ECONOMIC DEVELOPMENT IN THE VISEGRAD COUNTRIES FROM THE PERSPECTIVE OF MACROECONOMIC IMBALANCE PROCEDURE

Summary
The seriousness of problems stemming from macroeconomic imbalances in the EU and particularly in the euro area contributed to introduction of the Macroeconomic Imbalances Procedure which also includes a scoreboard of 11 indicators. The results of the scoreboard serve as an alert mechanism and are interpreted from an economic perspective with a view to identifying developments in the member states that may point to a risk of imbalances. The aim of the paper is to evaluate the risk of imbalances in the Visegrad countries using selected indicators from the scoreboard. Furthermore, the author extends the existing scoreboard methodology of absolute indicators by implementation of relative indices that are more valuable for effectiveness of the policy making process. The results suggest that the only Visegrad country with a significant risk of imbalances is Hungary. However, the relative indicators revealed a sign of possible imbalances also in the Czech Republic and Poland.

Key words: macroeconomic imbalance, international competitiveness, MIP scoreboard, relative indicators

Introduction
Several years after the financial crisis it is evident that the crisis was the most immense shock to the European economy since the 1930s. However, its impact on individual European Union (EU) member countries as well as the adjustment and recovery of national economies differ remarkably across the EU. The explanation of the intra-EU differences can be found in several factors. Buti (2011) argues that one of the most prominent factors was the accumulation of increasingly large macroeconomic imbalances and expansion in competitiveness divergences in the pre-crisis period. Gros (2012) points out that the imbalances are critical mainly in the euro area where they were built up

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over the last decade as massive capital flows moved from the north part to the south part of the euro area and Ireland. Since the start of the crisis and, even more intensively, after the crisis culmination of the abundant private capital flows have abruptly stopped. Such a crunch in financing contributed to the seriousness and deepening of the crisis in a number of countries and caused severe pressures on domestic demand and public finances.

Additionally, previous studies and analysis of the European Commission did reveal imbalances in several areas of the EU economies. For example, an overview of the most serious findings on external and internal imbalances in the EU economy can be found in the European Commission (2010). However, at that time, the policy discussions and responses were not systematic and lacked teeth. To remedy this, the European Commission proposed to establish a procedure to prevent and correct macroeconomic imbalances. This surveillance mechanism is called Macroeconomic Imbalance Procedure (MIP). While the MIP is designed and applied for all EU Member States, it is primarily targeted at the euro area countries that cannot apply an independent exchange rate policy in order to adjust macroeconomic imbalances. Accordingly, the vast majority literature dealing with the MIP and all corresponding aspects focuses on the euro area.

Therefore, the present paper fills the gap in literature and analyses selected indicators involved in the MIP in the environment of the Visegrad countries (the Czech Republic, Hungary, Poland, Slovakia – member of euro area). The aim of the paper is to prove how useful can the MIP be in assessing vulnerabilities and imbalances in the analysed countries and whether the MIP can be a beneficial tool for the economic policy design. In this context, the author also proposes application of relative indicators that can supplement the existing MIP with more appropriate benchmarking of the countries and better identification of misbalancing trends.

The remaining part of the paper is structured as follows: section 2 introduces the MIP and its rationale, main components of the MIP as well as indicators included in the MIP are also described in this section. Section 3 continues with application of selected macroeconomic indicators on the Visegrad countries. The evolution of these indicators is presented over the 12-year period and the absolute values of the indicators with the official thresholds for the years 2007 (pre-crisis) and 2012 (post-crisis) are compared. Furthermore, relative indicators are
calculated and performance of individual Visegrad countries with the EU, euro area and the whole Visegrad group is compared. Section 4 concludes the paper with summary of the most important findings and results.

1. Macroeconomic Imbalance Procedure as a part of the EU economic governance

The recent financial crisis stimulated the EU to propose and adopt a comprehensive reform in the macroeconomic governance of the EU. The new system consists of three components: the Six Pack, the Two Pack and the Treaty on Stability, Coordination and Governance (TSCG). All the rules are grounded in the European Semester which represents the calendar of the EU’s economic policy planning and actions.

The Six Pack describes a set of European legislative measures to introduce greater macroeconomic surveillance. Four of the six instruments in the Six Pack are used to conduct further reforms of the Stability and Growth Pact (SGP) particularly focusing on improving compliance. These reforms do not change any of the conditions already imposed by the SGP, but aim to enforce greater budgetary discipline among the euro area member states by stipulating that sanctions come into force earlier and more consistently. The remaining two pieces of legislation in the Six Pack relate to the MIP.

The TSCG is an International treaty which functions as an extension to existing EU regulations, utilising the same reporting instruments and organisational structures already created within EU in the three areas: budget discipline enforced by the SGP, coordination of economic policies, and governance within the euro area. Since the fiscal provisions of the TSCG represent the core of the Treaty, the TSCG is often referred to as the EU Fiscal Compact Treaty or a new stricter version of the SGP.

The Two Pack comprises of two regulations designed to further enhance economic integration and convergence amongst euro area member states. The first regulation applies to all euro area member states, with special rules applying to those in the corrective arm of the SGP, the Excessive Deficit Procedure (EDP). The second regulation sets out clear and simplified rules for enhanced surveillance for member states facing severe difficulties with regard to their financial stability, those receiving financial assistance, and those exiting a financial assistance programme.
1.1. The principles and course of the Macroeconomic Imbalance Procedure

The MIP rests on two pieces of legislation: the first regulation sets out the details of the surveillance procedure and covers all the member states. The second regulation establishes the enforcement mechanism including the potential use of sanctions and is only applicable for the euro area member states. The overall design follows the implicit logic that the MIP has two arms: a preventive arm with the alert mechanism and a stronger corrective arm with effective enforcement of corrective actions solving more serious cases of imbalances. The position of the MIP in the EU economic governance framework and all elements of the MIP are graphically presented in Figure 1.

**Figure 1. EU economic governance structure**

![EU economic governance structure diagram]

Source: Bobeva (2013, p. 71)

The MIP includes three core components. The alert mechanism facilitates the early identification and the monitoring of imbalances based
On qualitative economic and financial assessment. The scoreboard comprises a set of indicators with indicated thresholds differentiated for euro and non-euro area member states that are used in the early identification of external and internal imbalances. The in-depth review aims at determining whether the potential imbalances identified in the early-warning system are benign or problematic.

The procedure relies on an alert mechanism identifying member states which show signs of potential emerging macroeconomic imbalances that require in-depth analysis. The alert mechanism consists of an indicator-based scoreboard complemented by an economic reading thereof presented in an annual Alert Mechanism Report (AMR). After discussions of the AMR conclusions by the Council and the Eurogroup, the Commission decides for which countries it will prepare country-specific in-depth reviews. If, on the basis of this analysis, the situation is considered unproblematic, the Commission will not propose any further steps. If the Commission however considers that macroeconomic imbalances exist, it will come forward with proposals for policy recommendations for the member state(s) concerned. In the preventive arm these are parts of the integrated package of recommendations under the European Semester. If the Commission instead considers that there are severe or excessive imbalances that may jeopardise the proper functioning of the euro area, it may recommend to the Council to open an Excessive Imbalance Procedure (EIP) which falls under the corrective arm of the new procedure.

Then, and this is a key feature in this new procedure, the member state is obliged to present a corrective action plan (CAP) setting up a roadmap to implement corrective policy actions. The CAP should be a detailed plan for corrective actions with specific policy measures and implementation timetable. After submission of the CAP by the member state, the Council assesses the CAP with two possible outcomes. If the Council considers the CAP to be insufficient, the Council adopts a recommendation to the member state to submit a new CAP. If the new CAP is still considered to be insufficient, a fine (0.1% of GDP) can be imposed. If the Council considers the CAP to be sufficient, it will endorse the CAP through a recommendation that lists the corrective actions and their implementation deadlines. Then, once a sufficient CAP is in place, the Council assesses whether or not the Member State concerned has taken the recommended actions according to the set deadlines. Again, two possible outcomes can be distinguished. If the
actions of the member state were insufficient the Council can impose an interesting-bearing deposit (0.1% of GDP) which can be converted into annual fine if the inability of the member state to correct imbalances continues. If the member state concerned has taken the recommended correction actions the EIP can be closed or placed in abeyance depending on whether the member state is still experiencing excessive imbalances.

1.2. Scoreboard and findings of the Macroeconomic Imbalance Procedure

The early warning system draws on a scoreboard consisting of a set of 11 indicators. The choice of indicators in the scoreboard focuses on the most relevant dimensions of macroeconomic imbalances and competitiveness losses, with a particular focus on the smooth functioning of the euro area. For this reason, the scoreboard consists of indicators which can monitor external balances, competitiveness positions and internal imbalances, and encompasses variables where both the economic literature and recent experiences suggest associations with economic crises. The selection of indicators in the scoreboard took some time and was thoroughly discussed. Conceptually, it is not an easy task to choose the most relevant dimensions of macroeconomic imbalances and competitiveness losses. The procedure for macroeconomic imbalances started with 10 indicators and, in late 2012, another indicator was included which aims at detecting vulnerabilities of the financial sector.

Table 1 summarizes all the indicators along with ways how the data is transformed and the indicators are calculated. Table 2 also reports indicative thresholds for each indicator which specify the accepted range in which the indicator should be preferably found. The scoreboard includes both stock and flow indicators aiming at capturing the accumulation of imbalances over time as well as detecting short-term risks (Bobeva, 2013). The regulation which sets up the rules of the scoreboard envisages that the composition of the indicators may evolve over time. The EC underlines that while assessing the imbalances it also takes into account (although it is not clear how) other indicators – GDP growth, gross fixed capital formation, net lending/borrowing, FDI inflows, labour productivity, employment, etc.

The selection of indicators and thresholds has been subject of many discussions and is not free of ideological considerations. For example, the real effective exchange rate is computed against a basket of 35 industrial countries, and so, is by definition, mainly influenced by the
euro’s real exchange rate. Export market shares growth mirrors the weight of Europe in world trade or the integration of the country in the value added chain rather than a trend of the export performance. Thus, in 2010, in relation with the global crisis, even Germany did not abide by the threshold set by the Commission. Furthermore, some other indicators, like private sector credit flows or private and public indebtedness, are already accounted in the current account balance (Nayman et al., 2012). Moreover, the scoreboard limits the growth of labour unit costs to three per cent per year, which is barely higher than the official inflation target, but allows for a ten per cent unemployment rate.

Table 1. Macroeconomic Imbalance Procedure scoreboard and indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Measure</th>
<th>Accepted range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>External imbalances and competitiveness</td>
<td></td>
</tr>
<tr>
<td>Current account balance</td>
<td>3-year moving average, % of GDP</td>
<td>Between +6% and -4%</td>
</tr>
<tr>
<td>Net international investment</td>
<td>% of GDP</td>
<td>&gt; -35%</td>
</tr>
<tr>
<td>position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World export share</td>
<td>In current value, 5-year percentage change</td>
<td>&gt; -6%</td>
</tr>
<tr>
<td>Net international investment</td>
<td>% of GDP</td>
<td></td>
</tr>
<tr>
<td>position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real effective exchange rate</td>
<td>Vis-à-vis 35 industrial countries,</td>
<td>+/- 5% (euro-area) and</td>
</tr>
<tr>
<td></td>
<td>based on consumer-price indices,</td>
<td>+/- 11% (non euro-area)</td>
</tr>
<tr>
<td></td>
<td>3-year percentage change</td>
<td></td>
</tr>
<tr>
<td>Nominal unit labor costs</td>
<td>3-year percentage change</td>
<td>&lt; 9% (euro-area) and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt; 12% (non-euro area)</td>
</tr>
<tr>
<td></td>
<td>Internal imbalances</td>
<td></td>
</tr>
<tr>
<td>Private sector debt</td>
<td>% of GDP</td>
<td>&lt; 160%</td>
</tr>
<tr>
<td>Private sector credit flow</td>
<td>% of GDP</td>
<td>&lt; 15%</td>
</tr>
<tr>
<td>House prices relative to consumer</td>
<td>Year-on-year changes, in %</td>
<td>&lt; 6%</td>
</tr>
<tr>
<td>prices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General government debt</td>
<td>% of GDP</td>
<td>&lt; 60%</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>3-year moving average, in %</td>
<td>&lt; 10%</td>
</tr>
<tr>
<td>Financial sector liabilities</td>
<td>Year-on-year changes, in %</td>
<td>&lt; 16.5%</td>
</tr>
</tbody>
</table>

Source: the European Commission

The MIP was triggered the first time with the publication of the AMR in February 2012. Based on the analysis in the report, the European Commission carried out in-depth reviews for 12 EU member states. The analysis confirmed that these EU member states faced macroeconomic imbalances of different nature. But none was considered excessive, therefore no EIP was launched. On 10 April 2013, the Commission published the in-depth reviews based on results of the AMR from November 2012 and concluded that excessive imbalances exist in Spain and Slovenia. Within the last round of AMR, the Commission concluded that imbalances experienced in Italy, Croatia and Slovenia were excessive (European Commission, 2013). Nevertheless, on 2 June 2014
the Commission announced that the national reform programmes of the concerned Member States have been found as appropriately addressing the main challenges and, hence, the EIP will not be launched (European Commission, 2014). We should have in mind that the MIP does not apply to the so-called Assistance Programme countries which are under enhanced economic surveillance of their economic situation and policies due to severe effects of the financial crisis on their economy. Table 2 shows the findings of the MIP for all EU Member States over the last three years.

Table 2. Findings of the Macroeconomic Imbalance Procedure

<table>
<thead>
<tr>
<th>Year</th>
<th>No imbalance</th>
<th>Imbalance</th>
<th>Excessive imbalance</th>
<th>EIP</th>
<th>Assistance programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>AT, CZ, EE, DE, LV, LT, LX, MT, NL, PL, SK</td>
<td>BE, BG, CY, DK, FI, FR, HU, IT, SI, ES, SE, UK</td>
<td>No</td>
<td>No</td>
<td>GR, IE, PT, RO</td>
</tr>
<tr>
<td>2013</td>
<td>AT, CZ, EE, DE, LV, LT, LX, PL, SK</td>
<td>BE, BG, DK, FI, FR, HU, IT, MT, NL, SE, UK</td>
<td>SI, ES</td>
<td>No</td>
<td>CY, GR, IE, PT, RO</td>
</tr>
<tr>
<td>2014</td>
<td>AT, CZ, DK, EE, LV, LT, LX, MT, PL, SK</td>
<td>BE, BG, FI, FR, DE, HU, IE, NL, ES, SE, UK</td>
<td>CR, IT, SI</td>
<td>No</td>
<td>CY, GR, PT, RO</td>
</tr>
</tbody>
</table>

Source: Author’s compilation based on information from the European Commission

2. Macroeconomic Imbalance Procedure and the Visegrad countries

In order to evaluate the economic situation in the Visegrad countries from the perspective of the MIP, the author selected four indicators from the MIP scoreboard. In particular, three indicators of external imbalances were analysed (current account balance, world export share and real effective exchange rate) and private sector credit flow from the group of internal imbalances. In this chapter, the first issue presented is the evolution of these indicators over the period 2001-2012 and then come the absolute values of the indicators by their relative versions and comparison of the size and seriousness of imbalances in the pre-crisis and post-crisis periods.
2.1 Evolution of selected Macroeconomic Imbalance Procedure indicators

One of the main indicators for assessing external imbalances in the MIP scoreboard is the current account deficit/surplus. It is calculated as a 3-year backward moving average of the current account balance as a % of GDP. The scoreboard envisages an asymmetrical threshold of 4% for the deficit and 6% for the surplus. This “intelligent symmetry” is not well justified although it allows recognizing both current account surpluses and deficits as imbalances that pose risks of negative spillover effects.

Figure 2. MIP indicator on current account balance in the Visegrad countries (% of GDP, 2001-2012)

Source: the European Commission

Figure 2 depicts that the Visegrad countries have been facing permanent deficit of the current accounts. The improvement of the Hungary’s current account balance in the most recent period has been caused by financial assistance of international organizations that helped Hungary to overcome severe effects of the financial crisis. Therefore, this improvement cannot be attributed to any structural reform or progress in the Hungarian economy. Even though the MIP current account balance indicator often dropped below the official threshold of -4% of GDP it should be stated that the negative current account balance has been largely caused by a considerable cross-border outflow of incomes, principally in the form of profits and dividends, from the Visegrad countries. However, the graph also illustrates that the indicator has been
demonstrating a positive trend during the last couple of years shifting the current account balance to the acceptable range.

The next indicator of the MIP scoreboard applied in the paper is the export market share calculated as a 5-year percentage change of a national export as a per cent of the world export. The indicator aims at capturing structural losses in competitiveness. Negative changes in the share of the world export of goods and services point to important structural weaknesses in competitiveness. The threshold is set at -6%.

**Figure 3. MIP indicator on world export share in the Visegrad countries (5-year change in %, 2001-2012)**

Source: the European Commission

Figure 3 provides evidence that the Visegrad countries’ shares on world export were persistently rising before the crisis and the countries gained new markets. It can be understood that the international competitiveness of the Visegrad countries improved substantially and goods and services produced in the Visegrad countries found more customers on foreign markets. However, it can be observed that the growth of export share slowed down considerably in all countries during the post-crisis period. The most recent data even shows that Hungary is losing the market share at a rate well exceeding the threshold and the indicator of the Czech Republic is also negative and close to the acceptable margin. From the perspective of MIP, one can conclude that some external imbalance has already evolved (Hungary) or is just about to become evident in the Visegrad countries.
The last MIP indicator applied to demonstrate potential external imbalances in the Visegrad countries is the evolution of the real effective exchange rate (REER). This measure uses the exchange rate based on consumer price indices against 35 trading partners and is calculated as a 3-year change of REER in %. The thresholds set in the MIP are different for the euro area members and for the non-euro countries. While the acceptable range for the euro area member states is +/- 5% the wider range of +/- 11 % is applied for the member states outside the euro area. The REER is frequently used as another measure of international competitiveness. It is usually assumed that real effective appreciation of national currency deteriorates the country competitiveness and vice versa. All the Visegrad countries are small or mid-size and very open economies and they are heavily involved in the international trade and capital flows and have international economic activities with many foreign countries. Therefore, the REER captures the role of exchange rates in the economy most comprehensively and reliably (Stavárek, 2013).

**Figure 4. MIP indicator on real effective exchange rate in the Visegrad countries (3-year change in %, 2001-2012)**

![Graph showing real effective exchange rate in Visegrad countries from 2001 to 2012](source)

Source: the European Commission

Figure 4 portrays relatively high volatility of the REER indicator in the Visegrad countries. It is evident that all the countries typically faced real appreciation of domestic currency. This characteristic feature changed however, during the last two years. On the other hand, the last three years of the examined period brought relatively stable evolution of
the REER indicator that remained within the given tolerable corridor for all Visegrad countries. Although all three reported indicators of external imbalances it should be tightly related from the theoretical point of view, Figure 2 – Figure 4 present a different evidence. Decelerating of real appreciation or real depreciation was associated with losing of the world export share and not a significant improvement in trade balance.

The last indicator elaborated in the paper and the only one describing internal economic imbalance is the credit flow to the private sector of economy. It is measured as a ratio of total credit disbursed to the private sector on GDP. The threshold is set at 15%, which means that higher credit inflow shall be considered as imbalance. It is well known that companies in the EU have had a tendency to fund themselves much more from banks than from markets, suggesting substantial ‘bank dependency’. This is also the case of all Visegrad countries. If the credit growth rate reaches high values there is also a threat that funding provided to the private sector will not be used to support investments enhancing productivity but to finance consumption or to contribute to evolving of price bubbles.

The data depicted in Figure 5 suggests that only Hungary faced an imbalance stemming from a massive growth of the credit provided to the private sector. The share of credit on GDP was above 30% in 2008 and doubled the allowed MIP threshold. After the outbreak of the financial crisis the disintermediation phenomenon occurred in many European credit and financial markets. In reaction to the new market conditions banks substantially tightened credit standards and non-financial companies were able to obtain less resources from banking sector and other financial intermediaries. This is apparent in the post-crisis period when all Visegrad countries report substantially lower or even negative growth rates in credit volume.
2.2 Relative version of selected Macroeconomic Imbalance Procedure Indicators

As Gros and Giovannini (2014) point out, the key point in the MIP and EIP is that they should warn of impending problems within the euro area and the whole EU. It is thus questionable whether one should use absolute indicators thresholds. For example, if all countries had a large external deficit, a sudden stop to capital inflows would affect all of them at the same time. And if most EU countries run external surpluses, a particularly large surplus in any one country should not be regarded necessarily as an “imbalance”. Moreover, loss in export market share is common to all advanced economies due to structural change in international trade imposed by the rise of emergent countries. Therefore, the absolute change of the single member state is not an effective indicator per-se. This consideration applies more in general to all indicators discussed in the paper.

Therefore, the author calculated relative versions of all indicators for the time before the crisis represented by the year 2007 and for 2012 as the post-crisis period. The relative indicators are computed in relation to the whole EU, euro area and the group of Visegrad countries. The author calculated the weighted average of each indicator for the respective group. The weights were determined according to national GDP of the involved countries. Then, the absolute value of the indicator with the weighted average was compared. The resulting indices are presented in
Table 3. The imbalance is indicated if the relative indicator is above unity (below unity in case of the world export share). All observations of absolute as well as relative imbalances are highlighted in grey.

Table 3. Absolute and relative version of the MIP scoreboard indicators

| Source: Author’s calculations based on information from the European Commission Note: Thr is threshold, and Avg denotes the weighted average |

Results in Table 3 confirm in several examples that an imbalance identified by the absolute MIP indicator does not have to be out of the general situation in the EU or the euro area and, hence, the relative version of the indicator does not point to macroeconomic imbalance. For instance, this is the case of Poland’s current account deficit in 2007. On the other hand, fulfillment of the absolute indicator threshold cannot necessarily mean that the economic situation is balanced. For example, the Czech Republic’s absolute indicator of the current account balance - 3.01% in 2012 is within the acceptable range. However, it exceeded the weighted average of this indicator in the EU as well as the euro area by 42% and 30% respectively. Such a collision of absolute and relative
indicators can be also found in Hungary’s REER in 2007, Slovakia’s REER in 2012, and Poland’s and Slovakia’s private sector credit flow in 2012.

Conclusions

The aim of the paper was to show how useful the MIP can be in assessing vulnerabilities and imbalances in the analysed countries and whether the MIP can be a beneficial tool for the economic policy design. Based on evaluation of development of four selected MIP scoreboard indicators, the author came to a conclusion that the Visegrad countries in average demonstrate a more stabilized economic situation than before the financial crisis and the risk of evolving of serious macroeconomic imbalance is also rather limited. However, the selected MIP scoreboard indicators show several potentially dangerous trends that should be taken into account by policy makers in setting up the economic policy. The most significant is the concurrent losing of share on world exports and decelerating real appreciation or even depreciation.

In order to evaluate reliability of the MIP scoreboard the author constructed and computed relative indices of all indicators. The subsequent comparison of absolute and relative indicators revealed that they are in concordance only in the case of really serious and sizeable imbalances. In several examples the relative indicators warned about potential imbalance while the absolute indices did not signal any risk or threat. Moreover, particularly as regards current account imbalances one has to take into account that the MIP and its scoreboard are a preventive tool. Thus, the indicator should be forward, not backwards looking. Concluding, as the MIP is envisaged to warn of future crisis within the EU and the euro area, it does not make sense to use absolute indicators or thresholds, especially if they are backwards looking. Threads to the “smooth” functioning of the EU and mainly the euro area come from countries which deviate from the average and the corresponding indicators should be forward looking as corrective policies cannot do anything about the past.
Daniel Stavárek

Literature


