

Macro economic trade-offs in the euro area

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Chapter 4

MACROECONOMIC TRADE-OFFS IN THE EURO AREA

"For the euro area to gradually evolve towards a genuine Economic and Monetary Union, it will need to shift from a system of rules and guidelines for national economic policy-making to a system of further sovereignty sharing within common institutions, most of which already exist and can progressively fulfil this task. In practice, this would require Member States to accept increasingly joint decision-making on elements of their respective national budgets and economic policies."

Report of the Five Presidents

4.1. The imbalances question

The last year Report of the Five Presidents highlighted the necessity of progress in the EU in four directions: achieving "a genuine Economic Union, (…) a Financial Union, (…) a Fiscal Union, (and) a Political Union". The associated roadmap for completing the EMU includes a greater focus on employment, a better implementation of the Macroeconomic Imbalance Procedure, a better assessment of fiscal stance and fiscal sustainability, the completion of the Banking Union and the launch of a Capital Markets Union. They thus pointed to a very large set of ambitions which renewed the debate about the consistency of existing 6-pack, 2-pack and Fiscal compact, which were mainly related to fiscal and competitiveness issues.

This roadmap raises an important question: is it possible within the given institutional setting to close the unemployment gap (the difference between actual and natural rates of unemployment), that is to say increase the "well-being of the peoples" (Art. 3 TEU) in a sustainable way, achieve public finance sustainability, reduce macro imbalances, and ensure the liquidity and solvency of financial institutions and other objectives at the same moment?

Achieving these different objectives is difficult because the needed adjustments may seem unattainable for economic and institutional reasons, and because of internal inconsistencies, *e.g.*:

- The reduction of external macro imbalances can be achieved by an improvement in competitiveness in deficit countries, which can be reached via wages cuts or low wage growth. These structural reforms, if they are exclusively related to the labour markets, are no panacea and may be unacceptable by populations who already suffer from high unemployment and reduced purchasing power. Moreover, they are in contradiction with the objective of a fairly distributed well-being and with closing the unemployment gap, since they slash demand and therefore activity in the short run. They may also weigh on inflation and feed deflation pressures in the euro area. Therefore, they are also inconsistent with the objective of price stability of the EMU, and with the achievement of fiscal sustainability: deflation increases the real value of debts and thus slow-downs the ability of countries to reduce their debt-to-GDP ratios. Alternative policies could be implemented for reducing external macro imbalances without harming other objectives: faster wage growth in surplus countries, investment in export capacity and lower energy dependency in deficit countries.
- Fiscal sustainability remains intrinsically related to fiscal austerity which weighs on price developments, public investment and on output; those outcomes finally weigh on fiscal sustainability as they increase the real value of debt or the debt-to-GDP ratios; moreover, low growth prospects do not help closing the unemployment gap.
- The asymmetry in the reduction of macro imbalances, as it stands out in the Macroeconomic Imbalance Procedure, has led to the generalization of current account surpluses all over euro area countries. In this context, the market mechanism that would reduce current account imbalances is a euro appreciation. Such an appreciation would be detrimental to the closure of the unemployment gap: it would indeed reduce exports, but then also economic growth in a euro area whose recovery remains fragile.
- As we show in Chapter 2.4, governance reforms are necessary to put well-being first and establish a framework to deal with economic trade-offs. Actual institutional design of the EMU and its use by MS does not result in enough coordination of economic policies to achieve targets like the SDGs or the ones of the Europe 2020 Strategy, since they do not take into account the above mentioned internal inconsistencies.

This chapter aims at quantifying and better understanding the sources of current account imbalances and high public debt levels.Reducing imbalances implies some medium-term trade-offs between growth (in the sense of material well-being and employment), inflation, fiscal balance and current account balance. This chapter highlights these trade-offs against the backdrop that the euro area will be forced into an equilibrium of low growth and low inflation that will make it more painful to reduce external and public disequilibria. It demonstrates the difficulty of simultaneously reducing all imbalances, all the more that deflation and euro appreciation risks increase the cost of the reduction of imbalances. Besides, such reduction needs higher MS economic policies coordination, to avoid asymmetric adjustments that would be more painful, as we have warned in chapter 3 of the iAGS 2016 Report.

Regarding the difficulty of achieving these different targets, and to make the adjustment easier, we must consider some new economic policies. First, given a better coordination of economic policies between MS, relaxing the inflation target beyond recommended symmetric adjustments in countries with high current account surplus would open new fiscal space for MS without impinging on ECB's price stability objective. Second, relaxing fiscal rules especially to finance public investment within the objective of fiscal stability (see also Chapter 3.2) would also give new fiscal space. When public investment is efficiently managed, then, one can expect a positive impact on potential growth. That means that a permanent increase in public investment, with a long lifespan of the investment, would increase public capital, potential growth and net public assets.

4.2. Identifying current account imbalances and nominal adjustment needs

Current account imbalances are at the heart of the euro area crisis that begun in 2009. Those imbalances are even seen by some as a threat to the very survival of the euro area (EA). What are we talking about exactly? What are the economic causes of these imbalances? Which policies could help with their unwinding?

The current account of a country is the sum of the trade balance (the balance of exports and imports, of goods as well as of services) and of the balance of income and transfers (wages, interests, dividends and gifts received by residents from abroad, minus those sent abroad by residents). It measures the capacity of a country to finance its economic activities domestically: if the current account

is negative, the country needs to import capital from abroad and therefore accumulates foreign debt; conversely, if the balance is positive, the country exports capital and becomes a foreign creditor.

When a country has a flexible exchange rate regime, the adjustment of the exchange rate is the principal equilibrium device that corrects imbalances. Concretely, if the current account deficit becomes so important that foreign capital stops financing it, the domestic currency depreciates; in turn, this depreciation stimulates exports and discourages imports, and the current account balance improves.[1] In practice, however, this equilibrating mechanism does not always work as in this textbook case. Exchange rates can move sharply for reasons other than fundamentals, and can drive economies away from equilibrium at least for certain periods before forcing a correction.

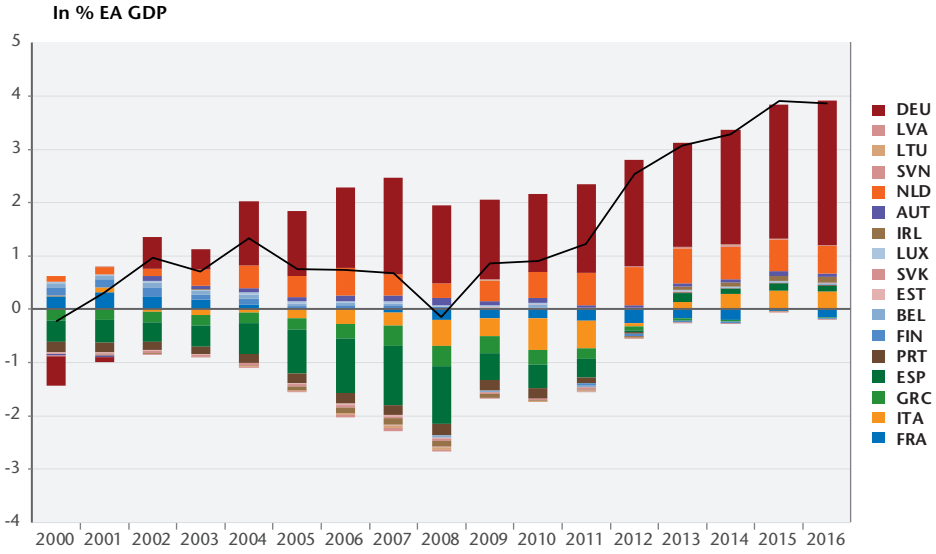
Within a monetary union like the euro area, this adjusting mechanism does not exist, by design. Large surpluses or deficits can appear without having a self-adjusting mechanism kicking in. The challenge is therefore to put in place other equilibrating mechanisms. Failing that, the cohesion of the monetary union may be threatened: this is precisely the point at which we have arrived today.

a) The dynamics of current accounts in the euro area

Figure 54 pictures the evolution of current accounts of euro area countries. Two periods can be clearly distinguished. The first one, which goes from 2001 to 2008, corresponds to the deepening of imbalances between countries that, for convenience, we term northern countries and southern ones. Germany, which was initially running a small deficit, gradually builds up a very large surplus; a similar move can be seen in the Netherlands and in Austria. On the contrary, deficits in Italy, Spain, Greece and Portugal increase very significantly. France, which was in surplus in 2001, gradually slides into deficit during this period, and can therefore be classified with southern countries according to this criterion.

1. More precisely, depreciation has two effects on the trade balance: a volume effect, and a price effect. The volume effect is positive because the depreciation discourages imports (which become more expensive) and stimulates exports (which become more competitive). But the price effect is negative because, at a given volume, the value of imports increases while the value of exports decreases, which harms the current account. The technical condition on the various elasticities which determines whether the volume effect dominates the price effect is called the Marshall-Lerner condition. For most countries, this condition is verified in the long run, but not in the short run, and this gives birth to the so-called "J-curve": the depreciation temporarily worsens the trade balance, before improving it permanently.

Figure 54. **Current accounts in the euro area**



Source: Economic Outlook 99, iAGS calculations.

Starting from 2009, deficits are brought down, to the point of almost disappearing in 2015, while overall surpluses tend to increase. The process of overall current account divergence has therefore been put to a halt but it has occurred in a one-sided way. At the same time, there is a clear break in the relation to the rest of the world: while the euro area as a whole had an almost balanced current account between 2001 and 2008, a surplus has started to build up since 2011, reaching a very high level in the last years. Meanwhile Germany's surpluses with the southern countries have come down substantially: the continued overall increase reflects trade outside the euro area.

To summarize, during the 2001-2008 period, the euro area deepened its internal imbalances while at the same time maintaining its external equilibrium. On the contrary, during the 2009-2015 period, it somewhat diminished its internal imbalances, but in a one-sided way and while building up an important external disequilibrium.

b) The role of current account balances in the euro area crisis

Are the deficits of the South the cause of the crisis of the euro area? Let us first recall that a current account in deficit is not necessarily the symptom of disequi-

librium. In the case of a country with a strong growth potential, which is in a process of catching up with more advanced countries, an external deficit can correspond to a healthy situation: external financing helps accelerating the development of the country and its catching up of the technological frontier. Since future growth will provide the basis for reimbursing the liabilities accumulated today, the deficit is only transitory, and there is no reason to worry. This is precisely the type of reasoning that was mainstream before the financial crisis and was used to justify the deficits of southern countries (Blanchard and Giavazzi, 2002).

But in reality, the undergoing process in the euro area was different from this optimistic scenario and rather corresponded to an unsustainable divergence dynamics. Incoming private capital flows in southern countries were not directed at sectors with strong productivity gains, but rather fueled housing bubbles and financed low-innovation sectors and consumption credit. Consequently, the current account deficits were not sustainable. An adjustment had become inevitable, and the world financial crisis of 2007-2008 triggered it.

To some extent, the crisis undergone by southern European countries looked like the phenomenon experienced by emerging countries in the 1980s and 1990s and which is generally labeled as "sudden stops": the incoming capital flows that were sustaining the current account deficit suddenly disappeared. Almost overnight, the improvement of the trade balance had become an urgent necessity, and the latter could only be obtained through an increase of exports or a decrease of imports. Moreover, the past current account deficits had led to an important accumulation of foreign debt, both private and public, which had become hard to service.

In order to face this situation, emerging countries generally implemented two policies: first, a currency depreciation, in order to improve their trade balance; second, a negotiated foreign debt restructuring, or even an outright default in some cases (the most famous one being Argentina in 2002).

However, the comparison between southern Europe and emerging countries stops here. The "sudden stop" was less dramatic in southern Europe: some private capital continued to flow in during the crisis, though at a higher interest rate, while the cross-country central bank funding (the so-called TARGET2 balances) compensated for the fall of private financing. Moreover, since the integrity of the euro area has been secured, depreciations have been ruled out. Debt defaults have been considered as a last resort option, even though a partial default eventually happened on Greece's debt. Other adjustment mechanisms have therefore been implemented in the euro area, mainly relying on

austerity policies and wage deflation, which was a drag on economic activity. Alternative policies—like structural investment in export capacities or alternative energy production allowing pulling down energy imports (especially important for the oil-dependent southern periphery) and therefore current account deficits—were not part of the adjustment process. Although their positive current account effect would have been slower, it would have been more sustainable and less detrimental to economic activity.

At first glance, the depressing policies have succeeded in correcting current account deficits. As it is visible in Figure 54, southern Europe countries all posted a current account surplus in 2015 (except Greece, which ran a small deficit of only 0.1% of GDP). Nevertheless, the situation is less positive than what a superficial look at current accounts may suggest, especially due to unsustainable high current account surpluses in some countries. Much remains to be done to correct imbalances, as we shall see below.

If deficit countries have been the subject of a lot of attention, one should not forget that some other countries, outstandingly Germany, run very large surpluses. Of course, deficits are worrying, because they can trigger financing crises, but surpluses are also a problem. The rationale is simple: the surplus of someone is necessarily the deficit of someone else. Northern Europe countries therefore cannot claim that they have no responsibility in the deficits of the South. And even if it is true that a significant part of the German surplus is today realized against countries that are outside the euro area, this still has negative consequences: the appreciating pressure that it engenders on the euro will end up worsening the competitiveness of southern countries and depreciating the assets that Germany has accumulated over non-EA countries. Furthermore, high current account surplus can be seen as import deficits, restraining export possibilities of the trading partners—which are foremost other EA countries. An exhaustive analysis of the euro area crisis must therefore also include an assessment of the evolutions within surplus countries. Developments outside the EA also matter, since they have an impact on the exchange rate of the euro, thereby affecting every single EA member. And last but not least, one has to remind the economic debate that trade surpluses are a loss of available resources within the surplus area in exchange to sometimes very uncertain promises of future repayment. In contrast to an often held misbelieve, trade surpluses are nothing similar to profits of a private enterprise but rather deliveries against future payment.

c) Nominal divergence and the role of wages

The debate on the causes of current account disequilibria in the euro area has been largely focused on wages: the mainstream view is that deficits in the South were caused by excessive wage increases there, which have harmed competitiveness and therefore trade balances. The austerity policies put a welcome end to these wrongdoings.

Even though there are some elements of truth in this explanation, it is far too simplistic, for at least four reasons: first, competitiveness is not the only factor explaining current accounts, and competitiveness itself is not reducible to wages; second, it neglects the fact that imports are as important as exports to explain the current account. Although wages are an important determinant of demand and therefore imports, attention has to be paid to profits and especially credit bubbles as well; third, the analysis must distinguish between nominal wages and real wages, which have evolved differently; fourth, one should also look at wages in northern countries, which can symmetrically be considered as not dynamic enough.

In order to explain the evolution of current accounts, the notion of competitiveness is generally put forward: it is defined as the capacity of a firm or a country to be more successful than its competitors in the battle for market shares. However, as Krugman already has shown in 1994 in his critique to the new competitiveness strategy raised by the European Commission at this time, it is not obvious that the concept of competitiveness can be used for countries as a whole, because they should cooperate among each other and are not competing on markets (but firms producing inside their borders).[2] Even if competitiveness is attributed to countries as a whole, it is not the only factor explaining current accounts: the other major determinant is internal demand. A country that is in bad cyclical conditions (*i.e.* with a negative output gap) imports less, and therefore sees its current account temporarily improved. The cyclical condition of trade partners also matters, because if they have a positive output gap, they will boost the exports of the domestic country, whose current account will therefore improve.

Notwithstanding, competitiveness remains a determinant of the dynamics of current account surpluses and deficits. But it is not reducible to wages. One generally distinguishes two dimensions of competitiveness: the price competitiveness, that is the price of domestic exports relatively to that of competitors;

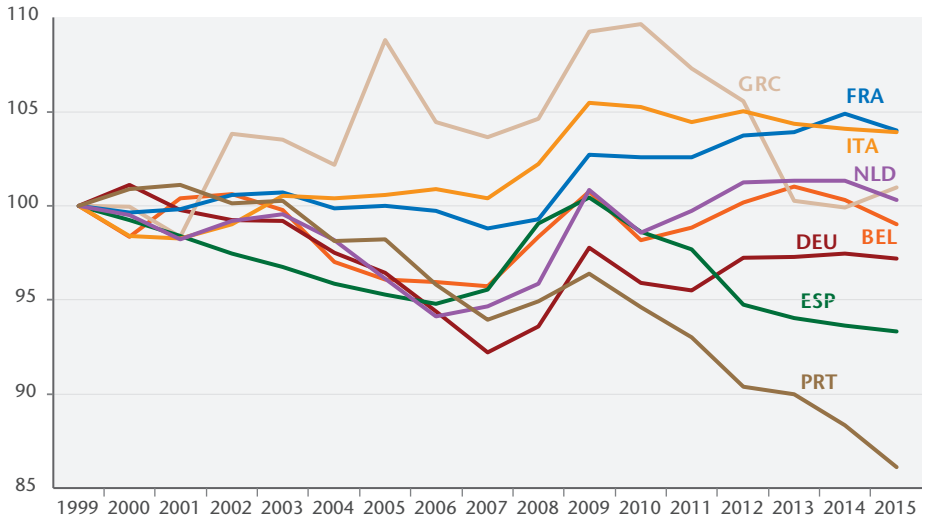
2. See Krugman (1994).

and the non-price competitiveness, which includes factors that are less easily quantified, such as the target market segment (high end or low end), or brand as well as reputation effects. Finally, price competitiveness itself is not only about wages, since it clearly also depends on productivity and profit margins. It is thus clear that wages are not the only factor that matters, even though they play a role.

Were wage increases in the South excessive? In order to determine it, unit labour costs (ULC) are the appropriate analytical tool.

If one looks at real ULC, that is the evolution of *real* wages relatively to productivity gains (see Figure 55), it appears that they have remained stable or have decreased in most countries between 1999 and 2007. They have substantially decreased in Portugal and Spain (as much as in Germany), while they have remained constant in Italy and increased slightly in Greece (3.6% cumulated over 8 years). Said otherwise, during the period preceding the crisis, the purchasing power of wage earners has increased less than productivity in most Southern countries, which means that the aggregate primary income distribution has evolved to the benefits of profits and to the detriment of wage earners. One can therefore hardly say that excessive real wage increases in the South are at the root of current account imbalances.

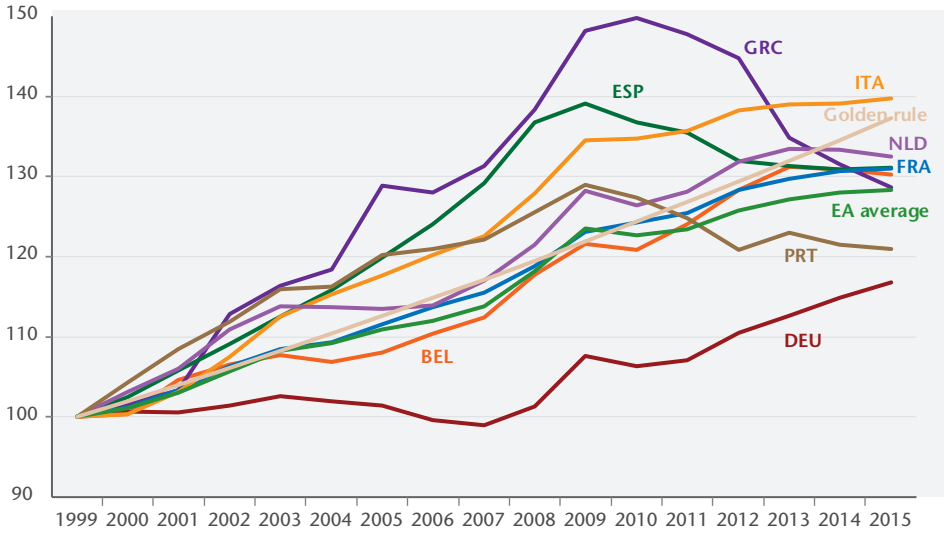
Figure 55. **Real unit labour costs in the euro area**



Source: European Commission.

On the other hand, the picture looks very different if one looks at nominal ULC, that is the evolution of *nominal* wages relatively to productivity gains (see Figure 56). From the beginning of the Monetary Union in 1999, to 2009, the divergence has been strong, between on one side Germany which has gone through a strong wage moderation, and on the other side Spain, Italy, Greece (and to a lesser extent Portugal) which displayed dynamic nominal wages. France, as often, stands in a middle ground. This divergence is essentially a nominal one since, as we have seen above, the divergence of real wages was rather limited (and did not follow a South/North pattern). In other words, the euro area divergence mainly comes from an inflation differential, which is a clear sign of a failure of the EU market doctrine. In contrast to the neoliberal concept of market integration, prices did not converge under the single currency—quite to the contrary, they diverged.

Figure 56. **Nominal unit labour costs in the euro area**



Source: European Commission.

On Figure 56 we have added a line corresponding to the "golden wage rule" within a monetary union: this rule corresponds to nominal ULC that increase of 2% per year, that is at the same rate as the European Central Bank (ECB) inflation target (*e.g.* Watt 2007). To the extent that nominal ULC strongly determine inflation, following this rule would imply on one hand that the target of the ECB is reached, and on the other hand that the relative price competitive-

ness of member states is not modified. For the EA as a whole, the evolution of the nominal ULC was in line with that rule until the crisis. Afterwards, due to the policy of internal devaluation within southern countries, wage developments fall behind, leading to a lack in aggregate demand and therefore deflation pressure and a high current account surplus.

At the country level, it is interesting to note that France, as well as Belgium and the Netherlands, have almost perfectly followed the golden wage rule, at least until 2012. On the other hand, both Germany and southern countries violated it, though in opposite directions.[3]

Starting from 2009, an uneven adjustment process can be observed. Italy slows downs its wages and fills part of its deviation from the 2% rule. Spain, Portugal and Greece go through a much more violent adjustment, with significant wage decreases and the entrance into a deflationary dynamics. Germany on the other hand makes little adjustment: far from filling the deviation from the golden rule that it built during the 2000-2007 years, it even dug it a little bit during the last years.

To which extent does the divergence of nominal wages explain the divergence of current accounts? In the end, this is an empirical question that can only be settled using econometric techniques. Ragot and Le Moigne (2015) thus estimate that almost half of the gap between the trade performances of France and Germany on the 1993-2012 period can be explained by the wage divergence, the remainder being mainly attributed to non-price competitiveness factors. In any case, even if wages do not explain everything, they are an important driver of current accounts, and they strongly contributed to the divergence of the first half of the 2000s and to the timid re-convergence of the last years.

d) How large are the remaining nominal imbalances?

Looking at Figure 54, one could conclude that the problem of current account imbalances is now behind us: in 2015, all euro area countries either were in surplus, or had reduced their deficit to a very small size.

The reality is however much more nuanced and structural imbalances remain very large.

3. See Chagny and Husson (2004) for a more detailed analysis of the various wage regimes in Europe.

Indeed, a significant part of the current account improvement in southern countries comes not from an improvement of their export performance, but from a diminishing of their imports. This phenomenon can be explained by the squeeze of internal demand following the sovereign debt crisis and the austerity policies, which have reduced purchasing power and economic activity. When those countries recover from this cyclical downturn, and in particular when their unemployment rate comes back to more acceptable levels, their imports will rise again and their trade balance will worsen. Unless one considers that being perpetually in crisis is the fate of those countries, one cannot claim that the improvement of their trade balance corresponds to a structural and permanent adjustment. At most, there is a debate on the exact magnitude of the cyclical part of the adjustment, whose estimation depends on the output gap, which is itself hard to know precisely.

Moreover, the euro area as a whole is currently in external disequilibrium. In 2015, it posted an aggregate current account surplus of about 3.8% of GDP. In value, this corresponds to 394 € bn, which is much more than the surplus of China! In a system of flexible exchange rates—the parity of the euro against other currencies being market determined—it is illusory to hope to sustain such a surplus on the long term. Even if for the moment, the differential of monetary policies across both sides of the Atlantic Ocean help sustaining the *statu quo*, the inevitable normalization of the ECB policy will induce an appreciation of the euro. This will harm the price competitiveness of the euro area as a whole and consequently its trade surplus as well. If the hierarchy within the euro area remains what it is today, this will lead to a—reduced—surplus for northern countries and to a return into deficits for southern countries; that is, a similar situation as in 2008.

In order to provide a quantitative assessment of nominal imbalances within the euro area, we have applied a "fundamental equilibrium exchange rate" methodology. The idea is to focus the analysis on price adjustments: we compute the adjustment of the general price level in every euro area economy that would be compatible with both an internal equilibrium (that is the full utilization of production factors, both labour and capital) and an external equilibrium (that is a current account deficit small enough to limit foreign debt accumulation—or conversely a surplus that does not lead to an excessive accumulation of foreign assets). The computation also depends on the sensitivity of imports and exports to price movements of domestic and foreign exporters.[4] Table 13 shows the

4. See iAGS (2014) for a complete description of the methodology. The price elasticities have been updated for the four largest euro area countries.

nominal adjustments that we estimate were still necessary in 2015, computed relatively to the EA average, which is the relevant reference point to counter imbalances within the EA.[5]

Table 13. **Nominal adjustments needed**

EA	0%
DEU	+13%
AUT	+6%
BEL	-14%
ESP	-8%
FIN	-14%
FRA	-7%
GRC	-22%
IRL	-12%
ITA	-5%
NLD	+8%
PRT	-12%

Since the adjustments reported here consider only the internal imbalances of the euro area, the adjustment needs of the EA as a whole relatively to the rest of the world are not analyzed. Yet, today, the euro is undervalued, given the large trade surplus of the area. A real appreciation is therefore needed to go back to equilibrium, and that can be obtained either through a nominal appreciation or through price increases within the euro area. The latter solution would be preferable, in order to avoid a deflationary spiral, and in that case price increases should be much more important in Germany than in Southern countries, as indicated in Table 1.
Source: iAGS model.

Several groups of countries can be identified. Germany, Austria and the Netherlands must appreciate relatively to the EA average, by up to 13% for Germany. At the other extreme, Greece must undergo a depreciation of about 22% relatively to the EA average, despite the sacrifices already made: even if today the Greek current account is close to equilibrium, its output gap is very negative, and the improvement is therefore largely cyclical. Between these two extremes there is a group of countries that must undergo a depreciation between 5 and 12% relatively to the EA average, which includes France, Spain, Portugal and Italy.

5. For an overall macroeconomic analysis, a better reference point would be the golden wage rule. As the focus here lies on the adjustment needs of countries within the EA to counter current account imbalances, we take the (weighted) average.

The size of the adjustments needs to rule out imbalances as they have been identified by this procedure can look significant. One should however keep in mind that our computations are based on the hypothesis that competitiveness adjustments only go through the price dimension, and that other dimensions remains unchanged. The needed nominal adjustments would be smaller if southern countries were able to improve their non-price competitiveness, through the implementation of other policies like investment in export capacity and lower energy dependency. In any case, our results show that internal imbalances within the euro area are far from being resolved, contrary to what a superficial analysis of the current accounts may suggest.

e) Designing a cooperative convergence strategy

The strategy followed until now for unwinding the imbalances has therefore not delivered. It has essentially consisted in cutting ULC in the South, both indirectly by deflating demand through fiscal austerity and more directly using several instruments: decreases of minimum wages and of public servants' compensations, cuts in social security contributions and benefits, facilitation of layoffs, decentralization of wage negotiations, etc. But that strategy has failed for two reasons.

First, even if wage costs indeed explain part of the divergence, they are not the only determinant of competitiveness, as we have seen. The increase of margins, especially visible in Greece or Spain, has largely neutralized the decrease in wage costs, which means that export prices have not changed much.[6] And for the time being, nothing shows that the recovery of margins has fuelled an investment dynamics. Policies consisting of lowering social security contributions, like the "Responsibility Pact" and the CICE in France, follow the same logic and so far, did not produce very tangible effects; additionally, they are one-shot policies (it is not possible to indefinitely lowering social contributions), and are thus ill-suited for compensating persistent inflation differentials on the medium term.

Second, wage austerity had collateral effects that were worse than the ill they were supposed to cure. The collapse of internal demand that followed has pushed southern countries into a crisis from which they have not yet recovered. Admittedly, it has led to a resolution of the current account deficit, but which is only of a temporary and cyclical nature. Furthermore, the generalized down-

6. See for example Uxó *et al.* (2014).

ward adjustment of wages carries the risk of pushing the euro area into a dangerous deflationary spiral. The asymmetric nature of the macroeconomic surveillance is at the root of the problem: in practice, only deficit countries are forced to adjust, while surplus countries are not, and this creates a deflationary bias (see Appendix 3 for a discussion on the asymmetric nature of the macroeconomic surveillance). This is an implicit validation of the neo-mercantilist strategy, inherently non-cooperative, that threatens the cohesion of the euro area. Paradoxically, the purpose of the EMU was precisely to prevent such a non-cooperative behaviour, by depriving Member States from the possibility of performing competitive depreciations.

If a new crisis is to be avoided—and such a crisis could threaten the very existence of the euro—it is therefore necessary to put in place a different convergence strategy, that would be of a cooperative nature and would rely on two pillars: a nominal and a structural one.

To ensure that nominal convergence is achieved, *i.e.* that inflation rates are harmonized and that there is no distortion of relative price competitiveness, the most efficient instrument would be a coordinated wage policy. It would be built on the "golden wage rule" already described above: in each country, nominal wages would move in the medium term at the same rate as domestic productivity, augmented by the inflation target of 2%. In the short run, however, the rule should be amended to correct the imbalances identified in Table 13. More precisely, wages in the North would rise faster than the rule during a given period, while they would rise slower in the South. However, given that profit margins are at a historical high in most southern countries, the adjustment could also include a diminishing of margins, that would allow for a more dynamic wage growth.

For this objective to be reached, the macroeconomic surveillance instruments must be modified. In particular, the Macroeconomic Imbalance Procedure currently sanctions countries with too dynamic unit labour costs, but not those with too weak wages growth; the rule thus needs to be made symmetric. But, beyond that, new tools must be created for the implementation of a wage coordination policy: generalization of wage floors through minimum wages or collective agreements and cross-country coordination of their increases, recentralization of wage negotiations at the national and sectoral levels, generalizations of collective agreements…

However, even if nominal convergence is a necessary condition for the coherence of the Monetary Union, it shall not be sufficient. Policies aiming at the

convergence of productive capacities and standards of living must also be implemented.

A policy of massive investments is thus needed in the South, to recreate or consolidate industrial sectors that are either strategic or with a high productivity gains potential, that could in particular help with restoring non-price competitiveness. Given the state of the business cycle and of public finances in these countries, these investments must be partly financed, at least in the short term, by transfers coming from the North. The Juncker plan could have been the vector of this policy, but it is clearly undersized and is not targeted on countries and sectors that need it the most. Moreover, in the specific case of Greece, further measures to reduce the public debt burden are necessary.

The obstacles to changes proposed here are mainly of a political nature: northern countries hold the power to decide whether these changes will be put in place or not. Today, those countries could have the sentiment that they are in a favourable position and that there is no urgency in accepting a reorientation of the euro area. That would however be a short-sighted calculation: internal imbalances within the euro area are dangerous enough to put into question its very existence, in particular in the case of a new financial shock. And even if the breakup of the euro would be painful for southern countries, northern countries would also have a lot to lose, especially on the foreign assets that they have accumulated.

4.3. How to tackle internal and external imbalances

Reducing imbalances implies some medium-term trade-offs between growth, inflation, fiscal balance and current account balance. This part highlights these trade-offs against the backdrop that the euro area will be forced into an equilibrium of low growth and low inflation that will make it more painful to reduce external and public disequilibria. It establishes the difficulty of simultaneously reducing all imbalances, all the more that deflation and euro appreciation risks increasing the cost of the reduction of imbalances. Regarding the difficulty of reducing imbalances, and to make the adjustment easier, we then consider some new economic policies. First, given a better coordination of economic policies between MS, relaxing the inflation target beyond recommended symmetric adjustments in countries with high current account surplus would open new fiscal space for MS without impinging on ECB's price stability objective. Second, relaxing fiscal rules especially to finance public investment within the objective of fiscal stability would also give new fiscal space.

a) Complying with the fiscal rule: is there a need for additional fiscal effort?

The current governance in the euro area mainly hinges on two pillars. On the one hand, countries are requested to comply with the Stability and Growth Pact, which is based on a "preventive" and a "corrective arm". In the "preventive arm", governments are expected to implement sound fiscal policies. To this end, they commit to an MTO (Medium-term objective) defined as a target for the structural deficit. In the "corrective arm", euro area members avoid excessive budget deficits and excessive public debt. Budget deficit is considered excessive when it is greater than 3% of GDP. Public debt is considered excessive if it exceeds 60% of GDP without diminishing at an adequate rate (defined as a decrease of the excess debt by 5% per year on average over three years). On the other hand, it has been emphasized that the scope of surveillance should go beyond public finance and should also focus on other macroeconomic indicators. The MIP (Macroeconomic imbalances procedure) has been introduced to this end as part of the "Six-pack". The MIP aims at "preventing and addressing the emergence of potentially harmful macroeconomic imbalances that could adversely affect economic stability in a particular Member State". In practice, the focus is mainly devoted to current account imbalances and competitiveness.

In Chapter 1, we assess whether countries would be able to achieve a 60% debt-to-GDP ratio by 2035 (see Table A1 and Table A2 in Appendix 4; see also Table A5 for main hypotheses). It notably suggests that France, Italy, Spain, Belgium, Portugal, Greece and Finland may be requested to implement additional fiscal consolidation beyond 2018 to avoid an excessive public debt (Figure 57). Germany, the Netherlands and Ireland would have fiscal space as their debt-to-GDP ratio would stand below 60% in 2035. For the euro area, debt would reach 71% of GDP. Consequently, the additional fiscal effort would be substantial for Greece, exceeding 9 points of GDP, but also for France, Spain and Italy (Figure 57). It is also suggested that complying with the debt rule would entail significant output costs. The average output gap would decrease notably in countries where additional fiscal consolidation is implemented. Though the output gap would improve for Germany, the Netherlands and Ireland, the average situation of the euro area would deteriorate, illustrating that fiscal expansion in countries with fiscal space would not compensate for output losses in countries where adjustment is needed to satisfy the debt criterion.

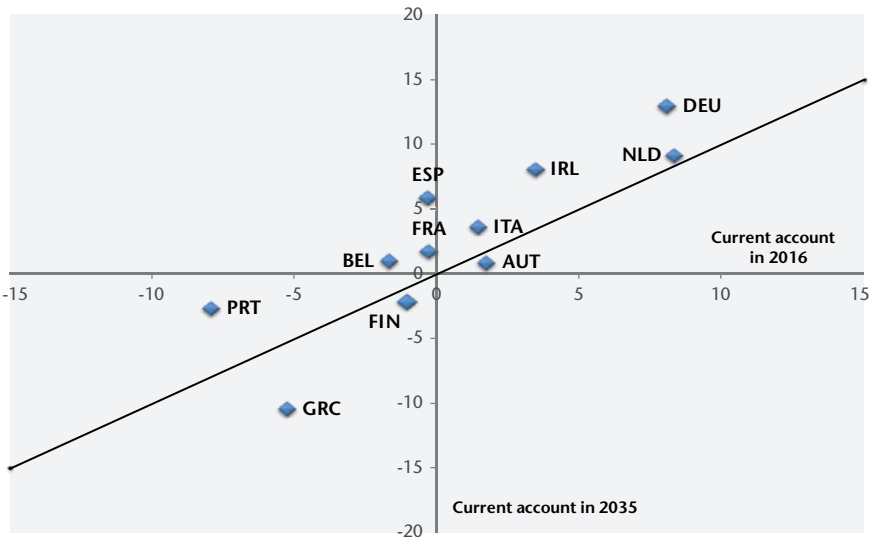
Figure 57. **Public debt in 2035, fiscal impulse and output gap**



Source: iAGS model.

Turning to current account imbalances, model simulations also illustrate the path for the current account dynamics for 11 euro area countries. In the baseline scenario, Germany, Italy, the Netherlands, Ireland and Austria would be in surplus in 2016. These surpluses would improve for all these countries except Austria (Figure 58). In 2035, the German current account surplus would amount to 13% of GDP while it would exceed 9% in the Netherlands. During all the period, it would stand above 6% for these two countries, which is the upper limit set in the scoreboard designed to capture the most relevant internal and external sources of macroeconomic imbalances. Countries with the highest current account deficit in 2016 would be Portugal and Greece. The current account deficit in these countries would exceed 4%, the threshold above which a macroeconomic imbalance would be signalled triggering an alert mechanism report. Moreover, the current account deficit would deteriorate in Greece from 2016 to 2035. The developments below will assess the consequences of adjusting current account imbalances. Furthermore, it must also be noticed that the current account surplus for the euro area would increase from 2.1% in 2016 to 5.2% in 2035, raising the risk of euro appreciation.

Figure 58. **Baseline – Current account in 2016 and in 2035**



Source: iAGS model.

b) Complying with external imbalances: adjusting nominal discrepancies?

In the first section, it has been suggested that adjustment in current accounts are needed despite a significant reduction of deficits since the outbreak of the crises. As output gap is still negative for several countries, structural current account deficits are expected to persist. The required nominal adjustment to cope with financial imbalances is then computed by applying a "fundamental equilibrium exchange rate" methodology. In what follows, it is considered that the adjustment would be symmetric[7] as countries with a current account surplus would implement "reflation" policies and tolerate inflation rates above the 2%. The relative nominal price adjustment for each euro area country is computed such that the average inflation for the euro as a whole reaches the 2% target fixed by the ECB. The adjustment is supposed to be spread over a 20-year period. As in the iAGS 2016 report we assume that euro area countries are able to influence inflation and expected inflation in their own countries by implementing reforms such that the required nominal adjustment is realized. Moreover, while non-cost competitiveness matters for reducing imbalances, we assume that the reduction of structural current account imbalances is realized only through relative price adjustments. Non-cost competitiveness has multiple dimensions and cannot be captured with a single and simple indicator. Moreover, the way that economic policies can influence non-cost competitiveness remains uncertain. Consequently, the required nominal adjustment computed in the previous section and used in simulations below may be considered as an upper limit.

In case of a symmetric adjustment, the target for expected inflation is higher for Germany, the Netherlands, Ireland and Austria while it would be lower for France, Italy, Spain, Belgium, Greece, Portugal and Finland (Table 14). Considering that expected inflation is anchored on these targets would have an impact on the real interest rate in each euro area country and would then change the requested fiscal adjustment to achieve a 60% debt-to-GDP ratio. Fiscal impulses (FI) are then adjusted for this purpose. Simulations presented in Table A3 in appendix show output gaps, inflation and current accounts dynamics in this situation where countries try to address the debt constraint and avoid external imbalances. First, all countries but Greece would be able to reach a 60% debt-

7. iAGS 2016 report has dealt with the case of the asymmetric adjustment and showed that the cost of adjusting simultaneously public debt and current account imbalances would entail significant output costs.

to-GDP ratio. The Greek situation would be slightly deteriorated as public debt would increase if the country tried to cope with external imbalances and simultaneously tried to reduce public debt.

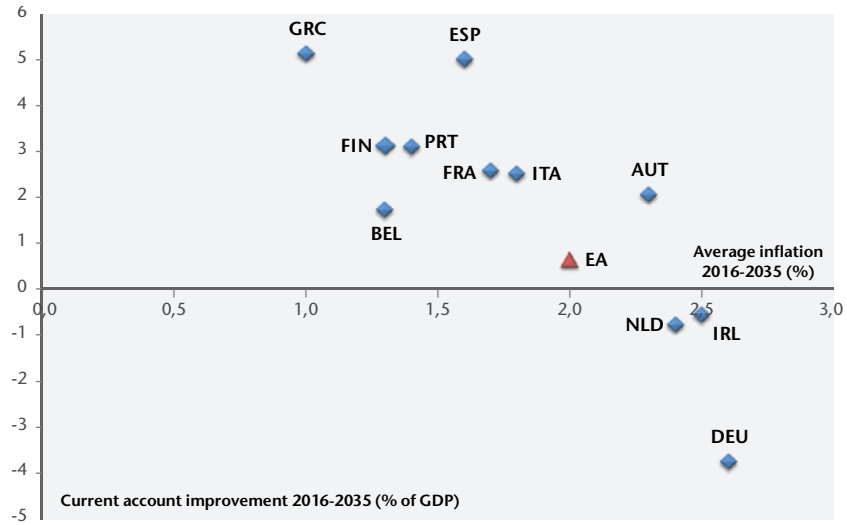
Table 14. **Symmetric price adjustments**

	DEU	FRA	ITA	ESP	NLD	BEL	GRC	PRT	IRL	AUT	FIN	EA
Annual deviation from 2% target	0.6	-0.3	-0.2	-0.4	0.4	-0.7	-1.0	-0.6	0.5	0.3	-0.7	0

Source: iAGS model.

Figure 59 and Figure 60 highlight the main consequences of this strategy in terms of current account dynamics and output gaps. The details of simulations for the 11 euro area countries are presented in Table A3 in the Appendix. It may first be noted that *ex post* nominal price adjustments relative to EA average price level from 2016 to 2035 are important: above 0.2% each year for Italy, France, Spain, Portugal, Finland, Belgium and Greece. Nominal price level relative to EA average would increase for Germany, Austria, the Netherlands and Ireland.

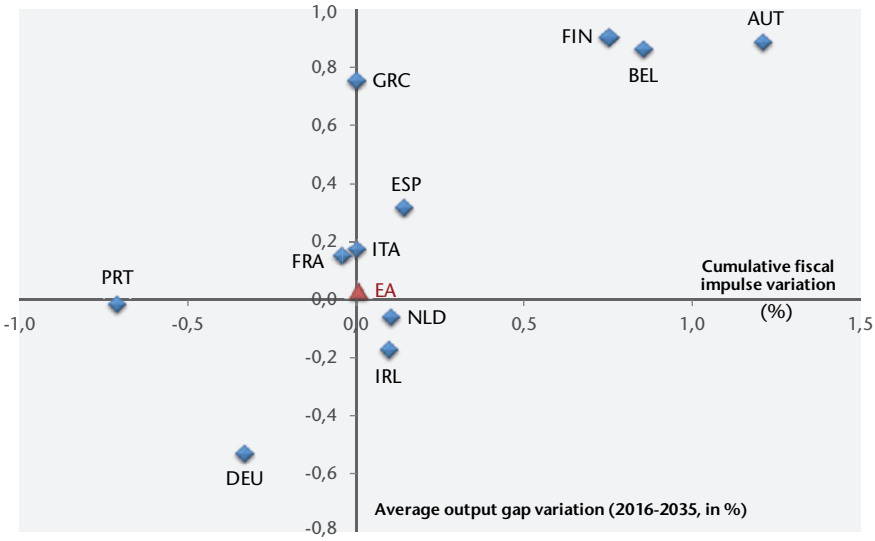
Figure 59. **Symmetric price adjustments – Average inflation and current account improvement**



Note: current account improvement is computed as the difference between current account adjustment in the symmetric price adjustment case and the current account adjustment with no price adjustment. In each case, FI are computed to achieve 60% of public debt-to-GDP ratio where it is possible.
Source: iAGS model.

Figure 59 and Figure 60 compare the situation in which the euro area simultaneously reduces public debt and current account imbalances with the situation where they only comply with the 60% target for public debt. The current account balance would improve for all countries except Germany, Ireland and the Netherlands even though the change in the current account balance would be inferior to 1 point in Ireland and in the Netherlands. For Spain and Greece, the internal devaluation would be associated with an improvement of the current account balance close to 5 points between 2016 and 2035. In France and in Italy the positive change would reach 2.5 and 2.6 points respectively. Finally, the current surplus of Germany would be reduced by 3.8 points.

Figure 60. **Symmetric price adjustments – Fiscal space and growth**



Source: iAGS model.

The impact of addressing current account imbalances on fiscal policy and output gap would depend on several forces. On the one hand, the decrease in relative prices would increase competitiveness and the output gap. This would also have a positive effect on the debt dynamic due the automatic stabilizers effect. On the other hand, the real interest rate would increase, reducing the output gap and increasing public debt. The global effect would notably depend on the sensitivity of external trade to the relative prices but also on the additional effort that may be required to achieve a 60% debt ratio. For Greece, there would be no increase in fiscal consolidation as it would already have

reached its maximum (0.5 point per year). Public debt would therefore increase but Greece would benefit from the internal devaluation so that the output gap effect would be positive. Portugal would be constrained to increase fiscal consolidation to be able to achieve a 60% debt-to-GDP ratio. This additional fiscal consolidation would offset the positive impact of competitiveness on the output gap. Finally, the average output gap would be reduced for countries where the relative price would increase: Germany, the Netherlands and Ireland. For the euro area, the change in the average output gap would be close to zero.

c) Complying with external imbalances: which euro appreciation?

As recalled in the first part of this chapter, the aggregate current account of the EA was highly positive in 2015. On the medium run, once monetary policies have normalised, this may lead to an appreciation of the euro that would restore the external equilibrium of the EA. It is therefore necessary to study the macroeconomic consequences of that appreciation, and in particular how it interacts with the internal and external equilibrium of EA countries.

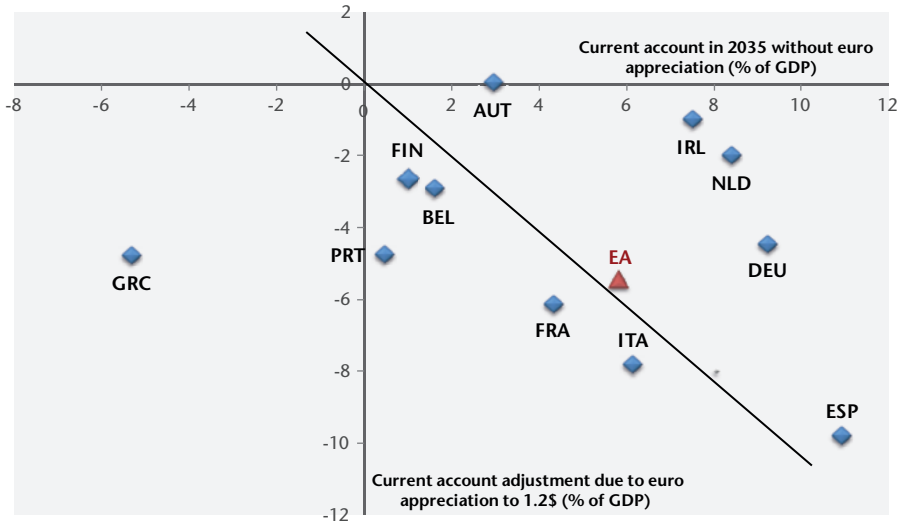
Using iAGS model, we compute the level of euro exchange rate compatible with EA current account equilibrium around 2035. Figure 61 pictures the outcome of a euro appreciation, following a normalization of the monetary policy in 2018, up to an exchange rate of 1.20$ (in our baseline scenario, the euro stabilizes at 1.05$). The horizontal axis corresponds to the current account in 2035 without the euro appreciation (as studied in the previous section). The vertical axis corresponds to the change in the 2035 current account caused by the euro appreciation, relative to the previous scenario. The black line therefore corresponds to an equilibrated current account in 2035 after the appreciation, which is the case for the EA current account.

The figure also illustrates that achieving EA external equilibrium would not be the result of a homogenous adjustment among EA countries.[8] Some countries would adjust too much (Portugal, and in a minor fashion Finland, Belgium, France, Italy), whereas others would only partialy adjust (Ireland, Netherlands, Germany) or even increase their current account imbalance (Greece). Of course, the euro area must be seen as an integrated economic area in which current account imbalances would not matter, not only a fixed exchange rate area in which current accounts should be balanced in the medium run for all countries. But it seems now that the EA is not enough integrated to fully disre-

8. See also Table A4 in Appendix 4.

gard external imbalances between EA countries. It is all the more the case as countries that overadjust are mainly countries that would have to restore competitiveness, as we have seen in Figure 59.

Figure 61. **Euro appreciation to 1.2$ – impact on current account**

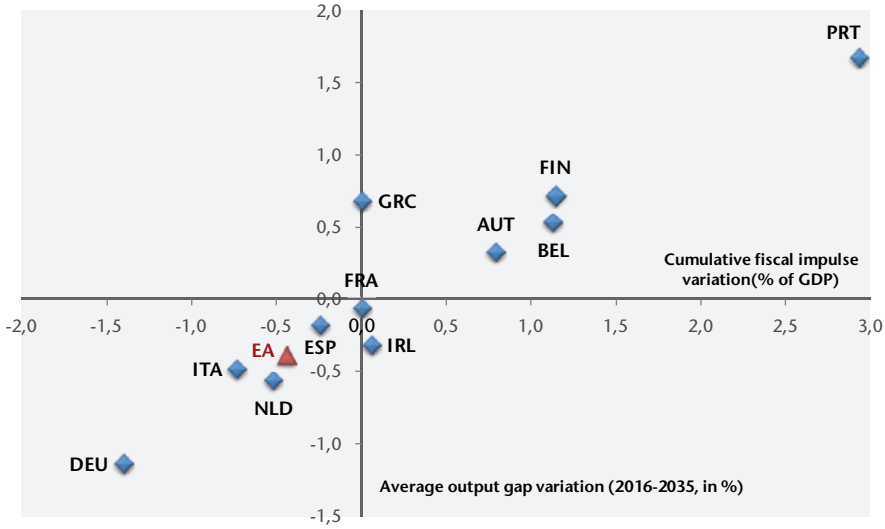


Source: iAGS model.

An appreciation of the euro may then contradict the correction of external imbalances. Figure 62 also demonstrates that it could impinge on correcting internal disequilibrium (high unemployment and public) for some countries. Euro appreciation would increase fiscal austerity to achieve the 60% to GDP public debt ratio for Italy and Spain, and reduce fiscal space for Germany and Netherlands, as it would weigh on growth for these countries. But other countries would benefit from the appreciation[9] (Portugal, Finland, Belgium and Austria) since the appreciation would impact in different ways price-competitiveness of exports and terms of trade among EA countries. These results imply that a rebalancing of the euro area current account may be detrimental to euro area convergence and integration.

9. See Box 5 for an explanation.

Figure 62. **Euro appreciation to 1.2$ – fiscal space and growth**



Source: iAGS model.

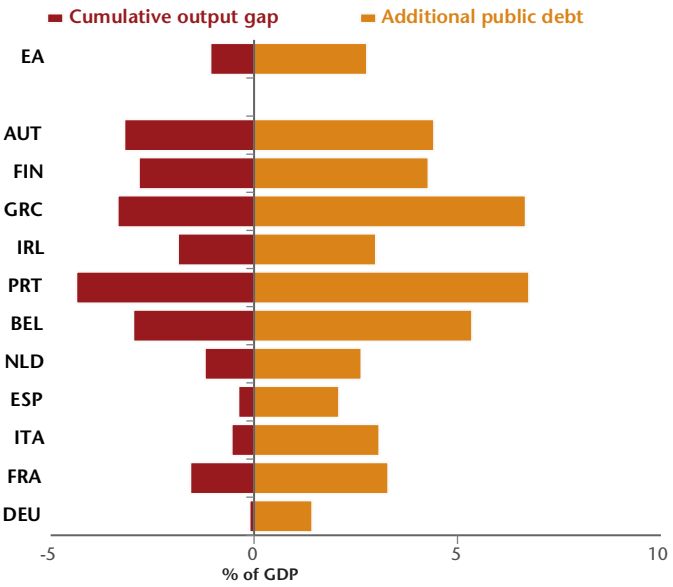
d) Remaining risks and relaxing constraints to ease the adjustment

EA adjustments to stabilise debt, reduce current account imbalances and EA current account surplus seem quite huge. They could be even greater if some risks—low inflation, euro exchange rate appreciation—materialise in the future. Facing such risks, EA institutions need some leeway to avoid EA collapse. In this part, we stress these risks and we discuss some tools to cope with them.

Remaining risks increasing imbalances across EA countries

As we have warned in past iAGS, low inflation would increase EA macroeconomic imbalances. If the ECB were to miss its 2% target on average by -0.1% a year from 2020 to 2035, public debt in EA would be about 2 points higher in 2035 (Figure 63). This would be due to higher real interest rates that would impinge growth: cumulative output gap would be 0.7 point lower. Low inflation would then increase fiscal adjustment needs for countries with a high public debt. Regarding additional debt and growth losses, countries would not be impacted in the same way as Greece, Portugal, Austria and Belgium would be the most impacted ones.

Figure 63. **Deflation risk – Impact of a lower inflation (-0.1% each year, 2020-2035) on debt and growth**



Source: iAGS model.

EA countries do not have the same trade openness, and their trade share with the rest of the world (*i.e.* all non EA member states) varies. Trade elasticities (for import and export volumes and prices) also differ from one country to another. These differences induce varying current account deviations following a lower inflation than targeted by the ECB. All countries gain price competitiveness compared to the rest of the world and improve their current account balance. On average, the EA current account would increase by 0.4 point of GDP, and increases would be the highest in Italy and Spain (Table 15). But some countries (Greece, Ireland, Finland and Austria) would suffer a deteriorating current account, since price competitiveness gains would not compensate for deteriorating terms of trade and lower imports coming from other EA countries due to lower growth.

Table 15. **Deflation risk – impact on current account in 2035**

% of GDP, value

	DEU	FRA	ITA	ESP	NLD	BEL	GRC	PRT	IRL	AUT	FIN	EA
CA variation	0.3	0.5	0.8	0.9	0.0	0.0	-0.2	0.0	-0.3	-0.5	-0.2	0.4

Source: iAGS model.

These results demonstrate that inflation must be high enough in the EA: low inflation would increase current accounts disequilibrium in addition to raising fiscal efforts to stabilise public debt. But as low inflation would favour EA current account surplus, it would then also push for euro exchange rate appreciation.

Box 2. Describing risk scenarios

The ability to reduce macroeconomic imbalances depends especially on inflation dynamics. As emphasized in a debt-deflation spiral, the real debt burden becomes higher when countries enter into deflation. Taking into account the constraints imposed by the TSCG may then force governments to further austerity measures reinforcing the deflation risk and increasing the debt burden. Moreover, deflation changes relative export and import prices in all EA countries. In that case, simple Marshall-Lerner conditions may not be sufficient to ensure a trade balance improvement following a gain in price-competitiveness of exports due to lower inflation: one EA country may gain competitiveness against the rest of the world but be less competitive towards its partners. Put another way, the fall in imports value does not compensate for the fall in exports value, once volume variations are accounted for.

To this end, we analyse the consequences of a decrease of the inflation rate under the following scenario. We consider a symmetric shock consisting in a drop in the ECB inflation target over the period 2016-2035. We consider a 0.1 point decrease.

Regarding current account surplus of the EA, EA countries face a risk of euro exchange rate appreciation. The appreciation would rebalance the aggregate trade balance of the EA and the current account too. But the loss of competitiveness towards the rest of the world would be detrimental to growth. And whereas the aggregate trade balance would rebalance, it may not be the case for all countries: in the same way as a low deflation shock, exchange rate appreciation would modify relative export and import prices in all EA countries, affecting current accounts in opposite ways from one country to another. The third point is that exchange rate appreciation would lead to imported disinflation, reinforcing the debt-deflation spiral and forcing governments to further austerity measures reinforcing the deflation risk and increasing the debt burden.

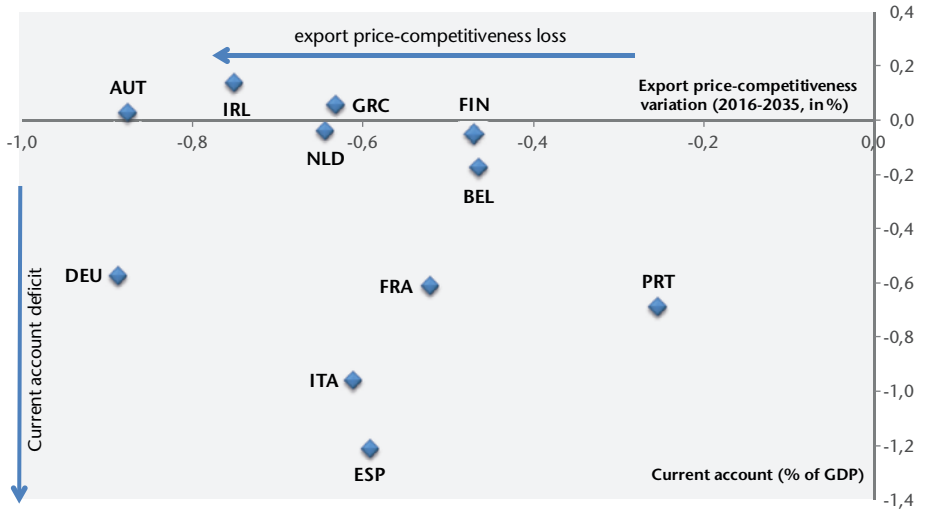
To this end, we analyse the consequences of a euro exchange rate appreciation under the following scenario. We consider a 2% appreciation of the euro in 2016 and maintained until 2035.

For simulations, we use the iAGS model (technical appendix is available on request). For the baseline scenario from which we compute differences we assume that:

— fiscal policy entails achieving 60% public debt-to-GDP ratio in 2035;
— symmetric nominal adjustments to correct EA internal current accounts discrepancies;
— euro exchange rate appreciation to 1.2 dollar in 2020 and beyond.

A euro exchange rate appreciation would counteract the price-competitiveness gains due to lower inflation. For example, a 2% appreciation from 2020 onward would lead to a decrease of the EA current account (CA) deficit by 0.6 point of GDP in 2035 (Figure 64). Spain, Italy, Portugal, France and Germany would be the most impacted countries regarding current account deviations.

Figure 64. **Exchange rate risk – Impact of a 2% appreciation of euro on trade balance**



Source: iAGS model.

Wheras it would limit the EA current account increase, a euro appreciation would nevertheless increase other imbalances. Growth would be lower in EA (-2.1 cumulative output gap on 2020-2035, Table 16) and unemployment higher. Public debt would then increase on average (+1.9 point of GDP in 2035). Italy and Spain would have to do more effort to achieve 60% of GDP debt ratio, and fiscal space would be reduced in Germany and Netherlands.

Table 16. **Exchange rate risk – impact on current account in 2035**

% of GDP

	DEU	FRA	ITA	ESP	NLD	BEL	GRC	PRT	IRL	AUT	FIN	EA
Public debt variation	4.3	0.2	3.5	2.9	2.3	-3.0	-3.5	-6.5	1.0	-1.5	-2.3	1.9
Cumulative output gap variation	-3.9	-0.6	-3.0	-3.2	-2.5	1.3	2.1	4.1	-2.3	0.2	1.2	-2.1
CA variation	-0.6	-0.6	-1.0	-1.2	0.0	-0.2	0.1	-0.7	0.1	0.0	0.0	-0.6

Source: iAGS model.

Some ways to ease the adjustment

In the previous sections, we have illustrated the adjustments which are needed for countries either to comply with debt objectives or to deal with current account imbalances, and the risks going with these adjustments. On the one hand, they would imply additional fiscal consolidation for some countries and, on the other hand, some countries would also need to adjust relative prices. It should be noticed that countries, which are supposed to implement further consolidation are generally those that will need to adjust relative prices. This is notably the case for: France, Italy, Spain, Belgium, Portugal and Greece. Yet, these objectives might not be compatible. Besides, the reduction of public debt to reach the 60% debt-to-GDP ratio would reduce growth and then curb recovery. The adjustment of prices would also slow down the reduction of public debt, forcing Member States to increase fiscal consolidation further, weighing down on growth. Euro area countries may then try to square the circle and be constrained to forsake one of the three objectives (economic growth, external and public balances).

A first possibility would be to frontload fiscal adjustment by using fiscal space in countries having some fiscal leeway and high current account surplus, mainly Germany, Austria and Netherlands. In these countries, higher public spending would sustain growth and inflation. It would also increase exports of EA partners, and produce an improvement in the convergence between EA countries, without endangering the sustainability of public finances. But such fiscal stimulus may not be enough to significantly sustain economic growth in other EA countries: spill-over-effects shall be small for two reasons. The first one is that the German economy seems to be at full employment. A fiscal stimulus would probably only produce small growth effects and exports for partners since fiscal multipliers are smaller when output gap is close to zero. The other reason is that Netherlands and Austria are not big enough economies to significantly stimulate partners' economy.

Using the iAGS Model, we illustrate this point by simulating a 1% of GDP increase in public spending of Germany, Netherlands and Austria from 2017.[10] The cumulative impact on German economy would be rather small (+1.1% of

10. For simulations, we use the iAGS model (technical appendix is available on request). For the baseline scenario from which we compute differences we assume that:
— fiscal policy entails achieving 60% public debt-to-GDP ratio in 2035;
— symmetric nominal adjustments to correct EA internal current accounts discrepancies;
— euro exchange rate appreciation to 1.2 dollar in 2020 and beyond.

cumulative output gap during the period 2017-2035, see Table 17). The effect on Austria and Netherlands would be higher (respectively +2.6% and +3.0% of cumulative output gap) since these countries start with a higher negative output gap. The results show quasi-null spill-over effects on the other EA countries.

Table 17. **Using fiscal space in Germany, Austria and Netherlands: +1% of GDP public spending expenditures from 2017**

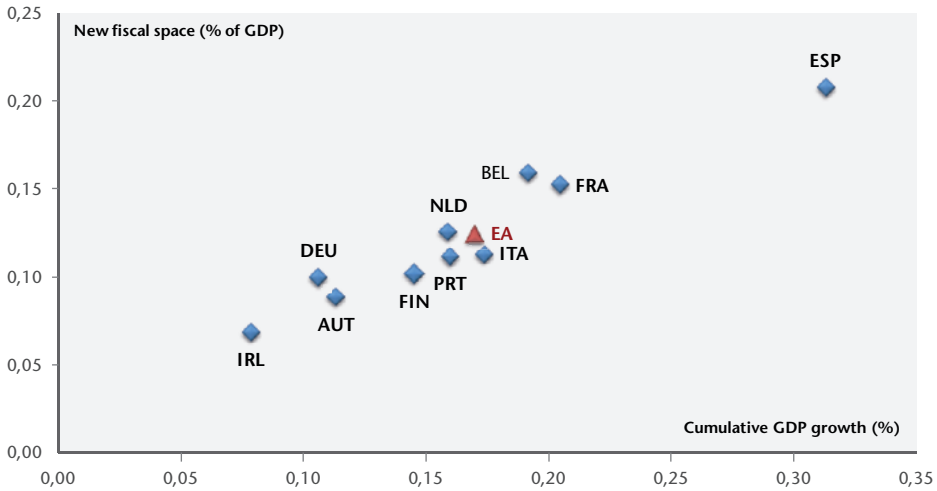
	Public debt (% of GDP)	Structural balance % of GDP)	Cumulative fiscal impulse (%)	Cumulative output gap (%)
	(1) 2035	(2) 2035	(3) 2015-2035*	(4) 2016-2035
DEU	17	-1.5	1.0	1.1
FRA	0	0.0	0.0	0.0
ITA	0	0.0	0.0	0.0
ESP	0	0.0	0.0	0.0
NLD	14	-1.2	1.0	3.0
BEL	0	0.0	0.0	0.1
PRT	0	0.0	0.0	0.0
IRL	0	0.0	0.0	0.0
GRC	0	0.0	0.0	0.2
FIN	0	0.0	0.0	0.0
AUT	15	-1.3	1.0	2.6
EA	7	-0.6	0.4	0.6

Source: iAGS model.

To ease the adjustment, EA countries need some leeway that avoids the caveats of a fiscal stimulus restricted to a small group of countries. A more efficient policy consists in making a fiscal stimulus in all EA countries, to maximise spill-over effects and to deal with high unemployment in the EA. To finance the stimulus a golden rule for public investment would allow reconsidering the fiscal targets. When public investment is efficiently managed, then, one can expect a positive impact on potential growth. Academics agree on an elasticity of at least .1 between public capital stock and potential growth (see Bom and Lightart (2014) for a recent survey). That is true even with less materialistic categories of capital stock like human capital. That means that a permanent increase in public investment by .1% per year, with a 20 years lifespan of the investment (a higher life span multiplies the effect), would increase public capital by 2% and long term output by .2%/year. In the end net public assets would increase.

The following simulations[11] show that, when this effect is added to plain Keynesian effect (short term multipliers) and to wise back-loading (higher fiscal multiplier when unemployment is high, zero lower bound when deflation is a high probability risk), the increase in debt (full public financing of the investment) is small.

Figure 65. **Relaxing public debt target and public investment – impact on growth**



Note: We assume an elasticity of .1 between public capital stock and potential growth.
Source: iAGS model.

To illustrate this point, we compute the new fiscal space compatible with a 61% public debt-to-GDP ratio in 2035 in all countries but Greece. Countries would use this fiscal space in 2017 to increase public investment. Results show that most countries with a negative output gap (Netherlands, Spain, France, Italy, Belgium, Portugal) would have a higher fiscal space, about 0.15% of GDP (see Figure 65) and would gain about 0.2 to 0.3% of cumulative GDP growth. In 2035, public debt would only be increased by 1% of GDP. *In fine*, 1 additional percentage point of public debt would give way to a 0.6% increase of net public assets[12] in 2035 in the euro area, thanks to a public investment increase by 0.1% of GDP starting from 2017 (Table 18).

11. For simulations, we use the iAGS model (technical appendix is available on request). For the baseline scenario from which we compute differences we assume that:
    — fiscal policy entails achieving 60% public debt-to-GDP ratio in 2035;
    — symmetric nominal adjustments to correct EA internal current accounts discrepancies;
    — euro exchange rate appreciation to 1.2 dollar in 2020 and beyond.

Table 18. **Fiscal space and Public investment (2017-2035) – impact on public debt and assets**

% of GDP

	DEU	FRA	ITA	ESP	NLD	BEL	GRC	PRT	IRL	AUT	FIN	EA
Add. public investment per year	0.11	0.15	0.11	0.21	0.13	0.16	0.0	0.11	0.07	0.09	0.10	0.12
Gross Public debt variation, 2035	1.0	1.0	1.0	1.0	1.0	1.0	nc	1.0	1.0	1.0	1.0	1.0
Gross Public assets variation, 2035	1.2	1.9	1.4	2.6	1.6	2.0	nc	1.4	0.9	1.1	1.3	1.6
Net public assets variation, 2035	0.2	0.9	0.4	1.6	0.6	1.0	nc	0.4	-0.1	0.1	0.3	0.6

Note: Gross Public assets variation is computed with a 5% depreciation scheme hypothesys for public capital.
Source: iAGS model.

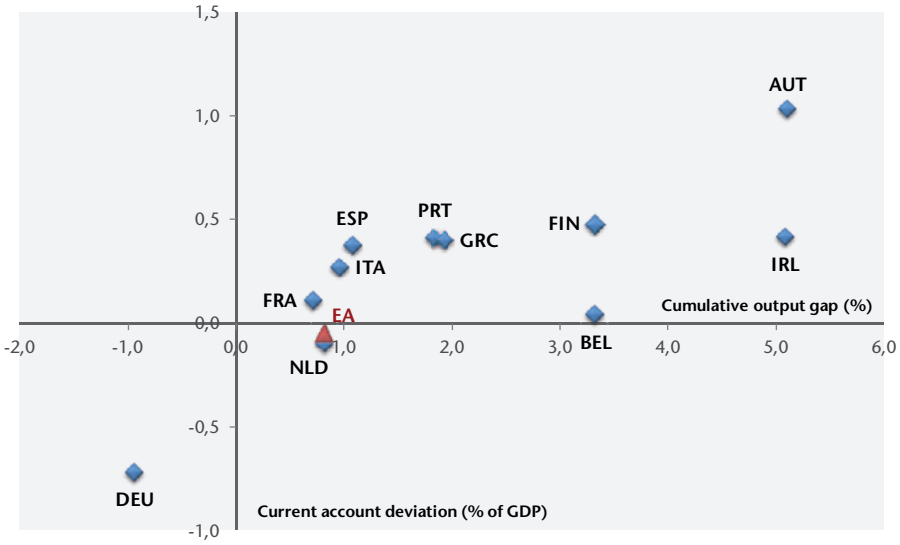
To facilitate the correction of EA imbalances, EA member states should encourage even higher inflation in high current account surplus countries (Germany, Austria and Netherlands). Indeed there is a room for more than 2% inflation on average in EA for the 20 next years, as average inflation has been lower than 2% on average since 2000. Higher inflation in these countries would induce competitiveness gains for the other EA members, which could improve their trade balance and current account.

As an illustration, we simulate[13] a positive shock of 0.2% each year on inflation in Germany, Netherlands and Austria from 2020 onward. Results show that all countries but Germany (CA would diminish by -0.7 point of GDP, see Figure 66) and Netherlands (-0.1 point) would improve their current account by 2035 (from +0.1 for France to +1.0 for Austria[14]). Results also make evident that all countries but Germany would gain economic activity (+0.2% to +0.5% of cumulative output gap for France, Italy, Spain, Portugal, Greece, Finland and

12. This effect depends a lot on the link between public investment and output. For an elasticity of 0.05, the increase in net assets in 2035 is nearly 0. This shows the importance of management and allocation of public investment. Bom and Lightart (2014) retain a range from .08 to .17, leaving room for more optimistic perspectives.
13. For simulations, we use the iAGS model (technical appendix is available on request). For the baseline scenario from which we compute differences we assume that:
    — fiscal policy entails achieving 60% public debt-to-GDP ratio in 2035;
    — symmetric nominal adjustments to correct EA internal current accounts discrepancies;
    — euro exchange rate appreciation to 1.2 dollar in 2020 and beyond.
14. This result comes from a strong improvement of the terms of trade for that country due to a lower elasticity of export prices to export prices of competitors compared to the other countries (elasticity of 0.18).

Ireland). The average inflation rate would only increase by 0.06 point each year on 2016-2035 (see Table 19), which would be compatible with ECB target in the long run. Slightly higher inflation would also ease the burden of debt by 1.8 point of GDP in 2035, giving fiscal space to sustain growth and fight unemployment in the EA.

Figure 66. **Relaxing inflation in high CA surplus countries – impact on trade balance**



Source: iAGS model.

Table 19. **Relaxing inflation in high CA surplus countries – impact on current account in 2035**

% of GDP

	DEU	FRA	ITA	ESP	NLD	BEL	GRC	PRT	IRL	AUT	FIN	EA
Public debt variation	-1.2	-0.9	-1.4	-1.2	-3.1	-4.1	-2.3	-2.1	-4.3	-7.1	-3.5	-1.8
Cumulative inflation 2016-2035	2.9	0.1	0.1	0.1	2.9	0.2	0.1	0.1	0.3	3.1	0.2	1.2

Source: iAGS model.

Cooperation would indeed make the adjustment softer, increase growth in the euro area and reduce the risk of deflation. It requires that countries fully take advantage of their fiscal rooms of manoeuvre when they have some fiscal space. It also requires surplus countries to accept more inflation and to revise their national inflation target upward. Yet, it remains to stress that a cooperative solution would only be a second-best: as we showed, trade-offs between interdependent objectives (debt, current account and growth) will still arise.

4.4. Policy recommendations

The recovery that started in 2014 in the euro area is faltering whereas output gap has not yet closed and the unemployment rate remains above its pre-crisis level. Divergence among European countries will widen if economic policy is not changed. It is still time to change and implement policies aiming at enhancing growth and convergence of living standards. The current institutional design may provide rooms of manoeuvre that need to be explored. In the longer term, changing the Treaties should also be considered as an option.

Use fiscal space

Fiscal space in countries where fiscal rules are not binding should be used to implement more expansionary fiscal policies. It would not only boost growth in those countries but would have positive spill-over effects on other EA countries.

Relax fiscal constraints

However, we should not expect too much from expansionary fiscal policies only in some countries. European growth cannot rely only on German expenditures. Expansionary fiscal policy in Germany would first benefit Germany, increasing the growth and living standard divergence among European countries. **More fiscal leeway is necessary** (for details, see Chapter 3.2). A positive fiscal impulse is needed in countries where the output gap is negative. EA countries need some leeway that avoids the caveats of a fiscal stimulus restricted to a small group of countries. **To that end, escape clauses might be extended**. The investment clause may already be used for countries with deficit below 3% of GDP. A generalization of such an escape clause should be considered. **In the future, it may call for a change in the Treaties to promote fiscal rules from which investment expenditures are excluded**. Relaxing the public debt target

and delaying the adjustment of structural public balances would also contribute to provide additional room of manoeuvre for EA countries.

Promote investment to raise future growth, future standards of living and reduce structural divergence

Productivity-enhancing investments must be favoured, notably in external deficit countries. The correction of current account imbalances cannot only be addressed through cost-competitiveness. Favouring public and private investment is necessary to reduce structural divergence and promote the convergence of the standards of living among EU countries.

Make the MIP more symmetric

External imbalances have persisted in the euro area despite the reduction of current account deficits. The adjustment has remained asymmetric, weighing mainly on deficit countries. **The MIP should be made more symmetric and encourage reflation policies in countries with high current account surplus**. It would for example imply higher increase in the minimum wage. **The indicators included in the scoreboard should be made more symmetric**. Actually, if a positive threshold has been identified for the current account to signal macroeconomic imbalances, its absolute value is inferior to the threshold for deficit countries: +6% against -4% of GDP. Moreover, indicators related to nominal wage cost only and real effective exchange rate only point to an upper value. A low wage growth may signal a weak demand. A bottom value should be introduced for nominal unit labour cost.

Promote a golden wage rule and more wage coordination

Wage growth in EA countries should stay close to the sum of the rate of productivity and the inflation target of the ECB (2%). Following this rule would imply that the target of the ECB is more easily reached by creating a nominal anchor through the wage dynamic. Moreover, wage coordination policy should be reinforced by the **generalization of wage floors through minimum wages or collective agreements and cross-country coordination of their increases**. To that end recentralization of wage negotiations at the national and sectoral levels would be desirable as well as the generalizations of collective agreements.

Improve EU institutional design

Lasting convergence with balanced, non-inflationary growth would require changes to both the policy content and institutional design of the euro area. Cornerstones of a reform agenda, that as far as possible makes use of existing procedures or elements that have already been envisaged (for instance in the Five presidents' Report) could involve the following elements (for details see Koll/Watt, forthcoming). The starting point is a **revitalisation of the procedure of economic policy co-ordination** as laid down in Article 121 TFEU, **with the Broad Economic Policy Guidelines as its central element**. In terms of policy content the BEPGs are appropriate to the needs of macroeconomic management in Europe but they have essentially been forced to the sidelines by the inappropriate fixation with fiscal rules focused narrowly on deficit reduction and the asymmetrical MIP. This change would enable the policy mix between aggregate-level monetary policy and predominantly national fiscal policies and incomes policies to be evaluated within a common and consistent framework, under the overarching treaty-based recognition of the necessity to regard economic policies as a matter of "common interest".

Member states commit to using a mix, appropriate to the country in question, of fiscal and incomes policies, in order to ensure demand and nominal wage and price developments consistent with overall policy goals such as laid down in Art. 3 TFE and Art. 119 TFEU. **Persistent non-compliance with agreed trajectories would need to be sanctioned**, as envisaged for instance in the Five Presidents' Report (*e.g.* with a denial of access to common "public goods" –structural funds, common fiscal measures, etc.).

The recommendations under the BPEG should be quantified where possible, in particular providing alternative macroeconomic development scenarios under different policy assumptions. To this end, **the recently established European Fiscal Council should be expanded in terms of personnel and resources** and broadened in scope to refer to the overall policy mix. As a starting-point **its work should serve a revised, symmetrical set of indicators along the lines of the MIP**. In parallel the **expert-advisory productivity boards at national level should be established** also with a remit to analyse the overall macroeconomic policy mix of the Member State concerned. These bodies serve to develop non-binding technical analyses and consistent scenarios. They might usefully be renamed "National Convergence Boards".

In order to ensure the linkage between expert analysis and effective policy-making an option that builds on an existing institution would be to substantially **strengthen the existing Macroeconomic Dialogue**–which brings together the

social partners, the central banks and representatives of the Commission and national fiscal policy at EU level (see *e.g.* Koll 2005). To this end **an MED should be established at the level of the Euro Area** (EUROMED). It would be strengthened vis-a-vis the existing MED at EU level by intensifying the links to the Eurogroup. Specifically we propose **incorporating representatives of the social partners** into some of the Eurogroup's deliberations (Extended Eurogroup format). At the same time, **MEDs should be established in all Member States**. The precise institutionalisation may vary depending on national structures, but the key issue is to bring together representatives of national fiscal policy, the national central bank and the social partners **to debate policy issues in the light of the expert analyses provided by the European and national-level boards**.

Appendix 3. MIP: the asymmetric nature of the macroeconomic surveillance

A new exercise in numerology?

A first stage of the MIP resorts to pinpointing the position of countries regarding thresholds, an approach close to the one already used for identifying excessive deficits in the Stability and growth pact (SGP). A first remark is that an over-interpretation of a numerical target should be avoided. Otherwise we may fear the risk of a new exercise in numerology that will create new rules of conduct without a clear and stable meaning as regards the numbers to be targeted. Within the SGP, the rule of conduct has long focussed on a public deficit at 3% of GDP, though this threshold lacks a theoretical and empirical basis. The proposed thresholds of the MIP are not based on sound theoretical or empirical conclusions which may show that breaching the thresholds echoes an unsustainable macroeconomic situation. A second remark relates to the identification of imbalances: it should not only rely on figures but it has to be based on in-depth economic analysis. The financial crisis has made clear that countries like Spain and Ireland which fulfilled the 3%-of-GDP limit on public deficit have also undergone a deep crisis.

Eventually, the general surveillance of a Member state's macro imbalances must go beyond a few targeted numbers which are without clear economic rationale and it should rely on an in-depth economic analysis. Yet, we must recognise that the MIP makes it clear that a thorough "economic" reading will complement the surveillance. In that view, the list of indicators will only serve as an early-warning signal. The scoreboard is an alert system but main decisions and major recommendations will result from "economic reading" and "in-depth analysis". Considering the distinction between "rough indicators" of the scoreboard and "in-depth analysis", questions about the hierarchy can emerge. On the one hand, if surveillance of macro imbalances relies mainly on the scoreboard, it will be difficult to avoid an excessive number of false alarms: a so-called "excessive" current account deficit may finally reflect a catching-up process. On the other hand, if surveillance relies mainly on "in-depth analysis", recommendations by the Commission will be discretionary. In case of discrepancy between recommendations and the scoreboard, the MIP will not deliver a clear and transparent message to the misleading country.

Not all imbalances should be treated equally

Second, not all imbalances are alike and the aim of the scoreboard (and of the surveillance) should be to identify (or correct) only those which may threaten the sustainability of growth and debts all over the euro area. Current account deficit as such is only a symptom, not the cause of the disease. One has thus to answer two questions: where do imbalances come from? How are they financed? Imbalances may indeed proceed from unfavourable developments in competitiveness or from internal demand, hence requiring different medicine. Both causes are also highly dependent on favourable developments in competitiveness or on the lack of internal demand in partner countries. Thus, in-depth analysis of macro imbalances requires taking into consideration international linkages.

Have current account deficits (surpluses) been caused by higher (lower) domestic consumption or by higher (lower) domestic investment? Higher consumption may fuel credit and a bubble. Investment, provided it remains productive, may enhance productivity and generate future economic growth. While the former may end up with ever-growing debts and a financial crisis, the latter may be self-financed over the long-run. The growth of total factor productivity (TFP) would help to assess the sustainability of current account deficits. By the same token, for catching up countries the dynamics of relative GDP per capita would also be a relevant indicator.

Have current account deficits (surpluses) been financed by net inflows (outflows) of foreign direct investment, higher (lower) retained earnings or net inflows (outflows) of portfolio investment? The latter can be volatile, hence introducing counter-productive uncertainty in the economy. The former can create positive backward spillover effects in the host countries (see Havranek and Irsova, 2011). It is thus important to know about the structure of capital flows. Once again, this issue has been left to the "economic reading" or in-depth analysis without any further indication on the way it would be implemented.

An asymmetric assessment of imbalances

Currently, most indicators are asymmetric. For instance, the current account threshold is set between a surplus of 6% of GDP and a deficit of 4% of GDP. There is no economic rationale for that numbers in particular; and there is no economic rationale as well for introducing an asymmetry in the current account threshold. What makes a deficit above 4% more dangerous to the stability of the euro area than a surplus above 4% (but below 6%)? It seems difficult to argue that German current account surpluses, above 4%, are more innocuous to the euro area than a deficit above 4% in a small country like Greece. The reverse is certainly more correct.

To make things clear, let us switch from ratios to levels. The level of external debt that a German surplus of 4% of its GDP entails is far higher than the level of external debt that a small-country deficit of 4% of its GDP entails. Hence, the disequilibrium forces, and thus the systemic risk, of a large country surplus are stronger than a small country deficit's. An indicator of trade imbalances which manages to monitor their impact on growth, price and financial stability should rely on levels rather than percentage points of GDP. The trade surplus of a large country will fuel credit by domestic banks to smaller countries; if it is huge, the availability of credit in the latter countries will produce easy money and a boom-bust situation. Portugal, Greece, Cyprus and even Spain are certainly good examples in this respect. Their external deficits were largely financed by capital flows from Northern countries and notably Germany and France (Chen *et al.*, 2013). To illustrate this point further, one can compare the respective amounts of (current) euros that a current account surplus of 6% of 2013 GDP in Germany and current account deficits of 4% of 2013 GDP in Greece, Portugal and Spain mean. The German surplus will amount to more than 160 € bn (109 € bn if the surplus achieves only 4% of the German GDP), whereas the deficits will amount to 7, 6 and 40 € bn in Greece, Portugal and Spain respectively. It is straightforward that the impacts on the euro area are not comparable! Then, if the German surpluses mirrored weak investment opportunities and weak internal demand, the deflationary forces would have been very powerful in the Eurozone if they had not been partially absorbed by deficits in other euro area countries.

In comparison with the indicator referring to the current account position, others relating to competitiveness and market shares are even more asymmetric: the burden of responsibility is exclusively borne by deficit/debtor countries. This is notably the case for the net international investment position which is, by construction, the accumulation of past current account balances. Because of this bias in signalling only a certain type of imbalances, it is possible to miss the fact that a market share loss by a given euro area country may have as counterpart a market share gain by another one. Therefore, there is a risk that recommendations will be geared toward deficit countries urging them to adjust wage costs downward or to implement restrictive policies. Conversely it will fail to signal that surplus countries have run competitive disinflation policies, as confirmed recently. The European Commission decided not to put Germany into surveillance for macroeconomic imbalances despite its current account surplus exceeding 6% for two consecutive years. As stressed by De Grauwe (2012), the current governance of macroeconomic imbalances in the euro area endorses the tyranny of creditor countries. The result will be that the euro area as a whole will continue to implement a global deflationary policy. By only signalling competitiveness losses, the MIP will actually miss to signal a coordination problem among euro area countries.

The same remarks hold for indicators of internal imbalances. By considering only the increases in private sector credit flows, the scoreboard will only signal member states facing overheating although weaknesses in internal demand may also be a source of disequilibrium. For macro surveillance to be consistent with article 2 of the Consolidated EU Treaty (stipulating that the general objectives of the EU are to promote a high level of employment and social protection, the raising of standard of living and quality of life, and economic and social cohesion and solidarity among Member states), it should not only point out the risks of an excess development in credit and asset prices. For instance, a growth slowdown in credit flows may signal a situation of credit crunch or weakness in internal demand. It would then be useful to consider a lower limit to the credit flows to the private sector.

Appendix 4. iAGS model hypotheses and simulations

Table A1. **Public finance and output performances under the baseline scenario**

(no risk premium, no fiscal impulse beyond 2018, time-varying fiscal multiplier, hysteresis effects)

	Public debt (% of GDP)		Structural balance (% of GDP)		Cumulative fiscal impulse	GDP growth rate (%)		Average output gap	Inflation rate (%)	
	(1) 2020	(2) 2035	(3) 2020	(4) 2035	(5) 2015-2035*	(6) 2016-2020	(7) 2021-2035	(8) 2016-2035	(9) 2016-2020	(10) 2021-2035
DEU	60	33	0.0	0.6	1.0	1.3	1.0	0.5	1.6	2.0
FRA	95	91	-2.3	-3.1	-0.7	1.6	1.4	-0.3	1.5	2.0
ITA	129	101	-0.8	-0.5	0.2	0.7	0.3	-0.3	1.3	2.0
ESP	102	101	-3.1	-3.6	0.0	2.3	1.4	-0.1	0.7	2.0
NLD	61	41	-0.3	-0.3	-0.7	1.6	1.3	-0.1	1.0	2.0
BEL	99	65	-0.2	-0.3	-2.1	1.3	1.6	-0.6	1.8	2.1
PRT	121	87	-0.4	-0.5	-1.5	1.4	1.1	-1.4	1.4	2.1
IRL	82	51	-0.9	-0.1	-0.7	2.2	1.9	0.9	0.7	1.9
GRC	178	182	-4.8	-6.4	0.3	1.8	1.2	-2.5	0.9	2.2
FIN	66	79	-2.1	-3.8	-0.4	1.6	1.7	-1.0	1.3	2.1
AUT	77	61	-0.6	-1.2	0.4	1.4	1.5	-0.8	1.5	2.1
EA	89	71	-1.1	-1.3	0.0	1.4	1.1	-0.1	1.3	2.0

* In the baseline scenario, fiscal impulses are equal to 0 from 2019 to 2035.
Source: iAGS model.

Table A2. Is it possible to reach a 60% debt-to-GDP ratio?

(baseline scenario except +/- 0.5 fiscal impulses depending on public debt gap *vis-à-vis* 60% target)

	Public debt (% of GDP)		Structural balance (% of GDP)		Cumulative fiscal impulse	GDP growth rate (%)		Average output gap	Inflation rate (%)	
	(1) 2020	(2) 2035	(3) 2020	(4) 2035	(5) 2015-2035	(6) 2016-2020	(7) 2021-2035	(8) 2016-2035	(9) 2016-2020	(10) 2021-2035
DEU	62	60	-1.5	-1.8	2.8	1.4	1.0	0.7	1.6	1.9
FRA	93	60	-0.8	-0.1	-3.0	1.4	1.5	-0.5	1.4	2.0
ITA	128	60	1.0	3.2	-2.6	0.5	0.3	-0.6	1.2	2.0
ESP	101	60	-1.4	0.5	-3.1	2.0	1.5	-0.4	0.6	2.0
NLD	62	60	-1.6	-2.1	0.8	1.9	1.3	0.2	1.1	2.0
BEL	98	60	-0.3	0.4	-2.4	1.5	1.5	-0.5	1.9	2.0
PRT	123	60	0.8	2.2	-3.8	1.0	1.2	-1.8	1.3	2.1
IRL	84	60	-1.5	-1.0	0.0	2.2	1.9	0.9	0.7	1.9
GRC	185	114	-2.7	3.7	-9.4	0.9	1.1	-4.1	0.6	2.2
FIN	63	60	-0.9	-2.1	-1.7	1.5	1.7	-1.1	1.2	2.1
AUT	75	60	-0.6	-1.2	0.5	1.5	1.5	-0.7	1.6	2.1
EA	88	61	-0.8	-0.2	-0.8	1.4	1.1	-0.2	1.3	2.0

Source: iAGS model.

Table A3. Correction of fiscal and external imbalances in symmetric price adjustment case

	Public debt (% of GDP)		Structural balance (% of GDP)		Cumulative fiscal impulse	Average output gap	Inflation rate (%)		Current account adjustment
	(1) 2020	(2) 2035	(3) 2020	(4) 2035	(5) 2016-2035	(6) 2016-2035	(7) 2016-2020	(8) 2021-2035	(9) 2035-2016
DEU	62	60	-1.3	-2.0	2.5	0.1	1.7	2.5	1.2
FRA	93	60	-0.9	0.1	-3.0	-0.3	1.4	1.7	4.6
ITA	128	60	1.0	3.4	-2.6	-0.4	1.2	1.8	4.7
ESP	101	60	-1.4	0.6	-3.0	-0.1	0.6	1.7	11.2
NLD	62	60	-1.7	-2.2	0.9	0.1	1.2	2.3	0.0
BEL	99	60	-0.4	0.4	-1.6	0.4	1.7	1.4	3.3
PRT	124	60	0.7	2.9	-4.5	-1.8	1.2	1.6	8.4
IRL	84	60	-1.6	-1.2	0.1	0.8	0.8	2.4	4.0
GRC	186	121	-2.7	4.0	-9.4	-3.4	0.4	1.3	0.1
FIN	63	60	-1.6	-2.0	-0.9	-0.2	1.2	1.5	2.1
AUT	76	60	-1.7	-1.5	1.7	0.2	1.7	2.3	1.2
EA	89	61	-0.9	-0.3	-0.8	-0.2	1.3	2.0	3.7

The adjustment of current account is computed as the change in the current account between 2016 and 2035.
Source: iAGS model.

Table A4. **Correction of fiscal and external imbalances, with appreciation of the euro up to 1.2**

	Public debt (% of GDP)		Structural balance (% of GDP)		Cumulative fiscal impulse	Average output gap	Inflation rate (%)		Current account adjustment
	(1) 2020	(2) 2035	(3) 2020	(4) 2035	(5) 2015-2035	(6) 2016-2035	(7) 2016-2020	(8) 2021-2035	(9) 2035
DEU	62	60	-0.1	-1.7	1.0	-1.01	1.7	2.6	4.8
FRA	94	60	-0.9	0.1	-3.0	-0.4	1.4	1.8	-1.8
ITA	130	60	0.9	3.7	-3.3	-0.9	1.1	1.9	-1.6
ESP	102	60	-1.5	0.8	-3.2	-0.3	0.5	1.8	1.1
NLD	60	60	-1.1	-2.2	0.3	-0.5	1.2	2.4	6.4
BEL	94	60	-1.1	0.0	-0.5	0.9	2.0	1.5	-1.3
PRT	113	60	0.0	1.7	-1.6	-0.1	1.5	1.6	-4.3
IRL	79	60	-1.5	-1.4	0.1	0.4	1.0	2.5	6.5
GRC	181	101	-2.5	5.4	-9.4	-2.7	0.5	1.4	-10.1
FIN	61	60	-2.3	-2.3	0.2	0.5	1.4	1.5	-1.6
AUT	71	60	-1.8	-1.8	2.5	0.5	1.9	2.3	3.0
EA	88	61	-0.5	-0.1	-1.3	-0.6	1.3	2.1	0.4

Source: iAGS model.

Table A5. **Main hypotheses for 2016**

In %

	Public debt (2015)	Fiscal balance	Structural balance	Primary structural balance	output gap (2015)	Long-term growth
DEU	71.2	0.5	0.2	1.7	0.2	1.0
FRA	95.8	-3.3	-2.4	-0.4	-1.8	1.4
ITA	132.7	-2.6	-0.8	3.0	-3.7	0.2
ESP	99.2	-4.3	--3.0	-0.4	-5.0	1.4
NLD	65.1	-1.3	-0.7	0.2	-2.5	1.3
BEL	106.0	-2.8	-2.2	0.2	-1.2	1.5
PRT	129.0	-3.0	-0.8	3.0	-5.5	1.0
IRL	93.8	-0.6	-1.9	0.7	0.6	1.8
GRC	176.9	-3.2	-2.5	1.7	-12.0	1.0
FIN	63.1	-2.3	-1.1	-0.7	-3.7	1.6
AUT	86.2	-1.2	0.0	1.8	-2.8	1.4

Source: iAGS model.