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# Managing external macroeconomic imbalances in the EU: the welfare cost of scoreboard-based constraints

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## ABSTRACT

This paper investigates the consequences of introducing a new economic governance tool in the European Union - Macroeconomic Imbalance Procedure. We focus on the external imbalances and especially on the lower limit of  $-4\%$  imposed on the current account deficit to GDP ratio. Using a 2-region, 2-sector New Keynesian DSGE model and Woodford's technique to operationalise inequality constraints, we demonstrate that it is possible to accordingly adjust monetary and fiscal policy. The utility-based welfare loss remains very limited as compared to optimum unconstrained policy, as measured for Poland on the basis of Bayesian estimation, and this result is robust over a wide range of parameter values. The cost is slightly lower i.a. when (i) the monetary policy is autonomous (outside the euro area), (ii) for non-converging economies, (iii) when the limit is relaxed by incorporating positive capital account to GDP ratio. The procedure also envisages lower limits on REER and ULC dynamics, but the latter can be in conflict with the CA constraint, especially in the monetary union. Therefore, the scoreboard-based evaluation of external imbalances - while not very costly - has definitely some room for fine-tuning in the course of future MIP reforms.

## 1. Introduction

Macroeconomic imbalances have long attracted the attention of the academia and policymakers. Their external dimension, which manifests itself through current account (CA) figures and real effective exchange rate (REER) movements, usually requires internationally coordinated policy responses. This is especially the case in highly integrated economic areas, such as the European Union (EU), and even more so in currency unions, such as the euro area, where imbalances can develop relatively easily. Potential reasons range from asymmetric transmission of common monetary policy shocks to output (as documented e.g. by Rafiq and Mallick, 2008), through many other dimensions of structural heterogeneity, to the level of development (cf. Bobeva, 2013). Even before the 2009 global downturn, a number of authors noticed deficiencies e.g. in unionwide prudential supervision tools (Granville and Mallick, 2009). The discussion has intensified during the EU economic governance crisis, and especially during the euro crisis that followed. The escalation in the euro area stemmed partly from internal and external macroeconomic imbalances that had built up before in individual countries.

When the euro was launched, external adjustment within the euro area was expected to take place via realignments in competitiveness. Once an asymmetric positive demand shock, say, increased one country's output gap and inflation rate values, the automatic real

appreciation should have first deteriorated its competitiveness, producing a recession, which then would lead to real depreciation (see European Commission, 2006). Obviously, this reasoning also applied to non-EA countries of the EU, but they additionally had autonomous monetary and exchange rate policy as adjustment instruments. However, once internal real devaluations became necessary in the Southern Europe (Greece, Italy, Spain, Portugal) and Ireland, this hypothetical mechanism crushed against massive social and consequently political resistance (De Grauwe, 2012), insufficient rationality of agents or economic inertia (Torój, 2010) and governments contented with the "euro premium" that had afforded a decade of low reform intensity (Bednarek-Sekunda et al., 2010).

Sharp external imbalances crystallised themselves along the border between Northern and Southern Europe (see Zemanek et al., 2010; Campiglio, 2015). It was the "core" or "North" of the euro area (Germany, Netherlands, Austria, Luxembourg, Finland) that were depreciating and lending and the "GIIPS" (Southern countries plus Ireland) that were appreciating and borrowing (see Fig. 1a). Over the period 2008–2013, the GIIPS countries have undergone some corrections, which again temporarily aligned their external indicators at the opposite pole to the "core" of the EA (see Fig. 1b).

During this experience, the EU faced critique for concentrating on fiscal imbalances (operationalised in *Excessive Deficit Procedure* in late 1990s) and ignoring macroeconomic imbalances. The EU's response

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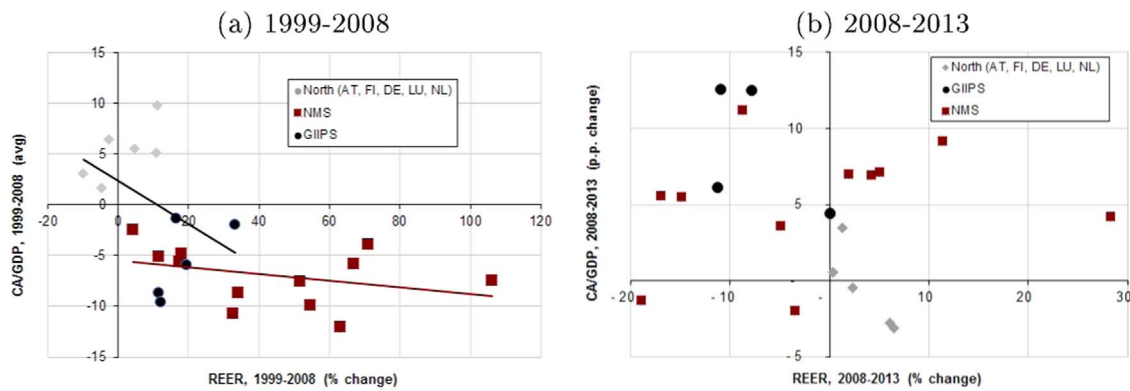


Fig. 1. Current account balance and REER corrections in EU countries. Source: author, Eurostat data.

was first proposed in September 2010 by the European Commission and entered into force in late 2011 in the form of *Macroeconomic Imbalance Procedure* (MIP, [European Parliament, 2011b, 2011a](#)). This procedure replaced the inefficient *Broad Economic Policy Guidelines* and was aimed to avoid imbalances, defined as “any trend giving rise to macroeconomic developments which are adversely affecting, or have the potential adversely to affect, the proper functioning of the economy of a Member State or of the economic and monetary union, or of the Union as a whole”.

The application of MIP starts with the analysis of a scoreboard of macroeconomic indicators with their respective, constant thresholds, lower and/or upper, that should not be exceeded. The procedure has generally been welcomed by the European institutions ([European Systemic, 2011](#); [European Central, 2012](#)) for transparency and filling an important gap in macroeconomic policy coordination within the EU. [Camarero et al. \(2015\)](#) conducted external debt sustainability analysis for EMU countries and concluded that policy actions in managing external imbalances in Europe are indeed urgently needed. However, a number of researchers have pointed out the weaknesses of the new procedure. The reading of the scoreboard focuses some of the markets’ attention and may adversely affect the sovereign’s financing conditions once the indicators are flashing even though the (later) economic analysis may play down the previous reading ([Gros and Busse, 2013](#)). [Gros and Giovannini \(2014\)](#) go even further by questioning whether the absolute or relative indicators for a single country are the valid measures, as long as they add up to euro area indicators (for example, if all the EU countries faced a CA deficit of 5% GDP, the entire EU would exhibit the same level of deficit, and all countries would have to be scrutinised), and hence these authors argue for a transformation into deviations from the EU average.

Although the European Commission emphasises that the reading of the scoreboard would not run mechanically and the essential role in the assessment of a country’s imbalances would be played by the subsequent stage of in-depth economic analyses, the significance of the scoreboard is twofold. Firstly, its reading takes place before the in-depth analysis and hence may impact on the market’s perceptions and expectations. Secondly, and even more importantly, the scoreboard is a non-discretionary component of the procedure (as opposed to in-depth analysis) and the recent euro-crisis has proven that discretion in such procedures should be minimised. From this point of view, one could expect that the MIP scoreboard should be prepared carefully and have solid analytical underpinnings. These are, as yet, largely missing: the European Commission itself emphasises the lack of comprehensive analytical background for the design of the scoreboard, e.g. the thresholds were set as order statistics from panel historical distributions. This paper aims to contribute to filling the gap in understanding the mechanics of thresholds.

We concentrate here on scoreboard thresholds related to the

following three (out of 5) external imbalance indicators: CA/GDP ratio, REER dynamics and nominal unit labour cost (ULC) dynamics, with a special focus on the lower threshold for the current account balance set at  $-4\%$  of GDP. We treat them as constraints imposed on the macroeconomic policy and calculate the welfare consequences of this restriction, as well as analyse the modifications of fiscal and monetary policy conduct necessary for compliance with the new requirement. Understandably, there are substantial differences between states that do and do not belong to the euro area in terms of feasible policy instruments and we treat the two cases separately, asking also for the difference in welfare cost of MIP for EA and non-EA countries. Therefore, we focus on Poland as an example. We look at the  $-4\%$  threshold (rather than  $+6\%$  of GDP<sup>1</sup>) as it seems to be binding for a number of converging economies. In the years preceding the introduction of MIP (up to 2010), average current account deficits in the catching-up Europe ranged between 6% and 7% of GDP. Even though the readings as of 2013–2015 were more favourable for the region (e.g.  $-3.4\%$  to  $-1.2\%$  GDP for Poland,  $-3.6\%$  to  $-0.9\%$  for Romania,  $-2.8\%$  to  $-1.9\%$  for Latvia), the Central and Eastern Europe countries are still at higher risk of non-compliance with scoreboard indicators, not necessarily due to the absence of necessary adjustments (see [Figs. 1a-b](#), again, to see the lack of clear patterns in this group). While the intertemporal approach to the current account determination treats deficits as equilibrium phenomena in low-income economies, the scoreboard treats all EU Member States homogeneously in this respect. This may imply running into another “one-size-fits-all” problem in Europe. Currently, there are only some asymmetric thresholds for euro area and non-euro-area countries, but the line of division is not the same: the former group comprises a number of NMS (e.g. Slovakia and Lithuania), while the latter e.g. UK, Denmark and Sweden. This is why we reconsider here the choice of indicator against a possible alternative: current account plus capital account (KA), as the latter is at least partly considered as a source of safe, stable financing. Such an approach would leave the scoreboard’s mechanics for the EA-12 group virtually unaffected, but could substantially relax the constraint for small, catching-up economies in a fundamentally justified way.

It should be stressed that we focus here only on the cost side of MIP, while acknowledging the likely benefits from the tools designed to track of macroeconomic stability in the EU in general. The long-term benefits should materialize themselves if the procedure is effective in limiting the persistent current account deficits that, by Thirlwall’s law, exert a negative impact on long-term growth ([Soukiazis et al., 2012, 2014](#)). Meanwhile, our cost-side analysis is rooted in the strand of literature originated by the seminal contribution of [Lucas \(1987\)](#) on the welfare cost of the business cycle. In the context of the European

<sup>1</sup> Some authors argue strongly against asymmetries between countries and upper versus lower thresholds (cf. [De Grauwe, 2012](#)).

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