

# CASE Network Studies & Analyses

## The Global Financial Crisis and its Impact on Emerging Market Economies in Europe and the CIS: Evidence from mid-2010

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No. 411/2010

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Warsaw Bishkek Kyiv Tbilisi Chisinau Minsk



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This paper has been prepared under the project on “Advisory Services on Macroeconomic Management and Institutional Reform (ASMMIR)” for the Ministry of Economic Development of Azerbaijan. The project is being conducted by CASE – Center for Social and Economic Research on the basis of Grant Agreement G-08-BPCS-162136 signed between the British Petroleum Exploration (Caspian Sea) Ltd. and CASE.

**Keywords: global financial crisis, emerging-market economies, European Union, Economic and Monetary Union, Central and Eastern Europe, Commonwealth of Independent States, sovereign debt crisis, global policy coordination**

**JEL Codes: E44, E63, F32, F36, F42, G15, H63**

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Graphic Design: Agnieszka Natalia Bury

EAN 9788371785214

Publisher:

CASE-Center for Social and Economic Research on behalf of CASE Network

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## **Abstract**

Emerging market economies were major beneficiaries of the economic boom before 2007. More recently, they have become victims of the global financial crisis. Their future development depends, to a large extent, on global economic prospects. Today the global economy and the European economy are much more integrated and interdependent than they were ten or twenty years ago. Every country must recognize its limited economic sovereignty and must be prepared to deal with the consequences of global macroeconomic fluctuations.

The statistical data for 2009 provides a mixed picture with respect to the impact of the crisis on various groups of countries and individual economies. On average, Central and Eastern Europe experienced a smaller output decline than the Euro area and the entire EU while the CIS, especially its European part, contracted more dramatically. However, there was a deep differentiation within each country group. Looking globally, richer countries, which are more open to trade and in which the banking sector plays a larger role and which rely more on external financing, suffered more than less sophisticated economies, which are less dependent on trade and credit (especially from external sources). With some exceptions, the previous good growth performance helped rather than handicapped countries in the CEE and CIS regions in the crisis year of 2009.

The post-crisis recovery has been rather modest and incomplete. It remains vulnerable to new shocks (like the Greek Fiscal crisis), the danger of sovereign default and other uncertainties. Full post-crisis recovery and increasing potential growth will require far going economic and institutional reforms on both national, regional (e.g., EU) and global levels.

## **1. Introduction**

In the early and mid-2000s, emerging market economies were major beneficiaries of the economic boom which preceded the recent global financial and economic crisis. They have become victims of the crisis, and their future development depends, to a large extent, on global economic prospects, which are highly uncertain in the fragile post-crisis environment.

Although there have been domestic economic policies which can be given credit for some of the early successes and then blamed for crisis-related problems, one cannot forget about the role of external factors. Many of the small open economies of Central and Eastern Europe, Latin America or Asia are dependent on external demand and capital flows originating from their dominant economic partners such as the EU, US, Japan or China. This has made them vulnerable to various shocks (both positive and negative) generated by those neighbors/partners which are largely beyond their control and beyond the capacity of domestic policy to cushion their impact (see Ganev, 2010 in respect to Bulgaria).

The above dependence results not only from formal integration arrangements such as EU membership/ EU candidate status (which, by definition, means giving up some degree of national sovereignty in economic and institutional spheres) or less binding free trade agreements, but also from the much broader phenomenon of rapid globalization observed during the last few decades. Thus, even the countries which do not belong to regional integration blocks like the EU face serious limitations in their domestic economic policies due to increasing global interdependence.

Today's global and European economies are much more integrated and interdependent than they used to be ten or twenty years ago, let alone during the post-World War II period. In an environment of highly integrated global markets, each country (even the biggest ones like the US, Japan, China or the EU as an entire block) must recognize its limited economic sovereignty and must be prepared to deal with the consequences of global macroeconomic fluctuations.

The purpose of this paper is to analyze the behavior of emerging-market economies during the recent global financial crisis. Special attention is given to Central and Eastern Europe

and the role of EU integration. The paper is policy-oriented and contains some general policy recommendations.<sup>1</sup>

The paper consists of eight sections. Section 2 contains a brief description of the period of rapid economic growth in the early and mid 2000s and its sources. Section 3 deals with the shock generated by the global financial crisis which erupted in mid 2007 in the US and hit most of the emerging market economies in the second half of 2008. Section 4 analyzes the depth of the recession in 2009 in various groups of countries and the factors determining this depth. In section 5 we look at the consequences of the second shock generated by the Greek fiscal crisis in spring 2010. Section 6 examines the role of the EU umbrella in protecting Central and Eastern European economies against crisis-generated shocks. In section 7 we discuss the potential future scenarios and risks associated with them. Finally, section 8 summarizes the findings of this paper and offers some policy conclusions and recommendations.

As macroeconomic and financial developments from 2007 onwards have had a very dynamic character, the findings, conclusions and policy recommendations offered in this paper have a tentative character, which is subject to further verification. The unfinished financial crisis story also determines the analytical format and methodology used. The analysis is based on the analytic-narrative method using simple comparative statistics illustrating major trends and comparative cross-regional and cross-country analysis. There will be more opportunities to conduct deeper and more sophisticated analyses at a later stage when more statistical information on the crisis and its various impacts becomes available.

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<sup>1</sup> This paper has been prepared under the project on “Advisory Services on Macroeconomic Management and Institutional Reform (ASMMIR)” for the Ministry of Economic Development of Azerbaijan. The project is being conducted by CASE – Center for Social and Economic Research on the basis of Grant Agreement G-08-BPCS-162136 signed between the British Petroleum Exploration (Caspian Sea) Ltd. and CASE. Earlier versions of this paper or its fragments were presented at the IAI Global Outlook Seminar on “Central and Eastern Europe after the crisis: scenarios of recovery and national responses” in Rome on January 29, 2010, the Conference on “Inclusion completed, adaptation successful? - What divides new and old members in the European Union, 6 years on?” organized by the Center for EU Enlargement Studies of the Central European University and the Friedrich Ebert Foundation in Budapest on May 14, 2010, and at the seminar organized by the Ministry of Economic Development of Azerbaijan and BP in Baku on July 6, 2010. I would also thank Paulina Szyrmer for editorial assistance.

## 2. The golden period of global growth before 2008

The years 2003-2007 recorded a remarkable pace of global economic growth and macroeconomic stability after quite good decade in the 1990s<sup>2</sup> (see Tables 1-5). Looking back, this golden period of prosperity and relative stability resulted from a coincidence of numerous supportive factors.

First and most importantly, the world economy benefited from comprehensive and far going policy reforms conducted in a number of important countries and regions in the 1990s/ early 2000s (China, India, Russia, Central and Eastern Europe, Latin America, etc.). Second, after two or more decades of macroeconomic turbulences caused by weak, and sometimes openly populist macroeconomic policies, the vast majority of less developed countries adopted a more prudent stance in this area. This resulted in an impressive disinflation trend worldwide (see Figure 1), the rapid building up of international reserves and a substantial improvement in fiscal balances. Third, these positive trends were accompanied by a unique calm in global financial markets (no serious turbulences). Fourth, with a certain time lag, the successful completion of the Uruguay round in the mid 1990s helped to liberalize the world's manufacturing trade and, partly, trade in the service sector. Fifth, the accommodative monetary policy of the largest central banks conducted in the first half of the 2000s, the aftermath burst of the so-called dotcom bubble and the 9/11 terrorist attacks have meant a strong and positive demand shock for most less developed countries and strengthened their economic boom.

Emerging market economies were the major beneficiaries of this boom, as they were growing much faster than developed countries (which served as the main source of global demand, especially the US) and were contributing to impressive progress in global economic and social convergence (see Tables 1 and 5).

This trend was also experienced by the emerging market economies of Central and Eastern Europe (see Table 2-4). In addition to the above mentioned positive global factors, the EU new member states (NMS) benefited from gaining full access to the Single European Market and a credibility premium upon EU accession (with the expectation of rapid entry into the

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<sup>2</sup> The entire period is sometimes called the period of Great Moderation; see Bernanke (2004).



EMU). It seemed that financial markets considered the entire EU as a homogenous area which was immune to adverse and country-specific macroeconomic and financial shocks. As a result, NMS risk premia were below those of other emerging markets (Luengnaruemitchai & Schadler, 2007).

Net capital inflows (and consequently, as a mirror phenomenon, current account deficits) reached a record-high level especially in the smallest economies with currency boards or fixed pegs such as the three Baltic countries and Bulgaria, which enjoyed a reputation of being fiscally prudent and microeconomically flexible. To a lesser extent, a similar trend was experienced by actual and potential EU candidates (i.e., Western Balkan countries and Turkey). In turn, CIS countries which had no EU membership perspective (or even close association) benefited from the global commodity boom. All post-communist economies gained from the previous decade of painful economic reforms and restructuring.

### **3. The first shock: global financial crisis (2008)**

Most of the favorable factors described in the previous section disappeared or even started to have the opposite effect once the global financial crisis hit the entire world economy, including Europe, in the summer of 2008.

In the financial sphere, liquidity and credit dried up, capital started to fly back to the main financial centers (mostly US), stock markets and commodity prices declined (although there was almost a one year time mismatch between the collapse of these two asset markets), risk premia for both sovereign and private borrowing grew dramatically (see Figure 2 in respect to sovereign borrowing of EU NMS), and many national currencies depreciated (especially in countries which run floating exchange rate regimes) threatening the massive insolvency of economic agents borrowing in foreign currencies. Some countries experienced banking sector troubles. In the real sphere, external demand for exported goods and labor declined.

Neither EU membership, nor currency board regimes were considered by financial markets as effective insurance against balance-of-payment and fiscal crises any longer (see Figure 2). Those NMS which managed to enter the EMU before the crisis (Slovenia, Cyprus, Malta and Slovakia) minimized nominal shocks (especially those related to currency risks) but were not able to use the exchange rate as a shock absorber. On the contrary, most countries with

floating exchange rates experienced much bigger fluctuations of nominal variables (see Table 6) but some of them (Poland) could accommodate faster to declining external demand.

The sharp fluctuations of nominal variables could lead to a serious disruption of the banking and financial sectors and in some cases, such as in Ukraine or Russia, this risk did materialize. However, in other countries, exchange rates and stock market indices started to rebound from spring 2009, which helped them to avoid full-scale domestic financial crises. The supportive policy of parent commercial banks from Western Europe backed by the European Commission and IMF also contributed to the relative stability of their Central and East European subsidiaries.

Three NMS (Hungary, Latvia and Romania), one high-income country of the European Economic Area (Iceland), two EU potential candidates (Bosnia & Herzegovina, Serbia) and six CIS economies (Armenia, Belarus, Georgia, Kyrgyzstan, Tajikistan and Ukraine) had to resort to IMF assistance in the second half of 2008 and the beginning of 2009 to secure their international liquidity and avoid both sovereign default and an uncontrolled run on their currencies. In the spring of 2010, the first EMU member, i.e. Greece had to ask for external financial aid (including the IMF program) because of its progressing public debt crisis (see Section 5).

#### **4. Economic performance in 2009 – a mixed picture**

Over the period of 2008-2009, the expected impact of the global financial crisis on emerging market economies remained the subject of frequently changing forecasts and speculations. Throughout all of 2008, many believed that the negative consequences of the financial crisis would be limited to the so-called advanced economies, mostly US, Western Europe and Japan, and most emerging market economies would remain relatively unaffected. The IMF World Economic Outlook Update released on November 6, 2008 (WEO, 2008, Table 1.1), i.e. seven weeks after the Lehman Brothers bankruptcy triggered a global financial panic, forecasted recession in most of the advanced economies for 2009. The actual recession was much greater than that predicted in the report. The report also predicted only a modest slowdown for emerging and developing economies. Such expectations may be based on the concept of “decoupling” (WEO, 2007\_Apr, Chapter 4, pp. 121-160; Kose et al., 2008)

according to which business cycles in emerging market economies become increasingly independent from those in advanced economies.

When it became clear that the crisis hit most emerging markets heavily, especially former communist economies in Central and Eastern Europe and CIS, the previously optimistic forecasts gave way to alarming expectations and comments like that of the World Bank President Robert Zoellick's on February 27, 2009<sup>3</sup>. Fortunately, these fears proved to be a bit exaggerated. Ex-post, in spring 2010, the picture looked less dramatic and more nuanced.

The IMF April 2010 preliminary GDP statistics for 2009 gave some opportunity to examine the depth of the crisis' impact on various groups of countries and individual economies. The imperfection of the available data was caused not only by its preliminary character (subject to further revision) but also by the lack of a comparative set of quarterly GDP statistics. Examination of the period of Q3 2008 – Q2 2009 or Q4 2008 – Q3 2009 would probably give a better picture of the crisis' length and impact than annual statistics for 2009. Some countries were hit by the crisis already at the end of 2007/ beginning of 2008 while many others were hit a half year or one year later. In many countries output recovery started already in the second half of 2009 while in some others, the recession has not ended yet (so the size of their cumulative output decline remained unknown at the time of writing this paper).

Keeping these methodological problems in mind, Tables 1 and 2 show that, on average, Central and Eastern Europe<sup>4</sup> experienced a smaller output decline than the Euro area and the entire EU. On the contrary, the CIS, especially its European part contracted more dramatically (see Table 4). At first glance, this might suggest that EU membership/ close association with the EU (the case of actual and potential EU candidates see Table 3) continued to provide some kind of protection umbrella for European emerging-market economies even in a time of distress. However, this conclusion seems to be premature and not necessarily well-grounded in reality.

Actually, there was a deep differentiation within each country group. Among NMS (Table 2) the deepest (two-digit) contraction was experienced by the three Baltic countries while

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<sup>3</sup> <http://www.ft.com/cms/3cf2381c-c064-11dd-9559-000077b07658.html>

<sup>4</sup> According to the IMF regional classification, i.e. including 7 NMS (Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland and Romania) and 8 EU actual and potential candidates (Albania, Bosnia & Herzegovina, Croatia, Kosovo, Macedonia, Montenegro, Serbia and Turkey).

Poland recorded a modest positive growth<sup>5</sup> and Cyprus and Malta experienced only a modest decline (less than 2%). Within the group of actual and potential EU candidates (Table 3), Kosovo and Albania recorded positive growth and Macedonia recorded a marginal decline (by 0.7%). The biggest recession hit tourism-dependent Montenegro and Croatia (respectively -7.0% and -5.4%).

However, even greater differences can be observed within the CIS (Table 4): Ukraine contracted by 15.1%, Armenia by 14.4%, Russia by 7.9%, and Moldova by 6.5%. On the other hand, all 5 Central Asian countries, Azerbaijan, and Belarus continued growing, in some cases (Azerbaijan and Uzbekistan) at a pretty high rate.

Among large non-European emerging markets, China and India continued growing at pretty high rates while Brazil recorded almost no decline (-0.2% - see Table 5). These results may partly validate the decoupling hypothesis discussed earlier.

Equally difficult is the analysis of the factors which determined the size and length of the crisis-related shocks and resilience of individual economies against them. Some early opinions like that stressing the importance of the exchange rate regime<sup>6</sup> do not necessarily hold true when a larger pool of countries and full 2009 data are analyzed.

In order to identify factors which might determine a country's vulnerability/ resilience to crisis-generated shocks, we ran a series of simple graphical analyses where we plotted 2009 GDP performance against various other variables available either in the IMF World Economic Outlook or the World Bank World Development Indicators databases. Figures 3-8 analyze factors which determine the depth of the shock using global macroeconomic statistics. Figures 3a-8a do the same in respect to Europe and the CIS region. The results of this graphical analysis do not offer any strong conclusions especially if one takes into consideration the preliminary character of some of the data available and other methodological problems involved<sup>7</sup>.

Global statistics tell us that the growth rate of real GDP in 2009 was negatively correlated with GDP PPP per capita level in 2006 (Figure 3), the exports-to-GDP ratio in 2006 (Figure

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<sup>5</sup> Due to Poland's economic potential (ca. half of the GDP of all NMS), its positive growth record affected the average performance of the entire CEE group.

<sup>6</sup> See e.g. Aslund (2009) who underlined the advantage of flexible exchange rate and inflation targeting over the fixed pegs in the group of former communist economies.

4), and the domestic credit-to-GDP ratio in 2006 (Figure 5). It was positively correlated with the average current account balance in 2005-2007 (Figure 7) and the average rate of economic growth in 2003-2007 (Figure 8). There is no correlation between 2009 growth performance and the rate of growth of broad money (M2) in the period of 2001-2007 (Figure 6). Putting these results in less technical language, one can conclude that richer countries, which are more open to trade, in which the banking sector plays a bigger role and which rely more on external financing suffer more than less sophisticated economies, which are less dependent on trade and credit (especially from external sources). The previous good growth performance helped rather than handicapped growth in the crisis year of 2009 although there were some exceptions, especially in Central and Eastern Europe and the CIS.

When one limits the analyzed cross-country panel to Europe and CIS, the correlations remain the same in terms of direction but not in terms of strength. Three of the above mentioned correlations – between the growth rate of real GDP in 2009 and GDP PPP per capita level in 2006 (Figure 3a), exports-to-GDP ratio in 2006 (Figure 4a) and domestic credit-to-GDP ratio in 2006 (Figure 5a) are negative but weaker for Europe and CIS than globally. The same concerns the positive correlation between the 2009 growth rate and the average growth rate in 2003-2007 (Figure 8a), which is weaker for Europe and the CIS. However, another positive correlation – between the 2009 growth rate and the average current account balance in 2005-2007 (Figure 7a) – proved to be stronger for Europe and the CIS than globally. Finally, the correlation between 2009 growth performance and the average rate of growth of broad money (M2) in 2001-2007 (Figure 6a) shows a very weak negative sign, which can be considered as insignificant.

Going beyond these general observations would require an analysis of structural data (e.g. the share of various sectors and industries) which are not available in terms of a cross-country comparative dataset. The only available figure of this kind, the average growth rate of the group of fuel exporters (see Table 1), indicates that they were more heavily hit in 2009 than other economies. Some anecdotal evidence may suggest that large shares of the construction, metallurgy, the automobile industries or the financial sector made the recent recession more severe.

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<sup>7</sup> The earlier comments on the imperfection of 2009 GDP data as the proxy of crisis length and depth also apply to this analysis.

## 5. The second shock: European and global public debt crisis

At the end of 2009 and beginning of 2010, the general mood in the global and European economy became more optimistic again. The worse case scenario, i.e. the danger of a long-lasting and devastating Great Depression style crisis seemed to be left behind. There were several signs of the revival of financial markets, global trade and the real sector. The emerging market economies, especially those in Asia and Latin America started to attract capital inflows again (less so in Europe although market sentiments improved here too). This optimistic mood did not last long, however. The new blow came from the Greek public debt crisis,<sup>8</sup> which erupted in the first quarter of 2010 and culminated in early May 2010, before the EU governing bodies and the IMF agreed on a rescue package for Greece.

The repercussions of Greece's fiscal troubles went far beyond the boundaries of this relatively small economy. First, this was the first open public debt crisis experienced by a member country of the Economic and Monetary Union since its launch in 1999 and financial markets tested the degree of actual fiscal solidarity within the Euro area.

Second, the Greek episode placed market attention on similar vulnerabilities in other Northern Mediterranean economies (Italy, Portugal and Spain) and several other developed countries, including all G7 members except Canada (see Tables 7 and 8). A year earlier the call for a substantial fiscal stimulus in all EU member countries overshadowed fiscal sustainability concerns which proved deeply wrong (see Dabrowski, 2009). Table 8 clearly demonstrates how difficult will be to stop the rapid increase in public debt to GDP ratio in most of the leading developed countries unless a dramatic fiscal adjustment is undertaken in the near future.

Third, the potential danger of Greek sovereign default served as a reminder about the continuing fragility of European banks and other financial institutions which did not recover fully from the post-Lehmann shock at the end of 2008 and could face big problems in the case of any new turbulence. Although the pan-European bank stress test completed in July

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<sup>8</sup> Called by many commentators and market participants as the crisis of the Euro, which does not seem to be a correct interpretation. Although somewhat weakened against the US dollar, the Euro did not become a subject of speculative attack as normally happens in the case of a currency crisis.

2010 seemed to demonstrate that these fears were exaggerated,<sup>9</sup> some experts questioned the macroeconomic assumptions used in this test (especially with respect to risks associated with government bonds - see Jenkins, 2010) and banks' honesty in disclosing all off-balance-sheet transactions.

Although the debt indicators in Central and Eastern Europe look, on average, better than those in Western and Southern Europe, some of the EU NMS (Hungary and Poland) may face serious fiscal problems in the not so distant future unless they undertake corrective measures in time. Other CEE countries may suffer from the negative contagion effects generated by the fiscal problems of either peripheral EMU members or less fiscally prudent neighbors. The increased volatility of CEE exchange rates and bond yields in April and May 2010 (i.e. before and immediately after adopting a rescue package for Greece) may serve as a good indication of their potential macroeconomic vulnerability. Consequently, their financial systems, especially commercial banks, may also suffer from the increased exchange rate volatility as well as from the potential problems of their mother banks in Western Europe.

## **6. The role of the EU/EMU umbrella**

As mentioned in the previous sections, the EU NMS and EU actual and potential candidates in South-Eastern Europe enjoyed several benefits of their progressive integration with the Single European Market and their adoption of EU institutions, standards and policies in the early and mid-2000s. One of these benefits was related to rapidly decreasing risk premia and the perception of financial markets that this region was moving from the 'emerging market' category into the class of advanced and matured economies. Very few believed that any part of the EU (including its new Eastern and South Eastern peripheries) would be ever hit by serious macroeconomic turbulence. So EU membership was considered solid insurance against potential instability.

Going further, joining the Economic and Monetary Union seemed to provide even more macroeconomic stability and security. Once an EMU candidate country adopted the credible strategy of joining the single currency area and financial markets became convinced of the successful outcome of this strategy, that country's risk premium would fall rapidly. This was

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<sup>9</sup> Only 7 out of 91 tested banks failed to pass the test (BBC, 2010) and the troubles of these 7 institutions were

the case of Italy prior to its 1999 launch of the Euro zone and Greece prior to its 2001 EMU accession (see Figure 9). The same phenomenon was repeated later when the EU NMS started to join the EMU.

The spread between yields charged on government bonds of the most indebted EMU members (such as Greece or Italy) and the bonds of Germany remained very low for the first decade of the Euro's existence (see Figure 9). This might be interpreted as the dominant belief of financial markets in either the successful work of EU/EMU fiscal discipline rules as defined in the Treaty and Stability and Growth Pact or in the eventual bailing out of the countries in fiscal troubles by other EU/EMU members even if it went against both the letter and spirit of the Maastricht Treaty<sup>10</sup>.

The global financial crisis dramatically verified the above assumptions, which have not been well grounded in the real political, institutional and financial architecture of the EU. The crisis confirmed what was quite obvious before. First, the fiscal surveillance rules in the EU and EMU were pretty weak from the very beginning and became additionally watered down by the reform of SGP in 2005. Second, the EU lacked both fiscal capacity and the operational mechanisms to provide rescue packages to member states in trouble. The same lack of capacity concerned the rescue mechanism of the European financial sector, a mechanism that was sorely needed at the end of 2008. Its lack threatened the disintegration of the Single European Market when individual governments had to come with national bailout packages, which were not always well coordinated (Dabrowski, 2010).

The first wave of troubles on the sovereign debt front in the second half of 2008 and the beginning of 2009 was modest enough to remain manageable under the then existing mechanisms, i.e. IMF stand-by programs augmented by EU resources (for non-Euro area member states) and bilateral aid packages. The three EU NMS (Hungary, Latvia and Romania) became the subject of such joint IMF-EU financial assistance.

However, at the beginning of 2010, the crisis got closer to the EU core, attacking the periphery of the Euro area. Greece was fighting dramatically with the danger of public debt

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known before the test exercise started.

<sup>10</sup> The current (Lisbon) version of the Treaty of the Functioning of the European Union Article 125.1 (former Article 103.1 of the Treaty Establishing the European Community) explicitly states: *"The Union shall not be liable for or assume the commitments of central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of any Member State, without prejudice to mutual financial guarantees for the joint execution of a specific project. A Member State shall not be liable for or assume the commitments of central governments, regional, local or other public authorities, other bodies governed by public*



default and some other EMU members (notably Portugal, Spain, and Ireland) experienced downgrades of their credit ratings and repeated crises of market confidence. The political disagreement within the Euro group on the scale and ways of supporting Greece not only dramatically deepened the problems of Greece itself but also undermined (at least temporarily) the market belief at the sustainability of the Euro project and the chances of EU members in trouble to receive support other than the standard IMF programs. This had to lead to the increase of risk premia on the sovereign debt instruments of several EU members.

Once again, the EU's Eastern periphery has been seriously affected by market uncertainties this time caused by Greece's crisis. In spite of the Euro depreciation against the US dollar the Swiss frank and other major freely floating CEE currencies such as the Czech crown, the Hungarian forint, the Polish zloty, the Romanian lei or the Turkish lira depreciated even more (both to EUR and USD).

Finally, on May 9, 2010, ECOFIN agreed to establish the European Financial Stabilization Mechanism which consists of €60 billion of the EU's own resources and €440 billion of the Special Purpose Vehicle that is guaranteed on a pro rata basis by participating member states (ECOFIN, 2010). More importantly, this mechanism is backed by IMF resources (IMF, 2010). Greece became the first beneficiary of this mechanism (closely coordinated with the standard IMF stand-by loan and its conditionality).

This, however, is only a temporary and emergency solution. In the long-term a permanent crisis resolution mechanism needs to be set up at the EU level, in addition to stronger fiscal surveillance rules (see e.g. European Commission, 2010). Greece's problems are only the tip of a rapidly growing fiscal liability iceberg of the EU member states. On the other hand, such a mechanism must respect the limitation coming from the above mentioned Article 125 of TFEU and, even more importantly, avoid moral hazard problems associated with a country's potential bailout.

Based on the experience of the crisis years of 2008-2010, one can draw the conclusion that EU or even EMU membership cannot be considered an absolute shield against serious macroeconomic and financial shocks. The earlier naïve expectation of financial markets in respect to absolutely safe sovereign borrowing within the EMU proved unjustified and wrong. However, EU/EMU membership offers some additional external support on top of the

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*law, or public undertakings of another Member State, without prejudice to mutual financial guarantees for the joint execution of a specific project."* – see <http://eur-lex.europa.eu/JOHtml.do?uri=OJ:C:2010:083:SOM:EN:HTML>

standard IMF rescue programs which have been seriously expanded and modernized in the last few years (as a result of the influence of EU shareholders on the IMF among other reasons – see Aslund, forthcoming, Chapter 5).

Furthermore, EMU membership continues to eliminate exchange-rate-related risk premia, contributing to a more stable macroeconomic and financial environment. From this point of view, the continuation of efforts to join the EMU by those NMS which remain outside the Euro area makes sense. In comparison, countries which joined the EMU in recent years and run responsible fiscal policies (Slovenia, Cyprus, Malta and Slovakia) have gone through the crisis without serious financial and macroeconomic turbulences.

## **7. Looking ahead: what can happen next?**

The continuing macroeconomic uncertainty makes it difficult to predict what may happen in both the near and more distant future. The IMF April and July 2010 forecasts (see the last column of Tables 1-5) suggest that recovery in 2010 will not be fast and will not be enjoyed by all countries: those which recorded the deepest recession in 2008-2009 may continue to experience recession or stagnation (see also Slay, 2010).

On average, CEE and CIS countries have the chance to grow faster than the Euro area and the entire EU. This gives them the opportunity to continue the catching up process, although at a slower pace than during the boom preceding the recent crisis. However, the picture will be uneven within each regional group/subgroup as it was in 2009. And returning to the pre-crisis boom does not seem likely at least in the near future. In addition, the overall macroeconomic environment will be less comfortable, with higher debt-to-GDP ratios in most countries, and tighter credit conditions. The EU NMS (including those which already entered or will enter the EMU) and EU candidate countries cannot count on lower risk premia generated by the EU/ EMU “umbrella” any longer. Its role was seriously reassessed by financial markets both at the end of 2008 and at the beginning of 2010.

In the slightly longer term, the situation of emerging market economies, especially those located in Europe and on its periphery, will depend on how the world economy manages to overcome the crisis and its underlying roots. The two potential scenarios seem to be

particularly dangerous for this group of countries. If the global economy experiences a so-called double deep recession (which could be caused by premature tightening of macroeconomic policies in major advanced economies, a public debt crisis or a new round of troubles in the financial sector), emerging market economies will be hit again on the demand side and may react more strongly on the down than their developed counterparts. However, if the monetary and fiscal stimulus is not withdrawn in time, there will be the danger of another kind of trouble: higher inflation (perhaps stagflation), new imbalances and new bubbles. Under such a scenario, emerging market economies in Central and Eastern Europe can easily become the first victims of a new macroeconomic and financial crisis.

## **8. Conclusions and recommendations**

The global financial crisis of 2007-2009 had severe consequences for the entire world economy, including emerging market economies. Even if it lasted shorter than one might have expected at the very beginning (when the association with the Great Depression period of the early 1930s was quite popular), the consequences of the crisis will be felt for a long time. Several countries were hit quite significantly, losing a substantial portion of their GDP. In most of these countries, part of the earlier accomplished progress in poverty reduction has been reversed, although there is insufficient statistical data as of yet to assess the scale of damage in this area. Their fiscal accounts also deteriorated, their indebtedness increased, and in some cases, the credibility of their national currencies was also damaged (demonstrated by the increasing share of spontaneous dollarization/ euroization). Recovering these losses will not be easy and will take time.

The output rebound experienced since mid-2009 is rather weak so far and subject to various uncertainties. New rounds of financial and macroeconomic turbulences are possible as demonstrated by the consequences of the Greek fiscal crisis in the spring of 2010. Financial conditions are and will remain tighter as compared to the pre-crisis situation. Credit will be more expensive and less available for both the private sector and most sovereign borrowers. The financial markets will scrutinize the economic policies of individual countries more seriously than they used to through most of the last decade.

The above-mentioned issues mean that the golden era of rapid and easy economic growth (in the sense that it did not require serious economic policy effort) is unlikely to return soon. A

higher rate of economic growth and the continuation of the catching up process by lower-income economies is still possible, but would require a new round of economic reforms in both individual countries and at the global and regional levels.

On a national level, the economic reform agenda depends very much on individual country situations and characteristics. However, there are some common challenges shared by larger groups of countries. First, the rapidly growing public debt in most countries must be stopped as soon as possible. This will require a far-reaching fiscal adjustment and will be impossible, in most cases, without the revision of major expenditure programs, especially in the social welfare sphere. All developed countries and some emerging-market economies (especially those in Central and Eastern Europe) must neutralize the fiscal and other consequences of population aging and decline. Increasing both the formal and effective retirement age seems to be the best response. A greater openness to immigration (contrary to widespread populist fears in many countries) could be another good recipe.

A radical overhaul of the welfare systems and labor regulations is important not only for balancing government accounts but also for making labor markets more flexible, i.e. overcoming the serious obstacles to economic growth in continental Europe, including most of the EU NMS and EU candidate countries.

Most middle and low-income countries (including CIS, Middle East and North Africa, and Western Balkans) need to work hard on improving their business and investment environments, upgrading their legal and public administration systems, fighting corruption, etc. to be able to attract more investment flows. The deregulation agenda is also important in the developed world, particularly in continental Europe and Japan. Many countries should continue the privatization of their public enterprises, including the quick withdrawal of public ownership from those financial institutions which received emergency capital injections from public sources in 2008-2009.

There is also a large, perhaps even more complex and difficult reform agenda on the supranational level as the crisis demonstrated a high degree of global interdependence and the limits of both national policies and regulations. First of all, this concerns global financial markets and institutions where both close coordination of national regulations and the building of global standards, regulations and supervisory institutions is required. The same concerns some form of coordination of macroeconomic policies between the biggest players which the G20 tried to do recently with mixed results. Finally, it is time to conclude global trade negotiations that began a decade ago under the Doha round even if the crisis and

recession have created the temptation for protectionist policies at national levels. In spite of populist rhetoric, developing and transition countries may become the major beneficiaries of the new round of global trade liberalization (as happened after the conclusion of the Marrakesh agreement in 1994).

The same concerns the regional level, especially in Europe. The EU must complete building a Single European Market, especially in respect to the services and financial sectors. Some deregulation of product markets, especially for agriculture goods, would be also beneficial for the future growth of both EU member states and its trade partners. Accelerating EU Enlargement (in respect to the Western Balkan countries and Turkey) would bring greater economic, financial and political stability to this part of Europe and make the Single European Market more vibrant and competitive. The same concerns EMU enlargement which can offer more macroeconomic and financial stability to those NMS which are still outside the Euro area.

Having well coordinated economic policy and economic reforms on a supranational level is probably the most important lesson which can be drawn from the recent crisis experience. No country can claim to be immune to global and regional shocks. National economic policies and reforms on a national level still matter a lot but they must be well coordinated regionally and globally. Any policy measure taken on a national level must be also judged against its externalities, i.e. its impact on other economies.

This relates not only to the measures which directly affect the competitiveness of other countries such as trade, investment and labor market protectionism, competitive devaluations of national currencies and other types of beggar-thy-neighbor policies. The leading developed countries and large economies must be aware that their macroeconomic policy decisions affect not only their economies but also most others', including those in the developing world. For example, if the US Federal Reserve Board or ECB decide on interest rates and other (so-called quantitative) monetary policy measures, this determines not only domestic liquidity in the US or Euro area but also the international one (given the international role of these currencies). Perhaps in the short term such externalities can be disregarded but after some time the international consequences of such decisions boomerang back to their authors. Unfortunately, these externalities are not always taken into account for both institutional (accountability to domestic constituencies) and analytical reasons (lack of adequate conceptual and analytical framework for global macroeconomic analyses).

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## Tables and Figures

**Table 1: Annual growth of real GDP, in %, 2003-2010, major regions**

Region	2003	2004	2005	2006	2007	2008	2009	2010
World	3.6	4.9	4.5	5.1	5.2	3.0	-0.6	4.6
G7	1.8	2.9	2.4	2.6	2.2	0.2	-3.4	2.4
EU	1.5	2.7	2.2	3.4	3.1	0.9	-4.1	1.0
Euro area	0.8	2.2	1.7	3.0	2.8	0.6	-4.1	1.0
Emerging & developing economies	6.2	7.5	7.1	7.9	8.3	6.1	2.4	6.8
CEE	4.8	7.3	5.9	6.5	5.5	3.0	-3.7	3.2
CIS	7.7	8.2	6.7	8.5	8.6	5.5	-6.6	4.3
MENA	6.9	5.8	5.4	5.7	5.6	5.1	2.4	4.5
Developing Asia	8.2	8.6	9.0	9.8	10.6	7.9	6.6	9.2
Sub-Saharan Africa	5.0	7.1	6.3	6.5	6.9	5.5	2.1	5.0
Western Hemisphere	2.2	6.0	4.7	5.6	5.8	4.3	-1.8	4.8
Fuel exporters	7.0	7.9	6.7	7.2	7.2	5.3	-1.8	4.0

Note: Yellow field means IMF April 2010 estimates, red field – IMF July 2010 estimate

Source: International Monetary Fund, World Economic Outlook Database, April 2010; fuel exporters – WEO (2010\_Apr), Table A1, p. 155.



**Table 2: Annual growth of real GDP, in %, 2003-2010, EU and EEA**

Country	2003	2004	2005	2006	2007	2008	2009	2010
<b>EU-15</b>								
Austria	0.8	2.5	2.5	3.5	3.5	2.0	-3.6	1.3
Belgium	0.8	3.1	2.0	2.8	2.8	0.8	-3.0	1.2
Denmark	0.4	2.3	2.4	3.4	1.7	-0.9	-5.1	1.2
Finland	2.0	4.1	2.9	4.4	4.9	1.2	-7.8	1.3
France	1.1	2.3	1.9	2.4	2.3	0.3	-2.2	1.4
Germany	-0.2	1.2	0.7	3.2	2.5	1.2	-5.0	1.4
Greece	5.9	4.6	2.2	4.5	4.5	2.0	-2.0	-2.0
Ireland	4.4	4.6	6.2	5.4	6.0	-3.0	-7.1	-1.5
Italy	0.0	1.5	0.7	2.0	1.5	-1.3	-5.0	0.9
Luxembourg	1.5	4.4	5.4	5.6	6.5	0.0	-4.2	2.1
Netherlands	0.3	2.2	2.0	3.4	3.6	2.0	-4.0	1.3
Portugal	-0.8	1.5	0.9	1.4	1.9	0.0	-2.7	0.3
Spain	3.1	3.3	3.6	4.0	3.6	0.9	-3.6	-0.4
Sweden	1.9	4.1	3.3	4.2	2.6	-0.2	-4.4	1.2
UK	2.8	3.0	2.2	2.9	2.6	0.5	-4.9	1.2
<b>EU-12</b>								
Bulgaria	5.0	6.6	6.2	6.3	6.2	6.0	-5.0	0.2
Cyprus	1.9	4.2	3.9	4.1	5.1	3.6	-1.7	-0.7
Czech Republic	3.6	4.5	6.3	6.8	6.1	2.5	-4.3	1.7
Estonia	7.6	7.2	9.4	10.0	7.2	-3.6	-14.1	0.8
Hungary	4.3	4.9	3.5	4.0	1.0	0.6	-6.3	-0.2
Latvia	7.2	8.7	10.6	12.2	10.0	-4.6	-18.0	-4.0
Lithuania	10.2	7.4	7.8	7.8	9.8	2.8	-15.0	-1.6
Malta	-0.3	0.7	3.9	3.6	3.8	2.1	-1.9	0.5
Poland	3.9	5.3	3.6	6.2	6.8	5.0	1.7	2.7
Romania	5.3	8.5	4.1	7.9	6.3	7.4	-7.1	0.8
Slovakia	4.8	5.0	6.7	8.5	10.6	6.2	-4.7	4.1
Slovenia	2.8	4.3	4.5	5.8	6.8	3.5	-7.3	1.1
<b>EEA</b>								
Iceland	2.4	7.7	7.5	4.6	6.0	1.0	-6.5	-3.0
Norway	1.0	3.9	2.7	2.3	2.7	1.8	-1.5	1.1
Switzerland	-0.2	2.5	2.6	3.6	3.6	1.8	-1.5	1.5

Note: Yellow field means IMF April 2010 estimates, red field – IMF July 2010 estimate

Source: International Monetary Fund, World Economic Outlook Database, April 2010

**Table 3: Annual growth of real GDP, in %, 2003-2010, EU candidates**

Country	2003	2004	2005	2006	2007	2008	2009	2010
Albania	5.8	5.7	5.8	5.4	6.0	7.8	2.8	2.3
Bosnia & Herzegovina	3.5	6.3	4.3	6.2	6.5	5.4	-3.4	0.5
Croatia	5.0	4.3	4.2	4.7	5.5	2.4	-5.8	0.2
Kosovo	5.4	2.6	3.8	3.8	4.0	5.4	4.0	4.8
Macedonia	2.8	4.1	4.1	3.9	5.9	4.8	-0.7	2.0
Montenegro	2.5	4.4	4.2	8.6	10.7	6.9	-7.0	-1.7
Serbia	2.4	8.3	5.6	5.2	6.9	5.5	-2.9	2.0
Turkey	5.3	9.4	8.4	6.9	4.7	0.7	-4.7	5.2

Note: Yellow field means IMF estimates

Source: International Monetary Fund, World Economic Outlook Database, April 2010

**Table 4: Annual growth of real GDP, in %, 2003-2010, CIS**

Country	2003	2004	2005	2006	2007	2008	2009	2010
Armenia	14.0	10.5	13.9	13.2	13.7	6.8	-14.4	1.8
Azerbaijan	10.5	10.2	26.4	34.5	25.0	10.8	9.3	2.7
Belarus	7.0	11.5	9.4	10.0	8.6	10.0	0.2	2.4
Georgia	11.1	5.9	9.6	9.4	12.3	2.3	-4.0	2.0
Kazakhstan	9.3	9.6	9.7	10.7	8.9	3.2	1.2	2.4
Kyrgyzstan	7.0	7.0	-0.2	3.1	8.5	8.4	2.3	4.6
Moldova	6.6	7.4	7.5	4.8	3.0	7.8	-6.5	2.5
Russia	7.3	7.2	6.4	7.7	8.1	5.6	-7.9	4.3
Tajikistan	10.2	10.6	6.7	7.0	7.8	7.9	3.4	4.0
Turkmenistan	17.1	14.7	13.0	11.4	11.6	10.5	4.2	12.0
Ukraine	9.6	12.1	2.7	7.3	7.9	2.1	-15.1	3.7
Uzbekistan	4.2	7.7	7.0	7.3	9.5	9.0	8.1	8.0

Note: Yellow field means IMF April 2010 estimates, red field – IMF July 2010 estimate

Source: International Monetary Fund, World Economic Outlook Database, April 2010

**Table 5: Annual growth of real GDP, in %, 2003-2010, other major countries**

Country	2003	2004	2005	2006	2007	2008	2009	2010
Brazil	1.1	5.7	3.2	4.0	6.1	5.1	-0.2	7.1
China	10.0	10.1	10.4	11.6	13.0	9.6	8.7	10.5
India	6.9	7.9	9.2	9.8	9.4	7.3	5.7	9.4
Japan	1.4	2.7	1.9	2.0	2.4	-1.2	-5.2	2.4
Korea	2.8	4.6	4.0	5.2	5.1	2.3	0.2	4.5
US	2.5	3.6	3.1	2.7	2.1	0.4	-2.4	3.3

Note: Yellow field means IMF April 2010 estimates, red field – IMF July 2010 estimate

Source: International Monetary Fund, World Economic Outlook Database, April 2010

**Table 6: Countries most affected by the financial crisis through financial channels, Sept. 2008 – May 2009**

**Countries most affected by the financial crisis through financial channels**

Rank**	Country	Currency Depreciation (%)	Bond Spreads(Bps)	Equity Market (%)
1	Ukraine	-59.9	733	-66
2	Argentina	-21.4	735	-58
3	Hungary	-18.9	283	-58
3	Poland	-35.2	127	-53
5	Jamaica	-20.4	439	-51
6	Ghana	-28.0	448	-35
7	Russia	-22.0	144	-44
8	Kazakhstan	-22.0	167	-34
9	Bulgaria	-1.5	175	-51
10	Mexico	-22.6	73	-35
11	Turkey	-21.7	44	-40
12	Greece	-1.2	95	-47
13	Sri Lanka	-6.6	464	-27
14	Indonesia	-8.8	85	-29
15	Austria	-1.2	39	-49
15	Pakistan	-6.3	132	-26
17	El Salvador	-0.3	176	-35
18	Vietnam	-7.1	53	-33
19	Italy	-1.2	13	-50
20	Lebanon	-0.3	57	-45
21	Netherlands	-1.2	17	-42
22	Brazil	-8.4	36	-28
23	Belgium	-1.2	14	-36
23	Chile	-5.5	80	-14
23	Tunisia	-7.7	62	-14
26	Ecuador	0.0	2528	-13
26	Egypt	-3.4	-137	-39
28	Spain	-1.2	20	-31
29	France	-1.2	11	-34
30	Colombia	-3.4	63	-10
30	Germany	-1.2	0	-34
32	Malaysia	-0.9	81	-12
33	Philippines	-0.1	53	-21
34	Peru	-0.4	42	-15
35	South Africa	1.5	39	-20
36	US	0.0	0	-24
37	Japan	9.2	-5	-17
38	China	0.3	-31	-11

**Note:** \*\*Rank from most to least affected. The country with the greatest currency depreciation was given a 1 (data from Wall Street Journal). Local currencies were compared to U.S. dollar, U.S. given 0 percent in currency depreciation. The country with the largest percentage drop in equity markets was given a 1 (data from World Bank GEM, Japan data from MSCI Barra). The country with the largest growth in bond spreads was given a 1 (data for EU countries from The Economist; data for remaining countries from World Bank GEM). EU bond spreads were compared to the German bund, while other bond spreads were compared to U.S. Treasuries (U.S. and German were given 0).

Source: Ali, Dadush & Falcao (2009)

**Table 7: Europe: Gross debt to GDP, in %, 2004-2009**

Region/ Country	2004	2005	2006	2007	2008	2009
<b>EU-27</b>	<b>62.2</b>	<b>62.7</b>	<b>61.4</b>	<b>58.8</b>	<b>61.6</b>	<b>73.6</b>
<b>Euro area</b>	<b>69.5</b>	<b>70.1</b>	<b>68.3</b>	<b>66.0</b>	<b>69.4</b>	<b>78.7</b>
Austria	64.8	63.9	62.2	59.5	62.6	66.5
Belgium	94.2	92.1	88.1	84.2	89.8	96.7
Bulgaria	37.9	29.2	22.7	18.2	14.1	14.8
Czech Republic	30.1	29.7	29.4	29.0	30.0	35.4
Cyprus	70.2	69.1	64.6	58.3	48.4	56.2
Denmark	44.5	37.1	32.1	27.4	34.2	41.6
Estonia	5.0	4.6	4.5	3.8	4.6	7.2
Germany	65.7	68.0	67.6	65.0	66.0	73.2
Greece	98.6	100.0	97.8	95.7	99.2	115.1
Hungary	59.1	61.8	65.6	65.9	72.9	78.3
Ireland	29.7	27.6	24.9	25.0	43.9	64.0
Finland	44.4	41.8	39.7	35.2	34.2	44.0
France	64.9	66.4	63.7	63.8	67.5	77.6
Italy	103.8	105.8	106.5	103.5	106.1	115.8
Latvia	14.9	12.4	10.7	9.0	19.5	36.1
Lithuania	19.4	18.4	18.0	16.9	15.6	29.3
Luxembourg	6.3	6.1	6.5	6.7	13.7	14.5
Malta	72.1	70.2	63.7	61.9	63.7	69.1
Netherlands	52.4	51.8	47.4	45.5	58.2	60.9
Poland	45.7	47.1	47.7	45.0	47.2	51.0
Portugal	58.3	63.6	64.7	63.6	66.3	76.8
Romania	18.7	15.8	12.4	12.6	13.3	23.7
Slovakia	41.5	34.2	30.5	29.3	27.7	35.7
Slovenia	27.2	27.0	26.7	23.4	22.6	35.9
Spain	46.2	43.0	39.6	36.2	39.7	53.2
Sweden	51.3	51.0	45.7	40.8	38.3	42.3
UK	40.6	42.2	43.5	44.7	52.0	68.1
Iceland	:	26.0	27.9	29.1	57.4	:
Norway	45.6	44.5	55.3	52.4	49.9	43.7

Note: Blue fields indicate countries where the public debt to GDP ratio increased by 15 percentage points or more in the period of 2007-2009

Source: Eurostat, [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=gov\\_dd\\_edpt1&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=gov_dd_edpt1&lang=en)

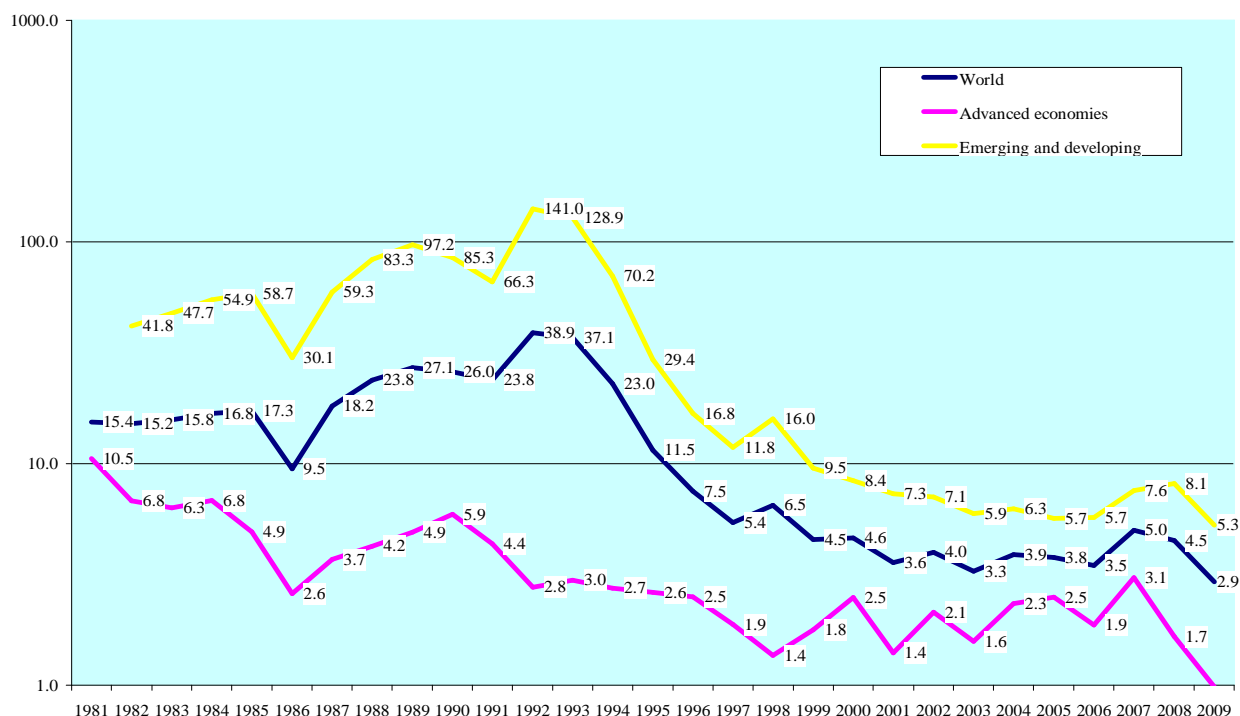
**Table 8: G7: Gross public debt to GDP, in % (2005-2015)**

Country	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Canada	70.3	68.7	64.2	70.4	81.6	82.3	80.9	78.7	76.2	73.4	70.5
France	66.3	63.7	63.8	67.5	77.4	84.2	88.6	91.6	93.2	94.3	94.8
Germany	68.0	67.6	65.0	65.9	72.5	76.7	79.6	81.4	82.1	82.0	81.5
Italy	105.8	106.5	103.4	106.0	115.8	118.6	120.5	121.6	122.8	123.9	124.7
Japan	191.1	190.1	187.7	198.8	217.6	227.3	234.1	240.1	244.0	246.7	248.8
UK	42.1	43.2	44.1	52.0	68.2	78.2	84.9	88.6	90.2	90.7	90.6
US	61.6	61.1	62.1	70.6	83.2	92.6	97.4	100.7	103.5	106.4	109.7

Note: Yellow fields contain IMF estimates/ forecasts

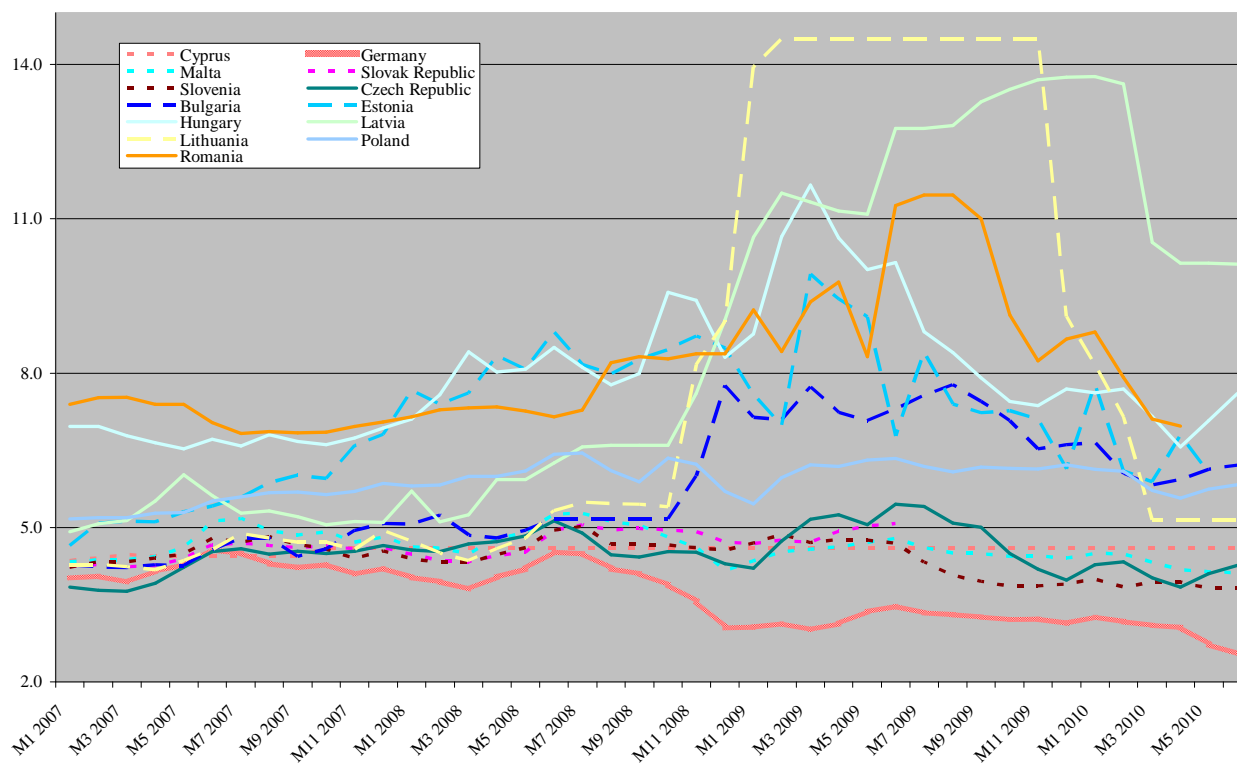
Source: IMF WEO Database, April 2010

**Figure 1: Global inflation, end of period, in %, 1981-2009 (log scale)**



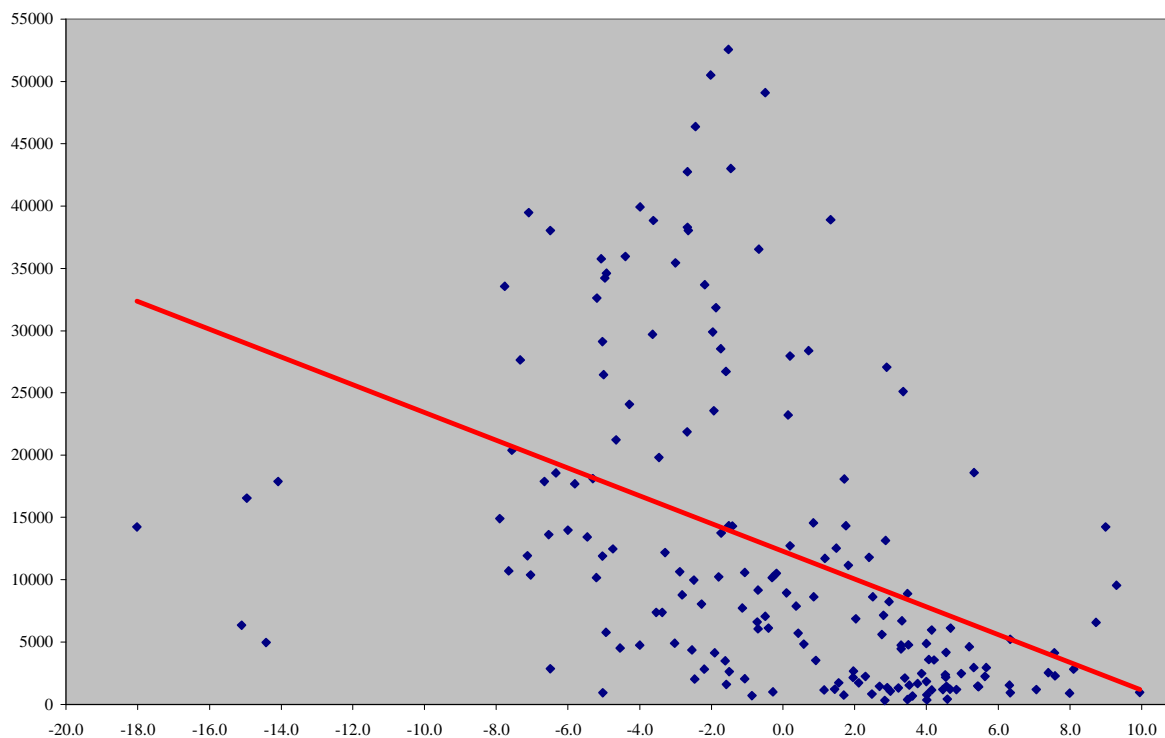
Source: IMF WEO Database, April 2010

**Figure 2: EU NMS: long-term government bond yields (annualized in %), 2007-2010**



Source: IMF IFS database

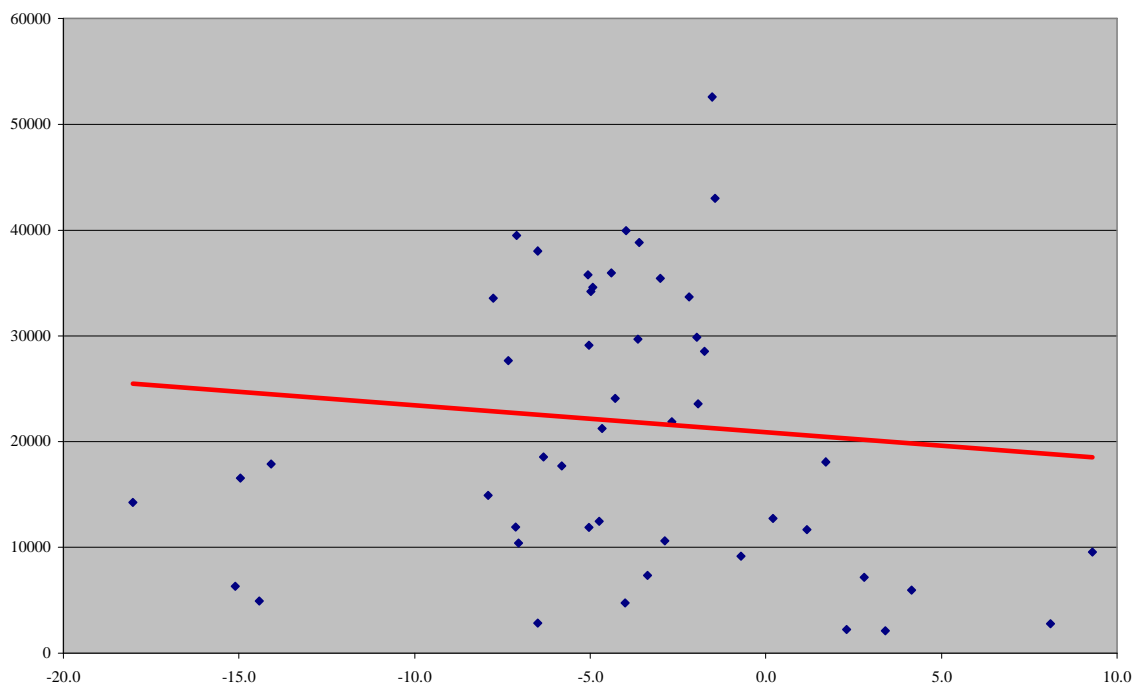
**Figure 3: GDP growth in 2009 (X-axis, in %) vs. GDP PPP per capita level (Y-axis, in current international dollars), 2006**



Note: Data for 179 countries

Source: IMF WEO Database, April 2010

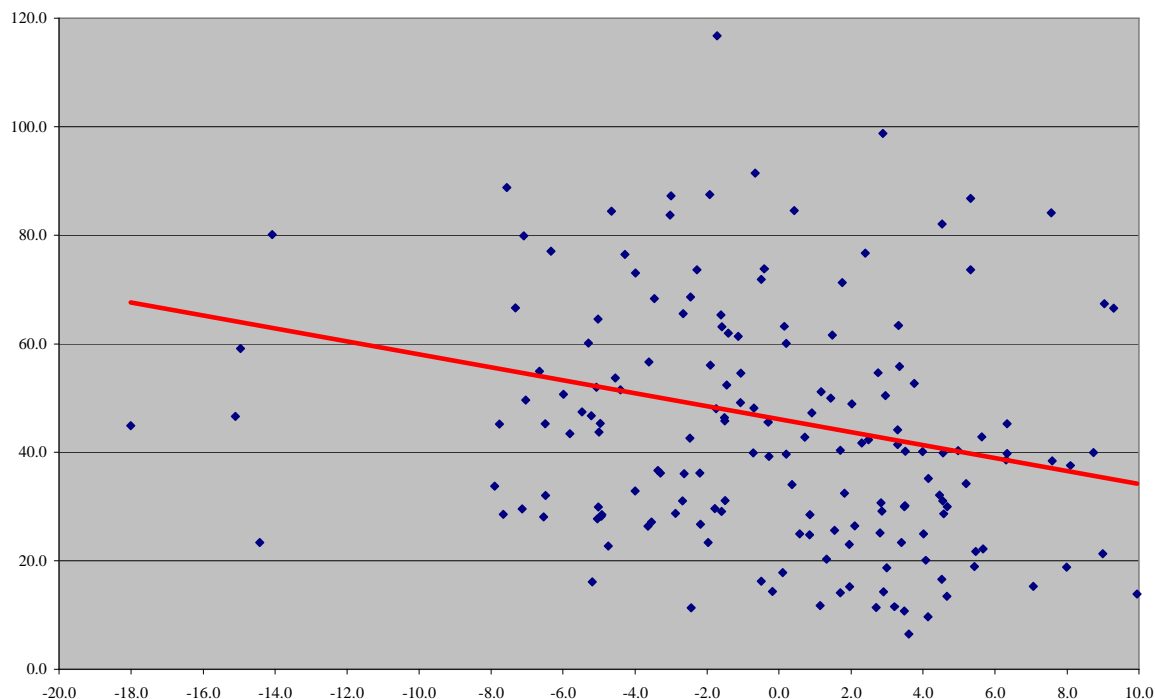
**Figure 3a: GDP growth in 2009 (X-axis, in %) vs. GDP PPP per capita level (Y-axis, in current international dollars), 2006, Europe and CIS**



Note: Data for 49 countries European and CIS countries

Source: IMF WEO Database, April 2010

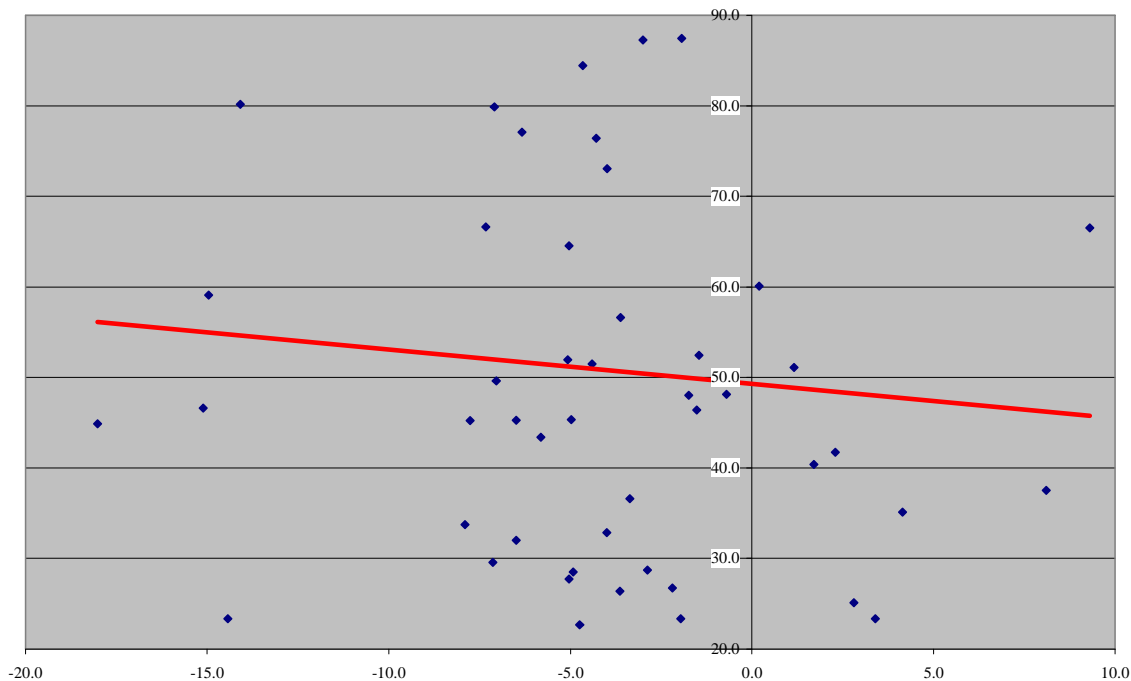
**Figure 4: GDP growth in 2009 (X-axis, in %) vs. exports-to-GDP ratio (Y-axis, in %) in 2006**



Note: Data for 179 countries

Source: IMF WEO Database, April 2010; World Bank WDI Indicators, 2010

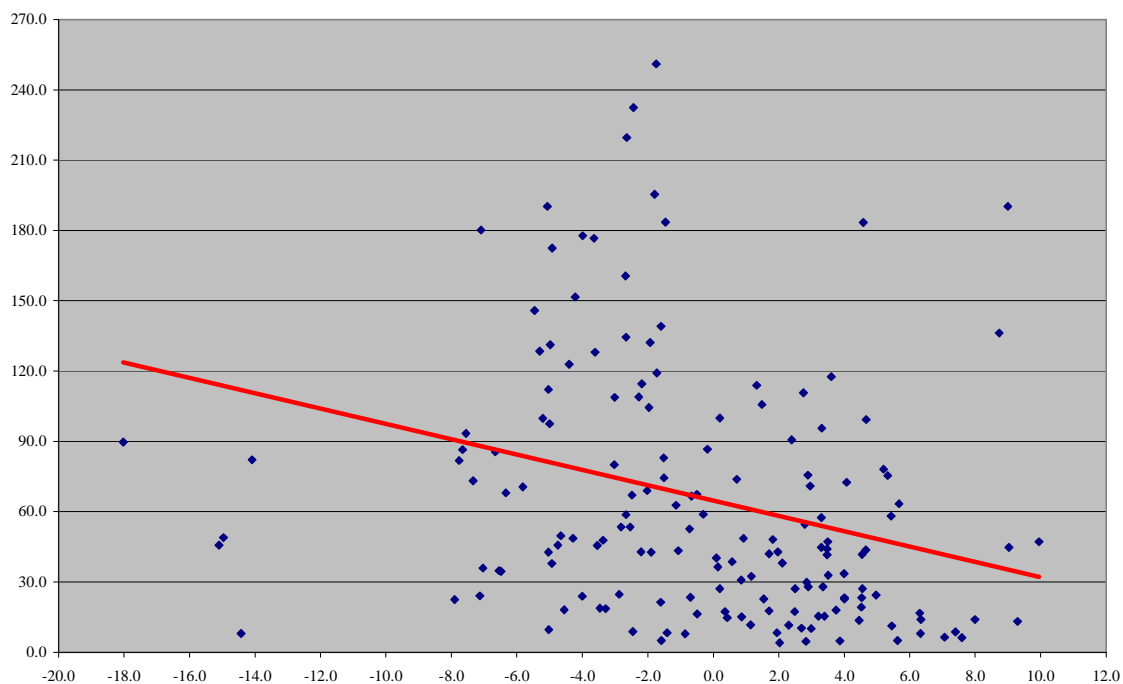
**Figure 4a: GDP growth in 2009 (X-axis, in %) vs. exports-to-GDP ratio (Y-axis, in %) in 2006 in Europe and CIS**



Note: Data for 48 European and CIS countries

Source: IMF WEO Database, April 2010; World Bank WDI Indicators, 2010

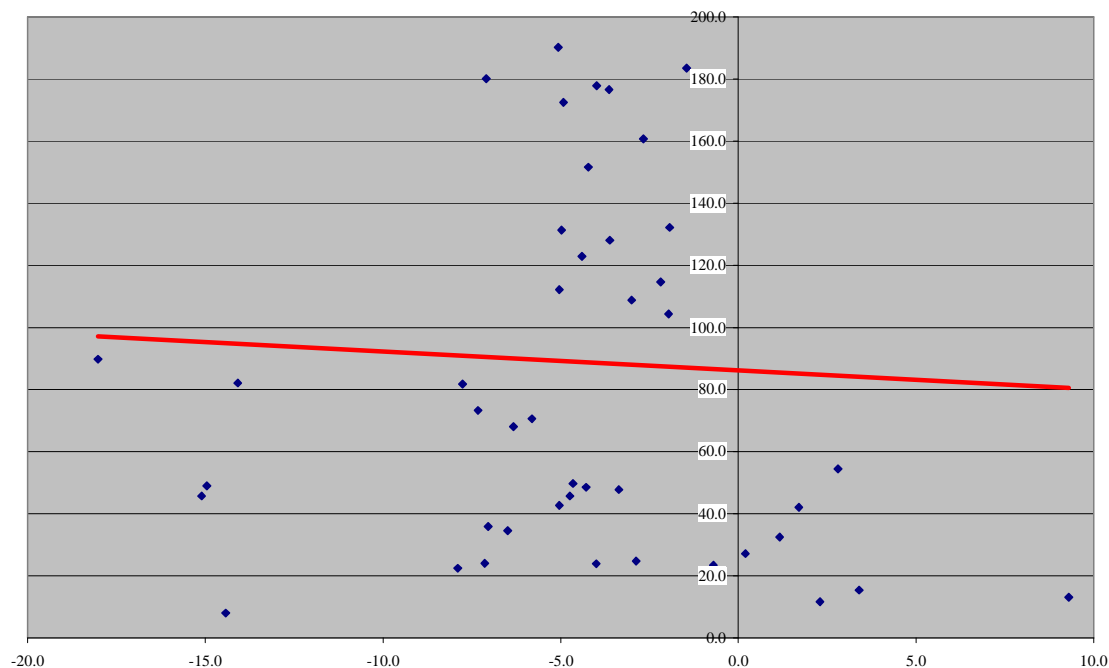
**Figure 5: GDP growth in 2009 (X-axis, in %) vs. domestic credit-to-GDP ratio (Y-axis, in %) in 2006**



Note: Data for 164 countries

Source: IMF WEO Database, April 2010; World Bank WDI Indicators, 2010

**Figure 5a: GDP growth in 2009 (X-axis, in %) vs. domestic credit-to-GDP ratio (Y-axis, in %) in 2006 in Europe and CIS**

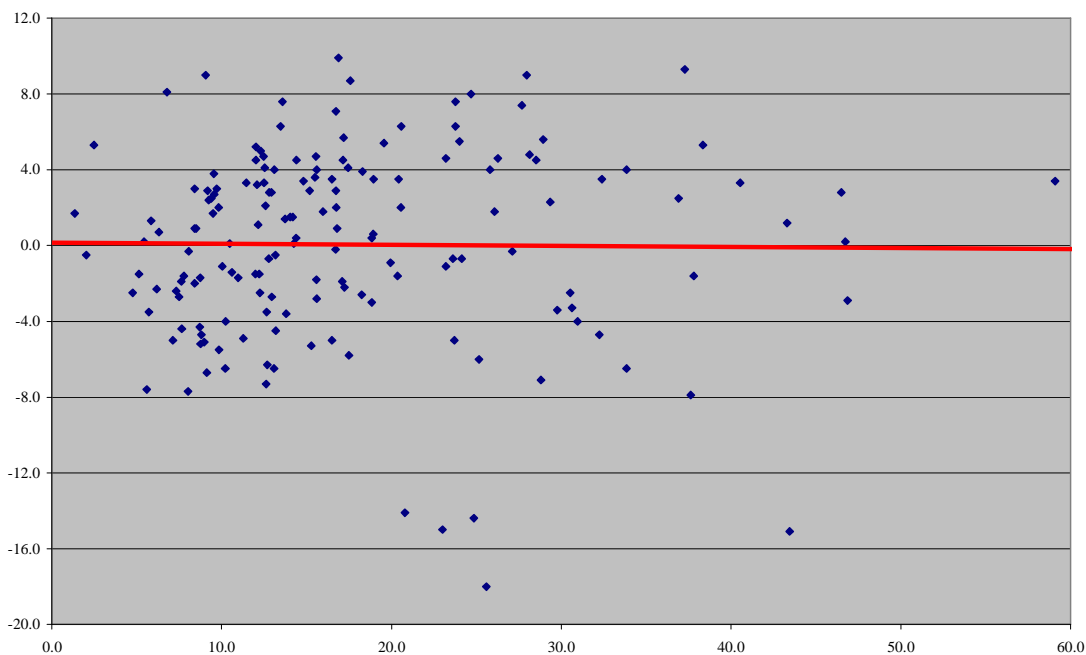


Note: Data for 46 European and CIS countries

Source: IMF WEO Database, April 2010; World Bank WDI Indicators, 2010



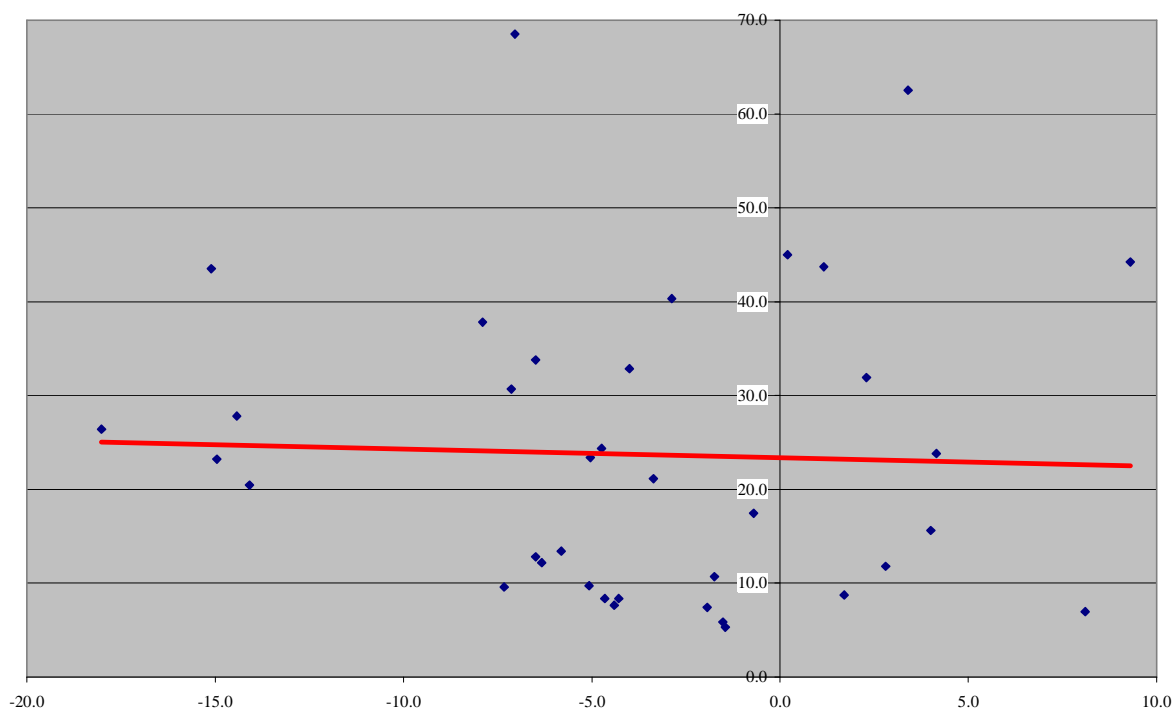
**Figure 6: GDP growth in 2009 (Y-axis, in %) vs. average money (M2) growth (X-axis, in %) in 2001-2007**



Note: Data for 164 countries

Source: IMF WEO Database, April 2010

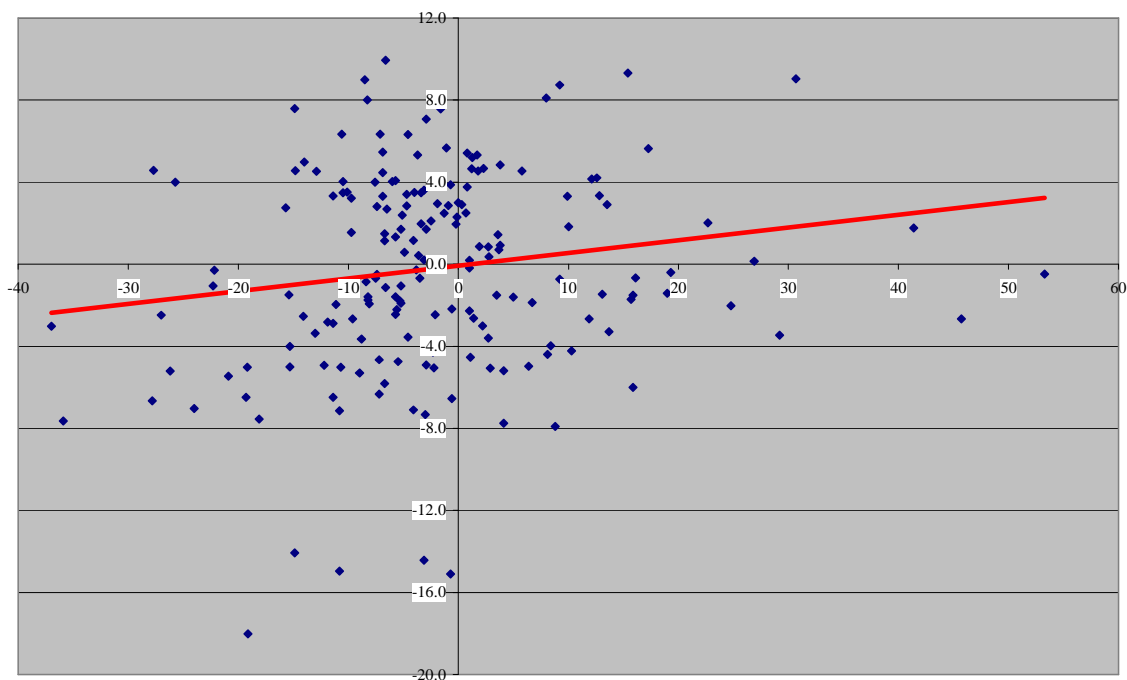
**Figure 6a: GDP growth in 2009 (Y-axis, in %) vs. average money (M2) growth (X-axis, in %), 2001-2007 in Europe and CIS**



Note: Data for 37 European and CIS countries

Source: IMF WEO Database, April 2010

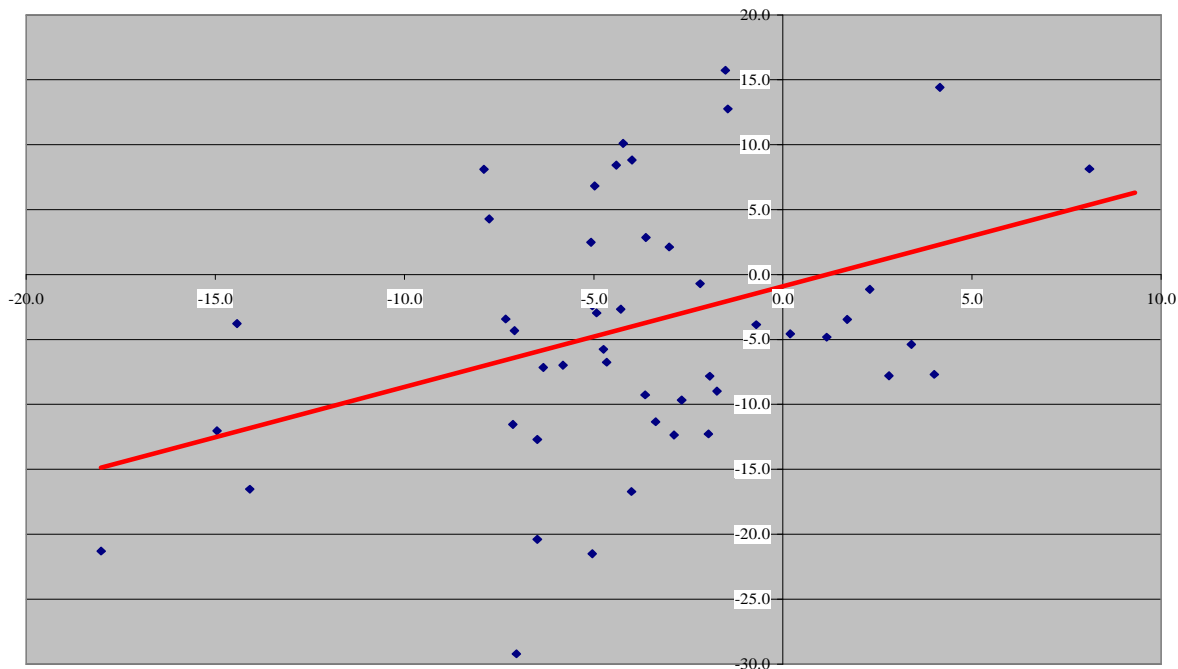
**Figure 7: Average current account balance in 2005-2007 (X-axis, in % of GDP) vs. GDP growth in 2009 (Y-axis, in %)**



Note: Data for 181 countries

Source: IMF WEO Database, April 2010

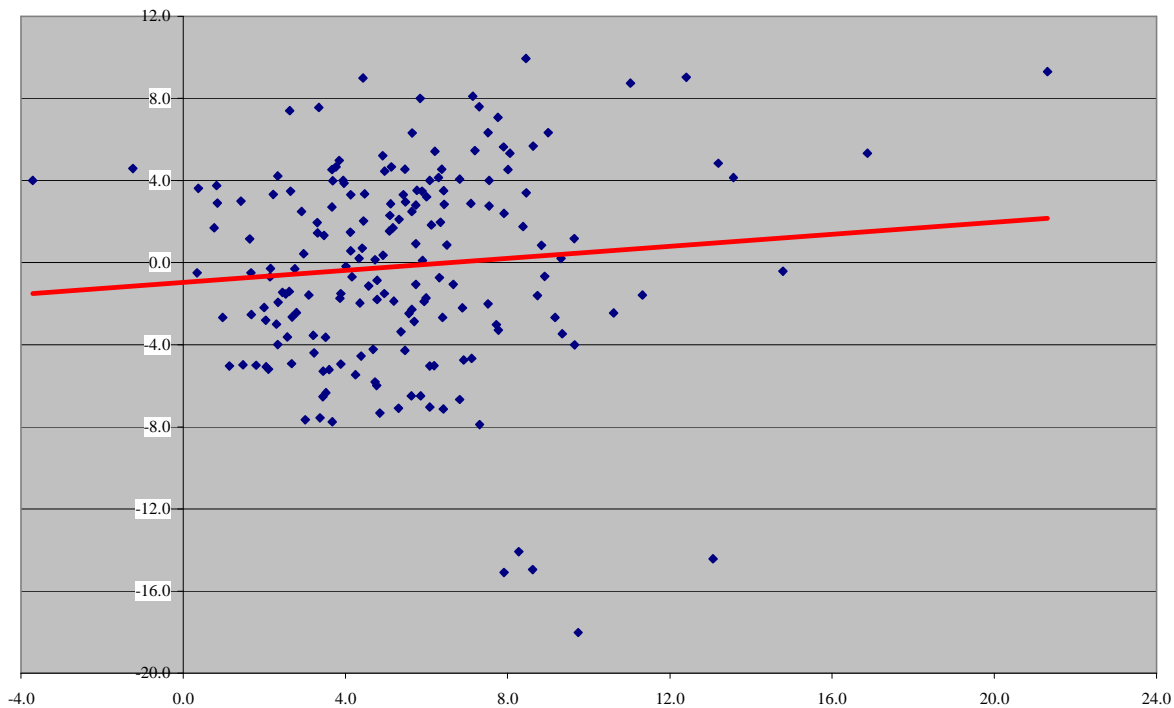
**Figure 7a: Average current account balance in 2005-2007 (X-axis, in % of GDP) vs. GDP growth in 2009 (Y-axis, in %) in Europe and CIS**



Note: Data for 50 European and CIS countries

Source: IMF WEO Database, April 2010

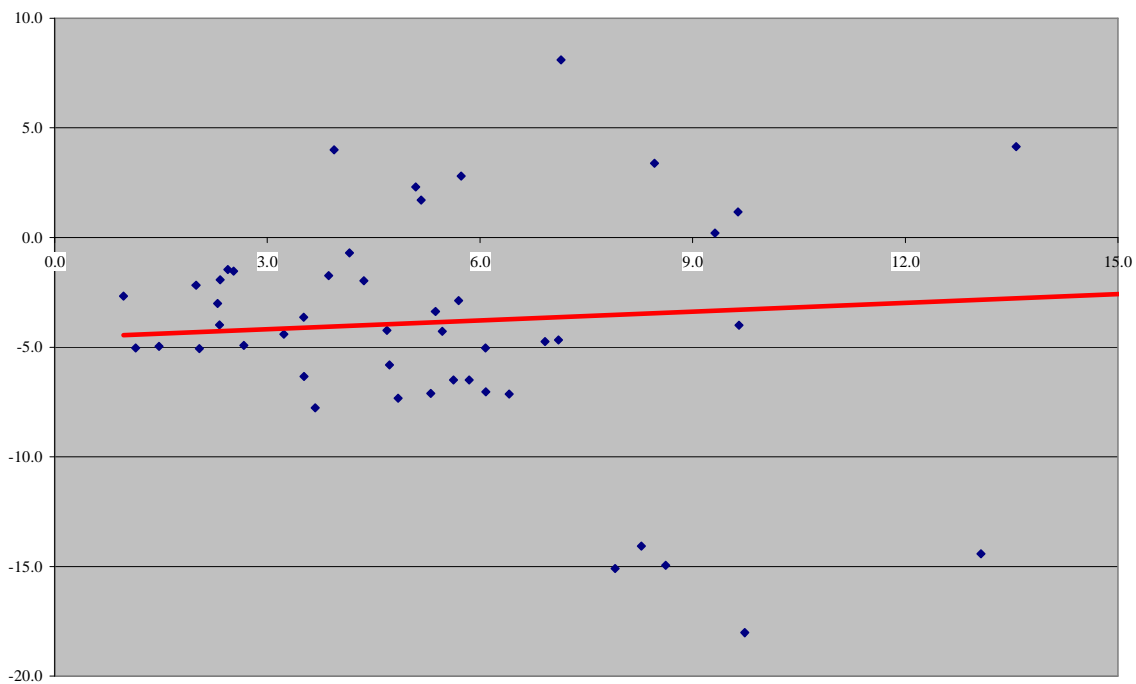
**Figure 8: Average GDP growth, 2003-7 (X-axis, in %) vs. growth in 2009 (Y-axis, in %)**



Note: Data for 182 countries

Source: IMF WEO Database, April 2010

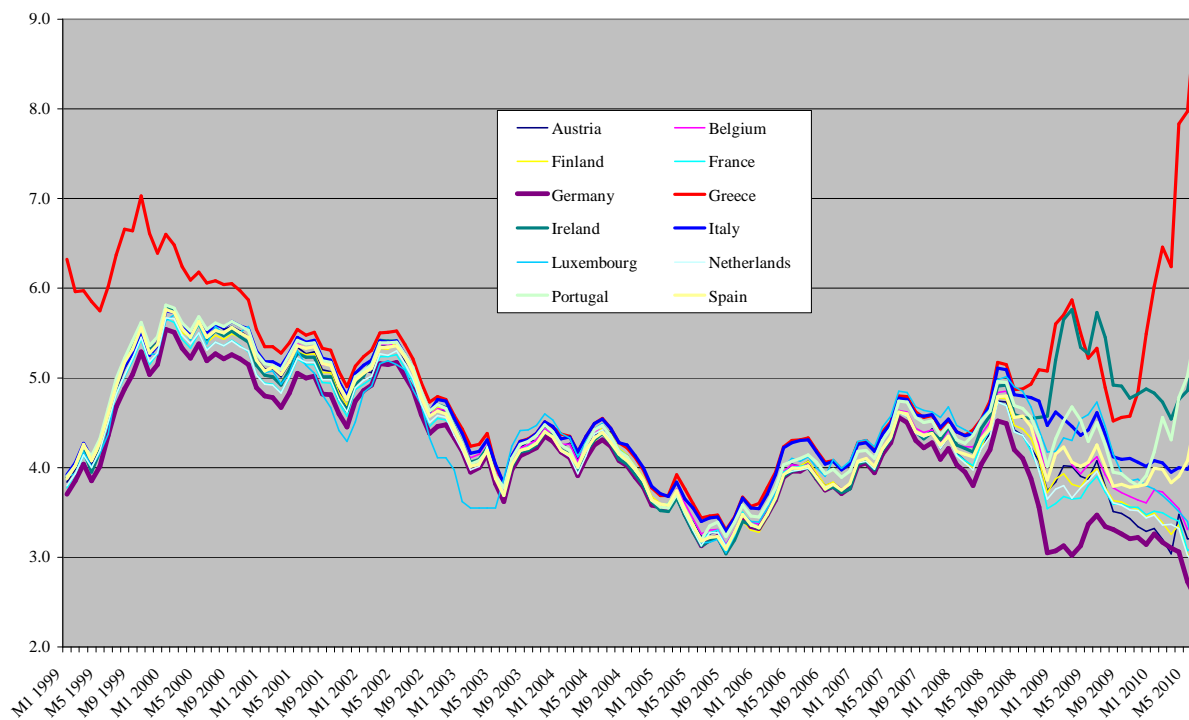
**Figure 8a: Average GDP growth, 2003-7 (X-axis, in %) vs. growth in 2009 (Y-axis, in %), Europe and CIS**



Note: Data for 50 European and CIS countries

Source: IMF WEO Database, April 2010

**Figure 9: Euro area: long-term government bond yields (annualized in %), 1999-2010**



Source: IMF IFS database