# Macroeconomic imbalances and institutional reforms in EMU<sup>1</sup>

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#### **Abstract**

The paper summarises the channels and mechanisms which led to the emergence of macroeconomic imbalances in EMU before, in and after the crisis of 2008/09. It focuses on the role of the specific institutional setting of EMU in these developments and outlines the key reforms which are necessary to eliminate the imbalances and prevent them from re-emerging.

Keywords: EMU, macroeconomic imbalances, European economic policy

JEL Codes: E02, E52, E62, F32, F33, F42

### 1 Introduction

Macroeconomic imbalances<sup>3</sup> are at the heart of the crisis in the European Monetary Union (EMU). Before 2008/09, EMU member states embarked on different growth paths: Germany and other countries in the "North" featured strong exports and weak domestic demand, and consequently accumulated large current account surpluses. By contrast, the economies in the "South" were characterized by weaker

<sup>&</sup>lt;sup>1</sup> I would like to thank Kurt Bayer for valuable comments. All remaining mistakes are mine. The research leading to these results has received funding from the European Community's Seventh Framework Programme FP7/2007-2013 under grant agreement n° 290647.

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<sup>&</sup>lt;sup>3</sup> This paper mostly deals with "external" or "current account imbalances". Changes in the latter however cannot be separated from domestic developments, which are sometimes subsumed under the term "internal imbalances". Because of that, I generally use the broader term "macroeconomic imbalances".

<sup>&</sup>lt;sup>4</sup> Throughout the paper, I use the labels "North" and "South" as well as "Northern" and "Southern" Europe as synonyms for current-account surplus and deficit countries, regardless of their geographical position. See Ederer and Reschenhofer (2013) for further discussion.

exports and a boom in domestic demand, and built up high external deficits.<sup>5</sup> These developments were not sustainable and made EMU highly vulnerable during the financial and economic crisis. They are also a major cause for the subsequent sluggish and uneven recovery, as well as for the crisis of public finances and the financial sector in many Southern European economies.

Major factors behind these developments were the institutional flaws of EMU. First, it is not an optimal currency union (OCA). With monetary policy centralized and fiscal policy restricted by a series of regulations, labour markets are the only remaining mechanism for adjustments after asymmetric shocks. Upward and downward wage and price flexibility are however not high enough, and labour migration within EMU is rather limited. Second, the institutional framework of EMU supported the boom and bust cycles which lead to the emergence of macroeconomic imbalances and the current crisis. The divergence in wages and prices entailed substantial differences in the real interest rate. High-growth and high-inflation countries had low real interest rates which stimulated domestic demand and amplified the boom. Strong domestic demand led to expanding imports and consequently to the emergence of current account deficits. By contrast, real interest rates in lowgrowth and low-inflation countries restricted domestic demand. This supported the emergence of current account surpluses. In theory, the so-called "real interest channel" should have been less effective than the counteracting "competitiveness channel". Before the crisis however, the situation was quite the opposite. The common monetary policy which was supposed to stabilise the business cycles had no remedy against these developments. Furthermore, due to fundamental changes in the risk perception of financial investors ahead of the establishment of EMU, nominal interest rates had converged and did not counteract the effect of the real interest channel.

The common currency and the integration of EMU's financial markets supported these (symmetric) developments. Domestic demand booms and current account deficits were financed by large capital flows stemming from current account surplus countries. Banks intermediated the credit expansion of domestic households and firms by running up large stocks of debt abroad. This made current account deficit countries highly vulnerable to "sudden stops" of capital flows when the financial crisis began and caused a sharp decline in domestic demand. The legacy of high stocks of financial debt impeded a recovery when the global crisis ended. Households and firms tried to reduce their debt burdens by restraining their

<sup>&</sup>lt;sup>5</sup> Trade deficits of catching-up countries are not necessarily harmful if they come along with high growth rates that permit those countries to equilibrate their external position in the future. Such trade deficits would not be named "imbalances". The developments in the South however where mostly not the result of a catching-up process, but stemmed from unsustainable consumption and construction booms. See Ederer and Reschenhofer (2013).

expenditures and consequently deflated demand, which aggravated the economic crisis even more. The countries suffered from a "balance sheet recession". Furthermore, the lasting boom in domestic demand before the crisis induced structural changes on the production side of the economy. The closed, domestic-oriented sectors, such as construction and services grew relatively to the open, trade-oriented sectors. Because booming demand in these sectors was unsustainable and is unlikely to return in the near future, these structural shifts need now be reversed, at least partially. Such adjustment processes however take time and are never easy for firms and employees alike.

The paper provides a summary of these developments and derives some conclusions with regard to economic policy in order to prevent macroeconomic imbalances from (newly) arising and to reduce the existing ones. It builds on the findings of Ederer and Reschenhofer (2013, 2014a, 2014b) and Ederer and Weingärtner (2013). The first section summarises the mechanisms which led to the emergence of macroeconomic imbalances. The next section highlights the role of the economic governance structure of EMU in these developments. The fourth section is about policy reforms to overcome those imbalances and make EMU more stable in the future. The last section summarises and concludes.

#### 2 Macroeconomic imbalances

# 2.1 The built-up of imbalances before 2008/09

Before the crisis of 2008/09, the EMU member states developed substantial macro-economic imbalances. Germany and other Northern European countries built up large current account surpluses whereas the Southern European countries accumulated substantial external deficits. These imbalances were the result of different growth paths: The surplus countries featured strong export growth but weak domestic demand. The deficit countries in general were hallmarked by weaker exports and a boom in domestic demand (Ederer and Reschenhofer, 2013).

At the root of these developments were huge differences in wage and price inflation within EMU. This divergence had various effects ("channels"): First, changes in relative prices determine the price competitiveness of a certain country vis-à-vis its trading partners. A higher inflation rate than in other countries reduces competitiveness and consequently leads to a deteriorating trade balance ("competitiveness channel"). If this was the only mechanism at work, it would automatically counterbalance divergent developments. Faster growing countries with higher inflation rates would lose competitiveness, which in turn weakens economic growth. On the opposite, slower growing economies with lower inflation rates would gain competitiveness and would consequently be stimulated.

There are however two more channels present, which potentially limit the effectiveness of the competitiveness channel. One is the so-called "real interest channel"

(European Commission, 2006, 2009): Higher inflation rates reduce real interest rates and therefore stimulate credit-driven domestic consumption and investment. This leads to an even higher economic activity, which in turn induces higher wage and price inflation. The economic boom is reinforced. Furthermore, different productivity, wage and price developments in EMU may result in divergent patterns in the wage share. A higher economic activity typically strengthens the power of labour unions and raises the wage share. A rising wage share usually stimulates consumption more than it reduces investment, thus stronger economic activity will be the result. Consequently, a rising wage share would deteriorate trade balances ("income distribution channel").

In the North, and particularly in Germany, unit labour costs almost stagnated before the crisis. Productivity growth was on average only marginally higher than in the South. Wages however increased markedly slower than in the rest of EMU. This led to a substantial gain in relative competitiveness in the North vis-à-vis the other EMU countries, and vice versa in the South. Germany and others however benefited not only from competitiveness shifts within EMU, they furthermore increased their competitiveness with respect to countries outside EMU. Because of the higher inflation rates in the South, the exchange rate of the Euro vis-à-vis other currencies was lower in the North than it would have been in the case of country-specific currencies. Contrarily, the euro was potentially overvalued in the Southern European countries, due to low inflation in the North.

The price divergence led to high differences in real interest rates within EMU. In the high-inflation countries in the South, real interest rates were much lower than in the North. Furthermore, differences in unit labour costs were even larger than in prices, which caused the wage share in the North to fall substantially more than in the South. All three channels consequently contributed to the emergence of macroeconomic imbalances in EMU (Ederer and Reschenhofer, 2013).

The surpluses of the North corresponded to some extent (but not entirely) with the deficits in the South. In the North, both exports into EMU and the rest of the world increased strongly (Ederer and Reschenhofer, 2014a). Exports of the South evolved less favourably, particularly into EMU. Imports of the North however more or less stagnated, both from EMU and the rest of the world. In the South, and particularly in Spain, imports increased, both from EMU and from outside. Thus, the North benefited from strong demand in the South and an ever better competitiveness position both within EMU and vis-à-vis the rest of the world. In the South, demand from the North contributed almost nothing to their export performance. A deteriorating competitiveness dampened exports, particularly within EMU.

Interestingly, the North thrived not so much because its firms positioned themselves better within global value chains, but because global final demand for their products (or products to which they contributed a certain value added) increased.

This effect was particularly strong vis-à-vis EMU. The North seemed to be in a good position inside the global value chains already before the establishment of EMU. Nevertheless, they also improved their position in the global value chain to meet extra-EMU demand. The Southern European countries did not benefit from rising foreign demand, both from EMU and the rest of the world. Some of the countries (Greece, Portugal, and Spain) seemed to have repositioned themselves better within global value chains. France and Italy on the contrary lost some of their share in the production of demanded goods.

Furthermore, in Greece and Portugal current account deficits have persisted for a long time and can therefore (at least partly) be considered as "structural" in the sense that they would not be eliminated entirely if domestic demand in EMU was more balanced across the member countries. Nevertheless, the lack of an industrial sector is possibly the consequence of the aforementioned price divergences in EMU. The continuous loss in competitiveness in Southern Europe discouraged investment in innovative technologies and the establishment of new firms. Furthermore, existing firms could not keep up with their competitors in other EMU countries and outside the monetary union, and closed down.

This is strongly supported by a look into the developments on the supply side (Ederer and Reschenhofer, 2014b). In the North the share of the manufacturing sector, and of the export-oriented industries in particular increased (relative to the EU average), whereas in Western and Southern Europe it decreased. These developments were again related to unit labour cost developments. When we look into the developments of unit labour costs and their underlying variables at the industry level, we find that productivity growth in manufacturing and its export-oriented industries was higher in the North than everywhere else. Wages on the other hand grew slowest in the North and fastest in the South. Unit labour costs therefore decreased in the former and increased in the latter. Changes in aggregate productivity and in unit labour costs of the total economy were almost entirely determined by their respective changes within sectors and industries. The structural change which we observed – the shifts of the value added share between sectors and industries – contributed only marginally to these developments.

We also find that the increase in the relative value added share of the manufacturing sector corresponds to a decrease in relative unit labour costs in the North, and vice versa in the South (Ederer and Reschenhofer, 2014b). A similar pattern can be found at the industry level. An increase in the relative value added share of exportoriented industries correlates with a decrease in relative unit labour costs in the North. In the rest of EMU, the opposite patterns can be observed. The results of the econometric analysis confirm these findings. We find a statistically significant negative impact of changes in relative unit labour costs on the changes in the value added share of a certain industry in a country relative to the EU average. Furthermore, there is a clear difference between the effects for domestic-oriented and

export-oriented industries. The latter are much more exposed to international competition, so that price competitiveness is more important than in the former. Our results thus strongly support the hypothesis that structural change was to some extent determined by the divergence of labour costs in EMU.

#### 2.2 Developments in and after the crisis

The financial and economic crisis in 2007/08 brought an abrupt end to these developments. Particularly those countries where current account imbalances were accompanied by credit-driven construction and/or consumption booms were hit hardest. Between 2007 and 2009, when the global crisis was at its worst, GDP declined in almost all EMU countries. Due to the global dimension of the crisis, exports declined everywhere and had a major impact on aggregate demand. In the South however domestic demand and imports declined much more than in the rest of EMU (Ederer and Reschenhofer, 2013).

This pattern was mostly a consequence of the macroeconomic imbalances which had built up before the crisis. In most of the South, domestic demand had been the driver of the economic boom, primarily fuelled by increases in the amount of private domestic credit which in turn was financed by the current account surplus countries. The financial and economic crisis led to a "sudden stop" in international credit flows as investors lost confidence and induced a reduction of the amount of credit to private households and firms by domestic banks (Lane, 2013). Without the possibility to refinance their expenditures, domestic demand collapsed.

The financial and economic crisis seemed over in 2009. In the majority of EMU countries the economy restarted to grow. The legacy of the developments before the crisis in general and the macroeconomic imbalances in particular (and the misguided crisis policies in the South) however led once more to divergent development patterns. The North recovered quickly from 2009 onwards, and reached its precrisis level in 2012. Recovery in general was mainly due to resuming export growth, in particular to the countries outside EMU. In the South however, GDP continued to shrink or stagnated, and remained well below its pre-crisis level.

The legacy of high stocks of financial debt impeded a recovery (or worsened the crisis) in the South when the global economy started to pick up speed again. Falling asset prices, a deteriorating economic climate and drying-up financial flows from abroad made refinancing for banks more difficult and led to a cancellation of credit contracts. This in turn provoked bankruptcies and asset prices to fall further, as all sectors tried to pay back their debt ("deleveraging") by selling assets. Households and firms tried to reduce their debt burdens by restraining their expenditures and consequently deflated demand, which aggravated the economic crisis even more. In almost all EMU countries, the balance of financial flows of the non-financial corpo-

rate sector turned from a deficit into a surplus.<sup>6</sup> The exceptions were France, Italy, and Portugal, where it remained in deficit. In those countries where the household sector had exhibited a deficit in the financial flows' balance before the crisis, it turned into a surplus or showed at least a significant improvement afterward. Private sector credit flows decreased in all EU Member States after the crisis, and turned even negative in Greece and Spain. These patterns provide evidence that many EMU countries suffered (and still suffer) from a balance sheet recession (Koo, 2009).

The long-lasting boom in domestic demand before the crisis had induced structural changes on the production side of the economy. The closed, domestic-oriented sectors, such as construction and services had expanded relatively to open, trade-oriented sectors. Because these developments were unsustainable and domestic demand is unlikely to return in the near future, these structural shifts need now be reversed, at least partly. Such adjustment processes however take time and are never easy for firms and employees alike. Current account surplus countries however face a similar albeit much less drastic need for readjustment. They had sold a large amount of their products to the booming deficit countries. Production and employment consequently had shifted to the open, trade-oriented sectors such as manufacturing. As exports in surplus countries were at least partly the mirror image of domestic demand in deficit countries, the former also face a need to adjust and shift production and employment to more domestic-oriented sectors.

## 3 The role of EMU's economic policy architecture

The (flawed) institutional setting of EMU contributed substantially to the emergence of macroeconomic imbalances and the subsequent crisis. First, EMU is not an optimal currency union (OCA). According to OCA theory, a monetary union is considered to be optimal if the participating countries are rather homogeneous in their economic structure and hence react similarly to shocks (this property is called "symmetry"), and if wages and prices are flexible and labour mobility is high ("flexibility", Mundell, 1961). In that case, asymmetric shocks are infrequent and, in the event, the economies smoothly adapt to such shocks. When EMU was founded, monetary integration was expected to lead to a steady convergence among member states. This however was overly optimistic: Although the poorer member states enjoyed above-average economic growth before the crisis and their income levels partly caught up towards the richer countries, a good deal of these develop-

<sup>&</sup>lt;sup>6</sup> In those countries which had a surplus in the balance of financial flows of the non-financial corporate sector already before the crisis, this surplus increased afterwards.

<sup>&</sup>lt;sup>7</sup> The literature lists several other criteria for optimal currency areas, such as product diversification, financial market integration, degree of openness etc. See e.g. Breuss (2011), Handler (2013) for an overview.

<sup>&</sup>lt;sup>8</sup> This is usually referred to as "endogenous OCA theory".

ments was driven by debt-financed demand rather than by increases in productivity (Aiginger et al., 2012; Bertola, 2013; Ederer and Reschenhofer, 2013). National differences persist with regard to economic and fiscal policies as well as product, financial and labour markets, which are a potential source of asymmetries. Furthermore, (upward and downward) wage and price flexibility are low, and labour migration within EMU is limited.

The OCA theory focuses on the adjustment mechanisms after (asymmetric) exogenous shocks. However, this is only one part of the story. The present set-up of EMU gives rise to a number of endogenous forces by which the asymmetry of business cycles is reinforced and instability enhanced (de Grauwe, 2013). The divergence of wages and prices entailed significant differences in the real interest rate. High-growth and high-inflation countries had low real interest rates which stimulated domestic demand and amplified the boom. Strong domestic demand led to expanding imports and consequently to the emergence of current account deficits. By contrast, real interest rates in low-growth and low-inflation countries restricted domestic demand. This supported the emergence of current account surpluses. In some countries, the "real interest channel" was more effective than the "competitiveness channel" (section 2).

Likewise, the consequences of financial market integration have been underestimated (Kuenzel and Ruscher, 2013). The strong increase in cross-border capital flows and of financial assets worked towards destabilising EMU. Before the crisis, the risk perception of financial investors changed fundamentally and nominal interest rates on longer-term assets converged. Domestic demand booms and current account deficits were financed by large capital flows coming from current account surplus countries. Banks inter-mediated the credit expansion of domestic households and firms by running up large stocks of debt abroad. This made current account deficit countries highly vulnerable to "sudden stops" of capital flows when the financial crisis began and caused a sharp decline in domestic demand.

The legacy of high stocks of financial debt impeded a recovery when the global crisis ended. Households and firms tried to reduce their debt burdens by restraining their expenditures and consequently deflated demand, which aggravated the economic crisis even more. The countries suffered from a balance sheet recession. In such a situation public expenditures are the only remaining source of demand. The fiscal rules which had been established in the Maastricht Treaty however limited public expenditures, in particular in those countries which had been affected most severely. Instead of relaxing the rules in times of the crisis, they were reinforced by introducing new, even stricter rules. Fiscal policy consequently acted pro-cyclically. Consolidation measures which were put into effect in a parallel undertaking in all EU Member States depressed demand and drove the economies (further) into recession.

Furthermore, sovereign debt is issued in a currency over which national governments have no control (de Grauwe, 2012). Unlike single states, EMU member states

do not have a lender of last resort. Given its mandate and the conception of its own role, the ECB was not in the position to guarantee the redemption of maturing government debt. If confidence in a country's public finances is undermined, a rising number of financial investors will be induced to sell that government's bonds, thereby driving up the interest rate. As a result, the likelihood of the country being able to pay back maturing debt diminishes. This in turn will undermine investor confidence in the country's ability to meet its financial obligations, triggering a self-reinforcing liquidity crisis. At the same time, capital will flow from the crisis-ridden periphery countries to stable Northern Europe where interest rates will decline and demand be strengthened, thereby amplifying asymmetric shocks. Moreover, the rise in refinancing cost may lead to the burden of public debt becoming unsustainable, with the liquidity crisis turning into a solvency crisis.

The framework for economic and fiscal policy of EMU put particular pressure on the deficit countries. At the time of the crisis, no rules or institutions to safeguard systemic banking crises or illiquid sovereign debt markets in the monetary union were established. Countries were pressed to bailout their banking sector (Greece, Ireland), and received financial support in the case of refinancing difficulties only after committing to drastic spending cuts in the public sector (Greece, Ireland, Portugal, Spain, Cyprus). This aggravated the economic crisis even more and forced several countries into a recession. Automatic stabilisers in the deficit countries were in fact "turned off".

A further aggravating factor was the close connection between the national authorities and the domestic banks. The slump in government bond prices diminished banks' fixed assets and thus their equity capital. As a consequence, the governments were again called to support the banks. The financial situation of public authorities and banks is therefore closely tied to each other. Further adding to the feedback loop described above were the repercussions of fiscal policy on aggregate demand. If the government reacts to the loss of confidence on the part of investors by cutting spending drastically, economic activity will be dampened (or an ongoing recession be deepened), adversely affecting public finances and requiring further fiscal restraint.

These mechanisms complicate adjustments to asymmetric shocks since they exacerbate the underlying asymmetries. In the case of temporary shocks, no lasting adjustment would be necessary as their impact may theoretically be accommodated by automatic stabilisers. This is however only possible in the case that financial market confidence is maintained during the critical phase and stabilisers are allowed to operate. In the case of permanent shocks, automatic stabilisers are no substitute for the necessary adjustments. Nevertheless, they may grant the economies more time for their implementation.

#### 4 Institutional reforms

The institutional deficiencies of EMU, which we summarised in the previous section, need to be eliminated in order to stabilise the monetary union. Without a lender of last resort, a joint regulation and supervision of banks, a common fiscal policy and a co-ordinated economic policy, EMU is incomplete. Its member countries face a situation similar to developing countries which incur debt in a foreign currency, and are consequently prone to liquidity crises. Furthermore, without aligning unit labour costs, EMU is not stable in the long run and is in danger of breaking up. In principle, this can be achieved by the following, mutually reinforcing measures (Aiginger et al., 2012; de Grauwe, 2012; Ederer, 2010):

- The establishment of a comprehensive banking union, including a common bank supervision and an authority for the resolution of banks in the case of insolvency as well as a common European deposit insurance in order to sever the close ties between government budgets and domestic banks.
- The European Central Bank (ECB), by guaranteeing all government bonds issued in EMU countries to an unlimited extent, should become a lender of last resort. In this way, liquidity crises could be avoided before turning into solvency crises pushing an economy into a downward spiral of a loss of confidence, financing problems and a recession.
- Government budgets and public debt should (at least partly) be mutualised at EMU level. This reduces the risk of a looming loss of financial investor confidence and thus prevents a self-fulfilling crisis in individual countries. The danger of a break-up of EMU will thereby decrease. Such a move should be combined with the set-up of an intra-EMU transfer mechanism in order to smooth differentials between national business cycles.
- A coordinated wage setting process should be established to adjust unit labour cost differences in EMU.

During the crisis, a series of institutional reforms have been put into place. The main focus of these reforms was the establishment of a banking union as well as a strengthened and reinforced fiscal framework. The new rules and procedures, particularly the Stability and Growth Pact (SGP) and the Macroeconomic Imbalances Procedure (MIP), are embedded in the original architecture of EMU and breathe the same spirit. The SGP was reinforced by the "Six-Pack" and "Two-Pack", and was complemented by the Treaty on Stability, Coordination and Governance (TSCG). They all aim at implementing more stringent rules on public deficits and debt, and on stricter sanctions in the case of non-compliance. The MIP was constructed in a

<sup>&</sup>lt;sup>9</sup> For a more elaborated assessment of the existing governance framework and its re-forms, see Aiginger et al. (2012), Ederer and Weingärtner (2013), Sachs (2013), and Thillaye (2013a, 2013b).

similar manner and consists of a preventive and a corrective arm, which both foresee recommendations and sanctions for member states with "excessive imbalances". The decision whether a member state exhibits an excessive imbalance is based on a scoreboard of indicators and in-depth reviews of the countries' economic situation.<sup>10</sup>

These reforms however fail to support the elimination of the present macroeconomic imbalances and are even more unlikely to effectively prevent them from emerging again. The SGP has led to fiscal policy acting in an uncoordinated, procyclical manner, giving too much emphasis on austerity and neglecting economic and political stability. The MIP on the other hand implies that imbalances arise solely within a single country, and not between countries. As we have discussed, the emergence of macroeconomic imbalances were supported by EMU's framework and are a symmetric phenomenon. They cannot be remedied by one country alone.

This current rule-based approach, which neglects the interlinkages between member states, is threatening to destabilise EMU. The economic and social situation has deteriorated in many European countries, and the public support for the EU as an institution is waning. As opposed to the path taken hitherto, the EU needs a common, coordinated approach to economic policy, as outlined above. Adjustment in surplus and deficit countries needs to be symmetric and coordinated to prevent further centrifugal and destabilising developments in EMU.

The symmetric approach to solving macroeconomic imbalances is supported by the results of Ederer and Reschenhofer (2014a). Neither an increase in domestic demand in the North nor the decrease of it in the South alone can reduce the imbalances entirely. Domestic production still contributes the lion's share to a country's final demand. Consequently, the direct impact of a demand increase in the North on the South is limited. Likewise, demand would need to shrink dramatically to reduce trade deficits in the South and would have only a small impact on the surpluses of the South. A combination of these two strategies, in the style of a balanced growth scenario, would adjust trade surpluses and deficits to a certain extent. Nevertheless, the current account deficits in the South (in particular in Greece and Portugal) seem to have long-time roots and need to be corrected by policies which aim at improving the countries' positions within global value chains.

These changes could be brought about by the establishment of new firms and industries, as well as technological change. These processes usually take some time; the necessary changes will therefore happen over several years. Furthermore, new investments need support by good public infrastructure and other incentives (Aiginger, 2014). During the period of adjustment, deficit countries would need financial means to support their industrial sector so as to reposition themselves in

<sup>&</sup>lt;sup>10</sup> For detailed information about the MIP see European Commission (2012) and the Commission website (http://ec.europa.eu/economy\_finance/economic\_governance/macroeconomic\_imbalance\_procedure/index\_en.htm).

the value chains. Until then, monetary transfers from surplus to deficit countries would support these changes. These transfers would replace the capital exports from the North to the South which mainly financed consumption and construction booms before the crisis. An adequate organisational structure would need to channel monetary transfers and private capital exports into productive investments instead. Building on the existing EU framework (the European Investment Bank and the Structural and Cohesion Funds of the EU) would be the logical solution.

Nevertheless, the divergence of unit labour costs, which was at the root of the emergence of macroeconomic imbalances, needs to be corrected. The reduction of the large gaps in price competitiveness is a precondition for deficit countries to improve their positions within global value chains. Reducing the competitiveness gap between EMU countries would also lead to a better position vis-à-vis non-EMU countries, because the euro exchange rate would better reflect each country's relative price level. These adjustments would support the development of new industries and the establishment of new enterprises and thus the necessary structural change in these countries.

Ederer and Reschenhofer (2014b) find that the lack of a competitive export-oriented industrial sector in the South seems to be (at least partly) the result of the diverging unit labour costs.<sup>11</sup> The continuous deterioration of relative (cost) competitiveness in Southern Europe most likely discouraged investment in innovative technologies and the establishment of new firms. If diverging competitiveness in EMU is at the root of the weak performance of export-oriented manufacturing industries in Western and Southern Europe, structural policies alone to foster these would most likely not solve the problem. Unit labour cost adjustments would be necessary to support the establishment of such new industries.

Labour and social policies nevertheless are still under the responsibility of the member states. Wage setting in the EU can therefore only be coordinated through a mix of (non-binding) country guidelines as part of the country-specific recommendations of the European Semester on the one hand and transnational collective bargaining processes on the other.<sup>12</sup> The guidelines should thereby set the country specific productivity growth plus the inflation target of the ECB as a measure for wage increases. During a transitional phase in which the competitiveness gaps are reduced, the yearly targets for wage policy should be set (symmetrically) during the European Semester.

<sup>12</sup> See e.g. Thillaye et al. (2014).

<sup>&</sup>lt;sup>11</sup> Another important determinant is for instance whether the countries conduct an industrial policy aiming at the development of an export-oriented industrial sector. See Aiginger (2014).

#### 5 Conclusion

Eliminating the macroeconomic imbalances which arose before the financial and economic crisis of 2008/09 and preventing them from emerging again is an essential element of an improved economic governance structure for EMU. Macroeconomic imbalances were at the root of the crisis and have been preventing the economies from full recovery since then. This paper has summarised the channels and mechanisms which led to the emergence of macroeconomic imbalances. It has also highlighted the role of the flawed economic architecture of EMU in these developments.

The macroeconomic imbalances procedure (MIP) which was established in 2011 to target these developments is not adequate to eliminate these imbalances. It is not based on the understanding of these imbalances as a *symmetric* phenomenon, which can only be dealt with by a coordinated cross-national approach. The rule-based Stability and Growth pact (SGP) and its reinforcements likewise function pro-cyclically and therefore undermine the stability of EMU more than they enhance it. Other elements of EMU governance framework, e.g. the banking union, improve the stability of EMU's financial system, but are not sufficient to prevent the emergence of macroeconomic imbalances.

A comprehensive, symmetric governance framework which would eliminate the institutional flaws of EMU consists of the following elements: a (more) comprehensive banking union, an actively coordinated fiscal policy, a lender of last resort for government debt (the ECB), debt mutualisation among EMU member states (at least to a certain extent) and a coordinated wage policy. Politically, these reforms are difficult to establish. Nevertheless, the current framework is inadequate to solve the problems of macroeconomic imbalances which suppress economic growth in the euro area. Without implementing them, the future of EMU seems rather gloomy.

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