

EFFECTS OF INFLATION TARGETING ON THE BANKING SECTOR IN TURKEY

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Introduction

One of the most significant dilemmas that central banks have to overcome in the 21st century is to determine which strategies in monetary policy should be pursued in order to attain economic sustainability. One of those monetary policy options which has been gaining popularity in the recent years is inflation targeting, an application that comprises indisputable commitment by a monetary authority along with a set of publicized quantitative objectives for the intermediate-run (Ozturk, 2009). Inflation targeting was first utilized by the Central Bank of New Zealand in 1989, and following its substantial effectiveness in lowering the inflation rate there, it has been adopted by the central banks of numerous developed and developing countries.

On the other hand, the unsatisfactory outcomes of monetary targeting policies applied in Turkey between 1990 and 1992 and later in 1998, and those of the exchange rate regime which was put into effect in 2000 have urged Turkey to seek a new monetary strategy. Subsequently, the Central Bank of the Republic of Turkey (CBRT), which gained its instrument independence in 2001 (Buyukakin & Eraslan, 2004) has begun to apply implicit inflation targeting as of 2002, and later moved on to an inflation targeting regime in January 2006 as a result of its perception that all prerequisites have finally been met. The inflation targeting regime which has been applied implicitly as of 2002, and openly as of 2006 has had significant impact on the banking sector and the economy as a whole. The banking sector, which accounts for 71% of the national financial system with its total current assets amounting to 1.4 trillion TL as of 2012 continues to be influenced by the inflation targeting regime, or in other words, by the relatively low inflation environment (BRSA, 2014).

The purpose of this study is to survey the effects of the relatively low inflation environment, that has been achieved through a process of inflation targeting strategies, over the Turkish banking sector. Initially, a definition of inflation targeting is made, followed by a survey into inflation targeting applications in Turkey in two segments: implicit inflation targeting and open-economy inflation targeting. In the last

section, the impact of inflation targeting in Turkey over the banking sector is assessed.

Inflation Targeting

Although various definitions of inflation targeting exist in academic literature, it is commonly referred to as the fundamental objective of certain monetary policies conducted by central banks in order to achieve price stability. Inflation targeting according to Bernanke is "a monetary policy application that can be defined as the founding of a monetary policy upon a target inflation rate or inflation range determined for a reasonable period of time, in accordance with the ultimate goal of attaining and sustaining price stability, and its announcement to the public" (Bernanke et al, 1999, p.4).

The fundamental distinction from other inflationary control measures of an inflation targeting regime that bases the monetary policy directly on an ultimate target with no obligation to select an intermediate target or targets is that its monetary policy instruments are shaped around future inflation rather than past or current inflation, leaving no room for random assumptions of inflation rates for the future. In order to achieve a target inflation rate, the central bank runs inflation forecasts, and determines a policy and how it will use its monetary instruments against any potential deviation from the inflation target (Arpaslan & Erdonmez, 2000).

Some of the generally accepted criteria set forth in defining inflation targeting are as follows: Price stability as the ultimate objective of the monetary policy; an explicit time frame and a quantitative inflation target to be achieved within this time frame; utmost transparency; accountability of the monetary authority (Kuttner, 2004).

In practice, a direct inflation targeting regime is generally established through a framework of agreements between central banks and governments. Said regime can vary from country to country depending on the individual circumstances (Arpaslan & Erdonmez, 2000).

It is generally accepted that inflation targeting has its advantages over other monetary policy regimes, the foremost being that an inflation targeting regime assists in controlling inflationary expectations and raising the credibility of a central bank. Another issue to point out is that, the primary objectives of a monetary policy in this regime are to achieve and sustain price stability. The authority responsible for conducting the monetary policy enhances the transparency of the policy by clearly pre-announcing it to the public. In this respect, inflation targeting is a

relatively clear cut, easily observed and comprehensible monetary strategy in comparison to other monetary policy regimes. In addition, inflation targeting raises the credibility of applied policies by eliminating the problem of time inconsistency, and it provides further flexibility to the central bank in its handling of the monetary policy (Daglaroglu, 2013).

It is also emphasized that aside from the aforesaid advantages of inflation targeting, there are certain disadvantages as well. First and foremost, provided inflation is the sole focus of attention under this regime, it tends to render very little discretionary power to the central bank, making it difficult for the central bank to react to shocks in a desired degree of flexibility. Another criticism is that contrary to controlling exchange rates or monetary aggregates, controlling inflation is a challenging task, and that the effects of monetary policy instruments on inflation take a prolonged lag to surface. In addition, and especially in economies with a high rate of inflation, major errors in forecasting the course of inflation can occur, which in turn obstruct the ability to achieve inflation targets, and subsequently undermine the sense of reliability which is an essential part of an inflation targeting regime (Daglaroglu, 2013).

- **Prerequisites of Inflation Targeting Regime**

According to Mishkin, inflation targeting as a monetary policy strategy comprises five main components (Mishkin, 2000):

- The announcement to the public of an intermediate-run quantitative inflation target;
- An institutional pledge that price stability has been determined to be the primary and fundamental objective of the monetary policy (and that some other objectives such as growth and a high employment rate are only secondary to price stability);
- The implementation of a strategy that relies on data covering a wide range of variables - and not only monetary aggregates or exchange rates - for identifying monetary policy instruments;
- Routine communication of the decisions of the central bank and their results to the public, hence adherence to a transparent policy;
- Increased accountability on the central bank's part as to the viability of its inflationary objectives.

In addition to these five main elements set forth by Mishkin, a set of prerequisites must also have been met in order for an inflation targeting

regime to be successfully conducted. These prerequisites are as follows (CBRT, 2006):

- Strong adherence to its objective of price stability
- An independent, accountable and reliable central bank
- Strong and developed financial markets
- Low fiscal dominance
- The provision of a technical infrastructure

Inflation Targeting in Turkey

Turkey had to go through the direst economic crisis of its history as a result of the abandonment on February 19, 2001 of the crawling peg exchange rate program that had been adopted in year 2000. Three days later, Turkey switched to an inflation targeting regime under a floating exchange rate system. One of the reasons for Turkey to make that move was the need to replace the ineffective nominal pegs of the past (i.e. exchange rate targeting and monetary targeting) with a credible nominal peg that would bring down the inflation level and aid in the pegging of inflationary expectations. Other reasons were that an inflation targeting regime stood out as the only viable option upon the termination of the currency peg, and that it had been successfully conducted in many other countries (Daglaroglu, 2013). In this part of the study, inflation targeting in Turkey will be examined in two sections: the 2002 - 2005 era when an implicit inflation targeting regime was exercised, and the post 2006 era when an open-economy inflation targeting regime was implemented.

• The implicit inflation targeting era

In 2001, the Central Bank of the Republic of Turkey adopted a floating exchange rate system and decided on the implementation of an inflation targeting regime in order to sort out the inflation problem that had been chronically haunting the economy for many years. However, since most of the prerequisites for an effective inflation targeting regime had not been met due to a climate of post-crisis economic uncertainty, it was decided that the inflation targeting regime should be initiated gradually, starting out with the adoption of an intermediate regime which could be described as an *"implicit inflation targeting regime"*. In this regard, *"an implicit inflation targeting regime could be defined as the announcement of certain quantitative inflation targets and the utilization of the instruments of the central bank to achieve them, without going*

through a full-fledged, official declaration of an inflation targeting regime". In this scheme, the central bank does not put its accountability mechanism into practice, yet pursues an expectations-management strategy similar to that of an inflation targeting regime. In an implicit inflation targeting framework, intermediate targets such as monetary aggregates can also be put to use (Kara & Ocak, 2008).

- **The open-economy inflation targeting era**

Throughout its implicit inflation targeting era, the CBRT formulated the general framework for inflation targeting, and examined countries that were already administering this regime, and consequently commenced an open-economy inflation targeting regime in 2006. The inflation target was formulated over the annual percentage change in CPI, except for a three-year period when a symmetrical and bi-directional uncertainty gap of 2% was detected around target points, which necessitated the inflation target to be jointly determined with the government (CBRT, 2006).

Therefore, there was a bi-directional uncertainty gap of 2% around the target declared in the first three years of the inflation targeting regime in Turkey. The uncertainty gap was explained as quarterly inflationary paths consistent with year-end targets. The reasons behind the central bank's decision can be inferred as follows: The negative effects on the CPI of (1) an increase in unprocessed food prices due for instance to droughts coupled with the fact that food items weigh highly in the CPI; (2) external factors such as oil prices, changes in international liquidity and risk premiums; (3) indirect taxation of goods that are under state supervision and governance; and (4) deficiencies in the institutional infrastructure, and specifically insufficiency in data collection and modeling have caused the two directional uncertainty gap of 2% which was observed around target points to occur (Daglaroglu, 2013). Targeted and actual inflation rates for the open-economy inflation targeting period can be found in Table 2.

Table 2: Targeted and actual inflation rates for the open-economy inflation targeting period (%)

Years	Target	Actual Inflation Rate	Years	Target	Actual Inflation Rate	Years	Target	Actual Inflation Rate
2002	35	29.7	2007	4	8.4	2012	5	6.2
2003	20	18.4	2008	4	10.1	2013	5	7.4

2004	12	9.3	2009	7.5	6.5	2014	5	-
2005	8	7.7	2010	6.5	6.4	2015	5	-
2006	5	9.7	2011	5.5	10.4			

Sources: www.tcmb.gov.tr (12.07.2014)

The target inflation rate determined in 2007 was 4%; however, actual inflation rate in 2008 came out to be 10.1% as a result of increases in energy prices and unprocessed food prices as of 2006, coupled with instability in financial markets in 2008. Actual rates routinely exceeding those that were targeted as of 2006 have urged the CBRT to make its first revision in 2008, subsequently raising the announced targets from 4% to 7.5% for 2009, 6.5% for 2010, and 5.5% for 2011 (CBRT, 2009).

Following the financial crisis which first appeared in the financial markets in the United States in October 2008 and went on to affect other developed and developing countries, it was realized that the price stability oriented inflation targeting policy, which has been implemented by some countries since 1980s, is not adequate to sustain both a stability in prices and stability in financial systems. Therefore, aside from price stability, several other objectives such as financial stability have been added to the agendas of Turkey and many other countries (Gundogan, 2013). In this respect, as of late 2010, the CBRT has designed and implemented a new monetary policy that takes notice of macro-financial risks as well. Upon reviewing the general framework of the inflation targeting regime, the Central Bank of the Republic of Turkey has put into effect additional policy instruments in support of financial stability (CBRT, 2009).

Within the context of its inflation targeting strategy and in line with its objective of achieving price stability and sustaining it, the central bank has continued the use of sale and repurchase agreement tender rates with a one week maturity as its policy interest rate. In addition to the policy interest rate, it has adopted a multi-purpose, multi-instrumental and flexible monetary policy strategy aimed at increasing its strength against vulnerabilities which may arise especially out of credit expansion, an abrupt stall or an impaired balance of payments (Daglaroglu, 2013). This new monetary policy strategy that has been in force as of 2010 is demonstrated in Table 3.

Table 3: The Monetary Policy Strategy of the CBRT

	Former Approach	New Approach
Objectives	- Price Stability	- Price Stability - Financial Stability

Instruments	- Policy Interest Rate	- Structural Instruments (Required Reserves and the Reserve Option Coefficient) - Circumstantial Instruments (Policy Interest Rate, Interest Rate Corridor, Foreign Currency Lending)
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Sources:Daglaroglu,2013,p.207

Table 3 shows the objectives and the instruments taken up by the CBRT under its former and current policies. The new approach that takes heed of financial stability also demonstrates the distinctions in objectives and instruments as compared to the standard inflation targeting regime which has been in force as of 2006. Price stability is still kept as the main objective in the newly formed regime; however, risks that might jeopardize macro-financial stability are also being considered. For this reason, multiple structural and circumstantial instruments can possibly be used in monetary policy (CBRT, 2013).

The Impact of Inflation Targeting on the Banking Sector in Turkey

Just like it affects numerous economic bodies, inflation affects banks as well, which are the fundamental creditor organizations in our country. While the negative impact of inflation over the sector can be observed clearly, the direct impact of inflation targeting on the banking sector is not distinguishable. However, the effects of price stability and financial stability which are the ultimate objectives of inflation targeting can be traced.

One of the primary concerns of entrepreneurs in developing countries such as Turkey is the inadequacy of equity. Lots of firms rely their growth strategies on debt, due to insufficient equity. However, especially due to the heavy public sector debt trend of the 1990s, banks have weighed public debt instruments heavily in their current assets, and in return they have had to face serious interest risks. Additionally, having banks finance the public sector with their existing equity in an inflationary environment causes the loans transferred onto the market to be limited, and creates a tendency on the lenders' part to avoid long-term lending on these limited resources, eventually forcing entrepreneurs to make their investments on short-term loans. The financing of long-term investments through short-term equity obliges the investor to undertake market risks, interest rate risks, and the risk of not being able to source additional financing upon the maturity of their present loan, and it causes financial instability in the financial statements of companies, subsequently raising their costs. In turn, investors with increased costs tend to raise their

income expectations and approach high-risk investments or terminate their investment plans, which would pose a negative effect over economic growth in general. One of the indispensable outcomes of inflation targeting is expectation-management. The expectation that central banks shall strictly adhere to implemented policies in order to achieve the target inflation rate in a transparent environment would, albeit partially, be able to eliminate inflation related uncertainties and facilitate institutional planning and budgeting functions. An environment of relatively low inflation is expected to decrease uncertainties under a macroeconomic framework, and contribute to a better fulfillment by banks of their intermediary functions as a result of the elimination of the short-run constraint in expectations.

During periods of relatively decreased inflation, the share of public sector securities in banks' current assets tends to fall while the share of loans receivable increases. This serves as an indication that during such periods, banks actually concentrate on their actual jobs of acting as intermediaries, and tend to avoid the public-sector-financing structure.

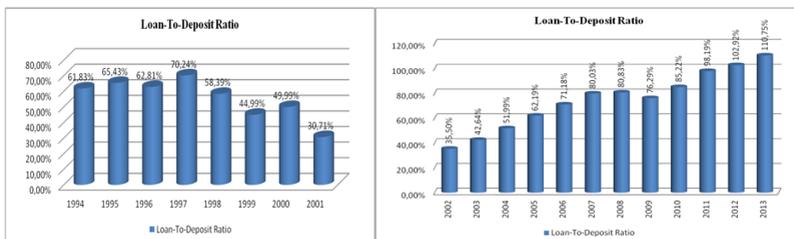
An increase in uncertainty and a climate of high inflation create a high cost of resources for investors and creditors alike, which causes return expectations to rise. While banks tend to allocate their placements towards high interest and high yield prospects during periods of high inflation, as inflation begins to fall banks' revenues show relative falls as well, due to an elimination of the high yield advantage and an increased level of competition between banks. A decline in the interest income vs. current assets ratio of the Turkish banking sector, in line with the rate of inflation has been observed as of 2001 and so far (Aloglu, 2005).

Banks are expected to make up for their interest income losses incurred from securities by expanding their loan portfolios, an impact that further increases the level of competition in the market by pushing banks toward further lending. Turkish banking sector have expanded their loan portfolios during periods of relatively low inflation rates, thereby increasing the share of loans in their assets in 2002-2013 period (The share of loans in assets 23,03% in 2002, 60,46% in 2013).

While not all bank deposits collected during periods of a high level of inflation are allocated to loans, a significant share gets transferred on to public sector securities. Figure 1 shows that less than half of the deposits accrued between 1999 and 2004 have been transferred to loans. An acceleration in the transfer of deposits to loans can be observed as of 2004, which was when inflation began to attain a relatively stable trend.

While almost all deposits have turned to loans in 2011, years 2012 and 2013 mark a period when loans have actually exceeded deposits.

Figure 1: 1994-2001 and 2002-2013 periods Loan-To-Deposit Ratio



Source: Data was compiled from BAT and TEA

Conclusion

The communication between markets and the central bank has gained strength throughout the period when inflation targeting was implemented in Turkey, and an increase in the transparency of the monetary policy has been observed, all of which have promoted the central bank to a stronger position, in line with expectations. However, certain deviations from inflation targets have also been observed during times of negative external shocks and confidence crises in markets. The most striking fact observed during the inflation targeting period has been the shift in the banking sector from a public debt financing structure towards one that focuses instead on providing equity to sectors with a lack of funding. The high interest yields created by an inflationary climate have declined in line with the decline in inflation levels, and the relatively low inflation rates have pushed banks towards a highly competitive loan market. By expanding their loan portfolios, banks have strived to make up for their interest income losses incurred predominantly from securities. The increase in the rate at which deposits were transferred to loans and an increased share of loans in total assets can be seen as indications of this impact. A rise in the level of competition and declining profits have urged banks to diversify their products and services, consequently leading to a rapid rise in personal loans, the availability of a wide variety of loan types and also a diligent effort to increase non-interest revenues in recent years.

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