rates on Spanish and Italian government bonds increased sharply. Both countries passed far-reaching austerity measures. In February 2012, the second Greek bail-out package was increased to €130bn. In June 2012 Spain was helped with €100bn. In February 2013 Cyprus received €10bn. It is clear even now that Greece in particular will require further help. The leading role in deciding under which conditions governments should be bailed out was taken over by Germany. All these measures were unable to prevent the sovereign debt crisis and convince financial markets that governments will not fail.

In the following section we discuss how, beyond these afore-mentioned bailout measures, the crisis in the EMU was handled (see also Dodig and Herr 2015). Three policies are in the focal centre: the policy of the ECB as lender of last resort, the policy of internal devaluation and fiscal austerity.

#### a) The ECB as lender of last resort

A financial system can hardly exist without a lender of last resort. This was already made clear by Walter Bagehot (1873). A lender of last resort is required in the normal daily activities on the financial system, but also during any financial crisis. Of course, a central bank can decide to let some unsound bank or even segments of the financial system go to the wall, but in the end it has to stabilise the relevant financial system to prevent fundamental distortions of the economy. Central banks also take over the function of lender of last resort for public budget entities, at least for the federal government which then helps local budget entities. Central banks must do this as otherwise vital government functions erode. Think of governments not paying policeman, closing hospitals or stopping pension payments. A central bank can help governments if it directly finances the budget, or, if there are legal restrictions, buys government bonds in the secondary market and refinances banks which provide funding for governments.

Looking at the ECB handling pf the EMU crisis, judgements are mixed (see Bibow 2016). The ECB, following the tradition of the Bundesbank, oriented monetary policy towards achieving its inflation target. Compared with the US Fed, interest rates in 2008 were cut relatively late. However, via several reductions in May 2009, the main refinancing rate reached 1%. A mistake was the increase in the main refinancing rate in 2011 in several steps. However, in July 2012, rates were cut in stages again and gradually reached in 2014 0.05% and in March 2016 0%. ECB interest rate policy can be criticised in detail but has been overall functional.

The ECB also took over a comprehensive function as lender of last resort for the financial system. From October 2008 banks in the EMU could refinance themselves at the main refinancing rate without any limit. The quality of needed collateral for refinancing was reduced in such a way that banks had sufficient room to get central bank money. Special liquidity programs, for example the purchase of (private) covered bonds or long-term credit to banks, were added.

When in 2008 cross-border credit markets in the EMU froze, financial institutions in crisis countries were affected by huge outflows of funds. First, households and firms bought foreign goods and services, paid interest to foreigners etc. and thereby simply transferred deposits of banks in crisis countries to overseas banks. Second, wealthy people in crisis countries were afraid of systemic financial crises in their countries and transferred their capital assets to countries considered to be stable, for example Germany. Such capital flights could be carried out without any exchange rate risk and at low costs. The problem for banks in crisis countries was that they had to balance every evening their cash flows via the TARGET2 (Trans-European Automated Realtime Gross Settlement Express Transfer System). In the boom phase banks could get the funds they required via the money market. But after the outbreak of the crisis this was no longer possible. Banks in need of funds had to finance themselves via the national central bank. Money created by central banks in crisis countries was booked in the ECB as assets of the central banks in the countries receiving the cash flows. Net TARGET2 balances of Germany reached in 2012 €600bn, and of a combined Finland, Luxemburg and

the Netherlands over  $\notin 1$  trillion. This huge sum is around the same as the total balance sheet of the ECB at end-2007. The other EMU countries had corresponding negative net balances. In the following years, these balances reduced slightly, but then increased in 2016 to the old levels (ECB 2017). Via TARGET2, financial systems in surplus countries were flooded with central bank money which they did not use for credit expansion but which were kept as excess reserves with the ECB.

In June 2014, the ECB started its unconventional monetary policy. The interest rate for bank deposits at the ECB (deposit facility) became negative and, in a series of steps, reached -0.4% in March 2016. A year earlier, quantitative easing (QE), already used by other central banks since 2009, was introduced. On average the ECB bought public and private sector securities amounting to €80bn monthly. From April 2017 the amount was reduced to €60bn a month. This unconventional monetary policy was mainly motivated by the poor economic development in the Euro Area and an inflation rate far below the 2% target. In fact, the Euro Area was in danger of slipping into a deflationary development comparable to that of Japan or even worse. QE could have been an opportunity to cleanse the balance sheets of banks of non-performing loans or to help governments in crisis countries. Such a policy, followed for example by the US Federal Reserve (Fed), was not implemented, however.

Let us come to the central bank as lender of last resort for public budgetary authorities. The Fed took over this function without hesitation and without causing any sensation or drama, as did the Bank of England, the Bank of Japan and other central banks. In these countries, no sovereign debt

crisis developed despite the fact that some of the countries had much higher public debt than, for example, Greece. It was a major mistake that the ECB only took over this function incompletely and very belatedly (De Grauwe 2013). This does not mean that countries like Greece could not have been pressured into undertaking the necessary reforms. But to use the bankruptcy of states and send a Troika to enforce far-reaching neoliberal reforms against the will of governments and parliaments in crisis countries is not an acceptable crisis-solving mechanism.

In periods of severe financial market turbulence and in the framework of the Security Markets Program (SMP), the ECB bought in May and July 2010 government bonds mainly from crisis countries with a value of around €60bn and between early August and January 2012 of around €140bn. This was not enough to calm financial markets. Finally, on July 26 that year, Mario Draghi, ECB President, announced in a speech in London: "Within our mandate, the ECB is ready to do whatever it takes to preserve the Euro. And believe me, it will be enough." (Euronews 2012) The ECB promised to bail out governments if they got help from EFSF/ESM and followed the requirements of the Troika. In September 2012, the SMP program was substituted by the so called Outright Monetary Transactions (OMT) Program which permitted the buying of bonds from EMU crisis countries without limit if they are controlled by EFSF/ESM. The ECB's commitment proved credible and has been put to the test by financial markets so far. These actions ended the sovereign debt crisis. German representatives at the ECB strictly opposed policies of allowing the bank to become at least a partial lender of last resort to EMU. Bundesbank

President Axel Weber resigned in February 2011 and ECB chief economist Jürgen Stark in September 2011.

### b) Internal devaluation to restore competitiveness

The Troika was right to care for the competitiveness of current account deficit countries in the EMU. But it did not in the slightest way push for a symmetric adjustment mechanism to restore competitiveness. It would have been more functional to push current account surplus countries like Germany towards substantially higher wage increases and fiscal expansion and deficit countries like Greece, Spain or Portugal towards lower wage increases. Instead, deficit countries were pushed into enforcing nominal wage cuts to increase their price competitiveness. Wage cuts were combined with the complete set of Washington Consensus policies, including flexible labour markets, privatisation and deregulation of public utilities. These policies were imposed by the Troika to change societies in a neoliberal fashion (see Scharpf in this volume) – even though in so many cases they had failed in developing countries.

With falling wage costs, consumer price levels in countries such as Greece, Portugal or Spain decreased especially after 2012 – producer price indices fell even down to minus 5%. To a lesser extent, similar developments happened in Italy and France. But in Germany too, inflation rates were very low with the result that the price competitiveness of crisis countries only increased slightly. And there were no focused policies to help these to increase productivity via industrial policy or other measures. It must therefore be expected that

as soon as growth recovers in these countries high current account deficits will return.

Policies to cut the level of wages are never fair. When Britain in 1925 went back to the Gold Standard with an overvalued exchange rate, seeing the way to make itself competitive as cutting wages, Keynes (1925: 3f.) wrote: "Those who are attacked first are faced with a depression of their standard of life, because the cost of living will not fall until all the others have been successfully attacked too (...). Nor can the classes which are first subjected to a reduction of money wages be guaranteed that this will be compensated later by a corresponding fall in the cost of living (...). Therefore, they are bound to resist so long as they can; and it must be war, until those who are economically weakest are beaten to the ground." Wage cuts failed and in 1931 the Gold Standard collapsed when Britain left it.

The Troika's key strategy was to abolish sectoral bargaining, weaken trade unions in general, freeze or cut minimum wages, reduce social transfers and pensions, erode job protection, allow precarious employment and so on (Hermann 2014). Indeed, its policies of bringing down nominal wages in the crisis countries were a kind of "war" and led to extremely unfair and unjust results.

The policy of internal devaluation implies – in addition to social injustice and the loss of social cohesion – deep economic contradictions. It is one of the great puzzles of European crisis management that it was not understood that deflationary policies permanently reproduce non-performing loans. Irving Fisher (1933) and many subsequent economists made clear that deflation increases the real debt burden and destroys the financial system. It should not be a surprise that

financial systems in crisis countries did not start working again and widespread over-indebtedness of economic units characterize their economies. And the ECB inside the Troika must have been acting as a kind of schizophrenic: Pushing for wage cuts and deflation in one half of the EMU and at the same time fighting deflation with QE programs seems an incoherent policy.

# c) Fiscal austerity

In 2010, fiscal policy in the EMU changed from an expansionary orientation towards strict austerity. Germany above all pushed for hard fiscal discipline and cuts in government spending. The Troika imposed fiscal austerity on countries dependent on its aid. Other countries, which were afraid to be punished by financial markets, also followed restrictive policies. After 2010, in Greece, Spain and Portugal public spending in absolute terms decreased – in Greece, the most extreme case, around 25% by 2014. In Italy public expenditures almost stagnated, whereas in Germany and France they continued to grow moderately but showed no sign of expanding. The outcome of this far too premature switch to restrictive fiscal policy was second EMU recession in 2012 and 2013.

When countries suffer from shrinking investment and consumption demand and, at the same time, have current account deficits and cannot easily increase exports, with shrinking government demand on top, a crisis must deepen. The hope of the Troika that neoliberal structural reform might trigger growth in a stagnating or even shrinking economy is built on sand. Even necessary structural reforms will not lead to spontaneous growth but can have only potential medium- and long-term positive effects. If there are no demand drivers, stagnation can last theoretically forever *even* if required structural reforms are implemented. If investors' expectations are depressed, animal spirts disturbed and finance not available, there will be no tendency for an economy to grow. The neoclassical hope of a bail-in of fiscal austerity in such a constellation seems to be not only illusionary but also cynical. And, of course, the question is which reforms are needed. The Troika interfered in an extremely harsh way in the democratic institutions of countries and enforced reforms which were not accepted by the majority of the population and are certainly not linked positively to growth.

In essence, the crisis countries, including those such as Italy not under Troika control, were forced to follow a policy comparable to that of US President Herbert Hoover from 1929 to 1933. Stiglitz (2016: 18f.) writes about the EMU: "Herbert Hoover fails again (....); his policies of austerity converted the crash into the Great Depression. Since Hoover, such policies have been tried repeatedly, and have repeatedly failed. (...). Why the Troika would have thought that this time in Europe it would be different is mystifying." One could add: Heinrich Brüning, head of the German government from 1930 until 1932 – just before Adolf Hitler came to power – failed with his austerity policies as well.

### 4. Conclusion

An astonishing point is that institutions like the European Commission or the ECB did not discuss the evolving fragilities shown up in the first phase of the EMU. One can follow Queen Elizabeth II when she asked at a briefing by academics at the London School of Economics on the turmoil on the international financial markets: "If these things were so large how come everyone missed it?" (Telegraph 2008). She could have also asked: Why did nobody see the EMU crisis coming? All this does not speak up for the quality of the macroeconomic management of the EMU. From 2005 at the latest the development of real estate prices in some of the countries, incoherent wage developments, high current account imbalances as well as the state of the global financial system, all should have been at the centre of economic policy debates in the EMU. By the way, Professor Luis Garicano, one of the LSE directors, answered the Queen: "At every stage, someone was relying on somebody else and everyone thought they were doing the right thing." (Telegraph 2008).

EMU crisis management was from 2010 onwards largely misguided. The EMU was unable to organise a lender of last resort for governments and thus let the sovereign debt crisis unfold needlessly. That alternative policy could have been combined with useful reforms in crisis countries. Separating fiscal and monetary policy in the way the EMU authorities did was a disaster that could have been avoided. However, the ECB must be considered as the institution that kept the EMU together, stabilising it during periods of extreme stress.

Internal devaluation, fiscal austerity and neoliberal structural reforms were at the centre of the Troika's strategy. Internal devaluation via wage cuts implies deflation. Deflation in countries with high domestic debt, as in the EMU crisis countries, leads to high non-performing loans and to the permanent erosion of a healthy financial system. Restrictive fiscal policy in the context of shrinking demand intensifies a crisis. And in the case of structural reforms one has to decide which reforms are needed. And even necessary reforms do not lead to quick economic results. Policies post-2010 pushed the EMU very close to a Japanese-style deflationary stagnation scenario which might continue for decades (Dodig and Herr 2015a). However, the political context and dynamics of a stagnating EMU is different to Japan's situation and could even destroy the European project.

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