

# Turkey's public sector finances and EU perspective

Merih Celasun<sup>1</sup>

## Abstract

In contrast to the sharpened policy preferences for sustainable public finances in the EU, Turkey's post-1990 policy process did not feature a credible political commitment to fiscal consolidation. Turkey postponed the fundamental change in its macroeconomic and public finance strategy until the early 2000s, and undertook these reforms only after experiencing a severe financial crisis. This paper reviews the patterns of fiscal adjustment against the backdrop of the main macroeconomic trends in the 1990s and early 2000s, and identifies the main strengths and pitfalls of the fiscal reform strategy. Based on assessments of projected debt dynamics, the paper highlights that persistent primary surpluses are required in the medium-run in order to ensure a credible pace of public debt reduction. Moreover, the composition of fiscal adjustment needs to be modified in favor of a greater reliance on direct taxes in order to enhance the durability of the fiscal adjustment and further reform of the social security system is needed to reduce the social security deficits that impose a growing burden on the budget.

## 1. Introduction

In countries that have exposed themselves to trade integration and capital account opening, a key legacy of the 1990s has been the increased significance of sound public finances for macroeconomic stability and rebalanced roles of the public and private sectors in

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<sup>1</sup> Formerly, Dean, Faculty of Economics, Administrative and Social Sciences, and Professor of Economics, Bilkent University. This paper represents Merih Celasun's work on Turkey's EU accession in late 2003. He organized his thoughts in the form of notes for section 1 through 5 in late 2003 and early 2004 but was unfortunately unable to fully complete the paper. In the interest of preserving Merih Celasun's original thoughts, his notes have been only lightly edited by Oya Celasun.

resource allocation within strengthened market economy frameworks. While globalization trends, tax competition and fiscal consolidations have generally tended to restrict governments' financing capacity to pursue redistributive policies, technological advances have provided a greater scope for private participation in some key sectors (e.g., network industries), requiring new modes of regulation for enhanced economic and operational performance. In general, the widespread use of highly arbitrary and cumbersome government control mechanisms has been reduced, and new forms of regulatory institutions have been introduced to improve efficiency in the public and private sectors.

Countries that had initially large outstanding stocks of government liabilities have made important strides in consolidating their public finances in the 1990s in order to alleviate their debt burden and create more favorable conditions for monetary and financial stability. The fiscal consolidation efforts have often been supported by budgetary reforms as well as structural changes in other deficit-producing components of the public sector such as pension systems. All these trends observed in the previous decade point to the cumulative change in the relative positions and institutional set-up of the public sectors. This change had significant implications for fiscal policy choices and underlying political economy relations, especially in those economies with previously-large governments facing tighter budget constraints in the new environment.

In the case of post-1990 European Union (EU) economies, the fiscal policy practice at the national levels has been steered largely by the new institutional strategy and policy guidelines adopted for establishing the Economic and Monetary Union (EMU). The Treaty of Maastricht and subsequently the Stability and Growth Pact have introduced fiscal rules, monitoring mechanisms and policy correction procedures to ensure the sustainability of public deficits and debt levels to support the single currency and centralized monetary policy of the EMU and evolve a reassuring macroeconomic context for the single market. The redesign of the framework arrangements for monetary and fiscal policies has been complemented by structural policy initiatives that are often commonly pursued in many areas of economic and social activity. The underlying presumption has been that the combined workings of the single market, common currency, monetary stability, sustainable public finances and supportive structural and social policies would create a more favorable EU-wide environment for growth and employment generation in the medium- and long-term.

Following the recession of the early 1990s, the EU countries, including those which opted out of becoming a member of the EMU in the initial stages, made an impressive effort in containing their budgetary imbalances and eventually putting their public debt on a declining path. For the EU as a whole, the actual general government deficit decreased from 6.2 percent of GDP in 1993 to 0.6 percent in 1999, creating favorable conditions for the reduction of general government gross debt from about 72 percent of GDP in 1996 to 68 percent in 1999 and further to 63 percent in 2001.

At the aggregate EU level, the budgetary adjustments were generally achieved mainly by expenditure restraint rather than through increases in total revenues. The EU average share of total general government expenditures in GDP declined from 53.3 percent in 1993 to 47.2 percent in 1999 whereas the total revenue remained almost constant at around 46.6 percent of GDP. In terms of GDP percentages, the major contributors to the expenditure restraint were the reduction in social security-related transfers to households and to a lesser extent reductions in interest payments and investment expenditures. On the revenue side, moderate declines in social security contributions were offset by tax increases (most notably in Italy, France and Sweden). In the late 1990s, an important start has been made toward rethinking of the pension systems and expected social security deficits due to aging populations.

Although these aggregate fiscal trends conceal important differences among the EU members, they nonetheless underscore the presence of a strong political commitment to sound public finances in the EU area. However, it may also be noted that the budgetary consolidations and improved prospects for debt sustainability need to be complemented by structural policies that promote more favorable responses on the supply side of the long-term growth process.

In contrast to the sharpened policy preferences for low inflation, monetary stability and sustainable public finances in industrial countries in general and EU economies in particular, Turkey's post-1990 policy process did not feature a credible political commitment to inflation stabilization, fiscal consolidation and structural reforms in the public sector. Following the adoption of an open capital account regime in 1989, the interrelated workings of high and persistent inflation, and loose fiscal policy increased output and price volatility, shortened the time horizons of economic agents, dollarized the economy, and hampered strategic planning in the private and public sectors. The benefits expected from market opening and establishment

of a Customs Union with the EU in 1996 could not be sufficiently realized, and especially the strengthening of industrial and infrastructure development programs with a more active participation of foreign direct investment fell short of expectations. In effect, Turkey postponed the fundamental change in its macroeconomic strategy, public finance and governance until the early 2000s, and undertook these reforms only after experiencing a severe financial crisis in 2001 that required a comprehensive program of stabilization and institutional reform. The average trend GNP growth rate declined in the 1990s to 3.33 percent per year during 1990-99 from 5.25 percent in the 1980s, which was characterized by a successful external adjustment effort in the aftermath of the 1978-80 debt crisis.

In the 1990s, Turkey's capital account transactions became dominated by private short-term flows, which were intermediated by inadequately regulated banks to finance government deficits, leading to a rapid buildup of domestic public debt with a relatively short-term maturity structure. Monetary and exchange-rate policies generally accommodated high inflation expectations with a view to ease the domestic public debt rollover problem, but the real cost of borrowing remained at high levels, because of the imperfect credibility of the policy process, particularly in the absence of a durable adjustment in government finances.

Policy corrections introduced after the 1994 capital account crisis produced only temporary improvements in fiscal balances and could not reverse the deteriorating trends in public debt dynamics. Meanwhile, the government accumulated substantial amounts of contingent liabilities in the private and public banking sectors, which were not transparently reviewed in the debt management process. Private banks operated with moral hazard under an extensive deposit insurance system, accumulated uncovered exchange and interest rate risks on their balance sheets and became highly vulnerable to a sudden reversal in capital flows. Public banks' so-called "duty losses," incurred largely from policy-driven lending at below the market interest rates, were not sufficiently compensated by the budgetary cash transfers, and thereby accumulated as an implicit government debt stock, pushing public banks to rely heavily on overnight borrowing to meet their liquidity requirements.

Towards the end of the 1990s, concerns with Turkey's public debt sustainability and rollover of its domestic debt stock heightened, especially after the reversal of capital flows to emerging markets following the 1998 Russian financial crisis. The establishment of a

stable three-party coalition and the massive 1999 earthquakes had created a political environment favorable to the launch of an IMF-supported disinflation and reform program covering the period 2000-2002. Moreover, the decision at the Helsinki Summit of the European Council in 1999 to recognize Turkey as a candidate for accession introduced a new perspective on constitutional and legislative reforms to meet the Copenhagen political criteria and complementary guidelines for a wide-ranging alignment with the EU acquis.

The IMF-supported 2000 program envisaged, for disinflation purposes, a transitional crawling-peg exchange rate regime (linking predetermined exchange rate adjustments to inflation targets) complemented by a currency board-type monetary regime (based on changes in net foreign assets with strict limits on net domestic assets). The program also entailed fiscal adjustment measures and a large number of structural reform initiatives.

Against the background of largely unremoved structural weaknesses in the banking sector, the program carried a high risk of a financial crisis in case of a sudden reversal in capital flows, in addition to the risk of a boom-and-bust cycle typically associated with exchange-rate based disinflation strategies. The program encountered a severe liquidity crisis in November 2000 and collapsed in February 2001 after a sizeable loss of international reserves and sudden outflow of capital, following a triggering event of a political nature. The domestic currency depreciated sharply after the announcement of the termination of the crawling peg and the switch to a floating exchange rate regime, bringing in its wake a host of balance-sheet problems in the banking and corporate sectors.

In response to the combined occurrence of the capital account and banking crises of February 2001, the government introduced a new program in mid-2001. The program included an unusually tight budgetary policy, and far-reaching structural measures for the restructuring of the banking sector and rebalancing the economic functions of the public sector, with a major emphasis placed on the achievement of price stability through a new monetary policy regime, granting instrument independence to the Central Bank. The post-crisis policy framework gained additional concreteness and financial support by adopting in February 2002 a new three-year stand-by arrangement with the IMF. Although the government's new program could not avert a deep recession in 2001, it paved the way for an unexpectedly-rapid output recovery in 2002, gradually improving prospects for medium-run public debt dynamics.

While Turkey's 2001 financial crisis had a number of characteristics that were commonly observed in emerging market crises experienced elsewhere in the 1990s, there were striking differences in certain areas. Turkey's crisis occurred in the context of implementing an IMF-supported program, which invited severe criticisms of the design of the program framework and its timing before addressing the fragilities in the banking system. Another striking feature of the Turkish crisis was that it resulted in a much steeper rise in net public debt (from 57 percent of GNP in 2000 to 93 percent in 2001). The fiscal cost of the Turkish banking crisis incurred in the process of bank-recapitalization was much higher (about 31 percent of 2001 GNP) than in most episodes experienced elsewhere, due to the realization of unusually large contingent liabilities that previously existed in the banking sector. Hence, the challenge of public debt sustainability has been much stronger in post-crisis Turkey, especially in the context of a monetary policy drive towards an inflation targeting regime. Furthermore, the tight budgetary constraint imposed by the requirement of primary surplus generation is likely to lead to conflicts in public expenditure allocation in accommodating new spending on the adoption and implementation of the EU *acquis* in the accession process.

The general observations presented in this introduction point to the crucial importance of fiscal consolidation and public sector reform in Turkey, which were not adequately addressed in the 1990s at the cost of a depressed trend of GNP growth, persistent inflation and a legacy of a high public debt burden that requires painful adjustment in the early 2000s. Against the backdrop of these introductory remarks, the remainder of the paper aims to provide an interpretive review and assessment of main trends and selected issues in Turkey's public finances, with a particular emphasis on the linkages with the fiscal aspects of Turkey's pre-accession preparations in view of the next stage of its EU candidature.

The remaining part of the paper is organized around five additional sections. Section 2 reviews the key elements of the macroeconomic context for public finances before and after the 2001 crisis. Section 3 presents an overview of fiscal indicators and public debt accumulation from 1997 to 2002 after a discussion of the major components of Turkey's public sector and the relative size of its general government in comparison with the EU averages.

Against the backdrop of some general observations on fiscal sustainability in the EU context, Section 4 evaluates the medium-term outlook for public debt reduction under alternative scenarios and provides a descriptive analysis of the changing composition of fiscal adjustment in the 1990s and early 2000s. The numerical assessments in Section 3 underscore the policy concerns arising from Turkey's heavy reliance on the revenue-based fiscal adjustment patterns in the early 2000s in the light of recent cross-country studies that suggest the relative durability of expenditure-based fiscal consolidations. The analysis of debt dynamics brings out the strong sensitivity of the speed of reduction in debt ratios to possible variations in two key variables, namely the primary balances and effective real average interest rates, underlining the critical importance of credibility in program implementation while also pointing to the potential risks associated with the real exchange rate movements in the Turkish economy, especially after the massive real appreciation experienced in 2003. Section 5 concludes by recapitulating the key fiscal policy implications of the study.

## 2. Macroeconomic environment and public finances: Key trends before and after the 2001 crisis

### *2.1. Macroeconomic background*

#### *2.1.1. The legacy of the 1980s*

Turkey's economic performance in the 1980s was marked by a rapid export-oriented response to the external debt crisis encountered in the late 1970s, which had forced a major change in the trade regime. The latter was characterized by the removal of quantitative restrictions on imports, gradual reduction of import tariffs and significantly increased export incentives that were supported by sustained real devaluations and a substantial decline in domestic absorption. The trade reform process was complemented by price liberalization in industrial product markets as well as by financial sector liberalization that entailed a gradual opening in the capital account after allowing domestic residents in 1984 to open foreign-currency denominated bank deposits and subsequently removing restrictions on domestic banks to engage in foreign exchange transactions.

The flip side of the coin in Turkey's post-1980 export-oriented and increasingly market-based recovery from its external debt crisis was marked, however, by a number of unfavorable features. The

sustained policy of real exchange rate depreciations were validated by a sizeable decline in real wages and cuts in subsidies to farmers. The increase in government saving was essentially engineered by reduced real wages of public sector workers and increased real prices of state-owned enterprises (SOEs), which yielded a substantial source of revenue (in the form of operating surplus) from the SOE sector (Celasun and Rodrik, 1989). Similar real wage trends were observed in the private sector, which had to cope with not only higher import costs but also higher real interest rates. The post-1980 shifts in the wage-price structure resulted in rising income inequality, which did not immediately lead to political conflicts, because of the military rule in 1980-83 and subsequently by arrangements that effectively constrained political competition until the 1989 general elections.

Besides the distributional deterioration, the 1980s also featured a highly criticized policy tendency towards setting up a large number of extra-budgetary government funds. The funds impaired fiscal discipline, blurred transparency in public accounts and opened the way for ad hoc and frequently changed policy measures that hampered the credibility of policy-makers as much as the credibility of the new policies. The institutional issues of establishing appropriate regulatory frameworks were not adequately addressed. The legal basis of privatization remained unclear and therefore was subject to numerous challenges in the courts.

In sum, the legacy of the 1980s had mixed characteristics. While public debt ratios remained low (net public debt around 29% of GDP in 1990) and the outward-oriented and market-based economic recovery from the debt crisis was particularly impressive by cross-country standards, the adverse characteristics included mainly the incomplete nature of inflation stabilization (e.g., an average of 66 % annual CPI inflation rate in 1988-89), much more unequal income distribution and weak governance in the public sector, allowing a large scope for discretionary policy actions in the government's overall economic management.

### *2.1.2. Aggregate economic performance in the 1990s*

Against the background of considerable success with trade opening and related liberalization measures in the 1980s, a major policy decision was made in 1989-90 to adopt full convertibility (Article VIII status of the IMF) in the external capital account, notwithstanding the missing elements of a prudent switch to capital account liberalization, most importantly in the area of effective



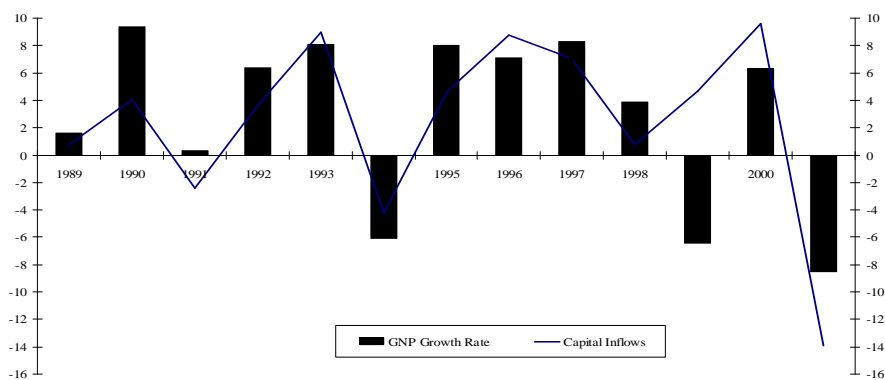
regulatory and supervisory frameworks for the financial sector. Although the stated general objective of the new policy regime was to allow the domestic economy to derive a much greater benefit from globally mobile capital flows, a more immediate policy interest was attached to easing the financing constraint on domestic output growth by allowing for higher net capital inflows, and more importantly to provide a greater scope for debt-financed public spending to reverse the unfavorable trends in income distribution in an increasingly contestable political environment after the 1989 elections (Celasun and Rodrik, 1989).

Despite the absence of domestic macroeconomic stability, private capital flows responded favorably to Turkey's full financial opening, but mainly with short-term maturities. In view of Turkey's weak public finances, chronic inflation, highly volatile financial environment and lack of sufficient policy credibility, capital account transactions became increasingly dominated by short-term flows, producing a growth process highly vulnerable to sudden stops or reversals in net capital inflows (Figure 1). The available econometric evidence suggests that the uncovered Treasury-bill interest differential was the most significant "pull" factor of Turkey's capital flows rather than "growth opportunities in the economy" during 1990-97 (Celasun *et al.*, 1999). Favorable borrowing conditions (mainly in the form of low interest rates) in global markets also impacted as external "push" factors behind the observed portfolio flows in some intervening years (e.g., 1996-97). The relative role of foreign direct investment remained minimal in resource inflows in the absence of stable financial and institutional conditions that are conducive to risk-taking in longer-term physical capital formation.

By cross-country standards for emerging economies, Turkey had a very high volatility of GNP growth in the 1990s as measured by the standard deviation of its annual growth rate, which was 5.9 percent. In addition, while the average yearly inflation rate (measured by the GNP deflator) increased from 46 percent in 1981-89 to 73 percent in 1990-99, the average annual GNP growth rate declined from 5.4 percent to 3.8 percent in these two successive periods, respectively. In the boom years during the 1990s, the capital account surpluses were generally higher than the current account deficits in the balance of payments. The broadly observed boom and bust cycles were associated with the rise and fall of real exchange rates and reverse movements in interest rates. In the 1990s, the changes in net capital inflows and financial variables together with high and unstable

inflation have been identified as significant determinants of the short-term dynamics of private expenditures (especially, consumer durables and machinery and equipment component of private investment) that underpinned the increased volatility of output growth (Celasun *et al.*, 1999).

**Figure 1**  
GNP Growth Rate (%) and Capital Inflows (\$ Billion)



A noteworthy characteristic of real sector performance in the 1990s was the sluggish growth contribution of rising share of investment in GNP (from 21.5 percent in the 1980s to 24.2 percent in the 1990s).<sup>2</sup> At the economy-wide level, the growth contribution of the rise in the GNP share of total fixed investment was evidently constrained by the adversely affected productivity of capital stock due to the underutilization of output capacities in the recession years of the volatile growth period. Moreover, the observed shift in the allocation of total investment towards activities that have high capital-output ratios (particularly, the housing and real estate sectors) also implied a decline in the marginal productivity of capital in the aggregate growth process. From 1990 to 1997, the housing sector alone absorbed about 34 percent of the total (or 43 percent of private) fixed investment,

<sup>2</sup> A related development was the rise in the relative share of private sector in total fixed investment from 58 percent in the 1980s to nearly 75 percent in the 1990s. These trends suggest that the physical “crowding-in” effect of public investments (which have been mainly in infrastructure sectors) had lost its strength in the 1990s, whereas the public deficits tended to exert a “crowding-out” effect on private investment through the financial and inflation channels, particularly in the short-run.

while its share in GDP had averaged around 3.4 percent. During the same period, the share of manufacturing (which is the most dynamic and export-producing sector of the economy) in total fixed investment was 19.8 percent, and in GDP nearly 22 percent.

On the supply side, another unfavorable trend was the limited growth contribution of labor, predominantly employed in low productivity sectors such as agriculture, construction and services. A sources of growth analysis for the aggregate economy shows that the relative contributions of capital accumulation, labor use and total factor productivity growth to the GDP increase over the 1990-2000 period (about 4.1 percent per year) were 73.2, 17.3 and 9.5 percent, respectively.

Against the background of its external debt stock rising from 41.7 billion USD in 1989 to 84.2 billion in 1997 and further to 131.5 billion in 2001, the observed patterns of Turkey's post-1990 GDP growth experience point to the rather unsatisfactory nature of aggregate benefits that have been derived from liberalized capital flows in an environment of macro-instability and prolonged distortions in resource allocation.

## *2.2. The post-1990 policy developments*

### *2.2.1. Main characteristics of macroeconomic policy episodes*

Under the open capital account, the government's declared exchange rate arrangement was the managed float regime, which was used with varying nuances over time until the adoption of an exchange-rate based disinflation program in December 1999. In the post-1990 period a number of policy episodes may be differentiated to underline the major changes observed in the macroeconomic environment and provide context for the analysis of fiscal adjustment patterns in Section 4.

- The 1990-93 episode was a foreign-financed boom period (except the recession year 1991 after the Gulf War I) with worsening macroeconomic fundamentals, involving a progressive overvaluation of the domestic currency, large fiscal primary deficits and widened current account imbalances. The primary source of vulnerabilities was in the public sector, arising mainly from the real wage hikes for government workers, weakened financial performance of state enterprises and the rising interest burden on public finance. The conduct of monetary policy was erratic with a frequent recourse to Central Bank advances in financing public deficits. The buildup of official foreign currency

reserves was insufficient to cope with possible shocks on the capital account.

- The 1994-95 period was an episode of currency crisis and incomplete adjustment. The 1994 crisis was precipitated by a sudden outflow of capital triggered by the loss of investor confidence in the government's debt management strategy after the cancellation of Treasury bond auctions, which signaled a possible rise in monetary financing of deficits and higher inflation. The 1994 crisis was characterized by a sharp currency depreciation (nearly 100 percent nominal increase in TL/\$ rate), highly destabilized financial markets, a steep fall in real wages and a contraction of GNP by 6.1 percent. The crisis was addressed by a stabilization program (April 1994) with the support of an IMF stand-by arrangement, which attached a high priority to budget correction and structural adjustment in the public sector, particularly to the SOE reform and privatization. To restore confidence in the financial system, a 100 percent saving deposit insurance scheme was introduced, opening the way for excessive risk taking (or moral hazard) in the banking sector. The size of fiscal adjustment in 1994-95 was substantial, but it relied heavily on cuts in public wages and public investment, which proved not to be durable thereafter. Program implementation weakened after the resumption of external borrowing in 1995 and was further disrupted by political instability in late 1995.
- Following a rebound in 1995, real GNP growth continued strongly (at around 7.5 to 8 percent per year) in 1996-97, resulting in another boom episode associated with the return of capital flows at much higher real interest rates in a highly inflationary setting. This episode is also marked by the introduction of the Customs Union with the EU in early 1996, entailing considerable reduction in import taxes. The so-called luggage trade with the former centrally planned economies in the region contributed positively to the balance of payments. The notable improvement in fiscal primary balance in 1994-95 lost its strength in 1996-97, however, and large increases in government's interest payments could not be offset by primary surpluses. While the Central Bank financing of public deficits was reduced and eventually eliminated in 1997, net foreign borrowing of the government turned negative, resulting in a large rise in domestic borrowing at high interest rates. During this subperiod, private banks began to accumulate large holdings of nominal (non-indexed) public domestic debt funded heavily by short-term external debt and repos in the domestic market with a rapid expansion of off-budget transactions.

- The 1998-99 period was marked primarily by falling GNP growth rates, rapidly worsening public sector debt dynamics and an increase in the government's contingent liabilities arising mainly from the banking sector vulnerabilities. A new fiscal-monetary policy framework was adopted in 1998, but its effectiveness was rapidly eroded by adverse developments in external financial markets (after the Russian default in August 1998) and domestic earthquake shocks in 1999. Nonetheless, important pieces of legislation were enacted in 1998-99 in the areas of social security reform, provision of international arbitration of disputes over foreign direct investment and issuance of taxpayer numbers as part of the drive to strengthen tax administration.
- The 2000-02 period was marked by another boom, crisis, and adjustment cycle with important differences from the earlier experiences. The distinguishing characteristics of the 2000- 02 period include, among other specific features, a relatively stronger political commitment to disinflation and reform, more comprehensive and sustained support from the IMF and World Bank, and the highly complementary policy impact of Turkey's EU accession perspective, which acquired a more concrete form after the European Council of December 1999 decided that "Turkey is a candidate state destined to join the Union on the basis of the same criteria applied to the other candidate States." A rather unique aspect of the 2000-02 experience is that Turkey encountered a severe financial crisis in February 2001 while it was implementing a program under an IMF stand-by arrangement, which included detailed macroeconomic guidelines for inflation stabilization as well as wide-ranging structural conditions.

### *2.2.2. The exchange - rate based disinflation program, 2001 crisis and response*

Under a new three-party coalition government formed after the April 1999 general elections, an exchange-rate based and IMF-supported disinflation program was launched in December 1999, covering the period from 2000 to 2002. This program formally announced a pre-determined schedule of monthly nominal devaluations of the domestic currency against a foreign-currency basket over an 18 month period, and an orderly exit with a gradually widening exchange rate band thereafter. The monetary component of the program was a currency-board like arrangement with a strict limit on Central Bank's net domestic assets. To support the nominal exchange rate anchor, forward-looking wage and price indexation was

envisaged for the public sector. Structural conditions of the IMF were numerous and primarily aimed to support medium-term fiscal adjustment, including highly optimistic privatization plans.

In its earlier stages, the December 1999 program seemed to have succeeded in lowering nominal interest rates on new bond issues by the government, but it also resulted in real exchange rate appreciation, which became more apparent in late 2000. As observed in most other exchange-rate based disinflation episodes elsewhere, the program eventually produced a consumption-led boom and a widened current account deficit in 2000 (about 5 percent of GNP), and enhanced the previously unaddressed balance-sheet vulnerabilities in the banking sector, mainly in the form of open foreign exchange positions and large exposures to interest rate and maturity risk in most private banks, and liquidity risk in public banks. The banking regulation and supervision authority (BRSA) had a late start in its operations in August 2000, but it was not well-prepared to cope with unviable banks in the system. In November 2000, a mid-sized bank's overnight funding difficulties spread to other banks and created a liquidity crisis, resulting in excessively high interest rates. The financial turbulence in money markets was calmed down by the additional support arranged by the IMF from its supplementary reserve facility in late December 2000.

Against the backdrop of growing anxiety about the sustainability of the pre-determined exchange rate path after the November 2000 experience, a political event —namely, a publicly announced dispute between the President and Prime Minister— triggered a sudden outflow of capital on February 19, 2001. The outflow resulted in huge losses of official reserves (despite the astronomic rise in overnight interest rates to levels exceeding 6000 percent), the eventual collapse of the crawling peg policy, and a switch to a floating regime (on February 21, 2001) that opened the way for unexpectedly sharp depreciation of the domestic currency in the ensuing weeks. This was a “twin” crisis both in the external and banking sectors, which produced a severe contraction of output and employment in 2001. Both the financial and real sectors were confronted with unprecedented balance-sheet problems (involving substantial losses of net worth), requiring an effective combination of domestic policy response, market-based solutions and strong international support.

The domestic policy response to the twin crisis was the adoption of a revised program framework in May 2001, titled “Program of Transition to a Stronger Economy.” The program committed policy-

makers to a more focused process of fiscal adjustment combined with a number of structural changes in the public sector, including in the initial stages the removal of off-budget subsidy schemes, improvements in public debt management and institution of new regulatory arrangements for key markets. To address the banking crisis, a large-scale program was put into effect for bank recapitalization and restructuring, the total cost of which has been estimated to be around 31 percent of GNP in 2001 (OECD, 2002).

In this context, a number of insolvent private banks were transferred to the receivership of the Saving Deposit and Insurance Fund (SDIF), which is an institutional setup to liquidate insolvent banks. It has taken over a total of 20 non-viable banks from 1997 to mid-2003. A restructuring plan was put into effect for the public banks in conjunction with a major policy decision to eliminate political interference in their management and provide budgetary appropriations before they are directed to embark upon non-commercial operations that involve financial losses. To resolve the non-performing loan problem in the banking sector, a market-based arrangement (Istanbul approach) was instituted for voluntary work-outs by the involved parties with the support of the government.

In the new program framework, the Central Bank was granted instrument-independence by a new law that enabled the price stability objective to be accorded the highest priority in monetary policy. In the medium-term, the Central Bank aims to introduce a formal inflation targeting framework after the establishment of supportive conditions in the fiscal sector. In the interim period, the Central Bank has adopted an implicit inflation targeting approach, which pursues base money targets consistent with the inflation projections jointly set with the government and heavily uses short-term interest rates as a key policy instrument. The new legislation for the Central Bank is an important step in the alignment with the EMU *acquis*, which requires full independence of the Central Bank in setting the inflation target as well as in the choice of monetary policy instruments.

The government's post-crisis program continued to receive the support of the IMF and the World Bank, especially after the events of September 11<sup>th</sup>, 2001, with a renewed IMF stand-by arrangement covering the 2002-2004 period. While the fall in domestic output could not be halted in 2001, the new program has succeeded in restoring confidence in the country's capacity to resume economic recovery and regain control over inflation in 2002.

**Table 1**  
Macroeconomic Indicators, 1997-2002

	1997	1998	1999	2000	2001	2002
A. Annual, percent						
Real growth						
GNP	8.3	3.9	-6.1	6.3	-9.5	6.5
Domestic expenditure	8.9	1.1	-4.0	9.1	-16.9	9.7
GNP deflator	81.2	75.3	55.8	50.9	55.3	43.9
Unemployment ratio						
Total	6.7	7.0	7.7	6.6	8.5	10.6
Urban	9.7	10.3	11.3	8.8	11.5	14.3
B. Index (1995=100)						
Real exchange rate <sup>a</sup>						
CPI based	116	121	127	148	116	126
WPI based	111	108	109	118	107	118
Real labor cost						
Public	102	102	139	168	149	128
Private	110	129	148	168	138	130
C. Percent of GNP						
Trade orientation						
Exports, goods and services	24.1	23.8	23.0	23.9	34.1	28.2
Imports, goods and services	29.8	27.2	26.6	31.3	31.7	30.6
Fixed investment	26.3	24.3	22.1	22.8	19.0	17.3
Domestic saving	21.3	22.7	21.2	18.2	17.4	16.6
Stock of financial assets	59.9	63.3	85.9	79.1	135.1	106.5
Deposits, TL+FX	36.0	37.4	51.0	44.5	59.4	47.0
Gov. Securities	20.7	22.2	29.8	29.1	69.7	54.8
Private Securities	3.2	3.7	5.1	5.5	6.0	4.7
Domestic credit, net	24.0	20.5	21.4	21.7	19.3	12.8
External debt	43.3	46.8	54.9	58.9	78.9	72.8
D. Billion US \$						
FDI inflows, net	0.8	0.9	0.8	1.0	3.3	0.6
External debt stock	84.2	96.4	103.0	118.7	113.8	131.4
Short-term	17.7	20.8	22.9	28.3	16.2	15.2
Medium and long-term	66.5	73.6	80.1	90.4	97.6	116.4
External debt to						
Multilateral org.	8.0	8.0	7.8	11.4	22.1	30.9
Central Bank reserves, gross	18.4	19.7	23.1	22.2	18.8	26.8

a/ An increase designates an appreciation.

Source : Processed from State Planning Organization (SPO) and Central Bank databases.



Table 1 gives a summary list of macroeconomic indicators for the turbulent period from 1997 to 2002, leaving the presentation of fiscal data to Section 3 for a more detailed consideration. The selected indicators shown on Table 1 underscore the decline in economic activity and the rising external debt stock in 1998-99; a consumption-led and foreign-financed boom in 2000; a severe contraction of domestic expenditure and real GNP together with a sharp fall in the short-term external debt stock in 2001 (also characterized by a significant response of exports to real exchange rate depreciation and slack demand in the domestic market); and a notable pace of output recovery and inflation reduction in 2002, with a further rise, however, in unemployment despite the declining trend in real labor costs. The end-year rate of CPI inflation came down from 68.5 percent in 2001 to 29.7 percent in 2002.

The output recovery in 2002 is also marked by a reduced ratio of domestic credit to GNP, which may be viewed as an indirect sign of the important position of the small and medium-size enterprises (SMEs) in the economy, since the SMEs rely more on their own financing than large enterprises. While the SMEs constitute a relatively more flexible segment of the productive sector, their strong presence is also a source of fiscal difficulties as they are more inclined towards evading direct tax and social security obligations, necessitating a greater reliance on indirect tax hikes in fiscal adjustment. Another noteworthy development during Turkey's disinflation episode relates to the rising share of multilateral organizations (mainly, the IMF and World Bank) in Turkey's external debt stock from 7.6 percent in 1999 to 9.6 percent in 2000 and further to 23.5 percent in 2002. The external financial support from the multilaterals had certainly facilitated the absorption of the huge fiscal cost of bank recapitalization, and enabled the Central Bank to proceed with reserve money targeting in the post-crisis period. With the benefit of hindsight, it may be noted that a banking sector restructuring program before embarking upon a highly risky disinflation strategy might have been less burdensome for all concerned, including the IMF.

After the November 2002 general elections, the newly formed majority government continued to implement the essential components of the post-crisis program with minor modifications in budgetary applications, including a controversial tax amnesty plan. The trends of output recovery and inflation reduction continued in 2003, while the progressive real appreciation of the Turkish lira

produced mixed signals, with unfavorable implications for the trade balance and external competitiveness, and favorable effects on disinflation as well as the reduction in the GNP-share of central government gross debt, a significant portion of which (about 53.5 percent in 2002) was denominated in or indexed to foreign exchange. Program implementation in 2003 received a considerable boost from the strengthened EU accession perspective after the December 2003 European Council in Helsinki, and subsequent domestic legislative reforms enacted mainly to meet the Copenhagen political criteria.

In reviewing Turkey's post-1990 macroeconomic episodes, particular interest is attached to the nature of chronic inflation process and the changing role of monetary policy over time. Before the 1994 crisis, inflation was driven, to a considerable extent, by the partial monetary financing of budget deficits. Deficit monetization was gradually eliminated in 1995-97, but inflationary expectations had become rigid and were generally accommodated by a passive monetary policy stance that was mainly concerned with the relative stability of financial markets to facilitate bond financing of public deficits and the rollover of the mainly short-term, domestic cash-debt stock. In the absence of sufficiently large and sustained primary surpluses to limit public debt accumulation during 1995-99, monetary policy was still operating under fiscal dominance in the sense that it could not be conducted independently of fiscal considerations. The monetary policy concern with the management of public debt also played a role in accommodating devaluation expectations built in nominal interest rates. Consequently, capital inflows attracted by high domestic interest rates resulted in sizable reserve accumulation and monetary expansion, against a backdrop of limited policy inclination for sterilization. The monetary expansion led to high inflation and large shares of nominal interest payments in the overall public sector borrowing requirement. In this context, nominal exchange rate movements gained critical importance in price-setters' and savers' decisions in the product and asset markets.

Such background factors behind high inflation and worsening debt dynamics had evidently induced policy-makers to adopt a pre-announced path of nominal exchange rate as an anchor in the December 1999 disinflation program, which was theoretically expected to produce favorable outcomes (without causing a boom and recession cycle) under perfect credibility (Calvo and Végh, 1999). It was presumed that this strategy would be bolstered by a partial transition to forward-looking indexation in the public sector, budget

correction measures and credibility enhancing reforms. However, against the background of unaddressed vulnerabilities in the banking sector, large prospective government deficits in case of program failure, limited flexibility in monetary policy, and rapidly widening trade imbalances, this disinflation strategy backfired with a credibility-eroding political event on February 19<sup>th</sup>, 2001, despite the supportive market sentiment observed in the earlier phases of the program.

More recent empirical research on Turkey's inflation process suggests that the inertial component of inflation has been on a declining trend and expectations of future inflation have become relatively more important than past inflation since 2000 (Celasun, Gelos, and Prati, 2004). Furthermore, the recent research provides formal evidence that fiscal variables (such as primary balances, changes in nominal debt and expectations about future fiscal performance) play a significant role in the formation of inflation expectations, which is a particularly relevant issue for the Turkish economy with high public debt ratios after the 2001 crisis. The implication is that a successful disinflation process requires a credible fiscal adjustment that can promote fiscal debt sustainability. The related issues are analyzed in Section 4 after an overview of Turkey's public sector coverage and fiscal accounts in Section 3.

### 3. Turkey's public sector and fiscal indicators

Although the issues of budgetary adjustment and fiscal sustainability are of central importance for Turkey's macroeconomic stabilization and reform process, the authorities have adopted different presentations of fiscal accounts for different functional purposes, which render an orderly monitoring and assessment of fiscal developments rather cumbersome. Hence, a brief discussion of different coverages of fiscal presentations seems useful before proceeding to the review of fiscal indicators in the late 1990s and early 2000s.

#### *3.1. The coverage and size of the public sector*

##### *3.1.1. Different presentations of public balances*

The public sector in Turkey has two segments: the general government and state-owned enterprises (SOEs). The general government comprises the central government, extrabudgetary funds, revolving funds, local administrations, three social security

institutions and the unemployment insurance fund. In turn, the SOE segment of the public sector has two components: financial SOEs and non-financial SOEs (Table 2, Panel A). Before the 2001 crisis, the financial SOEs included three major state banks, which were reduced to two in the post-crisis bank restructuring process.

For legislative scrutiny and vote, the central government budget is prepared by the Ministry of Finance on an annual basis and submitted to the Parliament by the Council of Ministers as the basic fiscal policy document, which is referred to as “consolidated budget” in official Turkish nomenclature. The main aggregates of the central government budget are determined within the macroeconomic framework of the government’s annual program prepared by the State Planning Organization (SPO). As part of their macroeconomic framework, the annual programs present a broader picture of public accounts so as to incorporate all public sector components (including the SOEs) outside the central government budget.

The SPO version of public accounts provide annual estimates of the total primary balance of the public sector as well as total public sector borrowing requirement (PSBR), which is the most prominent measure of the overall fiscal balance used in the domestic policy debate. The PSBR estimated by the SPO (jointly with the Treasury) does not explicitly include the annual flows of unpaid duty losses of the state banks; and the underlying interest payments are treated on a cash basis. In the SPO public accounts, the balances of social security institutions and the unemployment insurance fund are summed up and reported on the revenue side as a “social fund” item, which is measured before budgetary transfers. The latter presentation is quite important to bear in mind in the evaluation of the composition of fiscal adjustment, which invites attention to the growing social security deficits in Turkey in spite of the partial reforms introduced in the late 1990s, as also emphasized further in Section 4. In the earlier periods when the SOEs and extrabudgetary funds were relatively more significant, the SPO annual programs were the only source of information on public sector finances, covering all major subsectors.

For purposes of monitoring and policy evaluation, the post-1999 IMF stand-by arrangements have adopted the IMF’s own definition of the “consolidated public sector accounts,” which cover the subsectors of the general government (excluding revolving funds before 2002), major non-financial SOEs (eight in 2000), the central bank profit-loss account and primary expenditure component of quasi-fiscal activities carried out by financial SOEs on behalf of the central government

**Table 2**  
Turkey's Public Sector: Coverage and Size

A. PUBLIC SECTOR				
General government				
Central government budget agencies				
Extra-budgetary funds / revolving funds				
Local administrations				
Social security institutions				
State-owned enterprises (SOEs)				
Non-financial / financial				
2000 (% GNP)				
	Revenue	Primary Expenditure	Primary Balance	PSBR
<b>B. COVERAGE</b>				
Central government	26.4	21.1	5.3	-10.9
General government	41.2	34.2	7.0	-9.8
Public sector (SPO)	30.4	24.8	5.6	-11.9
Consolidated public sector (IMF)			2.3	-19.6
	2000		2002	
<b>C. NATIONAL ACCOUNTS (%GNP)</b>				
Public sector final expenditure	19.3		18.7 <sup>a</sup>	
Consumption	12.4		12.9	
Fixed investment <sup>b</sup>	6.9		5.9	
Inventory changes	0.1		-0.1	
Gov. services value added	10.1		10.2	
SOE value added				

a/ The final expenditure of local administrations was 3.1 percent of GNP

b/ Includes SOE fixed investment (1.8 % and 1.3 % in 2000 and 2002, respectively),

c/ SOE share in GDP measured at factor cost, excluding indirect taxes.

Source : Own elaboration mainly based on SPO data. HAB (2002) data for SOE value added.

(namely, the non-interest component of annual flows of unpaid duty losses of state banks) (see also the definitions in the technical memoranda of understanding attached to documents prepared for IMF stand-by arrangements). The IMF version of the fiscal primary balance makes adjustments on official primary balance estimates by the amount of interest receipts (and the central bank profit transfers) included as revenues in the subsector accounts. In the IMF documents on Turkey, the primary balances outside the central government are reported after budgetary transfers, which obscures subsector primary deficits before budgetary transfers (see, e.g., IMF, 2002a: 42).

Furthermore, the IMF programs adopt the concept of "net debt" of the public sector, which incorporates the stock of unpaid duty

losses of state banks while deducting the consolidated public sector's financial assets (mainly, the central bank net assets and public sector's bank deposits) from gross public debt. The net public debt concept provides a consistent basis for the inclusion of seigniorage revenue in analyzing the sources of change in debt stocks over time.

Starting from 2001, Turkey has been submitting to the European Commission its "Pre-Accession Economic Programmes (PEPs)," which adopt the coverage of general government in public finance projections. The macroeconomic and fiscal frameworks of the PEPs are prepared under the coordination of the SPO. Although the general government accounts reported in the PEPs broadly conform with the EU methodology (ESA 95 system of economic accounts), further adjustments are made to government deficits in "fiscal notifications," involving mainly the corrections for the recording of transactions on an accrual basis and including the duty losses of state banks as economic transfers from the budget. The annual PEPs and fiscal notifications are two important components of the pre-accession surveillance procedure designed for the EU candidate countries in order to familiarize them with the relevant EU methodologies for budgetary policy assessments in a comparative context. In the PEPs, the analysis of debt sustainability is based on the general government's gross debt stock (in line with the debt definition adopted by the Maastricht criteria), which largely consists of the gross debt of the central government. The aggregate estimates for general government accounts are available from 1999 onwards, which is a drawback for the historical assessment of fiscal adjustment patterns.

A brief comparison of the underlying characteristics of different sets of public accounts and balances reveal three points of particular interest. First, the gradually changing focus of fiscal policy from the central government to general government with a larger sectoral coverage is a positive development as the relative importance of local administrations and social security institutions will be increasing in the medium- and long-term. Second, the SPO version of public accounts provides internally consistent estimates of the aggregate primary balance, but the underlying revenue and expenditure flows may not be measured properly. Third, the IMF presentation of public balances seems to rest on more appropriate concepts of expenditure and revenue flows, but the underlying methodology and measurement details have not been sufficiently documented and clarified for a wider policy debate. As expected, the IMF measure of primary balance is smaller than other measures, mainly because of a wider coverage of

primary expenditures (including flows of unpaid duty losses in state banks) and corrections made for interest-rate related items in revenues and expenditures (Table 2, Panel B). Finally, it should be noted that privatization proceeds are separately shown in the SPO presentations of public balances and in the PEPs.

To show the aggregate size of Turkey's total public sector in national accounts, Panel C on Table 2 gives estimates of the GNP shares of public final expenditure and government services value added. In terms of national accounting (SNA68) concepts, Turkey's public consumption share in GNP (12.3 percent in 2000) is about the same as the upper middle-income country average and less than the world average (15 percent in 1999) (World Bank 2001). In 2000, the public sector fixed investment was 6.9 percent of GNP, of which the general government and SOE fixed investments were 4.6 percent and 2.3 percent of GNP, respectively. In the aftermath of the financial crisis, fixed investment in public and private sectors declined significantly in real terms, bringing the share of the economy-wide gross investment in GNP from 22.8 percent in 2000 to 17.4 percent in 2002 (as shown previously on Table 1).

### *3.1.2. The relative position of the SOEs in the economy*

Historically, the SOEs played a significant role in Turkey's development process, but their contributions to value added, employment and fixed investment were on a declining trend in the 1990s. The aggregate SOE share in GDP gradually decreased from 7.5 percent in 1996 to 6.0 percent in 2000, while its share in economy-wide total employment remained around 2.5 percent during that period (Table 2, Panel D). In 2000, the SOE shares in sectoral value added (measured at factor cost, excluding indirect taxes) were 0.3 percent in agriculture, 8 percent in manufacturing, 27.1 percent in energy and mining, 13.7 percent in transport and communications, and about 3.3 percent in other commercial services. The observed decline in the relative position of the SOE sector is largely attributable to the more rapid growth of the private sector rather than to a significant privatization effort in the 1990s. From 1986 to 2002, cumulative privatization revenue was US\$ 8.1 billion, excluding US\$ 3.5 billion of revenue from the sales of GSM licenses. Privatization proceeds had averaged around 0.7 percent of GNP per year during 1997-2002.

The general decline in the SOE shares in total output and employment does not necessarily imply that the SOE financial deficits have also been on a declining path. The overall SOE financial

performance has generally been highly sensitive to variations in wage, price and subsidy policies, which reflect changes in the government's stance on income redistribution and other non-commercial policy objectives (Celasun and Arslan, 1995). The transition from financial repression to financial liberalization has also impacted adversely on the SOE finances through higher real cost of market borrowing. The borrowing requirements of the non-financial SOEs were high in the early 1990s, decreased in the mid-1990s after the 1994 currency crisis, but increased again in the late 1990s.

The aggregate SOE deficits as measured before budgetary transfers reached the level of 3.0 percent of GNP in 1999 and 2000, mainly in response to the populist wage and price policies adopted by the government (SPO, 2002, p. 76). In the meantime, as emphasized earlier, the government was also running quasi-fiscal deficits in the form of uncompensated duty losses in major state banks, which were not explicitly recognized in the official presentations of public deficit and debt data before 2001. In the aftermath of the 2001 crisis, the total deficit of the non-financial SOEs was put once again on a decreasing path mainly through price hikes and real wage reductions, while the quasi-fiscal operations were largely eliminated by new budgetary arrangements. Recognizing the limitations of arbitrary wage-price adjustments to contain SOE deficits, SOE reform and privatization have been at the center of structural adjustment, not only to enhance efficiency but also to ensure a durable fiscal adjustment in the Turkish economy.

### *3.1.3. The size of the general government: Comparison with the EU averages*

Turkey's public sector is often regarded as too large either by cross-country standards or relative to both current EU members and newly acceding five central and eastern European countries (CEEC-5).<sup>3</sup> The relative size of Turkey's public sector (excluding SOEs) is large, if measured by the share of general government expenditure in GDP (around 55 percent in 2002). This is a much higher figure than the EU-15 average of 47.7 percent and Euro-12 (Euro area) average of 48.3 percent (Table 3). However, if interest payments are excluded, the GDP share of general government primary expenditure is about 36 percent for Turkey, 44 percent for the EU-15, 44.7 percent for the Euro-12 and 42 percent in the CEEC5 area (IMF, 2002b, p.151). In

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<sup>3</sup> The CEEC-5 consists of Poland, Hungary, Czech Republic, Slovakia, Romania.



the medium-term, it is unlikely that Turkey will be able to increase the relative size of its general government in terms of primary expenditure share in GDP, because of the overriding concern with the reduction of public debt burden, which requires continued effort to generate sizable primary surpluses.

The indicators shown in Table 3 also draw attention to the lower direct tax revenue and social security contributions (as percent of GDP) in Turkey as compared to the EU averages. Considering the uneven distribution of direct taxes and high tax wedge on gross labor costs, a key challenge for Turkey appears to be to broaden the base for tax revenue and social security contributions through a more rigorous policy effort to reduce the size and scope of the unregistered economy, which would serve the efficiency and equity objectives under a stronger orientation for employment creation.

**Table 3**  
General Government Size: Turkey and EU, 2002 (% GDP)

	Turkey	EU-15	Euro-12
Total expenditure	55.1	47.4	48.3
Interest payments	19.4	3.4	3.7
Primary expenditure	35.7	44.0	44.7
Total revenue	41.9	45.5	46.1
Tax revenue	24.2	27.2	25.8
Non-tax revenue	10.6 <sup>a</sup>	4.1	4.3
Social security contributions	6.9 <sup>b</sup>	14.2	16.0
Privatization proceeds	0.2		
Primary balance	6.2	1.5	1.4
Overall balance	-13.2	-1.9	-2.3
Memo items :			
Taxes			
Direct taxes	8.1	13.3	12.2
Indirect taxes	15.6	13.6	13.4
Capital taxes	0.5	0.3	0.2
General government investment	4.1	2.3	2.5
Gross public debt stock	102.5	62.7	69.2

a/ Includes factor income, which is 4.3 % GDP.

b/ Includes contributions to the Unemployment Insurance Fund.

Source: Turkey's Pre-accession Economic Program 2003 and Banca D'Italia Supplements to the Statistical Bulletin, Volume 11, September 2003.

### 3.2. Public balances and debt accumulation, 1997-2002

In the light of the previous discussion on the scope and size of Turkey's public sector, different presentations of public balances

summarized on Table 4 may now be examined before proceeding to the review of public debt accumulation patterns from 1997 to 2002. The key points emerging from the comparison of different measures of fiscal balances are the following:

Primary, operational and overall balances sharply deteriorated in 1999, which was a year of massive domestic earthquakes and deep recession as discussed previously in Section 2. Under the IMF presentation, it is observed that real interest payments increased from 5.3 percent of GNP in 1998 to 10.4 percent in 1999, reflecting the combination of unfavorable borrowing conditions (after the 1998 Russian crisis), loss of confidence in the government's fiscal plans and somewhat tightened monetary policy to regain control over monetary expansion. As a result, there was a steep decline in the operational balance (i.e., primary balance less real interest payments) of the consolidated public sector from 1998 to 1999. The willingness to adopt a high-risk disinflation strategy with the exchange rate serving as nominal anchor should therefore be evaluated against the backdrop of severe financing difficulties experienced in 1999. In 2000, there was a noticeable improvement in the primary and operational balances, because of budget correction and lower real cost of domestic borrowing (Table 5, memo items).

Measured in percentage units of GNP, the primary balances under all presentations have substantially improved from 2000 onwards, reflecting the fiscal adjustment embarked upon in the context of IMF-supported programs. During 1997-1999, total public sector balances were lower than the central government balances, implying significant deficits outside the central government budget. In the post-2000 period, this situation has been reversed by fiscal tightening in the SOEs and extra-budgetary funds. Despite the financial crisis and heavy fiscal cost involved in bank recapitalization, the operational balance of the consolidated public sector was not allowed to deteriorate in 2001. This was an important factor that bolstered market confidence in the post-crisis program that paved the way for an encouraging output recovery in 2002. There was some slippage in fiscal adjustment in 2002 (with a lower primary surplus), which was restrengthened in 2003 under a new majority government.

The evolution of public debt ratios is shown in Table 5 from 1997 to 2002, both for gross and net debt stocks and measured as percent of GNP. A close look at debt ratios in the light of data on fiscal balances discussed earlier draws attention to a particular aspect of Turkey's public debt accumulation, which has an important policy

**Table 4**  
Fiscal Balances: Variant Measures (Percent GNP)

	1997	1998	1999	2000	2001	2002
<b>A. SPO definitions</b>						
1. Public sector						
Primary balance	1.2	3.3	-0.2	5.6	8.1	7.4
Overall balance (PSBR)	-7.7	-9.4	-15.5	-11.9	-16.5	-12.6
2. Central government						
Primary balance	0.1	4.3	1.8	5.3	6.4	4.4
Interest payments	-7.7	-11.5	-13.7	-16.3	-23.3	-19.1
Domestic	-6.7	-10.5	-12.5	-14.9	-21.2	-17.3
Foreign	-1.0	-1.5	-1.2	-1.4	-2.1	-1.8
Budget balance	-7.6	-7.3	-11.9	-10.9	-16.9	-14.7
<b>B. IMF definition</b>						
Consolidated public sector						
Primary balance	-2.2	0.5	-2.0	2.3	5.9	3.9
Interest payments, net	-10.9	-16.2	-22.1	-21.9	-27.1	-17.9
Real int. Payments	-0.7	-5.3	-10.4	-9.2	-11.0	-9.2
Inflationary part	-10.2	-10.9	-11.7	-12.7	-16.1	-8.7
Operational balance	-2.9	-4.8	-12.4	-6.9	-5.1	-5.3
Overall balance	-13.1	-15.7	-24.1	-19.6	-21.2	-14.0
<b>C. Proximate EU coverage</b>						
General government						
Primary balance			1.3	7.1	7.8	6.2
Overall balance			-13.3	-9.9	-15.9	-13.1
Memo items :						
Privatization proceeds	0.3	1.0	0.1	1.5	0.9	0.2
Seigniorage revenue (reserve money)	1.9	1.8	2.3	1.6	1.1	1.0

*Source:* Processed from SPO, IMF and World Bank data.

implication for future public sector financial management. In the time profiles of both the gross and net debt indicators, there are two instances, namely 1999 and 2001, when the public debt ratios show significant rise from the previous year values for two different sets of reasons. In 1999, the increase in the debt ratios is largely attributable to the deterioration in the primary and operational balances, and worsened debt dynamics due to the widened difference between real average interest rate and real GNP growth rate. By contrast, the primary balance was in substantial surplus in 2001 and the operational balance noticeably improved for the consolidated public sector. Nonetheless, net public debt increased from about 57 percent of GNP in 2000 to nearly 93 percent in 2001.

**Table 5**  
Public Debt Stocks, 1997 - 2002 (Percent of GNP)

	1997	1998	1999	2000	2001	2002
1. Central government, gross debt	43.3	40.7	51.5	53.4	100.7	86.6
Domestic	21.4	21.7	29.3	29.0	69.2	55.2
Cash debt	15.8	17.8	25.8	23.4	33.1	32.9
Non-cash debt	5.6	3.9	3.5	5.6	36.1	22.3
External	21.9	19.0	22.2	24.4	31.5	31.4
2. General government, gross debt				60.2	121.6	102.5
Domestic debt				29.2	68.5	54.3
External debt				31.0	53.1	48.2
3. Stock of uncompensated duty losses of public banks	5.2	7.5	13.2	12.0	0.0	0.0
4. Consolidated public sector						
Net debt	42.9	43.7	61.0	57.4	92.8	79.0
Domestic	20.4	24.4	40.9	39.1	55.7	46.0
External	22.5	19.3	20.1	18.3	37.1	33.0
Memo items :						
Cash debt / M2Y <sup>a</sup> (%)		47.1	50.3	52.5	54.8	70.9
Domestic borrowing auctions:						
Average maturity (days)	349.0	233.0	479.0	410.0	148.0	255.0
Average interest rate (%) (compound, after tax)	108.4	115.0	109.5	38.0	96.2	64.0
CPI inflation - end year (%)	99.1	69.7	68.8	39.0	68.5	29.7

a/ Broad money supply (M2Y), including TL and FX deposits.

Source: Treasury, IMF and State Planning Organization.

A decomposition analysis of the sources of change in public debt stocks attributes the rise in the net debt ratio by 35.4 percent of GNP in 2001 to the following contributing factors: primary balance (-2.6 percent); the effect of real average interest rate and real GNP growth rate differential (+10 percent); and other factors (+28 percent). The other factors are mainly stock-flow adjustments, of which about 14.5 percent of GNP is accounted for by the issue of government securities for bank recapitalization and remaining 13.5 percent by other contributing factors, including the revaluation of the foreign-exchange denominated public debt stock due to currency depreciation during 2001. The increase in the central government's gross debt ratio from about 53 percent of GNP in 2000 to nearly 101 percent in 2001 is greater than the increase in net debt ratio, mainly because of the recognition of the stock of unpaid duty losses (in public banks) as an explicit gross debt in addition to the new debt issued for the

recapitalization and restructuring of insolvent private banks that had operated under full deposit insurance and inadequate prudential regulation.

In summary, the 2001 financial crisis forced the recognition of the government's contingent liabilities accumulated both in the public and private segments of the banking sector as explicit public debt with interest costs indexed to inflation, the exchange rate or closely linked to market rates. This has reduced the scope for more efficient allocation of fiscal resources in priority areas such as infrastructure, human capital formation, technological development and institution-building for structural convergence to the EU standards. A key lesson for public sector financial management is that public debt management systems should incorporate procedures to monitor and assess contingent liabilities over a sufficiently long projection horizon, covering the major sectors (including the social security system and privatized utilities) where implicit government guarantees are building up. In this context, a new legislation (Law No. 4749) for public debt management requires formal arrangements for risk management to limit the accumulation of the implicit liabilities of the public sector.

In addition to highlighting the potentially high fiscal costs of contingent liabilities accumulated outside the formal budget process, some other features of Turkish public debt may be noted. In the late 1990s, external public debt ratios remained nearly constant, while the domestic cash debt, which was issued mainly through Treasury auctions accumulated rapidly. The domestic non-cash debt was issued mainly to public banks in order to provide them with non-cash assets to partly compensate their losses from non-commercially justified quasi-fiscal activities.<sup>4</sup> Because of its short average maturity, the government's cash debt had to be rolled over within relatively short time spans in a small domestic financial market, where the ratio of cash debt stock to broad money supply had reached around 50 percent in the late 1990s. This rollover-risk had put additional pressures on borrowing costs, which also reflected risks regarding inflation and future policy choices. After the implementation of the post-crisis bank recapitalization program, the ratio of cash debt to broad money had reached nearly 71 percent in 2002. Given the low share (12.8 percent) of net domestic credit stock in GNP (Table 1 and Table 5) government interest payments constituted a major source of banks' interest income. This is a state of affairs that is hardly conducive to the further

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<sup>4</sup> Non-cash assets were typically not marketable and carried below-market interest rates.

development of financial intermediation capacities in the Turkish economy.

The post-crisis increase in the public sector indebtedness also involved substantial changes in the composition of gross domestic debt stock by lenders as well as by types of debt instruments. The share of end-year gross domestic debt stock held by public institutions (including the central bank, public banks and SDIF banks) increased from 33.5 percent in 2000 to 66 percent in 2001, but declined back to 52.8 percent in 2002 and further to 49.2 percent in June 2003, implying that the corresponding share of the gross domestic debt held by the private sector was 50.8 percent in mid-2003. At the end of 2002, the composition of gross domestic debt by types of instrument was the following: about 32 percent in the form of foreign exchange denominated and/or indexed bonds, 43 percent in the form of floating rate bonds and 25 percent in the form of fixed rate bonds. The latter had still comprised 56 percent of the domestic debt stock at end-2000.

The post-crisis changes in the structure of domestic debt have two major implications. First, domestic interest payments from the budget are partly captured by public institutions and should not therefore be fully considered as transfers to the non-government sector. Second, a considerable amount of exchange rate risk has built up in the government's gross debt portfolio, which includes external debt as well as domestic debt denominated in or indexed to foreign currency. However, in 2003, the appreciation of the domestic currency has worked in favor of the government debt position, requiring downward adjustments in the official forecasts of the net debt ratio from 75 percent of GNP to 70 percent in the Treasury's public debt management reports of April and November, 2003, respectively. The next section examines the key issues surrounding the processes of public debt reduction and fiscal adjustment with a view to crystallize the main policy challenges in the fiscal sector.

#### 4. Public debt reduction and composition of fiscal adjustment

The fiscal review presented in the previous section has highlighted that the 2001 crisis has forced the recognition of the government's off-budget liabilities as explicit public debt in addition to resulting in significant increases in formally recorded debt stocks. In general, the unprecedented rise in government debt levels intensifies policy concerns with fiscal sustainability and the

government's capacity to play its stabilization, allocational and distributional roles in a market economy framework.

In an environment of macroeconomic instability, high public debt ratios not only constrain the effectiveness of monetary policies in the disinflation process, but they also restrict the scope for countercyclical fiscal policies to attain output stabilization under volatile demand conditions.<sup>5</sup> High interest rates and increased interest payments that are typically associated with high public debt stocks may hamper the government's role in resource allocation by adversely impacting on public goods production, capital accumulation and other growth-promoting expenditures in the economy. In a similar vein, high debt service obligations restrict the budgetary scope for programs addressing social and distributional imbalances.

Thus, a public sector debt level too high by cross-country standards or too large in relation to the size of the country's financial system needs to be lowered at an appropriate pace with due considerations of ensuring fiscal sustainability, preserving an adequate growth momentum and maintaining an acceptable social balance. In such a context, the overall policy framework with a clear focus on fiscal adjustment gains a critical importance in ensuring consistency among particular objectives, policy instruments and their timing in the implementation process. Fiscal adjustment basically aims to improve the primary budget balance in order to put the government debt ratio on a declining path and restore investors' confidence in government's debt instruments so as to reduce the effective cost of debt service and lengthen the maturity of new borrowings at favorable rates. In policy implementation, two aspects of fiscal adjustment are considered important, notably size (measured by the change in primary balance) and composition (mix of expenditure cuts and higher revenues). The composition of budgetary adjustment may have critical implications not only for social policy and economic performance, but also for the

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<sup>5</sup> Favero and Giavazzi (2004) argue that a policy of inflation targeting is likely to be effective only if the fiscal policy regime ensures that public debt is sustainable. Galí and Perotti (2003) conclude that fiscal policies in the EMU countries have become more countercyclical after the adoption of the Maastricht treaty and the Stability and Growth Pact, which have promoted significant reductions in the public debt of member countries. Caballero and Krishnamurty (2004) show that lack of financial depth in emerging market economies constrains fiscal policy in a way that can overturn standard Keynesian prescriptions of countercyclical fiscal policy when the stock of debt is large.

durability of fiscal consolidations over longer time frames (Alesina and Perotti, 1995 and 1997, Purfield, 2003).

Upon a brief methodological discussion of fiscal sustainability and the debt accounting framework, this section explores the medium-term prospects for Turkey's public debt reduction from 2003 to 2008 and examines the issues relating to the composition of fiscal adjustment in light of available data. Viewed together, the numerical results of these assessments underscore the need for persistent primary surplus generation in the medium run. Moreover, implications emerge in regard to the need for a modified composition of budgetary adjustment supported by further inflation stabilization and structural fiscal reforms, particularly in the areas of direct taxation, expenditure management and social security institutions, which had not been reformed sufficiently in the late 1990s.

#### *4.1. Fiscal sustainability and debt accounting: Methodological remarks and general*

##### *4.1.1. Observations in the EU context*

The general notion of fiscal sustainability is rooted in the public sector's solvency condition, which states that the intertemporal budget constraint is satisfied, i.e., existing net debt is equal to the present value of current and future primary balances and seigniorage revenues. If the debt stock is measured in gross terms, that is central bank assets and other public assets are not subtracted from the debt stock, the intertemporal budget constraint would exclude seigniorage revenues. In practice, however, fiscal sustainability is related to the question of whether current fiscal policies can continue without upsetting the government's solvency condition. Hence, solvency is a necessary, but not sufficient condition for sustainability, which is admittedly a more imprecise and yet a highly relevant concept. In the empirical literature, there are two main strands of studies to assess fiscal sustainability: sustainability tests (of past policies) and sustainability indicators (of current and prospective fiscal stances).

While sustainability tests have proven to be sensitive to data quality and statistical procedures used, sustainability indicators have been more flexibly used in policy analysis, more often in partial rather than general equilibrium frameworks. A widely used approach to build a synthetic sustainability indicator is to adopt an accounting framework that can attribute the change in the government's debt level to a number of contributing factors, including the primary budget surplus, which measures the fiscal policy stance for the case under



study. The following budget identity serves as the relevant accounting framework:

$$\text{change in debt stock} = - \text{primary surplus} + \text{interest payments} - \text{seigniorage} - \text{stock-flow adjustment} \quad (1)$$

The latter identity may algebraically be written as :

$$b_t - b_{t-1} = - \text{surp}_t - [(r - g) / (1 + g)]b_{t-1} - s_t - \text{sfa}_t \quad (2)$$

where  $b$ ,  $\text{surp}$ ,  $s$  and  $\text{sfa}$  represent the debt stock, primary surplus, seigniorage and the stock-flow adjustment term, respectively, as ratios to GNP (or GDP), and  $r$  and  $g$  are the effective (average) real interest rate and real GNP (or GDP) growth rate and  $t$  denotes the time index. The second term in equation (2) measures the impact of the real interest rate and real growth rate differential on the change in the debt level. The latter effect may be viewed as a “debt dynamics” term or “snow-ball effect” as commonly referred to in the European Commission papers on public finance. The Commission defines the stock-flow adjustment as an item that “results from the government’s financial operations,” e.g. privatization receipts, realization of contingent liabilities or revaluation effects arising from exchange-rate changes. Seigniorage revenue is given by the expression  $s_t = \{(\pi + g + \pi g) / [(1 + \pi)(1 + g)]\}m_{t-1}$ , where  $m$  is the reserve money to GNP ratio. When the relevant debt concept is gross debt as defined in the Maastricht Treaty, seigniorage revenue is not incorporated into the above budget identities.

The debt accounting framework may be used in a variety of ways to evaluate debt developments from a policy perspective. A typical approach is to determine the internally consistent values for the primary surplus and seigniorage revenue (under specified monetary conditions) that are required at given growth rate and interest rate to maintain the debt to GNP ratio (or the net worth to GNP ratio as originally proposed by Buiter, 1985) constant at a targeted level (Anand and Wijnbergen, 1989). Another approach (based on Blanchard, 1990) is to calculate the tax gap over a specified projection horizon. For a given trend of government expenditure based on current policies, the tax gap “measures the difference between the current tax ratio and the constant tax ratio over the projection period necessary to achieve a pre-determined debt level at a specified date in the future.” A positive tax gap implies that there is a financing gap under current policies, which need to be changed either by raising tax revenues or reducing expenditures through a suitable combination of

short-term budget corrections and longer-term structural fiscal reforms.

Although the numerical exercises built around the debt accounting framework yield useful insights for policy assessments, they provide no definitive theoretical guidance for the choice of appropriate debt levels against which fiscal sustainability may formally be evaluated. In the EU context, the Treaty of Maastricht makes “the sustainability of the government position” an explicit criterion for a country’s eligibility to EMU, and defines fiscal rules to assess sustainability by means of reference values for the deficit ratio (3 percent of GDP) and gross debt ratio (60 percent of GDP). The Stability and Growth Pact has further introduced the requirement of general government budget positions close to balance or surplus in the medium term with the broad intention of reconciling fiscal discipline with budgetary flexibility for counter-cyclical policies.

While the EU fiscal-rules have not resolved the theoretical difficulties surrounding the specification of sustainability indicators, they have nonetheless introduced pragmatic policy guidelines and standard statistical definitions for the relevant fiscal variables, considerably reducing uncertainties faced in the budgetary surveillance process (Buti, Eijffinger, and Franco, 2003). Although the economic rationale of the reference values for the deficit and debt parameters has not been precisely clarified, it has generally been presumed that the compliance with these rules has been helpful to sharpen the focus on sound budget positions, which is needed not only for monetary stability, but also for longer-term preparedness to absorb the fiscal impact of aging populations.

For the EU-15, the average annual change in the public debt to GDP ratio was  $-2.5$  percent during 1998-2002 in contrast to 2.1 percent average yearly increase in 1992-1997. After the European Council of March 2003, the issue of “satisfactory pace” of debt reduction has gained a particular prominence in the fiscal policy analysis and co-ordination at the EU level. From 2002 to 2005, the aggregate general government debt to GDP ratio is projected to decline from 62.9 to 59.5 percent for the EU-15 and from 69.7 percent to 65.4 for the Eur-12 (Euro area).

For the EU candidate countries, the essential task in the pre-accession phase is to fulfill the Copenhagen criteria, undertake the required reforms and complete the negotiations for full membership. While the Copenhagen economic criteria place an emphasis on macroeconomic stability and sustainability of public finances, the

latter concepts have not been operationally defined in the pre-accession process. However, the candidate countries are expected to adopt the pre-accession EMU acquis (including the independence of the central bank, prohibition of any direct public sector financing by the central bank, prohibition of privileged access of the public sector to financial institutions and completion of capital account liberalization) to enable them to have, after accession, the status of “Member State with a derogation” as regards the adoption of the euro.

The new EU member-states will be subjected to the budgetary rules of the Stability and Growth Pact, with the exception of the sanctions, and prepare convergence programs that will specify the adjustment paths for the budget balances and public debt ratios. Given the independence of monetary authorities and diminishing flexibility of the exchange rate as a policy instrument in the earlier years of the post-accession phase, fiscal policy will gain crucial importance in the overall process of demand management. The constraints imposed by the EU institutional arrangements on policy choices in the post-accession phase suggest that the candidate countries should endeavor for sustainable budget positions at moderate debt levels in the run up to accession in order to enjoy some flexibility in fiscal policy in the process of stabilization as well as in absorbing the budgetary costs of structural reforms implemented for integration into the EU.

#### *4.2. Possible pace of public debt reduction in Turkey, 2003-2008*

The previous remarks on fiscal positions and debt levels in EU candidate countries are highly relevant to Turkey, which will be facing a more demanding task of public debt reduction than other candidate countries in their pre-accession phases. In ten countries set to become EU members in May 2004, the aggregate general government debt to GDP ratio was 36.9 percent and the general government budget deficit was 3.7 percent in 2001. By contrast, Turkey’s general government debt level was estimated as 102.5 (92.3) percent and its general government deficit as 13.6 (10.5) percent of GDP in 2002 (2003). Turkey’s public debt reduction is crucial not only from the perspective of its nominal convergence to the EU standards, but also from the standpoint of enhancing its long-term growth prospects, which have been adversely impacted by large fiscal deficits, heavy government debt service, high real interest rates and financial crowding out of private capital formation in trade-oriented sectors.

Table 6 gives a summary of medium-term projections of Turkey's public debt level (as percent of GDP) from 2003 to 2008, which are computed within the debt accounting framework described earlier. The debt levels for the base year 2003 are official estimates that were available in late 2003. For the 2004-08 period, two assumptions are made for the annual average primary surplus (5.0 and 6.5 percent of GDP) and two assumptions for effective (average) real interest rate (11 and 8.5 percent), while maintaining other parameters (including the real growth rate) fixed in all variant projections. Thus, four cases of debt reduction reported on Table 6 correspond to different combinations of primary surplus and real interest rate assumptions under the unchanged estimates for other parameters in the debt accounting framework. The numerical estimates for fixed parameters crudely reflect the consensus forecasts on medium-term economic developments. The debt level projections are elaborated for both the general government gross debt (as defined by the ESA 95 standards) and net debt of the consolidated public sector (as measured by the IMF stand-by documents). In the case of net debt projections, seigniorage estimates become applicable.

The numerical debt projections summarized on Table 6 bring out the sensitivity of debt developments to primary surplus generation, which is a factor that can largely be shaped by government policies, and the effective (average) real interest rate, which is not directly controllable as it largely depends on capital market conditions as well as on the risk perceptions of financial investors. However, the real interest rate is likely to be lower the more credible the government's economic and structural policies are. For a given level of primary surplus, a decline in real interest rate from 11 percent to 8.5 percent results in additional reduction of about 9 percent in the gross debt ratio and 8 percent in the net debt ratio from 2003 to 2008. In turn, at a given real interest rate, an increase of primary surplus from 5.0 to 6.5 percent of GDP yields an additional cumulative reduction of about 6 percent in the gross debt ratio and 8 percent in the net debt ratio during the same five-year period.

A comparison of the projected debt levels in 2008 also suggests that there would be no significant reduction in the gross debt level if the primary surplus remains at 5 percent of GDP and real interest rates persist at 11 percent throughout the projection period (Case 1 in Table 6). By contrast, if Turkey maintains a high primary surplus generation effort at 6.5 percent of GDP and succeeds in implementing credible economic policies that indirectly lead to real interest rates averaging

8.5 percent in 2004-08, the general government debt ratio may decline to nearly 75 percent by 2008. In Turkey's public policy discussions, the possible start up of formal negotiations for EU accession is generally considered as potentially an important turning point in the policy process, which will have highly favorable effects on the government's debt service costs through the enhanced credibility of economic policies in the run up to accession.

Needless to say, the public debt projections shown on Table 6 need to be interpreted with caution. They should not be construed as forecasts, because the actual outcomes during 2004-08 are likely to be influenced by unforeseen developments. Instead, they should be viewed as indications of the size of primary surpluses needed to reduce public debt levels at effective interest rates ranging from 8.5 to 11 percent in real terms. One important source of risk in these projections is the unfavorable revaluation effect of possible currency depreciation in the projection period. While the realization of the government's contingent liabilities may pose a threat to the debt reduction process, favorable developments may also result from financial operations such as accelerated privatization. Finally, it should also be remembered that the primary balances have different coverages for the general government (gross debt) and consolidated public sector (net debt) as discussed previously. In early 2000s, for a given fiscal adjustment effort, the primary balance measures were generally higher at the general government level than the primary balances estimated for the consolidated public sector. The implication is that a primary surplus of 6.5 percent for the general government may correspond to 5.0 to 5.5 percent primary surplus for the consolidated public sector, which is the basis for net debt measurement.

As pointed out in Section 4.1, the policy evaluations of fiscal sustainability in the EU context are concerned with the size of general government budget deficits as well as with the gross debt levels. As a candidate country in the pre-accession phase, Turkey should be concerned not only with public debt reduction, but also with lowering overall nominal budget deficits. The latter requires policy actions that address inflation reduction as well as primary surplus generation, because high inflation at a given real interest rate tends to increase nominal interest payments, widening the overall budget deficits.

**Table 6**  
Projected Public Debt Ratios, 2003-08

	Case 1	Case 2	Case 3	Case 4
<b>A. Gross public debt (% GDP)<sup>a</sup></b>				
2002 (actual) <sup>a</sup>	102.5	102.5	102.5	102.5
2003 <sup>a</sup>	92.3	92.3	92.3	92.3
2008	91.0	82.1	84.8	75.8
Change, 2003-08	-1.3	-10.2	-7.5	-16.5
<b>B. Net public debt (% GDP)</b>				
2002 (actual) <sup>b</sup>	79.0	79.0	79.0	79.0
2003 <sup>b</sup>	70.0	70.0	70.0	70.0
2008	58.2	49.8	49.8	41.8
Change, 2003-08	-11.8	-20.2	-20.2	-28.2
Assumptions, 2004-08 (annual average, %)				
Primary surplus / GDP	5.0	5.0	6.5	6.5
Real interest rate <sup>c</sup>	11.0	8.5	11.0	8.5
Real GDP growth rate	5.0	5.0	5.0	5.0
Seigniorage <sup>d</sup>	0.6	0.6	0.6	0.6
Stock-flow adjustment <sup>e</sup>	0.5	0.5	0.5	0.5

a/ The general government gross debt ratios for 2002-03 are the official estimates given in Turkey's Pre-Accession Economic Program 2003 (p. 54)

b/ The net public debt ratios for 2002-03 are the official estimates given in Treasury's Public Debt Management Report, November 2003 (p. 48) as percent of GNP. The GDP and GNP differences are ignored in the present exercise.

c/ Effective (average) real interest rate for total debt stock.

d/ Applicable to the projections of net public debt ratios.

e/ Includes privatization revenues.

Source : Author's projections from 2003 to 2008 based on assumptions specified for our numerical cases as shown on the table.

To highlight the importance of inflation reduction in conjunction with reducing the public debt level, Table 7 presents an illustrative numerical exercise that is based on possible stylized facts that may prevail in Turkey in the latter part of the 2000s. For a given hypothetical year, if the real growth rate and real interest rate are 5 and 8.5 percent respectively, and the government targets to reduce the gross debt ratio from 70 percent of GDP to 67 percent, the required primary balance is 5.3 percent of GDP. However, the nominal interest payments would be substantially higher if the annual inflation rate is 15 percent instead of 5 percent. The overall budget deficit will be 9.1 percent of GDP under the 15 percent inflation rate rather than 3.5 percent in the case of the 5 percent inflation rate. Ceteris paribus, a simultaneous progress in reducing inflation and public debt is likely to produce mutually reinforcing positive effects on the aggregate

economy, because of reduced uncertainty and lower risk premia on real interest rates. Summarized briefly, these numerical illustrations underline the vital importance of medium-term policy commitments to inflation reduction and primary surplus generation at sufficiently high levels, which will pave the way towards sound public finances for a more effective integration with the EU.

**Table 7**  
Public Debt Reduction, Inflation and Budget Balance

	Parameter combinations	
	A	B
A. Fixed parameters (%)		
Gross public debt / GDP ratio		
Previous year	70.0	70.0
Current year (target)	67.0	67.0
Real GDP growth rate	5.0	5.0
Real interest rate	8.5	8.5
Inflation rate	15.0	5.0
B. Implications (% GDP)		
Primary balance required	5.3	5.3
Nominal interest payments	14.4	8.8
Real part	5.7	5.7
Inflationary part	8.7	3.1
Overall budget balance	-9.1	-3.5

*Source* : An illustrative exercise by the author.

### *4.3. Patterns of fiscal adjustment and policy implications*

#### *4.3.1. Why does the composition of fiscal adjustment matter?*

In the standard Keynesian approach, the effects of fiscal policy changes are assessed in terms fiscal multipliers, which become modified by the second round effects of induced changes in interest rates and the exchange rate in the extended versions of the original model. Within the traditional Keynesian model, fiscal adjustment (alternatively expressed as fiscal consolidation or fiscal contraction) typically produces output and employment contraction. More recent empirical as well as theoretical research has indicated, however, the possibility of non-traditional macroeconomic responses to fiscal

policy changes, particularly in industrial economies. Some of the main propositions and empirical findings in this context are the following:

- When the stock of public debt is large, fiscal adjustments may have non-Keynesian effects on growth and employment, i.e, fiscal contractions may end up with output expansions. Expenditure-based contractions are more likely to yield output expansions, while revenue-based adjustments are more frequently associated with output contractions (or conventional Keynesian effects). Expansionary fiscal contractions may impact on the demand-side of the economy mainly through forward-looking expenditure behavior, policy credibility and/or wealth effects (Giavazzi and Pagano, 1990, and Alesina and Perotti, 1997).
- Fiscal adjustments may also exert an influence on the supply side of the economy, either through changes in public expenditure with positive externalities or changes in the tax burden on capital or labor that would affect their accumulation and allocation. In developing economies, the maintenance of adequate levels of public investment gains a particular importance in the adjustment process, because of its favorable externalities and possible crowding-in of private investment.
- Expenditure-based fiscal adjustments may be expansionary, but they may also contribute to higher income inequality as suggested by recent empirical research on industrial countries (Ford, 1998, Smeeding, 1997 and 2000, and Mulas-Granados, 2005).

The available cross-country research on the fiscal adjustment experience of developing economies has recently focused on the durability of fiscal adjustments that are more typically attained in policy episodes supported by external assistance and structural conditionalities. The findings broadly suggest that the expenditure-based fiscal adjustments have generally been more sustainable, particularly in transitional economies (Purfield, 2003).

#### *4.3.2. Decomposition of changes in fiscal balances over time, 1989-2002*

In Section 2, five policy episodes or subperiods were identified over the time frame from 1989 to 2002. These subperiods were differentiated on the basis of policy characteristics that changed over time. For a quantitative assessment of fiscal adjustment patterns from 1989 to 2002, the annual average of each component of the overall budget balance is computed for each subperiod in percentage units of



GNP. Then, the total change in the overall balance (from one subperiod to the following subperiod) is decomposed into its constituent parts, showing the relative contributions of expenditure cuts and revenue increases to total change in fiscal stance. The analysis has been conducted for the public sector as defined by the SPO, because the public sector under the SPO definition has a wide coverage and includes public sector entities outside the central government. The results of the numerical analysis are reported in Table 8. In a highly condensed form, the key points emerging from this analysis are as follows:

**Table 8**  
Fiscal Adjustment over Time, 1989 - 2002<sup>a</sup>

	Public sector, SPO definition (% GNP)				
	Total Revenue	Primary Expenditure	Primary Balance	Interest Payments	Overall Balance
1989	20.9	-22.6	-1.7	-3.6	-5.3
1990 - 93 average	18.8	-24.6	-5.8	-4.3	-10.1
1994 - 95 "	21.4	-17.7	3.7	-10.2	-6.5
1996 - 99 "	24.4	-22.3	1.8	-12.2	-10.4
2000 - 02 "	31.8	-24.8	7.0	-20.7	-13.7
Changes from <sup>b</sup>					
1989 to 1990 - 93	-2.1	-2.0	-4.1	-0.7	-4.8
1990 - 93 to 1994 - 95	+2.6	+6.9	+9.5	-5.9	+3.6
1994 - 95 to 1996-99	+2.7	-4.6	-1.9	-2.0	-3.9
1996 - 99 to 2000-02	+7.7	-2.5	+5.2	-8.5	-3.3

<sup>a</sup> The year 1989 marks the full opening of the capital account. The subperiods 1994-95 and 2000-02 feature the implementation of IMF-Supported Programs. Severe financial crises occurred in 1994 and 2001.

<sup>b</sup> The period-to-period changes denote the contributions of corresponding factors to the change in overall balance.

Source : Own elaboration from State Planning Organization (SPO) data.

- Compared to the late 1980's, the primary balance deteriorated massively in 1990-93 and was in a huge deficit, pointing to the populist policy characteristics of the early 1990s, which laid the ground for the 1994 financial crisis.
- The initial policy response to the 1994 crisis involved a sharp improvement in the primary balance, which featured, besides a considerable rise in revenue, a large cut in primary expenditure in 1994-95. The inflationary erosion of public expenditure (public wages, for example) played a more prominent role in this episode, rather than explicit decisions to downsize public spending.
- The interpretation of changes in policy and economic outcomes from 1994-95 to 1996-99 requires utmost caution. It may be noted that real GNP growth resumed rapidly after 1995 following the expenditure-based budgetary adjustment of the 1994-95 episode, which also saw a large devaluation. In a way, the 1995-97 growth phase may correspond partly to the expansionary fiscal contraction cases highlighted by Giavazzi and Pagano (1990) and Alesina and Perotti (1997), but the highly favorable external financing conditions for emerging markets in 1995-97 are also likely to have contributed to strong growth.
- Another noteworthy characteristic of the 1996-99 subperiod was that the annual average primary balance was in surplus (about +1.8 %, compared to -5.8 % in 1990-93), but after the initial adjustment, revenue increases did not fully offset the recovery in primary spending. This policy trend coupled with the off-budget accumulation of contingent liabilities adversely affected risk premia on interest rates and the real cost of domestic borrowing, which inevitably resulted in sharply increased nominal interest payments in view of high inflationary expectations. This kind of linkages merit further empirical research in the future.
- In terms of average characteristics, the 2000-2002 period features a very significant adjustment in the primary balance, which is predominantly based on revenue increases.
- The 2000-2002 period is also characterized by a rise in the public primary expenditure ratio, which is more than offset by the rise in revenues.

As noted earlier, cross-country research for developing countries suggest that revenue-based fiscal adjustments are less likely to remain durable. This trend is certainly a disturbing aspect of Turkey's recent fiscal adjustment, which has nonetheless been respectable in terms of its size relative to GNP. To throw additional light on this issue, a more

detailed analysis has been made for the sources of change in overall public sector balance as shown on Table 9. The main points are the following:

**Table 9**  
Composition of Public - Sector Revenue and Expenditure (% GNP)<sup>a</sup>

	1996-99 Average	2000-02 Average	Change <sup>b</sup>
Total revenue	24.1	31.8	7.7
Direct taxes	7.9	9.3	1.4
Indirect taxes	12.2	16.2	4.0
Nontax and other rev.	6.0	7.9	1.9
Social funds, net	-2.4	-2.5	-0.1
Subtotal	23.8	30.9	7.1
Privatization rev.	0.3	0.9	0.6
Primary expenditure <sup>c</sup>	-22.3	-24.8	-2.5
Current exp.	-11.3	-12.8	-1.5
Fixed investment	-6.1	-6.3	-0.2
Inventory changes	-1.5	-0.8	+0.7
Noninterest transfers	-3.0	-4.9	-1.9
Primary Balance	1.8	7.0	5.2
Interest payments	-12.2	-20.7	-8.5
Overall balance	-10.4	-13.7	-3.3

<sup>a</sup> Based on SPO definitions and classifications for the public sector.

<sup>b</sup> Contributions to the change in overall balance.

<sup>c</sup> Excludes social security expenditures and includes state enterprise investments.

Source : Own elaboration from State Planning Organization (SPO) data.

Compared to 1996-99, revenue increases in 2000-2002 originated mainly from indirect taxes and non-tax revenues, which have relied on somewhat ad hoc and temporary tax measures. It is therefore plausible to question the durability of the revenue-based adjustment patterns in the post-2000 period. On the expenditure side, an effort has been made to safeguard the relative level of public fixed investments, which is a welcomed choice from the supply-side perspective, but the nature of the rise in non-interest expenditure and current expenditure should be evaluated carefully from the perspective of efficiency in expenditure allocation.

There are two other critical observations on Turkey's fiscal adjustment in the early 2000s. The contribution of direct tax revenue to fiscal consolidation has been rather weak, which reminds us the important role played by direct taxes (together with household transfer payments) in reducing income inequalities in EU economies. Another point in the fiscal adjustment process relates to the deficit position of

"social funds" aggregate balances, averaging around 2.5 % of GNP in 2000-2002, but showing definitive signs of increase in the longer run, if it is not tackled with additional reform initiatives.

## 5. Conclusions

This paper reviews the historical patterns of fiscal adjustments in Turkey against the backdrop of the main macroeconomic trends in the 1990s and early 2000s and in the context of potential EU accession. Despite the important shift in the fiscal policy regime since 2001, important challenges still need to be tackled to keep Turkey's economy on a path of fiscal sustainability and growth.

Three main major policy implications emerge for the mid-2000s from a joint consideration of numerical assessments of public debt dynamics and fiscal adjustment patterns. First, a persistent effort of primary surplus generation is required in the medium-run (of an order of magnitude of 6.5 percent of GDP for the general government) in order to ensure a credible pace of public debt reduction in conjunction with further inflation reduction and lowered cost of debt finance with longer maturities. Second, the composition of fiscal adjustment needs to be modified in order to improve its quality and durability. Primary surplus generation should continue with a greater reliance on direct taxes (rather than *ad hoc* indirect taxes and non-tax revenues), moderately reduced current spending and further reform of the social security system with a view to reduce the social security deficits that impose a growing burden on the budget. Third, a greater policy concern is warranted with the process of expenditure allocation that should attach priority to spending items with highly positive externalities from the standpoint of economic efficiency as well as social cohesion.

Besides fiscal sustainability, the social sustainability of the stabilization and reform program is also important to establish supportive conditions for a viable growth process. If the contribution of direct taxes to fiscal adjustment increases in conjunction with the broadening of the tax base and contraction of the unregistered economy, it will be possible to reduce the relatively heavy tax burden on labor and thereby improve employment prospects, which would strongly contribute to the creation of a favorable development environment in Turkey.

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## Özet

### Türkiye'nin mali politikaları ve AB perspektifi

1990 sonrası dönemde, Avrupa Birliği'nde sürdürülebilir kamu maliyesi politikaları önem kazanırken, Türkiye'de bütçe dengelerinin gözetileceğine ilişkin inandırıcı bir politik kararlılık gözlenmemiştir. Türkiye, makroekonomik ve kamu maliyesi stratejilerinde ihtiyaç duyulan köklü değişiklikleri 2000'lerin başına kadar ertelemeyi sürdürmüş ve reform sürecini ancak yaşanan ciddi ekonomik kriz sonrasında başlatmıştır. Bu makale, mali uyum yönünde atılan adımları 1990'lar ve 2000'lerin başındaki makroekonomik eğilimler ışığında gözden geçirmekte ve uygulamaya konan mali reform stratejilerinin güçlü ve zayıf yönlerinin altını çizmektedir. Çalışma borç dinamiklerine ilişkin öngörülerini de değerlendirerek, kamu borç stokunun azalan bir seyir izleyeceğine dair güvenin oluşması için, faiz dışı bütçe fazlalarını sürdürmenin orta-vadede gerekli olduğunu göstermektedir. Ayrıca, dolaysız vergilerin payını artırıcı bir gelir yönetimi politikası izlenmesinin ve sosyal güvenlik reformunun, sistemin yarattığı açıkların bütçe üzerindeki artan yükünü azaltacak ek önlemler alınarak sürdürülmesinin mali uyum sürecini kalıcı kılmak için gerekli olan diğer adımlar olduğu vurgulanmaktadır.