

TURKEY'S DISINFLATION EXPERIENCE: THE ROAD TO PRICE STABILITY

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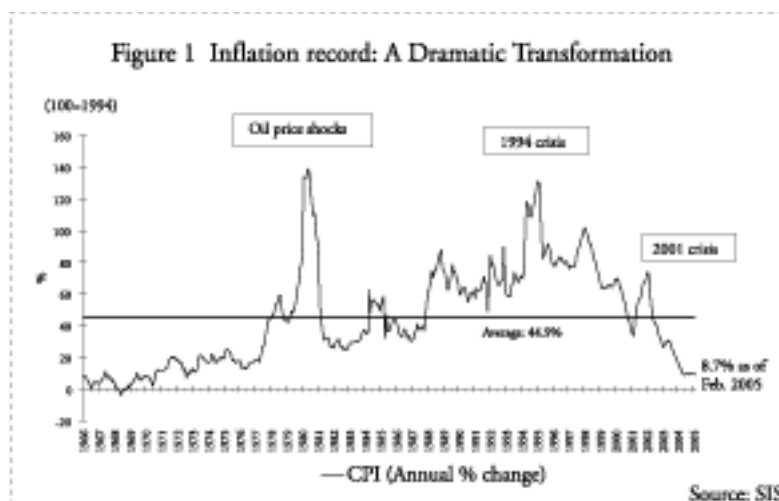
ABSTRACT

This paper aims to analyze the disinflation experience of the Turkish economy after adopting the floating exchange rate regime. Prudent fiscal and monetary policies reinforced by structural reforms have been at the heart of the recent success. Significant structural changes took place in order to maintain disinflation without significant output costs. The Central Bank independence and fiscal consolidation were the two main factors behind the success. Favorable domestic demand conditions, low real wages, increase in productivity, appreciation of TL, the strengthening of the competitive market pressures and declining market inefficiencies have also contributed to disinflation in the same period. Although single digit inflation is eventually reached in 2004 after more than two decades, price stability requires continued prudence from monetary and fiscal authorities under a series of reforms especially in areas of social security, healthcare and tax administration.

Turkey has lived in an inflationary environment for more than three decades. Although she never experienced hyperinflation, chronic high inflation remained as a structural problem. There were several attempts to bring down inflation since 1970s. However these attempts failed, typically together with deep financial crises caused

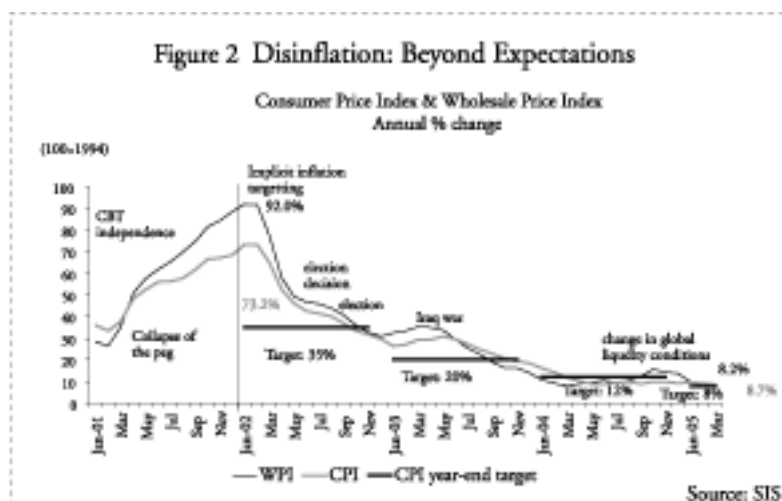
by external or internal factors. Inflation had been one of the primary sources of macroeconomic imbalances in the economy. Nevertheless, the economy overcame such imbalances after the implementation of an ambitious reform program put in place following the 2001 financial crisis. The program formulated the monetary and fiscal policies with the aim of reaching the roots of the structural problems. As a result, economic fundamentals have improved and disinflation has become the foremost trend in the economy (Figure 1).

Recently, historically low single digit levels were attained in inflation. The pace of disinflation was set to be gradual. Consumer price index (CPI) inflation targets were set as 35%, 20% and 12% for years 2002, 2003 and 2004 respectively. Realized CPI inflations undershot the targets in all three years.



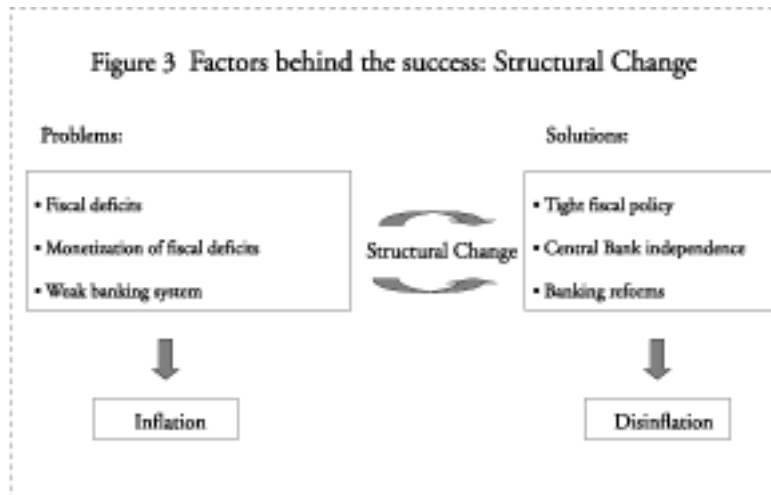
As a result, inflation fell from 73.2 percent in January 2002 to 8.7 percent in February 2005. Despite several disturbances along the way such as the election uncertainty, the Iraq War and the changes in global liquidity conditions, the improved resilience of the economy kept inflation on its target path. In an environment with interest rates declining to a three-decades low, a strengthening local currency and fiscal balance in line with the program parameters, the pace of disinflation exceeded both the official and market expectations

for the third consecutive year in 2004 helping ease inflationary expectations (Figure 2).



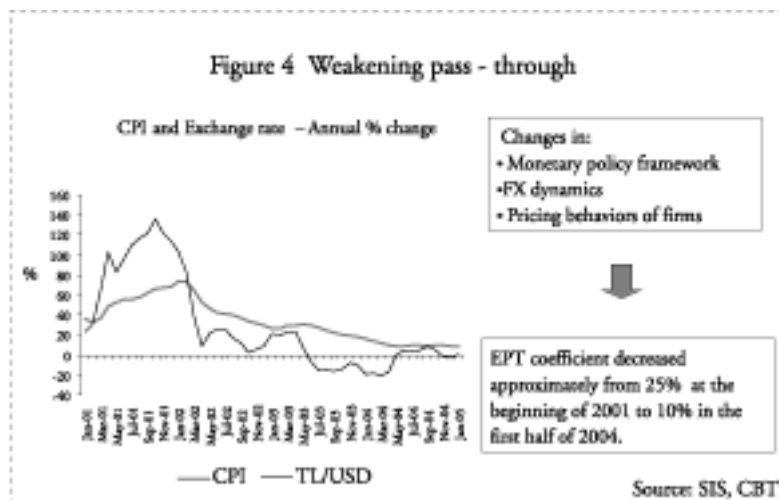
Chronic and persistent high inflation of the 1990s stemmed mainly from fiscal deficits, the monetization of these deficits by the Central Bank's resources and a weak banking system. These structural problems damaged the credibility of fiscal¹ and monetary policies; hence, a high difference between officially targeted and expected inflations, namely a credibility gap emerged at the end of 1990s. After the financial crisis of 2001, the transition program for strengthening the Turkish economy designed to reduce inflation by addressing these structural deficiencies.

In this context, the Central Bank Law was amended to grant independence to the Bank. The aim was to enhance the credibility of the Central Bank policy implementation on the road to price stability. Furthermore, the Central Bank altered its communication strategy to be more transparent and credible to reshape and manage inflation expectations under its new policy framework, namely the inflation targeting strategy under a floating exchange rate regime. Fiscal prudence based on high primary surpluses and enhanced fiscal consolidation together with the reinforcement of banking reforms were also at the core of the program to complete the structural change (Figure 3).

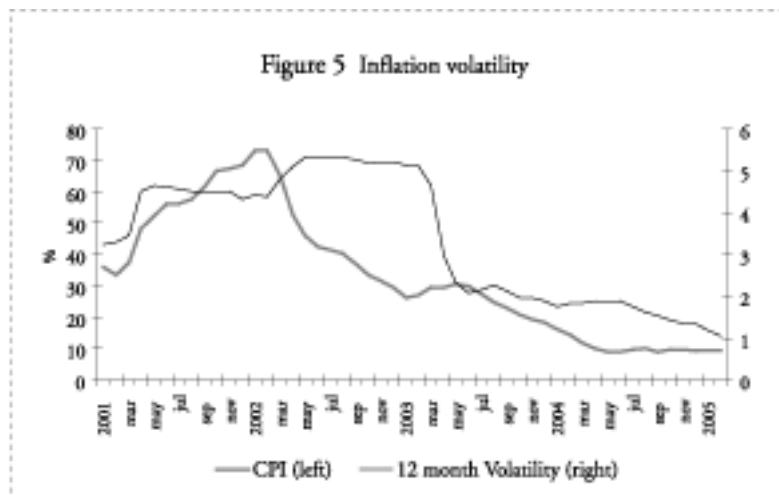


Besides the success in adopting structural changes, Turkey's firm commitment to the economic program led the economy to enjoy unique success both in monetary and fiscal policy aspects. Fiscal policy targets of 6.5 percent primary budget surplus to GDP were met especially in years 2003 and 2004. Favorable domestic demand conditions, an incomes policy consistent with the targeted inflation, productivity growth, and low real wages have also contributed to the persistent disinflation trend during the implementation of the program. The switch to a floating exchange rate regime in February 2001 altered risk perceptions, risk management practices, and pricing mechanism in the economy. Pricing mechanism changed in the sense that exchange rate indexation behavior weakened due to the abandonment of the peg regime. Producers as well as retailers prefer to wait for a certain period of time before reflecting the rise or fall in exchange rate on prices with the aim of identifying whether the change in the value of the domestic currency is permanent or temporary. Moreover, with the adoption of the implicit inflation targeting strategy, inflation expectations are carried to the center of the decision-making process. Therefore, the improvement in inflation expectations accompanied with increased competitiveness and commitment to monetary and fiscal discipline has limited the pass-through effect of exchange rate on prices. A recent study² finds that exchange rate pass-through (EPT) coefficient for CPI decreased approximately from 25 percent at the beginning of 2001 to 10 percent

in the first half of 2004. The results also show that EPT coefficient for non-tradables decreased by one-third of its historical average in 2004. More importantly, the effect of exchange rate on non-tradable prices is found to be lower than the effect on tradable prices, which was historically high. This implies that the second-round effects of exchange rate shocks are eroding gradually (Figure 4).



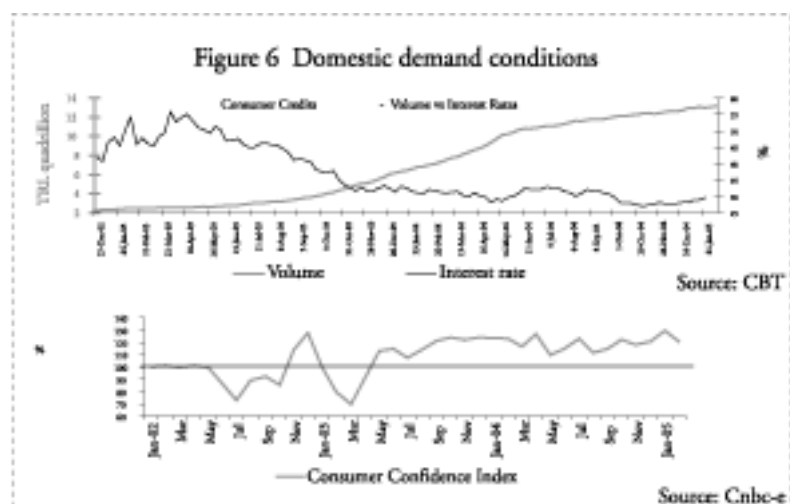
Meanwhile, the change in inflation dynamics brought down inflation volatility to historically low levels. Turkey's high rates of inflation had led to higher levels of inflation uncertainty in the



economy. The level of uncertainty has declined as the economic program became successful on all fronts. Lower inflation rates will contribute to the decline uncertainty further (Figure 5).

Domestic demand conditions were favorable for the disinflation process in 2002 and 2003. Following a significant contraction, the recovery in domestic demand was relatively slow due to high real interest rates, low real wages and gradually improving consumer confidence in the economy.

Relatively low interest rates, the appreciation of Turkish Lira, the fall in the interest rates of consumer loans and the rise in consumer confidence stimulated the revival of domestic demand, especially for durable goods in the first half of 2004. Nominal Treasury borrowing rates declined to approximately 17 percent so far in 2005, down from 63.5 percent in 2002. Profitability of granting consumer loans compared to government securities increased their willingness to extend consumer credits in the first half of 2004. Comparatively low base of consumer loans led to a surge in the pace of consumer credit expansion (Figure 6).

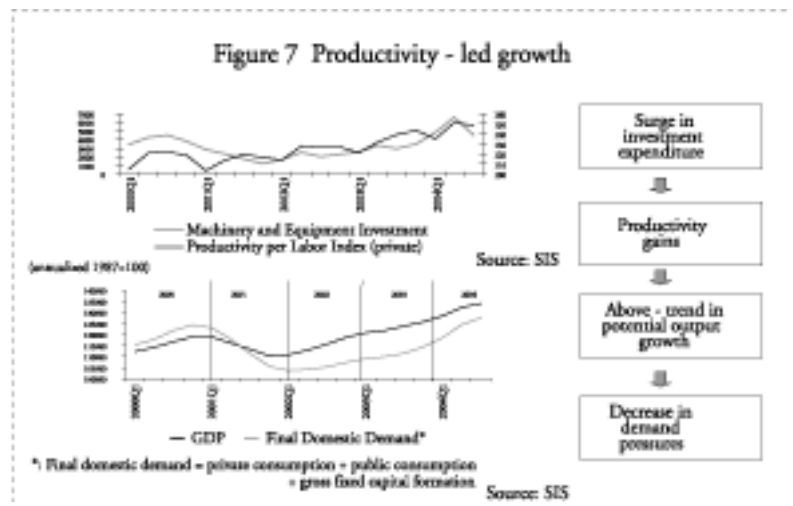


Economic growth was rapid as a result of the surge in investment expenditures and productivity growth. The annual growth rates of GDP were 7.9, 5.8 and 8.9 percent in years 2002, 2003 and 2004

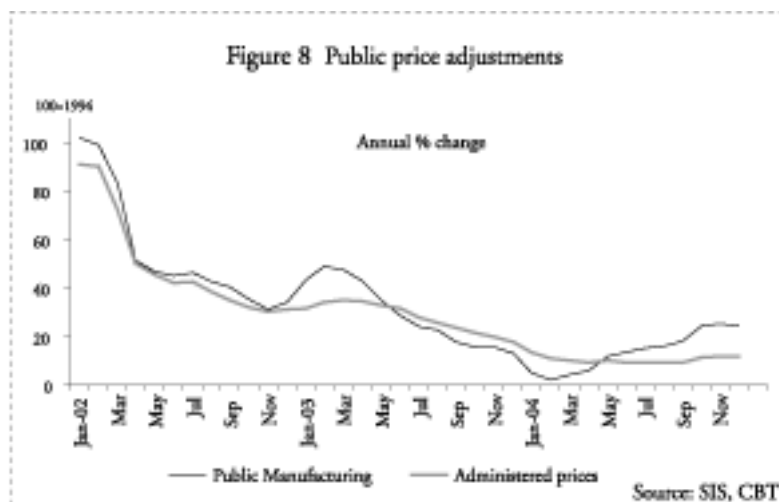
respectively. Labor productivity³ rose by 39 percent between the first quarter of 2001 and the third quarter of 2004, and currently, it is higher than its historical average; its pace of growth may slow down but it is still expected to be high in 2005.

Low real wage level is another factor that has underpinned the reduction in inflation during the program implementation. Real wage index⁴ has been declining since 2001. Real wages per hour in manufacturing industry decreased by almost 20 percent in the third quarter of 2004, compared to the second quarter of 2001. Low real wages not only limited the recovery in domestic demand, but also provided producers with cost-advantage.

Output gap dynamics have contributed to the pace of disinflation in the last three years. Negative output gap limited demand pressures on prices (Figure 7). Recent studies on output gap estimation⁵ indicate that the level of demand in the economy will not endanger disinflation in 2005. However, it is expected that the contribution of negative output gap to deceleration in prices will fall in 2005 compared to previous years. Changes in productivity, real wages, employment and capacity utilization rates will determine the impact of output gap on prices. Within the context of EU accession, further increase in investments may provide the opportunity of sustaining non-inflationary growth experience via productivity increases in coming years as well.

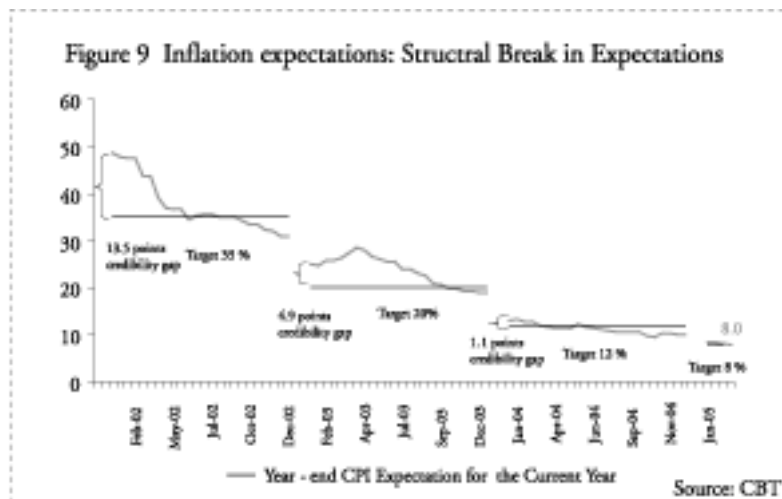


Another factor that helped disinflation was public sector pricing policies consistent with the inflation target. Administered price inflation was slightly lower than general consumer price inflation for the last three years. Given that the fiscal authorities were strictly committed to the fiscal discipline based on high primary surpluses, the public price adjustments resulted mostly from external factors such as oil and commodity price hikes in global markets. In the medium term, the weight of administered prices on price developments is expected to decline as a result of liberalization and privatization in sectors like telecommunications, energy and transportation. Public manufacturing prices are affected by rise in oil prices, exchange rate depreciation, increase in metal prices, rise in tobacco and alcohol prices through the period (Figure 8).

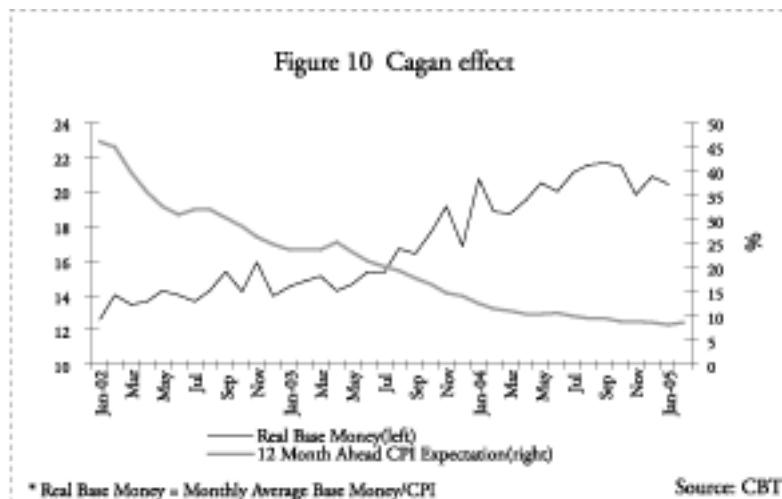


Inflation expectations moved at the center of decision-making process in the context of inflation targeting. Building up credibility over time and shaping inflation expectations in line with inflation targets are the cornerstones of monetary policy making process. Over time, the ability of managing expectations enhanced significantly thanks to the fast-learning by economic agents. The credibility gap, defined as the difference between inflation expectation and inflation target, narrowed to 0.4 percent at the beginning of 2005 from 13.5 percent in 2002. Increased confidence in economic program also contributed to the improvement in expectations. The year-end and

12-month ahead inflation expectations declined to 8 percent and 7.7 percent respectively according to the CBT's February 2005 second-term expectation survey. Given that the target for year 2005 is set as 8% we observe that as of February 2005 the credibility gap is all the way down to zero (Figure 9).

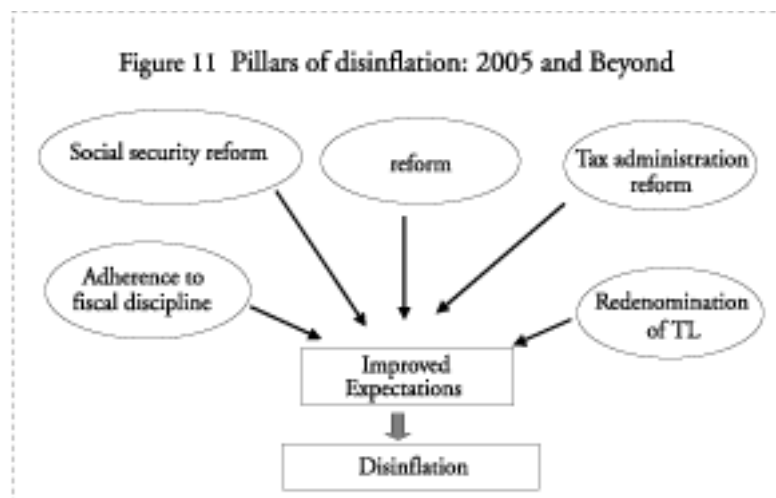


The improvement in 12-month ahead inflation expectations led to an increase in real base money demand in excess of real output growth, due to the Cagan effect (Cagan, 1956, see Figure 10). Within the current policy framework, the Central Bank cut O/N rates gradually and prudently in a forward-looking manner. There were



22 policy rate cuts throughout the program implementation between 2001 and 2005, which brought CBT's policy rate to 15.5 percent as of March 2005.

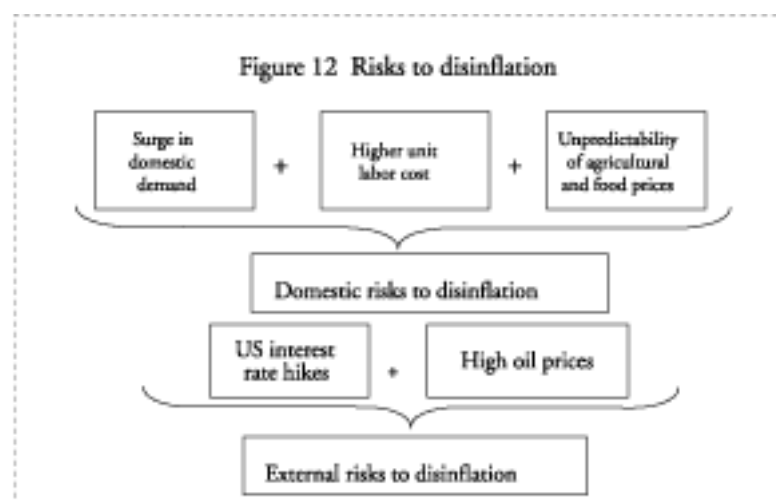
Confidence depends also crucially on fiscal stance. Thus, continuing adherence to fiscal discipline for the 2005-2007 period announced via the Pre-Accession Economic Programme (PEP), is essential for disinflation. The PEP targets a primary budget surplus at 6.5% of GDP for three consecutive years. This is projected to help close the budget deficit in year 2007. Banking sector reforms, reforms in public administration, commitment to program targets accompanied by adherence to structural reform agenda and deleting six zeros from Turkish Lira in January 2005 have assisted disinflation via expectation channel. Redenomination of Turkish Lira is unique in the sense that it has sent a clear signal to the economic agents about the determination of the Central Bank to achieve its main objective of price stability. Moreover, rounding-up effect, one of the possible risks of the operation, was not observed in the first two months of 2005. (Figure 11)



The Central Bank took one more step on the transparency and accountability fronts on the way to formal inflation targeting and reshaped its monetary policy decision-making process at the beginning of 2005. Monetary Policy Committee (MPC) meetings are

pre-scheduled in order to synchronize decisions on interest rates with MPC meetings. The decision on interest rates is announced at 9:00 a.m. on the workday following the meeting. The rationale behind the decision is released within two days as an inflation outlook report. Currently, the MPC operates as an advisory body, but starting from 2006, decisions on interest rates will be made by the Committee together with the start of full fledged inflation targeting. We have already reached single digit inflation rates. Nevertheless, there is a long way to attain price stability. Disinflation may be exposed to risks that could slow down its pace without altering its main course. Higher unit labor costs as well as external shocks to oil prices or global liquidity are visible risks to disinflation. Despite the fact that service sector price inflation has decelerated in the last three years, it is still behind the decrease in headline consumer price inflation. In 2004, it was observed that price increases in sub items of service sector prices such as prices in education and health approached the inflation target, which shows that there is a relative improvement in breaking the rigidity in service sector price inflation.

The revival of domestic demand should be carefully analyzed. Moreover, the quality of fiscal adjustment should be improved considering its effect on expectations. Beyond those factors, unpredictability of agricultural and food prices is a risk factor for all countries.



As mentioned above, risks to disinflation do not only stem from the internal dynamics of the Turkish economy, but also from external factors such as tightening of US monetary policy and higher oil prices. Higher oil prices could slow down disinflation through its cost-push effect and its impact on public sector pricing policy. Furthermore, increases in oil prices may cause deterioration in inflation expectations, known as a second-round effect (Figure 12).

To conclude, disinflation performance has been impressive up to now, but there are still challenges ahead on our road to price stability. The main challenge is to accomplish the structural changes needed in the economy. Within this context, keeping program implementation on track and rigorous management of expectations will complete the groundbreaking progress on the disinflation front and bring macroeconomic stability to the economy for good.

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ENDNOTES

*Erdem Başı: Vice Governor of the Central Bank of Turkey (CBT). The views expressed in this paper are those of the author and do not necessarily represent the views of the Central Bank of Turkey.

¹ The paper by Celasun et al. (2004) shows the importance of fiscal discipline in shaping inflation expectations in emerging economies.

² Kara et al. (2005).

³ The State Institute of Statistics (SIS), Productivity per labor in manufacturing index.

⁴ SIS, Real wage index for production workers.

⁵ Sarıkaya et al. (2005).