DEUTSCHE BUNDESBANK
EUROSYSTEM

# Research Brief

2nd edition – March 2016

# Are lower German wages creating current account imbalances in the euro area?

*By Timo Bettendorf and Miguel León-Ledesma*

**It is often said that wage moderation in Germany was the primary cause of the current account imbalances in the euro area that emerged prior to the financial crisis. A new study puts this hypothesis to the test.**

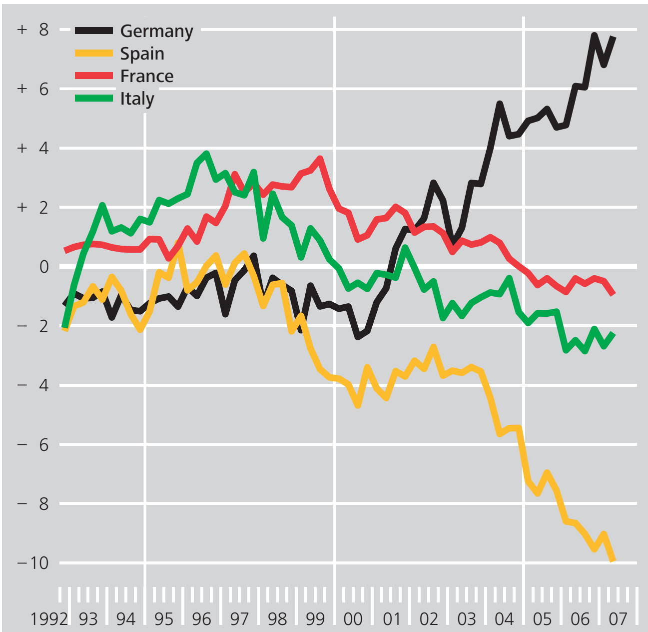
Persistent current account deficits can be problematic as, on account of the rise in external debt that they cause, they have the potential to make economies more vulnerable to shocks. Current account deficits arise when aggregate cross-border expenditure on goods and services, together with income payments and transfers sent abroad, exceed corresponding revenue. While many euro-area member states were posting such deficits, especially in the years prior to the financial crisis, Germany was recording high current account surpluses. Some observers even viewed these imbalances as the root cause of the sovereign debt crisis in the euro area.

Figure 1 shows how strongly the current account balances of selected euro-area countries as a percentage of nominal gross domestic product diverged during the reference period.

In our study, we examine whether current account imbalances in the euro area can be traced back to labour market reforms in Germany. One argument often put forward is that imbalances were driven primarily by the significant improvement in Germany's competitiveness in the late 1990s and early 2000s, which was given a considerable boost thanks to the spate of reforms adopted in the German labour market (IMF (2012) and ILO (2012)). Consequently, real wages in Germany fell as a result of factors such as collective pay agreements being relaxed and the introduction of opening clauses (see Eichhorst and Marx (2009)). These moves made it possible to deviate from the general agreements conclud-

**Current account to GDP ratios of selected EMU countries** Figure 1

%




Source: Bettendorf und León-Ledesma (2015) - Own calculations, based on OECD data.
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ed between employers and employees, subject to certain conditions.

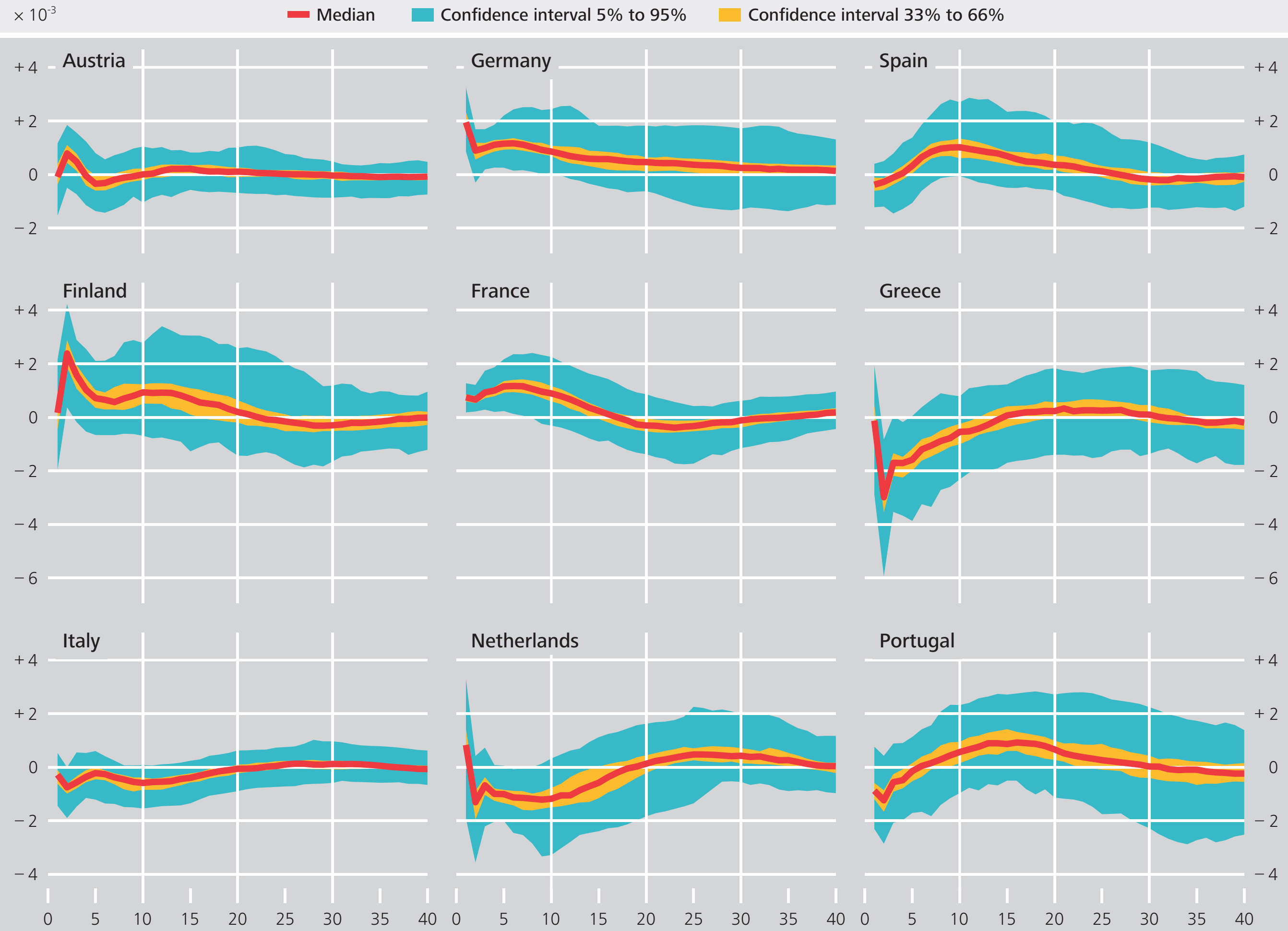
### Analysis of nine countries

How real wages develop over time hinges, not least, on the strength of employees' bargaining power in wage negotiations. If this falls due to factors such as labour market reforms or high unemployment, this can have a dampening effect on real wage developments. In our study, we focus on precisely this link between bargaining power and both real wage developments and current accounts. With this in mind, we use a multi-country model to compare the strength of German employees' bargaining power in wage negotiations with real wages, current accounts and other macroeconomic variables. In this global vector autoregressive (GVAR) model, we conduct a nine-country analysis based on a sample containing data gathered between the third quarter of 1992 and the second quarter of 2007. This method renders it possible to differentiate endogenous movements attributable to systematic correlation between observed variables from developments that are independent of this correlation and, in this sense, unexpected.

Such a model enables us to investigate the impact of an unexpected decrease in employees' bargaining power in a specific country on the domestic and international economy. Current studies have already shown that price competitiveness, employment figures and production all increase when employees' bargaining power in wage negotiations is reduced. This improves a country's current account balance (see Bettendorf and León-Ledesma (2015)).

**Quarterly responses of selected EMU current account to GDP ratios following a shock to German workers' wage bargaining power**

Figure 2




Source: Bettendorf und León-Ledesma (2015) - Own calculations, based on OECD data.
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Our analysis reveals that an unexpected decline in German employees' bargaining power has very heterogeneous effects on European current accounts. These developments are illustrated in Figure 2: as expected, there is an improvement in the German current account. By contrast, current account balances fall in Greece and the Netherlands, whereas positive effects are felt in Spain, Finland and France. The responses of the Austrian, Italian and Portuguese current accounts are barely perceptible.

One possible reason for these results is that trade links between countries differ. While negative spillovers are usually the result of direct competition between countries, positive spillovers may indicate the existence of international value chains. One scenario in which these might be present is when a country supplies intermediate goods to another country, which then processes these further and exports them.

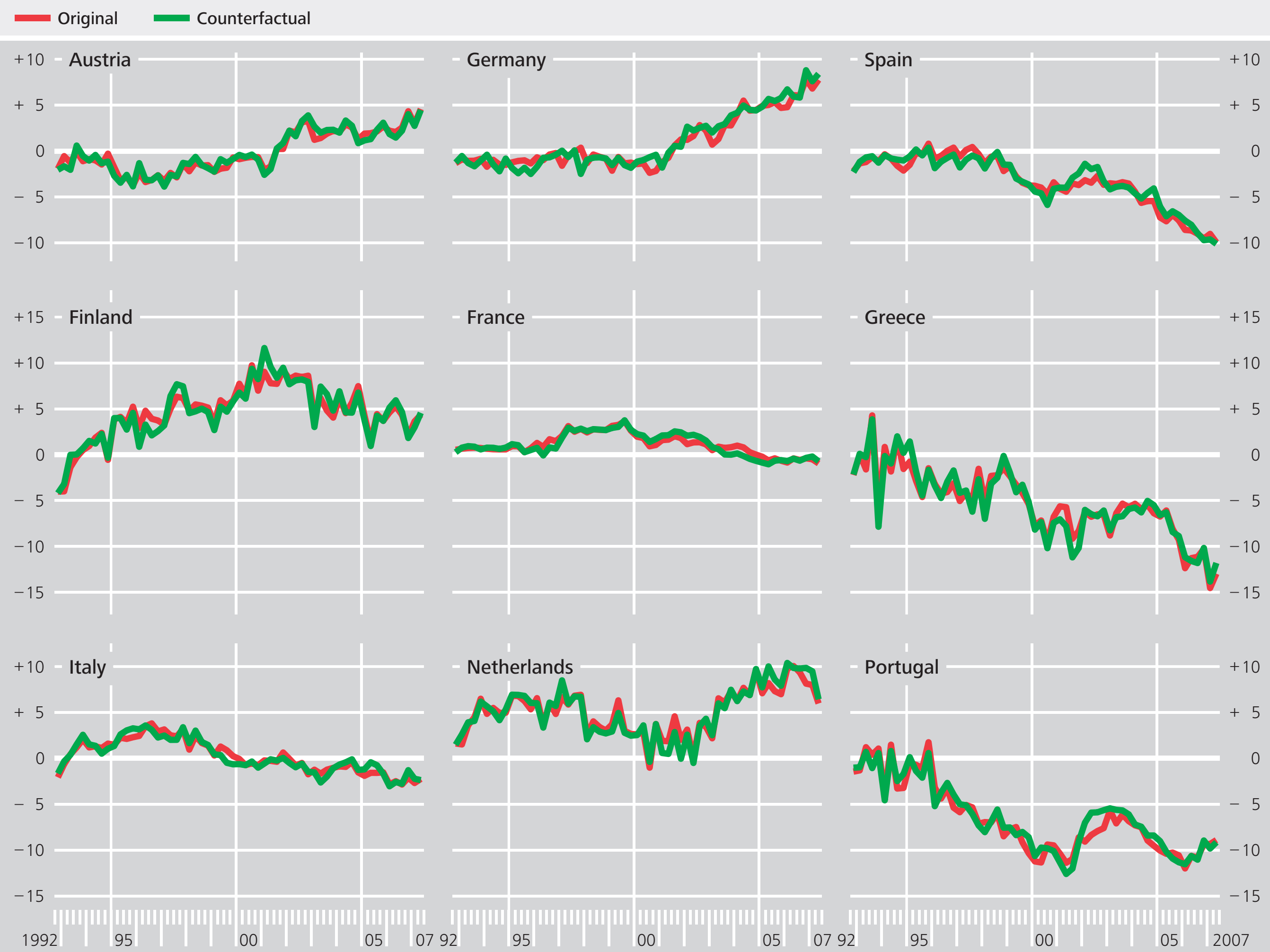
### Simulating the scale of the effect

The effect that the bargaining power of German employees in wage negotiations has on current accounts in other euro-area countries therefore varies quite considerably. But how significant is this effect?

To get to the bottom of this question, we compare our results with a hypothetical scenario in which no unexpected changes in German employees' bargaining power are observed in the model over the same period. This type of analysis is known as a counterfactual analysis.

Original and counterfactual dispersion of all CA/GDP ratios

Figure 3




Source: Bettendorf und León-Ledesma (2015) - Own calculations, based on OECD data.
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Figure 3 shows the ratios of current account balances to nominal GDP for both the original data (red) and the counterfactual situation (green). The comparison reveals that German employees' bargaining power has no major bearing on the imbalances observed in Europe (see also Gadatsch et al (2015)). Both the original and counterfactual current account balances follow a very similar path in all countries throughout the entire reference period.

## Conclusion

Our study shows that a reduction in German employees' bargaining power improves the German current account balance. However, the responses of other euro-area countries are mixed and, on the whole, the impact is minor. Hence, German wage moderation cannot have been the main driver of external imbalances in the euro area.

## Disclaimer

**List of references**

T Bettendorf and M León-Ledesma (2015), German wage moderation and European imbalances: feeding the global VAR with theory, Deutsche Bundesbank Discussion Paper, No 15/2015.

W Eichhorst and P Marx (2009), Reforming German labor market institutions: a dual path to flexibility, IZA Discussion Paper, No 4100.

N Gadatsch, N Stähler and B Weigert (2015), German labor market and fiscal reforms 1999 to 2008: can they be blamed for intra-euro area imbalances?, Deutsche Bundesbank Discussion Paper, No 29/2015.

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# News from the Research Centre

**Publications**

"The macroeconomic effects of monetary policy: a new measure for the United Kingdom" by James Cloyne (Bank of England) and Patrick Hürtgen (Bundesbank) will be published in the *American Economic Journal: Macroeconomics*.

"Monetary-fiscal policy interaction and fiscal inflation: a tale of three countries" by Martin Kliem (Bundesbank), Alexander Kriwoluzky (Halle) and Samad Sarferaz (ETH) will be published in the *European Economic Review*.

**Events**

Darrell Duffie (Stanford)
visited the Bundesbank on March 16.

10 – 11 June 2016:
Bundesbank Spring Conference
"Monetary, Financial and Fiscal Stability"