The Road to Sustainable Growth in Emerging Markets: The Role of Structural and Monetary Policies in Turkey

Aysan, Ahmet Faruk and Güler, Mustafa Haluk and Orman, Cüneyt

Central Bank of the Republic of Turkey, Central Bank of the Republic of Turkey, Central Bank of the Republic of Turkey

26 February 2013

The Road to Sustainable Growth in Emerging Markets: The Role of Structural and Monetary Policies in Turkey*

Ahmet Faruk Aysan† **Mustafa Haluk Güler**†† **Cüneyt Orman**†††

February 25, 2013

Abstract

The last decade witnessed an unprecedented economic growth in Emerging Market Economies (EMEs). EMEs have also been the main drivers of growth in the recovery following the global financial crisis. Nevertheless, EMEs continue to face a number of institutional and structural challenges that may pose risks to the sustainability of their recent growth performance, with potentially significant repercussions for the world economy. In this paper, we present a detailed account of Turkey's experience in dealing with various institutional and structural challenges during the last decade and provide evidence that taking the right steps can enable EMEs materialize their full growth potential going forward. Successful institutional and structural reforms can also provide room for monetary policymakers to effectively navigate their economies through turbulent times such as the recent global financial crisis.

Keywords: *Economic Growth, Structural and Institutional Reforms, Crises, Monetary Policy, Turkey, Central and Eastern Europe.*

JEL: *E52, E63, F30, F43, N10, O10*

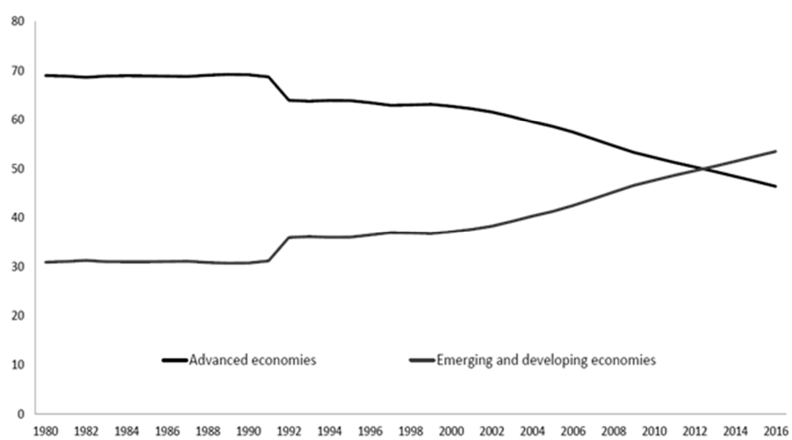
---

* The views expressed herein are solely of the authors and do not represent those of the Central Bank of the Republic of Turkey or its staff.

† Central Bank of the Republic of Turkey, Istiklal Cad., No: 10, Ulus, 06100, Ankara, Turkey.
†† Central Bank of the Republic of Turkey, Istiklal Cad., No: 10, Ulus, 06100, Ankara, Turkey.
††† Central Bank of the Republic of Turkey, Istiklal Cad., No: 10, Ulus, 06100, Ankara, Turkey.

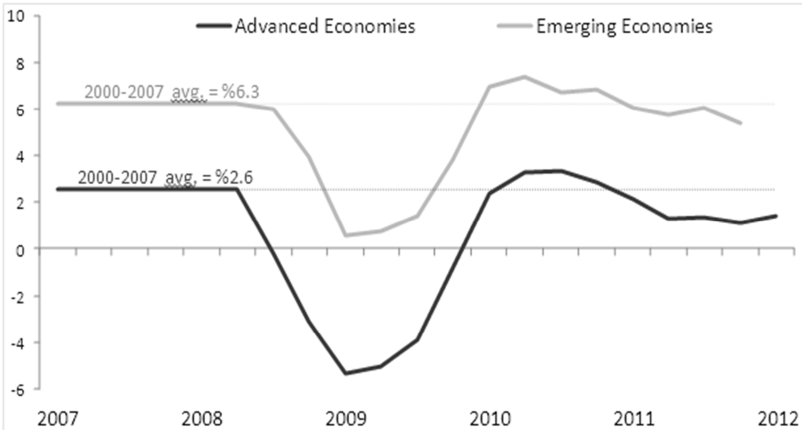
1. Introduction

The contribution of emerging market economies (EMEs) to world output increased significantly in the 2000s. According to an HSBC report, emerging market economies now account for roughly 50 percent of world output, up from about 35 per cent in 2000 (see Figure 1).[1] While the global financial crisis of 2008 sharply reduced economic growth rates world-wide, the slowdown in emerging market economies has been substantially less than that observed in advanced economies, and the emerging market economies have also been the main drivers of growth in the subsequent recovery (see Figure 2). The most recent OECD 'Going for Growth' report projects that the emerging market economies will continue to be the drivers of global growth until 2060, with major consequences for the composition of the world economy.[2]



Source: HSBC, World in 2050, January 2012.

Figure 1 ***Shares in World GDP (based on PPP, in per cent)***



Source: Bloomberg.

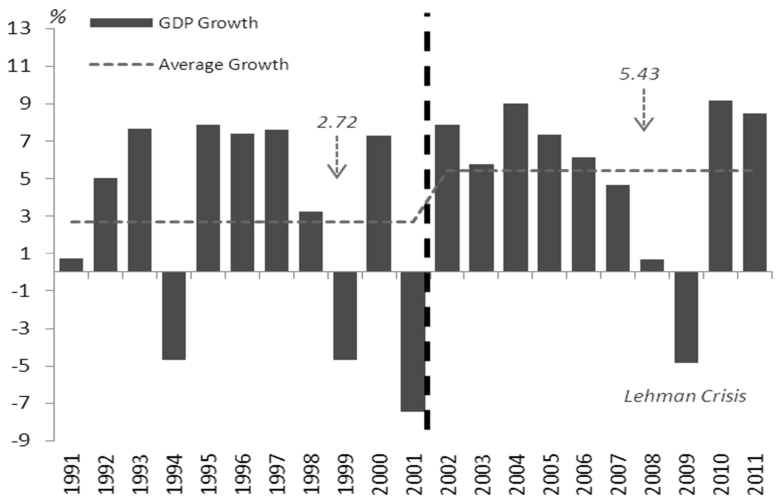
Figure 2 ***Global growth rates (annual change in per cent)***

Despite their perceived favourable growth prospects and increasing importance in the global economic landscape, however, emerging market economies face a number of institutional and structural challenges that may pose risks to the sustainability of their high growth performance. Some of the institutional difficulties have historically been and, to varying degrees for different countries, continue to be the presence of weak democracies, opaque government policies, and populist cycles aiming to maximize short-term objectives. The main structural challenges, on the other hand, have typically been the unsustainably high levels of public debt, high and chronic inflation, and shallow and under-regulated financial sectors. Fortunately, there has been tremendous progress in several emerging market economies along both dimensions in the recent decades, with desirable outcomes. Nevertheless, the emerging market economies have still a long way to go in ensuring that the recent progress can be carried into the future. In particular, the ability of the emerging market economies to sustain the high levels of growth rates they have attained in the recent past is closely linked with their ability to deal ably with the abovementioned institutional and structural challenges.

This paper aims to portray the experience of Turkey in addressing these institutional and structural changes since the 1990s. To this end, Section 2 provides a detailed account of Turkey's experience in recent years. In Section 3, we then compare and contrast the recent experience of Turkey with the experiences of peer emerging market economies in the Central, Eastern, and South Eastern European (CESEE) region to assess the relative performance of Turkey. Section 4 provides our concluding remarks.

2. Assessing the growth experience of Turkey

In order to get a better understanding of the growth experience of Turkey, it is important to look at its macroeconomic background and identify its major economic and institutional set-ups. In the 1990s, economic growth in Turkey was low and volatile, with three major recessions, the last one being the most severe (see Figure 3). By all accounts, the 1990s was a lost decade for Turkey. The severity of the 2001 crisis made it a turning point in the sense that it sparked a political momentum to engage in widespread institutional and structural reforms. This laid the foundations for a new era in which the Turkish economy has undergone a set of fundamental changes that resulted in an unprecedented growth performance. In particular, for the first time in half a decade, the Turkish economy grew at an average annual rate of nearly 7 per cent between 2002 and 2007. In order to understand the factors that contribute to this dramatic change, we now analyze the pre- and post-2001 crisis periods in detail.



Source: CBRT.

Figure 3 ***GDP growth (annual change in per cent)***

2.1 Before the 2001 crisis

Before the 2001 crisis, there were a number of structural problems in the Turkish economy regarding the institutional and economic set-up. A weak democratic system with fragile coalitions and weak governments was among the main institutional factors that retarded economic performance.[3] Prior to the crisis, multi-party coalition governments had been the norm and the average life of these coalition governments was only 16 months, compared to 60 months during 2001-12 period. Predictably, such a democracy tended to suffer from myopic electoral concerns, was hostage to populist policies, and failed to recognize the importance of fiscal discipline.

Government policies in the pre-crisis period were also opaque and unaccountable. State-owned banks financed the discretionary political spending of the ruling government and as a result encountered large duty losses, which were conveniently concealed thanks to the nontransparent accounting procedures.[4] These losses were compensated from the public budget. High and persistent budget deficits increased the influence of politics on the economy at large.

Another major institutional problem before 2001 was the lack of an independent central bank. The lack of an independent monetary authority was in fact a huge 'convenience' for the government since the rapidly growing government debt could be 'repaid' through an equally rapid monetary expansion. Unsurprisingly, this resulted in a highly inflationary economic environment that is at the same time fraught with uncertainty.

A final factor contributing to the 2001 crisis was the heightened level of risk in financial markets which increased the vulnerability of the banking system. In a system of pegged exchange rates and a significantly under-regulated banking system, most Turkish banks took excessive risk. In financing the high public sector deficit, banks were heavily involved in short-term borrowing in foreign currency from abroad. The size of bank open currency positions grew larger over time. In addition, the maturity of capital inflows remained short due to the uncertainty produced by the highly inflationary environment. This coupled with the large "duty losses" of state-owned banks financing discretionary political spending (see below) inevitably increased the vulnerability of the system. This consequent upward pressure on real interest rates worked to harm the potential growth rate.

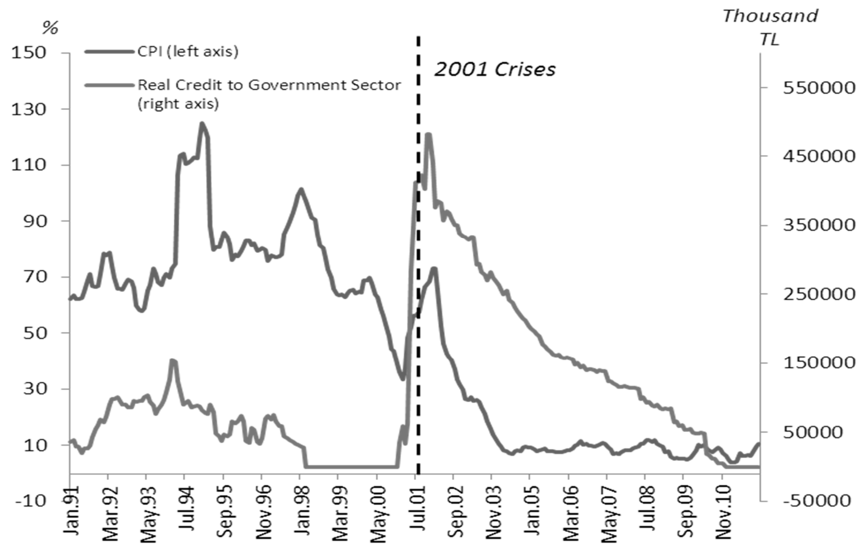
In such a vulnerable financial environment, three major economic crises occurred in 1994, 1998 and 2001. Unlike the 1994 and 1998 crises, the 2001 crisis brought about unprecedented changes in Turkey’s political and economic landscape and paved the way for the introduction of significant structural and institutional reform packages.

2.2 After the 2001 crisis

On 19 February 2001, at a time with extremely weak economic fundamentals, Turkey's last coalition government faced a severe political crisis when a public dispute between Turkey's President and Prime Minister against corruption escalated. This political tension caused panic in financial markets and triggered a financial crisis. With the run on foreign currency, the Central Bank of the Republic of Turkey (CBRT) lost a large share of its reserves and the payment system was frozen as the Turkish lira liquidity shrank rapidly and the public banks with high daily liquidity needs faced a severe liquidity crisis. Due to the pressures in financial markets, the exchange rate-targeting strategy was abandoned and the Turkish lira was allowed to float freely against foreign currencies on 22 February 2001. In that year, the economy experienced a 9.5 per cent contraction.

Following this sharp contraction, the so-called *'Strengthening the Turkish Economy'* economic reform programme was introduced. With the implementation of structural reforms and programmes after the crisis, the economy started to grow rapidly, the political influence on markets dissipated, and the economy gained more stability.[5] Since the reform programmes brought about a drastic transformation of the Turkish economy and created an environment that is conducive to stronger and stable growth, it is worthwhile to give an overview of these reforms and analyze their impact on the economy.

One of the most important reform areas was central bank independence. The independence of the CBRT ended the institutional relationship between the government and the monetary authority (see Figure 4), meaning that the government could no longer rely on the central bank to inflate away the debt burden of the government.

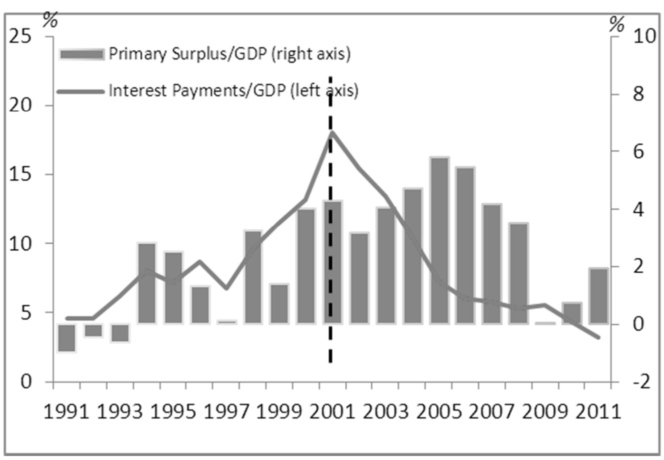


Source: CBRT.

Figure 4: ***CBRT monetization and inflation***

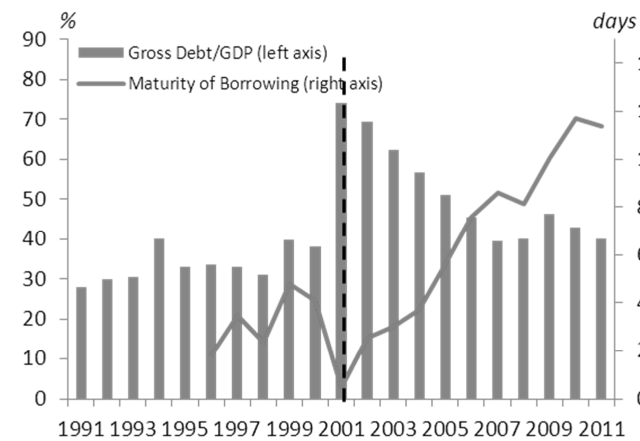
In addition to central bank independence, there were new laws and regulations on the restructuring of the banking sector. First, a domestic debt swap was launched in order to ensure easy liquidity for the Treasury and to lower the risk of banks by closing banks' open currency positions. These steps taken to strengthen the fiscal environment were combined with the introduction of legislative and operational regulations on the transparency and the effective supervision of the system. In this context, the Banking Regulation and Supervision Agency (BRSA), which was established not long before the crisis, was authorized as the sole regulator and supervisor in the banking sector. Under the new system, regulations were launched to closely monitor the banks for excessive risk-taking and their open currency positions. Reforms also covered the state banks, and the practice of assigning loss-creating duties to state banks, resulting in corresponding "duty losses", was ended; such political spending is now covered by the governmental budget. Moreover, some state banks merged and others were liquidated. These changes helped weaken the political influence on the economy significantly, and as a result, reduced economic uncertainty.

Concurrently with the above-mentioned steps, a tight monetary policy and fiscal policy were implemented. The CBRT began implementing first an implicit and then an explicit inflation targeting policy as a result of which the effectiveness of the monetary transmission mechanism increased dramatically. At the same time, very high primary surplus targets were announced by the government and, in order to achieve the targets, regulations were introduced in various taxation and public spending domains (see Figure 5). With tight fiscal measures, interest payments and the debt stock began to decrease. Specifically, the public debt stock went down from over 70 per cent of GDP in 2001 to less than 40 per cent in 2011 (see Figure 6). In addition, the maturity of government borrowing improved significantly after 2001. In particular, the average maturity of borrowing increased from 410 days in 2000 to 1170 days in 2011.



Source: Undersecretariat of Treasury.

Figure 5 ***Interest payments and primary surplus***



Source: Undersecretariat of Treasury.

Figure 6 ***Debt-to-GDP ratio and borrowing maturity***

The economic reform program after the 2001 crisis was extremely fruitful. The inflation rate that was about 60 per cent before the crisis declined rapidly, and by 2004, single-digit inflation was achieved for the first time in decades. With the confidence in the Turkish lira reconstructed, the currency reform of dropping six zeros from the lira was introduced in 2005. As a result of increased macroeconomic and financial stability combined with the renewed confidence in the government, the improved prospects for EU membership and the positive international conjuncture, capital inflows soared, most of which were in the form of long-term capital (see Figure 7). The rise in capital inflows, in turn, enabled the banking system to offer greater resources to the private sector. While the share of private-sector credit in banks' assets was as low as 19 per cent in 2001, it increased to 54 per cent in 2011, and in real terms, increased by 242 per cent (see Figure 8).[6]

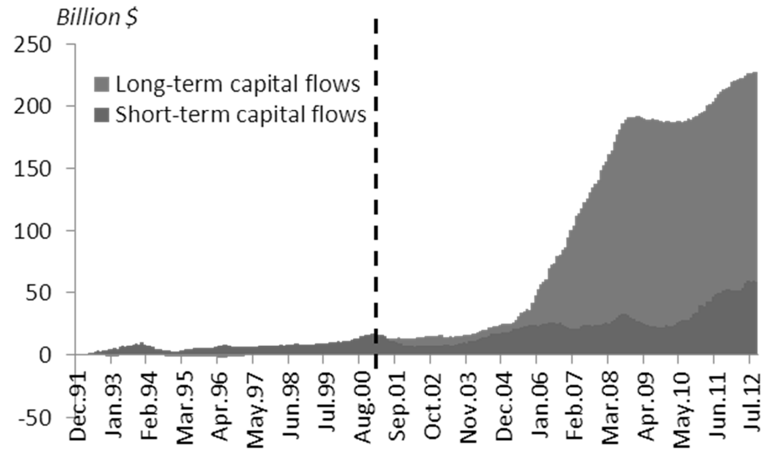
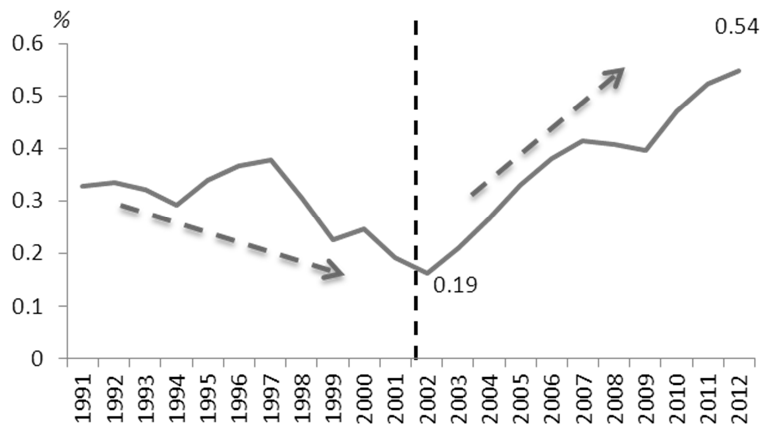


Figure 7 ***Capital flows (cumulative)***



Source: CBRT.

Figure 8 ***Credits to the private sector/total assets***

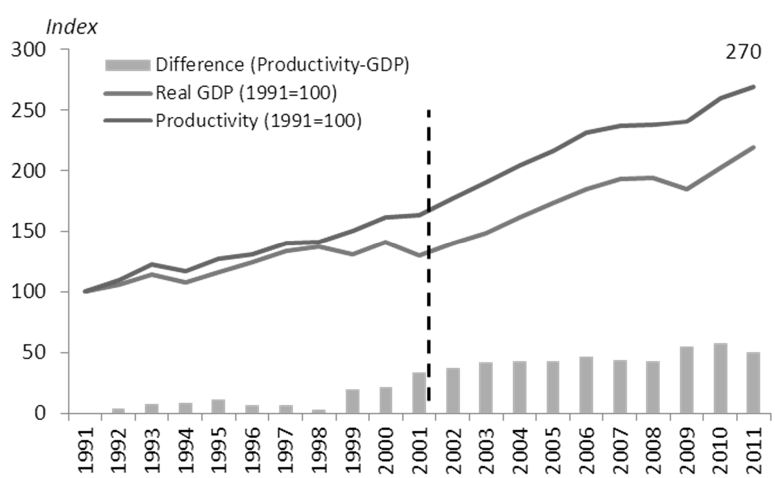
The positive economic outlook in the post-crisis period also improved political stability. Long-term policies and perspectives of governments ruling for longer periods replaced populist policies of short-term coalition governments. While the average life of government was 16 months in the 1990s, it increased to 60 months between 2002 and 2012. The EU compliance package passed by Parliament and government policies became more transparent and accountable.

All the above-mentioned developments in Turkey's economy created an enabling environment for growth. These reforms altered the growth dynamics of the Turkish economy and resulted in higher and stable growth rates. At a more fundamental level, there were important changes in the dynamics of productivity, the composition of expenditures, and the role of private sector in the economy. In particular, productivity increased considerably in the 2000s. The contribution of total factor productivity to growth increased dramatically from 0.1 per cent in the 1990s to 25 per cent after 2001 (see Table 1). Labor factor productivity and its contribution also increased after 2001 (see Figure 9).

	Contribution		
	Employment	**Capital Stock**	**Total Factor Productivity**
1990-2000	24.3	75.6	0.1
2002-2010	21.8	53.5	24.6

Source: Republic of Turkey Ministry of Development

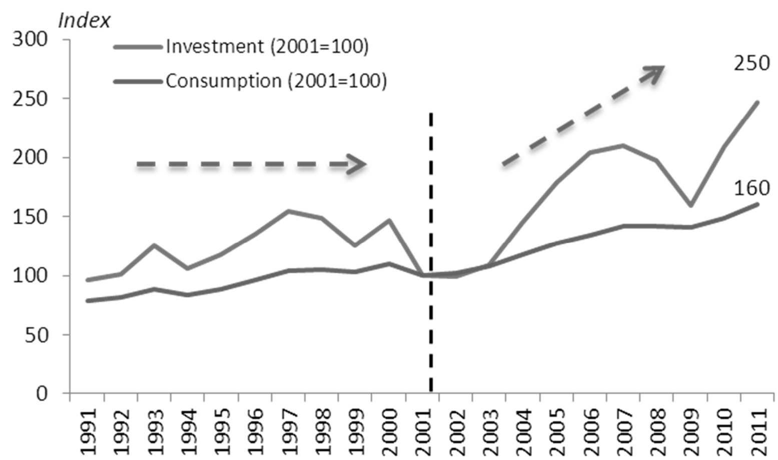
Table 1 ***Sources of growth***



Source: CBRT.

Figure 9 ***Productivity and real GDP (1991=100)***

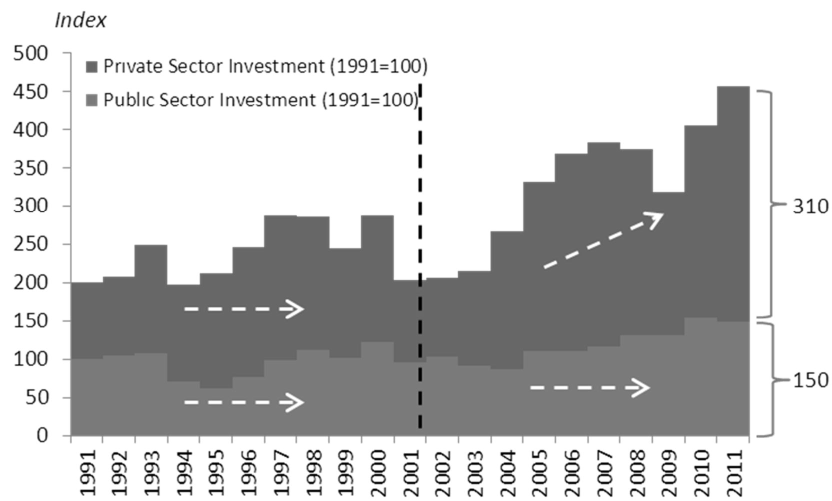
Another significant change in the economic dynamics of Turkey took place in the composition of expenditures. Both investment and consumption expenditures increased considerably. Importantly, investment expenditures rose more than consumption expenditures, reaching 250 per cent in real terms by 2011 (see Figure 10). This type of change in expenditure composition is favourable since it increases the potential growth rate of an economy in the long run.



Source: CBRT.

Figure 10 ***Investment and consumption expenditures (2001=100)***

Last but not least, the private sector started to play a larger role in economic activity and became the main source of growth and employment after 2002. Government investment expenditures' contribution to growth, on the other hand, did not change significantly. As can be seen from Figure 11, private-sector real investment expenditures increased threefold in the 2000s.



Source: CBRT.

Figure 11 ***Public and private Sector investment expenditures (1991=100)***

2.3 Monetary policy stance after the Lehman crisis: an immediate response to the crisis

The global financial crisis of 2008 underscored the importance of a pro-active central bank in protecting the environment for stable growth. Being pro-active requires closely monitoring the developments in both domestic and global economies and taking the necessary precautions in a timely manner. Following the collapse of Lehman Brothers, the CBRT moved ahead of most other emerging market economies' central banks and took decisive measures to protect economic growth. In addition to the longer-term structural reform process initiated after the 2001 crisis, monetary policy measures implemented in response to the Lehman crisis and macroeconomic governance in this period eased the adverse effects of the turmoil on the economy. Some of the main policy measures taken by the CBRT are the following:

i. The CBRT cut overnight rates by a total of 10.25 percent from November 2008 to November 2009. This is more than any other country operating within an inflation-targeting framework.

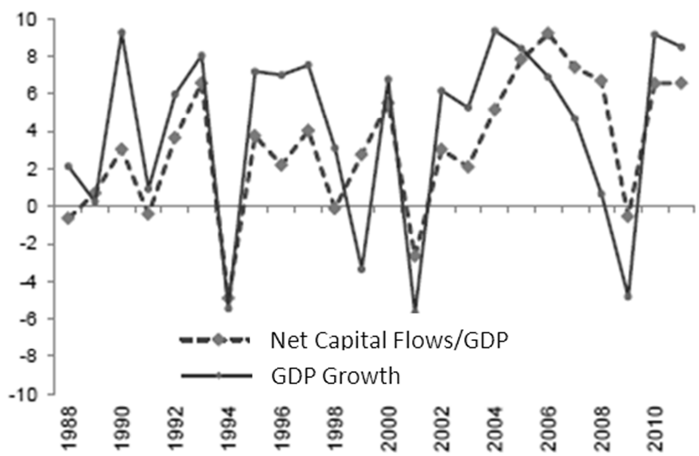
ii. The band between the borrowing and the lending rates was gradually reduced in order to limit fluctuations in overnight interest rates.

iii. The CBRT used FX reserves to support the banking system. The CBRT acted as a broker in the FX market between the financial institutions to facilitate the flow of FX liquidity in the system. The maturity of foreign exchange deposits borrowed by banks from the CBRT was extended and the lending rates were reduced. Additional FX liquidity was also provided to the banking system by a 200 basis point reduction in the FX required reserves ratio.

2.4 Soft landing after 2010

With the help of these measures, the initial impact of the recent global crisis on Turkish economy remained rather limited. In fact, after a contraction in 2008 and 2009, the economy started to recover rapidly. However, from late 2009 onwards, credit growth and then the current account deficit began to grow rapidly as well. The announcement of a second round of quantitative easing (QE2) in the United States in late 2010 further fuelled this growth, starting to create serious risks for macro-financial stability.

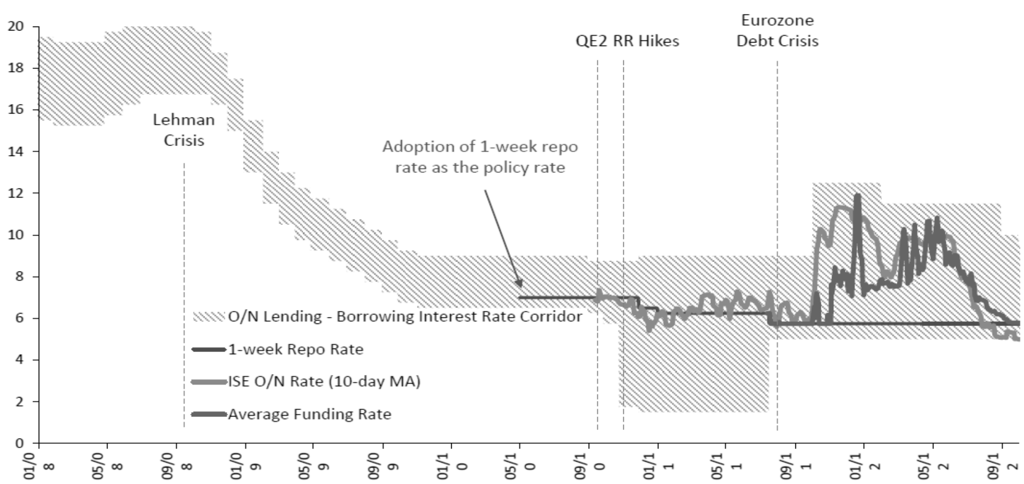
From Q4 2009 to Q2 2011, the current account deficit and credit growth increased from 2.1 per cent and 0.4 per cent of GDP to 9.9 per cent and 14.8 per cent of GDP, respectively. At the same time, the quality of current account deficit financing deteriorated significantly, with short-term capital flows almost completely replacing long-term flows. For Turkey, the stability (or the lack thereof) of capital flows has historically been a key factor in determining the national growth performance and macroeconomic stability (see Figure 12). In particular, a high current account deficit coupled with a high share of short-term capital flows in its financing has typically been associated with elevated risks for macro-financial stability. Therefore, a key objective of the CBRT's new policies and measures after QE2 has been to bring credit growth and the current account deficit to sustainable levels as well as to improve the financing of the current account deficit.



Source: CBRT.

Figure 12 ***GDP growth and net capital flows/GDP***

The first element in the new policy mix was a widened interest rate corridor. In particular, the overnight borrowing rate was reduced sharply while the lending rate was kept unchanged. This wide interest rate corridor allowed for significantly more volatility in short-term interest rates while leaving the average funding rate virtually unchanged. Open market operations conducted via quantity auctions further intensified the volatility in the short-term rates (see Figure 13). Both of these actions worked to discourage the inflow of short-term foreign capital, thereby contributing to the overall stability of capital flows. This corridor policy is used counter-cyclically. During good times, when the global financial markets lead to a surge in capital inflows, the corridor is broadened, whereas during bad times, when capital inflows are reversed or tend to follow a weaker trend, the corridor is narrowed.

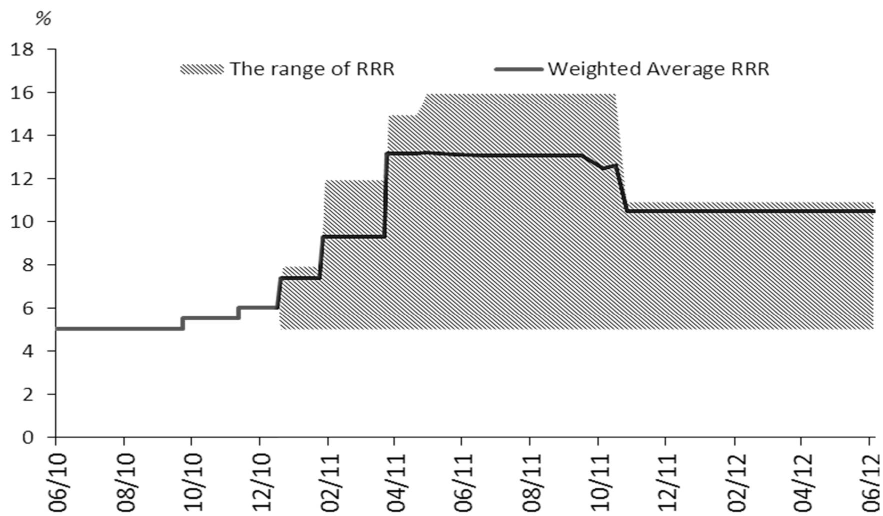


Source: CBRT.

Figure 13 ***Interest rate corridor and average funding rate***

The second important element in the new policy has been the Reserve Option Mechanism. Under this mechanism, banks are allowed to deposit foreign currencies or gold for their Turkish lira reserve requirements. This facility not only provides Turkish lira liquidity to the banks in a more permanent way and lowers their cost, but also supports the CBRT's reserves, which in turn reduces the adverse impact of volatile capital flows on the financial system and alleviates the appreciation and depreciation pressures on the Turkish lira.

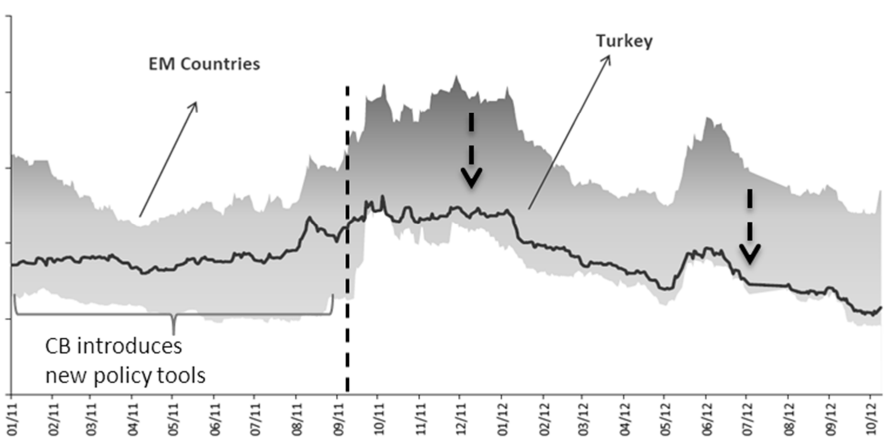
At the time the interest rate corridor was widened downwards, the CBRT took a number of accompanying measures to slow down the credit growth. Specifically, the remuneration of reserves was halted, reserve requirements were increased, and the coverage of reserve requirements were increased to include repos. In addition, reserve requirements were differentiated by maturities in order to alleviate the maturity mismatch concerns (see Figure 14).



Source: CBRT.

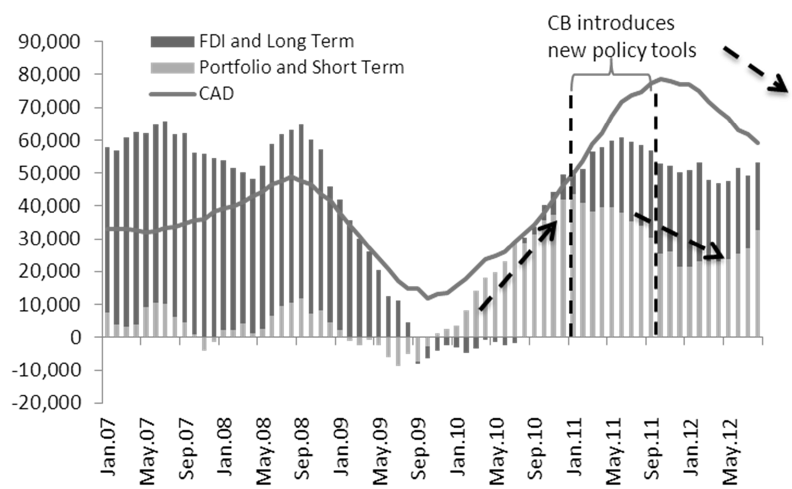
Figure 14 ***Reserve requirements***

With the help of this new policy mix, the economy began to move in the desired direction. Specifically, the increased volatility in short-term interest rates resulted in declines in the volatility of exchange rates (see Figure 15), encouraging long-term capital movements. The improvement in the quality of capital inflows became visible as early as early 2011 (see Figure 16). This also helped reduce excessive appreciation pressures on the Turkish lira, leading to depreciation in the real exchange rates (see Figure 17). As a result, the composition of demand started to move in the desired direction, slowing domestic demand and speeding up foreign demand. This rebalancing in the composition of demand, in turn, helped reduce the current account deficit to more reasonable levels. Hikes in required reserves coupled with a number of measures taken by the BRSA increased loan interest rates and began to impact on credit growth by mid-2011.



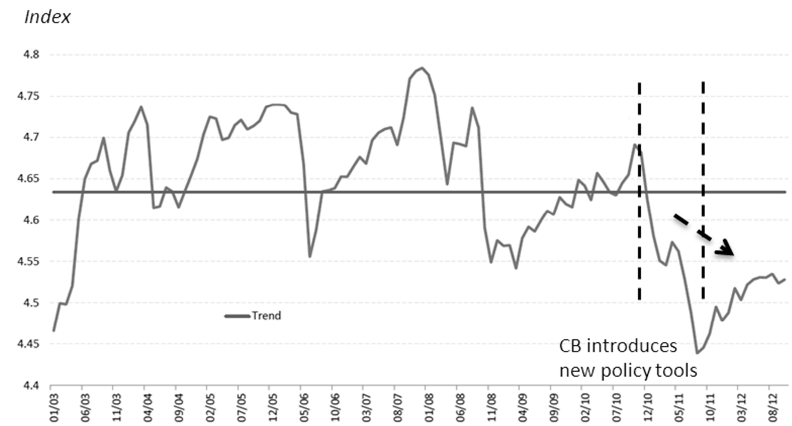
Source: Bloomberg, CBRT.

Figure 15 ***Volatility in emerging market currencies (implied for the next 12 months, in per cent)***



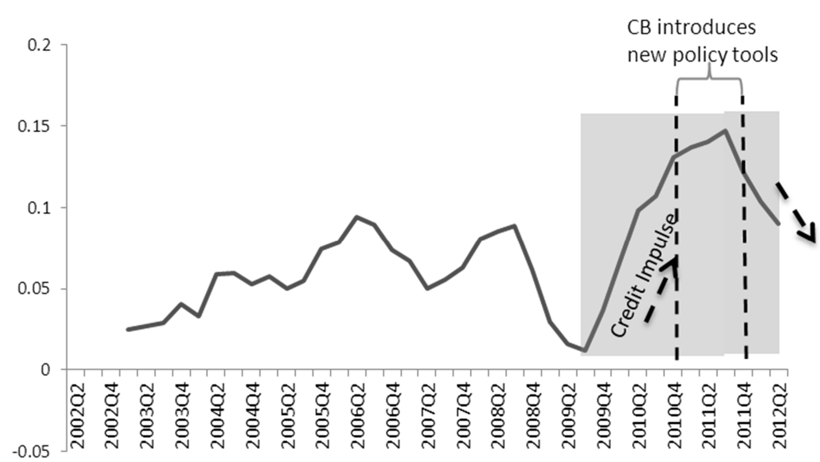
Source: CBRT.

Figure 16 ***Current account deficit and financing the deficit***



Source: Bloomberg, CBRT.

Figure 17 ***CPI-based (Developing Economies) real effective exchange rate (base year = 2003)***



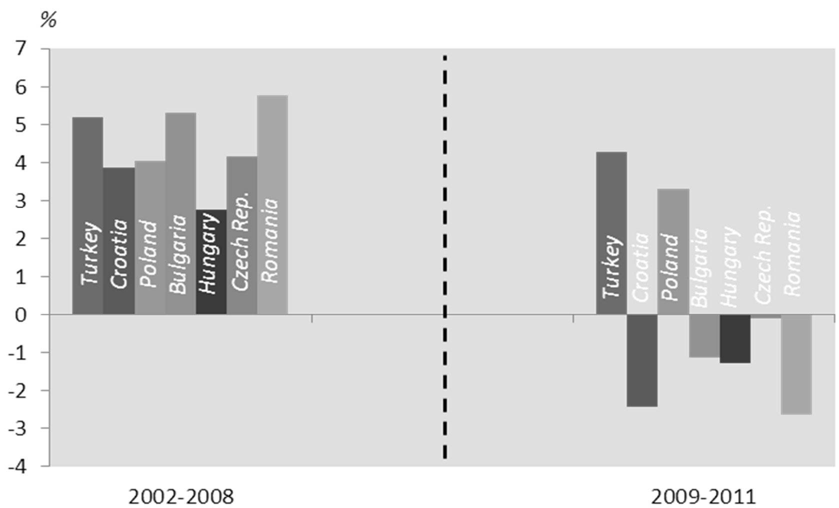
Source: CBRT.

Figure 18 ***Total credit change/GDP***

3. Turkish Economy versus CESEE Economies

While the growth performance of Turkey and CESEE economies was quite similar during 2002-08, the growth paths decoupled significantly following the collapse of Lehman Brothers in

2008 (see Figure 19). Specifically, while the average growth rates were generally negative for the CESEE economies during 2009-11, Turkey and Poland enjoyed average growth rates of roughly 4 per cent and 3 per cent, respectively. Remarkably, Turkish economic growth in 2010 and 2011 was 9.2 and 8.5 per cent, one of the highest growth rates in the world.



Source: World Bank (World Development Indicators (WDI) database).

Figure 19 ***Average growth rates***

What are the factors that contributed to this strong recovery in Turkey in the past few years? Foremost among them is the tight fiscal policy, that is, low levels of public debt and budget deficit. In contrast with most of the CESEE countries, Turkey has succeeded in maintaining its tight fiscal stance after the crisis. As can be seen from Figures 20 and 21, Turkey and Hungary were the only two countries in this region to actually improve their fiscal positions during this period relative to the pre-crisis period. This provided an environment that is supportive of growth led by the private sector.

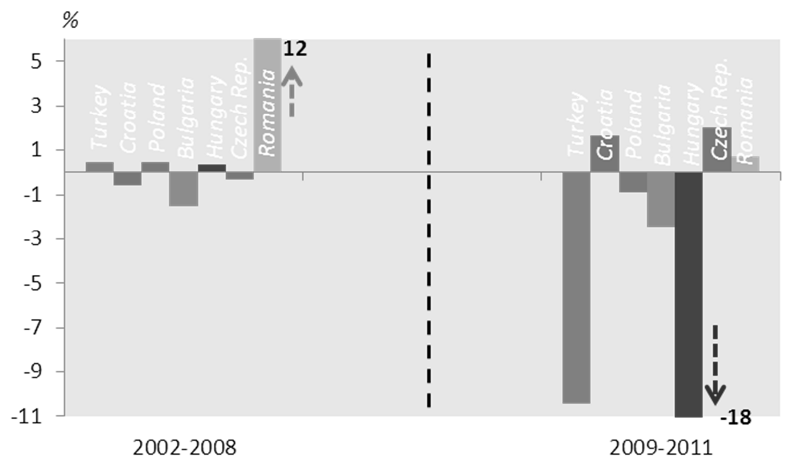
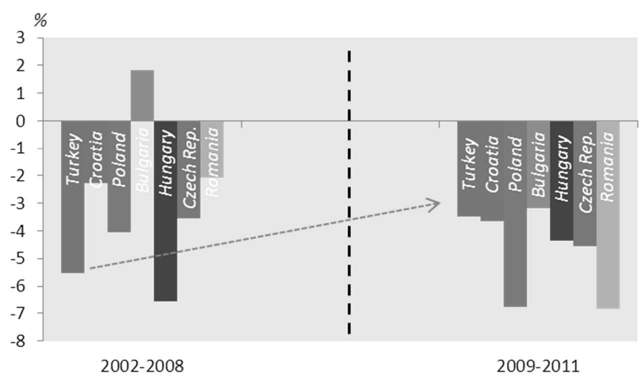


Figure 20 ***Increase in general government final consumption expenditure/GDP***



Source: World Bank (World Development Indicators (WDI) database).

Figure 21 ***General government budget deficit (per cent of GDP)***

Another factor that helps to explain the Turkish growth performance is the presence of a sound banking system that was created thanks to the ambitious reforms following the 2001 crisis. Importantly, there were no bank failures in Turkey during the global crisis. In fact, the Turkish banking system has come out stronger from the global crisis. Turkish banks have one of the lowest non-performing loan ratios and one of the highest capital adequacy ratios both in the world and in comparison with the emerging market economies in the CESEE region (see Figures 22 and 23).

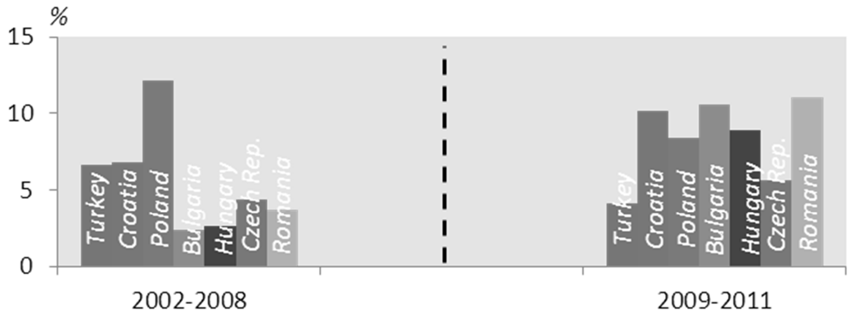
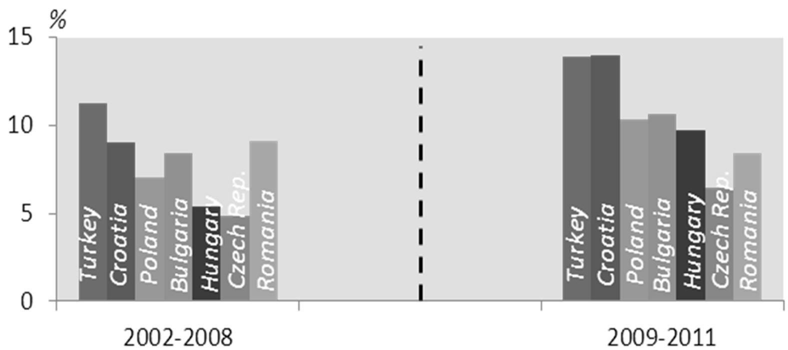


Figure 22 ***Banks' nonperforming loans to total loans (in per cent)***

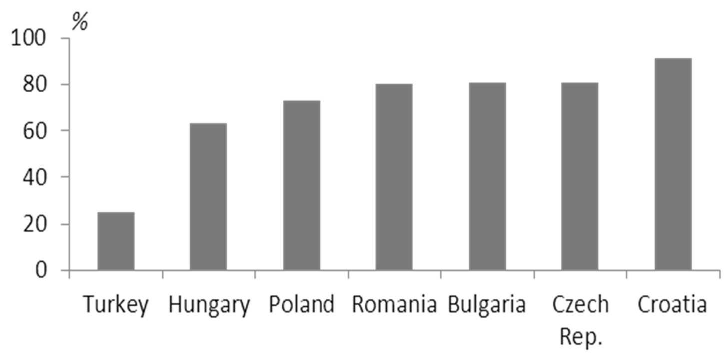


Source: World Bank (WDI database), EBRD (Transition Report).

Figure 23 ***Banks' capital to assets ratio (in per cent)***

Low foreign ownership is another factor that contributes to the soundness of the Turkish banking system. Globalization of the financial system through foreign bank ownership could internationally transmit shocks through the banking sector.[7] Thanks to low foreign ownership, Turkey has been affected less by the recent crisis than many other countries. Moreover, Turkish households were banned from taking out FX-denominated loans from banks in 2009. This policy measure shielded households against currency risk and also against excessive borrowing.

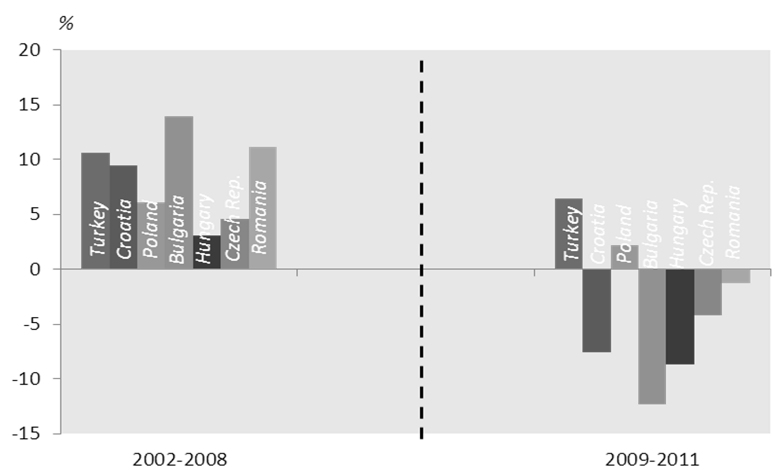
Besides, the imposition of loan-to-value restriction helped to alleviate credit risk in the aftermath of the crisis. In 16 December 2010, the BRSA limited residential mortgage loans to 75 per cent of the appraised value of the residential unit in order to contain credit supply and also to alleviate credit risk associated with the swings in real estate valuations over time. According to the same resolution, mortgages on commercial real estate properties are limited to 50 per cent of the appraised value of the real estate.



Source: WDI, EBRD (Transition Report).

Figure 24 ***Foreign ownership in the banking sector (in per cent)***

Finally, a combination of disciplined fiscal and wise monetary policies as well as a sound banking system produced an environment that is supportive of investment in Turkey. As can be seen from Figure 25, differently from the CESEE countries, Turkey has succeeded in sustaining its high investment profile even after the crisis.



Source: World Bank (WDI database).

Figure 25 ***Gross fixed investment of selected countries (annual growth in per cent, 2002-11)***

4. Conclusion

There has been a tremendous increase in the importance of emerging market economies in the world economic landscape. They have also been quite resilient to the global financial crisis and were the main drivers of growth in the subsequent recovery. Despite their favourable economic outlook, however, the emerging market economies, both in the CESEE region and elsewhere, face a number of institutional and structural challenges which may jeopardize their recent success story. Whether they will be able to carry this success into the future depends critically on their success in dealing with various challenges some of which we touched upon in this paper.

The recent experience of Turkey provides a good example. We have provided evidence that when the right institutional and structural steps are taken, the growth potential and stability can be significantly increased. A strong structural and fiscal position also provides room for monetary policy-makers to effectively navigate their economies through turbulent times such as the recent global financial crisis. The newly designed *'monetary policy mix'* of the CBRT also started to produce positive results in a short period of time. The unconventional monetary policies adopted by the CBRT are also a good indication of the institutional change in Turkey. The macro-prudential policy needs of Turkey are well addressed in this new policy framework which aims at reaching the main objective of price stability without ignoring financial stability in the medium and the long run. This paper presents the new monetary policy framework adopted in Turkey against which the dimension of institutional and structural change in Turkey may be assessed.

Notes

1 The report titled 'The World in 2050' was written by HSBC economist Karen Ward and published in January 2012.

2 Written by eight OECD economists, the title of the report is 'Looking to 2060: Long-term Global Growth Prospects' and was published in November 2012.

3 Onis and Aysan (2000) and Akin et al. (2009) provide evidence that the unstable political landscape of the 1990s had a substantial adverse effect on the Turkish economy.

4 For evidence on these so-called duty losses, see IMF (1998), Al and Aysan (2006), Aysan and Ceyhan (2007), Aysan and Ceyhan (2008 a-c) and Abbasoglu et al. (2008).

5 The European Council at its December 2004 summit in Brussels clearly underlined the rapid pace of transformation and reform that Turkey experienced after 2001. Also see Turhan (2008), Aysan et al. (2011), Turhan and Kilinc (2011) and Kilinc et al. (2012).

6 See UNCTAD (2003) on the importance of private sector credits in generating high and sustained growth in middle-income developing countries.

7 See Cetorelli and Goldberg (2011).

References

Abbasoglu O. F, Aysan, A. F. and Gunes, A. (2007) ‘Concentration, competition, efficiency and profitability of the Turkish banking sector in the post-crisis period’, *Banks and Bank Systems*, 2 (3), 106-15.

Akin, G.G., A.F. Aysan, and L. Yildiran.(2009), ‘Transformation of the Turkish financial sector in the aftermath of the 2001 crisis’, Turkish Economy in the Post-Crisis Era: the New Phase of Neo-Liberal Restructuring and Integration to the Global Economy, Z. Onis, and F. Senses (eds.) Routledge, pp. 73-100.

Al H. and Aysan A. F. (2006) ‘Assessing the preconditions in establishing an independent regulatory and supervisory agency in globalized financial markets: The case of Turkey’, *International Journal of Applied Business and Economic Research* 4, 125–46.Aysan A. F., M. M. Karakaya and M. Uyanık, (2011), ‘Panel stochastic frontier analysis of the profitability and efficiency of the Turkish banking sector in the post-crisis era’, *Journal of Business Economics and Management*, 12 (4), 629-54.Carmen, M. R. and S. R. Kenneth., (2010), ‘Growth in a Time of Debt’, *American Economic Review*, 100 (2), 573-78..

Cetorelli, N. and Goldberg, L., (2011), "Global Banks and International Shock Transmission: Evidence from the Crisis", *IMF Economic Review*, Palgrave Macmillan, 59 (1), 41-76..

IMF (1998), ‘Turkey: Recent economic developments and selected issues’, *IMF Staff Country Report,* 98/104, Washington, DC.

Johansson, A., Y., Guillemette, F., Murtin, D., Turner, G., Nicoletti, C., Maisonneuve, G., Bousquet, and F., Spinelli, (2012) ‘Looking to 2060: Long-term global growth prospects’, A Going for Growth Report, OECD, France.

Kılınç, M., Z. Kılınç and, M. I. Turhan, (2012),‘Resilience of Turkish economy during the global financial crisis of 2008’, *Emerging Markets Finance and Trade,* 48 (S5), 19-34.

Öniş, Z. and A. F. Aysan, (2000) ‘Neoliberal globalization, the nation state and financial crisis in the semi-periphery: A comparative analysis’, *Third World Quarterly*, 21 (1), 119-39.

Turhan, M. I. (2008), ‘Why did it work this time?: A comparative analysis of transformation of Turkish economy after 2002’, *Asian-African Journal of Economics and Econometrics,* 8, 255-80.

Turhan, M. I. and Z. Kilinc. (2011), ‘Turkey's response to the global economic crisis’, Insight Turkey 13 (1), 37-45.

UNCTAD (2003), ‘Trade and development report: Capital accumulation, growth and structural change,’ Geneva: United Nations Conference on Trade and Development.

Ward, K. (2012), ‘The world in 2050: Quantifying the shift in the global economy,’ HSBC Global Research.