

STUDY

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How has the macro-economic imbalances procedure worked in practice to improve the resilience of the euro area?



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Abstract

This paper shows how the Macroeconomic Imbalances Procedure (MIP) could be streamlined and its underlying conceptual framework clarified. Implementation of the country-specific recommendations is low; their internal consistency is sometimes missing; despite past reforms, the MIP remains largely a country-by-country approach running the risk of aggravating the deflationary bias in the euro area.

We recommend to streamline the scoreboard around a few meaningful indicators, involve national macro-prudential and productivity councils, better connect the various recommendations, simplify the language and further involve the Commission into national policy discussions.

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LIST OF ABBREVIATIONS

AGS	Annual Growth Survey
ALMP	Active Labour Market Policies
CSR	Country-specific recommendation
ECA	European Court of Auditors
ECB	European Central Bank
EFSP	European Financial Stability Facility
EIP	Excessive Imbalance Procedure
ESM	European Stability Mechanism
ESRB	European Systemic Risk Board
EU	European Union
EWS	Early-Warning System
FEER	Fundamental Equilibrium Exchange rate
GDP	Gross Domestic Product
IGs	Integrated Guidelines
MIP	Macroeconomic Imbalances Procedure
NPL	Non-Performing Loan
OECD	Organisation for Economic Co-operation and Development
PCA	Principal Component Analysis
SGP	Stability and Growth Pact
VAT	Value-Added tax

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EXECUTIVE SUMMARY

Background

The Macroeconomic Imbalance Procedure (MIP) was introduced in 2011 as part of the 'six-pack' reform of economic governance. It aims to identify, prevent and address macroeconomic imbalances that could adversely affect economic stability in a particular EU country, the euro area, or the EU as a whole.

The empirical analysis provided in this paper, however, shows that:

- Implementation rate of the country-specific recommendations (CSRs) has been declining over time; although imbalances have clearly receded in the euro area and in the EU over 2013-2018, there is no apparent link with the implementation of the CSRs;
- Despite past reforms, the MIP keeps still largely a country-by-country approach, running the risk of contributing to a deflationary bias in the euro area;
- The MIP scoreboard could be simplified with little loss in terms of early-warning performance; some indicators need to be re-defined consistently with the objective of convergence within the euro area;
- The consistency among the CSRs and the recommendations made by the IMF and the OECD varies greatly across countries; the CSRs are less clear on the financial sector than the IMF is, and they are not always connected to the recommendations made by the ESRB;
- The CSRs sometimes lack internal consistency, especially for countries with high current accounts surplus and with respect to the connection with the recommendations to the euro area.
- National policy-makers and experts are often totally unaware of the entire European Semester process. Communication is often done in technical and administrative form – failing to trigger interest in national debates.

Recommendations

1. Streamline the scoreboard around a few meaningful indicators; check that they are geared towards intra-euro area imbalances rather than performance vis-à-vis the rest of the world.
2. In the recommendation to the euro area, include a section explaining the strategy to reduce imbalances, the contribution of each Member State being specified.
3. Focus MIP-CSRs on policy actions that can have direct impact on imbalances. Involve national macro-prudential authorities and national productivity councils; coordinate the timetable of the European semester with that of ESRB's recommendations;
4. Simplify the language and further involve the Commission into national policy discussions.

1. INTRODUCTION

The Macroeconomic imbalance procedure (MIP) was introduced in 2011 as part of the 'six-pack' reform of economic governance. It aims to identify, prevent and address macroeconomic imbalances that could adversely affect economic stability in a particular EU country, the euro area, or the EU as a whole.¹ The MIP was introduced at the height of the crisis, at a moment when the political system had a clear understanding that the euro area had built up significant imbalances in the run-up to the crisis. These imbalances were visible in high current account deficits, high external indebtedness, loss of price and cost competitiveness and significant housing bubbles. Several countries with such problems were at risk of losing market access or had already lost such access.

At the time, a number of analytical papers demonstrated that these divergences were not primarily driven by the fiscal policies of the respective Member States, but rather had their root causes in financial developments, especially private credit growth (Ruscher et al 2010a,b; Balta et al 2009). The boost in domestic demand led to current account deficits and an appreciation of the real effective exchange rate, due to the change in the prices and wages of the non-tradable and tradable sector (Ruscher and Wolff 2009). As productive capacities were reallocated from the tradable sector towards construction and other domestic sectors, trade deficits surged. Except for Greece, these developments were not driven by public deficits, but rather by private sector borrowing.

The crises that resulted in countries with high current account deficit were due to sudden stops of private capital inflows, i.e. they were very similar to balance of payment crises, which economists had thought of as unthinkable for the euro area. Influential economists even claimed that the current account deficits preceding the crisis were no reason whatsoever to worry, as they just reflected the natural "downhill flow" of capital to countries with lower income (Blanchard and Giavazzi 2002). IMF surveillance of euro area countries up to at least 2005-06 also failed to recognize the magnitude of the problem that was building up, and considered that current account deficits were a benign phenomenon in the euro area, as balance of payment crises were supposedly impossible in a single currency area (see e.g. Pisani-Ferry et al 2011). This view was clearly reversed after the crisis. For instance, Giavazzi and Spaventa (2011) argued that capital inflows to peripheral European countries were misallocated to construction and other non-tradable sectors: their current account deficits were unsustainable because the sectors receiving foreign investments were unable to raise their productivity.

By 2010, it was clear that the euro area urgently needed a mechanism to deal with and prevent macroeconomic imbalances that were not driven by fiscal policies, for which the euro area had the Stability and Growth Pact (SGP), but by private sector's decisions. The MIP was therefore established, with the legal basis of Articles 121 and 136 of the TFEU, and was enshrined in two regulations. Regulation (EU) 1176/2011 on the prevention and correction of macroeconomic imbalances sets out the MIP procedure and applies to all EU countries. Regulation (EU) 1174/2011 on enforcement measures to correct excessive macroeconomic imbalances specifies the Excessive Imbalance Procedure (EIP) that includes a sanction mechanism for euro area countries.

The basic idea of the two regulations was that an "Alert mechanism", based on the so-called "MIP scoreboard", would trigger an in-depth investigation by the Commission into whether a country suffers of an economic imbalance (see the description of the MIP scoreboard and classification in Annex A). If

¹ "Surveillance of the economic policies of the Member States should be broadened beyond budgetary surveillance to include a more detailed and formal framework to prevent excessive macroeconomic imbalances and to help the Member States affected to establish corrective plans before divergences become entrenched." (Paragraph 7 of Regulation No 1176/2011).

the in-depth investigation concludes that it does, policy recommendations would be given to the country by the Council, based on a proposal by the Commission. These recommendations are legally binding in EU law, just as the fiscal recommendations from the SGP are. Non-compliance in the case of excessive imbalances, especially in the case of large external imbalances,² could lead to sanctions for euro area countries.

The scoreboard, which includes 14 “main indicators” and 28 “auxiliary indicators”³, has been subject to much debate (see i.e. Bénassy-Quéré, 2015). An important aspect concerns the way current-account surpluses should be considered in a monetary union. On the one hand, the risk of a financial crisis is clearly higher in current account deficit than in surplus countries; on the other hand, the increase in current account deficits in the pre-crisis years was mirrored by a simultaneous increase in current account surpluses (keeping the euro area current account roughly balanced). More recently, the reduction in deficits has not been mirrored by reduced surpluses, hence the aggregate external balance of the euro area moved from balance in 2007 to a surplus of over 3% in 2018. Such aggregate surplus reflects excess savings over investment at the aggregate level and has gone hand in hand with low inflation. In turn, low inflation on average has made it more difficult to carry out relative price adjustments without highly indebted countries incurring the risk of falling into debt-deflation. Furthermore, since the euro is a floating currency, a current-account surplus at aggregate level will likely trigger an exchange-rate appreciation, other things being equal, which dampens aggregate demand, as exports become more expensive, and does not produce any gain in terms of competitiveness.

The MIP regulation is somewhat contradictory on how to deal with current account imbalances. Article 4.4 states that “The choice of [scoreboard] indicators and thresholds shall be conducive towards promoting competitiveness in the Union”, which suggests that an aggregate current-account surplus is considered to be a good thing. However the preamble (paragraph 17) states that “in Member States that accumulate large current account surpluses, policies should aim to identify and implement measures that help strengthen their domestic demand and growth potential”.

While the Commission had originally proposed to translate the regulation into a symmetric threshold of +4 and -4% for the current account, the final scoreboard refers to +6 and -4 %. Furthermore, various indicators are defined in a way that is as ambivalent, as the MIP regulation itself. For instance, the evolution of the real effective exchange rate is calculated against 41 industrial countries, hence it is sensitive to the exchange rate of the euro against non-EU currencies. More worrisome, the evolution of unit labour costs (ULCs) is calculated in nominal terms. This feature could lead to a “race-to-the-bottom” in the euro area, each country trying to reduce its ULCs (or limit their increase), which would keep inflation at a low level without any gain in terms of price competitiveness. More generally, the scoreboard adopts a country-by-country approach, instead of trying to quantify intra-EU imbalances. This is especially problematic for euro area countries. It could be argued that this approach is benign, since the scoreboard is never directly used in the classification of countries. After all, the scoreboard is only the trigger for an in-depth investigation that relies on judgement when classifying countries and giving them recommendations. However, misleading indicators such as nominal unit labour costs or

² “The need for policy action is particularly pressing in Member States showing persistently large current-account deficits and competitiveness losses.” (Regulation No 1176/2011, Paragraph 17).

³ The indicators may vary over time. As recalled by European Commission (2016), the first scoreboard included 10 headline indicators and 19 auxiliary indicators. Financial sector variables and especially employment indicators were later added to the scoreboard.

real effective exchange rates against 41 other countries are not a good starting point to exert judgement.⁴

Since 2013, some efforts have been made to better frame the Country-Specific Recommendations (CSRs) to euro area Member States into a euro-wide strategy. The CSRs now specify how they contribute to the rebalancing of the euro area consistently with the recommendations to the euro area. However, the Annual Growth Survey (AGS), which kicks-starts the European semester, studies the euro area as a whole without mentioning specific imbalances within the euro area. The euro area recommendations also avoid mentioning any specific member state. Since December 2019 (hence for the 2020 semester), the AGS has been replaced by the Annual Sustainable Growth Strategy. In the document published in December 2019, the expression “macroeconomic imbalance” has disappeared (whereas there were three occurrences in the AGS of the 2019 semester). In fact, it is only in the accompanying document of the euro area recommendation (“Analysis of the Euro Area economy”) that euro area Member States are compared and the convergence analysis is made to a certain extent.

Aside from the European Commission itself, relatively few studies have systematically analysed whether the MIP has been an effective mechanism in preventing and addressing macroeconomic imbalances. The European Court of Auditors found that although the MIP is generally well designed, the Commission is not implementing it in a way that would ensure effective prevention and correction of imbalances. It also argues that the “*classification of Member States with imbalances lacks transparency, the Commission’s in-depth analysis despite being of a good standard has become less visible and there is lack of public awareness of the procedure and its implications.*” (ECA 2018, p. 85). The Court recommends to improve certain aspects of its management and to give greater prominence to the MIP.

In this paper, we argue that the MIP could be improved, based on existing instruments, by acting simultaneously at three levels: (i) the scoreboard, (ii) the recommendations, and (iii) national ownership. In Section 2, we discuss the implementation record of countries with respect to the annual CSRs and the evolution of imbalances according to the scoreboard. Section 3 turns to the scoreboard itself, which we analyse over a longer period. In Section 4, we look more closely at the country classification of the MIP and, more specifically, at the 2019 vintage. We study its consistency both internally (across Member States and with the recommendations to the euro area) and externally (compared with IMF and OECD recommendations). In Section 5, we provide recommendations on how to improve the MIP and increase its usefulness for the macroeconomic management of the euro area. One of our recommendations also refers to how to increase the ownership at the national level, which we consider of central importance for the success of the MIP.

⁴ Additionally, as noted by the [ECOFIN Council](#), in 2016, the indicators may not always be geared towards macroeconomic imbalances: “[The Council] underlines that social and labour market indicators are not relevant for identifying macro-financial risks and developments in these indicators cannot trigger steps in the MIP process” (Council Conclusions on Alert Mechanism Report 2016).

2. EFFECTIVENESS OF THE MIP

As part of the European semester, EU Member States receive policy recommendations under three different headings: SGP, MIP and “integrated guidelines” (IGs) related to the Europe 2020 growth and employment strategies. As evidenced by Hagelstam et al. (2019), recommendations related to IGs and to the MIP are often bundled together. Bénassy-Quéré (2017) further notes that the same recommendations can appear under the MIP or under IGs depending on whether a country is classified with no imbalances or with imbalances.

Here we rely on the implementation of the CSRs assessed by the European Commission in the country reports, with specific focus on MIP-CSRs. Previous research has cast doubt on the effectiveness of the MIP. Efstathiou and Wolff (2019) cannot find a statistically significant effect from the recommendations. Bricongne, Mata Garcia and Turrini (2019) find a statistically significant effect. However, they include a dummy for “hard-to-comply-with recommendations”, which captures recommendations that would have high political costs. As it would be expected, the implementation with the other recommendations that carry little political costs is higher – but likely also the effectiveness will then be lower, as the impact of easy reforms is small (this is why they are easy).

The empirical results on the relatively low effectiveness of macroeconomic and structural policy recommendations given to countries rhyme with an established literature on the euro area governance framework predating the MIP. Ioannu and Stracca (2014) find strong and robust evidence that neither the SGP nor the Lisbon strategy had a significant and beneficial impact on economic and fiscal performance outcomes. However, the evidence on the impact of fiscal rules is more nuanced than that. The literature finds some evidence that rules constrain fiscal outcomes (Heinemann et al 2018) and there is evidence that the more legally strong and binding fiscal rules are, the more effective they are (Iara and Wolff 2014). However, fiscal performance is only one aspect of MIP assessment.

Assessing the effectiveness can be done through two complementary approaches. The first one relies on whether countries did implement the relevant country-specific recommendations. The second approach is to look at whether the scoreboard indicators improved, following the implementation of country-specific recommendations.

2.1. Implementation rates

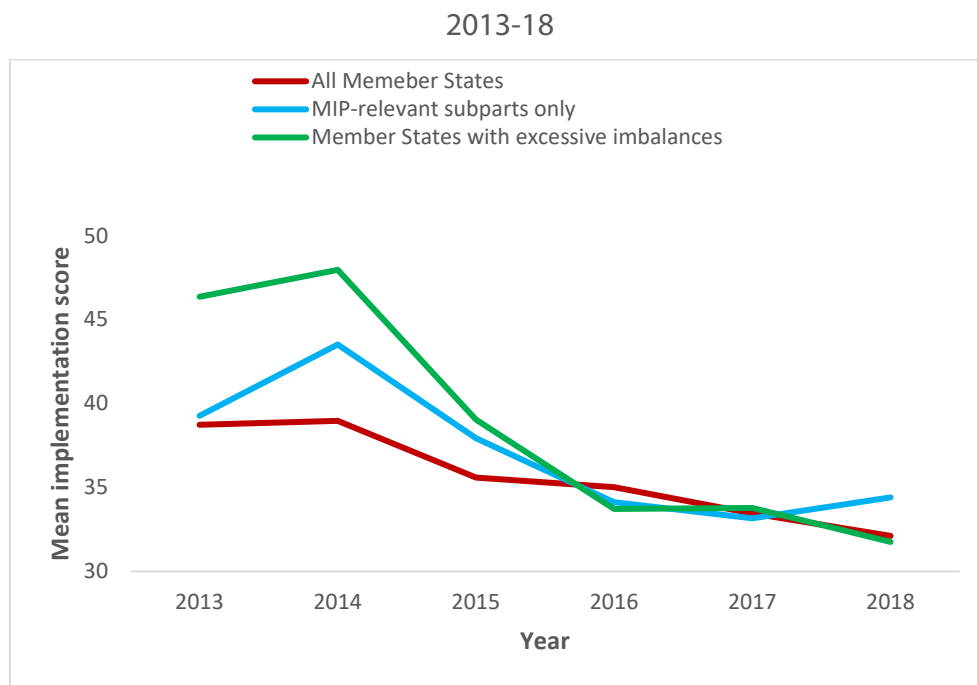
If judged on the basis of the implementation rate of CSRs, simple descriptive charts cast serious doubts on the overall effectiveness of the MIP framework. In Figure 1, we show the average implementation rate across all recommendations and all Member States for each year from 2013 to 2018. The implementation rates are calculated based on CSRs subparts, following the decomposition proposed by the Commission in its country reports.⁵ We also show the average implementation rates for MIP-CSRs and finally average implementation rates for countries with excessive imbalances (in the latter case, all recommendations are accounted for, but most of them fall into the MIP category).

The chart makes for a grim reading. Average implementation rates are less than 50%, i.e. on average implementation is only partial. Detailed implementation rates are telling even more: over the whole period and for all countries together, CSRs that are “fully addressed” represent only 2%, and those that show “substantial progress” represent 8%. In fact, the most frequent assessments are “limited progress” (39%) and “some progress” (38%), the remaining 13% being “no progress”. Moreover, implementation

⁵ The division into subparts results from the complexity of the recommendations and it allows for a more specific analysis of their scope.

rates have been falling substantially in the last 5 years. The chart also shows that implementation rates are higher when it comes to MIP-CSRs. However, this better picture only occurred during 2013-15 and since then there does not seem to be a systematic difference. Finally, the picture reveals that for countries in excessive imbalance, implementation rates were initially higher but for these countries, despite the fact that the legal framework is stricter and the reform needs are more pressing, the decline in implementation rates has been more significant. After 2015, it is difficult to identify any difference in implementation rates between MIP and non-MIP CSRs. Overall, this chart puts doubt on the effectiveness of recommendations. Instead, it suggests that reforms were only implemented when the financial pressure was big and fundamentals were looking weak.⁶

Figure 1: Average implementation rates per year, in percent of sub-CSRs

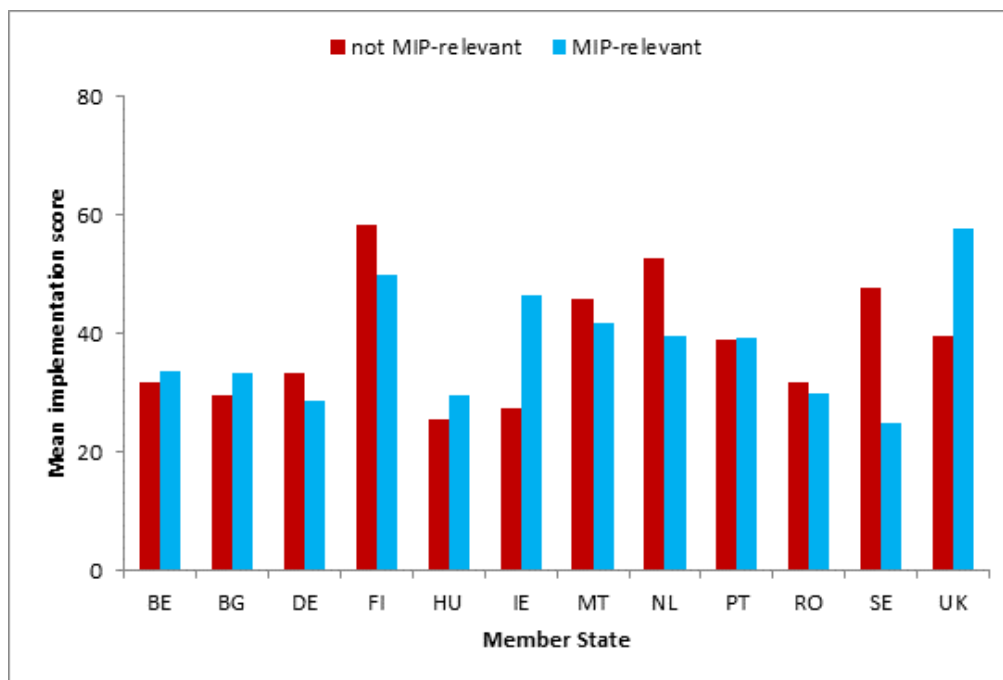


Source: Esthathiou and Wolff (2019). Years refer to the CSRs. Recommendations of year t are assessed in year t+1.

In Figure 2, we compare implementation rates across countries. Among countries that have received at least ten sub-CSRs in the entire period, implementation rates of MIP-CSRs and non-MIP ones do not differ systematically.

⁶ This evidence is consistent with Darvas and Leandro (2015) who find no major difference in the implementation rates for CSRs and for OECD recommendations except for countries that are under a financial assistance programme.

Figure 2: Average implementation rates per country, in percent of sub-CSRs*
2013-18



* The countries shown have at least 10 sub-CSRs under each legal basis over the entire period. Scores: no progress=0, limited progress=25, some progress=50, substantial progress=75, fully implemented=100).
Source: Esthathiou and Wolff (2019).

A counter-argument often made in response to these numbers is that countries tend to implement recommendations with some delay, for example after two or three years, especially since many reforms require several years to be legislated and implemented. We explored this argument for two countries, Germany and the Netherlands. Germany had an implementation rate below 25% in 2015 and 2017 and never an implementation rate above 40%. The Netherlands seems doing on average slightly better. But are the recommendations perhaps implemented after a few years? We note that the recommendation to Germany to increase public investment was given every year from 2014 to 2019. While the precise formulation varied, “limited progress” alternated with “some progress”. Also, the recommendation to Germany on the efficiency of the tax system was repeated several times. In the Netherlands, one key issue concerns the housing market and also there we see that recommendations are repeated year after year, even though with different formulations. The fact that recommendations are repeated year after year, even if with slight changes of the formulation, suggests that at least in some countries implementation rates remain weak even a few years after the recommendation is first received.

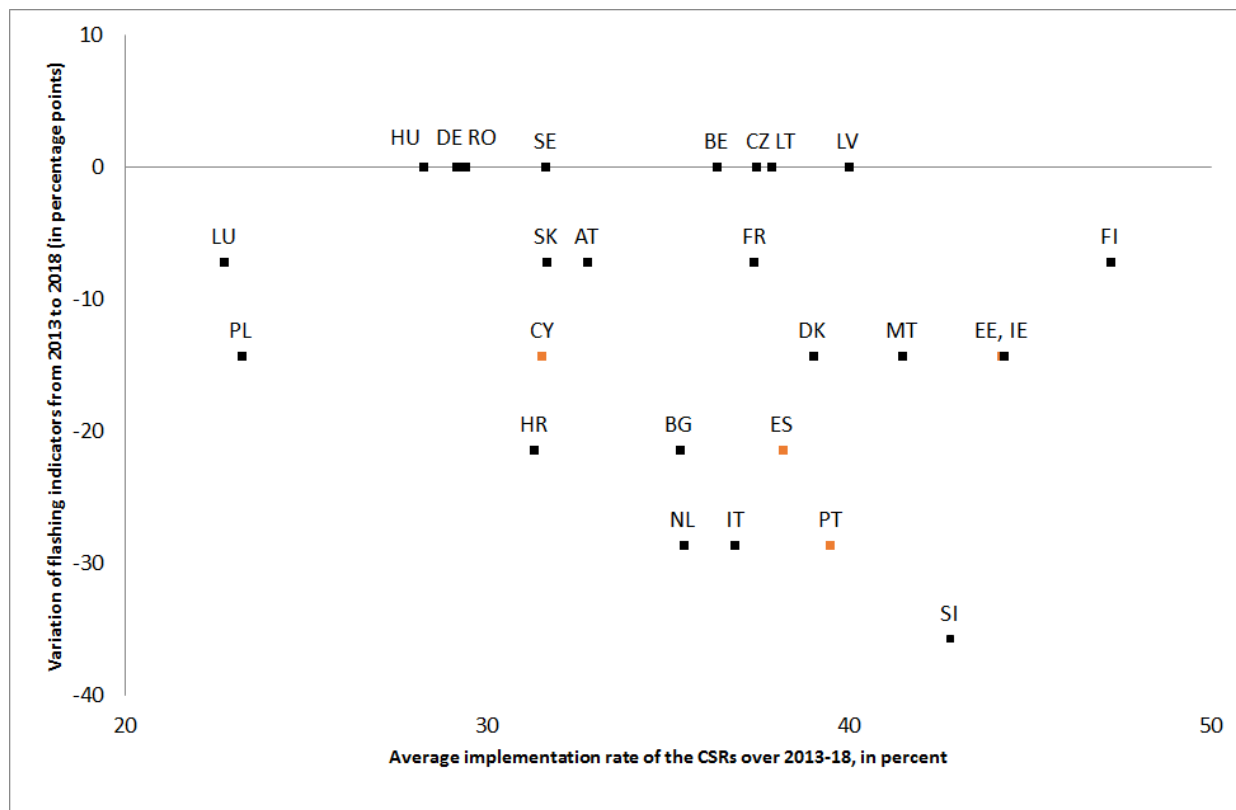
2.2. Evolution of scoreboard performance

This section explores whether higher implementation rates actually correspond to bigger reductions in imbalances, measured by a reduced proportion of flashing indicators in the scoreboard.⁷ In principle, one should expect that a better implementation of reforms should be associated with a faster and

⁷ Here we follow the logic of the scoreboard that defines a range of adequate values for each indicator, the values out of the range triggering a “flash” whatever their distance to the threshold.

better reduction in imbalances. Figure 3 reveals two main messages. First, in all countries - but the UK - the imbalances as measured in the scoreboard receded or stayed stable between 2013 and 2018. Second, there is no correlation between implementation rates of recommendations and imbalances.⁸

Figure 3: CSR implementation and scoreboard outcome, 2013-18*



* In orange: countries that were under financial assistance programs during part of the period (assessment rates are then calculated over the remaining years).

Reading: on average over 2013-18, Italy's implementation rate was 37%; between 2013 and 2018, the percentage of scoreboard main indicators flashing in Italy fell from 43% to 14%, i.e. by almost 30 percentage points.

Source: Authors' calculations based on scoreboard and Esthathiou and Wolff (2019) database.

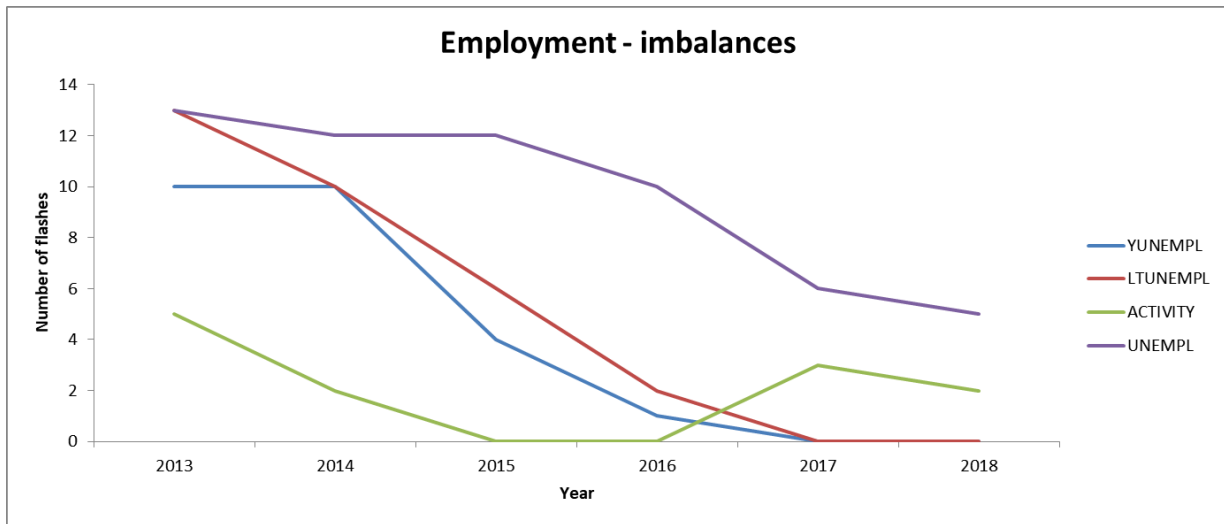
Pierluigi and Sondermann (2018) argue that the improvement in the scoreboard during this period is mainly due to "flow" indicators, whereas "stock" indicators did not improve.⁹ Our calculations rather highlight an improvement in labour markets over 2013-18 (Figure 4). Among the 14 main scoreboard indicators, 4 concern the labour market: change in activity rate, moving average of unemployment rate, change in long-term unemployment rate, and change in youth unemployment rate (see Annex A). It could be that the improvement in the scoreboard over 2013-18 was partly driven by labour market reforms. However, the implementation rates are not found systematically higher for labour market reforms than for the other parts of the country-specific recommendations (see Annex B). More

⁸ Dividing the period into two sub-periods (2013-15 and 2015-18) does not change the overall picture, except for the fact that the scoreboard improvement has not been linear in most countries.

⁹ The distinction comes from European Commission (2016). The Commission defines unit labour cost growth, the unemployment rate, the current account balance, house price increase and credit growth as flow variables, while the stock of public and private sector debt, as well as the net international investment positions, are stock variables.

realistically, the situation in the labour market improved or at least stabilized since 2013 as the economy was recovering. Among the four labour market indicators, three are changes in unemployment or activity rates, which means that just stabilizing unemployment reduces the number of flashes in the scoreboard.¹⁰

Figure 4: number of countries with flashing indicators across Member States, 2013-18 (all EU countries)



Source: Authors' calculations based on MIP scoreboard.

3. COUNTERFACTUAL ANALYSIS: 1999-2018

It is obviously difficult to guess whether the MIP would have made a difference had it been in place already in 1999. What we can do though is to calculate the scoreboard from 1999 to 2018 and study whether it would have helped identifying excessive macroeconomic imbalances and related risks for financial stability in the euro area.

As already mentioned, the MIP relies on a scoreboard with 14 main indicators and 28 auxiliary indicators. Here we focus on the 14 main indicators, since thresholds are set for them only. We calculate them since 1999. In Section 3.1, we analyse the connections between the scoreboard indicators and standard theoretical macroeconomic analysis of imbalances. In Section 3.2, we discuss the performance of the scoreboard as an early-warning system and explore ways to improve this performance.

3.1. The logic of the scoreboard

The indicators that are included in the scoreboard, and their respective thresholds, have been selected so as to cover the main sources of macroeconomic imbalances along two complementary dimensions (c.f. Regulation No 1176/2011, Art. 4.3): internal imbalances (“public and private indebtedness; financial and asset market developments, including housing; the evolution of private sector credit flow; and the

¹⁰ A similar argument can be made with external deficits, which have been reduced mainly due to weak internal demand in peripheral countries during this period.

evolution of unemployment”); and external imbalances (the evolution of current account and net investment positions of Member States; real effective exchange rates; export market shares); changes in price and cost developments”. It is a bottom-up approach where the observation of “a small number of relevant, practical, simple, measurable and available macroeconomic and macrofinancial indicators” (Regulation No 1176/2011, Art. 4.2) will provide an accurate picture of various possible vulnerabilities, without explicitly linking them within a comprehensive macroeconomic framework.

The empirical analysis provided in Annex A shows that the main scoreboard indicators cover well the two dimensions of macroeconomic imbalances, although some indicators (export shares, real effective exchange rates, unit labour costs) appear to measure more internal than external imbalances. As such, the distinction between external and internal has always been somewhat artificial, as the external data usually reflect internal developments in comparison to trading partners.

Alternatively, it is possible to assess macroeconomic imbalances through a top-down approach that summarizes all imbalances (internal and external) in just one measure of real exchange-rate misalignments. The most widely used measure relies on the FEER approach (Fundamental Equilibrium Exchange Rate, see Williamson, 1983). The FEER is defined as the theoretical exchange rate that would bring the external current account to a certain equilibrium level while assuming a closure of the output gap (through other, unspecified policy instruments). The various indicators of the scoreboard could have an impact on the exchange-rate misalignments through their effects on the output gap and/or directly on the current account. For instance, a higher fiscal deficit, other things equal, reduces the output gap and the current account. A rise in short-term unemployment generally coincides with a declining or negative output gap. Higher credit growth correlates with lower private savings (hence the current account), etc.

The FEER approach has been used by Couharde et al. (2017b) to study currency misalignments within the euro area. The bottom line of the methodology is to combine a measure of internal imbalances (the output gap) and a measure of external imbalances (the current account) to end up in a single vulnerability indicator (the real exchange-rate misalignment). Interestingly, the European scoreboard is consistent with such approach, since its indicators can be mapped along two axes representing internal and external imbalances, respectively (see Annex A). This is not surprising, since the estimates of the equilibrium real exchange rate were also computed by the Commission before the Scoreboard was created (see European Commission, 2009).

The thresholds that are used in the scoreboard may lead to weighting more heavily some indicators relative to others, compared to an econometric approach. One way of looking at this question is by comparing the scoreboard to the misalignments found through a FEER methodology.

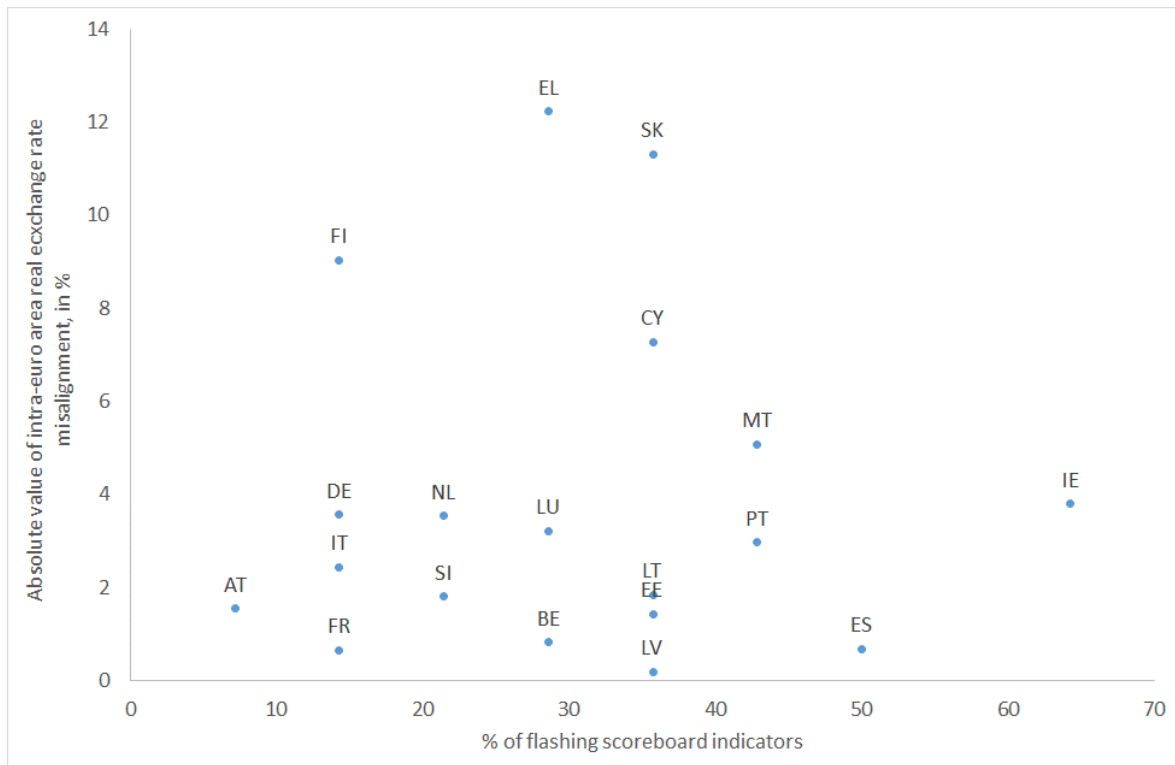
Figure 5 maps euro area countries in 2008 along two dimensions. The first dimension is the proportion of flashing scoreboard indicators.¹¹ The second dimension is the absolute value of real exchange rate misalignments within the euro area.¹² The scoreboard flashes well for Ireland, Spain and to a lesser extent for Portugal. Conversely, the exchange-rate misalignment flashes more for Greece and Cyprus,

¹¹ We use proportions of flashing indicators rather than number of flashes because there are missing data in 2008, notably for new member states (see Annex A).

¹² The calculation is based on misalignments of broad indices with variable country weights, as provided by the CEPII-EQCHANGE database. We calculate the euro area misalignment as the weighted sum of individual countries misalignments, where the weights are those of the ECB capital keys. Then, intra-euro area misalignments are calculated as the difference between country misalignments and euro misalignments. In the graph we consider the absolute value of the misalignments, hence overvaluations and undervaluations of the real exchange rates are considered similarly. This approach is consistent with the scoreboard that puts both lower and upper bounds for the current account, although the range is asymmetric and does not concern the output gap.

while Italy is clustered in the group of “safe” countries. Finally, the exchange-rate misalignment flashes for Finland and Slovakia, hence also for non-crisis countries. On the whole, the MIP-scoreboard seems to work pretty well prior to the 2010 sovereign crisis (Greece’s crisis was driven by fiscal developments which would have been flagged by the SGP). However, the comparison can be considered unfair, since the scoreboard was constructed in 2011 with a view to identify those imbalances that led to the 2010 crisis.

Figure 5: Euro area countries in 2008 along two measures of imbalances

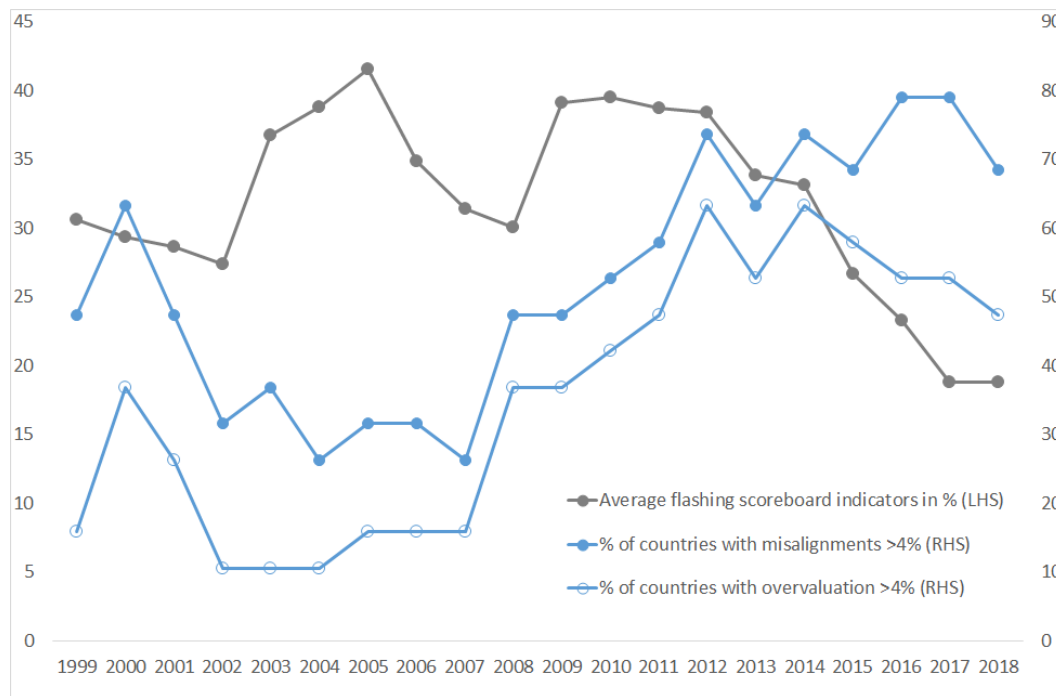


Source: Authors, based on the MIP scoreboard and on CEPII-EQCHANGE.

Figure 6 plots the evolution of the average proportion of flashing indicators for all euro area countries together (unweighted averages), and the proportion of exchange-rate misalignments in excess of 4%, from 1999 to 2018. Although the levels of these two indicators cannot be compared, their variations over time are interesting.¹³ Over 2009-2018, the proportion of misaligned countries tends to increase, whereas the proportion of flashing scoreboard indicators tends to decrease. Hence there is a divergence of these two measures of misalignments over this period. Restricting the analysis to the share of countries with relative exchange rate overvaluation among the countries with misalignments, it can be observed that this measure of imbalances declines since 2014, which means that the increased proportion of misalignments comes from undervalued currencies. Due to its composition and thresholds, the scoreboard may have underweighted the problem of “undervalued countries”. This finding is consistent with the Commission’s assessment that “*The MIP has been more successful in reducing current account deficits than it has been in reducing persistent and large current account surpluses*” (European Commission, 2020a, p. 17).

¹³ It should be reminded however that some scoreboard indicators are missing until the mid-2000s, see Annex A.

Figure 6: Two measures of imbalances, Euro area countries, 1999-2018



Source: Authors, based on the MIP scoreboard and on CEPII-EQCHANGE.

3.2. The scoreboard as an early-warning system

The role of the scoreboard is to help the European Commission in identifying cases where an in-depth analysis is warranted, in order to check whether the country is at risk (and/or whether it may cause a risk to the Union through spillover effects). Hence, the scoreboard is not used in a mechanical way, but rather as an alarm to raise the attention on a subset of countries.

Although its role may have changed de facto in recent years, the scoreboard was introduced as an early-warning system (EWS).¹⁴ In this section, we study whether it could have alarmed the Commission appropriately over the 1999-2013 period. To do so, we construct a synthetic indicators that measures the proportion of the 14 main scoreboard indicators that are out of their “admitted range” for each country-year. We then construct a binary indicator whose value in year t is unity in case there is a crisis in $t+1$ or $t+2$, and zero otherwise.¹⁵ We define a crisis as an event when the country asks for financial assistance from the IMF and/or from the EFSF/ESM. We eliminate the subsequent years from the sample. The crises events are reported in Table 1.

¹⁴ According to the Regulation No 1176/2011, “the scoreboard shall be used as a tool to facilitate early identification and monitoring of imbalances” (Article 4(1)).

¹⁵ This choice is standard in the literature. We alternatively constructed an advanced warning system that would ring 4 years ahead, but the results were worse than with only 2 years ahead, not to mention the problems raised by the last observations of the sample.

Table 1: Crisis events

Country	Crisis start year	Country	Crisis start year
Ireland	2010	Portugal	2011
Greece	2010	Hungary	2008
Spain	2012	Romania	2009
Latvia	2008		

Source: Authors, based on EFSF/ESM documents.

Such an early-warning mechanism has to trade-off two types of risks:

- The risk of missing a crisis (false negative, type I);
- The risk of issuing a fake alarm (false positive, type II).

Annex C details how the two types of errors can be weighted and how to interpret the results of the EWS. Looking at how the thresholds of each indicator of the scoreboard were set, Knedlik (2014) finds that the implicit weight of type I errors is 0.6 while that of type II errors is 0.4: this means that the European Commission puts more weight on not missing a crisis than on issuing a fake alarm. Relying on this weighting scheme, we can calculate the optimal threshold for the aggregate scoreboard indicator, i.e. the threshold above which an alarm will be issued. The threshold is optimal in the sense that it maximises the utility of the EWS, given the weights of type I and type II errors implicitly set by the Commission.

We perform a simulation which shows that the optimal threshold is 42%: for each country, when more than 42% of the scoreboard indicators are flashing, then the scoreboard issues an alarm. For the 28 EU countries over the 1999-2016 period, the scoreboard then issues 129 alarms, 13 of which were followed by a crisis.¹⁶ Only three crises are missed, which means that 81.3% of the crises are correctly predicted (see Table 2, left columns). Although 89.9% of the alarms are fake, the results are acceptable, given the preference for avoiding missing crises.

Table 2: In-sample performance of the scoreboard as an early-warning system (EU countries, 1-2 years ahead, 1999-2016)

Threshold	Full scoreboard		Simplified scoreboard	
	Crisis	No crisis	Crisis	No crisis
	42%		21%	
Alarm	13	116	16	123
No alarm	3	323	0	316
Signal-to-noise ratio (A+D)/(C+B)	2.8		2.7	
% of correctly called crises A/(A+C)	81.3		100.0	
% of correctly called tranquil D/(B+D)	73.6		72.0	
% of false alarms B/(A+B)	89.9		88.5	
% of false tranquil C/(C+D)	0.9		0.0	

Source: Authors' calculations. A: alarm/crisis; B: alarm/no crisis; C: no alarm/crisis; D: no alarm/no crisis.

It could be asked, however, whether a smaller set of indicators could do a similar job in predicting crises. As discussed previously, the indicators of the scoreboard cover various aspects of internal and external imbalances. Some refer to stocks (stocks of debts, of unemployed); some to flows (of external current account, of employed or unemployed, of credit); some to price changes (percent changes in real effective exchange rates, unit labour costs or of house prices). However, the empirical analysis presented in Annex A suggests that some of the scoreboard indicators seem to carry similar

¹⁶ The total number of observations is 455 instead of 28x18=504 because we have deleted all the observations after the start of the crises.

information in a way that is not always obvious. We now study the performance of a simplified scoreboard that would be reduced to only six indicators, based on what the empirical analysis extracts as variables with clearly different information content: current account, net international investment position, change in unit labour costs, credit growth, government debt and unemployment.¹⁷ The results based on the same preferences for type I and type II errors are reported in Table 2 (right columns). With a threshold of 21%, we are able to correctly call 100% of the crises without increasing the proportion of false alarms.

This simple exercise suggests that a somewhat streamlined scoreboard may perform no worse than the complete one in its task to flag possible risks requiring in-depth analysis.

4. CONSISTENCY

An important question is whether the country-specific recommendations (CSRs) given in the context of the European Semester are consistent both with recommendations given by international institutions and internally across policy areas and across countries. We aim to at least tentatively assess to what extent the given recommendations would actually be helpful in reducing imbalances, if implemented.

We start by mapping the classification of countries in relation to the scoreboard. We then analyse the consistency of this classification with the CSRs and the consistency of the CSRs themselves, both internal and external, by comparing recommendations given by the EU with those of the IMF and the OECD. Considering external consistency is important, because policy-makers in the individual countries receive recommendations from the two international institutions and the supranational EU. Although the CSRs are integrated in the EU “rule-based system” (see Hagelstam et al. 2019), the threat of sanctions is relatively small; hence *de facto* the difference may not appear so compelling. The CSRs may be more rigorous, since they are enshrined in law. Alternatively, since they are ultimately adopted by the Council, the CSRs may incorporate a dose of political self-restraint, especially when large Member States are at stake. In any case, the comparison with other sources of recommendations is valuable, not to mention that if recommendations are contradictory, national policy-makers will find it easy to ignore them or choose to just opt for those that are politically most opportune (which are not necessarily those that would reduce imbalances).

4.1. The MIP classification of countries

We have seen above that in recent years the scoreboard may have tended to under-weigh external imbalances, or at least current-account surpluses. The MIP classification of imbalances does not derive mechanically from the scoreboard. In fact, the scoreboard is only a first trigger to proceed to a further in-depth investigation of imbalances. An empirical exercise based on the available observation since 2012 is presented in Annex A (Table A2). It shows that countries tend to be classified as imbalanced or as excessively imbalanced when they have external deficits (current-account deficits, negative net investment positions) and internal deficits (high government debts, high unemployment). External surpluses and signs of overheating (credit growth, house price increases, increases in unit labour costs)

¹⁷ Alternatively, we have used the variation in house prices variable instead of credit growth. However the house price variable is not available for 1999 and 2000, and the subsequent EWS was less performing. Since credit growth is the core variable for macroprudential policies, we decided to select this variable as a measure of the financial cycle.

appear empirically to be less taken into account when making the classification. Since the MIP was introduced, few countries did flash for the private credit flow indicator. However, house prices did flash for 5 to 10 countries per year, while unit labour costs increased too rapidly almost every year in four EU countries.

In the 2019 vintage of the MIP, 15 EU countries were considered “without imbalances”, 10 with “imbalances” and 3 with “excessive imbalances” (Table 3). Figures 7 and 8 show how these three categories of countries differed in terms of the 14 main scoreboard indicators (for readability, we separate debt indicators from other indicators). In 2019, based on the 2018 scoreboard, the countries considered experiencing excessive imbalances on average differentiate themselves through lower net international investment positions, higher private and especially public debts, lower current accounts, higher unemployment, but also lower-than-average growth of unit labour costs and youth unemployment rates, and slower increase in house prices and liabilities in the financial sector.¹⁸ Hence, the 2019 vintage follows a similar pattern as in the previous years, as evidenced in Annex A (Table A2).

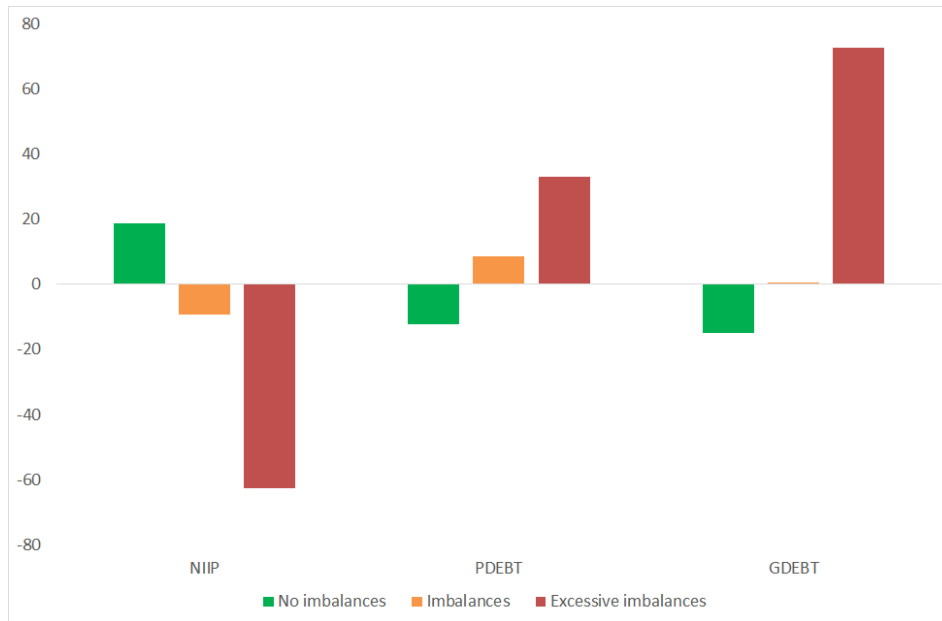
Table 3: MIP classification in 2019

MIP category	Countries
No imbalances	Austria, Belgium, Estonia, Finland, Latvia, Lithuania, Luxembourg, Malta, Slovakia, Slovenia, Czech Rep., Denmark, Hungary, Poland, UK
Imbalances	France, Germany, Ireland, Netherlands, Portugal, Spain, Bulgaria, Croatia, Romania, Sweden
Excessive imbalances	Cyprus, Greece, Italy

Source: European Commission.

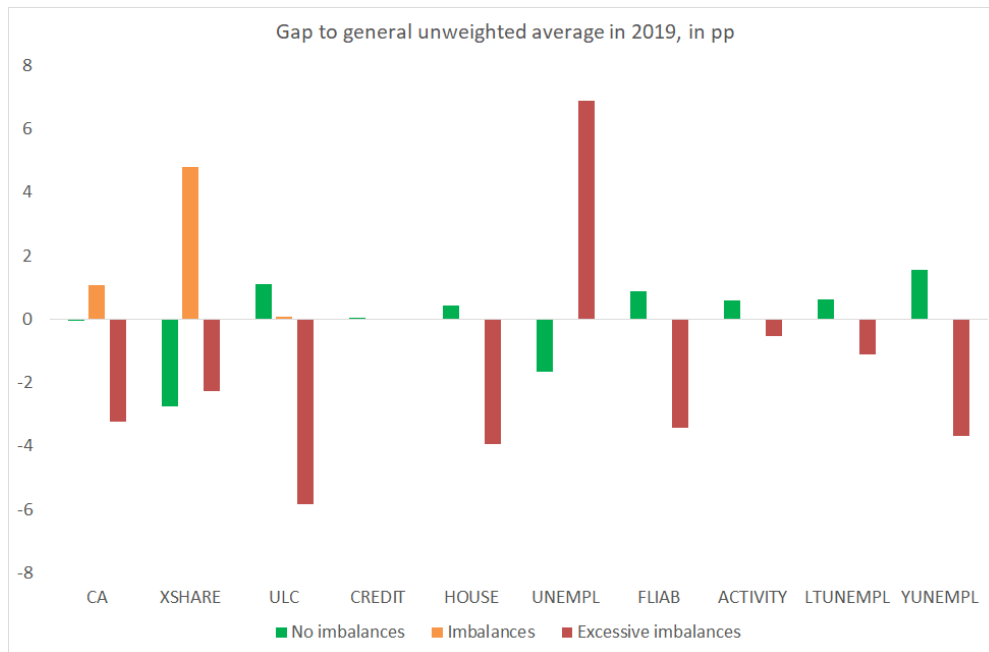
¹⁸ These are averages over the different countries in each group. There are of course differences within each group. For instance, Italy displays a current-account surplus whereas Cyprus and Greece have current-account deficits.

Figure 7: Three debt indicators of the 2018 scoreboard
Unweighted averages for the three MIP groups, in percentage point difference to EU28



Source: MIP scoreboard. Variables: see Annex A.

Figure 8: Other scoreboard indicators of the 2018 scoreboard
Unweighted averages for the three MIP groups, in percentage point difference to EU28



Source: MIP scoreboard. Variables: see Annex A.

4.2. External consistency

We now turn to the “external” consistency of the European Semester, by comparing the CSRs to the recommendations made by the IMF and by the OECD. Since we cannot systematically do such a

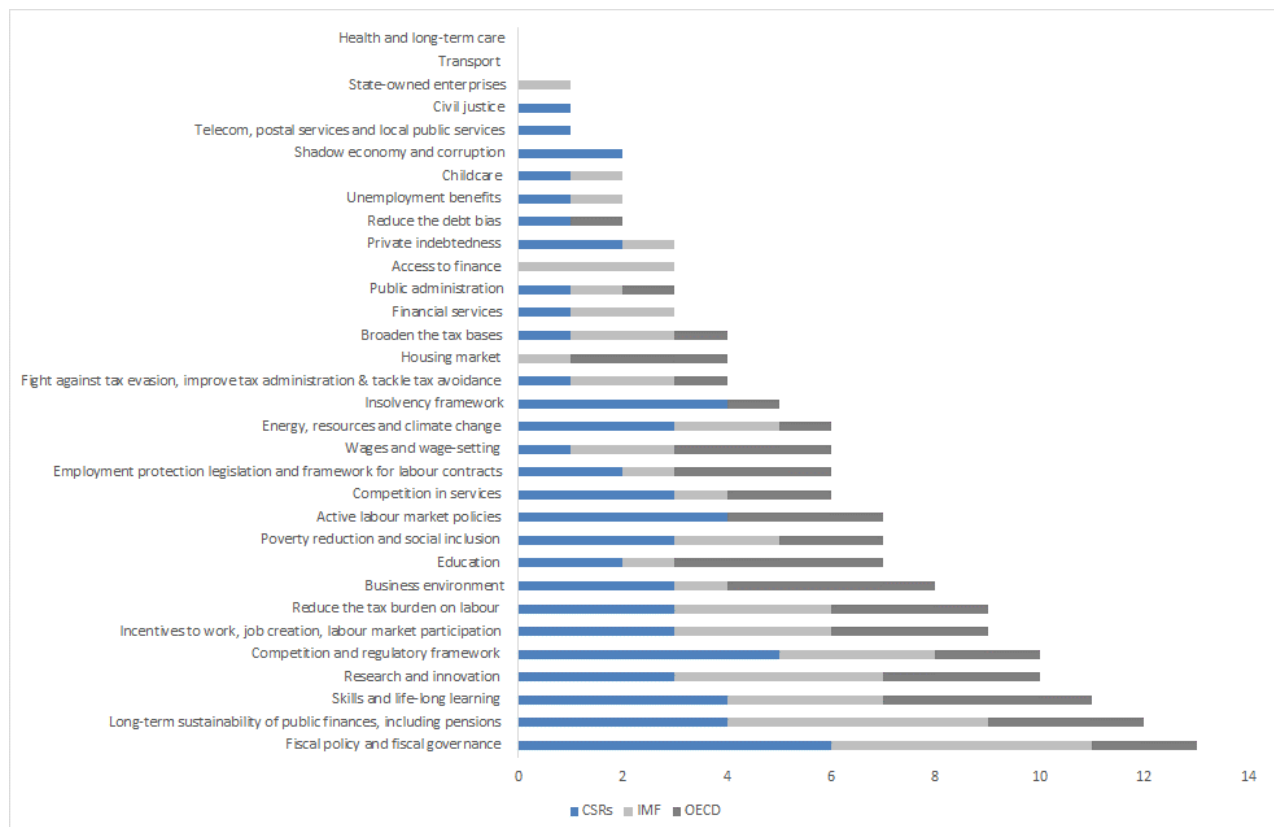
comparison for 28 EU countries, we concentrate here on the 2019 MIP vintage for the largest EU countries: Germany, Spain, France, Italy, the Netherlands, Poland and the UK. These are the biggest countries in the EU and their combined GDP amounts to more than 70% of the EU's GDP.

Studying the largest countries is particularly relevant for macroeconomic imbalances in the EU. Recommendations are not only relevant for the countries themselves, but are likely to also have significant macro implications for the rest of the EU, due to the size of their economies. Consistency of recommendations given to large countries with the overall assessment of the EU and the euro area economy is therefore particularly relevant.

In 2019, the “Big5” euro area countries were all classified as with imbalances or with excessive imbalances (see Table 3), and they received all their recommendations under the MIP heading. In contrast, Poland and the UK (the “Big2”), which are not members of the euro area, were considered with no imbalances. Hence, the comparison between the Big5 and the Big2 will inform us about the MIP CSRs for imbalanced euro area countries.

Figure 9 ranks the 32 policy areas identified by Esthathiou and Wolff (2019), depending on the number of recommendations received by the Big5 and the euro area in 2019 from the three institutions. The chart clearly outlines the focus of the three institutions on fiscal issues. They also insist very much on skills, R&D and competition, which are structural issues that would better fit the “integrated guidelines” heading. Macro-finance issues such as the housing market, financial services or private indebtedness are ranked after structural issues, and they are often covered by only one or two of the three institutions.

Figure 9: Number of recommendations received in 2019 by the Big5 + Euro area*

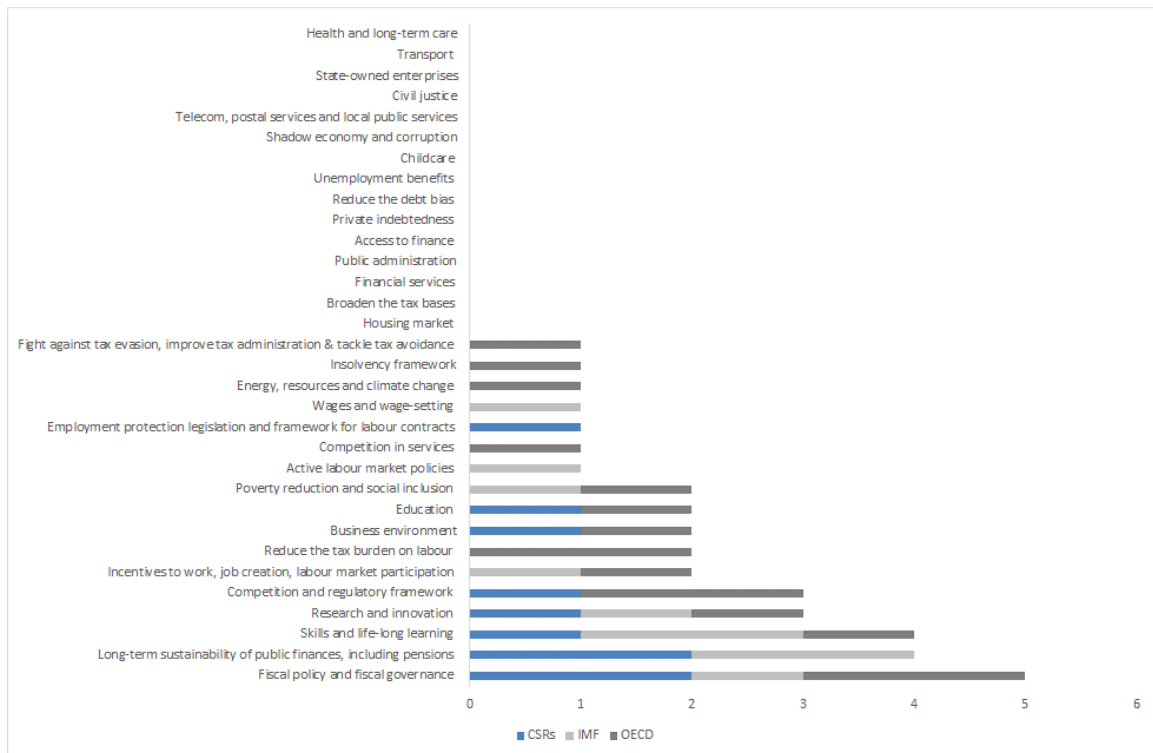


* Germany, France, Italy, Spain, Netherlands. Euro area treated as an additional country.

Source: Authors' calculations based on individual CSRs and IMF/OECD country reports.

Figure 10 provides the same ranking for our Big2 group (Poland and the UK). Unsurprisingly, the total number of recommendations is much less than for the Big5, and some areas are not covered. However, the focus on fiscal sustainability, skills, R&D and competition is similar. Hence, the contrast between MIP recommendations to euro area countries and non-MIP recommendations to non-euro area countries is not striking. The only sizeable difference is the presence of recommendations related to the financial sector for MIP countries, unlike non-MIP ones. However, in these areas, the recommendations coming from the MIP are less numerous than those stemming from the IMF or the OECD.

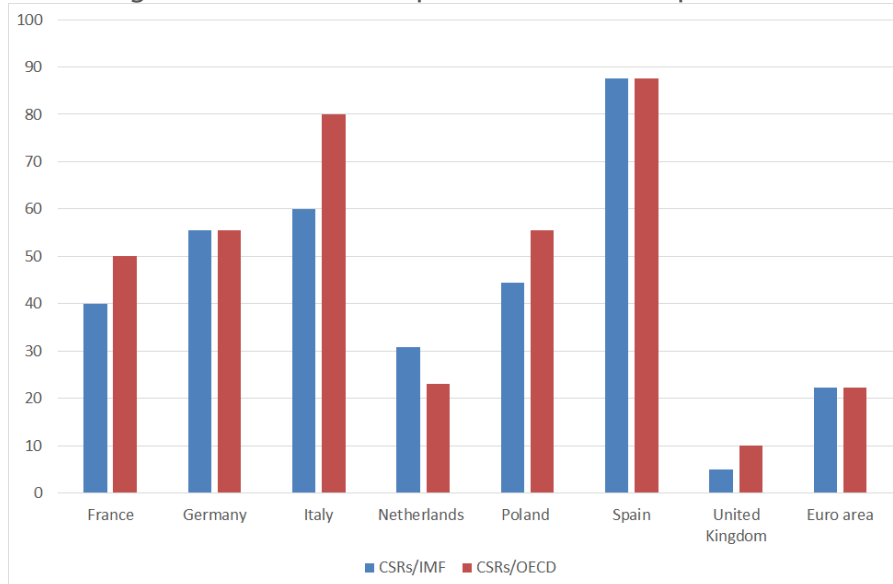
Figure 10: Number of recommendations received in 2019 by Poland and the UK (Big2)



Source: Authors' calculations based on individual CSRs and IMF/OECD country reports.

We now turn to the overlap between the three institutions for the same country sample. Figure 11 reports the percentage of EU-CSR subcomponents that are in areas also covered by the IMF or the OECD in 2018 or 2019 (depending on the publication schedules). The overlap is very limited for the UK and, to a lesser extent, for the euro area and the Netherlands. Conversely, the overlap reaches 88% with both institutions for Spain, denoting great convergence of analysis.

Figure 11: Percentage of EU-CSR subcomponents that overlap with IMF or OECD in 2019



Source: Authors' calculations based on individual CSRs and IMF/OECD country/Article IV reports (2019 or 2018).

Table D2 in Annex D summarizes the recommendations given to Germany, Spain, France, Italy, the Netherlands, Poland and the UK in 2019 or 2018 (when such report was not published in 2019 by the IMF or the OECD).

The first point to note in the comparison is that the focus of the three institutions is somewhat different. OECD recommendations have less of a focus on macroeconomics and instead tend to emphasise issues related to the labour market, product markets, education and the welfare state (for example in Poland, education and competition policy are highlighted strongly). The IMF, on the other hand, has a stronger focus on macro issues and emphasises financial matters, if compared to the EU recommendation. In particular, the IMF often makes recommendations that are directed at macro-prudential policies. The IMF also mentions clear bank restructuring and reform needs in Germany and Spain. The Commission, in contrast, does not mention macro-prudential policies and less frequently relates to banks (except for Italy). This is understandable, since macro-prudential policy is beyond the direct remits of the Commission. It is however problematic, as macro-prudential policy is a key instrument to prevent financial crises or at least limit the damage created by those crises. It is also problematic, as the MIP regulation explicitly encourages policy makers to make cross-references to the ESRB, which is in charge of macro-prudential recommendations.

The second point to note is that there is quite some consistency across the institutions, but details are not fully aligned. The IMF is the only institution giving a strong recommendation on bank restructuring in Germany. It does not mention public debt in Italy, while this is one of the key issues for the EU. Meanwhile, only the Commission mentions corruption as something needing to be addressed in Italy. For the Netherlands, the recommendations given by the three institutions look less consistent: while the IMF mentions fiscal space as a source of growth, this is not mentioned by the OECD. While the EU emphasizes public investment, the OECD talks of reducing the marginal tax rate on labour income. The EU recommendations themselves are clear, but there are some inconsistencies. For instance, the EU blames the large current-account surplus but recommends reducing the debt bias and debt burden of households. Since the current accounts is identical to the sum of public and private net savings, reducing dissaving in the household sector (through reducing their mortgage debt) will likely increase

the current-account surplus. Overall, though, there are no major inconsistencies in the sense that one institution was recommending one thing and another one the opposite.

In 2019, three EU countries were considered to be in excessive macroeconomic imbalances: Italy, Greece and Cyprus. Comparing the CSRs to either OECD or IMF recommendations is interesting since the “excessive imbalances” category is the last one before possible sanctions. The recommendations to Italy are broadly consistent across the three institutions and not very specific to macroeconomic imbalance, except for both the EU and the IMF mentioning the labour cost and banks’ non-performing loans. For Greece, both the IMF and the OECD give recommendations on social policies, which the EU does not do. The IMF also calls for more transparency, through enhancing the quality of the judicial system and speeding up anti-corruption reforms in Greece, which is not in the CSRs nor in the OECD recommendations. Meanwhile, on Cyprus, the EU clearly wants aggressive tax planning to be addressed, while the IMF calls for efforts to reduce money laundering, but there is considerable overlap when it comes to the reform of the public sector. Both institutions formulate several recommendations concerning the financial sector.

On the whole, the IMF seems to incorporate recommendations that go in similar directions as the MIP-CSRs, although both sets of recommendations also cover structural issues. The OECD is less prone to address macroeconomic policy issues in its recommendations. One good illustration is the common recommendation of the EU and of the IMF, but not of the OECD, to promote higher wage growth in Germany. Such recommendation can only be understood from a macroeconomic imbalance point of view.

4.3. Internal consistency

We now turn to the consistency of the CSRs with the recommendations made to the Euro area, based again on the 2019 vintage. That year, the recommendations to the euro area distinguished between those Member States with an external deficit, which were recommended to raise their competitiveness, and those with a “large” external surplus, which were asked to “strengthen the conditions that support wage growth in a manner that respects the role of social partners” and to “implement measures that foster investment”. All were recommended to shift taxes away from labour (see the synthesis of the CSRs in Table D3 of Annex D).

How did these recommendations to the euro area “trickle down” to the CSRs? Starting first with the countries with current account surpluses, we find that the link between the assessment that a country needs to boost demand and the policy recommendation is weak:

- Sometimes they are not specific enough. Both Germany and the Netherlands were asked to “Strengthen the conditions that support higher wage growth, while respecting the role of the social partners”, and Germany needed also to “Shift taxes away from labour to sources less detrimental to inclusive and sustainable growth”. The minimum wage and the remunerations in the public sector were not mentioned. And the “less detrimental” tax bases were also left unspecified.
- Sometimes the link between the recommendation and the objective of boosting demand is unclear. While it is true that the recommendations to Germany to boost private and public investment would be increasing demand (to the extent that it does not come as a substitute for consumption), shifting labour taxation to indirect taxes would have unclear effects on demand. In addition, such a shift would aggravate the relative divergence of unit labour costs across the EU. In 2007, Germany cut the labour wedge by around 0.5 percentage point while increasing the normal VAT rate from 16 to 19%. The same year, the gross saving rate of

households increased from 16.9% to 17.3% of disposable income, the latter having arguably increased (source: Ameco). The case of the Netherlands is even worse as the CSRs are about reducing the debt bias for households, which would likely increase net savings rather than reducing them. Improving the second (funded) pillar of the Dutch pension system would also stimulate households' savings.

Turning to a deficit country – France – we also find the recommendations to be loosely related to the need to raise external competitiveness, except for the recommendation to reduce taxes on production and to adjust the fiscal deficit (but the latter recommendation is already embodied in the SGP). Fast-rising leverage in both the household and in the corporate sectors observed in recent years is not mentioned. Actually, the keyword “leverage” is absent from the whole document, whereas “debt” is only associated to the government.

Finally, an interesting case is Italy, which is in “excessive imbalances” despite its current-account surplus. The recommendations to Italy concentrate on fiscal adjustment (which is likely to increase the external surplus), productivity and the labour market (with the objective of boosting supply and reducing the unemployment rate). Since the external surplus of Italy is not “large” by German and Dutch standards, these recommendations are perfectly aligned with those to the Euro area. A boost in Italian GDP growth would represent a central pillar in improving the strength and resilience of the euro area. Interestingly, the CSRs to Italy include the need to further strengthen the banking sector.

The difficulty to match recommendations to countries and to the euro area is neither new nor specific to the EU. Already Pisani-Ferry et al (2011) show that pre-crisis, IMF surveillance of euro area countries was missing the systemic dimension of sharing a common currency. It was wrongly assumed that a balance of payment crises could not occur within a currency area. Furthermore, demand and supply externalities that operate across borders were broadly ignored in the recommendations given to countries prior to the crisis.

The recommendations at the euro area level are not clearly broken down to recommendations to national policy-makers. The EU obviously faces the problem that it has no “euro area” institution other than the Eurogroup to whom it can address recommendations. One could therefore argue that recommendations need to be fairly generic. However, generic recommendations to “no specific addressee” are unlikely to yield many results. It is crucial that they become specific enough so that the countries represented in the Eurogroup understand what practical recommendation is given to them. In our reading, the IMF manages this problem better by now. In fact, the IMF document clearly highlights countries with high public debt that should be fiscally prudent, while countries with low debt should invest. We do not see the same clarity with the EU's euro area recommendations. The recommendation to the euro area comes with an annex with country detail. However this annex presents some benchmarking rather than a consistent convergence strategy. The CSRs replicate this lack of vision of the convergence: each country is supposed to contribute the same way to the common objective (represented by the recommendations to the euro area), with only general considerations depending on the external current account.

5. GOVERNANCE AND EFFECTIVENESS OF THE MIP

5.1. Summary of the results

In this paper, we have analysed the outcomes of the EU's macroeconomic imbalances procedure, with a special focus on the euro area. A number of key results stands out.

First, we document that the effectiveness of the MIP has been quite limited, if measured in terms of CSRs implementation. Implementation rates of recommendations at the national level tend to be low and in the last years there has been little difference between countries with excessive imbalances and those without imbalances. Right after the crisis, implementation rates were still higher in countries with excessive imbalances. It is likely that these higher implementation rates are not driven by the stronger legal framework, when it comes to recommendations given in the context of excessive imbalances, but rather to the macroeconomic and financial market situation (Efstathiou and Wolff 2019). We also show that imbalances in all countries (except the UK) decreased from 2013 to 2018, as measured in the scoreboard. However, there is no systematic relation to the degree to which countries have implemented their policy recommendations.

Second, we study the scoreboard in some detail. We find that, over the 2012-2018 period, the information pointing to possible overheating or surpluses (e.g. house prices) receives relatively little weight when it comes to determining whether a country is in imbalance. Instead, the MIP is more likely to point to countries with high current account deficits, high unemployment and high government debt. All in all, several variables of the scoreboard seem to convey similar information, whereas not all the dimensions of the scoreboard are fully accounted for in the MIP classifications.

Third, we have analysed how well the scoreboard serves as an early warning mechanism for crises following next year or two years later. Like any early warning mechanism, policy-makers need to trade off type-one and type-two errors. We show that it is possible to calibrate the early-warning system so that it would have warned of most of the crises. This is at the cost of many false alarms. To the extent that the scoreboard is not used directly, but that it rather triggers in-depth analyses, we think that this is a reasonable approach. However, we then document that the Commission could improve the scoreboard's capacity to serve as an early warning indicator by reducing the number of variables in the scoreboard.

Finally, we have checked the consistency of EU recommendations with those of the IMF/OECD and the euro area internal consistency. The three institutions cover a large array of policies and are broadly consistent. However, the IMF is more prone than the OECD to deliver recommendations concerning macroeconomic policies, which makes it closer to the CSRs. However, the CSRs are less clear on the financial sector than the IMF is. The euro area internal consistency is sometimes missing. The EU finds it difficult to give clear recommendations to countries with high current accounts surplus, and the connection to euro area recommendations is plagued by the very generic feature of the latter. Overall, our reading is that the exercise keeps still largely a country-by-country approach. We consider this to be especially problematic for euro area countries (see e.g. Ragot, 2017).

5.2. How to improve the governance

As already highlighted by several reports (e.g. Alcidi and Gros, 2017; ECA, 2018; Hallerberg et al 2017; Bénassy-Quéré, 2015, 2017, 2018), the European semester suffers from governance problems that have not been entirely solved by past reforms. Here we concentrate on the MIP.

Unlike the SGP or the macro-prudential policy,¹⁹ the MIP does not rely on a small set of indicators which could raise national awareness. As a matter of fact, most policy-makers at national level have some knowledge about the fiscal rules (although they often confuse the preventive and corrective arms of the SGP). Conversely, the MIP is mostly ignored at policymaking level, but also at expert level. Anecdotal evidence suggests that even the knowledge on the MIP is not widespread in academia or at expert level (e.g. within national productivity boards). Bénassy-Quéré (2015) argues that the current account could be used as a flagship indicator in order to raise awareness at national level. We have seen that a streamlined scoreboard would do better than the present one as an early-warning system. Since an alert based on the scoreboard is always followed by an in-depth analysis, there is really a case here to simplify the scoreboard.

A second problem with the MIP is that, although financial imbalances are part of the scoreboard, and although MIP classifications do take these imbalances into account, the CSRs often cannot be specific, since they point to macro-prudential policies that are monitored through a different, independent process. The Regulation (EU) No 1176/2011 states that: "It [the Commission] shall, in particular, take into account: [...] any warnings or recommendations from the ESRB on systemic risks addressed to, or being relevant to, the Member State under review. The confidentiality regime of the ESRB shall be observed" (Art. 5.2 on in-depth reviews). However, ESRB's views and recommendations do not necessarily coincide with the timeframe of the European semester. In July 2019, for instance, the ESRB expressed its worry about the real estate market in Belgium that could be a source of systemic risk, and recommended borrower-based measures. However, the country report issued by the Commission for Belgium in February 2019 praised the decisions already taken the previous years by the national macro-prudential authorities and classified the country as without imbalances. In September 2016, the ESRB had issued warnings to 11 countries concerning residential real estate: Austria, Belgium, Denmark, Estonia, Finland, Luxembourg, Malta, the Netherlands, Slovakia, Sweden and the United Kingdom. Table E1 in Annex E studies how these recommendations were followed-up in the next European semester. While it was the case for the Netherlands, Sweden and to a certain extent the United Kingdom, in the other countries there was no corresponding CSR, even in Finland that was considered to be with imbalances that year.

We believe that the MIP process and the macro-prudential process need to be better integrated – while respecting the independence of the respective authorities, consistent with the MIP regulation. For instance, the ESRB could issue its own country-specific recommendations at the same time as the European semester's CSRs, and a mixed delegation from the Commission and from the ESRB could have a yearly discussion with national macro-prudential authorities on these recommendations. As already recommended by the ECA (2018), the MIP recommendations could themselves focus on policy actions that have a clear effect on imbalances in the short and medium term.²⁰

A third problem of the MIP is that, despite efforts to connect the CSRs to a clear diagnosis for the euro area as a whole, the MIP exercise remains very much a country-by-country exercise. This feature is

¹⁹ The SGP relies on a number of simple fiscal thresholds: a financial deficit not exceeding 3% (corrective arm threshold); a structural deficit not exceeding 1% or 0.5% (depending on the debt ratio) for the preventive arm (medium-term objectives). As for macro-prudential policy, decisions on the counter-cyclical capital buffer are supposed to be taken under "guided discretion" based on the credit-to-GDP gap ("Basel gap"), see CRD IV Art. 136.

²⁰ "The Commission should systematically link MIP-CSRs to macroeconomic imbalances. The proposed measures should be sufficiently detailed, and should focus on policy actions to reduce imbalances in the short-to-medium term. Wherever possible, the Commission should make ex-ante and ex-post assessments of the impact of policy actions on imbalances" (ECA 2018, p. 8).

especially detrimental within a monetary union: by insisting on reducing current-account deficits and limiting nominal growth of unit labour costs, the MIP may actually create a deflationary bias in the euro area, especially if higher nominal growth in the surplus countries is not achieved. A start would be to change the scoreboard and define more clearly that relative imbalances in the euro area are the core issue of concern. This would require using unit labour cost developments relative to the rest of the euro area and calculating the real effective exchange rate against other euro area countries rather than against the United States or Japan.²¹ It would also involve re-insisting on the fact that the MIP is not about growth or fiscal sustainability but rather about imbalances. To do so, the recommendation to the euro area could include a section explaining the strategy to reduce existing imbalances, the contribution of each member state being specified. This could also help addressing the difficulty in having an impact on surplus countries, as acknowledged by the European Commission's review (2020a). Next, the MIP could involve the recently created national productivity councils. These institutions need to coordinate their methodologies and diagnoses in order to concentrate on convergence and eliminate the risk of a "race-to-the-bottom". Like macro-prudential authorities, productivity councils could have a yearly consultation with the Commission, ahead of the publication of the CSRs. In turn, national productivity councils could be asked to provide an independent assessment of yearly Reform programmes (like national fiscal institutions are asked to assess national Stability programmes). Involving both national bodies (macro-prudential and productivity councils) in the MIP process could contribute to increase national ownership of the process.

A fourth problem of the MIP is its relationship with the SGP. While the objective of the SGP is fiscal sustainability, that of the MIP is more broadly reducing macroeconomic imbalances. In some cases the two objectives overlap; in other cases (countries with high current-account surplus), the MIP may want to provide recommendations on top of existing fiscal rules. This is difficult, as the SGP is more binding than the MIP in the sense that public finance sustainability is a core part of the EU treaties. Some CSRs try to circumvent this difficulty through concentrating on public investment instead of public spending as a whole, but a country may respond by reallocating public spending with little effect on the macroeconomic stance. Fiscal policy is the area where a tighter connection with the recommendations to the euro area is required, but where also political resistance is the biggest. Ultimately, this problem, which has been recognized by the European Commission (2020a), requires more political ownership at the national level.

Finally, we would argue that communication needs to be radically overhauled. National policy-makers are often totally unaware of the entire European Semester process. Communication is often done in very technical and administrative form – failing to trigger interest in national debates. The Commission should simplify language, increase clarity and ensure that the recommendations are launched in the national context. Moreover, the staff of DG ECFIN should be much more present in national debates and conferences than currently, on top of interacting both with national productivity councils and national macro-prudential authorities.²² The clarity of the link between national recommendations and the fact that a country is a member of the euro area (and therefore is subject to constraints) needs to also be improved.

²¹ These indicators are already calculated as "auxiliary". They should just replace the two "main" ones, with appropriate thresholds.

²² Current discussions with the governments are not enough, since they are not open to the public and there are no press records.

Box 1: Summary of the recommendations

1. Streamline the scoreboard around a few meaningful indicators; check that they are geared towards intra-euro area imbalances rather than performance vis-à-vis the rest of the world.
2. In the recommendation to the euro area, include a section explaining the strategy to reduce imbalances, the contribution of each member state being specified.
3. Focus MIP-CSRs to policy actions that can have direct effect on imbalances. Involve national macro-prudential authorities and national productivity councils; coordinate the timetable of the European semester with that of ESRB's recommendations;
4. Simplify the language and further involve the Commission into national policy discussions.

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ANNEX A: SCOREBOARD AND MIP CLASSIFICATION

At the beginning of the procedure, the Commission publishes a so-called “MIP scoreboard” for each EU country. As of 2019, the scoreboard includes 14 main indicators and 28 auxiliary indicators. The 14 indicators are listed in Table A1. Based on the scoreboard, the European Commission writes an Alert mechanism report that justifies whether a particular country needs an “in-depth” analysis. After the latter are carried out, the Member States are finally classified into four categories: “no imbalances” (a category which also includes those countries that were not subject to an in-depth analysis), “imbalances”, “excessive imbalances”, and “excessive imbalances with corrective action”, the latter category being the anteroom of sanctions for euro area countries.²³ Since the introduction of the MIP, no country has ever been classified in the last category.

Table A1: MIP Scoreboard: 14 main indicators

Name	Definition	Threshold(s)
CA	3-year backward moving average of the current account balance as percent of GDP	-4%/+6%
NIIP	Net international investment position as percent of GDP	-35%
XSHARE	5-year percentage change of export market shares measured in values	-6%
ULC	3-year percentage change in nominal unit labour cost	+9%*/+12%
REER	3-year percentage change of the real effective exchange rates based on HICP/CPI deflators, relative to 41 other industrial countries	-/+5%* -/+11%
PDEBT	private sector debt (consolidated) in % of GDP	133%
CREDIT	private sector credit flow in % of GDP	14%
HOUSE	year-on-year changes in house prices relative to a Eurostat consumption deflator	+6%
GDEBT	general government sector debt in % of GDP	60%
UNEMPL	3-year backward moving average of unemployment rate	10%
FLIAB	year-on-year changes in total financial sector liabilities	16.5%
ACTIVITY	3-year change in p.p. of the activity rate	-0.2 pp
LTUNEMPL	3-year change in p.p. of the long-term unemployment rate	+0.5 pp
YUNEMPL	3-year change in p.p. of the youth unemployment rate	+2 pp

* Euro-area specific threshold

The scoreboard has been subject to several adjustment since its introduction. The first change was made in 2013, when European Commission added the “financial sector liability indicator”.²⁴ The year after, statistical definitions of real effective exchange rate, private sector debt and credit flow indicators were revised and some auxiliary indicators were added. In 2016, three employment indicators (activity

²³ Before 2016, there were five categories instead of four.

²⁴ European Commission (2012).

rate, long-term unemployment and youth unemployment) were moved from auxiliary to main indicators.²⁵

Auxiliary indicators are not main focus of the MIP as they do not have thresholds, which means that they never flash. Their number and technical details have changed over time as well. The latest technical revision was in 2019, when two indicators were redefined and two of them were replaced.²⁶

Here we use the interactive database compiled by Eurostat for the 14 main indicators considered in the 2019 vintage of the MIP for EU28 countries. From 2008, the dataset is complete. Before 2008, there are some gaps in the data especially for the early years (1999-2002). The most obvious batch of missing data pertains to the house price index (HOUSE), for which there are no values for 1999 or 2000. For this indicator, the values are completed only from 2007. Values on long-term unemployment (LTUNEMPL) are also missing for many Member States in the earlier period; the dataset is complete from 2007. In contrast, for the following indicators there are a maximum of 4 missing values for all countries during the examined time period (1999-2018) chiefly in the first two years: nominal unit labour costs (ULC), real effective exchange rate (REER), private sector debt (PDEBT), private sector credit flows (CREDIT), general government debt (GDEBT) and financial sector liabilities (FLIAB). In terms of geographical distribution, Spain has the most complete dataset (the only missing values are the house price index for 1999 and 2000). The bulk of the missing data is concentrated in certain “new” Member States, specifically Cyprus and Malta and to a lesser extent Slovakia. Data from the period prior to them joining the EU (2004) and euro (2008, 2009) are partially incomplete.

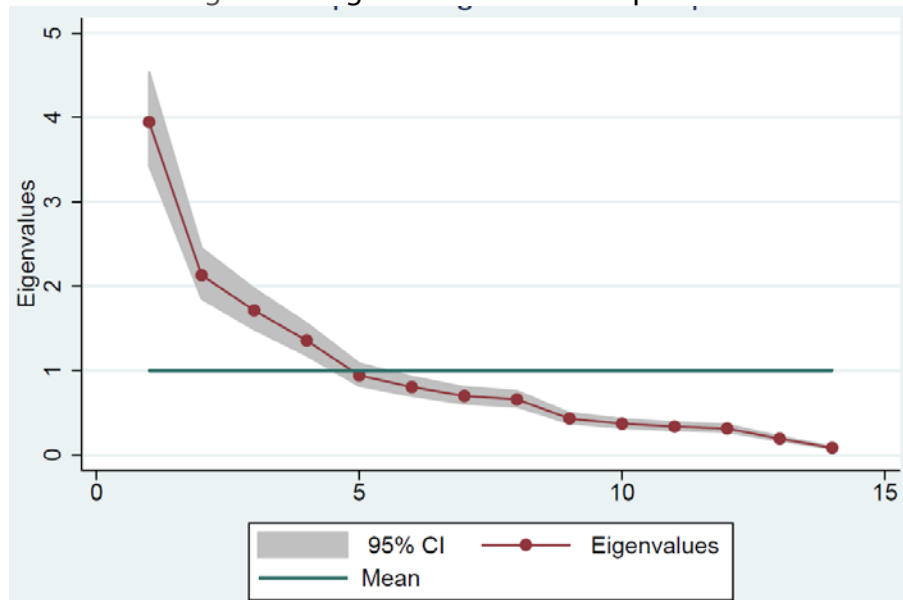
We run a Principal component analysis (PCA) on this dataset, pooling all countries-years in a single, descriptive analysis. PCA allows summarizing a large number of indicators along a small number of linear combinations that are defined so as to capture as much variance as possible. We then perform the PCA on the correlation matrix in order to account for the different scales and variances of the indicators. Importantly, the PCA does not test the MIP itself, for two reasons. First, it covers a period where the MIP did not exist; second, it includes crisis countries even when they were not scrutinized by the MIP, when they were in adjustment programmes. The PCA exercise rather aims at presenting the underlying logic of the scoreboard based on a purely statistical analysis.

In the PCA, each component is a linear combination of the different variables. The components are then ranked in declining order of variance: the first component is the linear combination of the 14 variables that captures the highest possible variance, hence it is the most discriminatory combination of the 14 variables. Figure A1 plots the eigenvalues of the 14 components in declining order. Because we are working on correlations, the average is unity. The chart suggests retaining the first four components of the PCA. Taken together, they explain 65% of the variance of the sample.

²⁵ European Commission (2015).

²⁶ European Commission (2018).

Figure A1: Eigenvalues of the components



Source: Authors' calculations.

Table A2 reports the correlation of each variable with each of the first four components. All correlations above 50% are indicated in bold. The first component (Comp1) is positively correlated to several variables that point to a booming economy: rise in export market shares, rise in unit labour costs, high credit flows, rise in house prices and in financial sector liabilities. It is negatively correlated to variables pointing to a slack: rise in government debt, rise in long-term and in youth unemployment.

The second component (Comp2) is highly and positively correlated to the two external variables: the current accounts and the net international investment position. It is negatively correlated to unemployment.

The third component (Comp3) is negatively correlated to unemployment and positively correlated (although by less than 50%) to the rise in unit labour costs. The fourth component (Comp4) is positively correlated to private debt and credit. Hence, components 3 and 4 do not add much novel information compared to component 1 that already opposes unemployment to various elements of booming or overheating. In the following, we concentrate the analysis on the first two components.

The table clearly defines two dimensions of macroeconomic imbalances:

- The internal dimension (Comp1), which opposes rising house prices, credit, financial liabilities, unit labour costs and export shares (positive correlations) to high government debt and rising unemployment (negative correlations);
- The external dimension (Comp2), which opposes current-account surpluses and high net investment position (positive correlations) to high unemployment (negative correlation).²⁷

²⁷ Unemployment is not an external variable. However, as argued by Williamson (1983), the current account needs to be “adjusted” for unemployment (or for the output gap) in order to be assessed in terms of “external imbalances”: higher unemployment makes a current-account deficit more problematic as the deficit will increase when employment recovers. This is exactly what we have in Table 3.

Table A2. Scoreboard indicators: correlations with first four components

Name	Definition	Comp1 (28.2%)	Comp2 (15.2%)	Comp3 (12.2%)	Comp4 (9.7%)
CA	3-year backward moving average of the current account balance as percent of GDP	-0.2165	0.818	-0.1402	-0.1824
NIIP	Net international investment position as percent of GDP	0.1883	0.7809	0.2555	-0.252
XSHARE	5-year percentage change of export market shares measured in values	0.6476	-0.3584	-0.0824	-0.0343
ULC	3-year percentage change in nominal unit labour cost	0.5949	-0.3042	0.4876	-0.2077
REER	3-year percentage change of the real effective exchange rates based on HICP/CPI deflators, relative to 41 other industrial countries	0.4664	-0.3635	0.2227	-0.1977
PDEBT	private sector debt (consolidated) in % of GDP	-0.3087	0.3239	0.257	0.5673
CREDIT	private sector credit flow in % of GDP	0.5214	0.1343	0.2057	0.5937
HOUSE	year-on-year changes in house prices relative to a Eurostat consumption deflator	0.583	0.2303	-0.4703	0.3066
GDEBT	general government sector debt in % of GDP	-0.6441	-0.0747	-0.4193	0.0359
UNEMPL	3-year backward moving average of unemployment rate	-0.454	-0.505	-0.5223	0.1405
FLIAB	year-on-year changes in total financial sector liabilities	0.6518	-0.0206	0.0464	0.4971
ACTIVITY	3-year change in p.p. of the activity rate	0.381	0.0399	-0.003	-0.3229
LTUNEMPL	3-year change in p.p. of the long-term unemployment rate	-0.7447	-0.1254	0.4143	0.1723
YUNEMPL	3-year change in p.p. of the youth unemployment rate	-0.6476	-0.2098	0.6186	0.0818
Country classification (2012-2018)					
IMBAL	0 "no imbalances"; 1 "imbalances; 2 "excessive imbalances"	-0.5579	-0.2349	-0.2575	0.2560

Notes: in bold: correlations of more than 50%; first line, in parenthesis: percentage of total variance captured by each component.

Source: Authors' calculations.

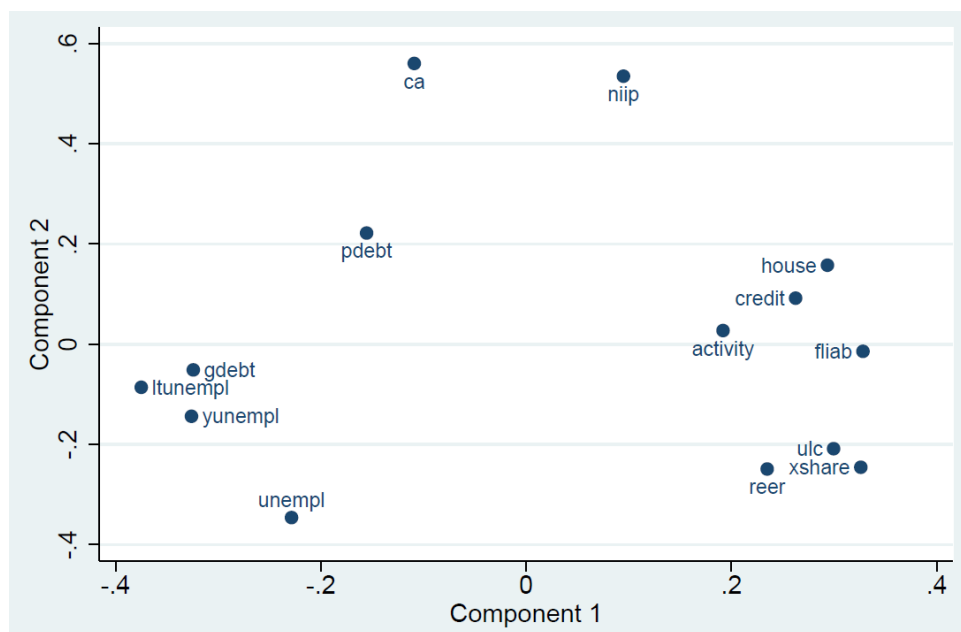
Figure A2 presents the loadings for the first two components, i.e. the mapping of the 14 scoreboard indicators in terms of the first two components defined in Box 1. For instance, the current account (ca) has a negative coordinate on the horizontal axis and a positive coordinate on the vertical axis. This means that a country-year with higher current-account weighs negatively in terms of the first component (i.e. it shows relatively weak aggregate demand); it weighs positively in terms of the second component (i.e. it shows relatively strong external position).

The chart also uncovers the proximity of three groups of variables:

- The three unemployment variables and the government debt variable, in the south-west of the graph;
- The activity rate, credit growth, house prices and financial sector liability in the right hand-side
- Unit labour costs, export shares and the real effective exchange rate variation in the south-east.

The graph does not provide any interpretation in terms of causality. It only suggests that, in terms of internal and external imbalances, the different variables within each group conveys similar information for our country-time sample.

Figure A2: Components loadings



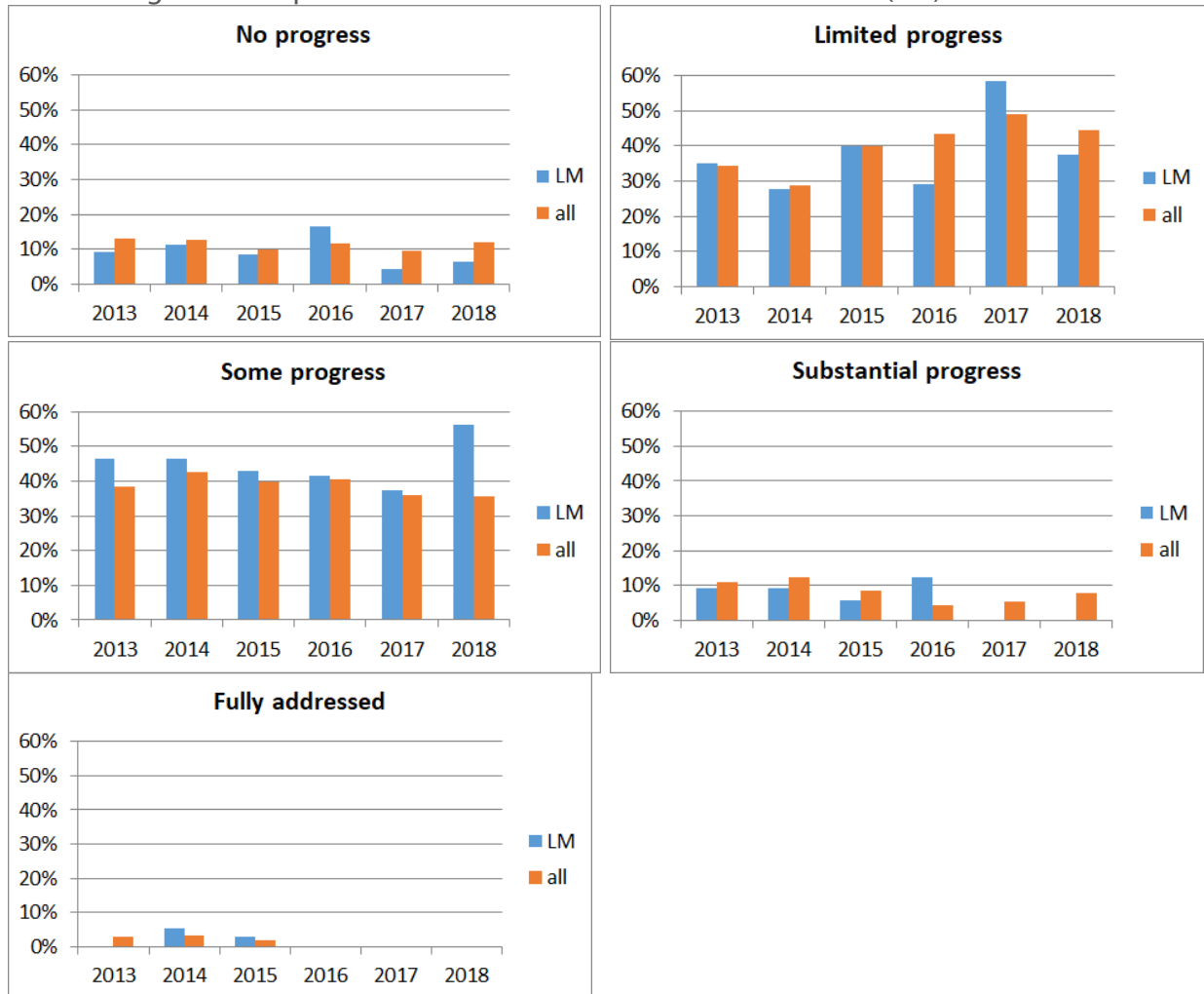
Source: Authors' calculations.

As already mentioned, the counterfactual analysis of the scoreboard cannot directly be interpreted in terms of the MIP. However, it is interesting to study how the MIP classification (since 2012) gets into this mapping of the scoreboard. To do so, we calculate the correlation between each component and a trinomial variable (IMBAL) representing the MIP classification of countries: 0 for “no imbalances”, 1 for “imbalances” and 2 for “excessive imbalances”. The correlation is calculated over 2012-2018. The results are reported in the last line of Table A2. The MIP classification is negatively correlated to the first component: imbalances are more often declared when an economy is in a slack (left hand-side of Figure 9) than in a boom/overheating country/period (right hand-side). The imbalances variable is also negatively correlated to the second component (external imbalances), although the correlation is much lower. Hence, over the period the MIP has concentrated on countries with external deficits and internal crises. This can be understood given the period when the MIP was introduced. However, the MIP needs also to pay attention to the right hand-side of the graph (overheating) and higher part of the graph (external surpluses) if it wants to act in a pre-emptive ways and to foster nominal convergence within the euro area.

ANNEX B: LABOUR MARKET REFORMS

Figure B1 compares the implementation of labour-market recommendations (LM) to the general implementation rates of country-specific recommendations. We report the record across all EU countries into “no progress”, “limited progress”, “some progress”, “substantial progress” and “fully addressed”.

Figure B1: Implementation of CSRs: labour-market reforms (LM) vs all CSRs



Source: Authors' calculations based on Esthathiou and Wolff (2019) database.

ANNEX C: THE EARLY-WARNING PERFORMANCE OF THE SCOREBOARD

As evidenced in Annex A, the logic of the scoreboard is very much that of an early-warning system (EWS). Here, we try to evaluate its performance to alert policy-makers of the rising probability of a crisis one or two years ahead. To do so, we follow the literature which aggregates different indicators into a single alarm system that will flash when exceeding a certain threshold. In our case, the single indicator is the proportion of main indicators flashing, hence it ranges from 0 to 100%.

Unfortunately, it is not possible to construct an EWS that performs well both in terms of signaling future crises and in terms of not issuing false alarms: if we want to avoid type I errors (hence not to miss crises), we need to select a low threshold, but then there will be many false alarms. Conversely, if we want to avoid type II errors (hence not have too many false alarms), we need to set a high threshold, but then we will miss some crises. The standard way of modelling this trade-off is through maximizing the following utility function:

$$U(\theta) = \text{Min}(\theta, 1 - \theta) - \left(\theta \frac{C}{A+C} + (1 - \theta) \frac{B}{B+D} \right) \quad (\text{B.1})$$

Where A, B, C, D are the number of occurrences of, respectively, accurate alarms, false alarms, accurate no alarms, false no alarms (false tranquil). This signalling approach is summarized in Table C1. A and D represent the (accurate) “signals” whereas C and B represent the “noise”. Early approaches consisted just in minimizing the noise-to-signal ratio $(C+B)/(A+D)$. More recent research relies Equation (B.1), where θ represents the weight of type I errors and $(1-\theta)$ is the weight of type II errors: the higher θ , the more type I errors reduce utility U, hence the higher the concern about missing a crisis.²⁸

Table C1: The signalling and noise matrix

	Crisis	No crisis
Alarm rings	A	B
No alarm	C	D

Source: adapted from Kaminsky and Reinhart (1999).

Since it is not applied mechanically, it is possible to argue that the purpose of the scoreboard is to ring the alarm quite frequently in order to minimize the risk of missing crises, even though most of the time the alarm will not be followed by a crisis. Along this line, we can set $\theta=1$: the Commission only wants to avoid missing a crisis (type I errors).

Looking at how the thresholds of each indicator of the scoreboard were set, Knedlik (2014) finds that the implicit value of θ is 0.6 on average: the Commission weighs more type I than type II errors, but still it does not want to get too many type II errors. In a second step, we set $\theta=0.6$.

The results are reported in Table C2. They show that it is possible to predict 100% of the crises based on the scoreboard, provided the threshold is set at 28%. However there is a very high proportion (93.9%) of false alarms and the signal-to-noise ratio is low (0.8, meaning more noise than signal).

Conversely, when the weights of type-I and type-II errors are more balanced ($\theta=0.6$), the optimal threshold is 42%. The proportion of false alarms is reduced to 89.9%, but the proportion of correctly

²⁸ The first term in the utility function allows for consistency of the utility when $\theta=0$ or 1 while ensuring that the utility function rises with signal-to-noise ratios. See Alessi and Detken (2011).

called crises also falls from 100% (previous case) to only 81.3% here. Still, the signal-to-noise ratio is higher than in the previous case.²⁹

Table C2: In-sample performance of the scoreboard as an early-warning system (1-2 years ahead)

	No type-I error ($\theta = 1$)		Higher weight on type-I errors ($\theta = 0.6$)	
Optimal threshold*	28%		42%	
	Crisis	No crisis	Crisis	No crisis
Alarm	16	248	13	116
No alarm	0	191	3	323
Signal-to-noise ratio $(A+D)/(C+B)$	0.8		2.8	
% of correctly called crises $A/(A+C)$	100		81.3	
% of correctly called tranquil $D/(B+D)$	43.5		73.6	
% of false alarms $B/(A+B)$	93.9		89.9	
% of false tranquil $C/(C+D)$	0		0.9	

* Threshold that maximizes the utility function (B.1).

Source: Authors' calculations.

²⁹ Note that these various performances are "in-sample". An out-of-sample test is not feasible in our case due to the limited number of crises.

ANNEX D: MIP 2019

Table D1: Country-specific recommendations to countries in excessive imbalances in 2019

	CSRs June 2019
Greece	<ol style="list-style-type: none"> 1. Achieve a sustainable economic recovery and tackle the excessive macroeconomic imbalances by continuing and completing reforms in line with the post-programme commitments given at the Eurogroup of 22 June 2018. 2. Focus investment-related economic policy on sustainable transport and logistics, environmental protection, energy efficiency, renewable energy and interconnection projects, digital technologies, research and development, education, skills, employability, health, and the renewal of urban areas, taking into account regional disparities and the need to ensure social inclusion.
Italy	<ol style="list-style-type: none"> 1. Ensure a nominal reduction of net primary government expenditure of 0.1% in 2020, corresponding to an annual structural adjustment of 0.6% of GDP. Use windfall gains to accelerate the reduction of the general government debt ratio. Shift taxation away from labour, including by reducing tax expenditure and reforming the outdated cadastral values. Fight tax evasion, especially in the form of omitted invoicing, including by strengthening the compulsory use of e-payments including through lower legal thresholds for cash payments. Implement fully past pension reforms to reduce the share of pensions in public spending and create space for other social and growth-enhancing spending. 2. Step up efforts to tackle undeclared work. Ensure that active labour market and social policies are effectively integrated and reach out notably to young people and vulnerable groups. Support women's participation in the labour market through a comprehensive strategy, including through access to quality childcare and long-term care. Improve educational outcomes, also through adequate and targeted investment, and foster upskilling, including by strengthening digital skills. 3. Focus investment-related economic policy on research and innovation, and the quality of infrastructure, taking into account regional disparities. Improve the effectiveness of public administration, including by investing in the skills of public employees, by accelerating digitalisation, and by increasing the efficiency and quality of local public services. Address restrictions to competition, particularly in the retail sector and in business services, also through a new annual competition law. 4. Reduce the length of civil trials at all instances by enforcing and streamlining procedural rules, including those under consideration by the legislator and with a special focus on insolvency regimes. Improve the effectiveness of the fight against corruption by reforming procedural rules to reduce the length of criminal trials. 5. Foster bank balance sheet restructuring, in particular for small and medium-sized banks, by improving efficiency and asset quality, continuing the reduction of non-performing loans, and diversifying funding. Improve non-bank financing for smaller and innovative firms.
Cyprus	<ol style="list-style-type: none"> 1. Adopt key legislative reforms to improve efficiency in the public sector, in particular as regards the functioning of the public administration and the governance of state-owned entities and local governments. Address features of the tax system that may facilitate aggressive tax planning by individuals and multinationals, in particular by means of outbound payments by multinationals. 2. Facilitate the reduction of non-performing loans including by setting up an effective governance structure of the State-owned asset management company, taking steps to improve payment discipline and strengthening the supervision of the credit acquiring companies. Strengthen the supervision capacities in the non-

	<p>bank financial sector, including by fully integrating the insurance and pension funds supervisors.</p> <ol style="list-style-type: none"> 3. Complete reforms aimed at increasing the effectiveness of the public employment services and reinforce outreach and activation support for young people. Deliver on the reform of the education and training system, including teacher evaluation, and increase employers' engagement and learners' participation in vocational education and training, and affordable childhood education and care. Take measures to ensure that the National Health System becomes operational in 2020, as planned, while preserving its long-term sustainability. 4. Focus investment-related economic policy on sustainable transport, environment, in particular waste and water management, energy efficiency and renewable energy, digitalisation, including digital skills, and research and innovation, taking into account territorial disparities within Cyprus. Adopt legislation to simplify the procedures for strategic investors to obtain necessary permits and licences. Improve access to finance for small and medium-sized enterprises, and resume the implementation of privatisation projects. 5. Step up efforts to improve the efficiency of the judicial system, including the functioning of administrative justice and revising civil procedures, increasing the specialisation of courts and setting up an operational e-justice system. Take measures to strengthen the legal enforcement of claims and ensure reliable and swift systems for the issuance and transfer of title deeds and immovable property rights. Accelerate anti-corruption reforms, safeguard the independence of the prosecution and strengthen the capacity of the law enforcement.
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Source: CSRs 2019.

Table D 2: Comparison between CSRs and IMF/OECD recommendations

Country	CSRs	IMF	OECD
Euro area	Deepen the single market and EMU, improve the business environment and the quality of institutions, reduce external debt, boost competitiveness, public and private investment, fiscal buffers, shift taxes away from labour, educational outcomes, ALMPs, banking and capital market union	Inflation adjustment, countries with high public debt – fiscal adjustment and stronger enforcement of fiscal rules, countries with fiscal space – investment, integration in the EU services sector, political agreement for risk reduction and sharing	Gradually normalise monetary policy, reform the European fiscal framework, reduce financial fragmentation to increase private risk-sharing, strengthen resilience through a common fiscal capacity
Germany	Increase private and public investment; shift taxes away from labour; strengthen competition; reduce disincentives to work more hours; increase sustainability of the pension system; promote higher wage growth; improve educational outcomes and skills levels of disadvantaged groups.	use the space within the fiscal rules to bolster long-term growth; reduce the tax wedge; improve education and lifelong learning; invest in public infrastructure; encourage strong wage growth; promote innovation; press the banking sector to accelerate restructuring plans; expand the macroprudential toolkit	make it easier for parents to choose the working hours they want, strengthen skills, reduce tax wedges on labour income and shift taxation towards less distortive taxes, promote better technology diffusion and better resource allocation; close the infrastructure gap.
Greece	Public debt, Public investment, regional disparities	Improve fiscal policies (social inclusion, fiscal management), investment, financial sector's resilience, productivity enhancement (through ALMPs and stronger institutions), transparency	Social protection, public administration enhancement, ALMPs, efficiency and fairness of the tax system, quality of education
Spain	Reduce public debt, improve public procurement, pension system sustainability, open-ended contracts, educational outcomes, skills mismatches, public investment (innovation, infrastructure, regional disparities), improve cooperation at all levels of government	Public debt, ALMPs, foster innovation, open-ended contracts, skills mismatches, barriers to firm growth, regional disparities, bank profitability and capitalization and liquidity risks	Tax system, education outcomes, enhance R&D spending, reduce labour market duality, regulatory differences and barriers to firm
France	Public debt, pensions system, labour market integration of vulnerable groups (migrants), private and public investment, simplify the tax system, regulatory restrictions.	Public debt, reduction in tax burden, labour market reform, strengthen competition, the resilience of the financial sector	Reduce labour market segmentation, improve quality of education, reduce regulatory barriers to competition, reduce labour taxes, strengthen public spending efficiency
Italy	Public debt, shift taxes away from labour, tax evasion,	wage bargaining, service market liberalization, reform	Public administration and tax structure efficiency,

	continue pension reforms, public investment (in R&D, regional disparities), public administration efficiency, improve competition, insolvency regime, corruption, labour market (women participation, young, ALMPs), education outcomes, NPLs, banks assets quality and efficiency	the public administration, insolvency system, consolidation, public investment, tax base and taxes on labour, NPLs	improve education and training outcomes, ALMPs, public investment and improve infrastructure
Cyprus	efficiency in the public sector, aggressive tax planning, NPLs, supervision of non-bank financial sector, reform on education and training system, public investment, territorial disparities, transparency	macroeconomic stability, strengthen productivity, NPLs, bank capital buffers, public debt, reforms in the judiciary system, anti-money laundering and on the labour market, technological investments	-
Netherlands	debt bias for households, distortions in the housing market, pension system transparency, wage growth, tax system improvements, strengthen lifelong learning, public and private investment	Use fiscal space to grow, reduce the labour tax wedge and household debt bias, Harmonize tax benefits and social security contributions, pension system transparency, households' indebtedness, SMEs support	Lower marginal effective tax rates on labour income, Ease employment protection for permanent contracts, ALMPs, limit rent regulation in the private market, increase direct public support for R&D
Poland	Public debt, improve the efficiency of public spending, increase labour market participation, raise pension age, strengthen the innovation, improve the regulatory environment	monitor inflation, narrow VAT gap, better target social benefits, raise pension age, monitor unsecured consumer credit warrant, remove barriers to investment, improve competition	Lower barriers to competition, reform the welfare system and reduce labour taxes, education outcomes, greener energy, improve R&D support policies
United Kingdom	Public debt, public and private investment	fiscal consolidation, gradual tightening of the monetary policy, structural reforms to boost productivity, strict prudential supervision, collaboration with the EU prudential authorities	Improve skills, strengthen work incentives and active labour market policies, enhance housing supply, improve public infrastructure, promote R&D spending

ALMP: Active Labour Market Policies; NPL: Non-Performing Loans.

Sources:

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Table D3: Consistency between CSRs and recommendations to the euro area, 2019

Euro area recommendations	<p>1. Deepen the Single Market, improve the business environment and the quality of institutions. Reduce external debt and pursue reforms to boost competitiveness, in particular through productivity in euro-area Member States with current-account deficits or high external debt, and strengthen the conditions that support wage growth in a manner that respects the role of social partners. Implement measures that foster investment in euro-area Member States with large current-account surpluses.</p> <p>2. Support public and private investment and improve the quality and composition of public finances. Rebuild fiscal buffers, especially in euro-area Member States with high levels of public debt. Support and implement EU actions to combat aggressive tax planning.</p> <p>3. Shift taxes away from labour and strengthen education and training systems and investment in skills. Improve the effectiveness of active labour market policies that support successful labour market transitions.</p> <p>4. Banking union and capital market union.</p> <p>5. Make swift progress on deepening the EMU, also with a view to strengthening the international role of the euro.</p>
Consistency of euro area countries with recommendations (extracts)	
Germany	<p>1. Use fiscal and structural policies to achieve a sustained upward trend in private and public investment, in particular at regional and municipal level... Shift taxes away from labour to sources less detrimental to inclusive and sustainable growth</p> <p>2. Strengthen the conditions that support higher wage growth, while respecting the role of the social partners...</p>
Greece	<p>1. Post-programme commitments.</p> <p>2. Focus investment-related economic policy on sustainable transport and logistics, environmental protection, energy efficiency, renewable energy and interconnection projects, digital technologies, R&D, education, skills, employability, health, and the renewal of urban areas, taking into account regional disparities and the need to ensure social inclusion.</p>
Spain	<p>2. (...) Foster transitions towards open-ended contracts, including by simplifying the system of hiring incentives. (...) Reduce early school leaving and improve educational outcomes, taking into account regional disparities. Increase cooperation between education and businesses with a view to improving the provision of labour market relevant skills and qualifications, in particular for information and communication technologies.</p> <p>3. Focus investment-related economic policy on fostering innovation, resource and energy efficiency, upgrading rail freight infrastructure and extending electricity interconnections with the rest of the Union, taking into account regional disparities. Enhance the effectiveness of policies supporting research and innovation.</p>
France	<p>2. Foster labour market integration for all job seekers, ensure equal opportunities with a particular focus on vulnerable groups including people with a migrant background and address skills shortages and mismatches.</p> <p>4. Continue to simplify the tax system, in particular by limiting the use of tax expenditures, further removing inefficient taxes and reducing taxes on production.</p>

How has the MIP worked in practice to improve the resilience of the euro area?

	Reduce regulatory restrictions, in particular in the services sector, and fully implement the measures to foster the growth of firms.
Italy	<ol style="list-style-type: none"> 1. Shift taxation away from labour, including by reducing tax expenditure and reforming the outdated cadastral values. 2. Ensure that active labour market and social policies are effectively integrated and reach out in particular to young people and vulnerable groups. Support women's participation in the labour market through a comprehensive strategy, including through access to quality childcare and long-term care. Improve educational outcomes. 3. Focus investment-related economic policy on research and innovation, and the quality of infrastructure, taking into account regional disparities. (...). Address restrictions to competition, particularly in the retail sector and in business services, also through a new annual competition law. 4. Reduce the length of civil trials. 5. Foster bank balance sheet restructuring, in particular for small and medium-sized banks, by improving efficiency and asset quality, continuing the reduction of non-performing loans, and diversifying funding. Improve non-bank financing for smaller and innovative firms.
Cyprus	<ol style="list-style-type: none"> 2. Facilitate the reduction of non-performing loans. 3. Deliver on the reform of the education and training system. 4. Focus investment-related economic policy on sustainable transport, environment, in particular waste and water management, energy efficiency and renewable energy, digitalisation, including digital skills, and research and innovation, taking into account territorial disparities. 5. Step up efforts to improve the efficiency of the judicial system.
Netherlands	<ol style="list-style-type: none"> 1. Reduce the debt bias for households and the distortions in the housing market. Ensure that the second pillar of the pension system is more transparent, inter-generationally fairer and more resilient to shocks. Implement policies to increase household disposable income, including by strengthening the conditions that support wage growth, while respecting the role of social partners. . 2. While respecting the medium-term budgetary objective, use fiscal and structural policies to support an upward trend in investment.

ANNEX E: CONNECTING THE ESRB TO THE MIP

Table E1: Follow-up of ESRB's recommendations concerning residential real estate in September 2016

Country	ESRB Sep. 2016	Country report Feb 2017	CSRs Aug. 2017
Austria	"While the policy measures that have been taken by the Austrian authorities are appropriate given the nature of RRE vulnerabilities in Austria, they may not be sufficient to fully address the robustly growing RRE prices and mortgage credit, signs of weakening lending standards and groups of households with elevated debt levels"	"The European Systemic Risk Board, which in 2016 conducted an EU-wide forward-looking assessment of vulnerabilities relating to residential real estate, issued a warning to Austria." (p. 20) Nothing in the executive summary No imbalances	No CSR on real estate.
Belgium	"Vulnerabilities are present in Belgium for the collateral, household and banking stretches"	"The National Bank plans to introduce an add-on to capital adequacy requirements for loans exceeding 80 % of the property's purchasing price in 2017, in addition to the general add-on introduced in 2013. The ESRB has pointed out that measures to directly address vulnerabilities due to highly indebted households have not been adopted, though, and that the tightening of credit standards applied in recent years appears to have halted" (p. 9) Nothing in the executive summary No imbalances	No CSR on real estate.
Denmark	"the policies in place are assessed as appropriate, but may not be sufficient to address the vulnerabilities in the collateral and household stretches"	"As a result, the European Systemic Risk Board — which in 2016 conducted an EU-wide forward-looking assessment of vulnerabilities relating to residential real estate — issued warnings to Denmark on vulnerabilities in the residential real estate sector resulting from a combination of a procyclical housing tax system, a highly regulated rental market, non-amortising loans, and a high proportion of variable interest rate mortgages" (p.19)	No CSR on real estate.

		Nothing in the executive summary No imbalances	
Estonia	"The policy measures are appropriate and expected to be sufficient given the current level of and trend in vulnerabilities"	No imbalances	No CSR on real estate.
Finland	"The Finnish authorities have applied several banking capital measures and an LTV limit was set through a legislative amendment in July 2016; however, the macroprudential authority currently lacks powers to implement certain measures such as LTI, DTI and DSTI ratio limits. For these reasons, the policy stance is assessed as appropriate and expected to be sufficient with respect to the collateral and banking stretches; however, it may not be sufficient for the household stretch"	"Households' debt has increased to 112 % of their gross disposable income. The European Systemic Risk Board issued a formal warning to Finland in 2016, highlighting the high level of indebtedness and the associated vulnerabilities." (p. 11) Executive summary: "Households' debt increased in 2016, with credit growth supported by favourable credit conditions, including low interest rates" (p.1) Imbalances	No CSR on real estate.
Luxembourg	"the policy stance for the collateral stretch is not appropriate and not sufficient since no measures have been taken in this area. Also, for household stretch, while the measure that has been taken is appropriate, it is not expected to be sufficient given the nature of the vulnerabilities"	"The European Systemic Risk Board issued on 22 September 2016 a warning to Luxembourg as it identified medium-term vulnerabilities in the residential real estate sector in Luxembourg, in relation to the combination of high residential real estate prices and increasing household indebtedness" (p. 25) Executive summary: "Housing demand continues to exceed supply, resulting in a sharp increase in real estate prices" (p.2) No imbalances	No CSR on real estate.
Malta	"It is important that the Maltese authorities continue to monitor developments and analyse more granular data on the distribution of household indebtedness"	"Current estimates show that the excessive price growth prior to 2008 has corrected and there does not appear to be overvaluation of house prices." "The current policy	No CSR on real estate.

		stance is assessed as appropriate (ESRB, 2016)." (p.25) No imbalances	
The Netherlands	"The measures that have been introduced are being tightened at a slow pace over a long time horizon, which may not be fully sufficient given the current level of risks. Thus the current policy stance is assessed as appropriate, but is not expected to be sufficient in addressing vulnerabilities in the household and collateral stretches. While the policy measures taken for the Netherlands are appropriate given the nature of RRE vulnerabilities, they may not be sufficient to fully address household and collateral stretch vulnerabilities since most measures are only being gradually phased in and their calibration will not be very constraining even after full implementation"	"Although the ratio gross household debt-to-household assets does not stand out compared to other peer countries, it is high in terms of GDP (almost twice as high as the EU-28 average) as well as in terms of disposable income (232 %). Also, the European Systemic Risk board issued a warning to the Netherlands, in view of increasing house prices and debt levels (ESRB, 2016)." (p. 25) Executive summary: "Rising house prices are boosting household assets, but may also provide the basis for a build-up of more imbalances." (p. 1) Imbalances	"Take measures to reduce the remaining distortions in the housing market and the debt bias for households, in particular by decreasing mortgage interest tax deductibility."
Slovakia	"The policy measures that have been taken by the Slovakian authorities have already had an impact in reducing vulnerabilities"	No imbalances	No CSR on real estate.
Sweden	"Tools that could directly address the high debt relative to income are not in place; this is related to the fact that the mandate of the Swedish macroprudential authority is unclear with respect to some measures. Furthermore, the high and overvalued RRE prices are not directly addressed by current policy measures."	"the European Systemic Risk Board (ESRB) — which in 2016 conducted an EU-wide forward-looking assessment of the residential real estate sector in EU countries — issued a formal warning to Sweden (as well as to seven other Member States) on the existence of vulnerabilities in the residential real estate sector." (p. 21) Executive summary: "The continued increase in house prices, household debt and bank exposure to residential mortgages is a growing risk to macroeconomic stability" (p. 2)	"Address risks related to household debt, in particular by gradually limiting the tax deductibility of mortgage interest payments or by increasing recurrent property taxes, while constraining lending at excessive debt-to-income levels."

		Imbalances	
The United Kingdom	"Before the referendum, the main risks related to the interaction of a household stretch (due to household indebtedness) and a collateral stretch (as indicated by RRE prices that were rising from already elevated levels and decoupling from rent and income growth rates)."	<p>"The European Systemic Risk Board (ESRB) – which conducted in 2016 a forward-looking EU-wide assessment of the real estate market across the EU– issued a warning on 28 November 2016 to the UK (as well as to seven other Member States) on the vulnerabilities of the residential real estate sector, given the high level of indebtedness of households" (p.8)</p> <p>Nothing in the executive summary</p> <p>No imbalances</p>	"Take further steps to boost housing supply"

RRE: Residential Real Estate.

Sources:

ESRB, "Vulnerabilities in the EU residential real estate sector", November 2016.

European Commission, country reports, February 2017.

European council, country-specific recommendations, August 2017.

This paper shows how the underlying concept of macroeconomic imbalances contained in the macroeconomic imbalances procedure (MIP) could be streamlined and clarified. Implementation of the country-specific recommendations is disappointing; their internal consistency is sometimes missing; despite past reforms, the MIP remains largely a country-by-country approach running the risk of aggravating the deflationary bias in the euro area.

We recommend to streamline the scoreboard around a few meaningful indicators, involve national macroprudential and productivity councils, better connect the various recommendations, simplify the language and further involve the Commission into national policy discussions.

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