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1994, 2001, and 2008-09

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# A Tale of Three Crises in Turkey: 1994, 2001 and 2008–09<sup>1</sup>

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## Abstract

Developing countries have encountered many economic crises since the 1980s, due mainly to structural problems related to their integration into the global economy. The Turkish economy is by no means an exception, and suffered significantly from the crises of 1994, 2001 and 2008–09. This paper investigates the tales of these three crises to shed light on the propagation mechanisms of crises and their implications for developing countries, given the Turkish experience. Our study is aiming at complementing existing studies by giving a very broad comparative picture of the main macroeconomic trends before and after the crises at the expense of ignoring many important details explained in other studies. This comparison can be also useful for understanding possible (and under current conditions highly unavoidable) implications of current developments in Turkish economy. Although there are many differences in the emergence of recent crises in Turkey, significant similarities can be found between the 1994 and 2001 crises. The crisis of 2008–09 can be considered exceptional in many aspects. The first two episodes were deemed to be mostly finance-led and finance-driven, with repercussions on the real sectors thereafter; but the 2008–09 crisis was a fully-fledged real sector crisis from the beginning, amid a direct collapse in employment and real economic productivity.

Key Words: Turkish Economy, Developing Countries, Crises

JEL Codes: F32, E63, E66, G01

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## Introduction

Developing countries have encountered dozens of economic crises since the 1980s, due mainly to structural problems related to their integration into the global economy. The Turkish economy is by no means an exception, and suffered significantly from the crises of 1994, 2001 and 2008–09. This paper investigates the tales of these three crises to shed light on the propagation mechanisms of crises and their implications for developing countries, given the Turkish experience. There are many studies investigating these crises either separately or in a comparative perspective.<sup>2</sup> These studies have broadened our understanding about these crises in many ways. Our study is aiming at complementing these studies by giving a very broad comparative picture of the main macroeconomic trends before and after the crises at the expense of ignoring many important details explained in other studies. This comparison can be also useful for understanding possible (and under current conditions highly unavoidable) implications of current developments in Turkish economy.

The main findings of the paper are as follows: Although there are many specific characteristics of each crisis, it is possible to see significant similarities between the cases of the 1994 and 2001 crises. The crisis of 2008–09 can be considered unique in many aspects. In this sense, two tales can be told about the three crises in question. Some stylized observations verify this picture. First, unprecedented government deficits with a very high interest burden and relatively high inflation were the characteristics of the period before the crises of 1994 and 2001, while high private debt was the characterizing factor in the 2008–09. Second, in all three episodes, financial flows played a role to varying degrees. The sheer size of the financial shock relative to Turkey's reserves and gross domestic product (GDP) played a key role in the crises of 1994 and 2001, whereas it seemed to have played a secondary role in the most recent crisis. In the first two crises, a very sharp exchange rate, foreign currency reserves, and interest rate movements were observed. Third, the trade channel played a decisive role in the last crisis, whereas there was no decline in Turkish exports in the previous two crises. The 2008–09 crisis likely exposed the limitations of export-based strategies. Fourth, the Turkish government implemented very tight monetary and fiscal policies during the crises of 1994 and 2001 whereas fiscal and monetary policies were relatively expansionary during the most recent crisis. This was possible due to specific domestic and global factors, such as relatively low public debt levels and low borrowing costs, mostly related to low interest rates globally, itself

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<sup>2</sup> Akyüz and Boratav (2003), Ekinci and Öztürk (2007), Özatay (2009), Rodrik (2009) Uygur (2010) are just a few among many of these studies.

a result of the enormous expansion of liquidity by developed economies. Fifth, unlike the other two cases, the crisis of 2008–09 took place in the midst of a severe global economic crisis, while the global economic environment was not exceptional in the previous crises. Sixth, the sensitivity of the labour market to crisis appears to have increased over time. In other words, the severity of the employment implications of crisis seems to have increased over time.

This paper will address these issues in turn. The next part will give a brief account of the implications of the crises. With reference to a large set of variables, the third part will investigate the pre-crisis conditions in the three cases. In this vein, this part will benefit from the literature on early warning indicators. The aim of this section is to explore an overall picture of pre-crisis conditions in order to understand factors leading to the crises. Furthermore, the existing domestic and global conditions before the crises will be explored as well. The fourth part will discuss how the crises spread throughout the economy (and through which channels), with specific reference to financial flows and the trade channel. The fifth part will be about the general implications of the crises and the fiscal and monetary measures taken in response, and the last part will conclude.

### **Immediate Implications of the Crises**

An economic crisis can be defined in different ways. In textbook versions, two consecutive quarters of negative GDP growth are considered a recession. Relatively deep recessions are deemed as crises. In some cases, sharp movements in unemployment, inflation, interest rates and exchange rates can also be utilized to determine the periods of crises. Throughout this paper, in order to make consistent comparisons, ‘crisis’ is defined as the period when quarterly real GDP recorded negative growth from the same quarter in the previous year. Accordingly, the Turkish economy has encountered four apparent economic downturns since the 1980s. Here, we will focus on the crises of 1994, 2001 and 2008–09, excluding the crisis of 1999 which can partially be explained by the devastating earthquake of August 1999 in north-western Turkey.<sup>3</sup>

In general, the comparison between different crises in terms of GDP is based on annual real GDP growth rates.<sup>4</sup> Turkish GDP declined by 4.8 per cent, 5.7 per cent and 4.9 per cent

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<sup>3</sup>Although the East Asian crisis of 1997 and, in relation to this the Russian crisis of 1998 had a role in the crisis of 1999, it is very difficult to disentangle the roles of these events in the 1999 Turkish crisis.

<sup>4</sup>Recently, Turkish Statistical Institute has made very significant updates in Turkish GDP series. These updates did not considerably change the growth rates around the crises years in question. Therefore, our analysis are not sensitive to these updates. However, there is a very huge discrepancy between new series and old ones after 2011. Up to now, Turkish Statical Institute has not satisfactorily explained the reason behind this.



annually in 1994, 2001 and 2008–09, respectively.<sup>5</sup> If annual growth rates are considered solely, then the crisis of 2001 is apparently the harshest one the Turkish economy has experienced after 1945. However, quarterly data reveal more information about the duration and magnitude of the crises. For the three crises in question, quarter two (Q2) of 1994, Q2 2001 and Q4 2008 were the quarters where negative growth was first recorded in that year. Similarly, the end periods of those recessions were Q2 1995, Q1 2002 and Q4 2009, respectively. The crises of 1994 and 2008–09 lasted four quarters, whereas the crisis of 2001 lasted three quarters, although the first positive growth in GDP recorded at the end of the crisis of 2001 was relatively very low, just over zero per cent. If seasonally adjusted real rates of GDP growth are taken into account, all three crises prevailed over four quarters. Figure 4.1 demonstrates that all three crises have a more or less classical V-shape, revealing that relatively monotonically decreasing growth rates are followed by monotonically increasing GDP growth rate (less negative rates) after the economy reaches its point of lowest negative growth.<sup>6</sup> Furthermore, we compared total output from the beginning and the end of the crises with that in the same previous period. Interestingly, irrespective of the duration of the crises, GDP declined by about 8 per cent (8.03 per cent in 1994, 8.18 per cent in 2001 and 8.53 per cent in 2008–09) in all three crises. As a result, although conventional understanding based on annual GDP growth comparisons implies that the most severe crisis in Turkey was in 2001, according to quarterly data the crisis of 2008–09 seems to have been at least as severe or even more severe than the 2001 crisis, irrespective of the fact that there was no financial collapse in 2008–09.

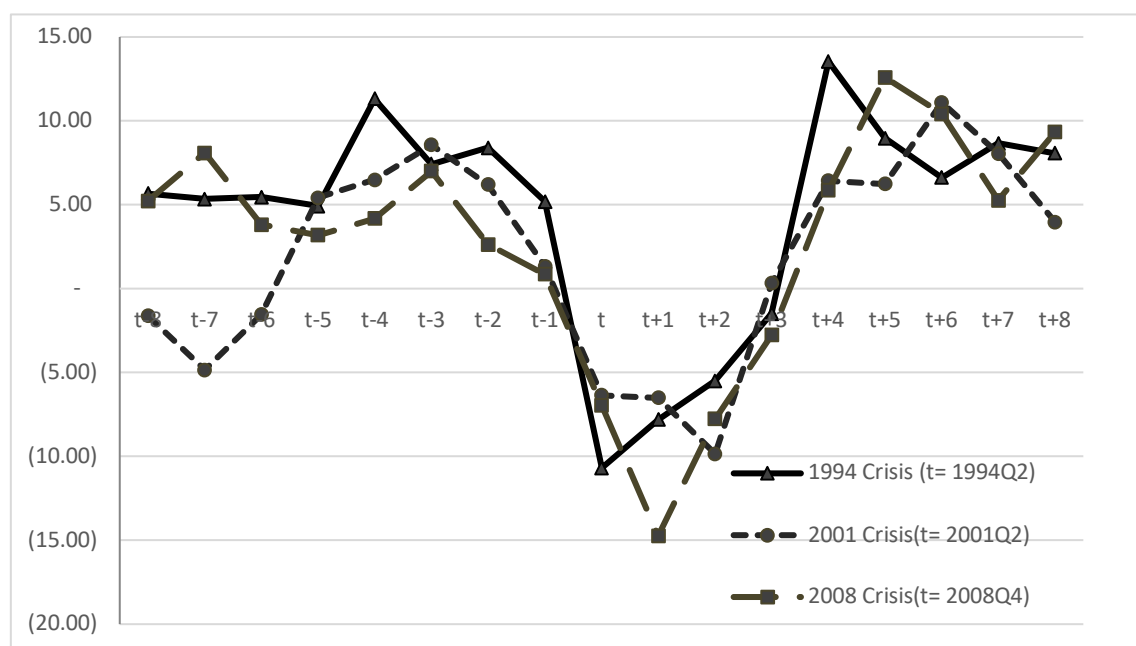
Indeed, Cömert and Uğurlu (2015) document that Turkish economic performance was one of the worst in the world in this period (see Table 4.1). Excluding very small countries from the sample, Turkish economic performance during the 2008–09 crisis was only marginally better than in a small number of former Eastern Bloc countries, including Latvia, Lithuania, Ukraine, Armenia and Russia, and raw material exporters, such as Botswana and Kuwait.

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<sup>5</sup>However, it is important to note that Turkish quarterly annual growth was 1.3 and 0.9 in 2001Q1 and in 2008Q3. In this sense, the crisis of 1994 began with a very high GDP decline in 1994Q2 (about 10 percent). However, sharp output declines in the other two crises followed slowdowns in GDP growth. Based on this observation, Türel (2010) argues that even though the crisis of 2001 and 2008–09 took place in the downswing phase of the national medium term cycle, the crisis of 1994 took place in upswing period of the national medium term cycle.

<sup>6</sup>Although Figure 4.1 gives us important information about the trajectory of the crises, it would be misleading to consider overall severity of the crises by investigating only this figure due to the level effects. The crisis of 2008–09 started in 2008Q4 and became influential throughout 2009Q1, 2009Q2 and 2009Q3. In general output levels are considerably lower during the winter in Turkey and many other developing countries, which can exaggerate percentage output declines.

**Figure 4.1: Turkish Growth Rate (compared with the same quarter of previous year), %**



Source: Prepared by the authors based on TurkStat data base

Although all three crises caused a severe decline in domestic production, the influence of each crisis on employment was significantly different. The severity of the employment implications of economic crises in Turkey appear to have gradually increased.<sup>7</sup> For example, as Figure 4.2 demonstrates, the unemployment consequences of the 1994 crisis are not very striking. However, Turkey's unemployment rate reached very high levels after the initial periods of negative growth in production during the 2001 and 2008–09 crises (see Figure 4.2). This trend implies that some structural changes in the Turkish economy, such as a decreasing rural population, and increasing deregulation in labour markets, appear to have increased the sensitivity of the labour market to economic crises.<sup>8</sup> Furthermore, the recovery periods after the crises have not generated enough employment, and have been described as periods of 'jobless growth' by Telli et al (2006) and Yeldan (2011).

<sup>7</sup> As Türel (2010) argues, one should be cautious about employment data in Turkey due to many changes made in the coverage and definitions of the employment variables.

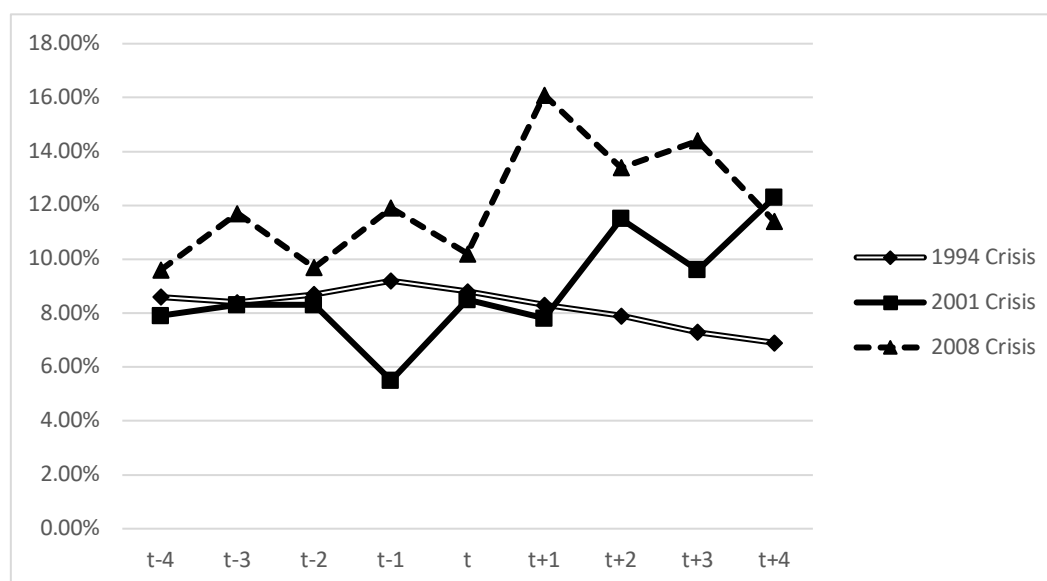
<sup>8</sup> A high share of rural employment in total employment would decrease pass through from output decline to the labor market due to the fact that agricultural goods demands would have less income elasticity. Turkish labor markets have been deregulated significantly through time; in many sectors, this might have enabled employers to decrease labor force in response to decline in demand for their production. Furthermore, working age household members planting their own land are considered self-employed in the agricultural sector. Therefore, as long as they plant their own land, they will not be considered unemployed. However, when they move to the city, they will be considered unemployed unless they will find a job or stop searching for a job. As a result, along with declining share of agriculture and migration to cities, labour market sensitivity to the crises can increase.

**Table 4.1: Growth Rates Across Selected Emerging Market Economies, %**

	<i>2002–06 average</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
Latvia	8.99	9.6	-3.27	-17.72
Lithuania	8.01	9.79	2.91	-14.84
Ukraine	7.44	7.6	2.3	-14.8
Armenia	13.32	13.74	6.94	-14.15
Botswana	5.18	8.68	3.9	-7.84
Russia	7.03	8.53	5.24	-7.8
Kuwait	9.74	5.99	2.48	-7.07
Croatia	4.71	5.06	2.08	-6.94
Hungary	4.2	0.11	0.89	-6.76
Romania	6.16	6.31	7.34	-6.57
Moldova	6.8	2.99	7.8	-6
Bulgaria	5.95	6.44	6.19	-5.47
<b><u>Turkey</u></b>	<b><u>7.21</u></b>	<b><u>4.66</u></b>	<b><u>0.65</u></b>	<b><u>-4.82</u></b>
Mexico	2.76	3.13	1.21	-4.52
Paraguay	3.83	5.422	6.35	-3.96
Developing Countries	6.86	8.701	5.87	3.11
World	4.31	5.348	2.705	-0.381

Source: Cömert and Ugurlu (2015: 10)

In other words, on the one hand, the sensitivity of labour markets to declines in GDP growth seems to have increased between the 1994 and 2009 crises and, on the other hand, the time the economy needed to recover in terms of employment appears to have grown.

**Figure 4.2: Unemployment Rate During Crises (6-monthly)**

Source: Prepared by the authors based on Central Bank of the Republic of Turkey data base

## **Pre-crisis Domestic and Global Conditions**

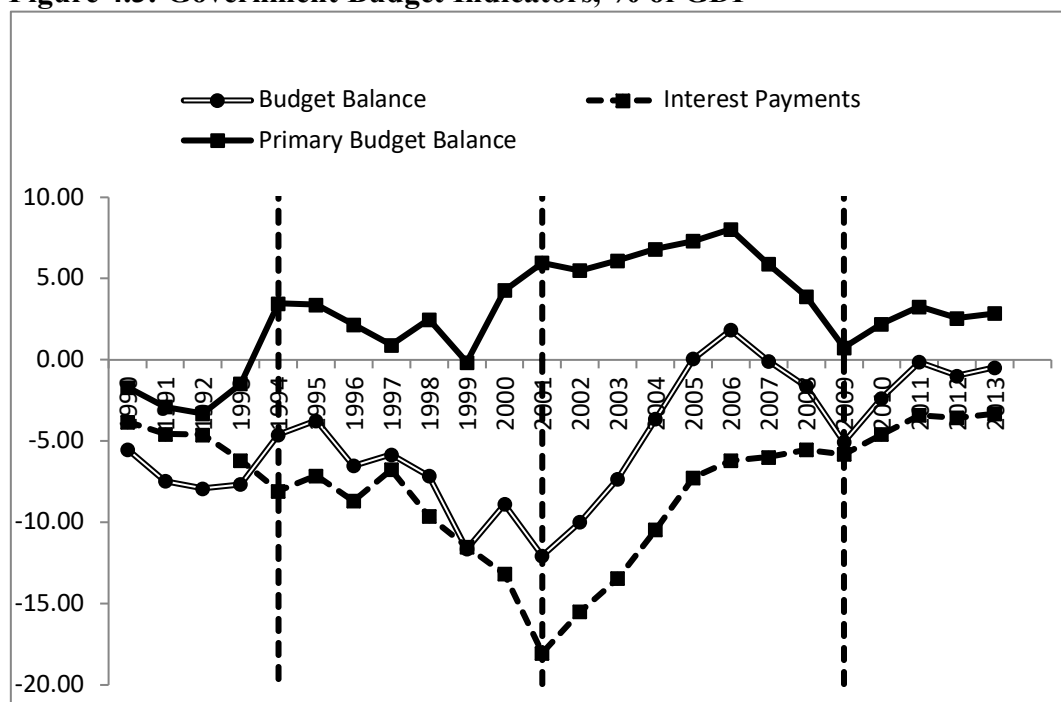
The literature on early indicators discusses many different variables signalling a potential crisis in an economy. (see Kaminsky et al, 1998 and Frankel and Saravelos, 2012). In this part, we explore the movements in the variables such as public debt to GDP ratio, the current account, interest rates, inflation, foreign currency reserves, and exchange rates in the periods leading to the crises, in order to understand the immediate factors contributing to the crises.

The developments in government budget and related variables (interest payments and government borrowings) are crucial indicator to assess the fiscal sustainability of an economy affecting overall economic health.<sup>9</sup> A persistent deterioration in these variables is seen as a signal of a possible crisis (Sachs, 1989). Indeed, in the case of many developing country crises, such as the Turkish crisis of 1994, a deterioration pattern in budget variables was very apparent. In the Turkish case, budget indicators reached alarming levels before the crises of 1994 and 2001. As can be seen from Figure 4.3, the reasons behind a high debt burden before the 1994 crisis were high primary budget deficits, together with high interest payments. The primary budget was in surplus in the period leading to the 2001 crisis due to tight fiscal policies. At the end of 1999, an International Monetary Fund (IMF)-sponsored stability programme was implemented with the aim of bringing the budget and inflation under control. Although the government initially reached its primary budget surplus targets, this did not prevent a deterioration in overall budget balance due to increasing interest payments (Akyüz and Boratav, 2003).

The government budget demonstrated a very significant improvement before the period leading to the crisis of 2008–09. Decreasing interest payments and a primary budget surplus of around five per cent of GDP until 2006 brought about a very significant improvement in the overall balance. A slowdown in economic growth after 2006 and the output declines after the fourth quarter of 2008, together with a relatively expansionary fiscal policy, caused a gradual deterioration in the overall balance from 2006 onward. However, as Figure 4.3 demonstrates, interest payments were not unmanageable. Indeed, the improvement trend in interest payments was not reversed. Therefore, as opposed to the case of 1994 and 2001, overall budget variables did not cause alarm bells to ring prior to the crisis of 2008–09.

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<sup>9</sup> Especially, the first generation models of crises are based on deterioration of public balance (Krugman 1979).

**Figure 4.3: Government Budget Indicators, % of GDP**

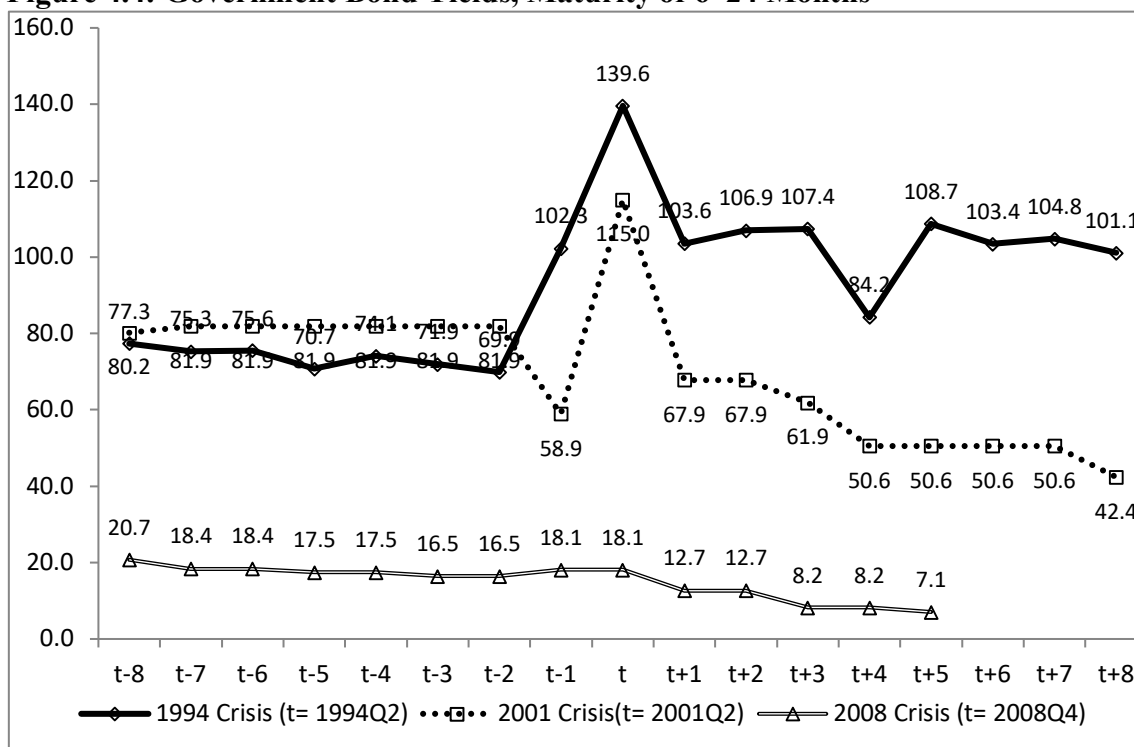
Source: Prepared by the authors based on TurkStat data base

Interest payments are the product of the cost of borrowing (interest rates) and the stock of debt. As Figure 4.4 demonstrates, interest on government bonds remained at very high levels before the periods leading to the crises of 1994 (about 70 per cent) and 2001 (in the range of 60 to 70 per cent). However, since the stock of public debt was still at low levels, the burden of interest payments was not out of control in the case of the 1994 crisis, whereas in 2000 relatively high interest rates combined with high levels of accumulated public debt (about 60 per cent of GDP) caused only a short-lived mild improvement in the overall budget balance, despite high primary budget surpluses.

One of the most distinctive characteristics of the 2008–09 crisis was Turkey’s moderate stock of public debt (about 40 per cent) with low funding costs (low interest rates on government bonds) in comparison to earlier periods. Interest rates on government bonds were less than about 18 per cent before the 2008–09 crisis and surprisingly started to decline at the outbreak of the 2008–09 crisis (Figure 4.4). After a gradual and considerable decrease, interest rates declined to below 10 per cent. However, interest rates before the crises of both 1994 and 2001 followed a very similar pattern, remaining at around 70 and 80 per cent for more than two years, and jumped to even higher levels as the crises began.<sup>10</sup>

<sup>10</sup>Thanks to positive domestic and global outlook, interest rates entered into a declining trend after a short time in the 2001 crisis whereas they remained at very high levels after 1994.

**Figure 4.4: Government Bond Yields, Maturity of 6–24 Months**



Source: Prepared by the authors based on TurkStat data base

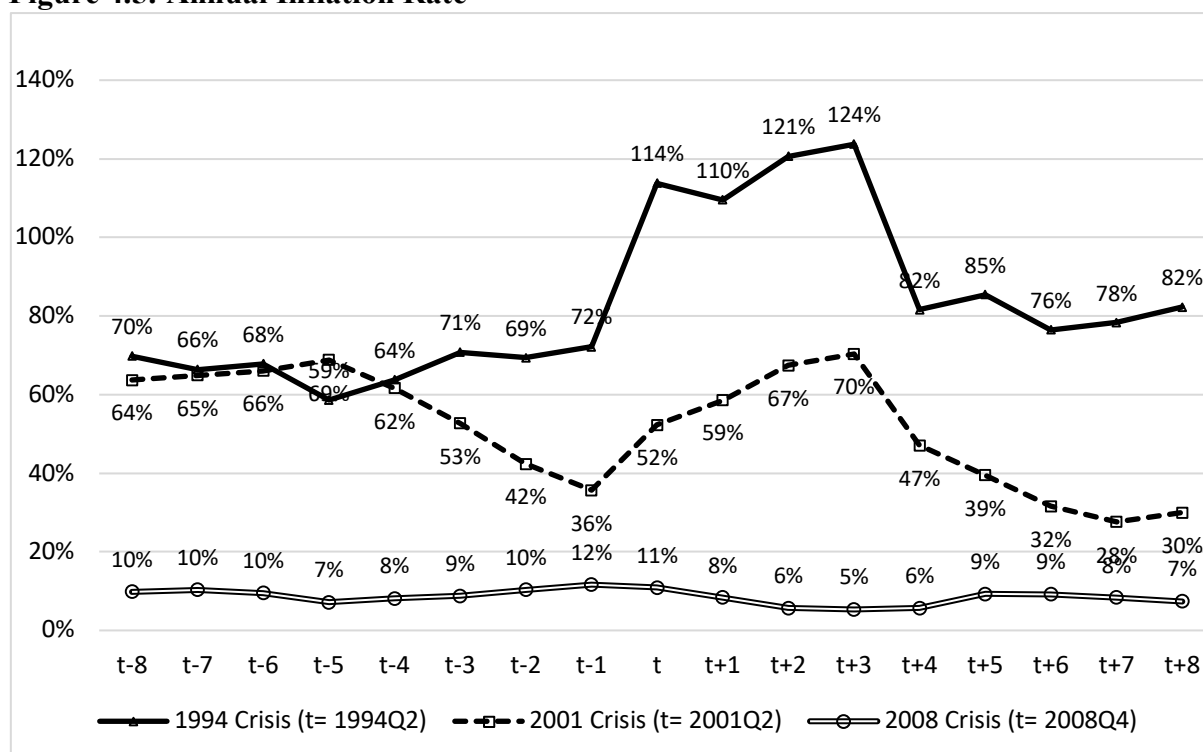
The inflation rate can signal important information about the economic fragility of a country. High inflation and high nominal interest rates can feed each other in some cases. Furthermore, persistently high inflation may feed uncertainty and create significant distortions preventing investors from embarking new projects.<sup>11</sup>

Historically, the Turkish economy has had a severe inflation problem. From 1990 to the 1994 crisis, the average rate of inflation was above 60 per cent. From the end of the 1990s to the 2001 crisis, although inflation was still in double digits, it was on a declining trend and fell to 36 per cent thanks to the exchange rate peg policy of the 1999 disinflation programme. As can be seen from Figure 4.5, in both episodes a sudden hike in inflation, mostly related to significant depreciation in the Turkish lira, took place. Quarterly annual inflation rates reached about 125 per cent and 70 per cent during the crisis of 1994 and 2001 respectively. In contrast, inflation remained relatively under control (below 10 per cent) before the 2008–09 crisis, although the central bank had difficulty in reaching its intended inflation targets (about 5 per cent). In short, the economic outlook in terms of inflation was worst in 1994; inflation rate was

<sup>11</sup>There is no consensus in the literature about the optimum rate of inflation. However, by all standards, inflationary trends in Turkey in the 1990s and the beginning of 2001 can be considered very high and detrimental to the economy.

high but exhibited a declining trend in the 2001 episode, and it was relatively moderate during the 2008–09 crisis.

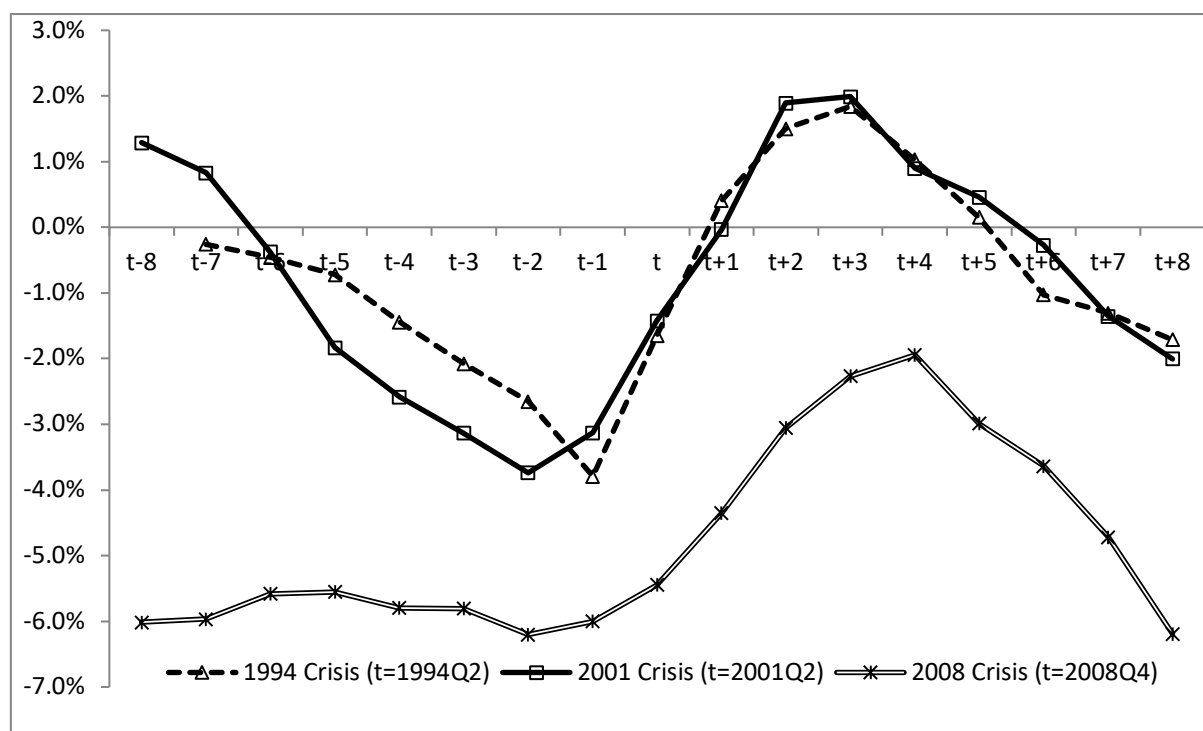
**Figure 4.5: Annual Inflation Rate**



Source: Prepared by the authors based on Central Bank of the Republic of Turkey data base

Many researchers argue that a significant deterioration in the current account is an early signal for severe economic crises in developing countries (Kaminsky et al. 1998). When we investigate the Turkish experience of economic crises, a marked deterioration in current account balance before the crises of 1994 and 2001 is very apparent. In these episodes, current account balances were negative and worsening for about five to six quarters before national production started to decline. Furthermore, in both episodes, the current account deficits reached their maximum levels around the period when output growth started to turn negative. For the 2008–09 crisis, the current account exceeded 4 per cent of GDP after 2004 and remained at around 6 per cent for about eight quarters before the initial impact of the crisis was felt on production. In all cases, as expected, a sharp decline in production brought about an improvement in the current account. Furthermore, this positive effect was sustained for about a year. However, in the crisis of 2008–09, the current account deficit persisted in the midst of very large production declines.

**Figure 4.6: Current Account Balance, % of GDP**



Source: Prepared by the authors based on Central Bank of the Republic of Turkey data base

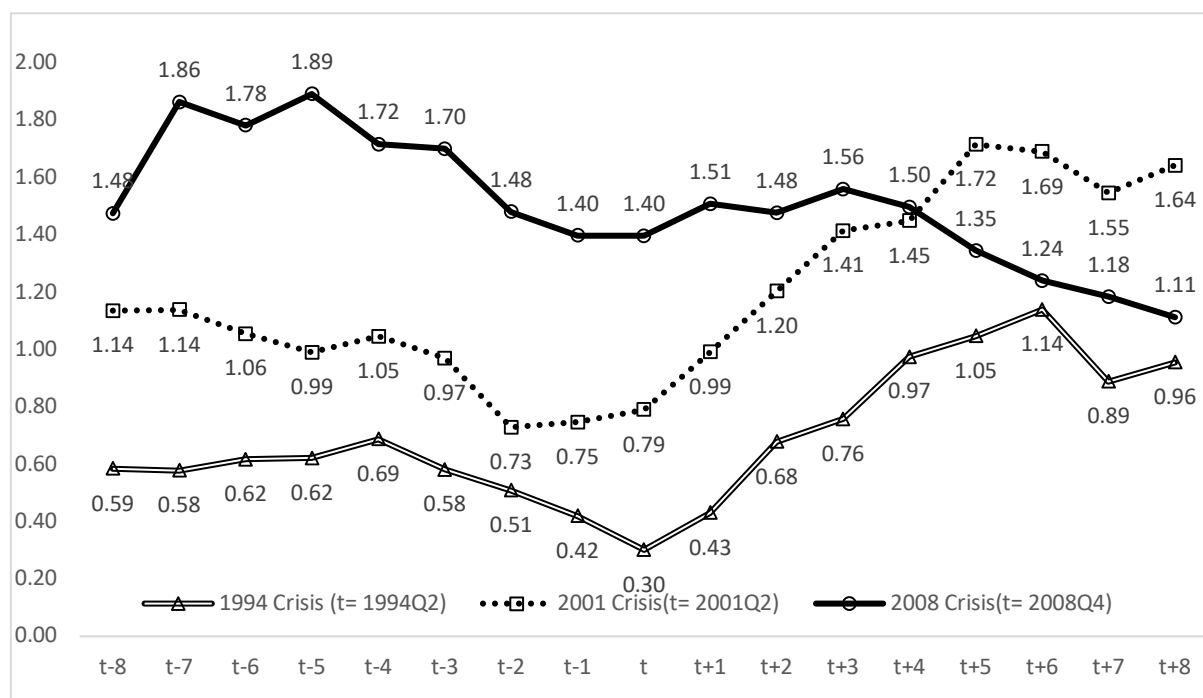
The current account deteriorated rapidly and reached more than 6 per cent of GDP in a very short time after the crisis of 2008-09. As can be seen from Figure 4.7 below, although the movement in the current account balance in the episodes of the 1994 and 2001 were almost identical, they exhibited a very different structural pattern in 2008-09. This observation is in line with the findings of Comert et al. (2015). Using a range of statistical methods, they demonstrate that a structural break in the Turkish current account might have taken place around 2000. The enormous amount of global liquidity made the unprecedented levels of the current account deficit possible during this period.

Persistent current account deficits imply the accumulation of large foreign liabilities. Developing countries cannot pay back their external liabilities with their domestic currencies, which had been termed as the 'original sin' or the 'hierarchy of money' (Eichengreen et al. 2003; Mehring 2013). In a world in which a strict hierarchy of money prevails, developing countries are forced to accumulate foreign exchange reserves even under flexible exchange rates regimes. Therefore, the amount of foreign reserves relative to liabilities (and relative to GDP) is another crucial indicator of possible vulnerabilities. Figure 4.7 demonstrates the general picture of reserves to short-term debt ratio during the crises. Complementing many other findings, the Turkish economy was caught in the crisis of 1994 with very low levels of reserves relative to its short-term debt. The reserves to short-term debt ratio critically declined



to 30 per cent before the crisis. In the 2001 crisis, the reserves to external debt ratio was not as bad as the 1994 crisis, although the deterioration in the reserve position for two consecutive quarters before the output decline started was striking in the 2001 crisis. As Figure 4.7 depicts, compared with the previous two crises, the 2008–09 crisis is unique in terms of the reserves position. The Turkish economy entered the 2008–09 crisis with an ample amount of reserves in a global environment in which US interest rates were falling drastically<sup>12</sup>.

**Figure 4.7: Reserves over Short-Term External Debt, ratio**



Source: Prepared by the authors based on Central Bank of the Republic of Turkey, and TurkStat data bases

### Political and Geopolitical Configuration

Political structures and geopolitical factors significantly influence the trajectory of an economy. In certain political and geopolitical scenarios, potential risks materialize. Therefore, it is also important to understand the political and geopolitical configurations for the three crises investigated here.<sup>13</sup> The Turkish economy was led in the 1994 and 2001 crises by relatively fragile coalition governments. In the case of the 1994 crisis, domestic conflicts,

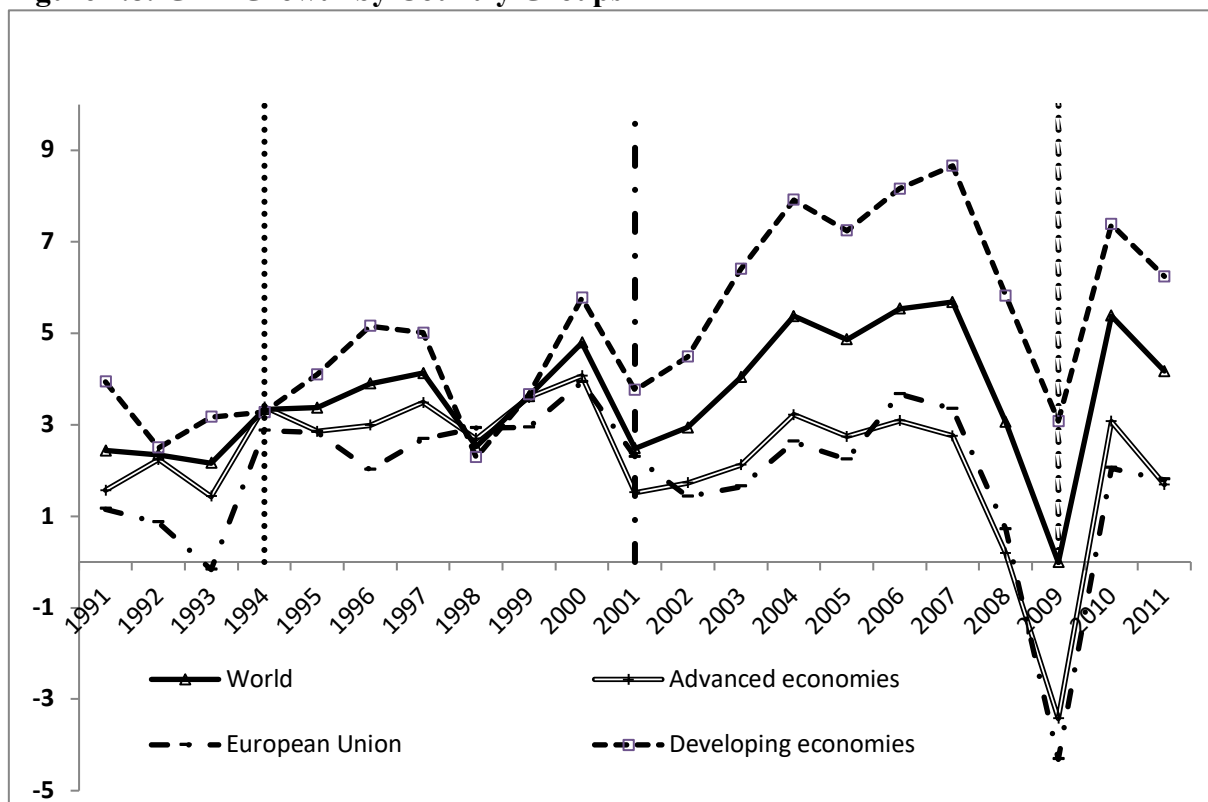
<sup>12</sup> Recently, especially accumulated private foreign debt and insufficiency of reserves relative to short-term accumulated debt have become very important concerns. In relation to this, the enormous increase in volatility in exchange rates has been another important concern giving worrying signals about the healthiness of the economy.

<sup>13</sup> Here, we only consider indicators of very broad political and geopolitical factors without almost any elaboration. However, a through political economy analysis requires much more attention to the details regarding these factors and distributional and other conflicts in an economy.

especially in the south eastern part of Turkey, increased existing uncertainties in the economy. Likewise, prevailing domestic problems within the coalition government and between the Prime Minister and the President increased economic fragility in 2001 (Marois 2012: 166). The Turkish economy faced the 2008–09 crisis with a relatively strong, single-party government, controlled by the Adalet ve Kalkınma Partisi. In short, it is likely that domestic political configurations exacerbated existing fragilities before the 1994 and 2001 crises. Domestic and political conditions were relatively favourable in 2008-09, although this did not prevent the economy from experiencing one of the worst crises in its history.

The global economic outlook was slightly different before the crises of 1994 and 2001. The 1994 crisis took place in a period of global upswing although there was a mild slowdown in 1993. The crisis of 2001 took place at the end of a global upswing despite the fact that, the 1997 Asian Crisis, the 1998 Russian and Brazilian crises caused a slowdown in the global economy. Furthermore, global growth was also affected negatively by the 11 September attacks in the USA in 2001. However, the global economy recovered quickly and entered into a relatively long period of growth during 2001–07. As opposed to the other two cases, the crisis of 2008-09 took place in the midst of a severe global economic crisis triggered by the US sub-prime mortgage crisis.

**Figure 4.8: GDP Growth by Country Groups**

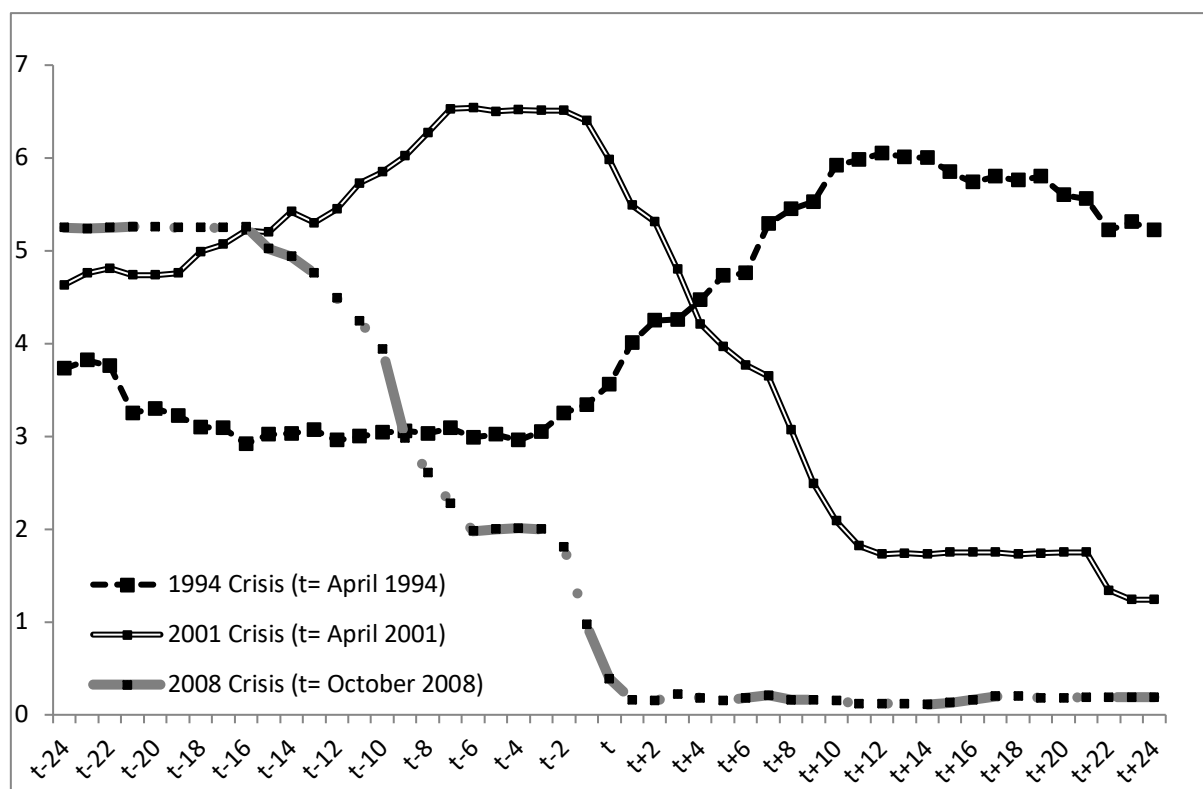


Source: Prepared by the authors based on World Bank Development Indicators

As Figure 4.8 shows, particularly advanced countries, which have been the main source of demand for goods and services of developing countries, encountered a massive reduction in GDP growth.

As experienced during the last global crisis, the monetary policy stance of developed countries has considerable influence on the economic trajectory of developing countries. The adverse effects of a deterioration of the global economic outlook can be mitigated via expansionary monetary policies. In this sense, the movements of the US Federal Reserve interest rate, indicating the Fed policy stance, can give some clues about the global liquidity and interest rates. High (or low) Fed interest rates may be an indication of increasing (or decreasing) attractiveness of US and other developed economies' financial assets, which sometimes causes slowdowns (or surges) in financial flows to developing countries, forcing them to offer higher interest rates to attract financial flows. The Fed's main interest rate was stable around 3 per cent from mid-1992 to 1994 (Figure 4.9). In this sense, there was no exceptional monetary move by the Fed before the Turkish crisis of 1994

**Figure 4.9: Effective Federal Reserve Funds Rate**



Source: Prepared by the authors based on St Louis's Fed Statistics.

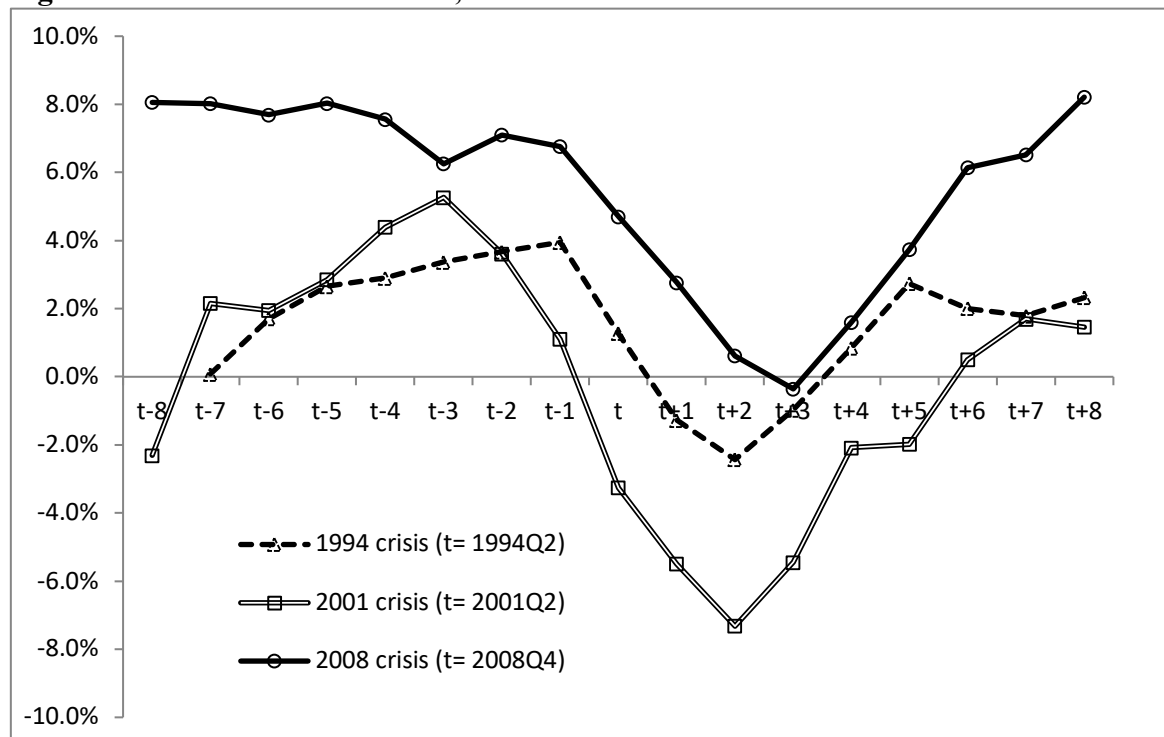
None the less, the Fed gradually increased its interest rate while the Turkish economy was passing through a very deep crisis in 1994 (and as Mexico entered the peso crisis of 1994). As

it was a very gradual increase taking a long time, this may not be considered an exceptional development in global financial markets, even though this move may not be considered beneficial for the Turkish economy. The Fed monetary policy was relatively tight before the crisis of 2001. However, there was very sharp easing during the 2001 crisis. The Turkish economy and other developing countries benefited from this situation in the form of an abundance of financial inflows, especially after 2002.

The crisis of 2008–09 was exceptional in terms of global liquidity and interest rates. The Fed and the central banks of many other advanced countries embarked on significant expansionary monetary policies. This led to close-to-zero interest rates and liquidity bonanzas in advanced economies. Turkey and many other developing countries enjoyed these developments by welcoming this liquidity into their economies, as well as cutting their own policy rates. As discussed in the following sections, one of the reasons behind the absence of financial reversals from Turkey and many other developing countries and the very quick recovery of the flows, was the expansionary monetary policy stance of advanced countries.

### **How did the Crises Spread?**

As documented above, global forces seem to have a very strong influence on the main economic trends in Turkey, as in other developing countries (Rey 2015; Benli alper and C mert (2015). In this vein, the Turkish crises under investigation were either triggered or exacerbated by global factors in the form of financial flows or/and trade shocks. The Turkish economy experienced a significant financial reversal during the crises of 1994 and 2001. However, although the economy experienced a sharp decline in financial flows during the 2008–09 crisis, overall there was almost no reversal in financial flows. (see Figure 4.10). In this sense, the magnitude and duration of the financial shock that the Turkish economy encountered in the most recent crisis was low relative to that of the previous financial crises.

**Figure 4.10: Net Financial Flows, % of GDP**

Source: Prepared by the authors based on IMF and Central Bank of the Republic of Turkey data bases

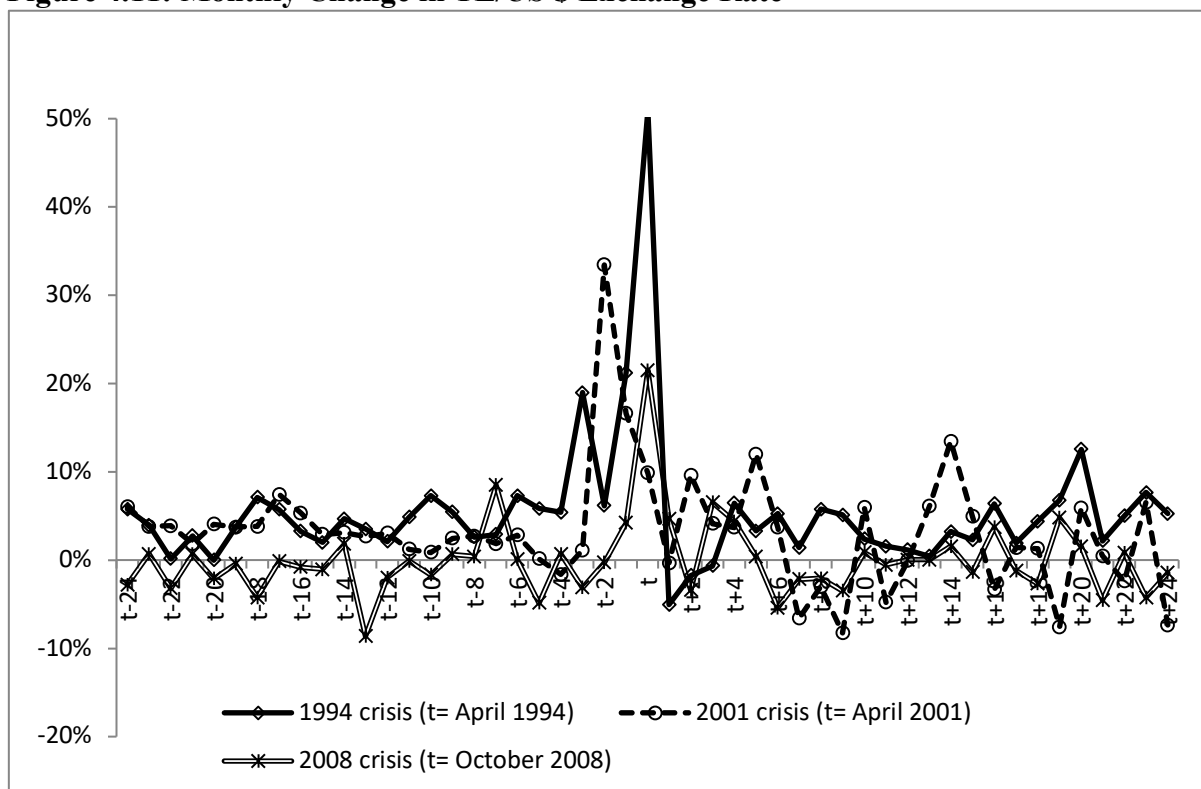
Negative net financial flows lasted three quarters, six quarters and only one quarter during the crises of 1994, 2001 and 2008–09, respectively. Partially, as a result of these differences in financial shocks, while there were massive bankruptcies in Turkish financial markets in the previous two crises, the financial system weathered the crisis relatively well in 2008–09. However, as mentioned before, Turkish economy still encountered one of deepest fall in its GDP growth in its entire history.

The difference between the magnitude and duration of Turkey's financial shocks has also had different implications for the country's reserves, exchange rates and interest rates. In this sense, the severity of a financial shock can be detected in the movements of central bank reserves, market interest rates and exchange rates, which may be transmitted to output losses and rising inflation.

Figure 4.11 shows that currency depreciation pressure was much milder during the 2008–09 global crisis than in the 1994 and 2001 crises. Maximum monthly appreciation of US dollar against TL reached 50 per cent and about 30 per cent in 1994 and 2001, while it did not exceed 15 per cent in 2008–09. Furthermore, monthly depreciation continued for at least four months in the previous two crises, but in 2009 it ended in two months. Here, it could be argued that due to foreign exchange interventions by the central bank (the selling of reserves to mitigate the overvaluation of dollar) exchange rate pressure might have been eased in the recent global

crisis. However, the pressure on central bank reserves in the last crisis was of a shorter duration and the magnitude of the pressure was less. In the third quarter of 2008, the reserves of the CBRT amounted to US \$76 billion, falling to a low of \$63 billion in 2009. The foreign reserves lost accounted for 17.0 per cent of total reserves. By contrast, reserve depletion during the 2001 crisis was 36.0 per cent and in 1994 more than 50.0 per cent.

**Figure 4.11: Monthly Change in TL/US \$ Exchange Rate**

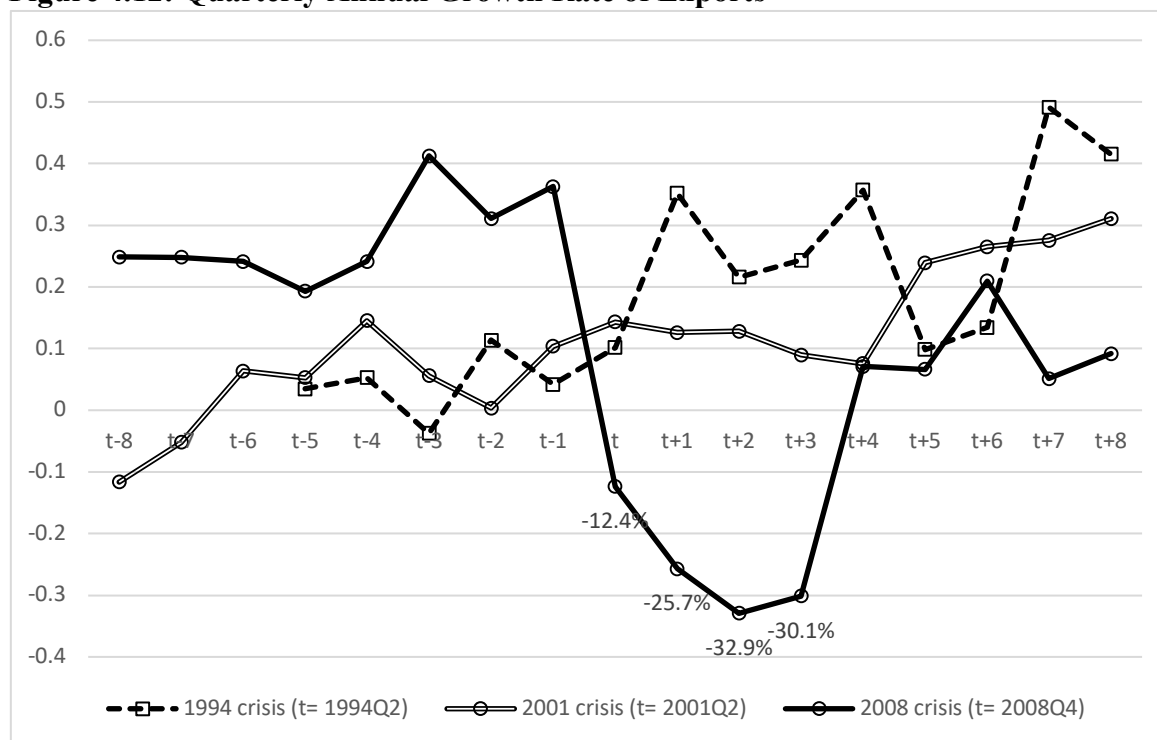


Source: Prepared by the authors based on Central Bank of the Republic of Turkey data base

It can be argued that high interest rates might have substituted for reserve operations to mitigate the depreciation pressure on the Turkish lira during the global crisis. If this had been the case, higher interest rates might have been observed in times of low reserve losses. Indeed, this might even have been considered as a choice of the Central Bank, to intervene in the financial market via raising interest rates rather than depleting foreign exchange reserves and allowing exchange rates to depreciate. However, interest rate movements closely followed exchange rates and reserves. Overnight market interest rates and interest rates on public debt instruments reached unprecedented levels in the crises of 1994 and 2001, in which reserve losses and exchange rate hikes were observed. Interbank overnight rates reached 400 and 350 per cent in 1994 and 2001,

respectively, while rates reached a maximum of just 16 per cent in 2009.<sup>14 15</sup> In conclusion as Comert and Colak elaborates (2015), these indicators suggest that Turkish financial system cannot be considered tested seriously during the crisis of 2008-2009. With gradual disappearance of cheap global liquidity and adverse geopolitical developments, financial markets in Turkish economy and many other developing countries can pay a huge price for neglecting accumulated vulnerabilities one more time.

**Figure 4.12: Quarterly Annual Growth Rate of Exports**



Source: Prepared by the authors based on Central Bank of the Republic of Turkey data base

Another channel through which the Turkish economy was hit by the 2008–09 global crisis was the trade channel. Even though the crises of 1994 and 2001 brought about an increase in Turkish exports, partially due to large depreciations in the Turkish Lira, during the 2008–09 global crisis, a substantial fall in export earnings was recorded. Annually, export earnings declined by more than 20 per cent in 2009. The first quarterly negative growth in exports was observed in the fourth quarter of 2008 and prevailed for four quarters. In other words, the

<sup>14</sup>The movements in exchange rates, reserves and interest rates can be summarized by a simple exchange rate index as well. We calculated an exchange rate index for three different crises periods. The implication of the index is very clear cut. Turkish economy encountered very high pressure on financial markets in the crises of 1994 and 2001 whereas the combined pressure on exchange rates reserves and interest rates was not very considerable in the recent crisis.

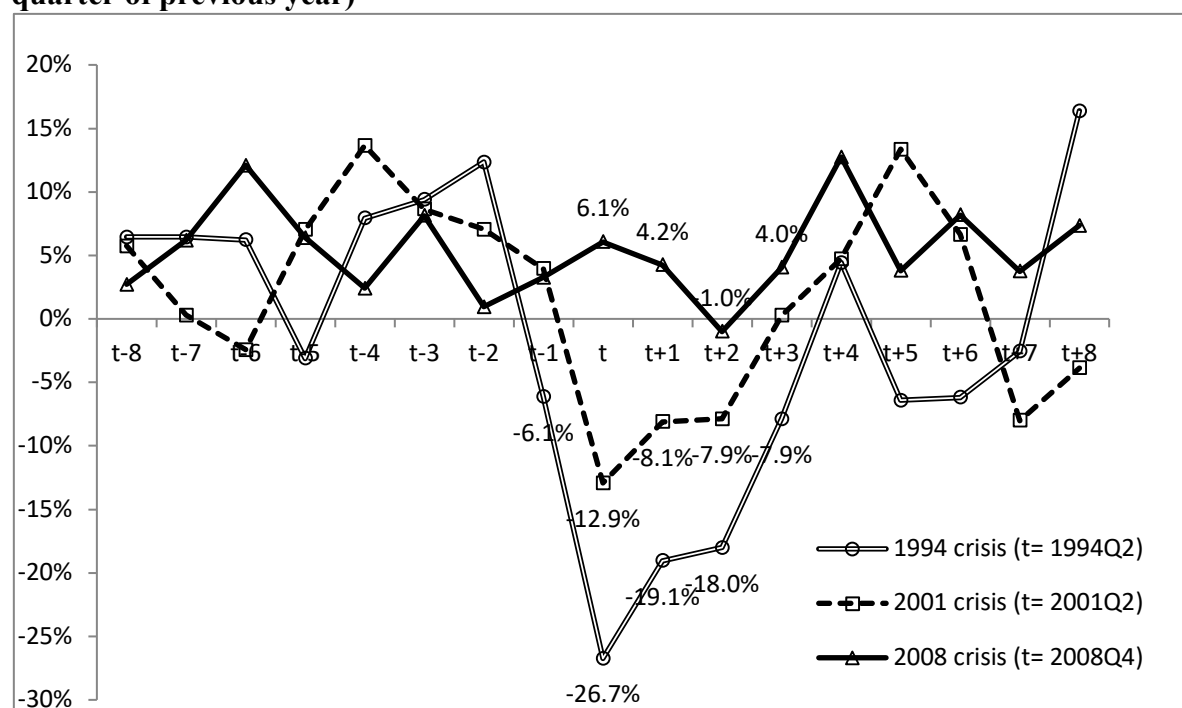
<sup>15</sup>As will be discussed, this trend was also part of the expansionary monetary policy stance of Turkish central bank

duration of the crisis and duration of the negative export growths coincided. The main reason for this export shock was that the biggest export partner of Turkey, the European Union, was in a deep crisis and hence demand from most parts of Europe substantially declined.

### Fiscal and Monetary Responses<sup>16</sup>

Differences in the government's fiscal and monetary responses to the three crises are striking and can partially help to explain the differences in performance of the Turkish economy in these episodes. As can be seen in Figure 4.13 government expenditure was reduced significantly during the crises of 1994 and 2001, whereas it did not decline much in the case of the 2008–09 crisis. Indeed, although the growth of government expenditure was negative for a long time in both the crises of 1994 and 2001, the economy experienced only one period of negative government expenditure growth during the 2008–09 crisis.

**Figure 4.13: Growth of Quarterly Real Government Spending (compared with the same quarter of previous year)**



Source: Prepared by the authors based on TurkStat data base

The striking difference in the fiscal stance of the government during the three crises can be followed by focusing on the primary balance and general government budget balance (see Figure 4.3). On an annual basis, there was an improvement in both the primary balance and general government budget balance just after the crises in 1994 and 2001. This clearly indicates

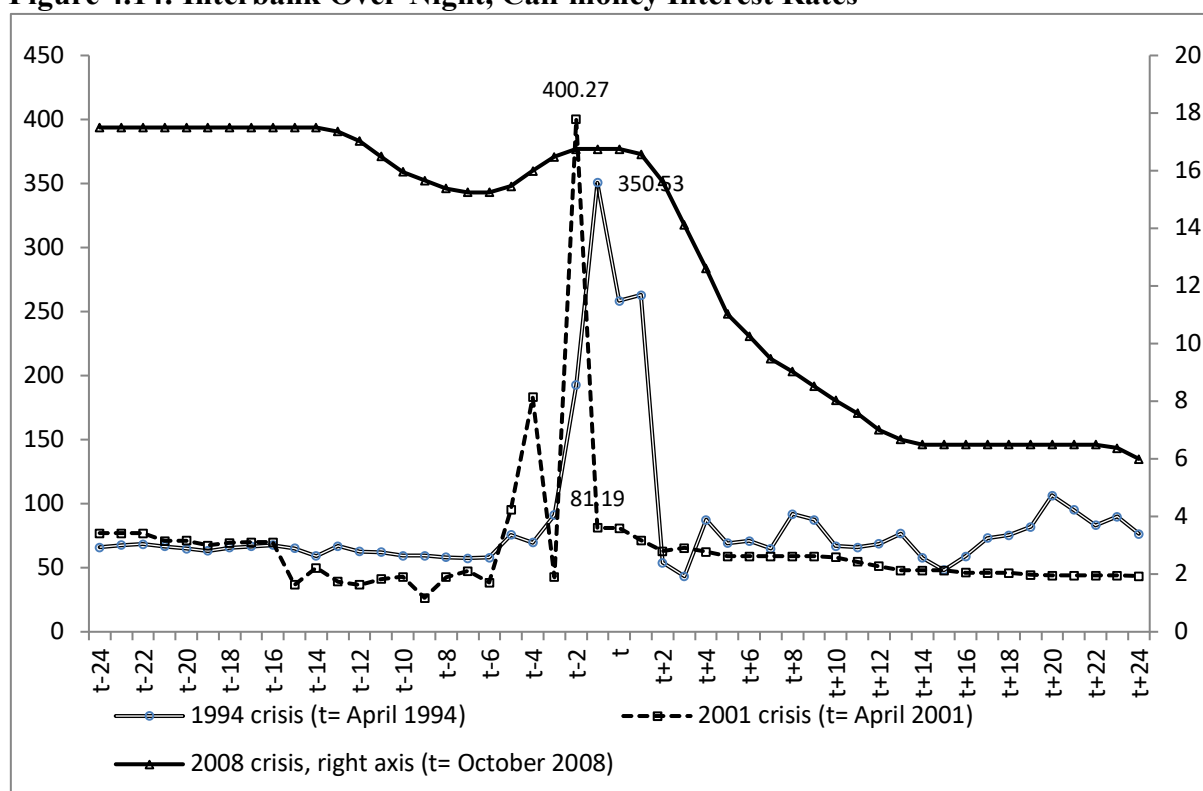
<sup>16</sup> A detailed account of the fiscal and monetary responses to the recent crisis in Turkey can be found Cömert and Çolak (2014)



that the government squeezed its spending in those episodes (that is, undertook austerity measures). However, in response to the 2008–09 global crisis, the government loosened fiscal policy, which led to a deterioration in both the primary and general budget balance.

Monetary and fiscal policies have followed similar patterns during periods of crisis in Turkey. The Central Bank of the Republic of Turkey implemented a very tight monetary policy in the case of the 1994 and 2001 crises. In order to halt the trend of depreciation in domestic currency, the Central Bank either decreased funding in the overnight markets or increased the discount rate significantly, which led to very high spikes in money market interest rates. On average, as stated above, overnight interest rates were about 400 per cent in 1994 and 350 per cent in 2001 just before production growth turned negative (Figure 4.14). In other words, these two crises began after the financial markets largely froze up. Massive IMF funding seems to have calmed the interbank markets in 2001, whereas a disturbance in money markets prevailed in 1994. However, during the last crisis, the Central Bank increased funding in the money markets and took additional measures in order to provide sufficient liquidity to the market. As a result, market interest rates steadily decreased, falling below 10 per cent in a very short time period.

**Figure 4.14: Interbank Over-Night, Call-money Interest Rates**



Source: Prepared by the authors based on Central Bank of the Republic of Turkey data base

## **Conclusion**

As the Turkish economy demonstrates, developing countries encounter and experience economic crises under different circumstances. Moreover, global factors, such as financial reversals and trade shocks, are also decisive in shaping the dynamics of crises in developing countries like Turkey. In this sense, the increasing degree of trade and financial globalization seems to have increased the sensitivity of developing economies to changes in global risk appetite and trade flows. Turkey is no exception.

Although there are many differences in the emergence of recent crises in Turkey, significant similarities can be found between the 1994 and 2001 crises. The crisis of 2008–09 can be considered exceptional in many aspects. In this sense, two tales can be told about three crises we have investigated. The first two episodes were deemed to be mostly finance-led and finance-driven, with repercussions on the real sectors thereafter; but the 2008–09 crisis was a fully-fledged real sector crisis from the beginning, amid a direct collapse in employment and real economic productivity.

The pre-crisis macroeconomic and political outlook was better in the last crisis. Expansionary fiscal and monetary policies were implemented, albeit with some delays as opposed to the first two crises. Without expansionary fiscal and monetary policies, Turkish economic growth might have collapsed more dramatically in the last crisis. Global liquidity conditions recovered quickly in developing countries, including Turkey, thanks to unprecedented interest rate cuts and quantitative easing. However, in the most recent crisis, the Turkish economy experienced one of its worst economic downturns in its history in terms of output losses and unemployment, even though its financial markets remained resilient. In this sense, the 2008–09 crisis should be treated differently from the first two. As in the case of the crisis of 2008–09, a massive trade shock together with a certain degree of slowdown in financial flows can be devastating for a developing country such as Turkey. There is no doubt that in the deteriorating external environment, the necessary adjustments that lie ahead for attaining economic stability in Turkey and the emerging market economies will be costlier and difficult. Indeed, recent developments in Turkish and similar developing countries suggest that these countries seem not to have learned enough from their frequent crises.

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