

Recent Monetary Policy in Turkey: Capital Flow, Reserves and Exchange Rate

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Abstract

In this paper, we investigate the recent monetary policies and development of Turkish banking system during the post 2001 financial and banking crisis. We explore the effects of capital inflows and outflows to real exchange rates and the real stock market prices, before and after the financial crisis. We investigate the relationship between real exchange rate, real stock prices and capital flows. We decompose the foreign flows into real assets and liabilities, in order to investigate the possible long-term effect of inflows and outflows. Reversal of capital flow seems to create a possibility of exchange rate crisis. The Turkish Central Bank by taking lessons from this experience they formulate their recent policies accordingly.

Recent Monetary Policy mix in Turkey aims to have financial stability by increasing the reserve ratio in each component of capital flows in Turkey. The ratio increases shorter the period of the asset. The Central Bank work claims to have an effect similar to inflation targeting.

JEL Codes: G1, F3, F4

1 Introduction

Indonesia and South Korea recently adopted instrument to manage money flows, therefore debate about capital controls has been revisited. While regulation of capital flows was seen as a legitimate policy tool during post-war economic restructuring, since 1980s, it has been frowned upon by advanced industrialized countries. Contribution of capital flows to International financial crisis has been recognized since the Asian crisis in 1997.

Despite the IMF's advise Malaysia had managed to restructure her foreign debt and they used capital control in order to recover from 1997 Asian financial Crisis. Recent policy practices and academic positions indicate that the image of capital controls might have changed again in the wake of the global financial crisis. While provoking fear of protectionism for some, others welcome the potential for enhancing global financial stability and development prospects. Gazioglu (2008) introduced a theoretical Model to justify the theoretical background and justification for some control. The question is thus how best to handle surges in inflows that may pose both prudential and macroeconomic policy challenges, such as appreciation of currency, which can harm exports. This paper reviews the theoretical background and present monetary policies of the Turkish Central Bank.

A decade has passed since the 2001 Financial Crisis & Banking Crisis in Turkey. During the analysis of this paper many people were asking when the next crisis will be hitting Turkey. 2008-9 Mortgage Crisis (Banking Crisis) in the West has some similarities to the Turkish Banking crisis. The similarity is the effect of capital inflow and reversal of capital. The Financial crisis of 90's had the direction of capital towards partly to the US and partly to China via Hong Kong. In the Mortgage Crisis of 2008-9 the direction of flow seems to be out of the US, towards China as well. Though Turkey has been affected negatively via their trade, Banks in Turkey had their highest profitability, as the major Banks in the West suffered. This indicates that it is important to investigate the post 2001 Financial and Banking Crisis in Turkey. The strengths of the Banking sector in Turkey indicate the other side of the coin in the Global Banking Sector. Furthermore, Turkey has produced double figure growth rate along with improved trade balance due to her increased trade with Arab countries and Africa.

The debate over capital flows, especially in developing countries, has been one of the most popular topics in economics. Those in favor of unrestricted capital flows argue that the restrictions cause inefficiency and higher costs so they must be eliminated in order to secure markets. On the contrary, those in favor of restrictions argue that the capital movement has to be regulated since studies such as Eichengreen (1996) and Cohen (1998) show that capital mobility has not affected all countries in the same manner. Financial markets can include risk in case of reversal of capital inflow if there does not exist sufficient regulations. Alfaro et al (2003) states that there can be significant gains from foreign direct investment in cases of well-developed financial markets, otherwise foreign direct investment alone has an ambiguous effect on development.

In Turkey, after the 1980's, the market has been liberalized almost completely. Lukauskas and Minushkin (2000) suggest that this type of financial market opening in Turkey is a consequence of the need to finance persistent current account deficits, to service existing foreign debt, and to finance huge budget deficits. Furthermore, Turkey has to borrow to complement from abroad to obtain capital in order to finance economic development due to low domestic saving rates. The urgent liberalization of markets in Turkey can be linked to the little bargaining power of Turkey in attracting foreign investors because of her twin deficits, high inflation and political instability (Lukauskas and Minushkin (2000)). However, more recently, inflation has not been a

problem. Considering urgent and quick liberalization of markets in Turkey, the restrictions on capital flows were eliminated prior to a regulatory framework. Hence, the economic nature of Turkey forces the economy to be more volatile depending on external shocks and more open to crises. The performance of Turkey in the context of the EU enlargement has been evaluated in Loewendahl and Ertugal-Loewendahl (2001) and has emphasized the importance of FDI for Turkey and comparatively higher dependence to capital flow for technological and innovation activities. However, during the sudden reversal of capital inflow in 2001, there has been a potential risk on the banking sector. Furthermore, inflation and exchange rate caused macroeconomic instability (Çulha (2006)). However, as we mentioned before Turkey's economic performance has been greatly improved.

There is an upward trend in direct foreign investment (FDI), since 1989 and especially after the 2001 financial crisis. FDI by sector shows that nearly 40% of the total FDI is in financial intermediation. This figure shows us the great importance of the banking sector within the FDI. Kaminsky and Reinhart (1999) claim that the banking and currency crises deepen via feeding back each other. The analysis over many industrial and developing countries, including Turkey, shows that after a boom sourced by capital inflow and credit the crises occur when a country plunges into a recession. Levine and Zervos (1998) underline the significant effect of financial factors on future rates of economic growth, capital accumulation and productivity growth.

The aim of this paper is to revisit foreign capital flows and recent Turkish Monetary policy. The rest of the paper is organized in the following manner. Section 2 we review foreign direct investment in Turkey and determinants of capital flow. In section 3 we investigate Turkish Banking system and role of the foreign shares. In section 4, we report the Policy mix of the Turkish Central Bank.

2 Foreign direct Investment in Turkey and Determinants of Capital Flows

The foreign direct investment (FDI) to Turkey follows an upward trend starting from the 1980's and makes a peak in 2006. The decomposition of foreign direct investment in the latest years indicates that there is a high concentration on financial intermediation and transport, storage and communications. Other sectors, including manufacturing, play only a minor role to affect the foreign direct investment. Though flows of investment to Turkey are a small percentage of the FDI in the world, its share in the Turkish industry is quite high. Foreign investors place pressures to buy the national industry. Such a structure of the economy directs the focus of the economy on service industry including the Banking sector and tourism, rather than manufacturing or production Gazioglu & Basbas (2009).

Çulha (2006) revisits the effects of pull-push factors for Turkey from 1992:01 to 2005:12. Over the whole period, the pull factors have a greater contribution than the push factors. Furthermore, the stock exchange index positively affects capital inflows. The issue is the growing importance of the effect of foreign interest rates (as a push factor) proving the dependence on capital flow and desperate policies in the face of sudden capital outflows.

Considering the specific determinants of capital flow to the banking sector, there are only a few studies investigating this question. Sabi (1988) investigates parameters the expansion of the U.S. multinational banking (MNB) sector to developing and less-developing countries, including Turkey. He finds out that market size, presence of multinational corporations from the U.S., extent of economic development, and balance of payments are important selection criteria for MNBs. The variable for regulation seemed to be insignificant, which means that once a MNB is established, regulations will not affect further growth. Moreover, the time span is 1975-82, which has to be handled with updated data.

3 Turkish Banking System and the Role of the Foreign Shares

In Turkey, the main aim of internalization of the banking sector was to open the foreign competition to increase diversification, efficiency and quality of banking services (Pehlivan and Kirkpatrick, 1992). 1980-89 demonstrated an increase in the number of foreign-owned banks and a decrease of restrictions to the entry of foreign banks. Pehlivan and Kirkpatrick (1992) claims that entrance of foreign banks forced domestic banks to improve their cost-efficiency performance, but the benefits had not been realized immediately. Lukauskas and Minushkin (2000) suggest that in the 1990's "focus of banking activity shifted from deposit taking and lending in domestic currency to the buying and selling of foreign exchange and government debt".

Starting from the 1980's, the number of banks significantly rose. Until the 2001 crisis, the number of banks grew rapidly accompanied with the overexpansion of branches. The financial crisis of 2001 was also the crisis of the Banking sector, where Banking regulations were lagging behind the international regulation. After the crisis, restructuring in the banking sector has taken place causing a reduction both in number of banks and branches. Instead of re-structuring nationally to reduce the number of banks, the banks were sold to foreign Banks. Foreign share in the banking sector shows an upward trend over the period between 1980 and 2007 with the exception of crises (Figure 1). Especially, the rising trend of foreign banks' share reaches the highest level with 45.7 per cent at the beginning of 2007.

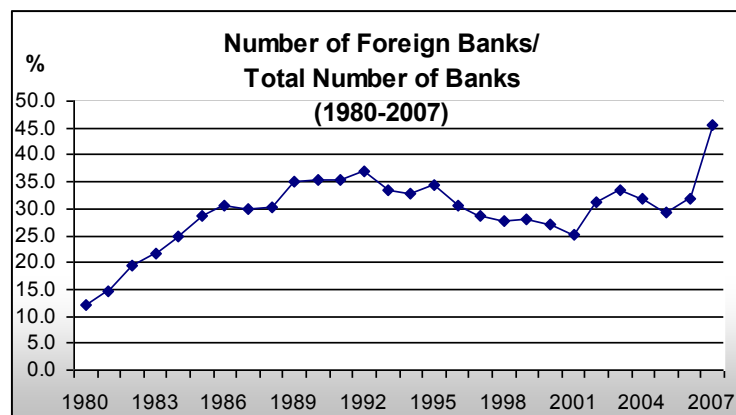


Figure 1. The Share of Foreign Banks in Turkey: 1980-2007. **Source:** Calculation from appendix 3 (Number of Foreign Banks/ Total Number of Banks)

Considering the performance of the banking sector, Steinherr et al (2004) analyze the financial intermediation, measured by ratio of assets and loans to gross national product, and show the upward trend of financial intermediation during the 1990's but a significant drop in the 2001 crisis. During the crisis, value added in financial services even drops below the level in 1990 (Steinherr et al. (2004). Özatay and Sak (2003), and Gazioglu (2003, 2005) underline the characteristics of the banking sector as one of the main causes of the crisis. Indeed, the fragility of the banking sector accompanied with other triggering factors led to the crisis Özatay and Sak (2003) emphasize the currency, interest and foreign exchange risk accumulation on the banks' balance sheets, heavy reliance of private banks on foreign exchange deposits and thereby on the capital flows, and differences between state and private banks. At the end, the cost of 2001 banking crisis to the Treasury was \$43.7 billion (29.5% of GDP) and the cost to the private sector was \$9.5 billion (6.4% of GDP), totaling about 35.9% of GDP in 2001 (Steinherr et al., 2004).

Following Steinherr et al (2004), selected efficiency parameters, reported by the Banks Association of Turkey, such as deposits-assets, deposits-branch, deposits-employee, assets-employee and assets-branch ratios draw attention to the productivity improvement in the banking sector.

Table 1 shows the net foreign asset that falls between 2000-2002 to -20 million increased to 80 million between 2002-2008. The main consequences of the 2000 Financial crisis is accompanied by banking sector crisis which lead to increase of foreign capital flows to the banking sector and the foreign ownership ratio has increased from 25 percent to 45 percent. The fall from 80 million to 40 million between 2008-2010 is the result of Mortgage crisis in the West.

Moreover, operating cost-income ratio for the largest Turkish banks indicates a close average ratio to the EU level. In 2008 Mortgage crisis also hit the European financial sector. The southern EU members face financial crisis.

However, Turkish financial system showed no negative effect from EU crisis. Banking sector has shown that it has not been affected by the 2008 Mortgage crisis, due to the restructuring took place after the 2001 Turkish Financial Crisis. Though drop of the Turkish exports to Europe increase the balance of payment deficit, the government policy of "zero problems with the neighbors" lead Turkey to improve trade and economic growth increased to double figures.

4 Empirical Evidence for Capital Flows to Banking Sector and Exchange Rate in Turkey

In this section we investigate the post-2001 Turkish financial crisis. We investigate foreign capital inflow to banking sector and its effect on the real exchange rate in Turkey.

The real effective exchange rate index, stock market price indices, foreign assets/ liabilities of the banking sector are used for E, V and H respectively. The real effective exchange rate, foreign assets/ liabilities of the banking sector are acquired from the Central Bank of the Republic of Turkey for the period from 1994:01 to 2006:12. The consumer price index and the stock market price indices are obtained from the Turkish Treasury and Istanbul Stock Exchange, respectively Gazioglu & Basdas (2008). Following, Gazioglu (2005, 2008) we argue that invested real foreign assets in the stock market causes a rise in the stock market returns and appreciates the foreign currency (Model 1). A change in real foreign liabilities has a greater impact on real exchange rate than real foreign assets; asymmetric effect (Model 2). Gazioglu & Basdas (2009). However, the post crisis period capital inflows is into banking sector.

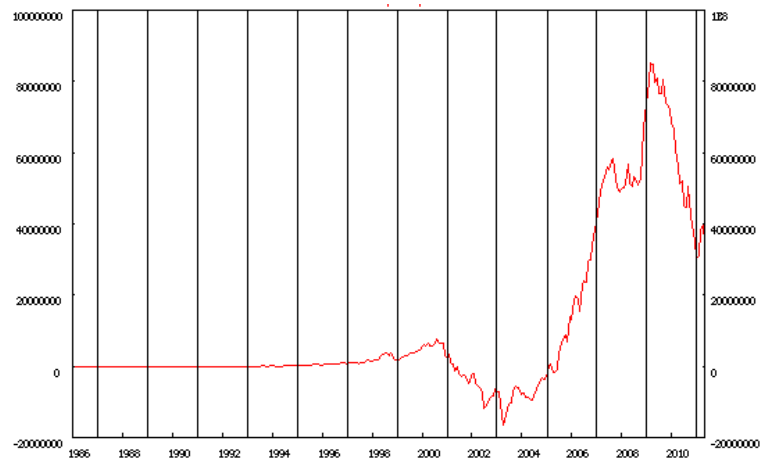


Table 1. Monetary Condition (Monthly, 000 TL) Source: Turkish Central Bank

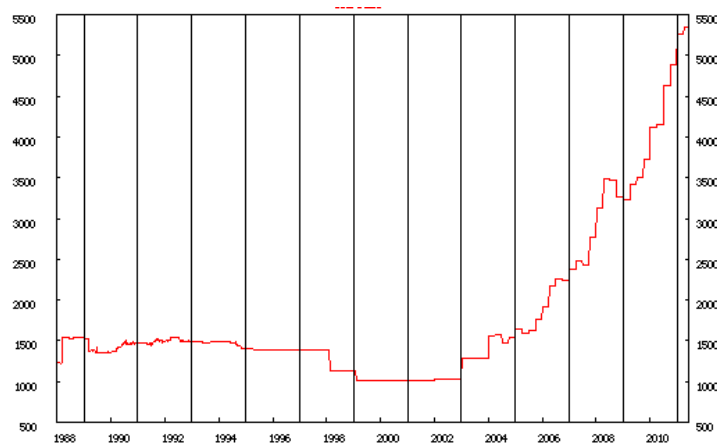


Table 2. The Central Bank Gold. Source: Turkish Central Bank



Table 3. The Central Bank Gold – fixed. Source: Turkish Central Bank

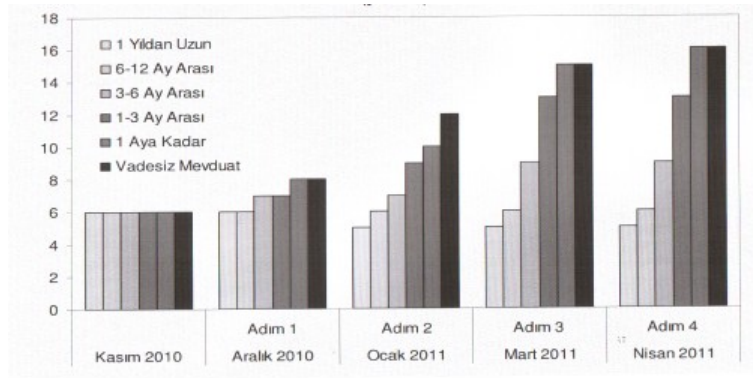


Table 4. The changes in the reserve ratio requirement. *Source:* Turkish Central Bank

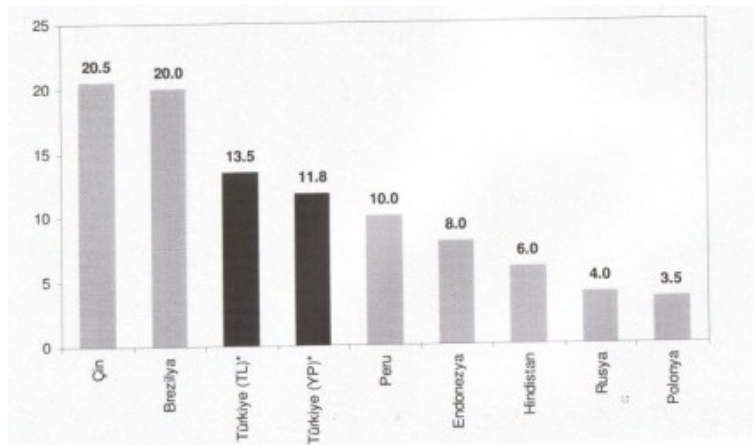


Table 5. Reserve ratio requirement in Turkey in comparison to other countries. *Source:* Turkish Central Bank

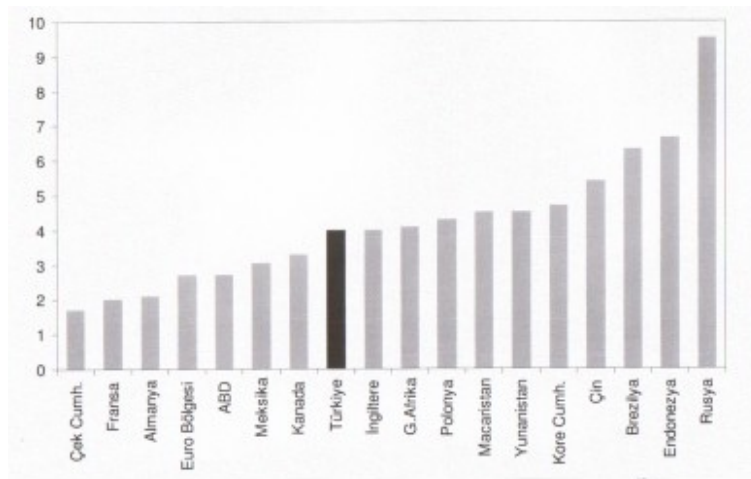


Table 6. Inflation rate in Turkey in comparison to other countries. *Source:* Turkish Central Bank

5 Monetary Policy in Turkey

Monetary Policy and capital flows goes and to and together. In Turkey pull-up theories are applicable. Since 2000 financial crisis had lot to do with reversal of capital flows in Turkey, similar to Asian crisis. Malaysia applied capital control in order to avoid borrowing from the IMF (Tan and Law (2000) and Ghosh (2000). Turkey has chosen to follow the second approach, as described below.

Quantitative pressures started for the period April-November 2010 as a start and continued after November in terms of increased percentage of existing assets (Basci 2011)

Approach 1: Monetary contraction via increasing interest rates, to stop capital inflows (Korea, Brazil)

Approach 2: Difference between domestic and foreign short term interest rate is kept close to each other. In order to control internal market, deal with the problem via other than interest rate. This methodology is not so

different than inflation targeting. Only difference is that the instrument used is mixed rate rather than a single one. They aimed to overcome the macro-financial risks by obtaining the right policy mix. Therefore, the monetary policy is determined by all policy instruments rather than single interest rate movements.

5.1 Financial Stability: Targets

There have been various targets in order to obtain financial stability

- i. Debt percentages. Main usage of internal fund
- ii. Debt period: Both for internal and external debt, increasing the debt periods
- iii. Improve the currency positions of public and private sector
- iv. Risk Management Processes and Management. All kinds of risk management in all aspects of economic New Policy Mix.

Table 2, 3 report gold reserves and the gross US dollar reserves, respectively. Gold reserves had been constant around 1000 million until 2002 and increased steadily until 2008 to 3500 million \$. Since 2008 until 2011(April) it has increased to 5500 million \$. It seems it has been the Central Bank policy to increase the reserves as a responds to the Mortgage Crisis, in order to avoid risk of being affected. Table 3 also shows continues increase in gross US \$ reserves until 2011. In 2008, there was some decrease of reserves due to a responds to the Mortgage crisis.

In Table 4, we show the low interest rate policies and high ratio of reserve requirement. In November 2010, the ratio of reserve equipment was 6% for all funds regardless of their maturity. In December 6-12 month maturity stayed the same. 1-6 month maturity the rate became 7% and up to 1month maturity rate increased to 8%f. In April 2011 one month or current accounts required the highest reserve requirement rate, which is 15%. The lowest reserve requirement is for a year or more, which is 5%.

Table 5 reports that Turkey is in the third place, after China & Brazil, which requires 20.5 and 20.0 % reserves respectively. The Table 6 indicates how quantity squeeze reduced inflation rate to 4% and Turkey's inflation is same level as Britain.

5.2 Targets for the Financial Stability

- i. Debt ratios: More home sources for borrowing
- ii. Debt periods: Through internal and foreign borrowing in order to increase debt period.
- iii. Foreign Exchange Possession. Strengthen the public and private sectors foreign exchange conditions.
- iv. Processes of Risk Management and Methods. All economic units deal with all kind of risk more effectively.

5.3 Instruments other than Interest rate

It might not be possible to obtain price and financial stability only by using interest rate policies. Solution is to use other instruments might be necessary. The possible instruments might be the followings:

- i. Required reserve ratio
- ii. Liquidity management in the Central Bank
- iii. Capital requirement ratio
- iv. Liquidity requirement ratio
- v. Taxes
- vi. Government expenditure except interest repayments

6 Conclusion

Rising share of foreign ownership in the stock market was an issue of concern in Gazioglu (2000, 2008), The foreigners bought the shares when the prices were low and as demand increased the price increased and as the prices were in the highest ,reversal of capital flows took place. The 2001 Financial Crisis occurred with the reversal of capital inflows. The exchange rate crisis was accompanied by the Banking crisis in Turkey. The 2001 Crisis, which-resulted in the restructuring and privatization of the Banking sector, by attracting foreign capital. The foreign share of stock market ownership also increased from 30 to 70%. In another word consequence of the crisis was cheep accusation of the Banks by foreign sector (Gazioglu (2008). Since the exchange rate was not fixed, no financial crisis occurred when stock market return was the highest in Jan06. However, a small crisis arrived as a foreign shock in 2008. The prime mortgage crisis in the US had minimum affect on Turkey, not through the capital outflows, but rather through a fall in demand Turkish export demand, from the Europe.

The recent policy mix by the Turkish Central Bank increased the reserve ratios for liquid funds and aims to increase the liquidity requirement ratio, in order to avoid over expansion of debt in both public and private sector.

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