MAKROSKOP

Fiscal austerity and wage reduction policies

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A fatal and irresponsible cocktail imposed upon the Euro crisis countries as „adjustment programs"

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Content

Introduction

This study covers the impact of the combination of wage cuts and government austerity on aggregate demand and employment in the euro zone. The focus is on the euro crisis countries and their development since 2008. Since 2008, the European Monetary Union (EMU) finds itself in a permanent crisis. Not all member states are equally affected. Severe criticism has been voiced in many countries. It is no longer guaranteed that the euro monetary union will continue to exist. The economic policies of the euro zone clearly need to be redesigned. However, so far mainstream economists and policy-makers have been unwilling to formulate and implement different policies. What matters here most is the lack of a straightforward diagnosis of the crisis of the eurozone.

The responsibility for the crisis was initially placed on the financial markets. Gradually, however, the "irresponsible" fiscal policy of certain member countries was identified as a supposed cause of the crisis. The crisis was reinterpreted as a "state debt crisis". Immediately thereafter, almost as a reflex, a general austerity program, accompanied by "structural reforms", to increase the "flexibility" of the future economy was called for. Finally, losses of competitiveness were discovered as the critical common denominator of all crisis countries. According to the official reading of the Eurogroup, this lack of competitiveness should be remedied by reductions in wages and increasing labor market flexibility.

The adjustment programs of the Troika that have been implemented in the years following the outbreak of the financial crisis are a combination of fiscal austerity (*i.e.* government austerity) and wage-cutting policies. The purpose of this policy mix was to bring about a recovery in the internal and external balance of the crisis countries. The internal balance is characterized by full employment, price stability and sustainable public finances. The external balance

refers to a sustainable equilibrium of the balance of payments and international investment position.

Government austerity is primarily aimed at making public finances "sustainable". It is controversial whether, in achieving this objective, such policies have negative effects on employment and price stability, and to what extent. The question relates to the size of the so-called "multiplier", which we will discuss in detail. Wage reduction policy, on the other hand, is primarily aimed at restoring an external balance. Its aim is to restore competitiveness. Within a monetary union, this cannot happen through exchange rate depreciation – there are no national currencies. It is only possible through an "internal devaluation", this is an improvement of the level of national unit labour costs compared to the trading partners.

From the perspective of the protagonists of such a double strategy, lower wages and higher flexibility limit the damage of austerity. They assume that wage cuts will rapidly lead to employment gains. In this study, we will show that this cocktail of adjustment strategies has failed.

We argue that the hypothesis of the mainstream is based on a fallacy and that this furthermore highlights a central weakness of mainstream labour market theory. Our own, alternative, hypothesis is that wage reduction policies *reinforce* the negative effects of fiscal austerity (which are always expected to occur), both on demand and employment. If such double adjustment strategy takes place in an economic environment that is already deflationary, the strategy adds additional stress factors to the economy in general and employment in particular.

Considering both the depth and the duration of the economic downturn as a result of the combined use of austerity and wage repression in the years 2010-13, *prima facie,* the evidence of our alternative hypothesis is almost overwhelming. High unemployment and low inflation in the euro area clearly show the failure of the economic policies that have been implemented by the mainstream with great zeal and conviction. Wages and prices increased little

and the euro zone as a whole has been teetering for quite some time now on the brink of deflation. This is the reason why, in 2015, even the ECB, after a long period of hesitation, launched a program of "quantitative easing" (QE) in order to increase inflation. However, so far, the desired inflationary effects did not occur and until today the so-called economic "recovery" remains weak, fragile and unbalanced. There is, in fact, a grotesque contradiction between economic policies aimed at reducing wages on the one hand and policies aimed at increasing inflation on the other hand.

The proponents of the official economic policy argue that we have seen some "success stories". We take a close look at these "success stories" in this study. For now, it suffices to mention that several influential researchers and economic policy consultants, such as for example the IMF, have admitted that, in addressing the crisis, the multipliers have been "underestimated" (see section 1.2). Unfortunately, it remains doubtful that mainstream researchers and policy-makers will learn from the mistakes they have made. While the admittance of the IMF concerning the multipliers is certainly positive, until today the real causes of the policy failures remain analytically unaddressed.

The aim of this study is to theoretically justify and empirically demonstrate that the approach which has been adopted in the EU and which has subsequently been forced upon the euro crisis countries – the combination of wage cuts and fiscal austerity in order to restore competitiveness - has been responsible for the depth and the duration of the observed collapse. This analysis and the evidence that we present is of major importance for the design of future adjustment programs. In our view, it provides an extremely powerful argument to encourage a fundamental rethink of the economic policies of the euro zone. Without a fundamental overhaul of the EU's economic policies, the euro crisis cannot be solved.

The organization of the study is as follows. Section 1 reproduces and subsequently questions and criticizes the official diagnosis of the crisis. The critical role of the "multiplier" in connection with government austerity policy is being explained from a theoretical and an empirical perspective. Section 2 deals with

the second prong of the grand adjustment strategy, the "internal devaluation", which is aimed at lowering wages. The theoretical discussion in this part highlights the fundamental difference between neoclassical labour market theory and Keynesian theory. It is here that we find theoretical support for our alternative hypothesis. Section 3 presents the empirical findings. We document the experience of the euro crisis countries and the euro zone as a whole and present a thorough analysis. Recommendations for crisis management in the "program countries" and for a series of alternative economic policies for the EMU as a whole are then developed in section 4. Finally, the study concludes with a summary and some critical closing remarks concerning the economic policies in the euro zone.

1. The official diagnosis of the crisis and its weaknesses

1.1. A first class economic policy failure

Since 2008, the global economy has been characterized by multiple crises and increased instability. For the last eight years, hardly any country or region in the world has been able to achieve a real, durable and satisfactory economic development. Remarkably, among the western industrialized countries, the euro zone stands out as the region that performed the worst of all after the global financial crisis (2008-09) and the subsequent euro crisis (2010-?). A recovery of the European economy remains far off. At the end of 2015, the gross domestic product (GDP) of the euro zone just barely reached again the pre-crisis level of the beginning of 2008. In reality, this corresponds to eight years of zero growth. This abysmal record is even worse than the Japanese development since 1991. More specifically, at the end of 2015, domestic demand was still about 3 percent below pre-crisis levels. The gap between GDP growth and faltering domestic demand corresponds to the very high current account surplus of the euro zone as a whole. This surplus has been building up since the beginning of the crisis. It indicates that in this period the euro zone has benefited from a from global economic growth momentum. Without it, the EU's own economic development would have even been weaker.

The exceptionally poor economic development record of the euro zone has several causes. There is no doubt that the macroeconomic design of the European Monetary Union is fallacious, just as there is no doubt that economic policy in Europe has blatantly failed to address the crisis. Yet, unfortunately, politicians have still not drawn the necessary conclusions. No fundamental correction of economic policy has been initiated. Proposals to reform the monetary union remain ambivalent, without proper vision and even went in part into the wrong direction. The mainstream stubbornly continues to hold fast onto the consolidation of public finances and the restoration of competitiveness by putting downward pressure on wages in the crisis countries.

Although there is no longer any question that these economic policies have failed, no political debate is taking place about it. The matter is hardly being discussed in civil society and social mobilization against these policies is lacking. This is especially the case in Germany, Europe's most important economic power. Germany has built its political dominance on the basis of its economic power. All other euro zone member countries have been affected much more by the crisis than Germany. The political situation has indeed become increasingly unstable. Germany is widely seen as having been profiting from the euro crisis at the expense of its trading partners. Politically speaking, the euro zone has been split. The partners are drifting apart. The economic policies of the EMU require urgent and a fundamental change of course in order to prevent their ultimate failure and a possible break down of the euro zone.

Crisis management can only be successful if it is based on an accurate diagnosis of the causes of the crisis. The failure of economic policy is a logical and unsurprising consequence of the official diagnosis and its glaring weaknesses. The circle of influential policy-makers produces a lot of nice rhetoric, but the obvious failures are never addressed. This is far from new. It was also the case before the outbreak of the crisis. In a speech of 2005, Otmar Issing, the first chief economist of the ECB (1999-2006) and former chief economist of the *Deutsche Bundesbank*, said that:

"On the eve of the changeover, I wrote a commentary on diversity and monetary policy in the euro area. To the question whether a single one-size monetary policy could fit all parties involved — be they national entities, social partners or economic actors — my answer was: 'One size must fit all.' The political decision on the creation of EMU had resolved all discussions on whether monetary union should precede or follow political unity and the fulfillment of the criteria for an optimum currency area. Today, in light of the evidence gathered so far in the euro area, I am more confident in saying: 'One size fit all!'" (Issing 2005: no page number given).

The theory of optimum currency areas focuses on so-called asymmetric shocks. Such shocks may pose a risk for a monetary union in particular, be-

cause a one-size-fits-all monetary policy (and of course the common currency) are unsuited to fight shocks that affect individual member states which differ greatly in economic development. This is the reason why many economists have analyzed the euro currency union as a highly risky political project. However, towards the end of his tenure as ECB chief economist, Issing mentioned in the speech cited above that fears about unsustainable divergences within the monetary union had been proved to be unfounded, that the euro monetary union did function much better than had been expected and that the project therefore had to be considered a major success. About the one-size-fits-all monetary policy in particular, Otmar Issing must have been dreaming aloud.

Before the outbreak of the financial crisis of 2008/09, Germany witnessed a period of stagnation in domestic demand. Exports served as the engine of its meager growth. In the other euro zone countries, however, and especially in the later euro crisis countries, the domestic economy was very strong. The monetary policy of the ECB resulted in a great expansion in, for example, Spain: mortgages rose, property prices climbed rapidly and consumption and wages grew strongly. Nothing of this happened in Germany. In Germany, a policy of "wage moderation" was pursued by concerted action and under political pressure, which led to a stagnation of domestic consumption and falling property prices. Germany's bank had little domestic business. Under a regime of uniform monetary policy, such divergent processes become *self-reinforcing*: competitive positions drift apart and imbalances in trade balances and international investment positions that are being created constantly grow.

Research of the ECB from that time shows that the ECB had reservations about the divergences of national unit labour cost growth and the ever increasing imbalances in trade and current account imbalances within the monetary union. But a monthly report of May 2005 said that there was still nothing to worry about:

"the competitiveness ('real exchange rate') channel, although slow to build up, eventually becomes the dominating adjustment factor" (EZB 2005: 77).[1]

Similar (mis)judgments are also to be found in the periodic financial stability reports of the ECB, which lacked any awareness of the urgency of the situation until the very outbreak of the crisis. For example, in December 2006 the ECB wrote that:

"With the euro area financial system in a generally healthy condition and the economic outlook remaining relatively favorable, the most likely prospect is that financial system stability will be maintained in the period ahead" (EZB 2006b: 9).

Even when major financial turbulence started to occur in August 2007, it still took ample time for the ECB to become aware of the acute dangers that were by then very clearly threatening the euro zone. The culmination of this type of official ostrich-like eloquence was given by Joaquín Almunia, EU Commissioner for Economic and Financial Affairs, following the tenth anniversary of the monetary union. Almunia said that:

"A full decade after Europe's leaders took the decision to launch the euro, we have good reason to be proud of our single currency. The Economic and Monetary Union (EMU) and the euro are a major success. For its member countries, EMU has anchored macroeconomic stability, and increased cross border trade, financial integration and investment. For the EU as a whole, the euro is a keystone of further economic integration and a potent symbol of our growing political unity. And for the world, the euro is a major new pillar in the international monetary system and a pole of stability for the global economy. As the euro area enlarges in the coming years, its benefits will increasingly spread to the new EU members that joined in 2004 and 2007" (Alumnia 2008: iii).

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[1] *This type of assessment corresponds to the usual mainstream conceptions of capital flows which are supposedly in equilibrium and which should, according to this view, contribute to income convergence (see, for example, Ahearne et al. 2007; Schmitz und von Hagen 2011).*

These words were published in the spring of 2008, or about three quarters of a year after the outbreak of severe unrest in the euro money markets. On 9 August 2007, the ECB was forced, for the first time, to rush to the rescue of banks and supply emergency liquidity into the euro money markets by means of fine tuning operations. Its operations led to an injection of in total 90 billion euro. In March and in June, it had raised its key rates by 25 basis points, thereby indicating further rate hikes. The blatant failure of the authorities cannot be denied.

Among the euro area member countries, the crisis has been particularly outspoken in Greece, where it continues unabated to this very day. Latvia, which joined the euro zone in early 2014, also witnessed a very deep crisis. It partially recovered in the meantime, although no new growth has been realized. Other countries which have been particularly hit hard by the euro zone crisis and which are the subject of this study is Portugal, one of the so-called "program countries" and Spain and Italy.

Each crisis country has its own specific features, although similarities always exist. We critically analyze these common and country-specific features in section 3.

The main cause of the euro crisis is no longer being disputed in the international literature. It was Germany and its policy of "wage moderation" which went against the most fundamental rule of the monetary union: the need to align wage policies to the common inflation target that everyone agrees upon (Flassbeck and Spiecker 2005; Flassbeck and Lapavitsas, 2015).

The wage moderation policy caused a stagnation of domestic demand in Germany, while, at the same time, it improved Germany's competitive position. German wage moderation led to huge imbalances in trade and international investment. Europe's banks played different roles in these acquisitions. While Spanish banks profited from the domestic price bubble, German banks were involved in their refinancing through euro money and securities markets. Ultimately, the banks in the euro zone became highly exposed to the ever in-

creasing risks that the imbalances created in the monetary union, apart from other risks in US markets and Eastern and Central Europe.

The problem of the public finances in Greece was a special case. This is yet another issue that escaped the attention of the mainstream. The euro crisis was ideologically rewritten into a sovereign debt crisis in order to justify "appropriate" reforms of the fiscal policy regime, structural reforms and austerity. This fallacious interpretation of the cause of the crisis sent the monetary union down the path of a series of disastrous economic policies. The remainder of this section deals, first, with an analysis of the consolidation policy and with the "multiplier dispute", a discussion which revolves about the size of the multiplier in the crisis countries. In the second section, we take a closer look at the consequences of the "internal devaluation", the second cornerstone of the adjustment programs, in addition to the so-called consolidation.

1.2. Harmful austerity policies and the ‚multiplier discussion'

The concept of the multiplier was developed in the early 1930s by economists that belonged to the so-called "Cambridge Circle". This circle of Keynes' doctoral students tried to critically expand Keynes' *Treatise on Money* that had been published in 1930. Richard Kahn and James Meade in particular helped to pave the way for Keynes' *opus magnum*, *The General Theory*, which was published in 1936. Kahn published a paper in 1931 on "The relation of home investment to unemployment". The study deals with the relationship between primary and secondary employment effects of debt-financed public investment programs. The "secondary" effects refer to the multiplier effect: if the state increases its spending, it creates the original (primary) impulse of increased spending (and related income) to other "secondary" effects (especially those that the primary effects affect the most), so that the total effect on employment of the government stimulus program exceeds the effect of the original stimulus program (and of any new debt related to it) and is therefore a "multiplier".

Kahn – even in the 1930s - considered a multiplier between 1.5 and 2 as realistic: an increase in government spending in the order of one per cent of GDP would generate an increase of one and a half or even two percent of total GDP. Kahn also took imports, declining unemployment benefits and possible price effects as factors in account because they can mitigate the demand momentum in the domestic economy. Meade provided a similar analysis around the same time. His work dealt with "leakages", drains in the circular flow of income, which reduce the multiplier (see Dimand 1994).

Kahn assumed that expansionary fiscal policies would take place in an under-employed economy and would be accompanied by an accommodative monetary policy, so that no displacement effects ("crowding out") of private investment due to rising interest rates would occur. This was, at the time, a particularly critical point because of the then notorious "Treasury View", the position of the UK Treasury, which held that government debt would inevitably and completely crowd out private investment because only a given amount of savings to finance investment would be available. Kahn's analysis, however, showed that savings increase to the same extent as the state investment program in the expansion process. This theoretical insight later became crucial for Keynes' *General Theory* (Clarke 1988).

Keynes formulated the multiplier in his *General Theory* as an "investment multiplier." He called it a "normal psychological law", stressing that consumption increases together with income, but that it grows less than the total income and that, therefore, at least in normal circumstances, a certain amount of income is always being saved. The theory describes the level of the marginal propensity to consume and shows that it is a determinant of the composition of capital and consumer goods in a situation of rising production and employment. When under-employment leads to an increase in investment, it usually also stimulates consumption, instead of displacing it, as is the view of the (neo-) "classical" theory of full employment.

Since investments and savings rise in lockstep, the multiplier also shows by how much income must rise, because, ultimately, it is (rising) savings which

create the new equilibrium. Keynes speaks about the "logical theory of the multiplier". In addition, international relations of trade are important, not only as "leakage", but also because of possible feedback effects on domestic exports. Keynes expected a very high value of the multiplier at high underemployment. Based on (uncertain) US data by Simon Kuznets, Keynes considered estimates of the multiplier in the range of 2.5 for the crisis stricken United States as "un-probably low" (Keynes 1936: 128). Later on, in his analysis of the British war economy, he mentions a multiplier of about three (see Keynes 1940).

In the textbook literature - of the Keynesian – postwar era, Keynes' multiplier theory is presented as a "fiscal multiplier." For an open economy, the relationship can be expressed in the following formula:

$$\Delta BIP = m * \Delta AA$$

in which AA is "autonomous expenditure", c is the propensity to consume, t is the tax rate, f is the propensity to import and the multiplier is $m = 1 / (1 - c (1 - t) + f)$

In addition to government spending, which is set by domestic economic policy, other components and autonomous spending are considered "exogenous". This means that their value or magnitude is not determined by factors within the model. These are, firstly, exports which depend on foreign and not on domestic income, and, secondly, investment. The rate of investment is of course influenced by domestic income. Keynes regarded investment as dependent on monetary policy and the long-term expectations of entrepreneurs. Private consumption, however, is primarily dependent on income, more precisely, on disposable income (income after taxes and transfers). Income and consumption are thus determined by the variables in the model (they are "endogenous"). If exports and investment are being held constant and the focus is on concrete fiscal measures which lead, for example, to a change in government spending, according to the formula, a corresponding change in GDP will occur.

It is thus the propensity to consume that is the driving force behind the Kahn-Keynes multiplier: the more the income pulse stimulates consumption, the higher the multiplier will be. The multiplier increases with the level of consumer spending, c, and decreases with an increasing tax rate, t (as an expression of the share of the public sector in GDP). Taxes and imports, f, constitute "leakages" from this circular flow of income. They limit or reduce additional demand development in the domestic economy. The multiplier decreases with increasing import propensity, *i.e.* the degree of openness of an economy.

Theoretically, in the multiplier model the *ceteris paribus* assumption is critical: the fiscal impulse is the only exogenous shock which leads to endogenous income adjustments, if all other variables (consumption rate, import quota, tax rate) as well as all exogenous variables remain constant. Simultaneous exogenous changes in, for example, exports, private investment or other variables that create effects on disposable incomes are kept outside the analysis in order to isolate the specific effect of fiscal policy. Impacts on disposable income can, of course, also be caused by a change in the tax rate, for example, by revenue-side run fiscal policy. Tax changes affect disposable income and they also trigger corresponding multiplier effects. In more complex models, changes in the interest rate and the exchange rate as well as feedback effects from abroad are introduced in the analysis and dynamic adjustment processes are being simulated. Ultimately, such simulations always refer to a comparative static equilibrium analysis, a comparison of equilibrium positions, before and after.

Empirically speaking, the distinction between short and long term, or between immediate effects and effects that occur over several years, is more or less arbitrary. It is possible to look at economic developments in two to five years after a fiscal impulse. In the meantime, however, in the real world a lot is happening which is not necessarily driven by supposedly stabilising market forces. For economic policy, the question if other economic policy measures can compensate compensate of strengthen austerity is criticial. Anyone who is looking empirically into the "medium-term"-effects of austerity, must, of course, as-

sume that a responsible and competent monetary and economic policy tries to compensate for the negative effects on growth and employment of austerity on the state budgets.

Empirical estimates made both before and after the crisis have come to quite diverse and quite contradictory results of the size of the fiscal multiplier at this time. A brief overview will suffice.

Studies from the period before the outbreak of the 2008/09 crisis typically show multipliers in the order of 0 to 3 for the United States (see for example: Bryant et al, 1988; Blanchard and Perotti 2002; Romer and Romer of 2008). For European countries, the estimates are typically significantly lower (Perotti 2002; Hemming et al., 2002). Researchers of HM Treasury (2003) show revenue side measures of multipliers of 0.3 or less. In contrast, multipliers of expenditure-based measures are between 0.3 and 0.7 (Al-Eyd and Barrell (2005). Multipliers for Germany are relatively larger than for other European countries.

Some studies find *negative* multipliers. These studies always deal with small countries, such as Ireland and Denmark (for example Giavazzi and Pagano, 1990, 1996). A negative multiplier means that austerity policies stimulate growth, hence the term "expansionary fiscal contraction". An IMF Staff Position Note (Spilimbergo et al 2009) lists the following rule of thumb: 1 to 1.5 for expenditure-based multipliers in major economies; 0.5 to 1 in midsize economies, and 0.5 or less in small countries. Capital expenditure has the tendency to lead to slightly higher multipliers. In contrast, revenue side multipliers are only about half the size each. The IMF authors emphasize that the height of multipliers always depends on prevailing specific conditions. This is indeed a very important observation, which Keynes had already emphasised.

An IMF Staff Position Note of March 2009 entitled "The case for global fiscal stimulus" (Freedman et al. 2009) is interesting in this respect. The authors use the IMF's "Global Integrated Monetary and Fiscal Model" in order to assess the effectiveness of a global stimulus package. Global coordination becomes criti-

cal, because strong international demand creates positive "spillovers" which make regional multipliers increase by a factor of 1.5. Another critical factor is monetary policy which would, according to a simulation using IMF World Models, more than double the multiplier: the IMF projects a multiplier value of 3.9.[2]

Germany and the euro zone implemented the G20 global fiscal stimulus for a very short time (during which the economy started to recover). In 2010, a study Alesina and Arganda by came out arguing for 'expansionary austerity'. It is clear that these authors said what key policy actors wanted to hear.[3]

The Italian-born Harvard economist Alberto Alesina presented its updated 'Theses on Expansionary Austerity' at the ECOFIN meeting in Madrid in April 2010 (Alesina 2010; Blyth, 2013). This is, precisely, the fateful moment when the euro zone started to go down the wrong path of unconditional regional austerity. According to forecasts, and following the adjustment programs of the euro crisis countries, multipliers were assumed to be very small. In the thoughts - and dreams - of many policy-makers they were probably even negative. The IMF went fully along with the policy sea-change. According to Blustein, this was because the IMF absolutely wanted to be involved (Blustein 2015a, b).

However, IMF researchers soon published several studies pinpointing to the danger and warning against drastic austerity. Roberto Perotti's paper from 2011. "The austerity myth: 'gain without pain'" is an example. Two years later, IMF chief economist Olivier Blanchard followed suit with the admission that, in the evaluation of the austerity and adjustment programs, the effects of the

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[2] *See also: Guajardo et al. 2011; Auerbach and Gorodnichenko 2012a, b; Baum et al. 2012; DeLong and Summers, 2012; OECD 2012; Riera-Crichton et al. 2014; Carnot and de Castro in 2015. Gechert and Will 2012 and Gechert et al. 2014 provide a detailed overview of empirical multiplier research. A recent blog entry by Geoff Tily on cuts in government spending in OECD countries clearly summed up the whole issue: "Cuts have greatly damaged economic growth – to a far greater extent than anticipated. … Given the political constraints under which they operate, the IMF and OECD have now come as close as they might to saying that cuts policies have failed" (Tily 2016).*

[3] *In World Economic Outlook of October 2010, the IMF does not make a clear statement on the issue. The research paper presents the hypothesis of expansive austerity policy as "extremely influential" (IMF 2010: 94). Reinhart and Rogoff (2010) provided similarly questionable empirical evidence for the belief that public debt slows down growth. See on this critically Panizza and Presbitero 2012.*

multipliers had been grossly underestimated. Blanchard and Leigh (2013) estimated a mistake of a factor one. The multiplier was not negative, as Alesina and other austerians had argued. It was, in fact, rather similar in size to what one might expect for the USA.

It should be emphasised that the standard economic approach used to estimate the amount of the multiplier, *i.e.* the measurement of the average coefficient for the fiscal stimulus, as it is measured for different periods for a sufficiently large group of countries is completely inadequate and misleading. It is not valid to take very small and very open economies together with very large and much more closed economies and to expect that averages values will be even approximately meaningful. Economic theory and the logic that underlies the multiplier make it essential to reckon with several factors: whether the economy has its own currency, whether it can implement its own monetary policy, whether exchange rate adjustments took place if the financial system is not working normally, whether the private sector has major balance problems and whether there is ongoing debt reduction. Factors concerning the global situation and economic policy with key trading partners are also essential. Furthermore, one has to investigate into the performance of economic sectors and evaluate policy measures and the general condition of concrete industries. Historical averages of economic policy of a specific country are not useful and do not provide guidance. Public sectors in various economies and concrete fiscal measures are organized and designed differently. All these factors are relevant and researchers should therefore take all of them into account, instead of aiding ideologically preferred policy choices.

The decade before the global crisis, however, was marked by the wishful thinking of the "Great Moderation" and the firm belief in an extremely naïve, mainstream, model world. The economic cycle seemed largely tamed, monetary policy seemed extremely effective, fiscal policy was considered largely ineffective and, moreover, prone to failure. This assessment changed abruptly in 2008. Policy-makers became suddenly willing to assume relatively high multipliers and to make calls for a coordinated international use of fiscal ex-

pansion. The IMF did so. Even the European Commission did it. This was the correct course. The assumption that, because of the crisis, very high multipliers would exist was intelligent. Unfortunately, it did not last.

The Greek government debt crisis made it abundantly clear how incredibly ideologically driven policy-making became in a very short time. From 2009 onwards, all of the important political actors in the euro zone fully supported the myth of "expansionary fiscal contraction". They engaged in this, against all empirical evidence. The hype about allegedly negative multipliers was the talk of the day. Policy-makers vehemently argued for the immediate return to austerity. Apparently, no questions were asked about the quality and the relevance of any scientific findings. Dishonest researchers were more than willing to provide the politically desired products.

In direct contradiction to the questionable relevance of many empirical studies, some meaningful considerations about the size of the multiplier can be derived logically and this should at least help to avoid serious economic blunders. Analytically speaking, negative multipliers - budget cuts that lead to an acceleration of growth (or at least a very quick recovery) – are indeed possible, but in the real world and under normal circumstances, they are just extremely unlikely. The ("non-Keynesian") 'effects of regaining confidence and trust,' which have been invoked repeatedly by policy-makers in the euro zone, are in practice highly questionable. It is easy to see why. Measures such as the 'Stability Pact' will not increase any consumption when people lose their employment. And people do lose their jobs when governments take measures that result in decreasing demand. People generally react with common sense. They react to the specific circumstances that they face and not to effects that may or may not occur in some distant future according to some economic model.

It is true that in small and very open economies the impact of government austerity can be offset. This can happen, either by a currency devaluation, or, else, when conditions of trade are extremely favourable. But these are again exceptions and no general rule can be derived from it (as we will see below, Ireland, which has often been called a success story of neoliberal expansionary

fiscal austerity, is a case in point). One cannot argue, on the basis of a highly specific case, that the multiplier is always and everywhere negative. Truth be told, this is not even a scientific discussion. The sad truth of the matter is that the proponents of the expansionary austerity thesis have shown highly unscientific behavior. Often enough, their economic policy consultancy consisted of telling policy-makers exactly what they wanted to hear.

Today, in modern mainstream economic theory, the special case of the zero multiplier is extremely popular. There is the "Ricardian equivalence" hypothesis, according to which private savings always automatically and completely compensate for the government's fiscal and debt policy. According to this hypothesis, neither the debt issue nor the question of financing through taxes of public spending is important. Neither make a difference to the economy as a whole. However, this idea is based on such obviously unrealistic assumptions that even David Ricardo refused to believe in the correctness of the hypothesis.

But the zero-multiplier and the full employment model of the mainstream go even beyond the obviously unrealistic Ricardian equivalence hypothesis. If government increases its expenditures in an economy at full employment, the central bank will automatically compensate for these expenditures by adjusting its interest rate. The design of the zero-multiplier model itself guarantees a hundred percent of 'crowding out'. In this, mainstream economists do not wonder why the state should follow an expansionary fiscal policy in a situation of full employment. They merely assume this, because, according to neoliberal ideology, the state has no major role to play in economic policy.

The existence of significantly high multipliers fits poorly into the model world of modern mainstream economic theory. In the case of the European Monetary Union, since the beginning of austerity in 2010, the European Commission and the IMF generally assumed only fairly low figures - generally in the order of only 0.5. These institutions were apparently surprised by the much stronger than expected (or assumed) economic downturn. This led to the "multiplier dispute": multipliers were said to be low, but *ex post* they proved significantly

higher. An explanation for this discrepancy had to be found (Blanchard and Leigh 2013).

The "multiplier dispute" led to surprising results and even comical situations: while, in reality, the case was obvious, mainstream economists did everything to fight it. The mainstream cited the case of Greece as evidence, but this was nonsensical. It makes a big difference whether only Greece implements austerity or whether the entire European Monetary Union (or EU) goes down this fateful path. It is clear that for a large and relatively closed economy such as the euro zone, only the US can be used as an accurate comparison. Multiplier estimates for small and open economies are completely irrelevant for the EMU or the EU as a whole.

Secondly, and even more importantly, the traditional multiplier analysis does not work in a concrete situation where the financial system of a large economic system is failing and when, in addition, government austerity policy forces private households and companies to decrease their debts (the so-called "deleveraging").

The contrary is true. Moreover, in so far as there is room for maneuvering, changes in the interest rates of the central bank are likely to have little effect. All of this is logical and the importance of such insights for economic policy should be clear.

Finally, there is still the crux of the whole matter. It is that within the monetary union, exchange rate devaluations act as an adjustment mechanism. Fast gains in competitiveness with the rest of the world can in the best case - and in a system of internationally diverging monetary policies – be achieved by a depreciation of the euro. Here, too, there is a catch: while the individual European economies are indeed quite open, the European economy as a whole and the euro zone are relatively closed and trade predominantly with itself. This is similar to the economy of the United States. Gains from increased trade with non-partners countries following a depreciation of the euro can also only be realized to a limited degree.

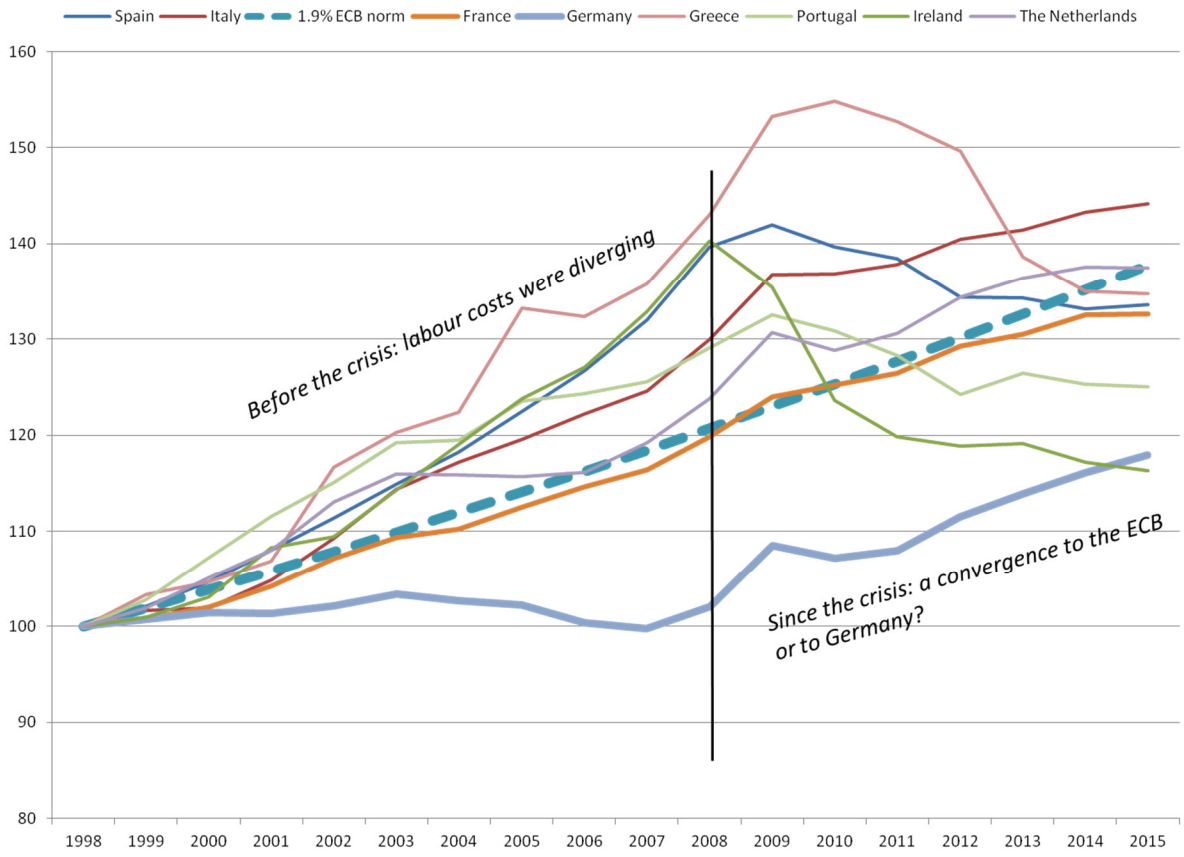
Within the euro zone, exchange rate adjustments are of course not possible – the countries have no national currency. Policy-makers, however, quickly discovered an "alternative". In their view the adjustment of the crisis countries should happen through "internal devaluation", *i.e.* wage and price level reductions relative to the other euro-partner countries. The case of Germany was used as proof for the success of such policy. An internal devaluation should, very much like an external devaluation of the exchange rate of the national currency, cause both an external and an internal adjustment. Internally, full employment should be promoted.

But this is a fundamental fallacy. An "internal devaluation" through wage moderation will not alleviate any internal adjustment, the contrary is true. It reinforces the negative consequences of government austerity on domestic demand. It is precisely here – and this is the central hypothesis of this study – that the correct explanation for the surprisingly high *ex post* multipliers in the crisis countries can be found. This point is absolutely critical for the discussion about the disastrous course of the euro crisis. This remains insufficiently understood. It is not being appreciated sufficiently in the general discussion about the crisis and the insight is to a large degree absent in the multiplier dispute. It is for this reason that we take a closer look at this in the next section.

2. Adjustment by „internal devaluation": theory and practice

The cocktail of fiscal austerity and falling wages creates a vicious concoction. We will explain in this section why especially this mixture leads to fatal economic consequences. But first, we need to clarify the background for the existing internal adjustment.

Figure 1: Germany undercut the 2% stability norm of the ECB



Source: Eurostat (Ameco database)

Note: nominal unit labour costs (economy as a whole).

Figure 1 shows the fundamental reason behind the severe imbalances within the euro zone. Germany started to implement wage moderation some years before the (third stage of) the monetary union came into effect Germany's unit labour costs remained stable until 2008 and were therefore clearly below the ECB's stability norm. The inflation target of the ECB of "below, but close to 2 percent" requires the countries to align its national trends in nominal unit labour costs with this standard and certainly not to deviate from it for long peri-

ods of time. Germany, however, inspired by neoclassical policies, continued to implement wage moderation. In doing so, it initiated and reinforced the divergence processes in monetary policy that we described above.

By 2008, huge imbalances had built up in the competitive positions of the EU countries. Germany did not "restore" its competitiveness" as is often said and as it is officially known, on the contrary – and contrary to the system! – it enormously undercut its euro zone trading partners. For example, Germany undercut France, which followed the ECB stability standard strictly, by around 20 percentage points. It undercut Italy by circa 30 percentage points and Greece, Spain and Ireland by circa 40 percentage points (Flassbeck 1997, 2007; Bibow 2001, 2006, 2007; Bofinger 2004; Flassbeck and Spiecker 2005).

It was not the first time that imbalances of such magnitude occurred in Europe. The situation in the early 1990s, after a decade of stable exchange rates within the European Monetary System (EMS), was very similar. But at the time, the German unification boom and the EMS currency crises of 1992/93, which saw strong currency depreciations of countries with higher inflation, restored the balance within Europe relatively quickly. Germany became inevitably less competitive in this intra-European adjustment process which achieved a new equilibrium. This led, however, in the mid-1990s, to the view, which turned out to be a fatal fallacy, that Germany had to "restore" its competitiveness. It is this blunder of economic policy which led in due course to the euro crisis which remains unresolved until this very day. One problem is that this type of imbalances are now much more difficult to eliminate because "parity changes" (depreciations and appreciations) as in the former EMS are no longer possible.

This is how "internal devaluations" became an 'alternative' to currency depreciations. The idea of an internal devaluation starts with the insight, which is quite correct, that greatly imbalanced competitive positions within the monetary union must return to an equilibrium. Without it, it is not possible to overcome the crisis and evolve towards a balanced and sustainable development.

The accumulation of trade imbalances cannot be sustained indefinitely. Even high, but stable trade imbalances that continuously lead to the rising indebtedness of the deficit countries make, sooner or later, a "Transfer union" inevitable: when the deficit / debtor countries ultimately face bankruptcy, the notorious surplus countries will have no other option than to give away their export surpluses.

Today, the deficit countries must return to a balanced trade position at full employment. To reduce their very high foreign debt (around 100 percent of GDP) faster than by GDP growth alone, these countries need to achieve external surpluses, at least temporary. But closing current account deficits by shrinking GPD and decreasing imports is by no means a solution. It replaces the external imbalance by an internal one: mass unemployment.

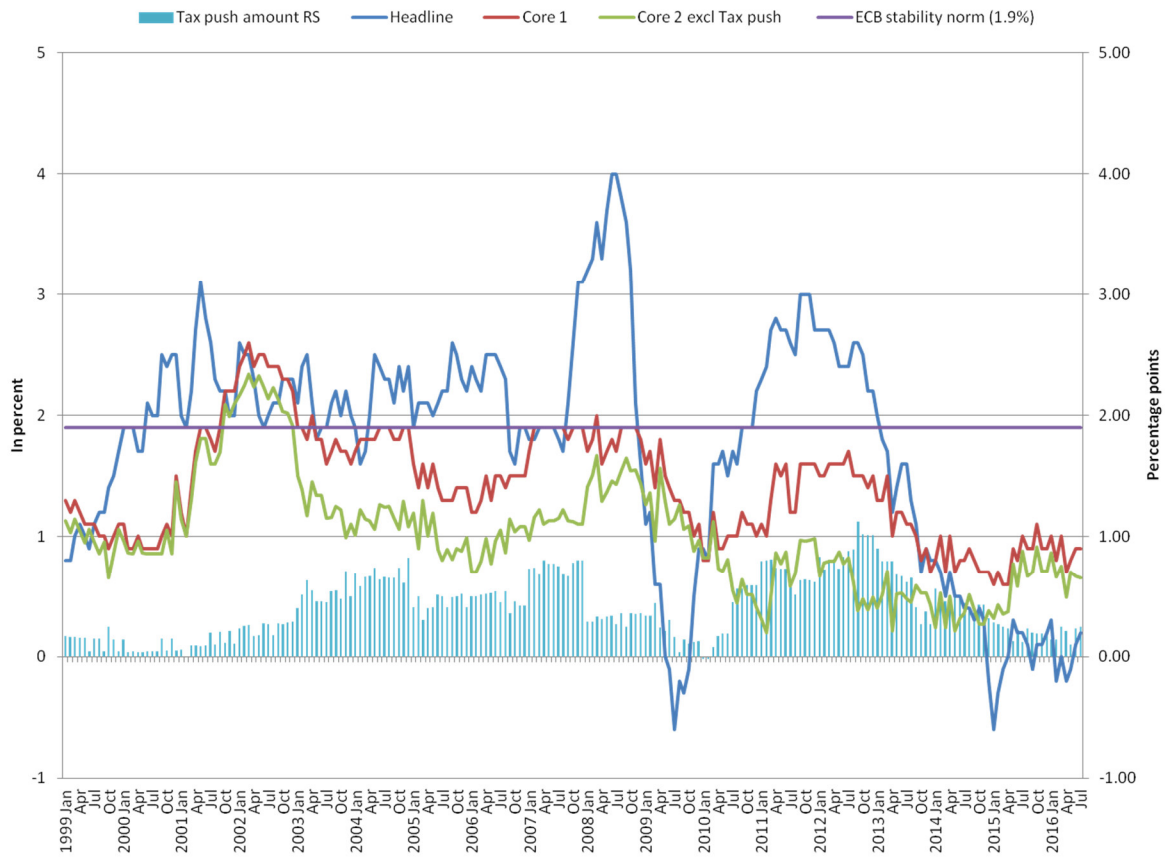
It is not possible to find a new balance in the euro zone without an adjustment of relative prices. On the one hand, traded goods in the deficit countries must become cheaper relative to the surplus countries. This is not only important for intra-European bilateral trade, it is also essential for the competition of euro zone countries in third markets. On the other hand, it also requires an adjustment of relative prices between tradable and non-tradable goods in the affected countries. This requires demand-side adjustments: in the deficit countries, domestic demand falls relative to external demand. And it requires appropriate supply-side adjustments: in the deficit countries, employment in the tradable-goods producing economy has to grow relative to the industries that produce non-tradable goods. In the surplus countries, demand and industrial structures must adapt accordingly. Theoretically speaking, of course, the relative development of productivity growth helps. In practice, however, aligning competitive positions without adjusting relative cost developments - and that means especially the development of wage costs – can hardly succeed.

Figure 1 clearly shows that strikingly big changes in the national trends in unit labour cost developments have occurred since the crisis. On the one hand, the growth rate of nominal unit labour costs in Germany has accelerated: after ten years of zero growth, unit labour costs are now finally rising in accordance

with the ECB stability standard. Second, unit labour cost growth has slowed in the other euro member countries.

Today we see basically everywhere a similar development: before the crisis, only Germany's growth rate was zero, now the growth rate is basically zero everywhere else. In other words, convergence of national trends in unit labour costs is now taking place, but this convergence is not oriented towards the stability standard of the ECB, it is oriented towards the level of unit labour costs in Germany.

Figure 2: Inflation: the ECB massively misses the stability target.



Sources: Eurostat, ECB; own calculations

This makes it readily apparent that the ECB stability goal cannot be reached. When Germany (which is good for circa 30 percent of the monetary union) shows an increase of cost of two per cent and the remaining 70 percent of the monetary union has a trend rate of zero, a core inflation of about 0.6 percent can be expected – and this comes indeed close to the reality of the last couple

of years. Temporary factors, such as energy prices and increases in indirect taxes and administered prices (as an aspect and a consequence of unconditional austerity and here shown as a "tax-push" inflation contribution) have led to temporarily higher or lower headline inflation. Given the prevailing cost trends, it is certainly not surprising that the ECB by far misses its inflation target. Those who speak of the "expropriation of savers" by negative interest rate policy and want to see it end, must allow a different wage development. (4)

However, the official economic policy of the euro zone has been so focused on the expropriation of the wage earners that it ultimately accepts an expropriation of savers on top of it. Here, then, we arrive at the crux of the whole matter: the disastrous economic consequences of the strategy of "internal devaluation" in the form of wage-cutting policy in the euro crisis countries. These adjustment policies should in theory allow the crisis countries to simultaneously restore internal and external balance. This grotesquely failed. The goal of an external balance can apparently only be achieved if the internal balance becomes more unsustainable. If the euro crisis countries today show nearly balanced current account balances, this is primarily a result of the fact that incomes are down and imports have shrunk accordingly. From the desired goals of the internal balance - full employment, balanced public spending and declining government debt - the euro crisis countries remain today as far away as ever since the outbreak of the crisis. Instead of helping these countries to overcome their problems, wage reduction policies intensified the crisis.

It is truly amazing to see how one-sided and stubborn the economic policies of the euro zone have been. The reduction of wages (and labour costs) has become the supposed panacea to solve all problems. It is almost necessary to assume or suspect that the European political leaders harbored a silent hatred towards the workers of Europe. They certainly did not serve their interests. They were all too happy and eager to take advice from mainstream economists who are blind and deaf to the crucial macroeconomic importance of wages.

Mainstream economists see "the labor market" just as any other market. To them, there is no essential difference between the labour market and the potato market: both should strictly and solely function according to the microeconomic laws of supply and demand. In this view, unemployment is nothing but a sign that wages are too high and, therefore, in order to increase employment, wage cuts are necessary. According to neoclassical theory, wage cuts immediately and directly increase employment, as companies very quickly substitute labour for capital and sales problems (*i.e.* the lack of effective demand) do not occur due to falling costs. Correspondingly, if wage reductions are necessary in order to restore competitiveness, also no problems are to be expected on the demand side because falling wages immediately increase employment.[4]

Falling wages *directly* reduce the *real* income of affected wage earners, at least insofar as prices do not simultaneously drop in lockstep with wages. There is no reason to expect why this would be the case. A general wage reduction has then immediately two important consequences. First, there are the distributional effects. These effects are to the disadvantage of the part of the population with a relatively high propensity to consume. If wages, but not other types of income, and prices move downward, private consumption will tend to decline together with the redistribution of income.

Second, confronted with falling prices and decreasing sales, companies do not increase their employment, they reduce it. This critical point about what takes place as a result of a nominal wage reduction remains usually completely unaddressed in mainstream theory. Theoretically, the argument is that in a market model there are no temporal sequences (Flassbeck and Spiecker 2007).

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[4] *If the expected result is not observed in reality, the neoclassical mainstream economist typically and immediately conclude that "structural problems" prevented the adjustment and call, also typically and immediately, for "structural reform", which should eliminate any supposed "rigidities" that disturb the implementation of their programs based on their wonderfully flexible fairytale world of neoclassical mainstream theory. A serious economist, on the other hand, tries to identify mistakes in the dominant theory in order to adapt the theory to economic reality. This was Keynes' concern in his General Theory. It is also the concern of this study.*

The neoclassical economists abide to the fiction that the declining wage income of workers is being compensated by rising wage income of workers which are being recruited, *without any time interval*, as companies quickly substitute labour for capital. This idea is as absurd as it is dangerous. If the immediate effects of declining wages on sales and the sales expectations of companies are considered in tandem, then a close relationship between wage income and private consumption must be recognised.

Wage reductions lead to many other problems and risks. It is evident that a negative development of private consumption will impact business investment. This happens, first, through declining sales and falling profits. Second, as Keynes among others, wrote, creating uncertainty in a situation of price level instability is also detrimental. Macroeconomic wage flexibility increases uncertainty and it hinders entrepreneurial planning. As a result, it leads to a falling rate of investment. This argument should appeal especially to those economists who consider price stability as the most important goal of economic policy.

Other important risks are those associated with deflation and the distributional effects at the expense of debtors and for banks and the financial system overall. The theoretically best case of demand stimulation by falling interest rates and credit expansion that we already discussed is conceivable at best by very mild disinflation or deflation.[5] Keynes already warned of the severe real economic consequences of deflation in his *Tract on Monetary Reform* (1923). In his essay "On the consequences for the banks of the collapse of money values" from 1931, he points out the consequences of deflation for the banking system. As monetary liabilities of banks remain constant, even with declining asset and commodity prices, the situation leads to a characteristic "credit crunch", which obstructs the growth of the economy. Irving Fisher (1933) built

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[5] *In practice, this compensation corresponds to a central bank with an inflation target that lowers its interest rate so that it falls below the expected rate of inflation. This type of adjustment is excluded in the case of the Euro zone crisis countries because these countries have no monetary policy of their own. Gali and Monacelli (2016) recently rediscovered this insight by Keynes.*

on these ideas when discussing the experience of the Great Depression and the theory of debt deflation. Keynes' original insights also provided the focus of Hyman Minsky's "instability hypothesis of the financial system" (1975).

These possible consequences or concomitants of an internal devaluation are of the highest possible relevance for borrowers, banks and the financial systems of the euro crisis countries. The private sectors of these economies were already characterized by very high levels of debt. This was particularly the case for the property markets. Falling asset prices, disinflation or deflation, and prolonged recession led the banking system of these countries into even greater difficulties, even without the global escapades of banks from other countries (the keyword here is "subprime"), such as German banks, which had oriented themselves to international markets due to lack of domestic business in Germany.

In the case of open economies, there are some positive effects on foreign trade, not only negative effects that weigh down on domestic demand. For very small and very open economies, the positive effects on trade can theoretically cancel out the negative effects on domestic demand. Whether this can happen in reality also depends on other factors, such as the economic development of the trading partners and the growth of world trade.

The conclusion is that an improvement in the competitive position may indeed be necessary for the restoration of an external equilibrium, but that with regards to achieving an internal equilibrium one can harbour no illusions – and especially not if at the same time unconditional austerity in the country and its main trading partners is being implemented.

We come, therefore, with regards to the anticipated effects on employment of a strategy of internal devaluation through wage reduction policy, to very similar results as the ones that we reached in the previous section when we analysed austerity: positive employment effects through internal devaluation are as unlikely to occur as negative multipliers. One cannot expect positive results if both policies are being implemented simultaneously. The contrary is true:

there will be double negative consequences for employment. Until today however – and this is really unbelievably irresponsible – the extremely serious consequences of the cocktail of government austerity and wage reduction policies for the economy in globo, and employment in particular, are being completely ignored in the economic policy debate and the multiplier dispute. Nothing explains the disastrous economic experience of the euro zone better than the fatal interplay between internal devaluations by lowering wages and unconditional austerity.

As explained above in Section 2, in multiplier calculations one usually assumes, according to the ceteris paribus assumption, that the world does not change in the meantime. In the model, one concentrates upon austerity and considers all other exogenous variables as given and unchanging. Correspondingly, one attributes observed changes in the model to endogenous variables solely to fiscal interventions. According to the mainstream, the prescribed austerity measures meant that wages would grow more slowly with rising unemployment or that they would even fall. In the economic policy debate, therefore, the argument was also partially that the prescribed austerity served both fiscal consolidation per se as well as the internal devaluation by lowering wages.

But that was not considered enough. The plan was not only to rely on endogenous pressure on wages by means of austerity and unemployment in order to achieve the internal devaluation. In addition, many so-called "structural" measures were written into the adjustment programs, which, directly or indirectly, also had negative effects on the evolution of wages. Directly, this was done, for example, by abolishing bonuses or by lowering the legal minimum wage. Indirectly, it happened through the so-called "structural reforms" that were put in place to increase labour market flexibility. Especially in times of recession, however, such "flexibility" means only one thing: facilitating employee layoffs and reducing wages and / or benefits. The bottom line is that "structural reforms" primarily lead to the reduction of incomes of workers. As ex-

plained above, cuts are not offset by gains in employment except – perhaps – through foreign demand in very rare cases.[6]

The wage cuts that were induced are clearly exogenous interventions in market events. Wages will fall more than would happen because of endogenous processes only. And that is exactly the meaning and purpose of the whole exercise. The mistaken belief has been that an internal devaluation will lead to faster gains in employment.

Previous adjustment programs had never led to wage cuts to such an extent. In the days before the euro zone, countries could simply depreciate their currency in order to regain competitiveness (see IMF 2013 Box 1.3; IMF 2015). This also means that the experience of the IMF in other countries was not applicable to the euro crisis countries. Internal devaluation is not a viable alternative to exchange rate depreciation.

And this is the major reason why the IMF originally expected multipliers which were much too small (and assumed that they would occur in the adjustment programs). An exchange rate depreciation can (partially) compensate for the impact of the contraction of government austerity; an internal devaluation through general wage cuts, however, will make the contraction bigger. When the economic slump then turns out to be "surprisingly" large, the multipliers are simply being corrected upwards. But this is far from enough. The question to be answered is why such corrections are necessary in the first place. Why did such misinterpretations occur to begin with? Only when these questions are being thoroughly addressed will it become possible to avoid future economic policy disasters.

The point is that the combination of government austerity programs and pay cuts generates a downward dynamic. This pernicious synergy is being incorrectly detected when using the conventional comparative-static logic. Unemployment is being produced in the first round of the prescribed measures –

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[6] *Even the IMF (2016a) admitted that structural reforms of this kind lead to negative effects on demand and employment when conditions are recessive.*

which already exerts pressure on wages. Then comes the second round - reinforced by the "structural reforms"! – which puts additional pressure on wages: the result is a spiral of wage cuts and increasing unemployment. The problem is that, contrary to what mainstream economists expect and assume in their models, the reaction of the market to wage pressure is not one of creating employment. On the contrary, the result is further contraction.

The multiplier formula in Section 2 explicitly describes the case of the expenditure side fiscal policies. We mentioned there that fiscal austerity, in the case of direct taxes, means a corresponding reduction in the disposable income of those affected and that these changes are correspondingly amplified by multiplier effects too. As can be expected theoretically, because in the first round, part of the disposable income that has been reduced by the tax increase does not affect spending (it does affect savings), the empirical multiplier estimates for revenue-side measures are usually slightly lower. Basically, a wage reduction is very similar to a tax increase. The wage cut reduces the disposable income of those affected directly and especially of those income earners with a relatively high propensity to consume. A reduction in wages may therefore - quite similarly to a tax increase - have corresponding negative multiplier effects on domestic demand and employment. These effects are, of course, not being recognised by those who believe that wage cuts increase employment. This is exactly the reason why the expected multipliers in the adjustment programs were too small.

Looking at the practice in the EMU from this angle, no positive effects from the combination of austerity and wage cuts can be found. But even simply adding up the (negative) multipliers might be insufficient. Due to existing interactions, the overall impact of the policy cocktail is likely to be even worse. For example, negative effects on income and expenditure can be mutually reinforcing. Both austerity and wage cuts reduce domestic demand. Falling wages have greater negative effects than a tax increase because they generally also increase problems of borrowers and banks. In the end, all these negative ef-

fects on domestic demand and employment threaten to put new pressures on public finances.

As a result, domestic demand is also permanently strangled. Whether, or by how much, this damage can be offset by short-term export growth depends on the size and openness of the economy. In the austerity programs, the restoration of the external equilibrium seemingly succeeds quickly – but this is only because imports decrease together with domestic demand and incomes. The evolution towards the external balance makes it impossible to reach an internal balance: the external balance moves in the right direction, while, internally, unemployment rises rapidly.

With regard to the desired consolidation of public finances, the austerity-cum-wage austerity policies may also backfire. When the overall impact of the cuts on aggregate income is high, consolidation will not succeed, simply because at a lower overall economic output, governments generate less revenue while they face a situation of higher expenditures (for example, the need to pay more social welfare benefits). In other words, the multiplier can be sufficiently large, but the policies can turn out to be completely pointless because governments can end up having higher deficits at the end than they would have had without cuts. And even if the budget deficit falls, the debt crisis may have worsened, which happens when GDP shrinks faster than the budget deficit.

A too drastic consolidation policy can be counterproductive as austerity creates a bigger problem than the one it was supposed to solve. There are "speed limits" to austerity. We have been knowing this for a long time. The point is, rather, that the risk of misguided austerity increases when it is combined with wage cuts. It is vital that this is being understood, not only with regards to problems in relation to the national debt. In the EMU, this issue is always at the centre of any debate. However, the same problem also concerns the external debt of the euro crisis countries. The rapid balancing of the current accounts means that the growth in net foreign debt stops. But when this goal is achieved by shrinking domestic income, the burden of external debt will often

still rise. As Keynes and Fisher emphasized, deflation is not an appropriate way for debtors to beat a crisis.

It also has to be clarified that there is no need for actual deflation for the debtors' position to deteriorate: falling inflation ("disinflation") will already be sufficient. "Wage cuts" literally mean absolutely declining nominal wages. When wages fall, domestic demand falls with it and disinflation occurs. Even a slowdown in wage growth decreases inflation, as it weakens consumption.

Germany's experience with "wage restraint" in order to "restore" its competitiveness provides clear evidence for all of this. As figure 1 above showed, in Germany nominal wages fell far behind productivity growth. Real wages stagnated in Germany at low, but positive inflation. The policy of wage moderation was combined with austerity. As a consequence, domestic demand fell, private consumption fell and investment and government spending stagnated. Germany, once the "sick man of EMU", only grew because of its exports. Germany was lucky. At the time, only Germany was pursuing this unwholesome strategy, while world trade was growing rapidly and the uniform monetary policy fueled domestic demand in the euro partner countries (Bibow 2005, 2007).

When from 2010 onwards, world trade grew more slowly, the euro zone got into trouble. Circumstances were no longer favourable to successfully implement German-like policies and experiments – not that Germany's counterproductive policies are a model for the eurozone to follow. Not that it is even feasible, the complete contrary is true.

What is really surprising is not that fiscal multipliers were ex post significantly higher than had been assumed ex ante, but that they were not even higher and that the EMU has not permanently sunk into deep deflation. The key to this mystery lies in the turnaround of the current account of the euro area: the rest of the world saved the EMU. An even worse outcome was avoided. But it is in this way that the euro crisis became the main cause of the stalled global economic recovery.

With this our theoretical discussion of why wage reduction policies ("internal devaluation") are counterproductive to overcome the crisis has come to end. In what follows, we present a detailed examination of the development of demand in the crisis countries. Thereafter, we provide a final judgment.

A further elaboration on the learning process of the IMF regarding the problem of internal devaluation

In 'World Economic Outlook' of October 2013 (see the graph "External rebalancing in the euro area"), the IMF presented an initial conclusion about the state of rebalancing within the euro area: "progress has been asymmetric and has not been accompanied by a return to internal balance". The IMF observed that in Ireland and Greece, wages have declined and that falling unit labour costs in the crisis countries had been realized primarily through 'labor shedding': if employment falls faster than production, arithmetically the cost of labour declines.

The IMF stated that domestic demand and employment have collapsed in the EMU. It noted that companies expand their profit margins in the periphery. It concluded that internal devaluation needs to continue, but that it should be accompanied by stronger demand in the surplus countries, because so far adjustment has been asymmetric, although the current account of the euro area as a whole had greatly improved.

A discussion paper from the IMF, "Wage moderation in crisis: policy considerations and applications to the euro area" from December 2015 deals with the same issue and sets out to simulate the effects of internal devaluation through wage restraint by using the IMF's "Flexible System of Global Models". For what concerns private consumption, the IMF researchers emphasise the increase in the real debt burden and correctly conclude that

"Wage moderation can therefore increase the real burden of household debt and, beyond, induce a moderation of consumption of imported goods and thus lead to less consumption of domestic goods, if their prices do not fall one-for-one with wages" (see Eggertsson and Krugman 2012). For households that consume all their income and do not have access to credit, wage moderation implies the necessity to reduce consumption (Decressin et al. 2015, 9). (8) The IMF researchers also find that (1) internal devaluation is more likely to lead to job losses, if not one country but a whole series of crisis countries adopt the same strategy simultaneously and (2) there has been insufficient monetary support. Although their simulation includes additional austerity (to a certain subordinate extent), they found only relatively small negative effects on production and employment. We have to conclude that the IMF model only partially captures the interdependencies and synergies. Interestingly, they conclude also that "a more sensible proposition than across-the-board wage moderation is moderation in crisis-hit economies combined with wage increases in those economies (which) did feature larger-than-warranted current account surpluses" (Decressin et al . 2015 p. 15). A footnote refers to the 2015 IMF country report on Germany.

A paper "Crisis Program Review" published by the IMF in November 2015 concludes: "in practice, internal devaluation proved difficult to achieve, and the desired recovery in growth and exports did not materialize in most countries" (IMF 2015: 3). This analysis includes only those countries which took part in the IMF adjustment programs, it is to say Latvia, Greece, Ireland, Portugal and Cyprus, but not Italy and Spain (see our own overview in the next section). In this report, the IMF emphasises a very critical point. In the case of the Eastern Caribbean Currency Union, the IMF assistance programs set conditions for the joint institutions of monetary union, while in the case of the EMU, the IMF only provided recommendations.

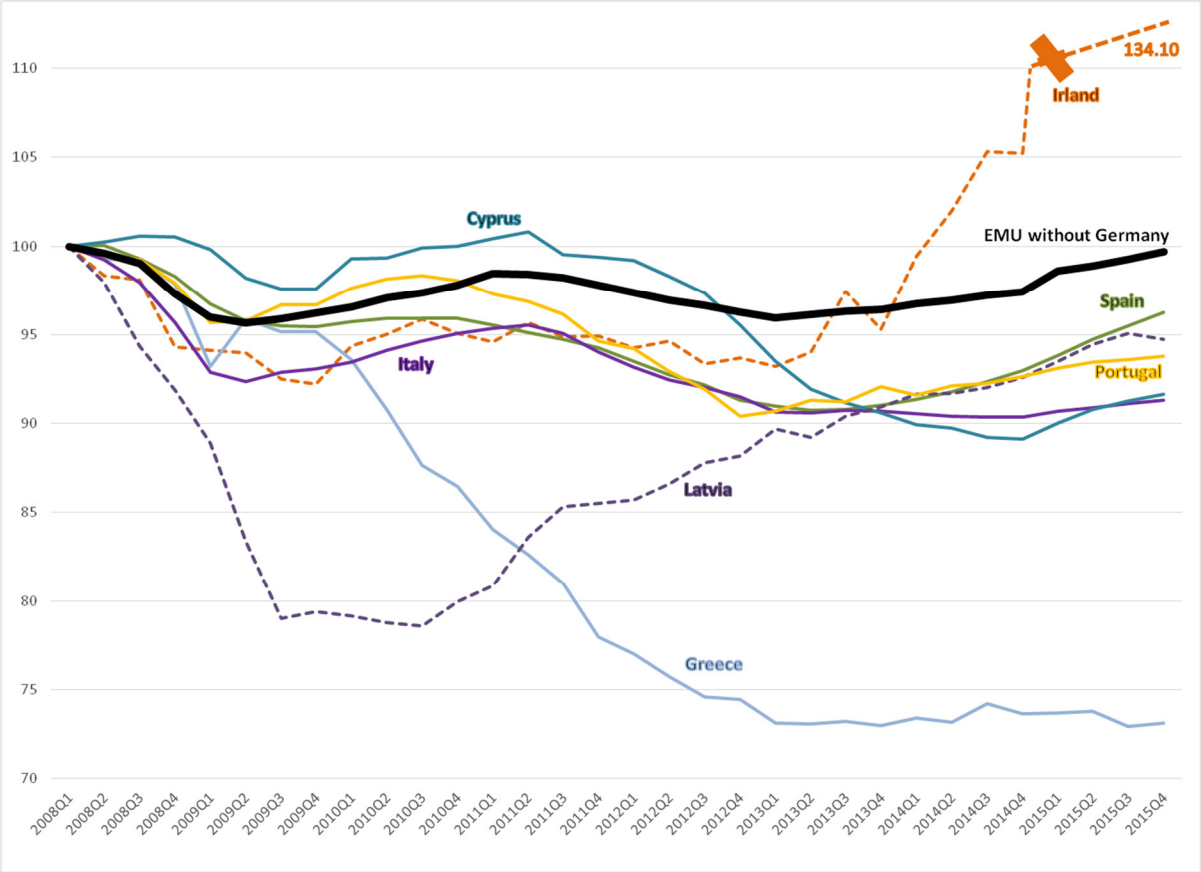
We will present our own recommendations for the crisis countries and for an alternative economic policy in the EMU as a whole in Section 4 below. We then also return to the role of the IMF.

3. The development of demand in the crisis countries

This section contains a detailed empirical analysis of demand trends across the euro area crisis countries and the euro zone as a whole. As said, neoliberal ideology and mainstream economic theory assume that adjustment programs and wage cuts would quickly lead to employment gains. These gains would minimize the social costs of austerity. Structural reforms to increase the flexibility of labour markets were therefore called for. They would supposedly facilitate and accelerate the desired adjustment. The above sections 2 and 3 contain a scathing critique of these theoretical concepts. It is precisely this thinking that underlies the failed economic policies of the EMU.

This section provides an empirical analysis as well as an evaluation of the development of countries, some of which have, officially been used as an example of the 'success' of these policies. Our aim is to empirically validate our hypothesis that wage cuts trigger a slump in domestic demand and worsen the overall economic outlook. Internal devaluation through wage cuts and structural reforms aimed at the liberalization of labour markets does not mitigate the negative consequences of austerity; instead it *reinforces* these consequences.

Figure 3: Real GDP (index 2008 Q1 = 100)



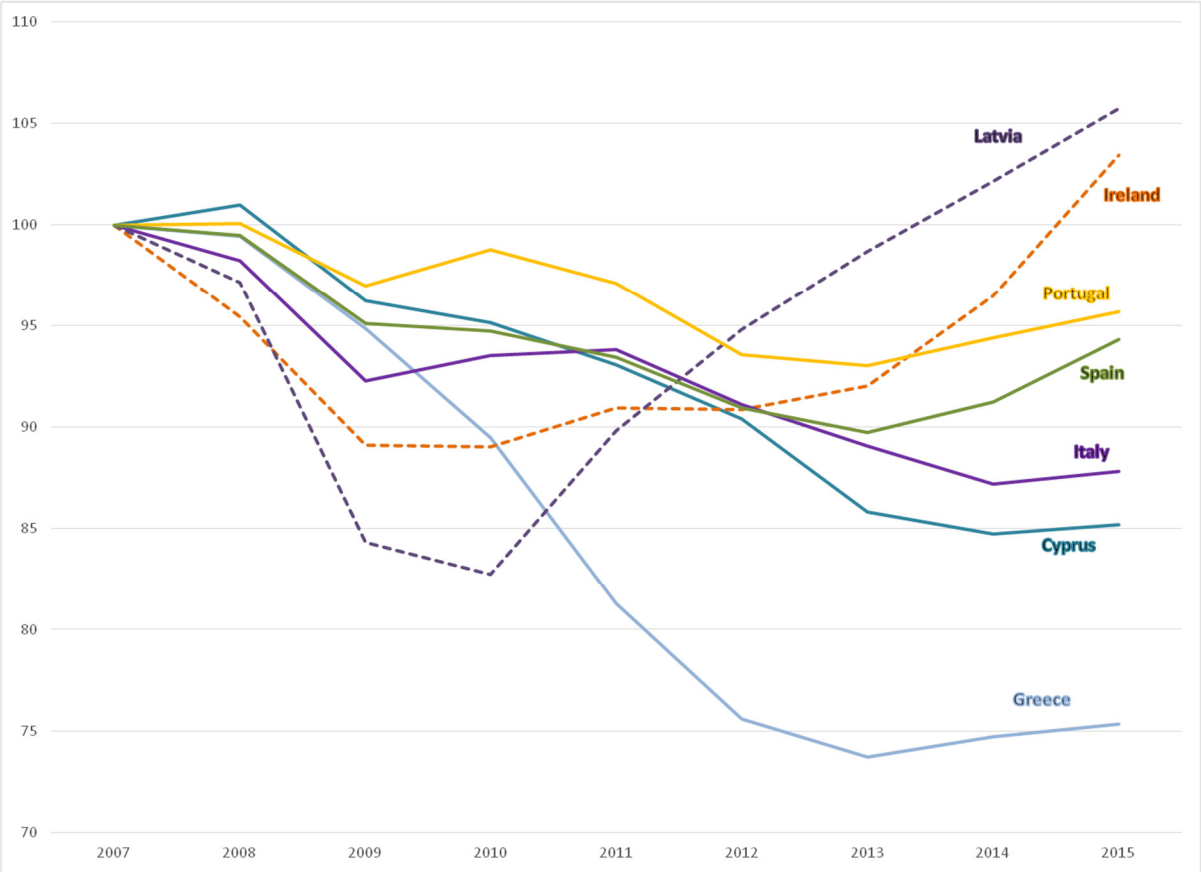
Source: Eurostat

Let us first look at the depth and the duration of the crisis. Figure 3 shows the evolution of economic output (GDP) in the euro crisis countries since 2007 (measured relative to the level of Q1 2008). We choose this measure, as it is the benchmark which is most often being used, although serious doubts prevail as to whether the GDP calculations of the countries accurately reflect their true development. There is, for example, considerable doubt if this is the case for Spain (as has been argued by Flassbeck and Spiecker, 2015).

Latvia was hit early and hard by the global financial crisis. In the years 2008-10, GDP fell in the small Baltic country by around 20 percentage points. From 2011, it started to recover. In the meantime, this recovery has weakened significantly. Here too, the relevant indicators no longer show progress. Last year, the gap in economic output compared to 2007 had shrunk to around 5 percentage points, which means that even eight years later Latvia has not yet overcome the deep economic slump.

The Greek crash began a little later and was initially somewhat weaker than in Latvia, but, unlike the economy of this Baltic state, the crisis in Greece only deepened and the country has never shown any sign of recovery. The Greek economy shrunk compared to the beginning of 2008 by more than 25 percentage points. There was some stabilization in 2013, but at an extremely low level. In Ireland and Italy, the crisis led to great difficulties and hardships in the early years. In Ireland, the situation stabilized in 2011 and in 2014 followed a significant recovery. (9) Italy sank in 2012 into a deep crisis and has to date not led to any noticeable recovery. The crisis was somewhat less pronounced in Spain (according to its official data) and in Portugal. In 2011, the two Iberian countries sank into a recession, which was followed by a slight recovery in 2014. Cyprus was a laggard. It stagnated for many years and fell into a deep recession in 2012. Today, it is still below pre-crisis growth, as are all other crisis countries, except Ireland. The EMU as a whole, without Germany, reached at the end of 2015 almost its pre-crisis levels.

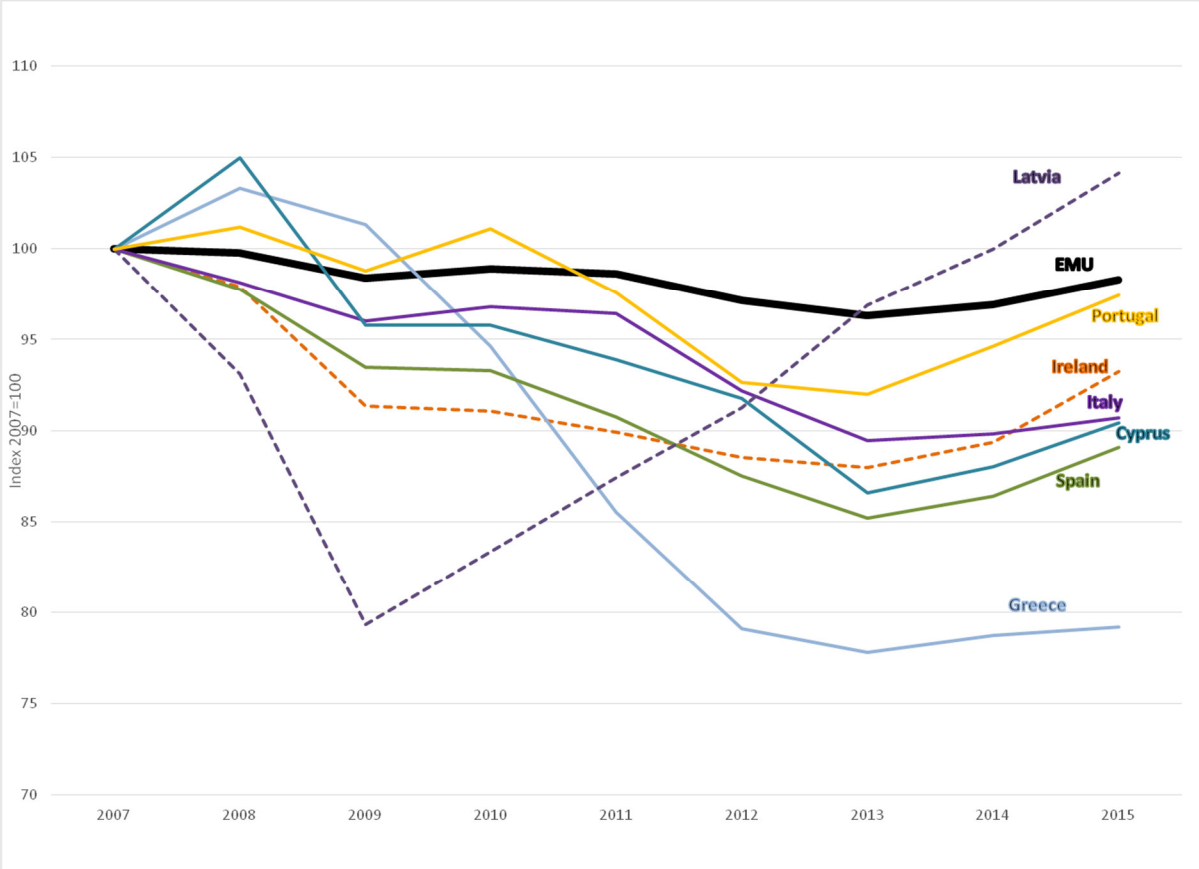
Figure 4: GDP per capita (Index 2007 = 100)



Source: IWF, World Economic Outlook Databank (April 2016)

Figure 4 shows the bleak evolution of GDP per capita (see figure 4).[7] In Italy, where the population grew by 1.5 million people while employment is falling the situation is particularly bleak. For Latvia, things appear to look better at first. The figures show an improvement on a per capita basis. But the figures do not show the emigration of more than ten percent of the population. There is no doubt that Latvia solved its crisis, at least in part, by exporting its population.

Figure 5: Standards of living clearly fell.



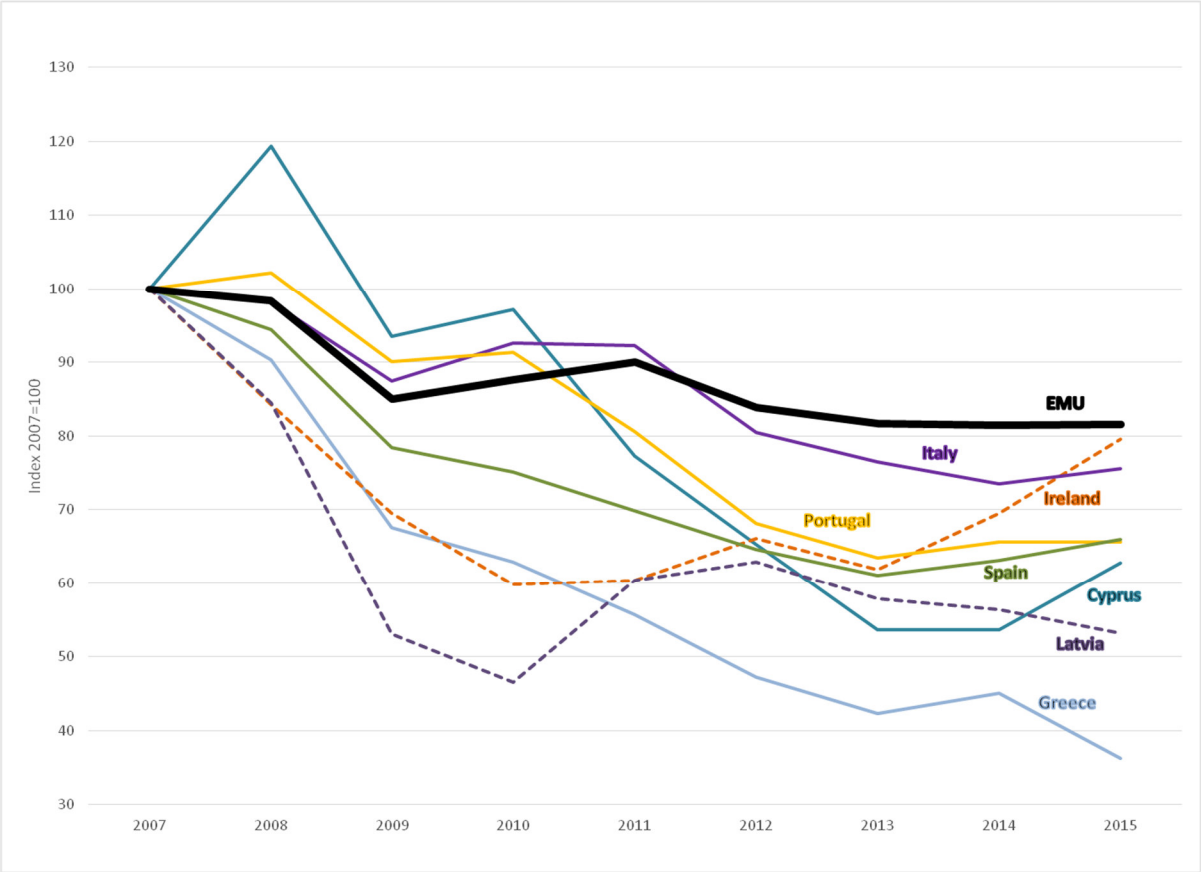
Source: Eurostat

The development of living standards is in fact particularly difficult to measure. Of the available aggregates in the national accounts, probably private consumption is best. This is shown in Figure 5 in real terms and on a per capita basis. Even the EMU as a whole had not regained pre-crisis levels last year. Among the euro crisis countries only Latvia – now with a ten percent smaller

[7] *We use annual data of the IMF for the sake of simplification. These are data from April 2016, i.e. before the revision of the Irish GDP in July 2016.*

population – is slightly above pre-crisis level. Private per capita consumption in Portugal is 2.5 percentage points lower than in 2007 (its population fell by about two percent). The biggest loser, as measured by private consumption per capita, is, unsurprisingly, Greece, which lost well over 20 percentage points. Spain, Italy and Cyprus show losses of about ten percentage points. Even Ireland is lagging almost seven percentage points compared to 2007. In these four euro crisis countries, the population has grown since 2007, either due to high birth rates (Ireland) or to immigration (Spain and Italy).

Figure 6: Rate of investment (as a percentage of GDP).

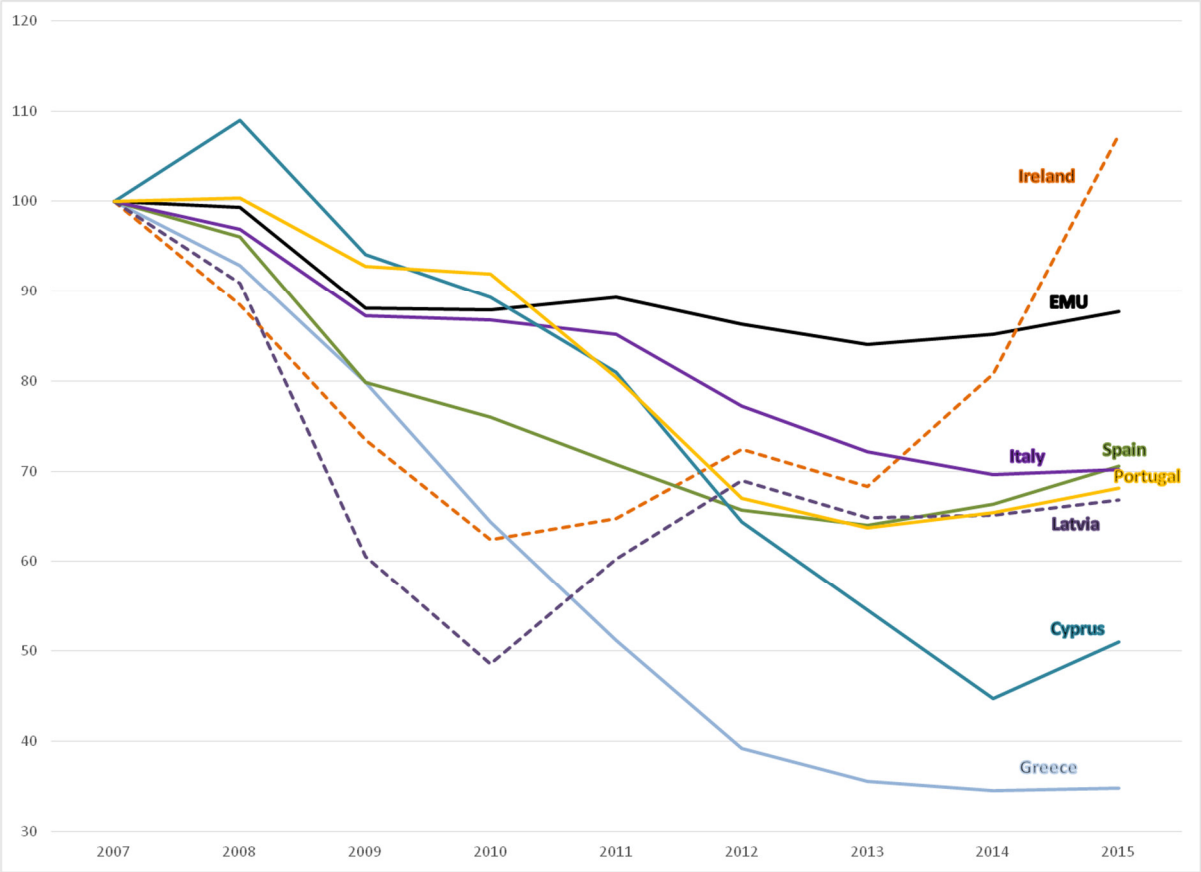


Source: IMF, World Economic Outlook Databank (April 2016)

Figure 6 shows the investment as a share of GDP. It shows that the slump in investment has been particularly deep. A significant recovery occurred only in Ireland since 2014. The other crisis countries saw, at best, a stabilisation at very low levels. This also holds true for the EMU as a whole, as figure 7 shows. The figure depicts the level of gross fixed capital formation as compared to

that of 2007. Since the low point in 2013, there has hardly been any improvement.

Figure 7: Gross fixed capital formation (index 2007=100)

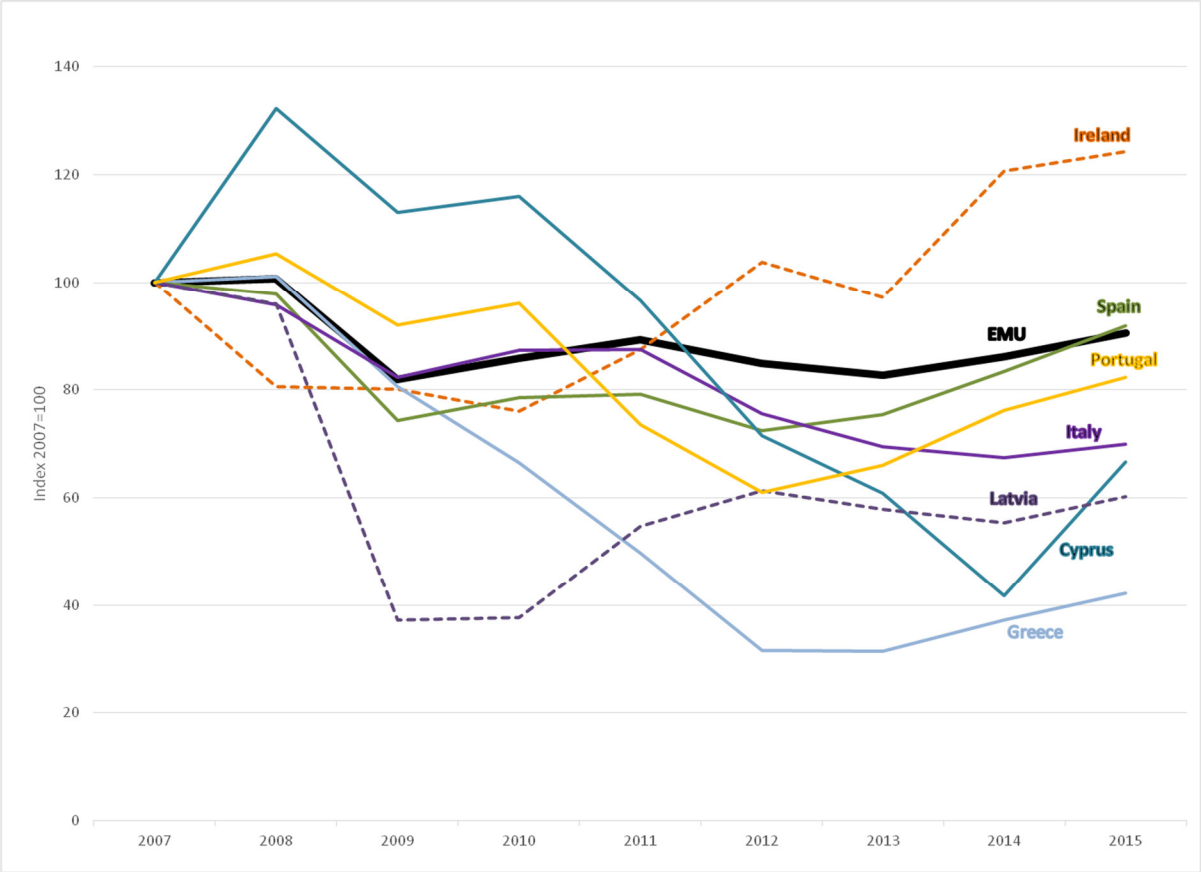


Source: Eurostat

Note: in the Irish case, we clearly see the above mentioned data distortion.

The slump in housing has been particularly strong and long-lasting. In Italy, the level of housing investment fell compared to 2007 by almost 30 percentage points. In Spain and Portugal, it fell by more than 50 percentage points, in Ireland, Cyprus and Latvia by more than 70 percentage points and in Greece by more than 90 percentage points. The drop was almost as equally strong in commercial construction. Italy in particular has been hit hard. The Italian situation is now even worse than in Greece where the slump was initially delayed and only started in 2010. There has been a very slight improvement in some countries in recent years in equipment investment (see figure 8 below). Again, the crisis has proved to be very strong and stubborn.

Figure 8: Equipment investment

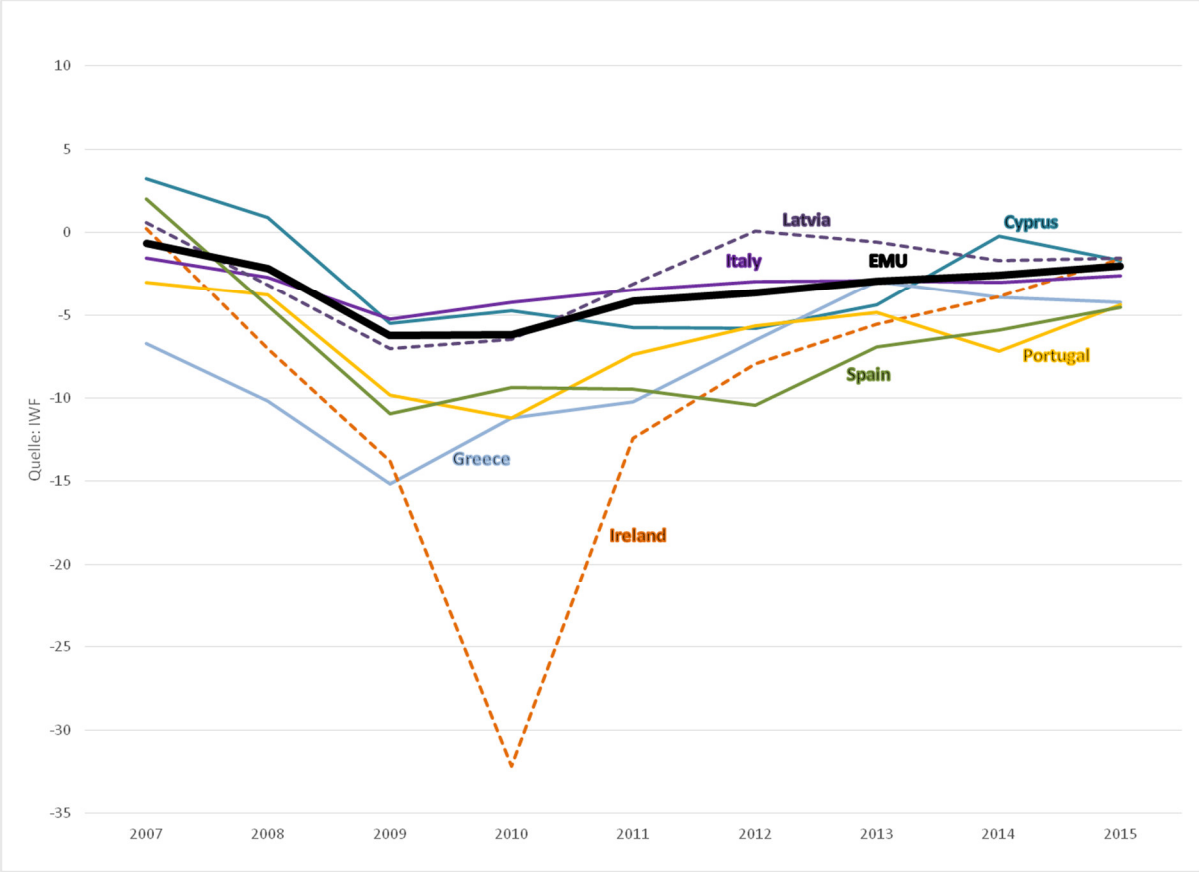


Source: Eurostat

Residential investments are, similar to private consumption, much influenced by the employment and income situation of households and their financial situation (such as access to credit). Business investments also tend to be held back by weak consumption. For companies, exports can lighten up the economic picture. Whether a possible external impulse in domestic demand weakness proves sufficiently strong depends in particular on the size and the degree of openness of the economy. We recall here the case of Germany in the 2000s, when corporate investment stagnated for a long period of time in tandem with private consumption. Even in Latvia, which went into a very strong slump, the recovery in equipment investment has not shown strength. Only the also very small and very open Ireland has experienced a strong recovery. Ireland's recovery was driven by multinationals preferring the island, as Ireland has strategically underbid its EU partners.

After this overview of economic development in general, we will take a look at the concrete impact of austerity on the one hand and the internal devaluation on the other. We begin with the development of the budgetary situation and austerity by looking at the course of the budget balances since 2007.

Figure 9: Government budget balances (as a percentage of GDP)



Source: IMF Fiscal Monitor Databank (April 2016)

Italy, Portugal and Greece reported already before the crisis budget deficits. The other countries had surpluses (see figure 9).

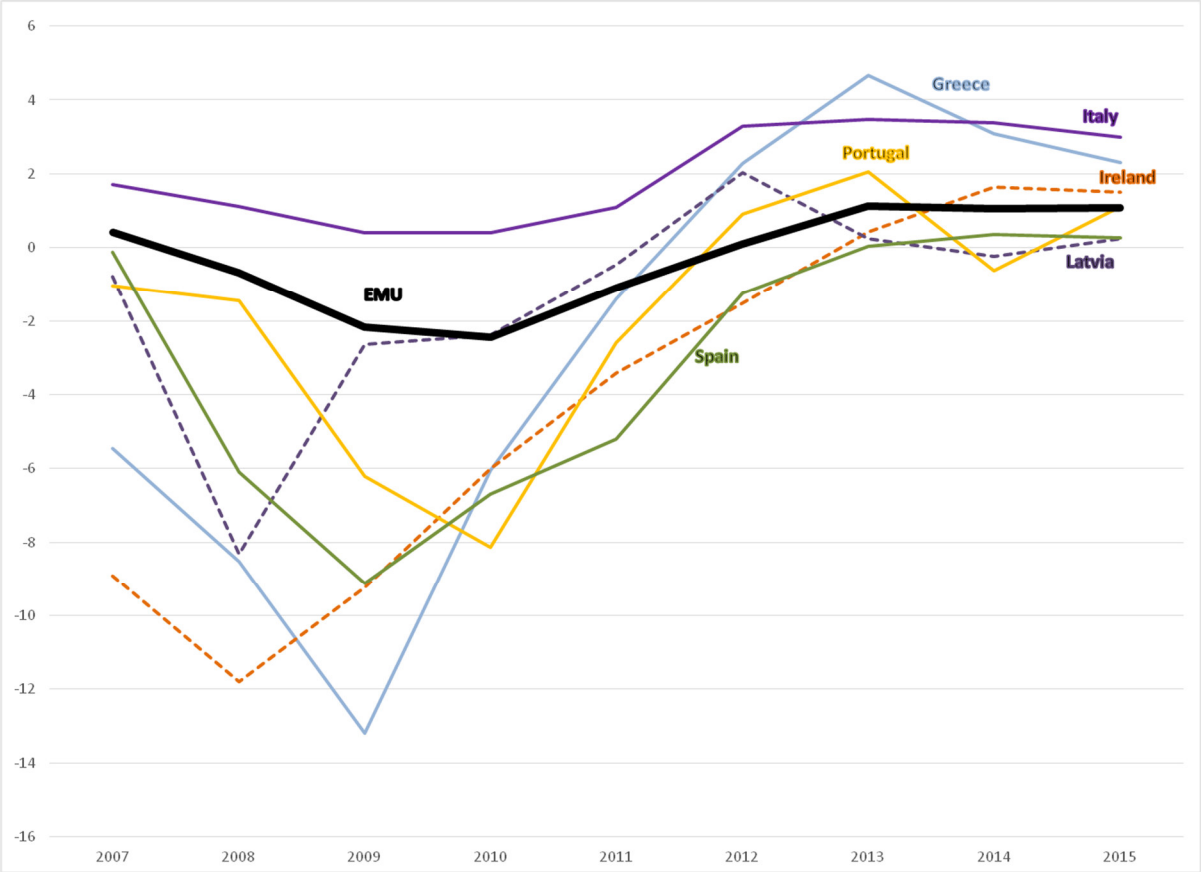
Italy's debt ratio in the eurozone, with its low economic development and its budget deficits of around 3 per cent of GDP, sunk to a level of around 100 percent of GDP (according to Maastricht definition). Later, Italy's budget situation worsened relatively little during the crisis itself. It remained close to a sustained recessive development at around 3 percent of GDP. Portugal's economic development as a member for the euro was also disappointing. It was marked by persistent conflicts with the Commission concerning the Stability and Growth Pact. Portugal deficit ratio increased after the outbreak of the cri-

sis to more than 10 percent. It then fell back in 2013 to around five percent. The full extent of the Greek budget crisis, as mentioned above, did only become public in 2009. The Olympic Games in Athens 2004 had increased Greece deficit. Since then the budgetary situation had not significantly improved. The deficit increased in 2009 to a peak of 15 percent of GDP. It fell in 2013 and today it is around 3 percent.

The other euro crisis countries experienced a relatively stronger deterioration of their budgetary situation. Ireland suffered a severe banking crisis in 2010. In Cyprus, Latvia and Ireland, the deficits fell to low levels in 2015. Last year, Spain's budget deficit was similar to that of Portugal, still at around 5% of GPD. For the EMU as a whole, the budget deficit rose to a peak of just over 6 percent of GDP. It then fell to just 2 per cent of GDP last year.

The state of public finances depends on economic development. Budget balances provide little information about whether governments implemented austerity or cut spending and/or increased taxes or not. Cyclically-adjusted primary balances, however, provide more information. These balances exclude interest payments on the public debt, which depend on the level of interest rates. Interest rates are more influenced by monetary policy than by fiscal measures. As the cyclical adjustment is intended to reflect the "structural" budget position relative to potential GDP, the impact of the economy on the budgetary situation, which acts through the so-called “automatic stabilizers”, is being excluded. Therefore, the change in the cyclically adjusted primary balances provide a measure of both the timing and the extent of austerity measures in a given time period (see figure 10).

Figure 10: Cyclically-adjusted primary balances



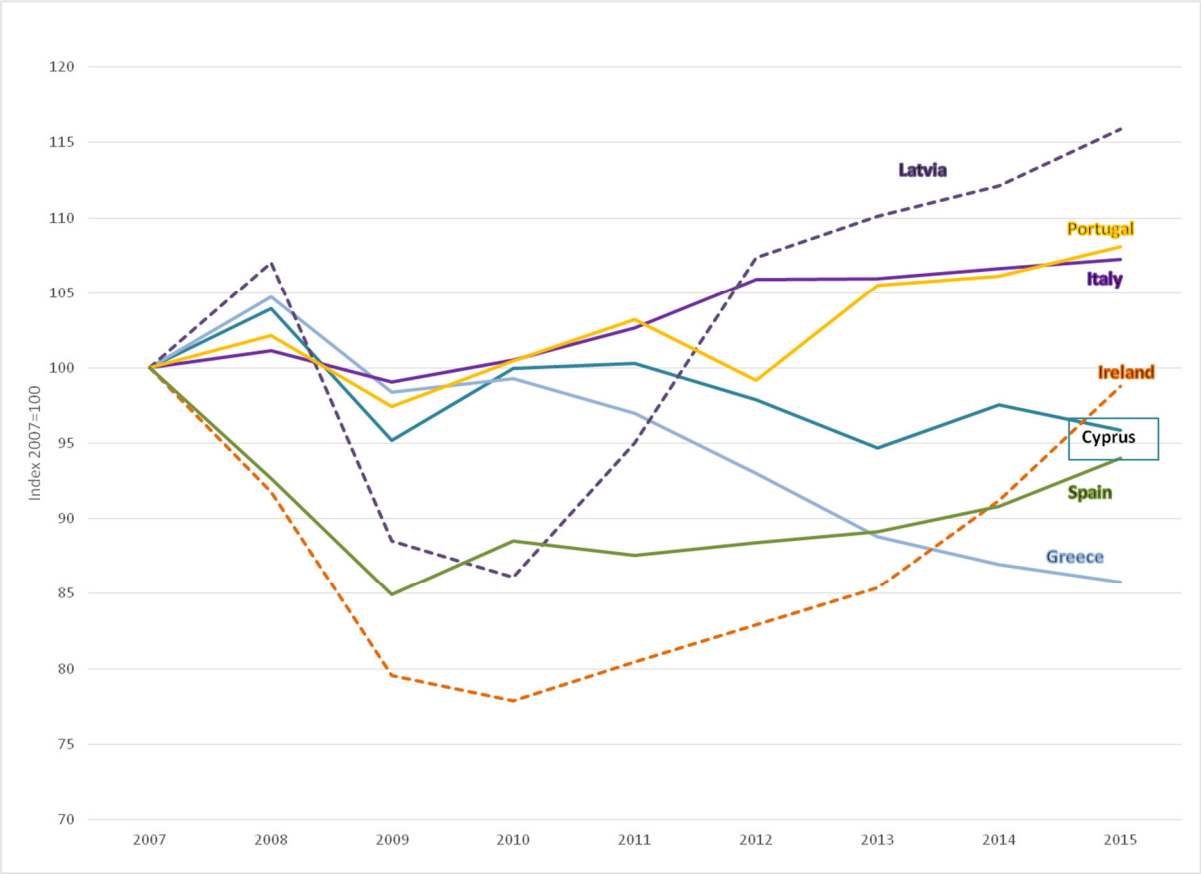
Source: IMF, Fiscal Monitor database (April 2016)

According to IMF calculations, the consolidation process in Latvia began in 2009 and was completed by 2012 (in subsequent years one sees stable cyclically adjusted primary balances). In Ireland, the consolidation started in 2009, its total impact was almost 14 percentage points. Greece witnessed the hardest consolidation measures of all countries (almost 18 percentage points) in the years between 2010 and 2013. Portugal consolidated in the years 2010 to 2013 by about 10 percentage points, Spain, in the same period, by slightly less (9 percentage points). In Italy, the consolidation took place in the years 2011 and 2012 by a total of about 3 percentage points. For the euro crisis countries and the EMU as a whole, the impact from 2013 onwards is a roughly fiscal neutral stance (this statistic does not exist for Cyprus).

However, all these figures need to be treated with high caution. These cyclically adjusted figures from the IMF are proxies based on estimates of potential GDP. It is well-known that estimates of potential GDP (or trend growth) are

not held steady over the business cycle. They are constantly adapted to the actual development (in practice, this happens by using statistical smoothing methods which, however, imply a high degree arbitrariness). In the course of such a stubborn recession and crisis, as the EMU experienced since 2008, estimates of potential GDP growth have been repeatedly and very strongly revised downwards (Jarocinski and Lenza 2016). Other statistics, such as the cyclically-adjusted primary balances were affected accordingly. The true extent of the consolidation efforts that were implemented is therefore uncertain (Truger 2015a). Figure 10 should be interpreted in this way: as an approximation. It also has to be regarded as illustrative for the view of the (research department of the) IMF in recent years: austerity negatively affects economic development - the fiscal multiplier - and worsens government revenues and expenditures.

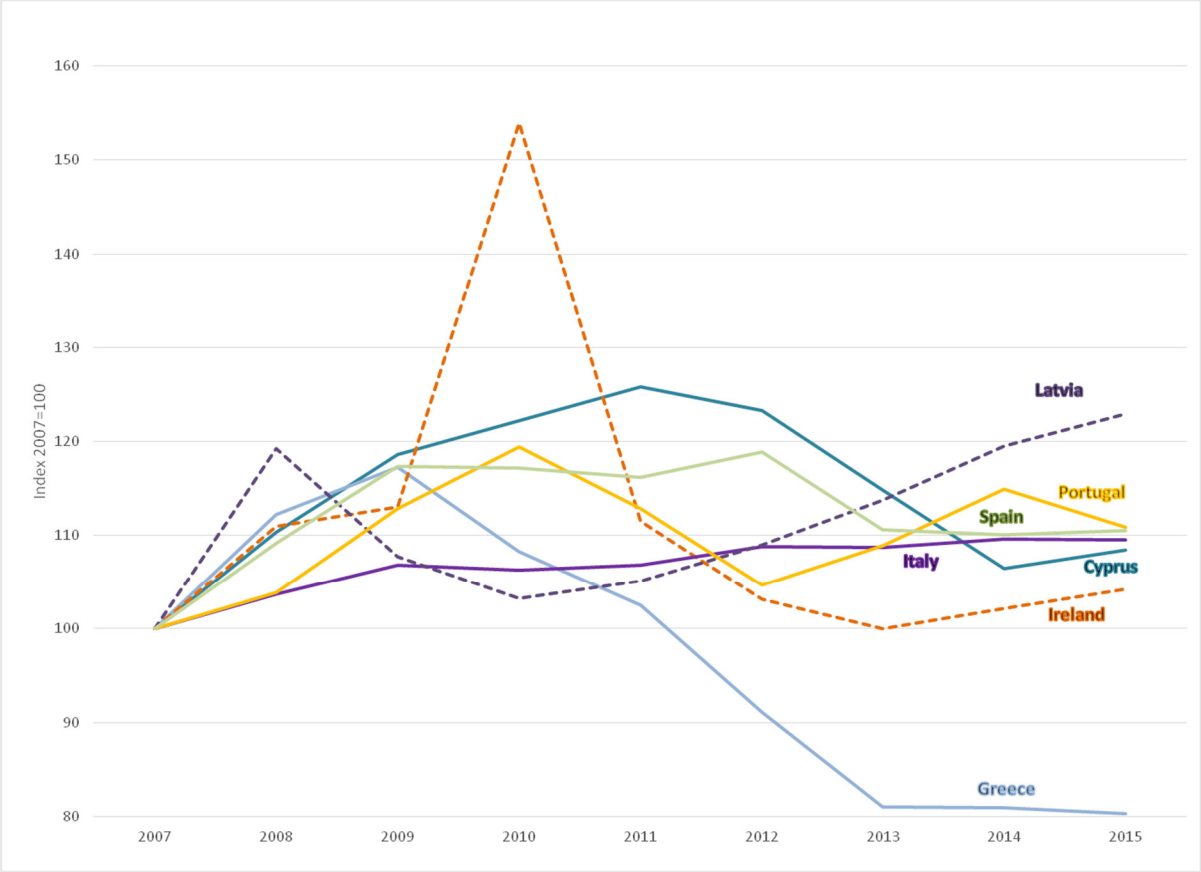
Figure 11. Government revenues (Index 2007=100)



Source: IMF, World Economic Outlook Databank (April 2016)

When we look at the development of government revenues (relative to the level of 2007), the crisis-related slump of 2009 can be seen immediately (see figure 11). The consolidation efforts in subsequent years then proved more or less successfully. Only in Latvia government revenues have increased strongly since 2011, in Ireland only since 2014 - each with the start of the recovery. In Italy and Portugal, government revenue increased slightly from 2011 onwards, in Spain this happened since 2014. In Cyprus government revenues fell initially in 2013 and then stabilized at a lower level. In Greece, a still ongoing deterioration took place from 2010 onwards. The latest figures point towards a stabilization in at an extremely low level. After many years of the strictest austerity, government revenue is circa 15 percentage points below it pre-crisis level.

Figure 12: Government spending (index 2007=100)

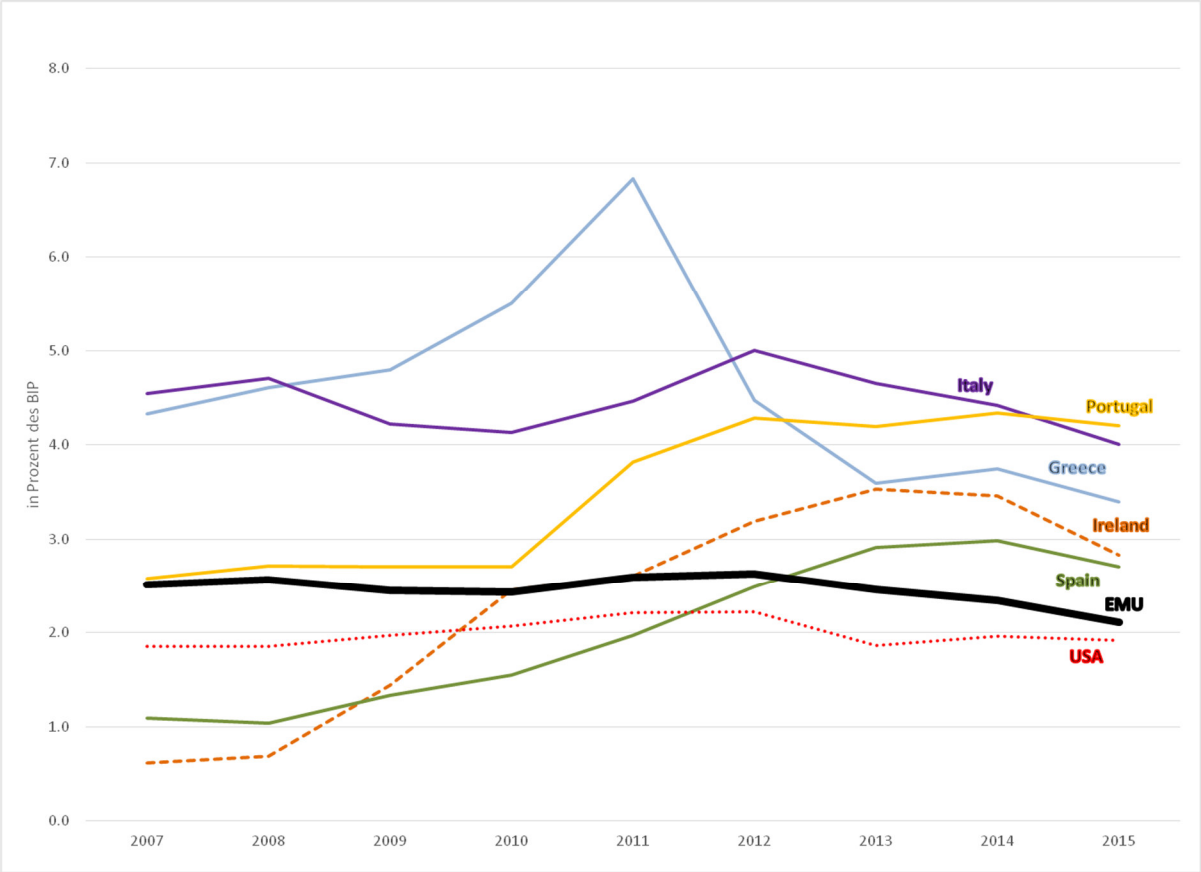


Source: IMF, World Economic Outlook Databank (April 2016)

While government revenue usually automatically falls in a crisis, some of its spending almost always automatically rises. This was the case in (almost) all

countries in 2009 (see figure 12). Only Latvia saw cuts in government spending already in 2010. It was followed by an increase in 2011. In Italy, we see a slight increase since 2010. Government spending then stabilized at around a 10 percentage point higher level than before the crisis. In Portugal and Ireland, government spending declined from 2011 onwards, in Cyprus it declined since 2012 and in Spain from 2014. In Greece, government spending declined between 2010 and 2013 by 20 percentage points! It then stabilized at a very low level. Government expenditure shown here includes interest payments on public debt. The public interest burden (as shown in figure 13 as a percentage of GDP) depends on the level of interest rates and the debt ratio.

Figure 13: Interest burden on public debt (as a percentage of GDP)



Source: OECD, Economic Outlook Databank, Nr. 99

Figure 13 shows a marked increase in the interest burden of the euro crisis countries. This increase was especially pronounced in Greece between 2010 and 2011. Since 2012, it markedly dropped. The other countries have only seen some relief in recent years. In addition, figure 13 shows the development

of the EMU as a whole and the development of the United States. In both cases, the interest burden remained constant, despite the sharp rise in the debt ratio. In the EMU, this happened because German interest rates and the German interest burden considerably fell early on. Germany's crisis-ridden euro partners experienced the opposite. In the US, on the other hand, the Federal Reserve went very early on for massive "quantitative easing" (QE) and prevented an increase in the interest burden in this way. (12) This factor is very important, because a rising interest burden may exert additional pressure to consolidate the primary budget, leading to lack of financing for public services (such as schools and hospitals, etc.) in order to serve increasing creditor demands. Put in another way (and anticipating the coming analysis below), in recent years a more supportive monetary policy of the ECB would have significantly reduced the consolidation pressure generated by the SGP in the euro area. The ECB could have made a decisive contribution to the stabilization and the "recovery", but it only arrived at a conclusion which is similar to the one of the Federal Reserve with many years of delay.

Table 1: Percentage of EU GDP and degree of openness of the euro crisis countries

	Ireland	Greece	Spain	Italy	Cyprus	Latvia	Portugal	EU together	EU extra
% of EU GDP	2.1%	2.5%	11.5%	17.1%	0.2%	0.2%	1.9%	100.0%	100.0%
Openness	76.7%	28.8%	28.7%	27.6%	56.1%	48.0%	34.8%	39.6%	16.0%

Source: Eurostat (Ameco for 2007)

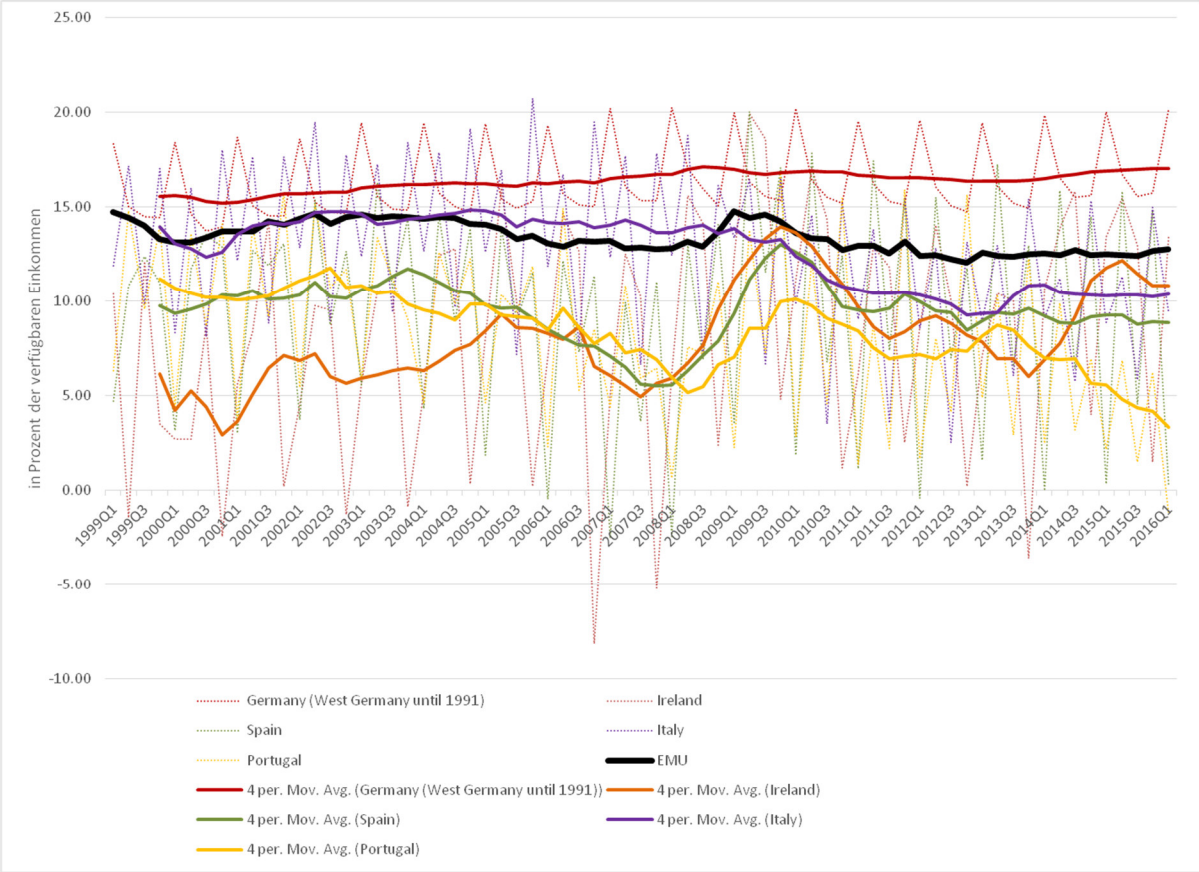
In light of our discussion on austerity, we will now analyse the crisis in each individual country. We concentrate upon the evolution of wages and employment. The purpose is to find more empirical evidence for the negative synergy between austerity and wage cuts. The chances of success of an internal devaluation depend, crucially, on the size and openness of an economy. Italy and Spain are respectively the third and the fourth largest economies in the euro zone. The other euro crisis countries are either small or very small economies. Greece and Portugal are relatively less open, compared to their small size. A higher degree of openness should in principle increase the chances of success

of an internal devaluation. Rising exports may offset the adverse effects of austerity and wage deflation policies on domestic demand (see table 1).

As mentioned before, our hypothesis is that wage moderation *reinforces* austerity. Mainstream economic theory and the adjustment programs of the Troika assumed – erroneously - that wage cuts would quickly lead to employment gains and that this would offset the negative consequences of austerity. According to our hypothesis, wage cuts - much like additional tax increases for workers - reduce disposable income and therefore curtail consumption. Other negative effects result from deflation and cause the additional tightening of credit ("debt deflation").

The combination of austerity and wage cuts reduces the compensation of the employees and therefore private consumption when: (1) the number of salaried workers decreases; (2) the working hours of employees are being reduced; and / or (3) those still or newly employed workers receive lower wages. We expect a fundamental and close relationship between compensation of employees and private consumption. Wage development and consumption can diverge when recipients of certain types of incomes compensate (in part) for the loss of consumption of the employees through redistribution. The exact tightness of the relationship between compensation of employees and household consumption also depends on whether the workers who experience income losses have liquid assets or/and easy access to credit in order to support their consumer spending. It is for this reason that the financial situation of the banks is relevant. Their balance sheets determine whether credit is readily available or not. In a situation of debt deflation, obtaining credit will of course be difficult. The recourse to reserves or loans reflects itself in the development of the saving rate of households. This rate is calculated on the basis of disposable income and not only on the compensation of employees.

Figure 14: Saving rate of households



Source: Eurostat

Figure 14 shows the evolution of the saving rate of households in the EMU as a whole and for the euro crisis countries, at least when the information is available (the times series are not available for Greece and Cyprus). Because this is a non-seasonally adjusted time series, we carried out a smoothing exercise in order for the evolution to show up better. The development shows what we were expecting. In the early phase of the crisis, we initially observe, both in the EMU as a whole and especially in the crisis countries, an increase in the saving rate, which indicates a spontaneous and natural reluctance to consume due to heightened uncertainty. The next period shows the downward trend in saving rates. This very likely indicates the use of reserves due to the crisis-related emergencies. If the savings rate decreases and / or recipients of other types of income experience less income loss, consumption may remain more resilient than the development of employee compensation. In addition, figure 14 shows the atypical - very stable - development of the German savings rate.

The figures on the individual euro crisis countries that we present in the following section are based on Eurostat's statistics of the quarterly national accounts. These are national time series for real private consumption and for the real compensation of employees deflated by the Harmonized Index of Consumer Prizes (HICP).

There is also information on the average weekly hours work and the hourly wages (both nominal and real terms, *i.e.* deflated by the HICP).

For some countries, "real" time series on wage developments exist. The data provide information on, for example, the right to collective bargaining ("negotiated wages") and legal minimum wages. Sometimes a distinction is made between the wages in the public sector and (certain sectors) of the private sector. Time series of wage rates may be distorted by so-called "wage drift". It can be assumed that this factor has tended to depress actual earnings during the crisis of recent years. Wage cuts often dealt with all sorts of bonuses and one-off payments. The basic incomes of the lowest brackets of workers were only touched as a last resort. This means that estimates of the average wage can become significantly distorted by changes in the composition of the workforce (these are the so-called "composition effects"). For example, if young and low-paid workers are being laid off, the statistical average wage for those remaining in employment will look better than the actual real wage development (Puente and Galan 2014. Cruces et al 2015; Müller and Schulten 2015 ; Euro Found 2015 ECB 2016).

We here use the "unreal" wage time series that is derived from the national accounts. These series probably reflect the overall picture of the development the best. We made no distinction between wages in the public and in the private sector. It has been frequently observed that the public sector functioned as a sort of forefront for government austerity. It was not only austerity. There was a concerted effort on the part of politicians to create general wage pressures, not least by implementing structural reforms to improve labour market flexibility. As austerity programs often led to increases in indirect taxes and

government-administered prices, workers were taken in the tongs in this way too.

In what follows, we present a detailed analysis of the Euro crisis countries.

Greece

The depth of the economic and humanitarian crisis in Greece is well known and needs no detailed elaboration. Greece's situation is comparable to the Great Depression of the 1930s in Germany and the USA. Although Greece "received" three "bailouts" from the Troika, one cannot call any of the programs a rescue or assistance. It has always been very clear from the very beginning that the creditors were trying to save their own banks and the euro, not Greece (Janssen 2010; Blustein 2015b). Specifically, from the German perspective, Greece did not deserve help, but punishment.

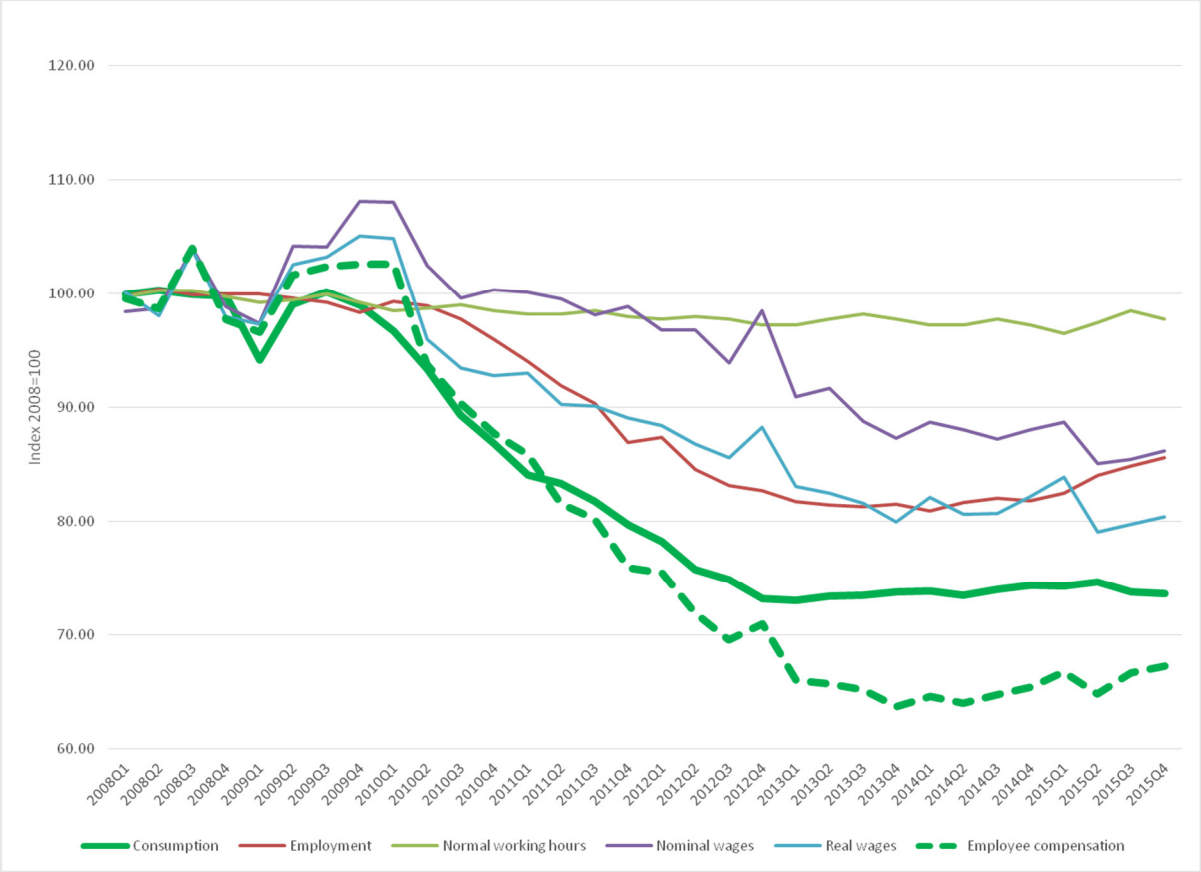
After an immediate debt restructuring had been excluded, the bar was laid accordingly high for the austerity measures: in order to obtain the first "bail out" in May 2010 to the amount of € 110 billion, Greece had to implement an austerity package of € 30 billion (or 11 percent of GDP). The imposed austerity would have achieved a primary surplus of almost 6 per cent of GDP by 2014. This austerity package, mind you, was in addition to previously agreed austerity measures amounting to 5 percent of GDP. The result, an extremely deep recession, was not at all surprising. It was absolutely clear that the "speed limit" for effective consolidation had been significantly exceeded. The subsequent attempt to cover up the mistake by implementing new and more cuts proved particularly devastating. It severely exacerbated the whole problem. Even the Independent Evaluation Office of the IMF did not use particularly diplomatic language when it commented on the Greek disaster:

"an increasingly unworkable strategy was maintained for too long. In Portugal as well as in Greece, when GDP contracted more than anticipated the nominal deficit ceiling was routinely tightened in order to achieve the original targets (which were set in relation to GDP in the EU programs) ... This tightening was tantamount to disallowing the operation of automatic stabilizers, thus aggra-

vating the pro-cyclicality of the fiscal policy, which exacerbated the contraction" (IMF 2016a: 29).

Estimates by Truger (2015a) show that, in the case of Greece, the actual austerity measures reached 20 percent of GDP. This is more than twice as high as in Ireland, Spain and Portugal. Given the sheer brutality of austerity, one can declare without any hesitation that the Troika made the crisis incomparably deeper than it was before the austerity packages and the structural reforms were imposed upon a hapless Greece. And exactly as our hypothesis says, wage cuts significantly enhanced the consequences of austerity. The empirical support for our hypothesis is extremely robust in the case of Greece. In Greece, not only wage restraint (wage-disinflation) occurred, but actual wage *deflation*.

Figure 15: The Greek crisis



Source: Eurostat

Figure 15 shows critical support for our hypothesis. The sustained fall in private consumption started in 2010, the beginning of the austerity measures.

Consumption stabilized only in 2013 at extremely low levels. The compensation of employees fell in sync with the slump in consumption and a synergetic effect originated. The slight reduction in normal working hours was not so terribly important. The main factors were the slump in employment and absolute wage cuts. Compared to 2008, wage deflation reached 15 percentage points.[8] Real wages fell even more. The consumer price level continued to rise in the early years of the crisis, due to increases in indirect taxes and government-administered prices. This was part of the austerity program. Only in recent years, consumer prices dropped a little.

In the Greek case, austerity and wage cuts were obviously closely related: the Greek government dismissed workers *en masse*, it reduced the wages of those who remained in employment, it reduced the legal minimum wage and it undertook many other "structural reforms" in order to increase the flexibility of the labor market, which means nothing else than to facilitate layoffs and implement wage cuts in the private sector. According to the economic mainstream, drastic wage cuts should lead to fast employment gains. And if these gains, as by surprise, do not occur, the mainstream calls for *more* austerity and deeper wage cuts. It accuses the Greek government of obstructing the magical workings of their supposedly wonderful neoclassical medicine. Mainstream economists will never admit that their model is just fantasy. The facts show, unequivocally and overwhelmingly that their policies not only did not work, but that they made everything worse than it already was. And do not forget that the official exorbitantly high rates of unemployment in Greece hide the fact that, according to the Bank of Greece, about 400.000 Greeks (nearly 4 percent of the population) left the country since the outbreak of the crisis (Kathimerini 2016).

There is no need to repeat the obvious: austerity and wage cuts – a rabidly deflationary policy at a time when stimulus was essential! – also ruined the Greek banking system. That this would happen is, again, completely unsurpris-

[8] *A wage index published by the Statistical Office of Greece shows a wage deflation of over 20 percentage points.*

ing. These relationships are only being ignored in the phantasmagoric mainstream models, which see no connection between austerity, wage cuts, deflation, credit crunches and depleting financial assets.[9] Perhaps the greatest irony of all is that Greek exports, which had grown as fast as German exports before the crisis, remained flat since the crisis and today barely reach pre-crisis levels. And this is, again, also not surprising. This is what can be expected when a whole economy, its banking system included, is being so thoroughly destroyed as in Greece.

The economic policies of the Troika have caused a massacre in Greece. One has to take this literally. We have here provided ample arguments to justify the accusation of gross negligence. The alternative explanation of punishment for the purpose of setting an example in the name of the "moral hazard" gods, or intention is even less reasonable.

Portugal

The recent report of the Independent evaluation office of the IMF (see the quote above) also deals with Portugal. The Portuguese crisis was also completely mishandled. When the Portuguese economy suffered as a consequence, harsher pro-cyclical austerity measures were imposed. Portugal had initially remained relatively unaffected by the global financial crisis. By imposing unconditional austerity, the country suffered a second sustained recession from 2011 onwards.

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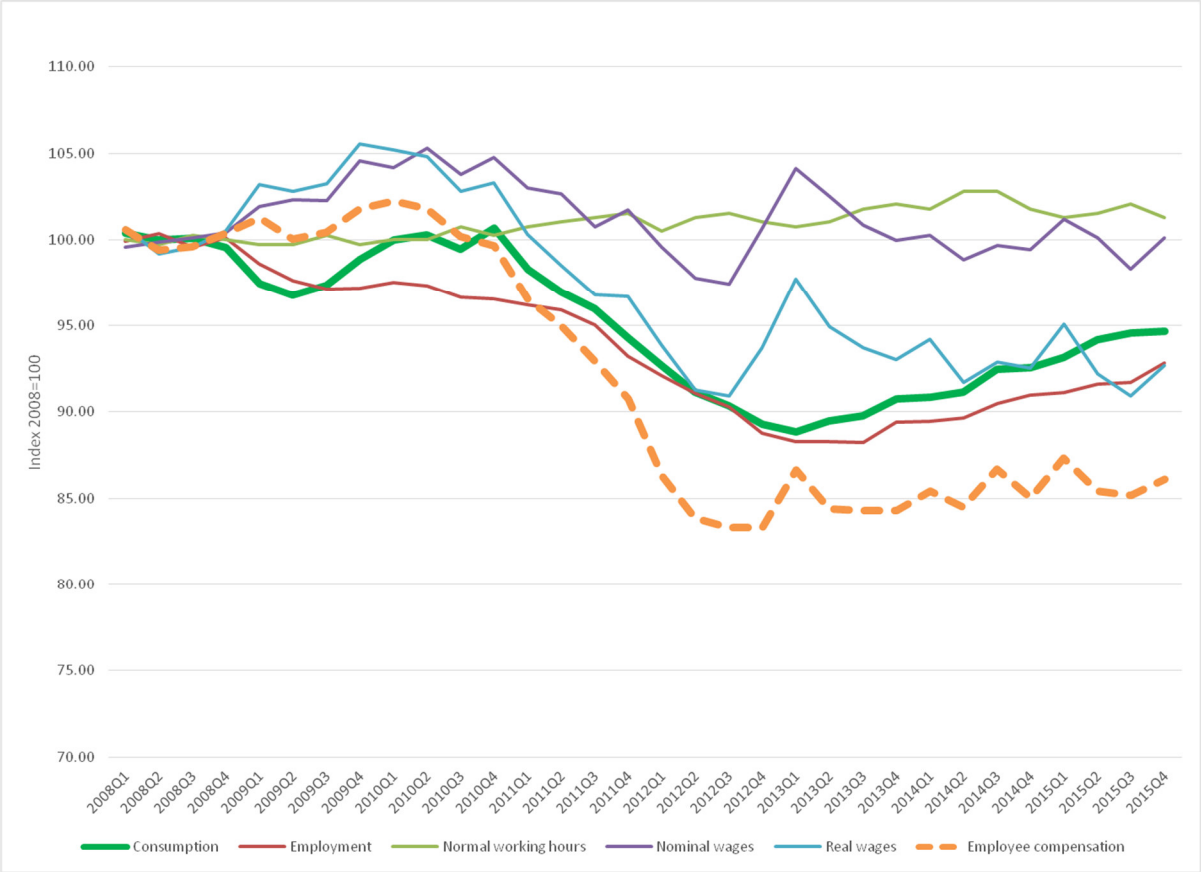
[9] Since the global financial crisis, mainstream economists have made some efforts to remedy this gross embarrassment and combine standard DSGE models with insights about the financial system. For example, a recently published study by Gourinchas et al. 2016 promptly led to the conclusion that austerity only explains half of Greek GDP collapse. The other half was due to the worsening of the financing conditions of the state and the economy. This finding is truly wonderful, especially given that the mainstream researchers give, in the same breath – the usual advice for more structural reforms and faster price adjustments. The role of wage cuts and deflation in the Greek crisis, which in fact also includes the banking crisis, does not even enter their analysis.

Figure 16: Portugal



Source: Eurostat

As Figure 16 shows, the sustained fall in private consumption occurred when the 2011 austerity package was imposed. Consumption stabilized in 2013 at very low level. The compensation of employees fell in sync with the slump in consumption. When consumption fell, employment fell ever more. Until 2010, wages increased both in nominal and in real terms. In 2011, however, the wage cuts arrived. Wage deflation remained relatively mild in Portugal. During the crisis, consumer prices continued to rise and increases in indirect taxes and government-administered prices were being implemented as part of the austerity program. These measures played an important role. Real wages fell quite strongly in 2011-12. There has been a very slight improvement in wage development and employment since 2013. These modest improvements also somewhat supported consumption.

As was the case in Greece, austerity and wage cuts created an extremely negative synergetic effect. The Portuguese government dismissed employees *en*

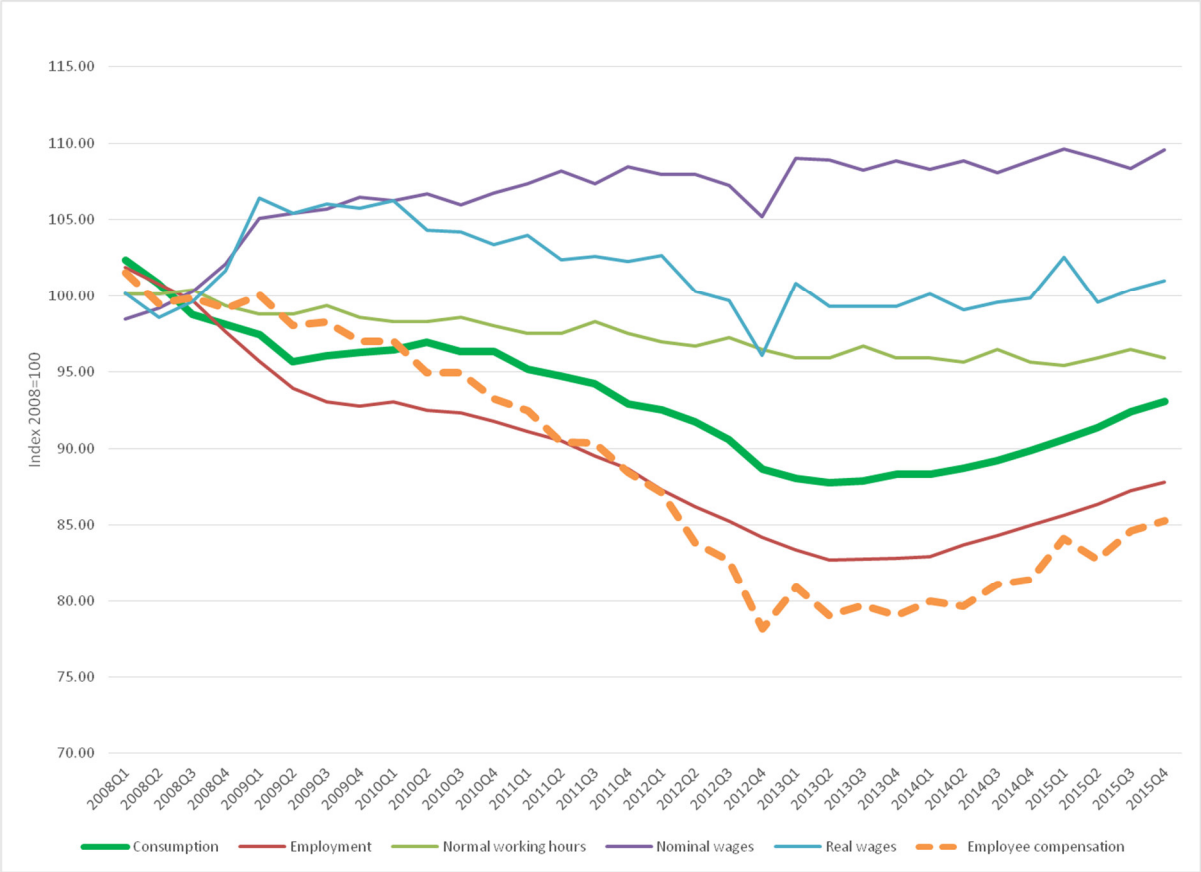
masse, it lowered wages, reduced the legal minimum wage, and undertook structural reforms to facilitate layoffs and wage cuts in the private sector.

Spain

The situation is Spain was different than the one in Greece or Portugal. Spain had been in trouble since the beginning of the global financial crisis because the huge Spanish property bubble had burst. This had caused a significant rise in unemployment. Spain initially tried to counteract the slump by an expansionary fiscal policy. As the housing crisis quickly led to a budget deficit of around ten percent, substantial pro-cyclical austerity measures were implemented in the years 2010-12.

In Spain, the austerity was also too drastic and the budget deficit fell only very slowly. Similar to the case of Portugal, austerity was virtually suspended in 2013. However, since Spain's budget deficit last year was still about five percent, more austerity is presumably coming, unless the economy recovers through export. Spain received no official Troika adjustment program. Instead, it got a loan from the European Stability Mechanism to re-capitalize and stabilize its banking system which had been hit hard by the bust of the domestic housing bubble.

Figure 17: Spain



Source: Eurostat

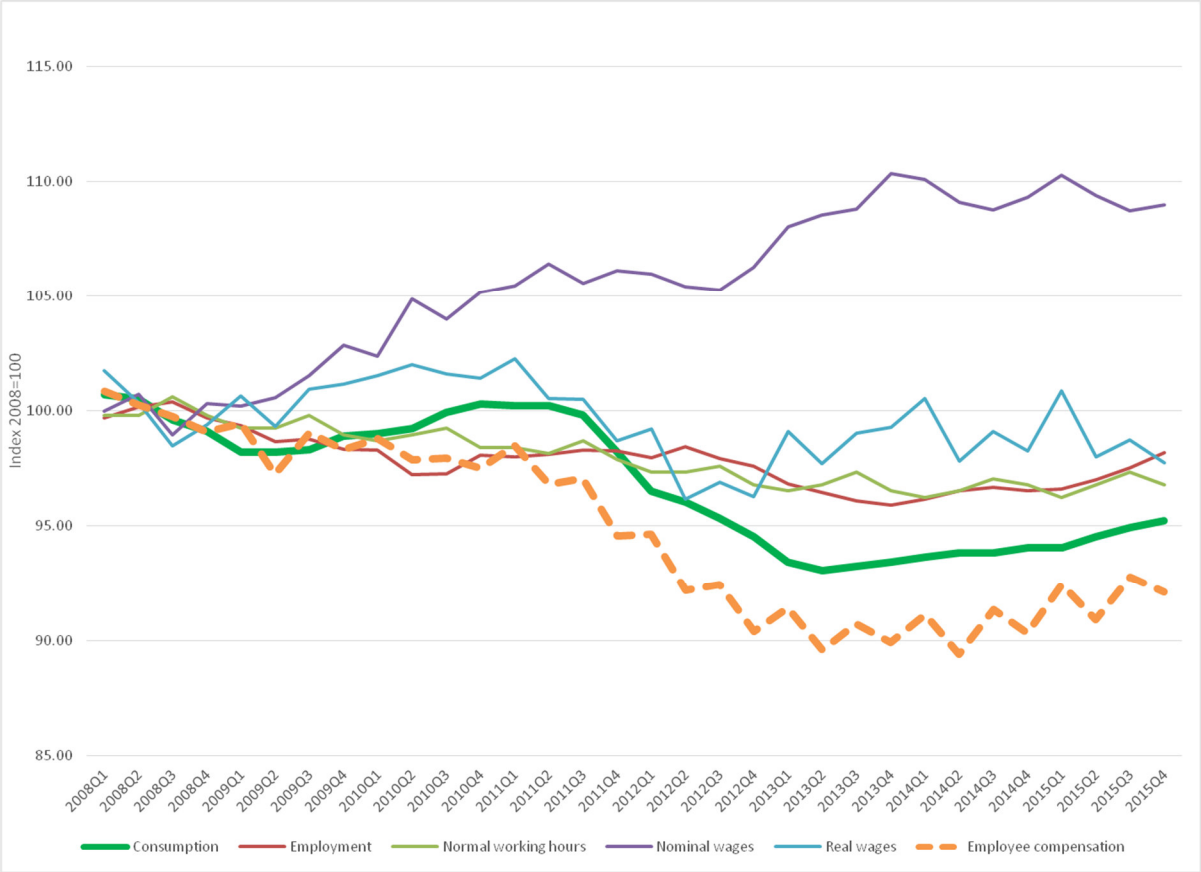
In the Spanish case, the unconditional austerity that was implemented in the beginning of 2010 created a second slump in employment and consumption. Figure 17 shows that the compensation of employees by the end of 2012 continued to contract vigorously, because normal working hours and, from 2010 onwards, real wages declined. The suspension of austerity in 2012 led to a slight recovery since the beginning of 2014. In fact, employment and the compensation of employees rose significantly during the last two years and consumption witnessed a corresponding recovery. Real wages stabilized in Spain since 2013. There had initially been a strong nominal wage increase in 2009, which led, through a time delay, to a corresponding increase in real wages because of the crisis-related zero inflation. Contrary to Greece and Portugal, according to wage times series derived from the national statistics, nominal wages slightly increased in the following years. Other studies show the existence of specific nominal wage cuts. There is no doubt that, between 2010 and 2012, rising consumer prices led to losses in real wages. Once again,

there exists a negative synergy between austerity and the 'structural reforms'. The details hardly need to be repeated once more. Government layoffs, wage cuts and structural reforms led to the facilitation of layoffs in the private sector – this picture is more or less characteristic for all the crisis countries. In all these countries, austerity led to increases of indirect taxes and government-administered prices, which drove up consumer prices and put the compensation of employees and their purchasing power under pressure.

Italy

The impact of the global financial crisis on Italy was initially rather modest. Italy was much less hit than, say, Germany. Italy's exports had already come under pressure in the euro zone. However, Italy's acute vulnerability to the global crisis remained small. Its banks were less vulnerable than many other European banks and Italy had not witnessed a domestic property bubble. The crisis only reached Italy at full force in 2011, when the technocratic transitional government under former EU Commission President Mario Monti decided – without an official Troika adjustment program – to implement the usual Troika policy cocktail. As we have seen, this cocktail is supposed to promote growth and employment. Instead, it maneuvers countries more deeply into the crisis.

Figure 18: Italy



Source: Eurostat

A deeper crisis, then, is exactly what happened. Figure 18 shows the sharp fall in consumption and wages in the years 2011-12. This was followed by a stabilization at a low level in 2013. In Italy, employment shrunk during this second recession comparatively less than in other crisis countries. Declining employment, declining real wages and the reduction of normal working hours each contributed in decreasing the real compensation of employees. In fact, overall, wages did not fall in Italy, they continued to rise. The problem is that consumer prices rose faster than wages, as a result of indirect taxes and government-administered prices. Only last year, consumer price inflation in Italy stabilized at about zero. The stabilization of the Italian economy only started in 2013, when the austerity programs were suspended. Since then, wages stagnated and consumption experienced only a very weak recovery. Recently, there has also been a slight rise in employment. Overall, the crisis in Italy has been less pronounced or severe than in the other crisis countries: the slump was less deep. The problem is that Italy suffers from a gradual decline. The *de facto*

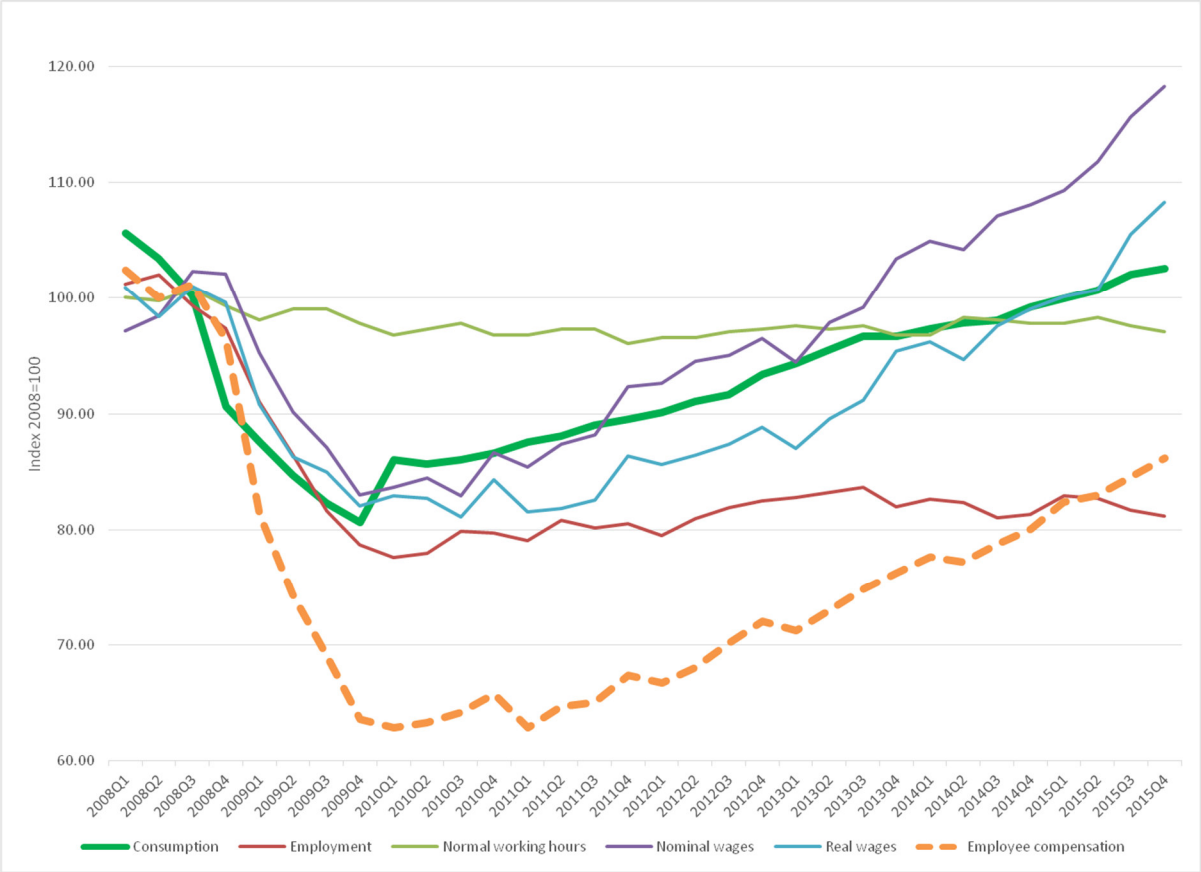
permanent recession and, recently, deflation showed the vulnerability of the Italian banking system, despite the fact that Italy had not experienced a mortgage crisis. The Italian banking crisis is related to something else. Given the dominance of small and medium-sized companies that characterize the Italian corporate landscape, the Italian banking crisis reflects the decline of manufacturing.

Latvia

The tiny Baltic country and former Soviet republic is often presented as a "success story" by the economic mainstream. The mainstream argues that the combination of austerity and internal devaluation made the Latvian economy return to growth. Latvia was not a member of the euro zone when the global financial crisis broke out – it only joined in 2014. Before that, Latvia had a fixed exchange rate against the euro. The IMF advised Latvia to restore competitiveness through substantial currency depreciation. But the Latvian government did not want to jeopardize the country's accession to the EMU at the earliest possible date. A depreciation was, therefore, completely out of the question. All of this took place, with the latent fear of Russia and the desire of a fast and close integration into the EU at the background. The European Commission and the ECB supported Latvia's position (Blanchard et al 2013; Blustein 2015a).

The Government of Latvia implemented an internal devaluation by means of strong wage reductions. This was especially the case in the public sector, although wage cuts took place everywhere in the economy. After years of very strong wage growth, this was a dramatic turnaround. In addition to the wage reduction policy, the government implemented austerity during the years 2009-12, notwithstanding the fact that Latvia's public sector is quite small and that its public debt is very low.

Figure 19: Latvia



Source: Eurostat

The massive slump shown in Figure 19 shows a fall of 35 percentage points. Its cause was a very strong employment slump and considerable absolute wage cuts (and, at first, strongly rising consumer prices as well). As a result of this development, consumption temporarily fell by 20 percent, but this drop was far less pronounced than the drop in income.

Since 2011 wages, both in nominal and real terms, started to rise again and today they exceed their level of 2008. The compensation of employees and consumption grew as wages recovered. Employment, on the other hand, remained at a low level and is still 20 percentage points lower than before the crisis. This, without a doubt, explains why Latvia lost ca. 10 percent of its population through emigration since 2008 – not immediately a characteristic of a "success story". Unlike other euro crisis countries, the situation of the population that stayed may even have returned to normal in the meantime, but an increase in employment as a result of wage cuts is nowhere to be seen.

The main result of this empirical overview is that it is really time to put any fairy tales about expansionary austerity and employment-friendly wage reduction policy to rest. It is abundantly clear that the experiments with unconditional austerity and wage reductions in the EMU have proved disastrous. Negative fiscal multipliers are a figment of the neoliberal imagination. Wage cuts are not a recipe for employment gains. Wage cuts act like a specific tax increase on workers. They decrease compensation of employees as well as domestic demand and employment. The austerity and the wage cuts policies that were imposed upon the crisis countries have massively enhanced and prolonged the economic crisis. Wage cuts have reduced employment and increased unemployment. From the perspective of the mainstream, all of this sounds like an upside-down world. This is because they have been fundamentally wrong.

4. Recommendations for crisis policy in the ‚program countries' and for an alternative economic policy in the EMU as a whole

The theoretical and empirical analyses of the above sections allow us to present a decisive conclusion for economic policy: the disastrous policies of the Troika adjustment programs must end quickly.

Austerity and wage reduction policies do not lead to adjustment and recovery in the EMU, the contrary is true: they threaten to destroy the euro zone. Dramatic and unconditional austerity is counterproductive in itself. In combination with wage cuts, the likelihood of a sustained strangulation of domestic demand that is associated with rapidly increasing unemployment grows exponentially. Concomitant deflationary tendencies damage the banking system and trigger a credit crunch. None of these developments favour supply-side adjustments. They are more suitable to destroy an economy and to drive a part of the population, especially the younger and more productive members, out of the country.

Greece is the most glaring example of this truly enormous policy failure. The other euro crisis countries - including the alleged "success stories" - have experienced the same development, only in a less severe form. Not even in tiny economies was the strangulation of domestic demand offset by a rapid growth in exports. Even if there were improvements (the example is the exceptional Irish case), these policies cannot work for any of the other countries or for the EMU as a whole. The tremendous turnaround in the current account balance of the EMU limited the damage in that, so far, it prevented the euro zone from sliding into outright deflation. But this alone cannot be called a successful economic policy. It only provides a little respite, while it creates new global and regional vulnerabilities.

Proponents of the crisis policies that have been put in place argue that there had been no alternative. There was nothing else that could be done, except austerity and wage cuts. The public finances of the crisis countries were clearly

in a precarious condition. These countries simply had to "live within their means," the sooner the better. When the crisis countries in the EMU lost their competitiveness, internal devaluation was the only option – the more the better. And, declares the mainstream, if the combination of austerity and wage cuts did not lead to the desired effects – if, in other words, reality does not confirm with mainstream economic theory – this is due to the fact that national governments insufficiently cooperated. The fault never lies within neoclassical theory itself. The governments should have implemented the structural reforms of the Troika with more enthusiasm and vigour, so that the countries should have enjoyed the fruits of austerity and falling wages even more. This is, of course, nothing else than propaganda. It has the function of covering up the failures of the mainstream and the Troika and to blame others for it. It is interesting too, because the propaganda also shows that those who are really responsible still fail to understand the complete unsuitability of their crisis policies (and the mainstream economic policies and theories that underlie it). The priority is to serve certain interests, even if the house is burning down. Today, the political and social situation in the euro area is such that a regional conflagration can no longer be excluded.

Those who are responsible have now at least taken full knowledge of this danger. After about three years of brutal and unconditional austerity, since 2013, further consolidation efforts have become increasingly controversial. Recently, even the European Commission - under pressure from the German Finance Minister Dr. Wolfgang Schäuble – granted leeway and agreed to delays in the further consolidation policies of countries such as France, Italy, Portugal and Spain, thereby symbolically waiving the imposition of possible penalties (Khan 2016). But this is not to say that the mainstream finally learned its lesson. According to the EMU's fiscal rules, there is a considerable further need for the consolidation of the debt ratios in the monetary union. According to the mainstream, debt ratios need to converge in the long term at significantly lower levels or even become zero. The fact that such requirements are economically completely nonsensical and that they do not work in practice apparently bothers no one. The neoliberal agenda is clear: starve the state. It is not

economic insight which today - temporarily! – argues for leniency in the application of economically inconsistent and unworkable rules, but the fear for their own skins.

The ECB also realized during the escalation of the euro crisis in 2012 that their fate is tied to that of the euro. Since the famous speech of the then new ECB President Mario Draghi at the end of July 2012 in London the ECB also changed course, although the change has come as "too little, too late". The ECB had previously refused for many years to significantly lower the general level of interest rates in the euro area. Since 2012, interest rates have been lowered and the financial fragmentation within the EU has, at least partially, been reversed. The resistance of the *Deutsche Bundesbank* has been overcome. The European Court has confirmed the independence of the ECB in matters of monetary policy. This gives the ECB leeway for the implementation of monetary policy. The German Federal Constitutional Court has, at least temporarily, stopped its resistance and currently no longer attempts to bring the ECB under German control (Bibow 2015a, 2016).

An extremely important side effect of the monetary policy shift of the ECB was that it reduced the burden of interest on public debt. This created new fiscal leeway and tremendously reduced the pressure to consolidate the primary budgets. However, as said, austerity has not ended, it has only been *de facto* suspended. General consolidation pressures will continue, according to EU economic governance rules, unless new growth fuels domestic demand. But where will such growth come from, given the reality of German mercantilism and considering the situation of the current account balances in Europe?

In short, those who celebrate the so-called "recovery" of the EMU since 2013 as a success of EMU crisis policy, celebrate nothing else than the suspension of a series of extremely harmful policies. They cannot overlook the role of the ECB, which had to overcome opposition from both the *Bundesbank* and the German constitutional court. In reality, until today the so-called recovery in the euro area remains highly fragile and unbalanced. The adjustment policies that have been implemented remain far away from an internal equilibrium. The

question is therefore what needs to be done to overcome to the crisis. Can the euro survive? Which economic policies can achieve a return to growth?

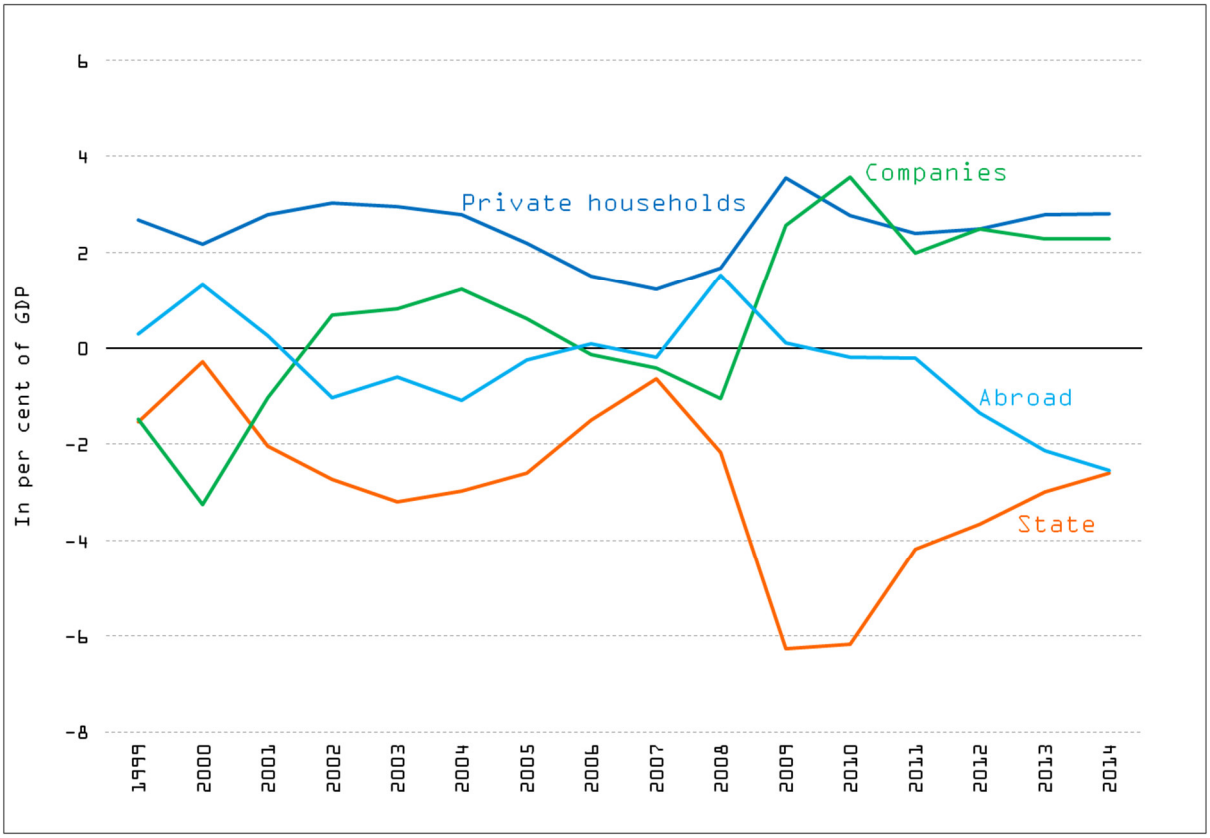
In essence, the European economy must return to normalcy. This means that workers fully participate in the productivity gains that are being realized and that governments fulfill their public duties and responsibilities. The neoliberal agenda to starve the state and permanently depress wages in order to skew the distribution in favour of particular interests has led to a complete dead end. What we are witnessing today is, in fact, the deepest crisis of the capitalist market economies since the Second World War. A return to normalcy requires the complete overhaul of this agenda. Some piecemeal improvements and changes here and there will not do. What we need is a fundamentally new course of economic policy and development.

For wage developments in EMU, a return to normalcy means, in concrete terms, that wage growth - at the macroeconomic level, *i.e.* excluding any adjustment of relative wages – increases in sync with national productivity growth plus the inflation target of the ECB (of about 1.9 percent). The German experiment has proved that long-term deviations from this rule leads to disaster.

For the fiscal policies of the Member States, a return to normalcy means a significant increase in public infrastructure investment and the reconstruction of a functioning administrative apparatus. The nature and the extent of redistribution by the state are the subject of political debate. That in the public sector efficiency standards must be applied is nowhere in dispute. Everyone agrees. But it is beside the point. All over Europe, but especially in the euro crisis countries, government have gone for excessive staff reductions and reductions in public investment in order to "save." It has brought public employment to an irresponsible low level. Even in Germany, net public investment over the past ten years has been negative. We live on what we have to today, leaving future generations with a run-down infrastructure (Truger 2013 2015a, b; Elekdag and Muir 2014).

The objection will of course once again be made that additional government spending is not possible without new taxes, because existing fiscal rules exclude debt and require further consolidation measures. Full compliance with these "stability-oriented" rules is, so it is argued, of the highest possible importance to bring budget deficits under control and to create the confidence that is necessary for entrepreneurs to invest. But how can compliance to a set of rules be so extremely important? How are they supposed to generate trust when it is clear that these rules drive the euro zone into ruin? Because this is exactly what those who favor the continuation of the current economic policy will achieve: collective ruin.

Figure 20: Financial position of the economic sectors in the Euro zone



Source: Eurostat an AMECO

Note: Negative values of the foreign sector represent a debt of foreign countries.

Figure 20 shows the financial balances of the four sectors of the EMU economy: households, businesses, government and foreign countries. The financial

balances indicate whether a sector is saving (income exceeds expenditure) or not (expenditure exceeds income) resulting in additional debt.

Private households (as a whole) are savers. The downward trend in the financial balance before the crisis is very noticeable, which also reflects the increasing indebtedness of many households in this period. There is then an abrupt increase during the crisis and this is followed by a stabilization at a high level. According to economic theory textbooks, a permanently negative net lending by the corporate sector is expected in this case. Companies should compensate for the sums that households save in terms of additional spending. This was – for the last time - the case in the euro zone at the end of the 2000s. But after the burst of the "dot.com" bubble, the corporate sector exercised restraint and "deleveraged". Only immediately before the outbreak of the global financial crisis its balance returned to a deficit for a very short time. After the outbreak of this crisis, the corporate sector became a net saver and this situation has remained unchanged ever since (the data for 2015 show a more or less constant savings rate for the company sector).

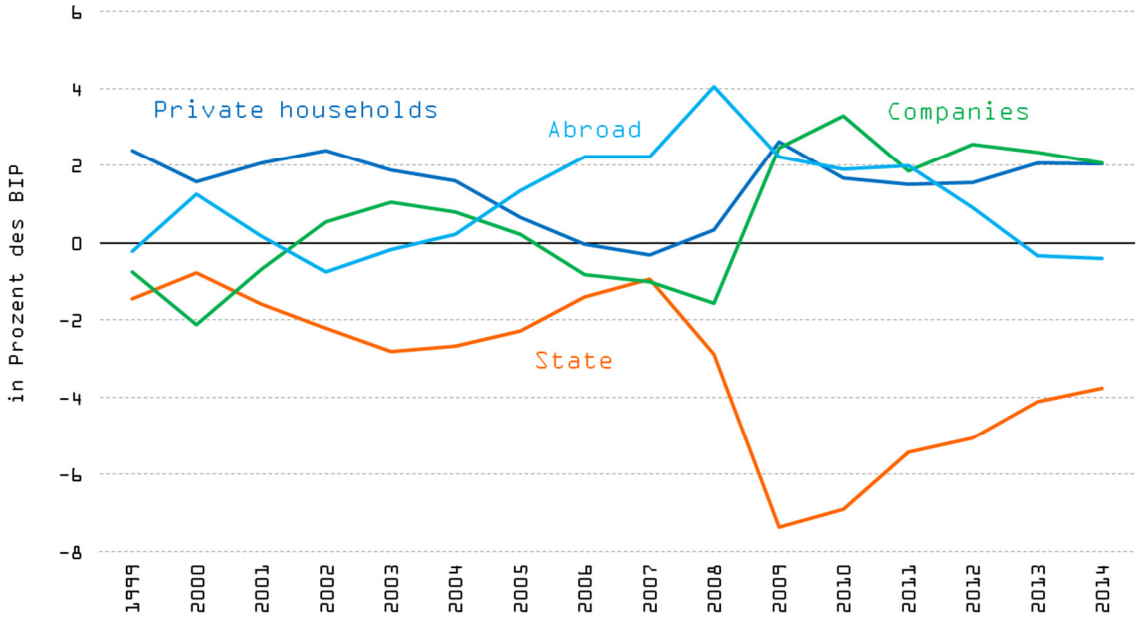
If we assume for a moment that the euro zone is a completely closed economy, given this peculiar configuration of financial balances, then the government sector would have to correspond with high negative net lending to the savings of households and companies. For the economy as a whole, the sum of the balances must always be zero: a closed economy cannot earn more than it spends. It is not possible for industry and household to save unless another sector takes on correspondingly more debt. This is, to a large degree, the situation which existed in the euro zone in 2011. In the era that preceded the global crisis, Euro zone economists time and again told their international counterparts that they had no responsibility whatsoever for the at the time much-debated 'global (current account) imbalances', because the Eurozone had a roughly balanced current account balance. When the global crisis broke out and the spending of industry and households dried up, government spending initially rose accordingly. This happened automatically in part, due to the "automatic stabilizers" which were in place and partly because govern-

ments implemented active fiscal stimulus policies. Governments acted in a proper and a responsible manner at that time. The essential point is that, if in such a situation, the government also tries to save more than it spends – and this is what also happened during the Great Depression of the 1930s – the economy is being saved to ruin. Overall, an economy can only save when output grows and investment is taking place. If this does not happen there is no choice: governments need to take on more debt – not less!

But this is of course not what happened. Governments reacted for a short time in a responsible way. In 2010, under German pressure, the fiscal stimulus was replaced by austerity. Governments could not do anything else anymore than follow the path of unconditional austerity. As we said, in a closed economy, such irresponsible policies can only lead to collective ruin and this is what we are now witnessing. The dysfunctions and the imbalances that these economic policies created have brought the euro zone to the brink of collective ruin. Only trade with foreign countries has limited the damage somewhat. The government sector in the euro zone was able to improve its fiscal balance, as the financial balance of the rest of the world deteriorated. But this reflects in fact nothing more or else than the rising current account surplus of the euro zone. Domestic demand is being strangulated, imports are being stalled and only exports continue to participate in an extremely weak global economic recovery.

Behind the current account surplus of the euro area lies, in particular, the gigantic German surplus which is today almost nine percent of German GDP. In Germany, the household sector is a particularly big saver. Companies have also become big savers, as investment has been eroded due to the lack of domestic demand. Germany's fiscal policy celebrates this collective irresponsibility and it adores the "black zero". It is an impossible rule. Such defunct economic policy can only work if the foreign sector continues to accumulate debt. But Germany cannot go on earning and saving income with the foreign countries incurring ever more debt and enabling more German export surpluses. This is the road to ruin.

Figure 21: Financial position of the economic sectors in the EMU, excl. Germany



Source: Eurostat and AMECO

Until the global crisis, the European partners made it possible for Germany to follow this policy. The Euro-partners enabled Germany's mercantilism by incurring debts. As a result, internal divergences and imbalances started to grow. As Figure 23 shows, the household sector in the euro zone *excluding Germany* had become a net borrower before the crisis. However, even if we exclude Germany, figure 23 shows that since the global crisis a new constellation of fiscal balances came into existence in the euro zone countries, which, over time, more and more started to resemble the German configuration: the corporate and household sectors became permanent savers and the government balance improved only insofar as a deterioration in the financial balance with foreign countries took place (see Terzi 2016). Said in one word, the cocktail of austerity and wage cuts in the euro zone cemented and enlarged German mercantilism.

On balance, this means nothing else than that Germany and the euro zone countries, which are of course all parties to international agreements that

have the purpose to avoid global imbalances, are in fact actively running their economies on the basis of macroeconomic mercantilism. This policy did not only bring the euro zone itself to the brink of collective disaster. It also caused a significant weakening of the world economy and the emergence of new global imbalances and unstable divergences. The fiscal regime of the euro area will remain in place until the German goals of the 'black zero' will have been reached. This fiscal policy is grossly irresponsible. It just cannot work.

There is only one way out. A new and responsible fiscal policy has to come in place. The fiscal balances of the sectors need to be changed. If it proves impossible to make companies abandon their surplus position because they prefer saving to investing, governments have no other choice than to accept high budget deficits that offset these savings. Better yet, governments must implement active economic policies and provide additional public investment in order to help reviving private investment (the so-called "crowding in"). Public investment has been greatly reduced in the euro area in recent years. It is now at an extremely low level. In Germany, for example, net public investment has been negative for over ten years. The euro zone crisis is as deep as it is because any measure of normalcy and collective responsibility has been put overboard.

Today, a return to fiscal normality therefore requires finding means to finance public investment at a reasonable rate. In countries such as Germany, such policies can be implemented immediately and without any problems with specific rules. It is a fact that Germany lives notoriously below its means. The "savings" that are being realized will fall back on future generations, which will have to deal with the economic failures, the lack of investment and the lack of functional infrastructure. This is as unreasonable as it is irresponsible. Nowadays, in the euro crisis countries not even existing EU funds are always being fully used, as blind austerity may prevent the required co-financing. This is unreasonable to the point of being criminal. Do the EU / EMU impose their rules with the ultimate aim of self-destruction?

What is available in today's EU budget is insufficient. Financing the necessary normalization of public policy and implementing stimulus policies require new creative solutions. The so-called "Juncker plan" (Juncker 2014) recognizes the problem and is certainly a step in the right direction. But it is not nearly good enough. The proposed new public funds are insufficient. The European Investment Bank could make an important contribution. Ultimately, however, new ground has to be broken.

Let us discuss the goal and the means of the new strategy. There is no way around it: the economic policy of the EMU must ensure strong domestic demand growth in the EMU as a whole. This is especially important for the surplus countries. This must be accompanied by increases in unit labour costs and a rate of inflation that is significantly above today's two percent target. Internal adjustment can only work if the *surplus* countries thoroughly change their policies.

The internal devaluation of the crisis countries requires the active internal revaluation of the surplus countries. This is the basic requirement. Investment in the crisis countries needs to rise - not fall – in order to support supply-side adjustments and productivity development. The euro crisis countries have to grow while adjusting and increasing employment. This is so for many reasons which are all obvious. One reason is that otherwise young and productive workers will continue to move to Germany and help there to undermine the necessary wage increases.

How can this be accomplished best? One thing is certain: monetary policy alone is insufficient. Today, the ECB finally implements the correct monetary measures necessary for economic recovery. Its funding conditions are not as expansive as it may seem at first glance. At least, they are now adequate to address the desolate economic situation appropriately and today more is probably hardly possible. The ECB should continue its accommodative monetary policy and extend its QE program through March 2017. This is a basic prerequisite. Otherwise a real recovery cannot take place.

It is absolutely essential that the ECB does not regress into its old obsession. It has to be prevented at all cost that the Bank recklessly stifles economic recovery because of its unwarranted fears of inflation. The risk of inflation is imaginary at this point. The acute risk is deflation. If we manage to turn the European economy around, it will, at some point, be necessary for countries to exceed the ECB inflation target. Any mistakes will, once again, unfairly increase the burden of the debtors and, in doing so, damage the general welfare of the populations of the crisis countries in particular and the EMU as a whole in general. In the long term, the ECB needs to be redesigned, according to the model of the American Federal Reserve. As a goal of macroeconomic policy, full employment has to be on an equal footing with price stability.

What is urgently needed today are not some further interest rate cuts by a few basis points, but a constructive contribution of fiscal policy and, especially, the return to normalcy in public investment (IMF 2014; Abiad *et al.* 2015). This, as said, requires creativity in policy design. An appropriate expansionary fiscal policy can be achieved if we exclude public investment from the existing rules and allow the member countries to go into additional debt in order to finance national investment programs. This is a viable solution as long as the ECB continues its QE program to ensure a union-wide appropriate monetary policy stance.

There is, however, a much better solution, which takes its cue from the US situation. It can also be made to work in the EMU. It is possible to finance public investment through the establishment of a "Euro Treasury" (Bibow 2013, 2015b). If this would happen, a fiscal union would complement the monetary union in the EU.

There would be no "transfer union" on the basis of the GDP share of the EMU member countries (or the capital key of the ECB). Instead, every year, the Euro Treasury would sell bounds, for example, to the amount of, say, 3 percent of EU GDP. The proceeds would be used as investments in the member states. Public investment would be jointly monitored and jointly financed, but the specific programs would be implemented by the member states. The Euro Treas-

ury would also use taxes in the EMU member states to cover the interest payments of the total debt. This would, again, happen on the basis of the share of the GDP of each of the countries. These policies would, in the longer term, even out the severe regional imbalances that exist between the surplus and the debtor countries and which threaten to destroy the euro zone.

The alternative of a Euro Treasury has important advantages over the current model. Member States would remain bound to the rules concerning the budgets, but investment would be excluded from these rules. Such policy would allow the EMU member states to reduce their national public debt to low level. The funds for investment, on the other hand, would be a central and common debt to the whole of the EU and would be backed up by the ECB. The ECB would, of course, be permitted to intervene with monetary policy (contrary to the position of the German constitutional court and the European court of justice). In doing so, the ECB would become a European "Federal Reserve." This functional model has been in existence for about hundred years in the US.

The main conclusion is that there is simply no alternative to a fundamental change in economic policy. Those who argue that there is no alternative to the current economic policy say, in reality, that we need to adapt to the management of the demise of the EMU. We believe that we have outlined a rational and fully implementable alternative. Our alternative can ensure the survival of the euro and lead to satisfactory economic development.

Summary and Concluding Remarks

The euro zone crisis remains unresolved eight years after the outbreak of the financial crisis. The crisis has been felt to a lesser degree in Germany and Austria. The euro crisis countries, on the other hand, suffer mass unemployment and today in some of these countries per capita income and consumption lie far below pre-crisis levels. There is no indication of any rapid or sustainable improvement. The current "recovery" remains weak, fragile and unbalanced. Political and social instability have grown rapidly in almost all euro member countries. There is the latent risk of escalation associated with the collapse of the monetary union.

Without any doubt, the architecture of the euro zone is fallacious. Economic policies to combat the euro zone crisis have been a complete failure. The monetary union was not institutionally prepared to prevent crises and it was even less prepared to fight them effectively. Deficits and imbalances were not the only problems of the euro zone. Economic policy strangled domestic demand, inspired as it was and is by neo-liberalism and mainstream economic theory. The undeniable basic fact is that the so-called successes of this economic policy do not exist. In particular, Germany cannot serve as a model for the EMU to emulate. Its current, apparent, success is based on nothing else than the ruin of its euro partners.

The ultimate cause of the euro crisis is the policy of wage moderation in Germany since the mid-1990s. This policy has weakened German domestic demand considerably. Germany's competitive position improved, modestly at first and massively later on. What Germany did was against the rules of the monetary union. It effectively succeeded to undercut its partners, both in terms of wages and in terms of prices. As a result, internal trade and current account imbalances increased. In the deficit countries, the debt of the private sector increased rapidly. These countries accumulated massive foreign debts in a relatively short period of time. Germany, on the hand other, balanced its public balance and piled up foreign assets. German businesses and the

wealthy have greatly profited from the result: both profits and property income rose significantly. The banks also made a lot of money: they financed housing bubbles in the periphery of the euro zone, while, in Germany, they indulged into the unimpeded risks of refinancing price bubbles abroad via the money and capital markets.

The result of such uneven development was perfectly predictable. The only remaining questions concerned the exact timing and the concrete manifestations of the disaster, not that there would be one. Institutionally speaking, the monetary union was not prepared to deal with any of this – global financial crisis, German wage moderation and the creation of major imbalances. The economic policy-makers lacked intellectual vigilance. When the crisis broke out, for a brief moment, EU policy-makers moved in the right direction. They actively tried to counteract the fall in demand. But once the impact of the banking crisis and the recession on government budgets became clear, policy-makers quickly fell back onto their old thinking patterns and ideological inclinations. The core of the dominant neoliberal economic philosophy is to roll back the state and depress wages. The sovereign debt crisis "forced" governments into austerity. The diagnosed loss of competitiveness of the crisis countries made wage reduction policies the order of the day. The cocktail of austerity and wage cuts promised to heal and overcome the euro crisis, at least if one believes in the fairy tales of mainstream economic theory and has no problem in serving the interests of capital to the detriment of everybody else. Logically speaking, however, an economic policy that stubbornly and unwaveringly focuses on two prongs only, the consolidation of public finances on the one hand and the restoration or improvement of competitiveness, in particular by putting severe pressure on wages in the crisis countries on the other hand, can, at the end, only generate deflation and mass unemployment.

Insofar as the economic policies of the euro monetary union were not solely driven by ideology, but that they were also informed by mainstream economic theory, it is clear that policy-makers have been systematically badly advised. Today, mainstream economists admit that their estimations of the fiscal mul-

tipliers have been incorrect and that the slump in domestic demand and employment has been underestimated accordingly. There is no doubt that incorrect estimates have been made and they have played a role. If a large economy such the EMU/EU goes down the path of unconditional austerity, then multiplier estimates for the USA are the correct and relevant point of reference, not those that refer to small and open economies. It was assumed that restrictive fiscal policy would be highly efficient in dealing with the acute banking crisis in the euro zone and with the macroeconomic imbalances. To invoke the concept of the negative multipliers in the discussion at all, corresponds to the action of surgeon who is trying to cure a brain tumor by performing an appendectomy. Any such surgeon would never be taken serious again and would lose his or her license.

The incorrect calculations of the fiscal multipliers have yet a more specific cause, which relates to a central tenet of mainstream economic theory. Mainstream economists refuse to see any conceptual difference between the labour market and any other market. Like all markets, the labour market is being ruled by the microeconomic law of supply and demand. Unemployment is nothing more or else than the positive proof that wages are too high. Hence, in order to combat unemployment, it is necessary to reduce wages. Applying this dogma to the internal adjustment problems in the euro zone, wage reductions should mitigate the negative effects of austerity on employment. According to this doctrine and even if one believes in the existence of positive fiscal multipliers and therefore in the negative effects of austerity on employment, wages should still be cut, because they increase employment and help to limit the damage that is being caused by austerity. Accordingly, many structural reforms that deal with labour market flexibility have been written into the adjustment programs in order to accelerate these supposedly benevolent adjustment mechanisms. The thinking has been – and unfortunately still is – that policies designed to cut wages will serve the necessary goal of restoring competitiveness, *i.e.* internal devaluation. In short, the combination of austerity and wage cuts policy should allow the euro crisis countries to quickly and relatively painlessly restore both an internal and an external balance.

These fundamental misconceptions of mainstream economic theorists have led the strategists of the Troika to produce enormous blunders. A general reduction in wages is associated with high risks in the development of domestic demand. It is true that such risks can be compensated by trade in very small and very open economies and only under global favorable conditions – not a position of any of the crisis countries (with the relative exception of Ireland of which the economic development is unique in the EU) or the EU as a whole.

We have argued in this study that a general reduction in wages is comparable with a tax increase on labor income and that therefore one must reckon with the corresponding negative macroeconomic consequences of such policy. In concrete terms: wage cuts – just as tax increases – lead to a series of negative effects on consumer demand and employment. If governmental austerity and wage reduction policy are being implemented in tandem, wage reduction does not remediate the effect of austerity. Instead, austerity and wage reduction generate a synergetic effect that is more negative than each of its parts. Wage reduction does not lead to an increase in employment. Only mutually reinforcing negative effects on domestic demand and employment are to be expected. And if this adjustment strategy is taking place, as was the case for the euro crisis countries, in an overall deflationary economic environment, the subsequent deterioration in the position of both banks and borrowers will create additional burdens and problems.

The empirical analysis of this study has investigated the relationships between employment, the compensation of employees and consumption. Not even in the supposed "success stories", the small Ireland or the tiny Latvia, it is possible to show that falling wages led to gains in employment. As might be expected – and this validates our hypothesis – wage cuts lead to a fall in consumption, domestic demand and employment. In none of the euro crisis countries, these effects have been offset fast enough by growing foreign trade.

The empirical analysis has therefore confirmed that the combination of austerity and wage cuts has caused the significant downturn of the euro crisis countries. The dynamics of this crash are easy to understand from the alter-

native theoretical view that we have presented in this study. All of what we said remains outside dominant economic doctrine. The admission by the mainstream that it "underestimated" the fiscal multipliers is just not good enough. Not only miscalculation is the issue here. The problem is that the theory is conceptually wrong. The labour market theory of the mainstream is a case in point.

This study provides an alternative explanation for the disastrous consequences of the economic policies of the euro zone. This economic policy has undoubtedly failed and must be urgently reversed. The ECB must continue its current monetary policy until further notice. But this alone will not be sufficient to bring about a strong economic recovery. The temporary suspension of further austerity measures in the euro zone is nothing more than damage control. It is not constructive economic policy.

We recommend a fundamental and lasting turnaround in economic policy. It is, basically, nothing more than a return to normalcy. A return to normalcy means, on the one hand, at the macroeconomic level, that workers gain fully from the increases in productivity – wage increases need to follow national productivity growth plus the inflation target of the ECB. On the other hand, it means the implementation of fiscal stimulus programs in the member states. These programs need to lead to massive public investment in infrastructure. The reorganization of a functioning administrative apparatus is also essential. The neoliberal strategy to starve the state and permanently depress wages, create job insecurity and attack social security must be abandoned and destroyed. In the deepest crisis of the capitalist market economies since the Second World War, neoliberalism has led to a complete dead end.

Important economic actors should therefore fundamentally review their positions and policies. The European Commission has to return to its original and common mission. It must demand the symmetry of adjustment policies. The essence lies in the orientation of wage developments in the common stability standard of the ECB. The ECB must not forget the lessons of the crisis and now has to maintain the present course to enable and promote growth. Fiscal

policy must leave the blind obsession with unconditional savings behind and promote concrete expansionary policies. The "Euro-Treasury Plan" provides an elegant blueprint for change that is absolutely necessary. Europe cannot return to growth without dismantling German mercantilism.

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