AT THE EDGE OF DEFLATION
SUPPORTING REBALANCING THROUGH WAGE COORDINATION

The euro area crisis contains many elements – sovereign debt, the banking sector, competitiveness, demand – that interlock in complex ways. This chapter of the report focuses on an important sub-set of those interactions, those between current account imbalances, wage and price developments, unemployment and inequality. A particular concern is the way in which current account and competitiveness imbalances in the euro area are being resolved – namely one-sidedly through deflationary policies. Fiscal austerity and institutional "reforms" force unemployment up and wages and prices down in the crisis countries. But surplus countries are failing to offset the negative impact with expansionary policies. While the adjustment of relative wages and prices in the euro area is essential, to correct past imbalances, wage and price deflation can be highly dangerous. In a context of inadequate demand, low interest rates and high levels of indebtedness, a deflationary spiral is a real risk. Falling prices keep real interest rates inappropriately high, and raise the real value of debts. Demand is depressed further. Under such circumstances the process of balance sheet repair is delayed or even thrown into reverse. Hard-won competitiveness gains are offset because the common currency tends to appreciate. Persistent deflation could yet turn the Great Recession into a repeat of the Great Depression.

But, there are alternatives to deflation. A better cooperation is needed to avoid a prolonged internal devaluation. The adjustment has to be balanced with surpluses countries playing their part in the reduction of external imbalances. The aim of this chapter is to shed some lights on the benefits of cooperation in the area of wage-setting. The adoption of minimum wage norms may indeed be used to dampen the risk of deflation in crisis countries and to boost internal demand in surplus countries.

First of all we examine the evidence in the areas relating to competitive rebalancing and identify the problematic elements of the adjustment strategy pursued. We then present existing national institutional features in terms of minimum wage system. Finally, we consider alternative policies. While the need for alternative stabilization policies to boost demand in the euro area is discussed more fully in Chapters 1 and 4 of this report, we focus here on the role of coordinated wage policies.

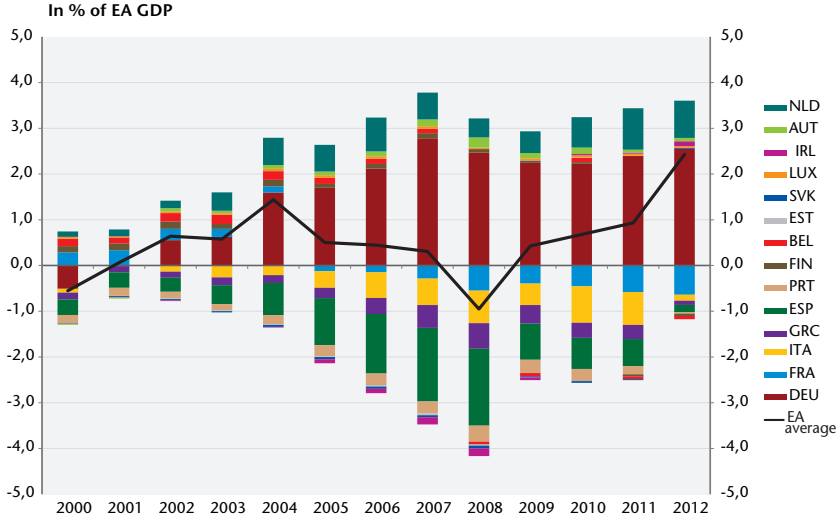
1. Current account imbalances, competitiveness and wage developments

In the pre-crisis period, current account imbalances within the euro area, and within Europe more widely, rose sharply. As already discussed in iAGS 2013, these imbalances implied an accelerating increase in the foreign indebtedness of the deficit countries and a corresponding rise in the net foreign asset position of the surplus countries. The widening gap was financed by a growing flow of private capital to the current account deficit economies from the surplus countries and others, (notably French and German banks, Lindner 2013). After the crisis, both

the ability and willingness of economic agents in the deficit countries to continue net borrowing and, more importantly, the willingness of private sector agents in the surplus countries to prolong existing credit and hold government bonds of deficit countries quickly dried up. The gap was partly filled by various forms of public lending and the monetary refinancing operations of the ECB. A rebalancing of the euro area economy and a narrowing, if not a reversal, of current account imbalances is a necessary condition for a re-emergence of a stable growth model in the euro area.

On this there is both good and bad news. Some progress has been made in narrowing current account imbalances (Figure 29), particularly in the bilateral intra-EMU trade balances. However, that progress has been one-sided, with adjustment borne disproportionately by the deficit countries. This has meant that rebalancing has occurred at far lower levels of aggregate output and employment – with negative knock-on effects on fiscal consolidation – than would have been possible with a more symmetric adjustment.

Figure 29. Current accounts balance



Source: OECD

In the pre-crisis period, the imbalances increased broadly symmetrically. If we average the 2007 and 2008 figures, the surpluses – above all of Germany, but also the Netherlands, Finland, Austria and Luxembourg – and the deficits of, above all, Spain Italy, Greece and Portugal, increasingly also France, both amounted to around 3½% of GDP. Initially there was a very sharp contraction of deficits when the crisis hit, as households and firms in the deficit countries faced restricted access to funding or were otherwise (bankruptcy, unemployment) forced to reduce consumption, investment and borrowing. The downward adjustment of the surpluses was much smaller and, above all, temporary: already in 2010 they began increasing once more, driven particularly by developments in the Netherlands and Germany. Deficits stabilised for a while only to shrink precipitously in

the wake of the tightening of austerity policies and the renewed downturn beginning in 2011, with the contraction driven particularly by Spain, Portugal, Italy and Greece. France's deficit, on the other hand, widened further. Current estimates suggest that already this year, all the crisis countries will have achieved a balanced current account position or a surplus. France and Finland will be the sole countries posting a deficit.

This one-sided adjustment, a dramatic push for higher net exports on the part of the crisis countries, unmatched by a willingness to increase net imports by surplus countries, had two main consequences. The direct consequence was that the overall current account position of the euro area moved sharply into surplus, reaching 2.4% of euro area GDP in 2012 and an expected 3.2% in the current year. This is a major change, as the euro area current account had been close to balance since the common currency's inception in 1999. But unlike within the euro area, at the global level a built-in equilibrating mechanism kicks in when the second largest currency area in the world seeks forcibly to raise its overall net exports: the currency appreciates. As a result the euro has recently substantially appreciated against the euro area's major trading partners. Thus while deflationary policies helped improve the crisis countries' competitiveness within the currency area, in line with the recommendations of the European Commission but at great cost in terms of domestic demand and jobs, the appreciation induced by the rising current account surplus – i.e. from the failure of the surplus countries to expand domestic demand in a symmetrical way – counteracted such efforts, weakening their competitive position on markets outside the euro area.

It is important in this context to note the fallacy of an often-heard claim to the effect that what is being demanded of the crisis countries is no more than to replicate the efforts that Germany had to put in to regain competitiveness in the early 2000s. While superficially similar, the positions of Germany then and the crisis countries now are very different. The adjustment costs in terms of depressed domestic demand, while severe, were much lower in Germany because at that time the overall global economic climate was either fair (early 2000s) or buoyant (mid 2000s), and its trading partners within the euro area were acting as a counterweight: demand there was booming and nominal wages and prices rising strongly. In contrast, the crisis countries' adjustment is occurring under depressed economic conditions.

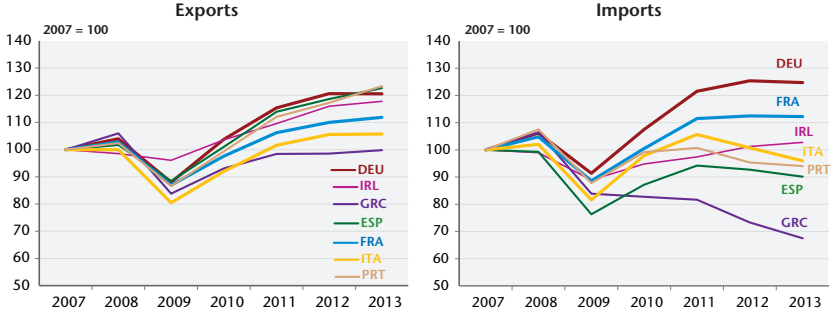
Changes in the current account position are dominated by those in the balance between exports and imports of goods and services (trade balance). A narrowing of a current account deficit therefore typically occurs via some combination of contracting imports or rising exports. It is more favourable to follow an adjustment path focusing on rising exports than contracting imports, as the former implies rising domestic production, whereas the latter is a sign of falling domestic demands and incomes. The picture for the euro area is mixed (we focus here on the crisis-hit countries Greece, Ireland, Italy, Portugal and Spain, as well as on France and Germany).

If we look at nominal figures (which are decisive for the trade balance) we see adjustment by the crisis countries on both sides of the trade balance, except in Greece. Between 2007 and 2013 export growth in current prices was even slightly higher in Portugal and Spain than in Germany (where it was just over 20%) and it was only slightly lower in Ireland. In Italy, though, only meagre nominal export growth was recorded, while Greece had by 2013 not quite regained its 2007

level. Meanwhile imports, again in current prices, were below their 2007 in all countries (except in Ireland); in Greece they had fallen by around one third.

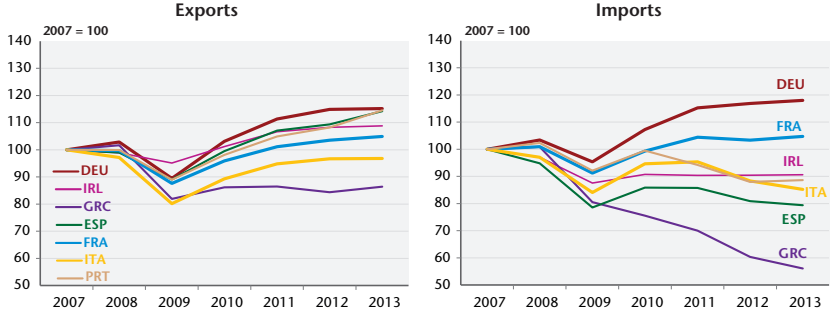
In real terms – which is more telling for actual export performance and living standards – the performance of Portugal, Spain and Ireland relative to Germany is slightly less favourable, reflecting the fact that their export price increases were greater than in Germany; nonetheless compared with 2007 the two Iberian states have increased their export volumes by almost 15%, while Ireland managed a 9% increase. Of major concern is that high export price increases (15% in Greece and 9% in Italy) hide the fact that in real terms exports have fallen in both countries (by almost 15% in Greece). On the import side, volumes were growing slowly after massive crisis-induced contraction, but they stagnated or fell again after 2011. In all crisis countries real imports were down more than 10% by 2013, while in Greece they were divided by two.

Figure 30. Exports/imports of goods and services (current prices)



Source: OECD.

Figure 31. Exports/imports of goods and services (constant prices)



Source: OECD.

In short, there has been some welcome improvement in export performance on the part of Ireland, Portugal and Spain. In Greece, however, the trade-balance improvement has largely come by killing demand and driving down imports; this also occurred in Spain albeit less drastically. Italy is in an intermediate position on both sides of the trade balance. In France the nominal rates of import and export growth are broadly similar, but given the existing trade deficit, this implies a continued widening of the negative trade balance.

It is noteworthy that export prices have increased substantially in all the crisis countries over the period, although less so than import prices: in Spain, Portugal and Ireland by 7-8%, in Italy around 9% and in Greece by more than 15%. By contrast, in Germany export prices have risen only a little over 4% since 2007. The strategy of internal devaluation is premised on improving export competiveness by driving down production costs and in particular unit labour costs. The sharp rise in export prices suggests that this strategy is not working in the way intended. However, a somewhat different adjustment path is also conceivable. A combination of falling (absolute or at least relative) labour costs and rising export prices would increase export margins, and raise domestic producers' profitability. It would also trigger a shift from the production of non-tradables to that of tradables (see the discussion in European Commission 2013). We return to this issue once we have examined labour cost developments.

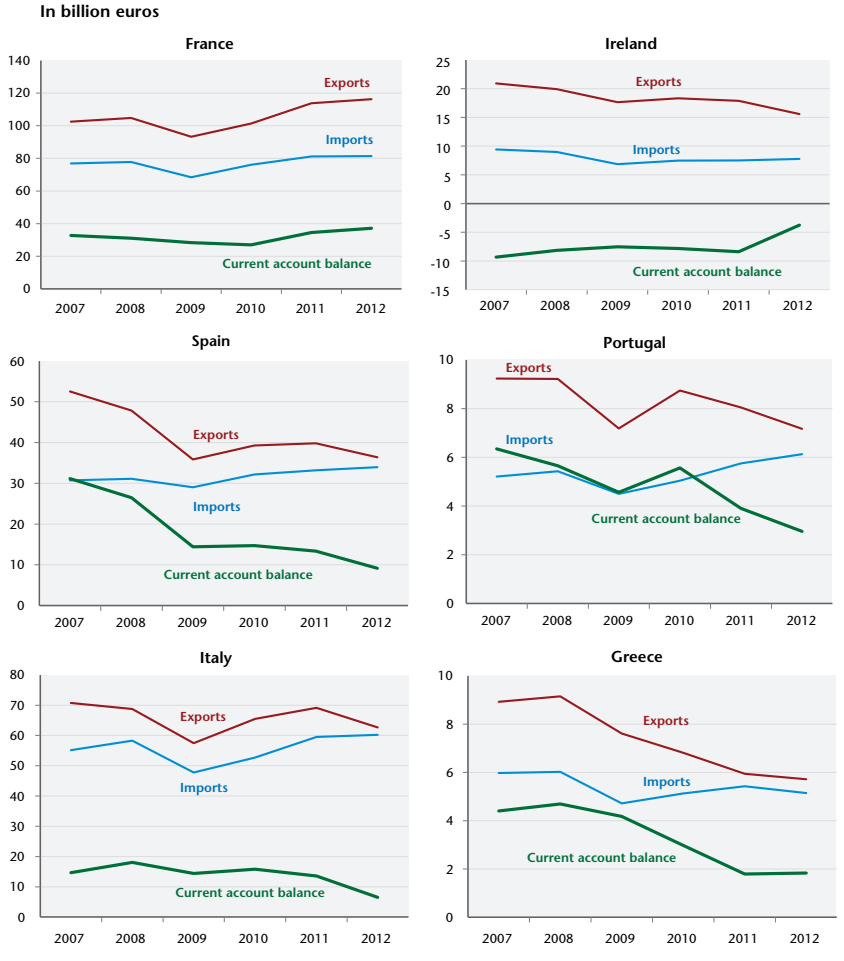
Before leaving the issue of trade and current account balances, though, it needs to be recalled that the changing current account positions and adjustment paths discussed so far apply to the overall trading positions of the countries concerned, including both intra and extra-EMU trade. Clearly, the implications for euro area policy would differ if the picture of one-sided adjustment did not apply in the case of intra-EMU trade and payments relations.

To look at this we consider Bundesbank data for the bilateral trade and payments relations between Germany – the largest economy and by far the most important surplus country in the currency area – and five crisis countries as well as France, the second-largest EMU economy. The figures are reported from the German position, so that the line representing "Exports" to, for instance, Spain represents Spanish imports of goods and services from Germany. We see that Germany has maintained a current account surplus throughout the period since the crisis with all the other countries except Ireland. But the current account surpluses have fallen substantially, by some two-thirds in Spain and Greece and by around half in Italy and Portugal. In Ireland, though, the trade surplus with Germany declined in 2012, whereas in France the deficit has more recently widened.

If we consider the development of exports and imports separately, a similar pattern emerges as seen with post-crisis trade relations more generally. Initially the trade deficits were closed primarily by import-compression. More recently, though, exports from the crisis countries to Germany have picked up somewhat. As a combined result of these two trends, the German trade surpluses are now very limited in most cases (exception: France). The fact that the current account deficit remains considerably wider is due to the other components of the current account (factor income and transfers) which have tended to remain rather stable in the years since the crisis broke. This means that, despite the improvement in bilateral trade balances with Germany, the crisis countries still have to fund

current account deficits which implies further increasing their net foreign liabilities vis-a-vis Germany.[1]

Figure 32. German bilateral trade and current account



Source: Bundesbank.

Greater import absorption by Germany on the back of expansionary policies and measures to increase wage and price growth would have reduced the costs of adjustment and the crisis countries would already certainly be running trade

1. For this reason Erber (2013), who also refers to Bundesbank data, remains less than fully convincing in his attempt to exonerate Germany from the critique, by Paul Krugman and others, of mercantilism.

surpluses and probably also current account surpluses against Germany, enabling them to pay down foreign debt. It is not too late to rectify this costly error. A corollary of shrinking bilateral current account surpluses with the EMU crisis countries is that the continued German current account surpluses of between 6 and 7% of GDP are due to growing net exports in trade with non-EMU countries, for instance with the US and the BRICS. As we have seen, though, currency appreciation limits the scope and/or sustainability of such a fortuitous development from the German point of view. More recently, as the euro has appreciated and some of the country's export markets have stumbled, the consequences of the failure to stimulate domestic demand and thus help to pull up the countries in its "back yard" have increased Germany's vulnerability to fickle extra-EU foreign demand. This has been behind the weakening of German growth this year. Greater import absorption from the euro area periphery is not, in short, a matter of charity, as it is unfortunately often portrayed.

Wage developments and competitiveness

As discussed in the iAGS Report 2013, the pre-crisis years saw a close correlation among euro area countries between the development of unit labour costs and current account positions. Countries with above-average unit labour cost growth experienced widening current account deficits; those with below-average increases – most prominently Germany, where nominal unit labour costs were broadly unchanged over much of the 2000s – posted growing surpluses.

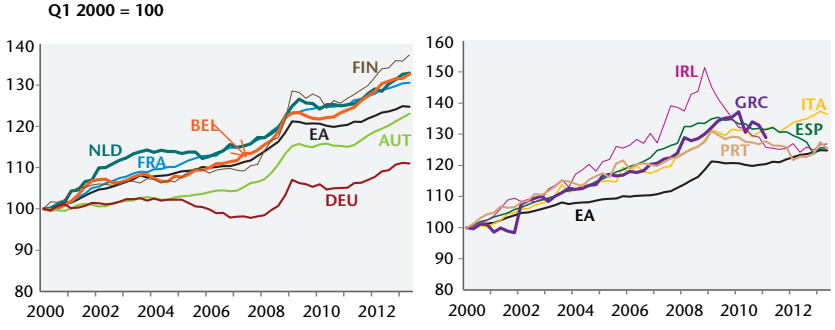
As explained in more detail in last year's report, the relationship is not a simple causal one running from rising (falling) labour costs to declining (improving) competitiveness and thus to growing trade deficits (surpluses). Rather, the deficit and surplus countries were each locked into a separate, but symbiotic, process of cumulative causation. In the former the reduction of real interest rates on joining the euro stoked up domestic demand and pushed up wages and prices while sucking in imports. The higher inflation rate – given a uniform nominal interest rate for the entire euro area – kept real interest rates low, while steadily eroding international competitiveness, depressing exports. Surplus countries faced higher real interest rates, sluggish domestic demand growth with strong downward pressure on wages. Their meagre growth was heavily dependent on net exports, not least to the booming periphery. For many years private capital flows happily accommodated the build-up of claims by the in-surplus core against the in-deficit periphery. But what was unsustainable had at some point to stop.

When the crisis hit, competitiveness, and specifically unit labour costs, became a prime focus of policymakers' attention, rivalled only by the obsession with fiscal consolidation. The Euro Plus Pact was initially termed the Competitiveness Pact, and that was its key focus. Unit labour costs were specifically taken up as an indicator in the Scoreboard operationalising the Excessive Imbalance Procedure (EIP). However, in a clear sign that the above-mentioned complexities and geographical interdependencies of the interrelationships between labour costs, competitiveness and current account positions had not been properly understood – or were being wilfully ignored – the EIP only set a maximum limit on the development of nominal unit labour costs (ULC). They were not to grow by more than 3% a year over a three-year period.[2] There was no minimum threshold. Wages,

2. The limit is 9% over the previous three years for euro-area and 12% for non-Euro countries.

apparently, could only ever increase too fast. This asymmetry meant that the rise in the unemployment rate in some countries triggered a significant downward adjustment process not just in wage growth but in wage levels. But, even if adjustment was needed, it seems that is has gone out of control. The fall in GDP following first the recession of 2009 and then the double dip resulted from fiscal consolidation have given rise to a real risk of wage deflation in some countries (Spain, Greece and Portugal).

Figure 33. Unit labour costs (total economy)

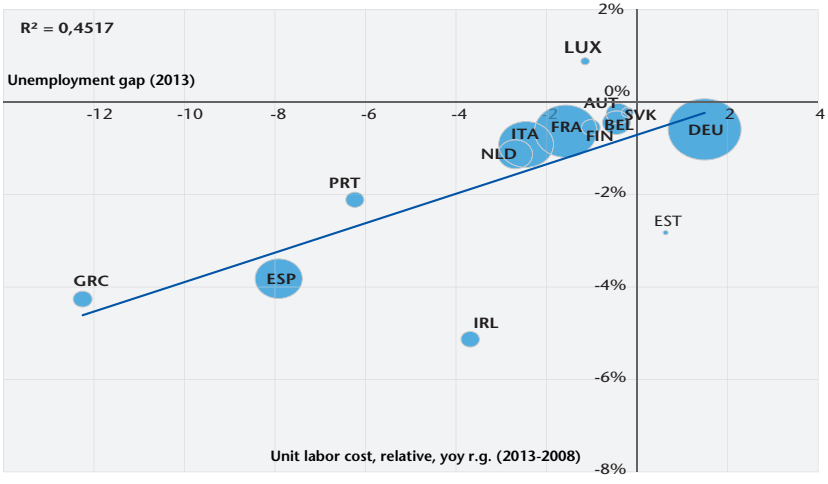


Source: OFCE-IMK-ECLM calculations on Eurostat data.

As can be clearly seen from the Figure 33 and 34, the pattern of a close association between unit labour cost and current account developments and between ULC and unemployment rate continues. ULCs, too, have adjusted, but very asymmetrically. The crisis countries (but not Italy) have all by now – Figure 33 include the first two quarters of 2013 – adjusted so as to return to the trajectory of average ULC growth in the currency union. Thus the trend identified in last year's report continues. The right-hand panel of the next figure shows that all of the crisis countries except Italy actually achieved negative ULC growth between 2007 and 2012. But even if external imbalances have already significantly narrowed, the unemployment rate remains at record levels. The wage deflationary pressures will then continue and may even strengthen if expectations anchor to deflation equilibrium. Competitiveness will still improve and past current account deficits may rapidly turn to future surpluses. As long as no backstop to the slow down or even decrease in wages is put in place, the downward adjustment will continue until the unemployment gap is markedly reduced.

Germany, on the other hand, has experienced faster ULC growth since the crisis compared to before, but its ULC growth rates have been broadly in line with the EMU average: in other words, while it is no longer opening up a competitiveness gap vis-à-vis the other EMU countries, neither is it closing the accumulated gap that had built up in previous years. Worryingly the most recent quarters have seen renewed sluggishness in German ULC developments, although short-run and within-year comparisons must be interpreted cautiously. Austria, by contrast, has been steadily closing the gap with the EMU average from below, offering an example of successful symmetrical adjustment.

Figure 34. Unit labour costs and the unemployment rate gap (total economy)



Source: OECD.

In interpreting these figures it is important to recognise that the EMU average cannot in fact be considered an appropriate wage-policy benchmark. This is important not least in assessing ULC trends in France. French ULC developments have consistently been slightly above the average for the currency area; a gap of just over 5% has opened up. However, to a considerable degree this reflects the fact that aggregate ULC developments have lagged behind the appropriate benchmark, which is the annual inflation target of the central bank.[3] A ULC increase of 1.9% p.a. would be roughly equidistant between the final data point for France and for the EMU average.

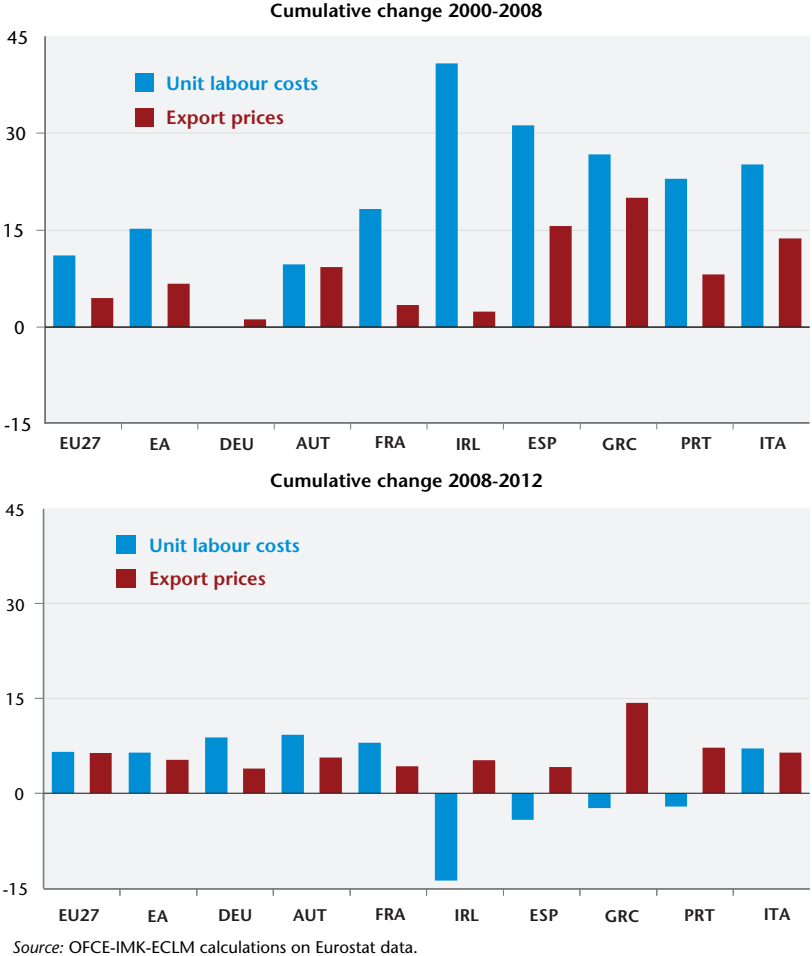
The figure also enables us to return to the issue briefly mentioned above: the relationship between unit labour costs and export prices. As we have already seen, export prices have continued to increase since the crisis, in some cases rather slowly (e.g. Ireland, Spain), but in others (e.g. Greece and Italy) more rapidly. This occurred in the face of falling unit labour costs (right-hand panel).

This suggests that firms in these countries are "pricing to market": irrespective of changes in their labour costs of production they sell goods on foreign markets in line with (rising) price trends on those markets. This increases their margins and profitability and may contribute to increase the share of profits in the value-added (see Box 7). Looking at the left-hand panel of the figure, we see that during the pre-crisis period firms in the subsequent crisis countries were unable to pass on their rapidly rising unit labour costs fully onto sales prices. Spanish companies, for example, raised prices by just over 15%, implying a loss of competitiveness

3. This is because ULC and price increases that are equal and in accordance with the central bank target are a long-run condition for sustainable economic development; sustainable both in terms of being non-inflationary and of ensuring no change in the functional income distribution (i.e. between labour and capital); see Watt 2012.

(unless offset by increases in product quality or shifts in the product mix in favour of higher-value goods). But this was less than half the increase in unit labour costs. This suggests that margins had been heavily squeezed in the pre-crisis period, implying, in turn, that, at least in part, the increasing margins were an important part of the readjustment process. We can agree with the European Commission (2013) that this may also have been "necessary", in a sense, in order to compensate firms for their higher cost of capital. However, this higher cost of capital was in very large measure a reflection of the failure of EU policymakers to address the causes of high interest-rate spreads and the broken monetary policy transmission mechanism. Ultimately, then, this form of compensation by wage-earners cannot be construed as "necessary".

Figure 35. Unit labour costs and export prices



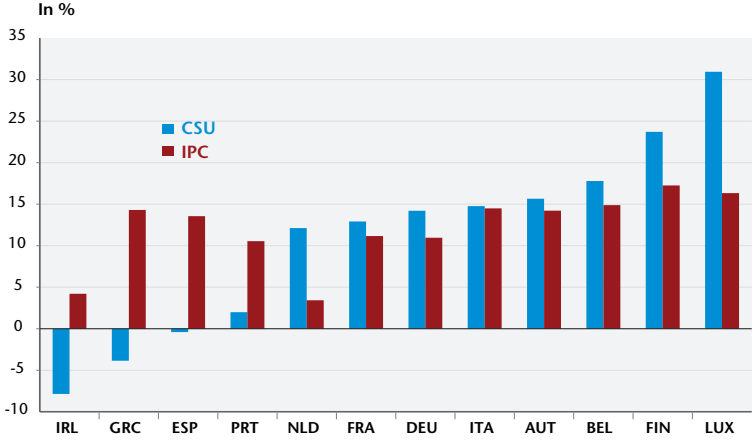
Source: OFCE-IMK-ECLM calculations on Eurostat data.

More generally, the gap between unit labour costs and export price developments suggests that export growth could have been stronger if price rises had been restrained. It is of concern in distributional terms – and is potentially a social and political flashpoint going forward – if workers in the crisis countries continue to exercise wage restraint and jobs are being cut in the name of raising competitiveness, but the main effect is to raise profit margins.

Box 7. The share of value-added

Since 2007, in most fragile euro area countries, unit wage costs have either decreased (Ireland, Greece and Spain) or have grown moderately (Portugal). Yet, inflation has remained positive notably because of increases of indirect taxes (due to hikes in VAT rates) and higher import prices (energy). In France, Germany and Italy, the rise in unit wage costs has exceeded the inflation rate, which have led to a reduction in firms' margins (Figure).

Figure 36. Cumulated developments in unit wage costs and in inflation rate, 2007-2013



Source: Eurostat, AMECO.

The share of the value-added between labour and capital followed diverse developments in the pre-crisis period. A wage moderation policy was pursued by Germany over the period 2000-2007 (table). This was also the case in Austria, Belgium and France but to a lesser extent. Conversely, the dynamic of the share of value-added has been more favourable to labour in Italy and Ireland.

During the initial phase of the crisis, firms' behaviour has partly mitigated the rise of unit wage costs. Labour hoarding has triggered a fall in productivity and rising unit wage costs. The downward adjustment of profits has then prevented from a rise in inflation. Firms were thus hard hit by the crisis over the period 2007-2009. Margins decreased while unit wage costs, in all countries still grew at positive rate. The share of labour in the value-added increased between 2007 and 2009, correlated to the slow down of value-added and profits. But, from

2010 to 2012, unit wage costs started to decrease in the manufacturing sector, with the exception of Belgium. Nevertheless divergences are increasing. Some countries (Greece, Spain and Portugal notably) are engaged in a strategy of internal devaluation resulting from sharp reduction in wage costs. With a positive inflation rate, real wage costs are decreasing and firms may progressively restore their profit margins. Then households bear a larger part of the adjustment and real disposable incomes are decreasing. France and Italy are exceptions since margins are still deteriorating as the GDP deflator increases less rapidly than unit wage costs.

Table 11. Share of labour in the value-added

In % of Value-added

	2000	2007	2009	2013(f)
DEU	60.0	54.3	57.9	58.7
AUT	58.0	53.7	56.7	55.9
BEL	57.9	56.3	58.6	58.9
ESP	55.1	53.3	54.0	49.3
FIN	53.5	53.7	59.5	59.1
FRA	60.3	59.8	61.7	62.1
GRC	38.9	39.7	40.8	35.3
IRL	44.2	47.4	51.4	45.1
ITA	45.3	47.1	48.8	49.7
LUX	52.7	48.4	56.1	52.0
NLD	56.8	55.4	58.2	57.7
PRT	55.7	56.3	57.5	54.1

(f) : forecast
Source: Eurostat, base AMECO, OFCE-IMK-ECLM calculations.

2. Minimum wages in Europe: from diversity to coordination

The reduction of external imbalances is doubtless needed. Until now it has mainly hinged on internal devaluation. This strategy is clearly non cooperative and may lead to a vicious circle where each country will successively seek to regain lost competitiveness in reaction to internal devaluation carried by its European partners. Deflation will then progressively install, starting in the most fragile countries. Once the deflation has installed, it becomes a process difficult to stop, especially when unemployment is high for a long period of time. If agents' expectations are negatively anchored, it might prove very difficult to change the sign of these expectations, as we have observed in Japan. The austerity policies taking place in Europe have accelerated this adjustment mechanism through higher unemployment, thereby reinforcing deflationary pressures. Wage costs play a fundamental role in the adjustment but overshooting should be avoided. The adjustment should be relative in the sense that unit wage costs grow faster in surplus countries. Even if wages are mostly determined by market forces, governments may influence the dynamics of wages through minimum wages and other policy influences. Henceforth, we suggest introducing minimum wage norms in Europe as it may be used as a discretionary policy tool in each country, to put an end to the downward adjustment. The rise in minimum wages would depend on

the relative current account positions, with the aim of equilibrating external imbalances within the euro zone. The advantage of this policy compared to an automatic adjustment by market forces is that it would rest on cooperation between euro area countries, holding out the promise of much more favourable results in aggregate.

This would prevent Europe from falling into the vicious circle of deflation, while reducing current account imbalances, thereby increasing debt sustainability. A coordinated solution would avoid non-cooperative competitive devaluations as is the case for the moment. And not only would it improve the macroeconomic situation, it would also mitigate the risks of poverty and dampen rising inequalities.

Unfortunately, this is not the direction that has been followed by European authorities lately. Initially, the European Union had no competence concerning wage policy. But within the framework of the "European semester" and of the "Six-pack", recommendations can now concern wages to prevent or correct macroeconomic imbalances. Financial sanctions can be imposed by the Commission of countries not fulfilling their obligations to rein in imbalances (Koll 2013). Furthermore, countries benefitting from a bailout (Greece, Ireland and Portugal) or from a support to the financial sector (Spain) have to implement recommendations of Memorandum of Understanding which typically relate also to wage-setting (for more details, see Schulten and Müller, 2013).

Simplifying, there are three ways in which labour market institutions can impact on the evolution of wages:

1) the minimum wage level and the share of employees concerned by it, and also the impact of its evolution on other wages;
2) the system of collective bargaining: wages can be negotiated at different levels (firm-level or by sector, Table 12), there can be pattern bargaining, where one sector sets the pace for the whole economy, and also automatic indexation clauses.;
3) the extension or not of the results of collective bargaining to employees not directly covered by an agreement. The extension can be practically automatic in some countries whereas it is very limited in others.

Given this framework, the main EC recommendations to improve competitiveness are: decentralisation of wage bargaining at firm-level, limitation of the extension of collective bargaining, reform of the level or the procedure to set the minimum wage. The idea is to facilitate a downward adjustment of wages in a context of widespread unemployment, *i.e.* to improve the market-based adjustment of wages. The two boxes below present the main reforms recently approved concerning wage-setting (Schulten and Müller, 2013). In Greece, reforms asked were particularly strong, but all countries are to some extent concerned.

Table 12. Wage-setting framework in 2011

	Main level of wage bargaining[1]	Use of extension mechanism	Bargaining coverage *in %* (2010/2011)
AUT	3	Limited	99
BEL	5	Extensive	96
BGR	2	Very limited	18
CZE	1	Very limited	41
CYP	2	No	52
DNK	3	No	85*
EST	1	Very limited	25
FIN	5	Relevant	90
FRA	2	Extensive	92**
DEU	3	Limited	61
GRC	5	Extensive	65**
HUN	1	Very limited	34***
IRL	1	Very limited	42
ITA	3	No	85
LVA	1	Very limited	20
LTU	1	Very limited	12
LUX	2	Extensive	58**
MLT	1	No	55**
NLD	3	Relevant	84
POL	1	Very limited	29
PRT	3	Extensive	32
ROU	1	Limited	20
SVK	2	Limited	35
SVN	3	Extensive	92***
ESP	4	Extensive	73
SWE	3	No	91
GBR	1	No	31

1. The bargaining predominantly takes place: 1/ at the local or company level, 2/ intermediate between sector and company level, 3/ at the sector or industry level, 4/ intermediate between central and industry level, 5/ at central or cross-industry level.
*2007, ** 2008, *** 2009.
Sources: Kampelmann, Garnero and Rycx (2013), Visser (2013), ICTWSS (http://www.uva-aias.net/208).

Interventions of the EC in wage policies in 2011-2012

Recommendations/agreements:	Addressed countries:
1. Country-specific recommendations in the framework of the European Semester:	
Decentralisation of collective bargaining	Belgium, Italy, Spain
Reform/abolition of automatic wage indexation	Belgium, Cyprus, Luxembourg, Malta
Moderation of minimum wages developments	France, Slovenia
Moderation of general wage developments	Bulgaria, Finland, Italy, Slovenia
Wage developments in line with productivity growth	Germany
Addressing high wages at the lower end of the wage scale	Sweden
2. Country-specific agreements between EU-ECB-IMF or IMF and national governments within the framework of "Memorandum of understanding":	
Decentralisation of collective bargaining	Greece, Portugal, Romania
More restrictive criteria for extension of collective agreements	Greece, Portugal, Romania
Reduction/Freeze of minimum wages	Greece, Ireland, Latvia, Portugal, Romania
Reduction/Freeze of public sector wages	Greece, Hungary, Ireland, Latvia, Portugal, Romania

Source: Schulten and Müller (2013).

Decentralization of collective bargaining in countries under surveillance

Measures:	Affected countries
Abolition/termination of national collective agreements	Ireland, Romania
Facilitating derogation of firm-level agreements from sectoral agreements or legislative (minimum) provisions	Greece, Portugal, Hungary, Italy, Spain
General priority of company agreements/ abolition of the favourability principle	Greece, Spain
More restrictive criteria for extension of collective agreements	Greece, Portugal, Romania
Reduction of the 'after-effect' of expired collective agreements	Greece, Spain
Possibilities to conclude company agreements by non-union group of employees	Greece, Hungary, Portugal, Romania, Spain

Source: Schulten and Müller (2013).

Because of these reforms, a lot of employees are no longer covered by a collective agreement. In Portugal for instance, due to stricter criteria for the extension of collective agreements since 2012, only 10% of employees were covered by an agreement in 2012, whereas it was about 30% a year earlier (Eurofound, 2013). In Spain, since 2012, the government has limited the continuation of a collective agreement to an expiry date: it is now fixed at 12 months, while it was valid indefinitely before in case of disagreement between social partners. In July 2013, about 1 million workers were concerned by those expirations and are no longer covered (about 7% of all employees). In Greece, reforms on labour market in 2011 have fostered wage cuts, by limiting the extension of collective agreements and allowing firm-level agreements to prevail over sectoral ones.

In a context of austerity amplified by reforms in the labour market, the current process of disinflation/deflation is not under control and risks creating a long lasting deflation (see the simulations below), spreading from Spain, Portugal and Greece. Cost competitiveness will improve, current account deficits may turn to surpluses but the adjustment threatens to overshoot.

There is then a need to take control of this situation through a wage coordination mechanism, and notably by using minimum wage norms. Even if relatively few workers directly receive the minimum wage (with the exception of France or Bulgaria, see Table 13), its evolution impacts on the whole structure of wages and its change over time, especially in countries where few employees are covered by collective bargaining (Schulten and Müller, 2013). Moreover, it is generally ultimately set by the government – although there are frequently provisions for the social partners to play a role in its negotiation – and may then be more easily coordinated at the euro area level. In Belgium and Greece, it was not the case, the level of minimum wage hinging on a collective agreement between social partners. But under the pressure of the Troika, it is legally fixed from now on in Greece (see below).

It is true that a statutory national minimum wage does not exist in all European countries. There are today two groups of countries in the euro area regarding the institutional features of minimum wage norms. The first group includes countries where there is a statutory national minimum wage and the second group concerns countries where minimum wages are negotiated by region and/or by sector and do not concern all employees (Germany, Italy, Austria, Sweden, Denmark, Cyprus and Finland). They can be relatively high. However many employees are not concerned by these minimal thresholds, because of their absence in certain sectors or because of the very limited extension of these minima to firms not covered by agreements. This is the case in particular in Germany, although the recent coalition agreement foresees the introduction of a statutory minimum wage in the country starting in 2015. In some countries (Cyprus for example), the government can set minimum wages in sectors where they do not apply.

Table 13 presents information about minimum wages (MW) in countries where a national statutory minimum wage exists. Their levels vary considerably across countries, in absolute terms as well as in relative terms (i.e. compared with median wages). Apart from Belgium, Poland and Estonia, where social partners normally decide on the evolution of the MW, in other countries, social partners' proposition can be followed or not by the government. Furthermore, indexation is quasi-automatic only in France, the Netherlands, Luxembourg, Malta and Poland. So governments have big latitude to set the MW. This can facilitate coordination between countries but also allows the EC to put pressure on governments.

At a time when many European countries are facing an increasing number of low-wage earners (see the analysis in Chapter 2 of this report) and a reduction in bargaining coverage and when European enlargement has strengthened the risks of wage dumping, the debate on minimum wages is regaining momentum. Not only have trade unions in many countries supported MW but so have also international institutions. At the same time not all European trade unions welcome State or European-level intervention on this subject, particularly in countries where the tradition of autonomous wage-setting by collective agreement is strong (e.g, Italy or Denmark). So the European Trade Union Confederation (ETUC) recommends setting, in countries where a national MW exists, a level of at least 50% of the average wage or 60% of the median wage, highlighting the important role it could play in lowering in-work poverty and wage inequalities (ETUC, 2012).

Table 13. Minimum wages in the euro area

	Gross minimum wage in 2013 (in euros)	Minimum wage in % of median wage in 2012	% of full time employees receiving MW in 2005	Set by
BEL	1502	51		Collective agreement
BGR	159		16	Government, after tripartite consultation
HRV	401			Government, after consultation of a council about the salary policy
CZE	308	36	2	Government, after bipartite consultation
EST	320	36	4,8	Government, after bipartite agreement
FRA	1430	62	16,8	Government, after tripartite discussions, indexation on inflation and possible additional increase
GRC	684	43*		Government, after bipartite consultation since 2013
HUN	332	54	8	Government, after consultation of a council
IRL	1462	48	3,3	Government, after consultation
LVA	285	51	12	Government, after tripartite consultation
LTU	290	48	10,3	Government, after tripartite consultation
LUX	1874	42	11	Government, indexation on inflation
MLT	697		1,5	Government, after tripartite consultation, indexation on inflation
NLD	1478	47	2,2	Government, indexation on negotiated wages increases, but it can be exceptionally frozen
POL	369	47	2,9	Tripartite Agreement or government if no agreement, indexation on inflation
PRT	566	58	4,7	Government, after tripartite consultation
ROU	179	45	9,7	Government, after bipartite consultation
SVK	338	47	1,7	Government, after bipartite consultation
SVN	784	60	2,8	Government, after bipartite consultation
RSP	753	44	0,8	Government, after bipartite consultation
GBR	1190	47	1,8	Government, after bipartite consultation

*51% in 2011, before minimum wage cut by 22% in 2012.
Sources: OECD, Eurostat, ILO.

To promote this coordination of minimum wages evolution, many authors recommend using the open method of coordination (Schulten and Watt 2007, Schulten, 2008; Kampelmann, Garnero and Rycx, 2013) whereby the European Union defines wage targets and deadlines, and monitors the outcomes, but leaves member states free to work within their respective national frameworks (statutory minimum wages, automatic extensions of collective agreements…).

There have also been attempts within the European authorities to set targets regarding minimum wages. For instance, a resolution (2011/2052 – INI) adopted by the European Parliament in 2011 asked the EC to start discussions about a legislative initiative on minimum income in Europe, "with due regard for differing practices, and for collective labour agreements and legislation in the various

member states, bearing in mind that the definition of a minimum income remains the prerogative of each member state". It pointed the need to combat poverty, to realize the workers' right to a decent living and to guarantee an income that is equal or higher than 60% of the median income in each member state (i.e. the poverty threshold).

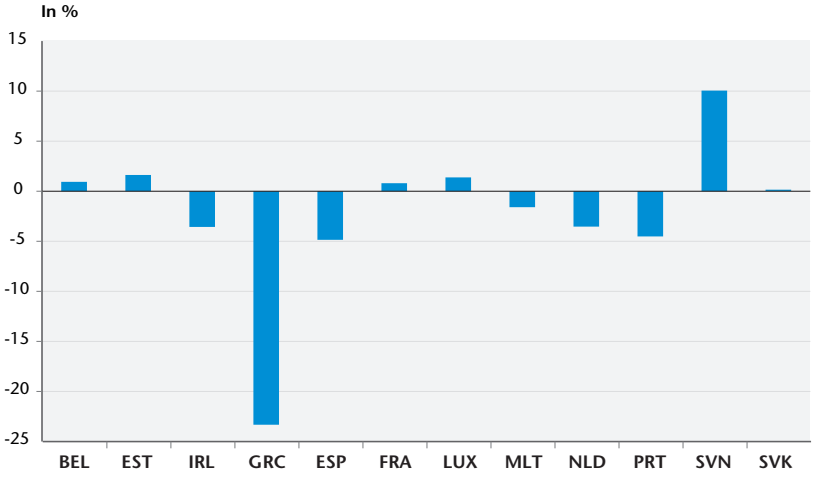
But so far, recommendations of the EC regarding wages have been paradoxical. On the one hand, the EC is concerned by poverty issues and is aware of the potential effect of minimum wages to fight poverty. But, on the other hand, it also wishes to facilitate downward adjustment of MW in countries with deficits on current account. MW are part of the strategy of deregulation of labour market to foster employment and also contribute to the reduction of current disequilibria.

In April, 2012, the EC, in a document to support employment (Towards a job-rich recovery), reaffirmed the necessity of fighting in-work poverty (8% in the EU), due to low minimum wages or to unequal wages distribution. There was an implicit reference to Germany. For the EC, differentiated minimum wages depending on sectors and negotiated by social partners better take into account economic developments. The paradox is that in-work poverty is high not only in Germany (7,7% in 2011) but also in countries that are concerned by recommendations to freeze or even reduce minimum wages (11,9% in Greece, 12,2% in Spain, 10,8% in Italy, 10,2% in Portugal). In reality, for the EC, minimum wages shouldn't be too low, to prevent poverty, but it also should be adjusted depending on the economic situation. In a document published in June 2012 by ILO, OECD, IMF and the World Bank (Boosting jobs and living standards in G20 countries), conclusions were globally the same: minimum wages should amount to 30 to 40% of median wages to lower poverty and inequalities and sustain internal demand. But to preserve employment, it shouldn't be higher than that. However, the poverty threshold represents 60% of the median income, after social transfers. Then, despite social allowances, a minimum wage of 40% of median wages is likely to be insufficient to protect from poverty. (The relationship is complex because the minimum wage refers to the individual and only wage income, whereas the poverty threshold includes all income and is measured at the household level). Moreover, as indicated in table 13, minimum wages are below 40% of median wage in 2012 only in 2 countries in the European Union (Czech Republic and Estonia). It reaches between 40 and 50% in 10 countries, and is above 50% in 5 countries. The maximum is observed in France (62%).

In countries under bailout, minimum wages have been frozen (Ireland since 2008 or Portugal since 2012) or even been cut (Greece in 2012). The first Economic Adjustment Program for Ireland planned a decrease of 12% in MW in 2011, because its level was judged too high in a context of widespread unemployment. Finally, it was frozen at the level of 2008. In Greece, after asking for a cut of 22% in 2012, the MW will be frozen until the end of the bailout. Moreover, the MW is no longer determined through collective bargaining between social partners, but it is set by the government, after a bipartite consultation. In Portugal, the MW cannot be increased without the agreement of the Troika. In other countries, minimum wages have also slowed down, because of the crisis and /or of recommendations of the EC. As a consequence, real minimum wages have decreased recently in many countries (Figure 37). Apart from Greece where there has been a cut of 20% between 2010 and 2013, the fall in real terms has amounted to 4% in Spain, Portugal, Netherlands and Ireland. Minimum wages have been stable or have slightly increased in France, Slovak Republic, Estonia,

Luxembourg and Belgium. The only exception is Slovenia with a huge increase since 2010.

Figure 37. Evolution of minimum wages, deflated by harmonized indices of consumer prices, between 2010 and 2013



Source: Eurostat.

As seen previously, the EC strategy and recommendations have predominantly led to a decrease in the purchasing power of MW, notably in the crisis countries. It has then certainly contributed to the gain in cost competitiveness. In a welcome development, the EC has recently shown that it is also concerned with the "symmetry" of the adjustment in the euro area. For the first time since the introduction of the Macroeconomic Imbalances Procedure in 2011, Germany is also concerned since the 13th of November by an Alert Mechanism Report, due to a current surplus exceeding 6% of GDP for at least the past three years. The in-depth review which will be published in spring 2014 could lead to recommendations. In June 2013, the EC already recommended that Germany support domestic demand via wage growth by two means: a reduction of taxes and social security contributions for low-wage earners, and an easier transition from mini-jobs to "normal" jobs (subject to social security contributions). And as noted above, following the legislative elections of September, the future government coalition has just decided to introduce a statutory national wage and other labour market reforms, which will support wage growth and domestic demand, and have consequences for the adjustment process in Europe (see Box 8 for more details).

To mitigate the risk of a deflationary spiral, we propose to promote not only wages coordination but also minimum wage coordination. As already mentioned by different authors (Schulten, 2012; Herr and Kazandziska, 2011), minimum wages are an important anchor against deflationary pressures. A coordinated minimum wage policy could be a tool that would put a limit on internal devaluations (and then on the mechanisms of correction of imbalances). It would also serve to provide an orientation to wage agreements higher up the pay scale. First,

statutory minimum wages should be introduced in those countries where it doesn't exist unless collective wage-setting institutions are strong and coverage is high (as for example in Austria). Secondly, whichever the type of MW (statutory or set by collective agreements) its evolution should reflect productivity growth or variation of current accounts / external positions.

Box 8. Good for Germany can be good for Europe

The coalition agreement between the CDU/CSU and the SPD contains a long section on European policy that signals a continuation, if not a further tightening, of the restrictive approach to resolving the European crisis, focusing on fiscal consolidation and so-called "structural reforms" to raise competitiveness, that have so signally failed.

Thus it is fortunate that, ironically, when the two parties are not actually thinking about Europe, but about domestic issues, they promise policies that will actually benefit the continent as a whole. By far the most important of these commitments is the introduction of a statutory minimum wage of EUR8.50 per hour across the whole country from the start of 2015. There are a number of transitional measures to respect existing collective agreements and those signed in the meantime by "representative" sectoral organisation, but at the latest by 2017 the minimum wage will apply nationwide and to all workers. Moreover, it will be made easier to declare sectoral collective agreements legally binding on all employers in a sector. This once important mechanism on the German labour market – the Allgemeinverbindlichkeitserklärung, or AVE to its friends – had virtually fallen into disuse. It will tend to underpin wage growth for workers that earn somewhat above the minimum wage.

It is hard to overstate the importance of these changes. In European comparison the proportion of the workforce earning less than 60% of the median wage is highest in Germany, as is the average pay gap of the low-paid. High unemployment in the early and mid-2000s, coupled with labour market reforms, opened up the bottom of the labour market and were largely responsible for the fact that the rise in inequality at the bottom of the distribution in that period was among the most pronounced in the entire OECD. This, in turn, was a crucial element in the most important driver of the euro crisis: the opening up of competitiveness and current account imbalances between the euro core and periphery.

Pay rises, in some cases substantial increases, for around 14% of German workers will make a difference. They will strengthen domestic demand in Germany. But not only that: some of this will leak into higher demand for the exports of goods and services from other EMU countries. The number of German workers affected, somewhat under six million, comfortably exceeds total employment in Portugal, for instance, and is around 2/3 of that in the Netherlands. The higher wage costs will be partially passed on in the form of higher prices. This will have the effect of rebalancing competitive positions, and doing so in a less damaging way to overall demand than the strategy to date of one-sided cuts in the periphery. (Note that it is not critical that most minimum wage workers are not employed in Germany's export sectors. Price competitiveness is a matter of overall labour costs, which include those of the domestic inputs purchased by manufacturing exporters). Other things equal, this stronger wage and price dynamic will tend to push down the external value of

the euro, which again will ease the squeeze on producers in other EMU countries without going through bilateral trade balances. (If overall inflation were close to the ECB target, one could object that the central bank will tighten policy, with negative effects on the other EMU countries, but this is not the case. Indeed with inflation at just 0.7% policymakers should be thankful for every little contribution to reflation).

There is another effect *via* the public finances. Currently the German states pay out billions in benefits to low-paid workers. For a substantial number this will not be necessary once workers are earning the minimum wage. Moreover, wage income is "tax-rich": the upward push at the bottom, with knock-on effects for workers currently earning somewhat above the minimum wage will lead to a substantial increase in income tax, while higher prices will increase the revenues from value-added and consumption taxes. This will help to finance a number of substantial spending promises in the coalition agreement. Fiscal policy is likely to be somewhat supportive of aggregate demand in Germany, once again with (limited) beneficial effects in other countries.

3. The benefits of a coordinated wage policy

To analyse the potential impact of a coordinated wage policy, we present simulations based on an augmented-version of the iAGS model[4]. The model includes the main euro area countries[5] and is extended to the United States, the United Kingdom and Japan.

The main features of iAGS model are that:

— The size of multipliers can vary according to the business cycle: fiscal impulses have a greater impact on GDP in bad times (when unemployment rate is very high compared to the equilibrium unemployment rate);

— Fiscal policy can have long run impact on potential GDP through hysteresis effects (austerity can alter potential GDP if investment is lowered or workers are excluded for long periods from the labour market for example);

— Euro area economies are interconnected through external trade. A recession in one country lowers demand to its partners, as its imports and their exports fall, so that GDP growth slows down in partner countries.

— The model includes a Taylor rule describing monetary policy. A zero lower bound on interest rate is added. Monetary policy then feeds back on economic activity and government interest expenditures through its effects on long term interest rates. The model then produces higher fiscal multipliers when monetary policy is at the lower bound, which is currently the case for the ECB.

The properties and characteristics of the model include assumptions about the variable size of fiscal multipliers and the long-lasting effects of a real crisis on

4. The model is not described in the present report but a complete presentation will be available from the OFCE.

5. Germany, France, Italy, Spain, the Netherlands, Belgium, Ireland, Portugal, Greece, Austria and Finland.

the output gap. It is a tractable and simplified toolkit (a small scale dynamic model) based on sound theoretical foundations. To provide an in-depth analysis on deflation and external imbalances, it has been extended to account more accurately for the price-wage loop and for the impact of competitiveness on external trade. We have adopted a triangle model, as suggested by Gordon (1988), to represent the dynamics between prices and wages:

- Inflation now depends on the growth of domestic prices (GDP deflator) and of foreign prices, computed as the weighted average of the foreign GDP deflators. All prices are expressed in terms of domestic currency. The impact of foreign GDP deflator also depends on nominal exchange rates, which are exogenous;
- The growth of the domestic GDP deflator is determined as a constant mark-up on the growth of unit wage costs;
- Nominal wages are set according to a Phillips relation where the growth of wages at time (t) depends on the growth of nominal wages at time (t-1), expected inflation, the trend of labour productivity and the unemployment gap between the current unemployment rate and the NAIRU (non accelerating-inflation rate of unemployment). In the long run, real wages increase with labour productivity. Minimum wages may accelerate or restrain the growth of wages in the short term, whereas they grow at the same rate in the long term.

The role of expectations is essential when deflation issues are raised. In the iAGS model, inflation expectations are adaptive and adjust according to the spread between past inflation and an anchor, which is equal to the inflation target set by central banks. For convenience, the target is set at 2% for all central banks. The adjustment depends on the adjustment speed and may also respond in the short run to the business cycle. Here, we have indeed considered a scenario where inflation expectations decrease when the output gap widens.

Table 14 sums up the results of the baseline simulation (see Box 9 for a description of the main underlying hypotheses). In the baseline, we simulate the path of inflation, the output gap, public debt levels (expressed in percentage points of GDP), current account and other macroeconomic variables. This baseline scenario depends on the fiscal impulses which have been forecast in the euro area from 2013 to 2015. By assumption, we include zero-forecast fiscal impulses beyond 2016. Public debt may not converge to the 60% threshold by 2032 in the baseline. We then compute three scenarios where public debt is brought back to the target of 60% in 2032, which is consistent with existing fiscal rules.

The baseline scenario clearly illustrates the risk of deflation, not in the euro area as a whole but in the most fragile countries. In Spain, prices would decline by 1% on average between 2014 and 2020. Deflation would occur despite a GDP growth recovery and would be triggered by sustained high unemployment. The negative output gap would also drag down expected inflation, reinforcing the deflationary pressures at least in the short run. The situation would be worst in Greece and Portugal, while Ireland would also enter a milder deflation. For the euro area as whole, inflation would not exceed 0.6% on average, which is far from the inflation target set by the ECB. France, Italy, the Netherlands and Belgium would escape these gloomy perspectives but would nevertheless record inflation rates below 1%. These countries would then remain under the threat of more

severe negative shocks to expected inflation. The global impact on growth is unsettled because, on the one hand, deflation increases real interest rates, which has a negative impact on the output gap, but on the other hand, the gain in competitiveness boosts exports and has a positive impact on the output gap. This situation is largely representative of what is happening in Spain. The deflation may hamper the reduction in private and public debts but the low growth of unit labour costs improves firms' margins and their ability to increase export market shares. This may then trigger a significant change in the share of value-added, to the detriment of workers.

Besides, this baseline also illustrates the overshooting of the adjustment. The current account would indeed improve sharply in the countries where deflation occurs. From 2014 to 2030, which is the horizon over which the current account stabilizes in the simulations, Spain, Greece and Portugal would unambiguously become surplus countries. In these countries, real interest rates would be positive despite the negative output gap. This slows down the recovery as the transmission of monetary policy in those countries is impaired by deflation. Germany would yet improve its external balance and only the Netherlands, Austria and Finland would suffer from a small reduction in their current account balances. Thus, the average current account surplus of the euro area would also increasingly move to surplus. Nevertheless, caution is needed when interpreting the results of simulations on the current account. The dynamic of the current account also hinges on the balance of revenue, that also depends on net external position. Some asset prices effects are not captured by the model. The feedback effects on the current account are not taken into account here. The dynamics of the current account is then essentially explained by net exports, which depend on external demand and the relative prices (or the real exchange rate). Yet, having this in mind, it appears clearly that the adjustment of external imbalances risks being excessive. The current account balance of Spain would indeed improve by more than 16 percentage points between 2014 and 2032, the horizon where the current account has stabilised. It is in line with the strong gain in competitiveness recorded for Spain. The same apply for Portugal, Ireland and Greece. It must be noted here that in the baseline scenario, only Germany would suffer from a loss of competitiveness. The current account would slightly improve nonetheless. In this scenario, France, Spain, Portugal and Greece would not be able to reach the 60% debt-to-GDP ratio. For Ireland, debt would end at 62%. Nevertheless, it must be noted that public debt would be significantly reduced for France.

Conforming to the last iAGS-2013 report[6], we then determine the additional fiscal impulse, which is needed to bring back public debt to 60% in 2032 in accordance with the treaties. Assuming that the fiscal impulses are left unchanged for 2014, we calculate a sequence of fiscal impulses over 2015-2032 following a simple algorithm. As it was largely discussed in the iAGS-2013 report, we consider fiscal impulses that do not exceed -0.5% of GDP are in accordance with existing fiscal rules. Additional impulses are then implemented as long as debt exceeds 60% in 2032. We maintain a neutral fiscal policy after 2014 (i-e with a zero fiscal impulse) for countries which achieve 60% or below. Therefore public debt is left unchanged compared to Table 14. This simple algorithm implies that the cumu-

6. The update of this scenario is presented in Chapter 1 of the present report.

lated fiscal impulse is larger than in the baseline scenario for countries which converge towards a debt above the target, and smaller for others.

Table 14. Baseline scenario

In %

	Average annual growth	Average inflation rate	Average real interest rate	REER* evolution between	Increase (+) or decrease (-) in current account balance between	Public debt in
	2014-2020	2014 2020	2014-2020	2014-2032	2014-2032	2032
DEU	1.5	1.6	-0.5	8.9	1.2	25
FRA	1.9	0.5	0.6	-7.6	2.0	76
ITA	0.7	0.2	1.1	-15.1	7.6	49
ESP	2.2	-1.0	2.6	-28.8	16.7	98
NLD	1.9	0.5	0.7	-15.5	-0.3	35
BEL	1.8	0.8	0.6	-1.5	1.4	50
PRT	1.7	-1.2	3.3	-20.8	11.2	122
IRL	3.2	-0.6	2.4	-19.9	5.9	62
GRC	2.4	-3.9	4.2	-53.1	34.5	244
FIN	1.9	1.5	0.0	-1.6	-2.7	48
AUT	1.7	1.2	0.2	-4.6	-1.7	26
EA	1.6	0.6	0.7	-1.5	4.7	54

* Real effective exchange rate.
Source: iAGS model.

Table 15 sums up the results of this simulation. Striking results are threefold. First, two countries – Portugal and Greece – are unable to achieve the debt-to-GDP target. The fiscal stance over 2014-2032 produces a cumulative fiscal impulse which lowers the average annual growth by nearly 0.4 point of GDP on average. This fiscal stance is inefficient in terms of public finance and highly costly in terms of growth as the fiscal multipliers are high when output gaps are strongly negative. Moreover, the rise in unemployment reinforces the deflation loop and tightens monetary policy through the increase of real interest rates. Second, France and Spain achieve the debt target in 2032, but under a much more restrictive fiscal stance than scheduled, especially for Spain. Both countries also suffer the same disease as Portugal and Greece: higher fiscal impulse and lower growth (-0.25 for Spain, -0.1 for France), which weighs on inflation (-0.06). These four countries also benefit from an improvement of their current accounts thanks to a competitiveness increase. On the contrary, other countries need less austerity than scheduled to achieve the fiscal debt target, which permits a small rebound of growth (from 0 to 0.1 p.p a year). These simulations show how the European fiscal strategy could widen divergence across euro area member states, reinforcing deflation in countries with the lowest output gaps, and underpinning the healthiest ones.

Table 15. Scenario where public debt cannot exceed 60% in 2032

In %

	Average annual growth	Average inflation rate	Average real interest rate	REER* evolution between	Increase (+) or decrease (-) in current account balance between	Public debt in
	2014-2020	2014 2020	2014-2020	2014-2032	2014-2032	2032
DEU	1.5	1.7	-0.5	9,0	1.2	23
FRA	1.7	0.5	0.7	-9.5	3.3	60
ITA	0.7	0.3	1.1	-14.4	7.0	52
ESP	1.9	-1.1	2.7	-33.4	20.4	60
NLD	2.0	0.7	0.6	-11.5	-2.0	60
BEL	1.9	0.8	0.5	-0.6	0.8	60
PRT	1.3	-1.3	3.4	-27.6	17.5	67
IRL	3.1	-0.6	2.4	-20.1	6.1	60
GRC	2.0	-4.1	4.4	-61.3	42.0	196
FIN	1.8	1.5	0.0	-2.0	-2.5	43
AUT	1.8	1.3	0.0	-2.8	-2.6	42
EA	1.6	0.6	0.7	-1.5	5.4	47

* Real effective exchange rate.
Source: iAGS model.

Box 9. Main hypotheses for the baseline simulations

The simulations start in 2014. To do so, we need to set some starting point values in 2013 for a set of essential variables. Output gaps for 2013 come from OECD forecasts. Potential growth for the baseline potential GDP is based on ECLM-IMK-OFCE projections (see Table 16). Concerning fiscal policy and budget variables, the main hypotheses are:

—The public debt in 2013 comes from OFCE-IMK-ECLM forecasts.

—We use the OFCE-IMK-ECLM forecasts for fiscal balance in 2013;

—We use the European Commission's autumn 2013 forecast of interest expenditures for 2013; combined with OECD forecasts of output gaps in 2013, and model estimates of the cyclical part of the fiscal balance, which gives the structural primary balance for 2013;

—Fiscal impulses come from OFCE-IMK-ECLM forecasts for 2013, 2014 and 2015.

—Current account balances for 2013 comes from IMF.

—Inflation in 2013 comes from OFCE-IMK-ECLM forecasts.

Table 16. Main hypotheses for 2013

In % unless otherwise specified

	Public debt	Fiscal balance	Inflation rate	Current account *as % GDP*	Output gap	Potential growth
Source	OFCE-IMK-ECLM	OFCE-IMK-ECLM	OFCE-IMK-ECLM	European Commission	OECD	OFCE-IMK-ECLM
DEU	80.8	-0.2	1.7	6.0	-0.8	1.3
FRA	92.9	-4.1	1.3	-1.6	-3.9	1.4
ITA	131.7	-1.9	1.5	0.0	-5.8	0.2
ESP	91.2	-6.8	1.7	1.4	-9.6	1.4
NLD	74.8	-4.0	2.7	10.9	-4.7	1.6
BEL	101.3	-3.4	1.3	-0.7	-2.0	1.5
PRT	128.9	-5.9	0.7	0.9	-8.8	1.0
IRL	124.6	-6.6	0.8	2.3	-8.1	1.8
GRC	179.2	-7.8	-0.6	-0.1	-13.8	1.0
FIN	56.3	-1.9	2.4	-1.6	-2.4	1.6
AUT	74.5	-2.3	2.2	2.8	-2.8	1.4
GBR	93.5	-7.1	2.7	-2.8	-2.4	1.9
USA	110.8	-7.7	1.5	-2.7	-3.1	2.1
JPN	227.1	-11.5	-0.1	1.2	0.0	1.1

Note: the hypotheses used for simulations do not systematically take into account the most recent statistical information and may then slightly differ from forecasts presented in chapter 1.
Sources: European Commission, OFCE-IMK-ECLM forecasts.

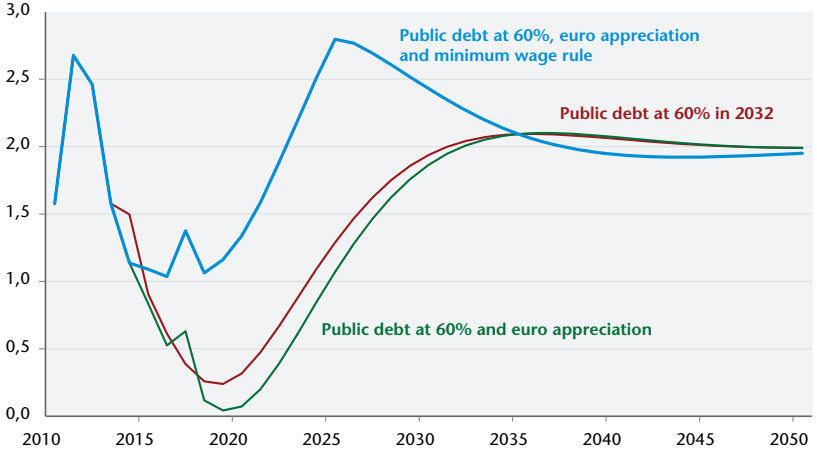
The risk of deflation may even be amplified if we consider an additional shock. The increase in the average current account balance of the euro area may well foster an appreciation of the euro compared to the US dollar, the British pound and the yen. This shock is illustrated in Table 17 where we analyse the impact of a 10% appreciation of the euro each year for 3 years (2014, 2015 and 2016).

Inflation is lower in all countries and the impact is correlated to the degree of openness of countries. Ireland is the country where the nominal exchange rate shock is the strongest, due to the high share of Irish trade with the United States and the United Kingdom. Deflation would be amplified by 0.5 percentage point in average due to imported inflation. This would in turn increase public debt and real interest rates. GDP would be negatively impacted both by the loss of competitiveness of Irish firms and by higher real interest rate. More fiscal efforts will thus be needed to reach the 60% threshold for public debt, lowering growth again (by -0.6% per year on average between 2014 and 2020). For other euro area countries, the negative consequences of the shock would be limited. But this result strongly hinges on the limited number of non euro area countries in our model. The appreciation of the euro is only conducted against 3 countries (the US, UK and Japan). The inclusion of other European countries (notably East European countries), Asian and African countries would increase the impact of a euro appreciation.

Globally, the average current account of the euro area would be reduced by 1.5% of GDP, which would help the global rebalancing process. However, there would be very little internal rebalancing of relative current account positions, as most countries would experience adjustments comprised between 1 and 2.5% of GDP, with deficit countries (France, Spain, Italy) deepening their current balance more than surplus countries (Germany, Netherlands). On top of that, all the

adjustment would be triggered by the export side of the equation. There would be lower inflation (Figure 38) and lower growth, which would not be offset by the decrease of real interest rates. Public debt would globally be higher despite accrued fiscal effort. In Germany and Italy, where the debt-to-GDP ratio is below 60%, the appreciation of the euro would lead to an increase of debt of respectively 2.4 and 3.6 points. For Portugal and Greece, which are anyway unable to reach the 60% target, the debt situation would be worsened by lower inflation (+5.4 and +10.6 points respectively).

Figure 38. Average inflation in the euro area for 3 simulations



Source: iAGS model.

Table 17. Scenario where the euro appreciates by 10% each year for 3 years

Percentage point difference with Table 15

	Average annual growth	Average inflation rate	Average real interest rate	REER* evolution between	Increase (+) or decrease (-) in current account balance between	Public debt in
	2014-2020	2014 2020	2014-2020	2014-2032	2014-2032	2032
DEU	-0.06	-0.10	-0.09	2.2	-1.1	2.4
FRA	-0.13	-0.13	-0.03	0.9	-1.7	0.0
ITA	-0.08	-0.10	-0.07	1.1	-2.0	3.6
ESP	-0.12	-0.11	-0.08	0.5	-2.0	-0.1
NLD	-0.13	-0.20	0.00	0.4	-1.1	0.0
BEL	-0.15	-0.23	0.04	0.5	-1.6	0.1
PRT	-0.10	-0.10	-0.09	1.0	-1.7	5.4
IRL	-0.62	-0.53	0.22	-4.3	-2.5	-0.2
GRC	-0.11	-0.11	-0.08	1.0	-2.2	10.6
FIN	-0.08	-0.11	-0.05	0.8	-1.1	2.5
AUT	-0.06	-0.10	-0.07	0.8	-0.7	2.0
EA	-0.11	-0.13	-0.05	-1.9	-1.5	1.5

* Real effective exchange rate.
Source: iAGS model.

Considering a risk of deflation in some countries and given that the process of rebalancing current account position could be more important than what is needed, we suggest to introduce a mechanism aiming at avoiding the deflation trap. The dynamics of wages is clearly central on these issues. Price dynamics is indeed strongly linked to wage dynamics and wages are a key component of unit labour cost and competitiveness. Their adjustment will then have consequences on current accounts. The reduction of external imbalances plays a central role in European governance. But, as we have seen above, the new MIP (Macroeconomic imbalances procedure) only sets an upper limit to the increase of unit labour costs but does not fix any limit to the decrease. The European Commission has promoted structural reforms to liberalise labour markets and enhance the adjustment of labour costs. But these reforms may fuel the deflation process.

This is why we call for a European coordination on wage policies. As described earlier in this chapter, wages are largely determined by market forces but governments may have their say by stimulating minimum wages. This may be done easily in countries where minimum wages are set by government or when the governments play a key role in the bargaining process, but countries with strong autonomous collective bargaining institutions can also successfully target appropriate (minimum) wage trends. Then, coordination of these minimum wages with the aim to restrein deflationary pressures and with the aim of rebalancing current accounts becomes possible. It implies that countries with high external surpluses have higher wage growth through increases in minimum wages. For deficit countries, the need of adjusting competitiveness would be limited to avoiding deflation. The minimum wage would then still increase but less than in surplus countries.

We introduce a simple rule by which minimum wages are adjusted according to the relative position of euro area countries' current account positions. For the group of countries where the current account (as % of GDP) at date (t-1) is lower by 1 percentage point than the euro area average, the nominal minimum wage is increased by 1% (deficit countries). If the current account is higher by 1 percentage point than the average, the minimum wage is increased by 3% (surplus countries). For the rest of the countries (balanced countries), the minimum wage is increased by 2%. The rule is applied for 10 years (2014-2024) and countries can move from one group to another according to the evolution of their relative current account position. The impact on prices crucially depends on the diffusion of minimum wages to the growth of nominal wages, which is assumed to be 0.4 in the short term. The results of this scenario are presented in Table 18.

First, the impact on growth is limited as competitiveness and real interest rates effects partly offset each other. Deflation in Spain, Portugal, Ireland and Greece is lessened but not avoided. Inflation is globally higher by 0.7% in the euro area (Figure 39), with large disparities between country groups. The group of surplus countries includes Germany, the Netherlands, Portugal and Greece[7]. There, inflation increases by about 1% on average, which allows Portugal to reach the 60% target and reduces the Greek debt by 40 percentage points in 2032. As prices rise, real effective exchange rates appreciate by 10% to 20% in these four

7. Due to the sharp fall of GDP in the crises countries, current accounts imbalances have already been reduced. Portugal and Greece have then become surplus countries.

countries between 2014 and 2032, fostering current account adjustments. All four countries experience a larger degradation of their current account than the euro area as a whole.

Table 18. Scenario with euro appreciation and coordination of minimum wages

Percentage point difference with euro appreciation scenario

	Average annual growth	Average inflation rate	Average real interest rate	REER* evolution between	Increase (+) or decrease (-) in current account balance between	Public debt in
	2014-2020	2014 2020	2014-2020	2014-2032	2014-2032	2032
DEU	-0.04	1.07	-0.36	20.8	-5.1	-1.2
FRA	0.03	0.38	-0.02	-0.2	0.0	0.0
ITA	0.00	0.38	-0.02	-0.1	0.1	-4.2
ESP	0.01	0.38	-0.02	4.5	-3.2	0.0
NLD	-0.09	1.06	-0.33	-17.2	-7.3	0.0
BEL	0.01	0.43	-0.05	-1.7	1.0	0.0
PRT	-0.07	1.02	-0.32	9.6	-9.8	-12.3
IRL	-0.15	0.84	-0.22	5.2	-5.6	0.2
GRC	-0.05	0.90	-0.26	14.6	-13.1	-40.9
FIN	-0.01	0.38	-0.01	1.7	-0.8	1.0
AUT	-0.03	0.85	-0.24	0.8	-0.8	-3.2
EA	-0.02	0.67	-0.16	8.1	-2.8	-2.5

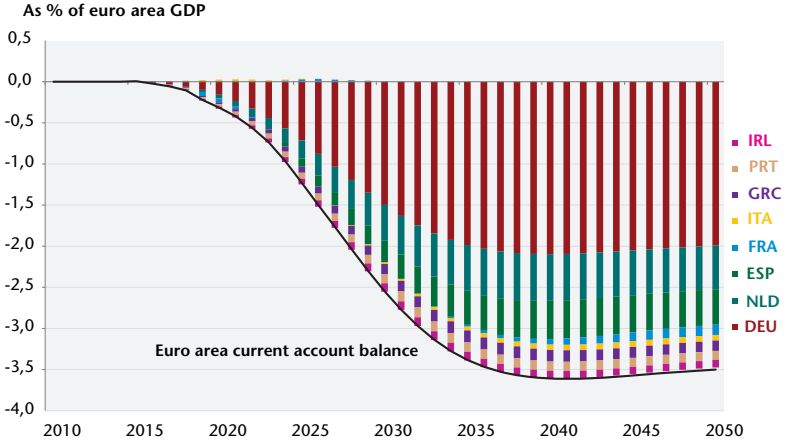
* Real effective exchange rate.
Source: iAGS model.

For deficit countries (France, Italy, Belgium and Finland) the situation is reversed. Inflation is higher but only by 0.4% on average. Therefore the relative competitive position is improved with a slightly negative growth of real effective exchange rates, leading to a small improvement of current account positions. Spain, Austria and Ireland are either balanced countries or moving from one group to another. Their adjustment in terms of competitiveness or current accounts is thus closer to the euro area average. Figure 39 illustrates the change in the current account position of the euro area which can be directly imputed to this wage coordination policy. After 20 years, the average current account balance of the euro area would be reduced by 3.5% of GDP, with Germany, the Netherlands and Spain being the main contributors to this rebalancing process. It must yet be noted that these effects may be overestimated as there are no feedback effect in our model from the exchange rate. A relative higher inflation rate or a relative reduction in the average euro area current account balance may indeed lead to a relative depreciation of the euro. But it rests that our simulations show that a coordinated wage policy would play a key role in the reduction of macroeconomic imbalances.

For the euro area as a whole, the average inflation rate increases by 0.7%, which is non negligible and desirable. However, if coordination of wage policy may help to boost inflation in a deflationary environment, it may not be suffi-

cient. The exit of deflation may also hinge on other macroeconomic policy or to a stronger shock on wages. It is then fundamental to avoid excessive fiscal consolidation. Less austerity would help growth to recover in the most fragile countries. Unemployment rate would then decline more substantially reducing the negative impact on wages through the Phillips effect. A European initiative on public investment could participate to this process. We discuss this in the following chapter.

Figure 39. Impact of wage indexation on the euro area current account, by country



This graph is built as the difference between two simulations: (2)-(1)
(1) The euro appreciates by 10% per year during 3 years (2014, 2015 and 2016)
(2) On top of the appreciation of the euro, a minimum wage rule is put in place, where surplus coutries implement a 3% increase of minimum wage, deficit countries a 1% increase and balanced countries a 2% increase. Country groups are redefined every year relatively to the euro area average during 10 years (2014 to 2024).
Source: iAGS model.