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The Egyptian Stabilization Experience: An Analytical Retrospective

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Abstract

This paper analyzes the successful Egyptian stabilization experience during the 1990s, focusing on its distinctive features and contrasting them with the recent experiences of other developing countries. The key policy elements were a large fiscal adjustment, use of an exchange rate anchor that has endured for over six years, supported by prudent monetary policies, and early moves to liberalize interest and exchange markets. The outcomes included the avoidance of an output collapse despite the magnitude of fiscal adjustment; avoidance of stresses on the financial system; reversal of endemic dollarization; financial deepening at the expense of the banking system; and maintenance of external viability despite a lackluster export performance.

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Summary

This paper analyzes the successful Egyptian stabilization experience during the 1990s, focusing on its distinctive features and contrasting them with the recent experiences of other developing countries that undertook adjustment. The successful stabilization provides a sound launching pad for Egypt's acceleration of structural reforms, which were designed to raise Egypt's economic growth rate.

Following the Middle East conflict, Egypt launched a concerted stabilization effort that had as its main elements a large fiscal adjustment, virtually unparalleled in recent years, an exchange rate anchor, prudent monetary policies; and early moves to liberalize interest and exchange markets. This effort produced a remarkable turnaround in Egypt's macroeconomic fortunes in terms of reducing inflation, restoring confidence, and engendering external viability.

The paper focuses on the distinctive features of the Egyptian experience and provides explanations for the following analytical questions: How was an output collapse avoided despite the large fiscal adjustment? How did the Egyptian financial system escape the trauma typically associated with stabilization? Why was chronic dollarization reversed? Why did the level of monetization decrease despite the successful stabilization? Was the choice of the exchange rate as anchor appropriate? Why did the resulting real appreciation not threaten external viability?

I. INTRODUCTION

Egypt is well embarked on a reform effort aimed at placing the economy on a higher growth trajectory that would durably raise living standards, reverse the rising tide of unemployment, reduce the level of poverty, and facilitate Egypt's accelerated integration in the world economy. These objectives are to be achieved through a program that would build on the macroeconomic stability attained in the last few years and which envisions the acceleration of structural reforms, encompassing privatization, trade liberalization, deregulation, fiscal reform, and strengthening of the financial sector. To ensure a strong enabling environment for these reforms, it is important to understand, assess, and draw lessons from Egypt's success in macroeconomic stabilization, not least because continuing stabilization forms the *sine qua non* for the growth phase.

This paper attempts an analytical retrospective of the Egyptian stabilization experience, focussing on the commonalities with episodes of stabilization in other countries, as well as the idiosyncracies of the Egyptian situation. It is organized as follows. Section II outlines briefly macroeconomic performance in Egypt between 1987/88 and 1996/97, with 1987/88–990/91 denoting the pre-stabilization period and 1991/92–996/97 the stabilization period. Section III examines the fiscal underpinnings of the stabilization, describing magnitudes, analyzing the underlying factors and evaluating medium-term sustainability. Section IV investigates the transmission mechanism and the monetary story in terms of analytical questions such as whether money demand was stable and the consequent implications for monetary versus exchange rate targeting; whether monetary policy was overly tight and, if so, whether that raised the output cost of inflation; and why dollarization was so successfully reversed in contrast with some countries in Latin America and East Asia. Section V analyzes the evolution in the financial system during stabilization, in particular how the financial system escaped the trauma that typically afflicts stabilization efforts. Section VI evaluates selected issues related to the exchange rate. Section VII compares certain special features of the Egyptian experience with those of recent developing country stabilizers. Section VIII outlines briefly the vulnerabilities in the stabilization picture and Section IX concludes.

II. OVERVIEW

Egypt, in the latter half of the 1980s, exhibited the classic symptoms of an economy in financial disequilibrium. As Chart 1 indicates, inflation was running above 20 percent in the pre-stabilization years,[1] fueled by a profligate fiscal stance with the budget deficit averaging about 15 percent of GDP. Automatic accommodation of these deficits led to expansionary monetary policy as evidenced in annual rates of liquidity exceeding 18 percent. Confidence in the economy was ebbing, reflected in growing dollarization with a high fraction (nearly

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[1]Throughout this paper, the pre- and post-stabilization years will refer to the periods 1987/88–1990/91 and 1991/92–1996/97, respectively.

Chart 1. Stabilization Indicators, 1987/88-1996/97

1a - Time Series

1b - Pre-and Post- Stabilization Averages
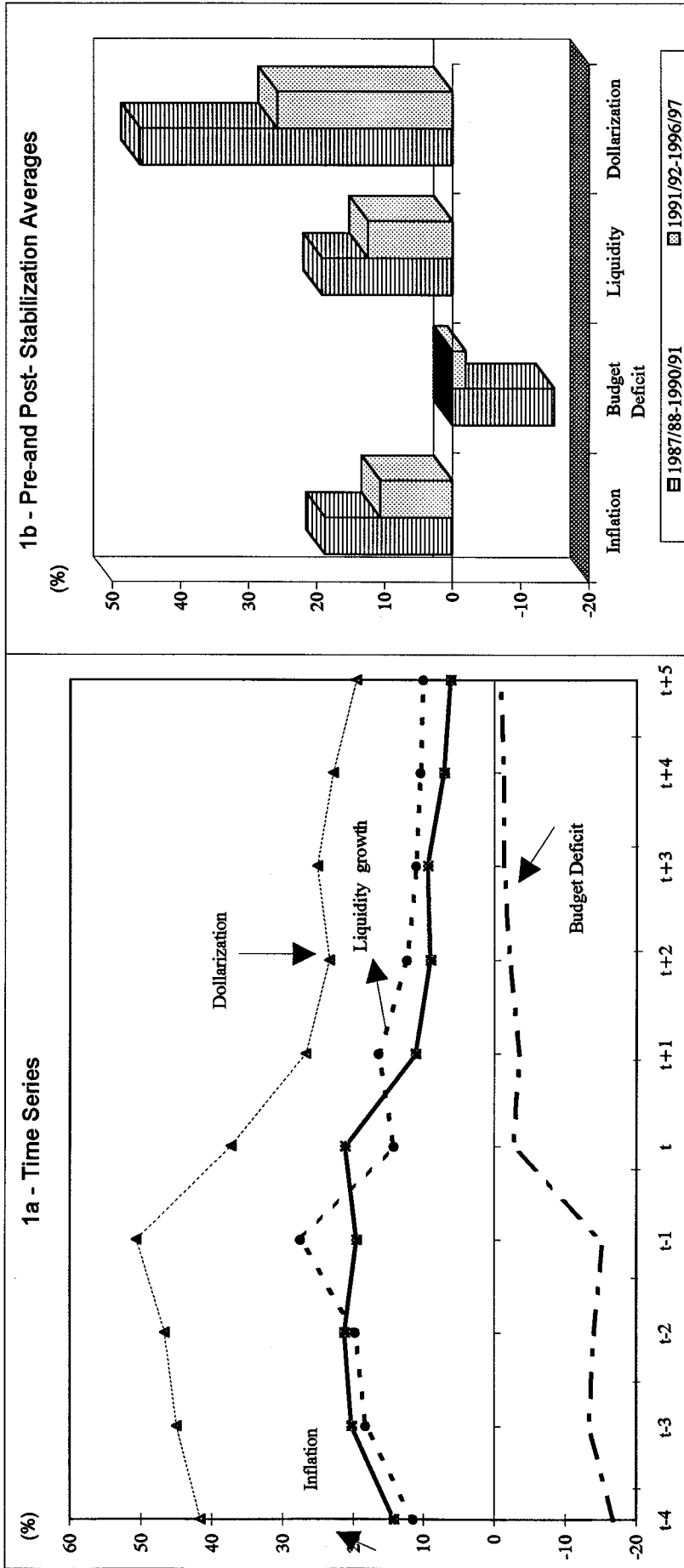
Inflation, Liquidity growth: percent
Dollarization: Foreign currency deposits as percentage of liquidity
Budget deficit: Percent of GDP
t: 1991/92

50 percent) of total liquidity accounted for by foreign currency deposits. Internal imbalances were complemented by external balances: for much of the 1980s exports stagnated, and the current account deficit reached about 8 percent of GDP in 1998/89, leading to an inability to service external debt obligations. Exceptional financing between 1986/87 and 1990/91, including accumulation of arrears on external debt service, totaled about $14.1 billion. A series of nominal depreciations since 1986 prevented a severe erosion of competitiveness as the real exchange rate depreciated by almost 30 percent between 1986/87 and 1990/91.

The year 1991/92 marked a watershed in Egypt's stabilization effort. Following the Gulf war, the Egyptian Government launched a concerted stabilization effort that encompassed the four points set out in Bruno's (1993) orthodox prescription: (a) establishing the fundamentals for internal and external balance; (b) pursuing nominal anchors to achieve disinflation; (c) undertaking currency reforms to accelerate exchange stabilization; and (d) undertaking structural reforms to remove price distortions. He might have added another vital ingredient for success, namely, favorable external developments, which also contributed to the success of the Egyptian experience.

The keystone in the arch of establishing the macro-fundamentals was fiscal stabilization. The fiscal deficit was reduced from over 15 percent of GDP to 1.3 percent of GDP over a four year period, an effort that has perhaps few international parallels in recent history.[2] In terms of the choice of nominal anchors, Egypt naturally eschewed wage/price anchors; these instruments of statism were sought to be disavowed rather than elevated to the status of anchors. Instead, Egypt opted for an exchange rate anchor[3] supplemented by strict monetary and credit targets. Currency reform was pursued early in the stabilization effort: in February 1991, the different markets for foreign exchange were de facto unified. Concurrently, important steps toward financial market reform were initiated through liberalization of interest rates: in January 1991, official limits in interest rates were lifted, and treasury bill auctions were introduced. These were followed by the elimination of lending limits to the private and public sectors in 1992 and 1993, respectively.

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[2]Over the same period, the primary balance underwent an improvement of over 16 percentage points, from a deficit of about 9 percent of GDP in 1990/91 to a surplus of over 7 percent of GDP in 1993/94.

[3]While " anchor" may be the appropriate metaphor to describe the role of a stable exchange rate in facilitating disinflation, that ceases to be true in a situation of capital inflows where greater exchange rate flexibility is more conducive to disinflation.

This effort produced a remarkable turnaround in Egypt's macroeconomic fortunes.
Inflation declined from 21 percent in 1991/92 to 7.1 percent in 1995/96 as liquidity growth
also declined from over 27 percent in 1990/91 to 10.5 percent in 1996/97. External viability
was also achieved as the **current account** improved from a deficit of about 5 percent of GDP
to a surplus of 1.1 percent in the post-stabilization era, and external reserves burgeoned to
unprecedented levels (Chart 2). **Real output growth,** which declined sharply in the first two
years of the stabilization—to 0.3 percent and 0.5 percent, respectively, rebounded quickly,
and followed with a one-year lag the reduction in inflation (Chart 3). Since 1993/94, real GDP
has grown steadily, reaching 5.0 percent in 1996/97. **Wages** were not as adversely affected as
in other reforming economies. For example, wage data for the civil service and for the public
economic sector indicate that, except for and since 1991/92 which was the year of peak
inflation, nominal wage increases have outstripped inflation (see section VII for details).

III. FISCAL ADJUSTMENT

As noted above, at the very heart of the stabilization effort was the rectification of the
fiscal imbalance. This section looks at the magnitudes involved and the manner in which the
correction was achieved.

A. Magnitudes[4]

Comparing averages for the pre- and post-stabilization periods depicts a remarkable
adjustment effort (Chart 4): the overall deficit declined from about 15 percent to 2 percent of
GDP; the primary balance swung from a deficit of over 10 percent to a surplus of about
6 percent; the government became a net saver as savings increased from -2 percent to over
4 percent of GDP; and the savings-investment deficit narrowed from almost 14 percent to
about 2 percent.[5] These averages mask the speed of fiscal correction: the bulk of the
adjustment effort was concentrated in just one year—from 1990/91 to 1991/92. Over the
four-year period, from 1990/91 to 1994/95, the overall deficit and the primary balance swung
around by over 14 and 16 percentage points, respectively.

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[4]GDP numbers have been adjusted for the one-off upward revision in 1991/92 to facilitate
comparison between the pre- and post-stabilization periods.

[5]"Government" is defined to include central and local government, economic service
authorities, and the investment activities of economic authorities, which encompasses most of
the economic infrastructure. Public sector enterprises are excluded from the scope of
government in both pre- and post-stabilization periods.

Chart 2. External Indicators, 1987/88-1996/97
(In percent of GDP; In billions of U.S. dollars)

2a - Time Series

2b - Pre- and Post -Stabilization Averages

Current account (Left Scale)

Gross Reserves (Right Scale)

(% of GDP)

($bn)

t-4 t-3 t-2 t-1 t t+1 t+2 t+3 t+4 t+5(Est.)

(% of GDP)

Current account

▤ 1987/88-1990/91   ▨ 1991/92-1996/97
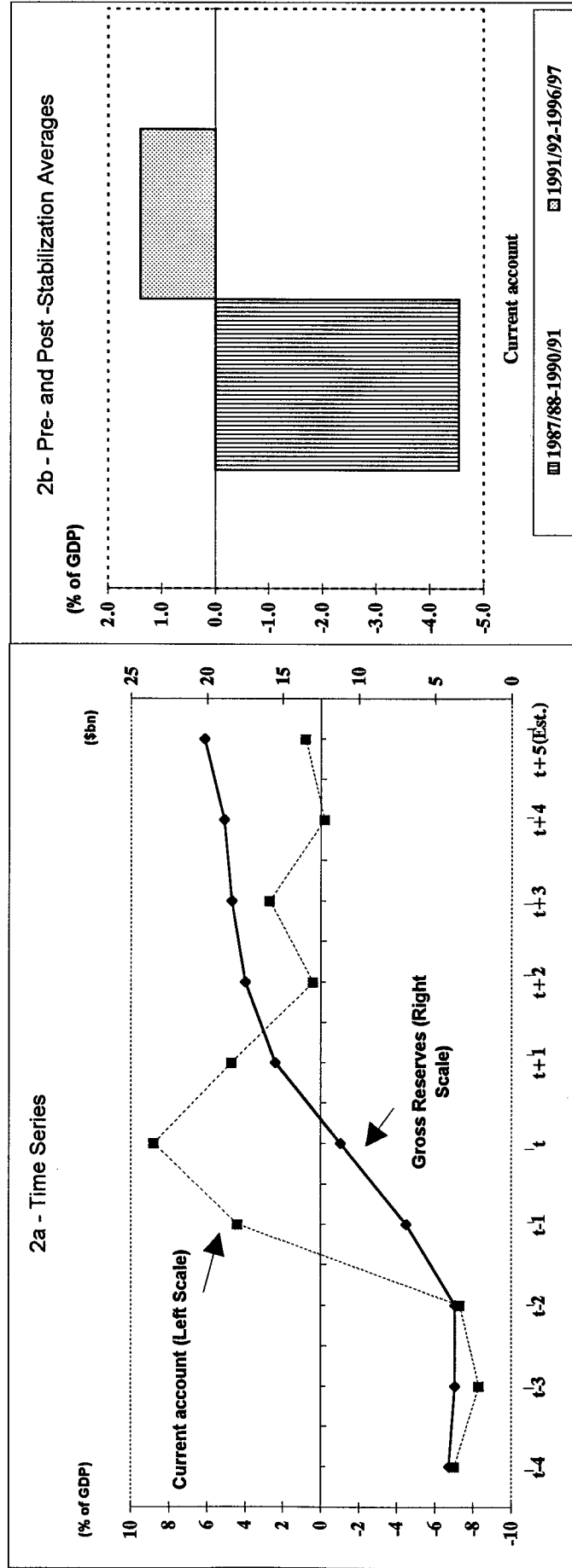
Sources: Government of Egypt; and IMF staff estimates.

t : 1991/92

Chart 3. Inflation and Output, 1987/88-1996/97
(In percent)

3a - Time Series

3b - Pre- and Post-Stabilization Averages
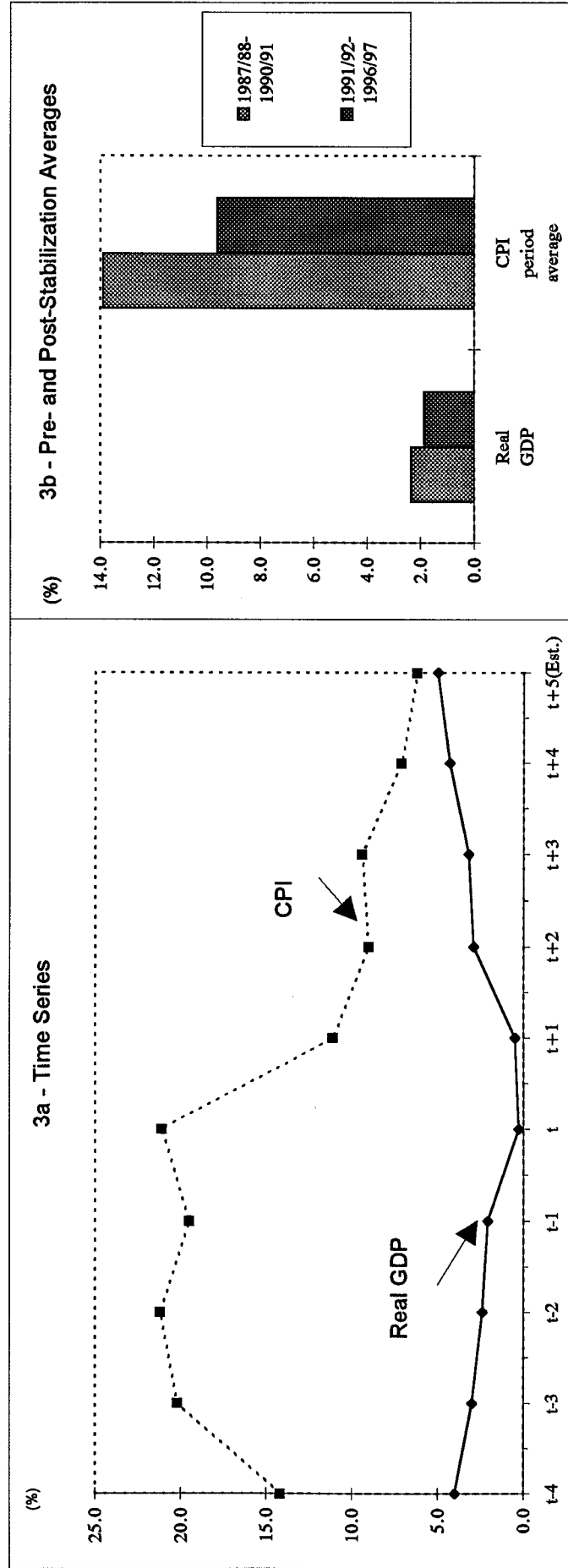
t= 1991/92

Chart 4. Fiscal Indicators, 1987/88-1996/97
(In percent of GDP)

4b - Pre- and Post-Stabilization Averages

4a - Time Series
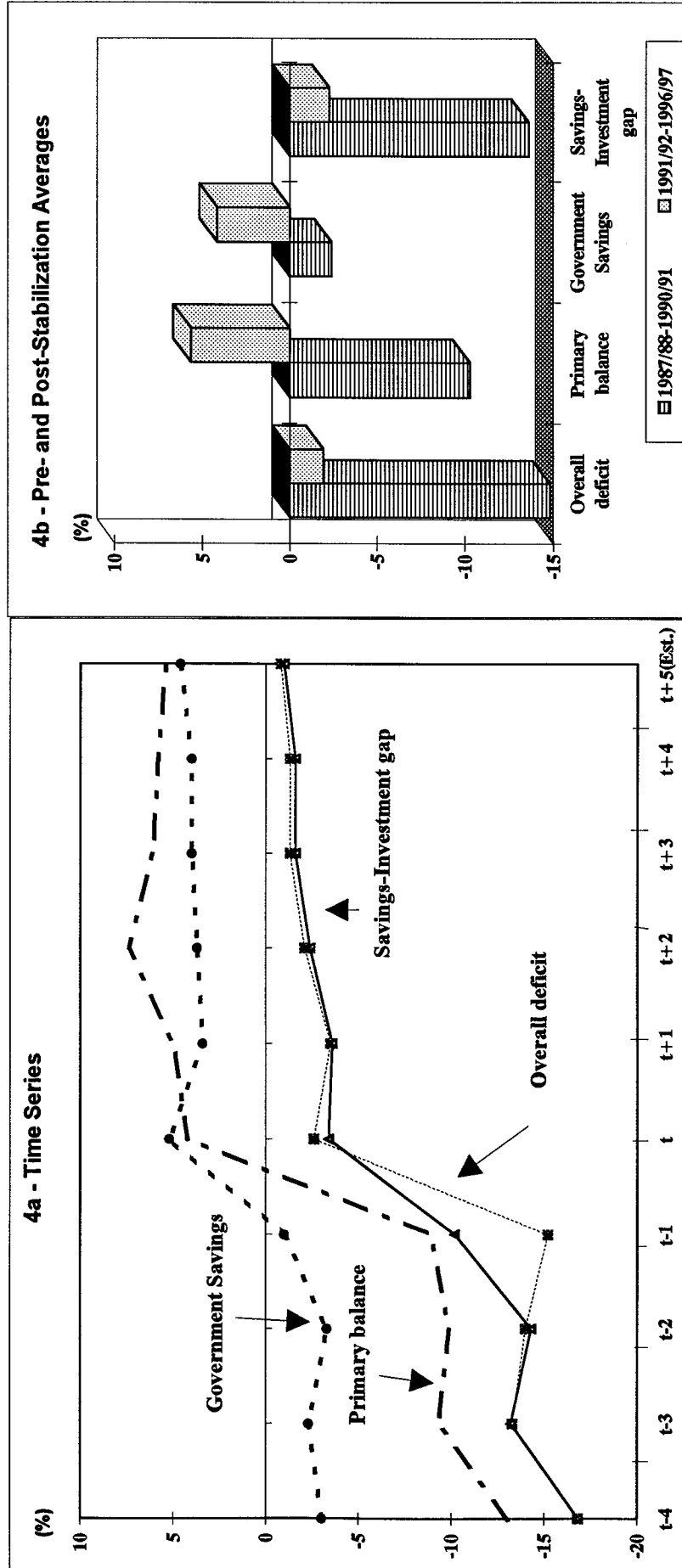
t: 1991/92

B. Composition of Adjustment:[6]

The reduction in the overall deficit was obtained through both a revenue increase, which accounted for 42 percent of the turnaround in the overall deficit, and expenditure reduction (58 percent) (Chart 5a).[7] Excluding the one-off expenditure related to bank capitalization, total expenditure reduction amounted to 6.1 percent of GDP, rendering the fiscal adjustment broadly neutral between revenues and expenditures. Had the debt forgiveness and debt reduction related to the Gulf war and Paris Club reschedulings not been conferred upon Egypt, current expenditure would have been higher and the overall fiscal adjustment lower to the extent of about 1.4 percent of GDP on average during the stabilization period.

■ The largest single element of the policy effort on the **revenue** side was the exchange rate change in early 1991. This raised revenue from oil receipts (by about 1 percentage point on average), Suez Canal receipts (by about 2 percentage points on average), and from taxes on international trade. In addition, the introduction in 1991 of the sales tax and its subsequent expansion contributed about 1.4 percentage point to the revenue effort (Chart 5a).

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[6]The numbers in this section have been adjusted to take account of a major change in the coverage of the fiscal accounts in 1992/93 that involved excluding the public sector companies from the accounts. Without this adjustment, the overall fiscal effort would appear somewhat greater: in particular, unadjusted calculations would show a decline in the overall deficit from 16.9 percent of GDP to 2.4 percent of GDP. More importantly, not making allowance for this change would bias or mislead the assessment of the composition of the adjustment (see below).

[7]Without controlling for the change in the coverage of the fiscal accounts, it would appear that the adjustment in the fiscal effort was distributed between revenue increases and expenditure reduction in the ratio of 20 and 80 percent, respectively.

Chart 5a. Fiscal Indicators: Change Between pre- and Post-Stabilization Periods
(In Percent of GDP)

Sources: Government of Egypt; and IMF staff estimates.
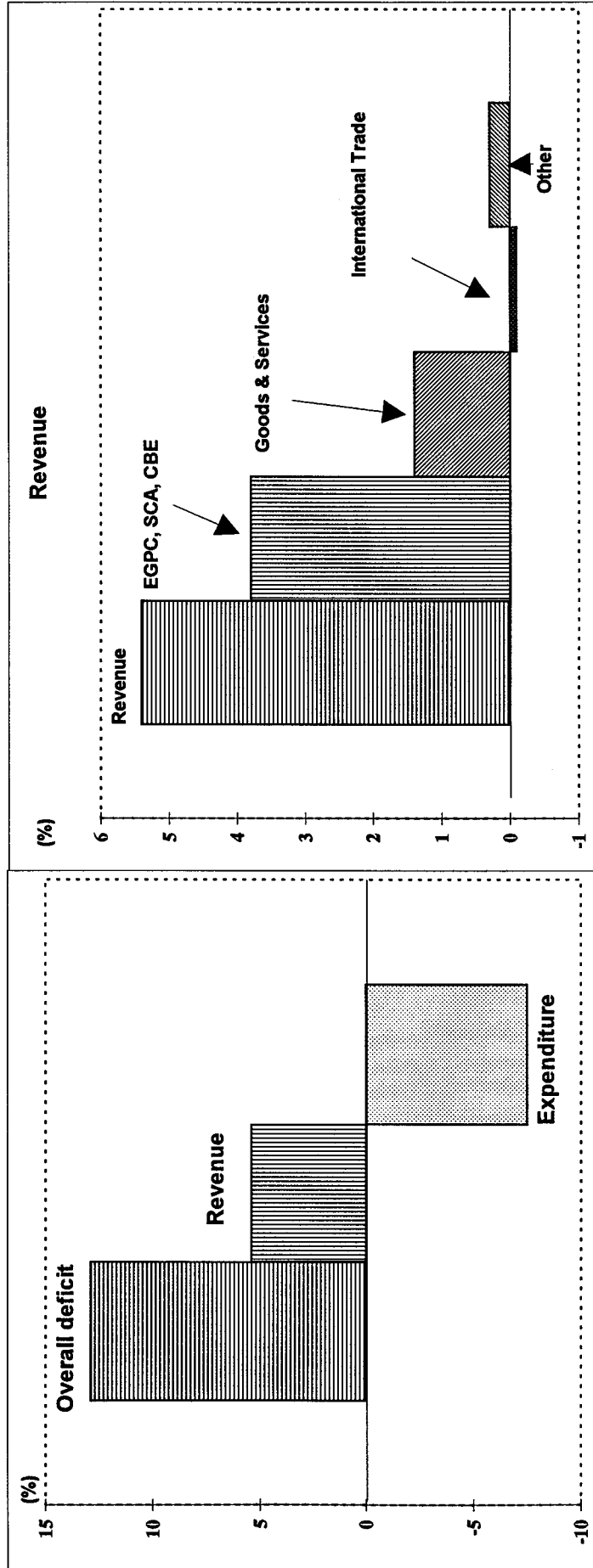
EGPC : Egyptian Petroleum Company
SCA : Suez Canal Authority
CBE : Central Bank of Egypt

■   On the **expenditure** side, the total cut (amounting to 7.5 percent of GDP) was distributed between current and investment expenditures in the ratio of 16 and 64 percent respectively, with the rest explained by a reduction in net lending.[8] (Chart 5b). The net lending change was a one-off adjustment due to recapitalization of banks (in 1990/91), amounting to 5.5 percentage points in aggregate or 1.4 percent per year in the pre-stabilization period. This one-off feature overstates the expenditures in the pre-stabilization period and hence the magnitude of adjustment in the stabilization period. Within investment expenditure, the share of spending accruing to the social services sectors remained unchanged, allaying concerns that the burden of fiscal adjustment would fall on poorer sections of society. The bulk of the investment cuts was in the economic sphere as the government cut back on projects in the electricity and tourism sectors.

■   Within **current expenditures**, which were reduced by 1.2 percentage points, subsidies and transfers witnessed a decline of about 2.4 percentage points, while wages and salaries (including pension payments) saw a modest reduction of about 0.6 percentage points of GDP. The decline in aggregate current expenditure cloaks a compositional shift away from non-interest expenditures; interest expenditures, especially on domestic debt were about 2.1 percentage points higher during the stabilization period (Chart 5b). This compositional shift also explains the greater reduction in the primary balance compared to the overall deficit. As a result of the debt forgiveness and Paris Club rescheduling agreement of 1991, Egypt's foreign interest bill was substantially reduced, estimated at about 8.4 percent of GDP (cumulative for the post-stabilization period) or 1.4 percent on average for the six-year period.

This fiscal adjustment undertaken by Egypt should be evaluated against the backdrop of the massive sterilization effort mounted during the period 1991/92 to 1993/94 in order to offset the liquidity impact of the surge in capital inflows. The fiscal costs of sterilization[9]

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[8]If adjustments for the changed coverage of the budget are not made, it would appear that the reduction in government investment expenditure was almost 9 percentage points. This is because the changed methodology involved excluding the investment expenditures of the public sector enterprises from the scope of the fiscal accounts. The reduction in net lending observed between the two periods is in large part due to the recapitalization of the banks in 1990/91 which was a one-off effort. In any event, in the case of Egypt, net lending should be excluded in analyzing fiscal developments as it is largely a financing item, comprising government amortization payments to the National Investment Bank.

[9]The costs of sterilization are calculated as the change in net domestic assets of the CBE, which is the counterpart of the increase in inflows, times the interest differential between domestic and foreign assets.

Chart 5b. Fiscal Indicators: Change Between pre- and Post-Stabilization Periods
(In percent of GDP)
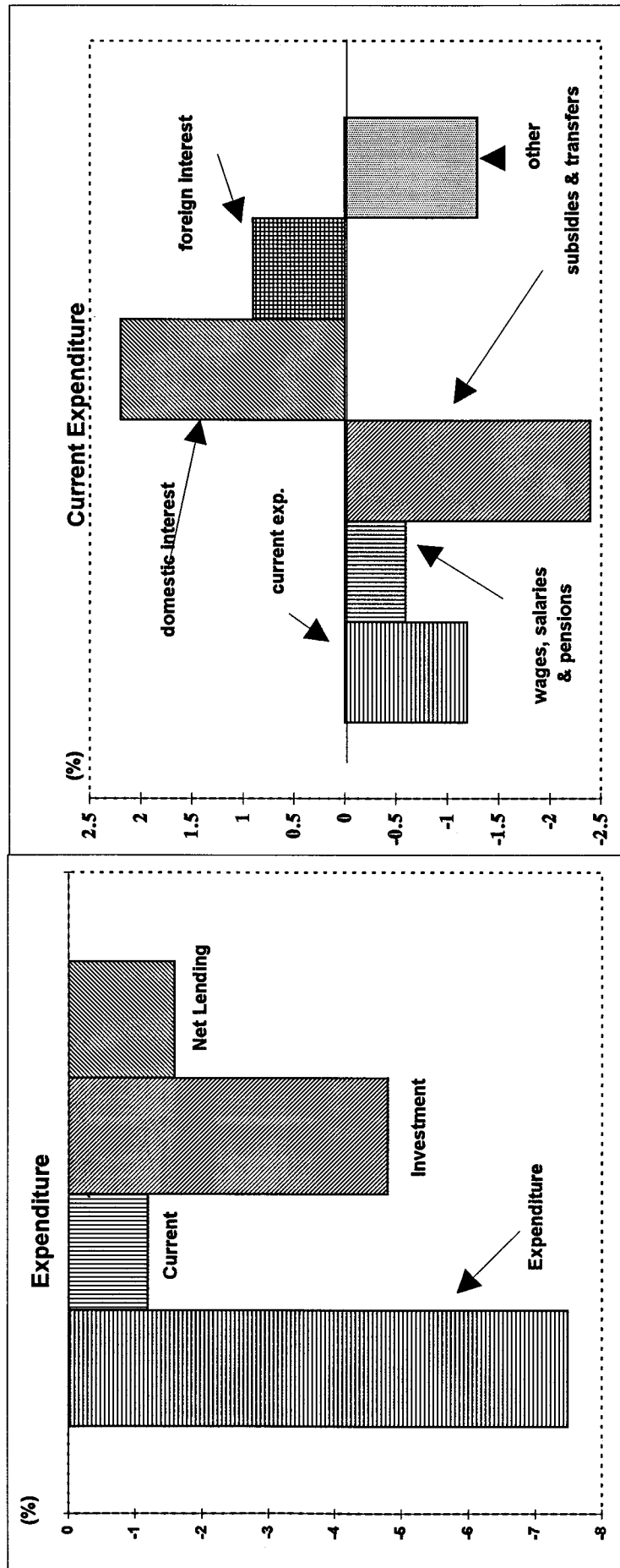
Sources: Government of Egypt, and IMF staff estimates.

amounted to about 4 percent of GDP (cumulative) or an average of 0.6 percent over the six stabilization years. However, if the sterilization effort is seen in the context of its effect of providing implicit support to the banking system, the fiscal effort amounted to about 8 percent of GDP (in addition to the expenditures of about 5.5 percent of GDP incurred in 1990/91 for overt recapitalization of the banking system; see Section V for details).[10]

■   A corollary of the strengthening fiscal position was the diminishing reliance on **monetary financing, comprising seignorage and the inflation tax** (Chart 6).[11] Egypt's extraction of seigniorage, transferred to the budget in the form of the CBE's taxes and profit transfers, has increased by about 1.2 percentage points of GDP, from 1.5 percent to 2.8 percent. On the other hand, Egypt's recourse to the inflation tax has diminished substantially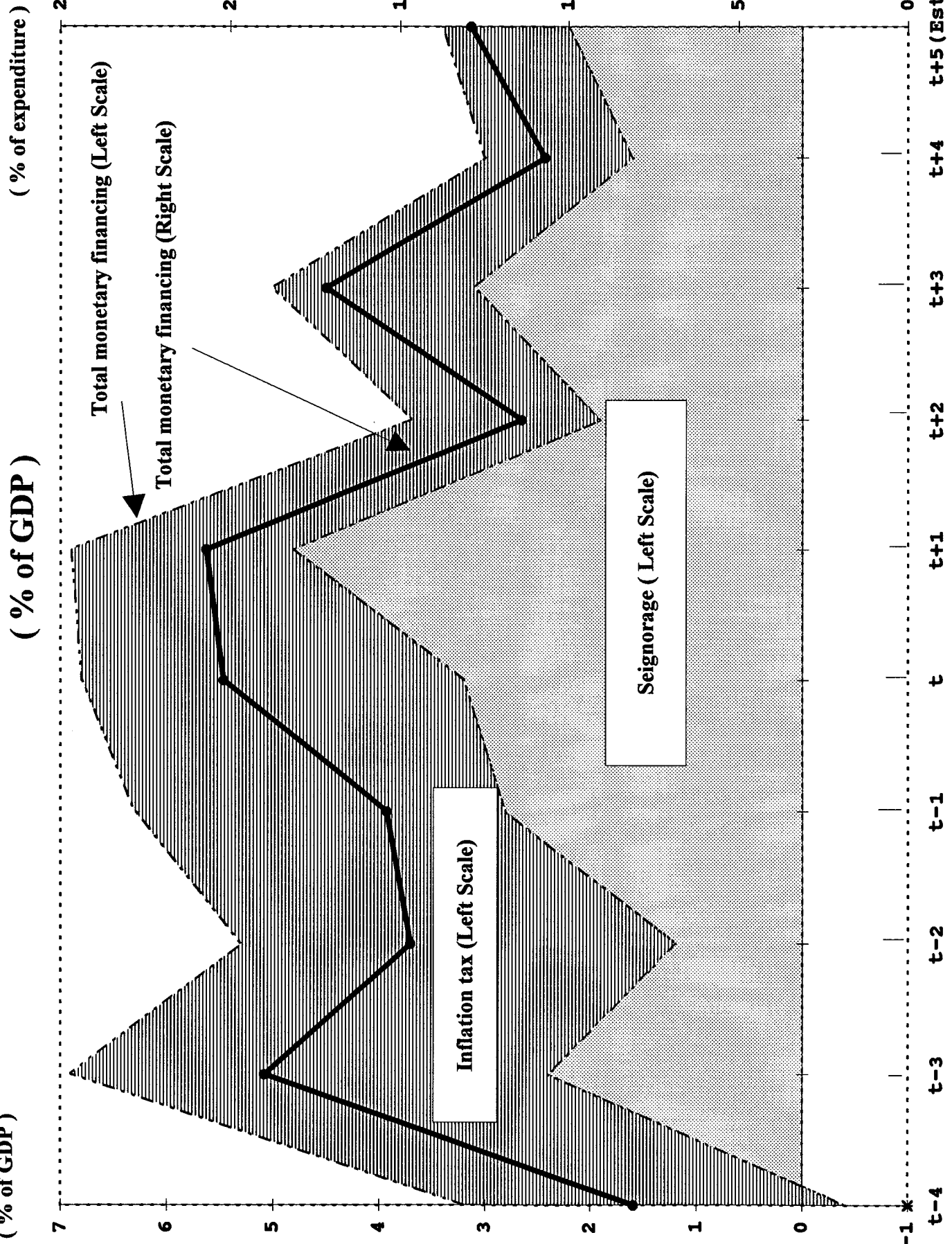 as a share of GDP, from 3.9 percent to 2.0 percent. Overall, monetary financing as a share of GDP has declined (from 5.4 percent to 4.8 percent of GDP) but increased slightly when measured against total expenditures. This reduced recourse to monetary financing in aggregate has been accompanied by a positive compositional change reflected in the relative importance of revenues from seignorage and the inflation tax. In the pre-stabilization period, the share of reserve money in GDP declined quite sharply, which meant that the inflation tax was extracted more from a high tax rate rather than a growing tax base. By contrast, in the stabilization phase, the inflation tax has come down and has been garnered against the background of a stable or expanded tax base, without the distorting effects of a high tax rate.

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[10]The exclusion of arrears accumulation by the government from the fiscal accounts tends to overstate the magnitude of fiscal adjustment: while no firm data are available, it appears that the stock of government arrears—the bulk of which has been likely accumulated during the stabilization period—to the economic authorities and the public sector enterprises totaled about LE 10 billion at end–996. However, the analysis presented above is not invalidated by this omission if it is recognized that arrears accumulation by the government led to increased fragility of the banking system, which necessitated a fiscal infusion in the form of treasury bill allocations to the banks (see Section V below). Thus, unrecorded accumulation of arrears have been reflected in the fiscal accounts, albeit in an roundabout manner, through the cost incurred to redress the consequences of arrears accumulation.

[11]**Seignorage** arises from the fact that the central bank issues interest free liabilities which are willingly held by economic agents and is measured as the change in reserve money as a share of GDP. The **inflation tax** reflects the reduction in the purchasing power of money balances due to inflation and is measured as the inflation rate multiplied by reserve money as a share of GDP. The private sector has to run a surplus of income over expenditure to acquire money balances when inflation is positive and thus pays an inflation tax; the fiscal authorities, however, gain only to the extent that erosion of the money stock through inflation is not offset by gains by the private sector as net debtors. This is why the base for the inflation tax is reserve money rather than broad money (see Anand and Wijnbergen (1989)).

Chart 6. Monetary Financing, 1987/88 - 1996/97
(% of GDP)

(% of GDP)

(% of expenditure)

Total monetary financing (Left Scale)

Total monetary financing (Right Scale)

Seignorage (Left Scale)

Inflation tax (Left Scale)

Sources: Government of Egypt and IMF staff estimates.

t : 1991/92

C. Medium-term Fiscal Viability

While the fiscal adjustment looks impressive, a certain circumspection may be in order in view of the large public debt ratios, totaling about 91 percent of GDP in 1996/97 (Chart 7). A more long term assessment of the fiscal position would need to look at the evolving debt situation. Here too, the picture is one of progress, evidenced in declining total debt and internal debt when expressed as a share of GDP. Egypt's total gross internal debt has declined to about 52 percent of GDP in 1996/97, down from the peak of about 71 percent reached at the time when Egypt was sterilizing its capital inflows. Reflecting the substantial placements of government deposits in the CBE (the counterpart of the sterilization), Egypt's net internal debt is substantially lower, and currently stands at 35 percent of GDP.

While the declining debt ratios would allay concerns about the medium-term sustainability of Egypt's fiscal position, this needs to be corroborated by examining debt dynamics in an intertemporal context with account being taken of intertemporal constraints. An intuitive approach for doing this is explained in Anand and Wijnbergen (1989) which posits that medium-term debt and fiscal sustainability are affected by a simple equation linking the primary balance to seignorage and the difference between the real interest rate and the growth rate of GDP.[12] This equation can be used to derive the level of primary fiscal balance (the sustainable balance) that is consistent with a stable level of debt relative to GDP.

Table 1 and Chart 8 illustrate issues related to sustainability. They show that throughout the stabilization period the actual primary balance has remained substantially above the notional sustainable balance derived from the debt dynamics equation.[13] The margin for comfort is over 8 percentage points of GDP, suggesting that there are few grounds for concern about medium-term viability from the perspective of delivering debt service capability consistent with low inflation.

Moreover, the large margin masks a positive change that has occurred during the stabilization period. In the early part of the stabilization period, debt viability was based more

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[12]The equation for determining a sustainable primary balance, d, is given by: $d = s - [(r-g)xb]$, Where b represents the public debt to GDP ratio, d is the primary deficit as a share of GDP, s denotes seignorage revenues (including the inflation tax) as a share of GDP, r the real interest rate, and g the real growth rate. The intuition is that if the government is running a primary deficit larger than the amount of seignorage it can obtain, and if the real interest rate exceeds the growth rate, the debt to GDP ratio will rise without limit.

[13]In calculating the sustainable balance, the perspective is one of assessing viability at the time of the adjustment and not through the spectacles of hindsight: therefore the calculations are based on three-year moving averages of real growth and interest rates.

Chart 7. Government Debt , 1990/91-1996/97
(In percent of GDP; In billions of Egyptian pounds)

7b. Gross total debt

(LE. bn.)

(% of GDP)

Total debt (Left Scale)

Total debt (Right Scale)

7a- Local currency debt

(L.E. bn)

(% of GDP)

Gross debt (Left Scale)

Gross debt (Right Scale)

Net debt (Left Scale)

Net debt (Right Scale)
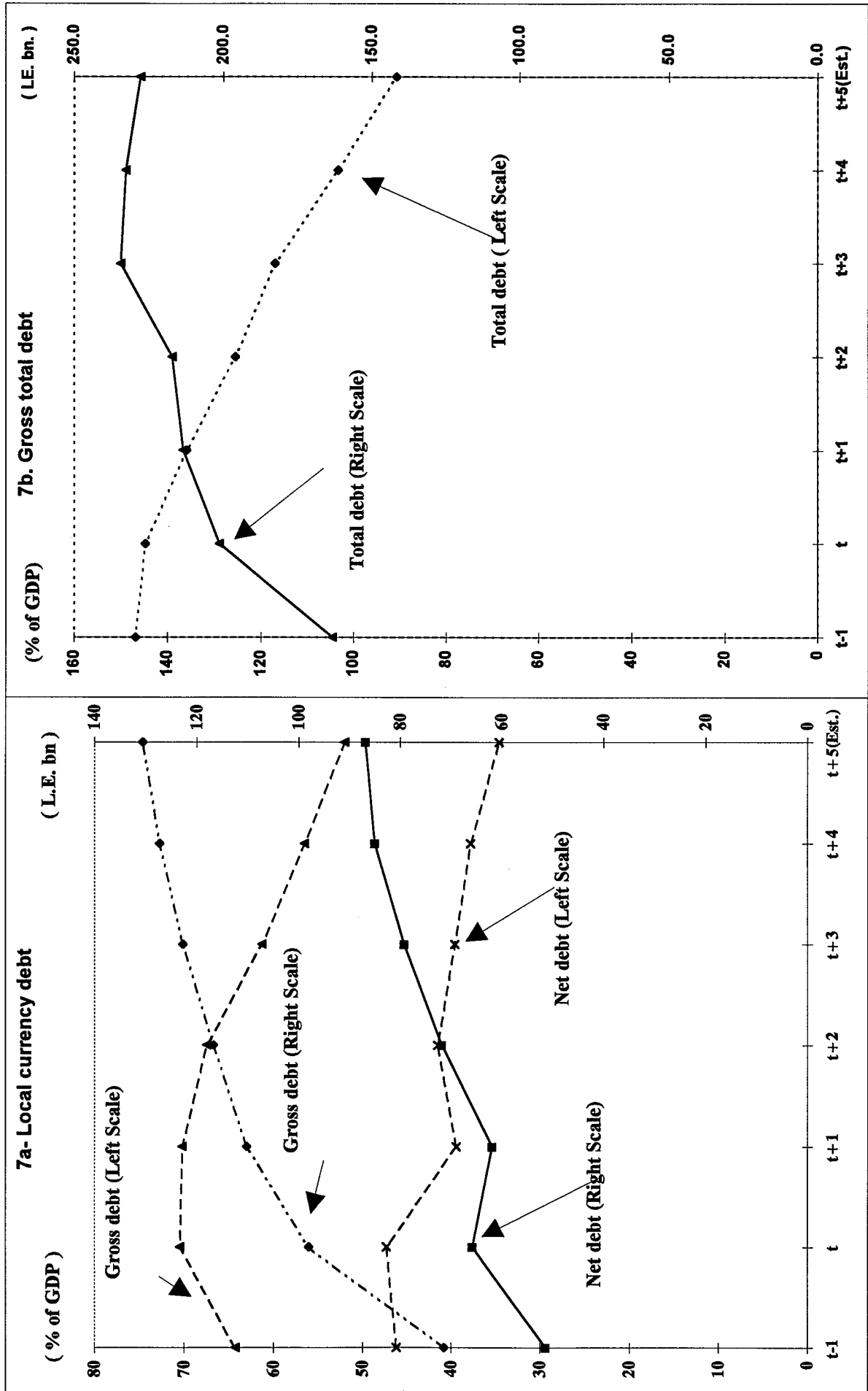
Table 1. Egypt: Fiscal Sustainability and Monetary Financing, 1990/91-1996/97

(In percent of GDP unless otherwise indicated)

	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97
Gross foreign debt	82.6	74.3	65.8	58.0	55.7	46.8	38.6
Gross domestic debt	64.3	70.5	70.2	67.5	61.3	56.5	52.0
Total debt	146.9	144.8	136.0	125.5	117	103.3	90.6
Seignorage	2.8	3.2	4.8	1.9	3.1	1.6	2.2
Inflation tax	3.5	3.6	2.1	1.8	1.9	1.4	1.2
Interest rate on external debt	3.1	4.0	5.1	4.1	4.5	4.5	4.5
Interest rate on internal debt	-0.4	-2.1	4.6	4.4	1.4	3.1	3.6
Average interest rate (3-year moving average)	1.3	2.5	3.4	4.0	3.6	3.5	3.9
Nominal GDP growth	25.1	25.1	12.9	10.2	15.8	12.4	11.5
Real GDP growth	2.1	0.3	0.5	2.9	3.2	4.3	5.0
Real GDP growth (3-year moving average)	1.2	1.0	1.2	2.2	3.5	4.2	4.7
Inflation	19.5	21.1	11.1	9.0	9.4	7.1	6.2
Interest rate minus real growth rate 1/	0.1	1.5	2.1	1.8	0.2	-0.6	-0.8
Sustainable primary balance 1/	-6.2	-4.7	-4.0	-1.4	-4.8	-3.7	-4.2
Actual primary balance	-8.9	4.2	5.0	7.4	6.1	5.8	5.3
Total monetary financing	6.3	6.8	6.9	3.7	5.0	3.0	3.4
(as percent of total expenditure)	15.4	20.2	20.7	11.4	17.2	10.7	12.9

Sources: Government of Egypt; and staff estimates.

1/ Based on moving average of real interest and growth rates.

Chart 8. Fiscal Sustainability, 1990/91-1996/97
(In percent of GDP)

(% of GDP)

(% of GDP)

Actual primary balance

Sustainable primary balance

t-1 t t+1 t+2 t+3 t+4 t+5(Est.)
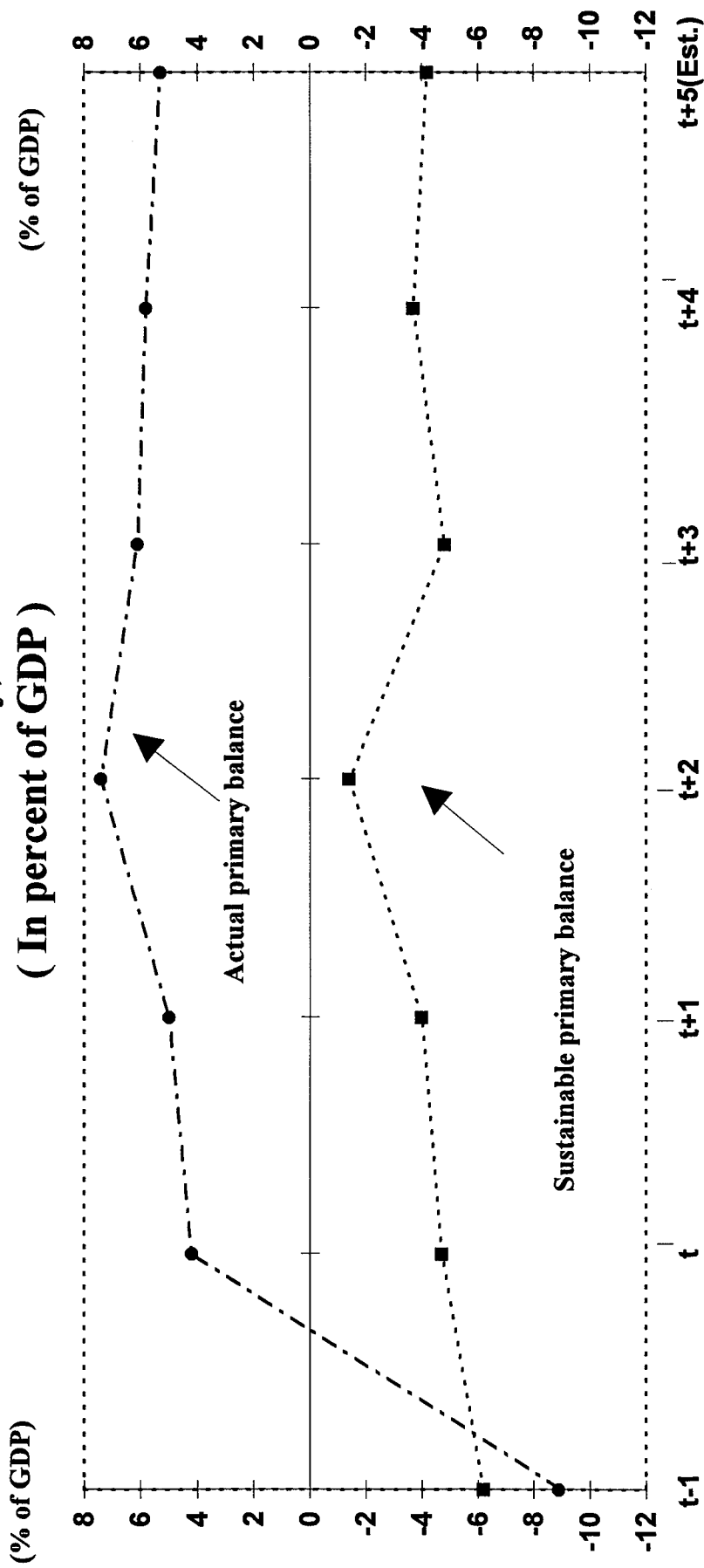
Sources:Government of Egypt and IMF staff estimated.

on high rates of the inflation tax against the background of interest rates exceeding the growth rate. However, since 1994/95, sustainability seems assured in the context of a healthier economic background comprising lower levels of inflationary financing and real interest rates below the real growth rate.

Of course, this measure of the sustainable fiscal balance does not address the more fundamental assessment of whether the stance of fiscal policy is consistent with broader macroeconomic growth objectives. Notwithstanding the favorable debt dynamics illustrated above, a more ambitious fiscal effort might be dictated by a host of developments and policy considerations, including a surge in capital inflows (necessitating a tighter fiscal stance to preserve competitiveness) and the need to augment domestic savings to achieve higher growth. However, as a minimum, the claim can be made that, in the absence of unforeseen developments, Egypt's current fiscal position, including government indebtedness, is consistent with an ability to service debt at moderate rates of inflation.

IV. TRANSMISSION MECHANISM: THE MONETARY STORY

A. Monetary Aggregates and Demand

During the stabilization period, monetary restraint accompanied and was aided by the fiscal adjustment that was under way. Overall liquidity growth was reined in from a peak of almost 28 percent in 1990/91, the year of greatest fiscal excess, to between 10 and 11 percent after 1994/95. Reserve money, while displaying greater variability, also trended down, from peak levels of 21 percent.

Monetary prudence was facilitated by the fiscal adjustment but also by the quick establishment—in the second year of stabilization—of positive rates of interest from financially repressed levels. With financial liberalization and opening of the capital account to international arbitrage possibilities, the differential between pound- and dollar-denominated assets became an important indicator of and target for the conduct of monetary policy. A resounding return of confidence in the domestic currency was reflected in the rapid pace of de-dollarization[14] from almost 50 percent in 1991/92 to about 24 percent a few years into the stabilization; of course, de-dollarization was helped by the large interest rate differential between pound and dollar assets, which was 14 percent in 1991/92 and edged down gradually to reach 5 percent in 1994/95.

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[14]Dollarization is measured as the share of foreign currency-denominated deposits in total liquidity.

B. Was Money Demand Stable?

Table 2 and Chart 9 depict the behavior of the velocity of broad money aggregates, inclusive (M2) and exclusive of foreign currency deposits (M2X). The latter is more amenable to government control and has a greater impact on the public finances through the extraction of seignorage and the inflation tax. While velocity of the narrower aggregate trended downward very perceptibly (reflecting de-dollarization), the broader aggregate remained remarkably stable, except for a short but perceptible dip during the capital inflow years of 1992/93 and 1993/94.

This apparent stability of broad money demand raises the question of whether the reliance on the exchange rate as a nominal anchor was overdone. Would a money-based stabilization also have been equal to the task? Or, more plausibly, once the fiscal adjustment was securely in place did the choice of anchor really matter? The arguments in favor of an exchange rate anchor remained valid: first, despite the stability in velocity when measured over a longer time-frame, intra-year instability could still have plagued a money-based disinflation strategy. Second, a money-based stabilization would still have required assumptions about the behavior of real output and prices, which can be difficult to predict. Third, given the high level of dollarization at the beginning of the stabilization program and the consequent endogeneity of a large part of the monetary base, exclusive or primary balance on monetary targets could have denuded the economy of a nominal anchor. The rejoinder that the relevant monetary aggregate influencing nominal demand and hence prices was narrow money (exclusive of foreign deposits) and not broad money is not consistent with the Egyptian experience at least during the stabilization period.[15] Most compelling was perhaps the Egyptian context, and the history of exchange shortages and crises, which made the exchange rate an important symbol of stability in itself; exchange rate stability was a consummation devoutly to be pursued and not just a means to achieving broader price stability. Moreover, contemporaneous movements in the nominal rate in the late 1980s and inflation meant that the pass-through effect to domestic prices was perceived as important and an exchange rate anchor was seen as having merit in containing this source of inflationary pressure.

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[15]Theory is inconclusive on the choice of monetary aggregate relevant in determining aggregate demand (Friedman (1990)). Two channels of influence from broad money to aggregate expenditure derive from the possibility that foreign deposits offer liquidity services and from a wealth effect. In the Egyptian case, a more important role for broad money is suggested by a higher correlation between broad money and inflation than between M1 and inflation (for the period 1987/88–1996/97). An earlier Fund staff estimation of a demand for money function for the period 1982/83–1990/91 indicated a greater explanatory power for a broad money over a narrow money aggregate, supporting the hypothesis that foreign currency deposits were a close substitute for domestic money.

Table 2. Egypt: Capital Inflows and Relevant Indicators

(In percent of GDP, unless otherwise indicated)

	Average of 2 years prior to episode 1	Inflow Episode 1			Inter-episode years		Inflow Episode 2 (proj.)
		1991/92	1992/93	1993/94	1994/95	1995/96	1996/97
Magnitudes							
Increased inflows							
(In billions of U.S. dollars)	n.a.	2.5	1.1	1.2	n.a.	n.a.	1.5
(In percent of GDP)	n.a.	6.0	2.3	2.3	n.a.	n.a.	2.0
Cumulative inflows							
(In billions of U.S. dollars)	n.a.	2.5	3.7	4.8	n.a.	n.a.	6.3
(In percent of GDP)	n.a.	6.0	8.3	10.6	n.a.	n.a.	12.6
Fiscal indicators							
Overall balance	-17.0	-5.4	-3.5	-2.1	-1.3	-1.3	-0.8
Primary balance	-11.8	1.4	5.0	7.4	6.1	5.8	5.3
Government savings	0.2	5.2	3.4	3.7	4.0	4.0	4.6
Monetary indicators							
Reserve money 1/	23.6	10.8	20.2	8.9	16.8	8.4	10.4
NDA of CBE 2/	-87.9	-349.3	-133.6	-143.3	59.1	46.0	8.8
Of which							
Net credit to government 2/	-259.1	-343.5	-188.0	-49.2	26.8	118.7	129.1
Broad money 1/	23.6	14.3	16.4	12.4	11.1	10.5	12.2
Velocity (inc. foreign deposits) 3/	1.33	1.41	1.36	1.32	1.37	1.40	1.39
Velocity (exc. foreign deposits) 3/	2.46	2.46	1.9	1.73	1.82	1.83	1.75
Dollarization 4/	45.9	42.7	28.8	24.0	24.6	23.8	20.2
Non-government credit (nominal) 1/	21.8	6.2	19.2	25.1	23.5	23.6	22.4
Non-goverment credit (real) 1/	1.2	-12.3	7.3	14.8	12.9	15.4	15.2
T-bill interest rate (nominal)	n.a.	16.2	15.2	12.0	10.2	10.3	9.6
T-bill interest rate (real)	n.a.	-2.1	4.7	4.3	1.4	2.9	3.4
U.S.and LE t-bill rate differential	n.a.	14.2	13.2	10.5	5.6	5.3	4.8
Income and prices							
Real GDP growth	2.3	0.3	0.5	2.9	3.2	4.3	5.0
Inflation	20.4	21.1	11.1	9.0	9.4	7.1	6.2

Table 2. Egypt: Capital Inflows and Relevant Indicators (Concluded)

(In percent of GDP, unless otherwise indicated)

| | Average of 2 years prior to episode 1 | Inflow Episode 1 | | | Inter-episode years | | Inflow Episode 2 (proj.) |
		1991/92	1992/93	1993/94	1994/95	1995/96	1996/97
				(In Egyptian pounds)			
Sterilization indicators							
Stock of t-bills	4.0	17.1	30.5	35.2	29.9	30.3	32.6
Gross issue of t-bills	4.0	13.1	13.4	4.7	-5.3	0.4	
Change in NDA-CBE	-9.4	-10.6	-8.5	-4.7	4.1	1.8	1.0
Change in NDA-non-CBE	8.5	9.2	8.5	13.4	8.9	14.0	12.0
Fiscal costs of sterlzn. 5/	1.3	1.5	1.18	0.49	n.a.	n.a.	n.a.
In percent of GDP	1.2	1.1	0.8	0.3	n.a.	n.a.	n.a.
External indicators							
Gross official reserve 6/							
(In billions of U.S. dollars)	6.4	10.6	14.9	17.0	18.4	18.8	20.2
Months of imports	6.7	12.6	16.7	19.1	18.6	16.0	16.2
Ratio to cumulative inflows	n.a.	4.2	4.1	3.5	n.a.	n.a.	3.2
Current account balance	-1.5	8.8	4.7	0.4	2.7	-0.2	0.8
Real appreciation 7/	-11.5	0.7	7.9	10.4	-0.4	2.4	10.8
Non-oil export volume	2.7	2.7	-20.4	-5.6	24.7	-18.6	0.0
Investment-savings 8/							
National savings	19.6	27.0	20.9	17.1	19.4	16.6	19.0
Investment	21.0	18.2	16.2	16.8	16.7	16.9	18.1

1/ Percent growth.
2/ Contribution to reserve money growth.
3/ Period average. Pre-1990/91 figures adjusted to take account of revision to level of GDP in 1990/91.
4/ Foreign currency deposits as percent of total liquidity.
5/ Pre-inflow episode 1 figure refers to 1990/91.
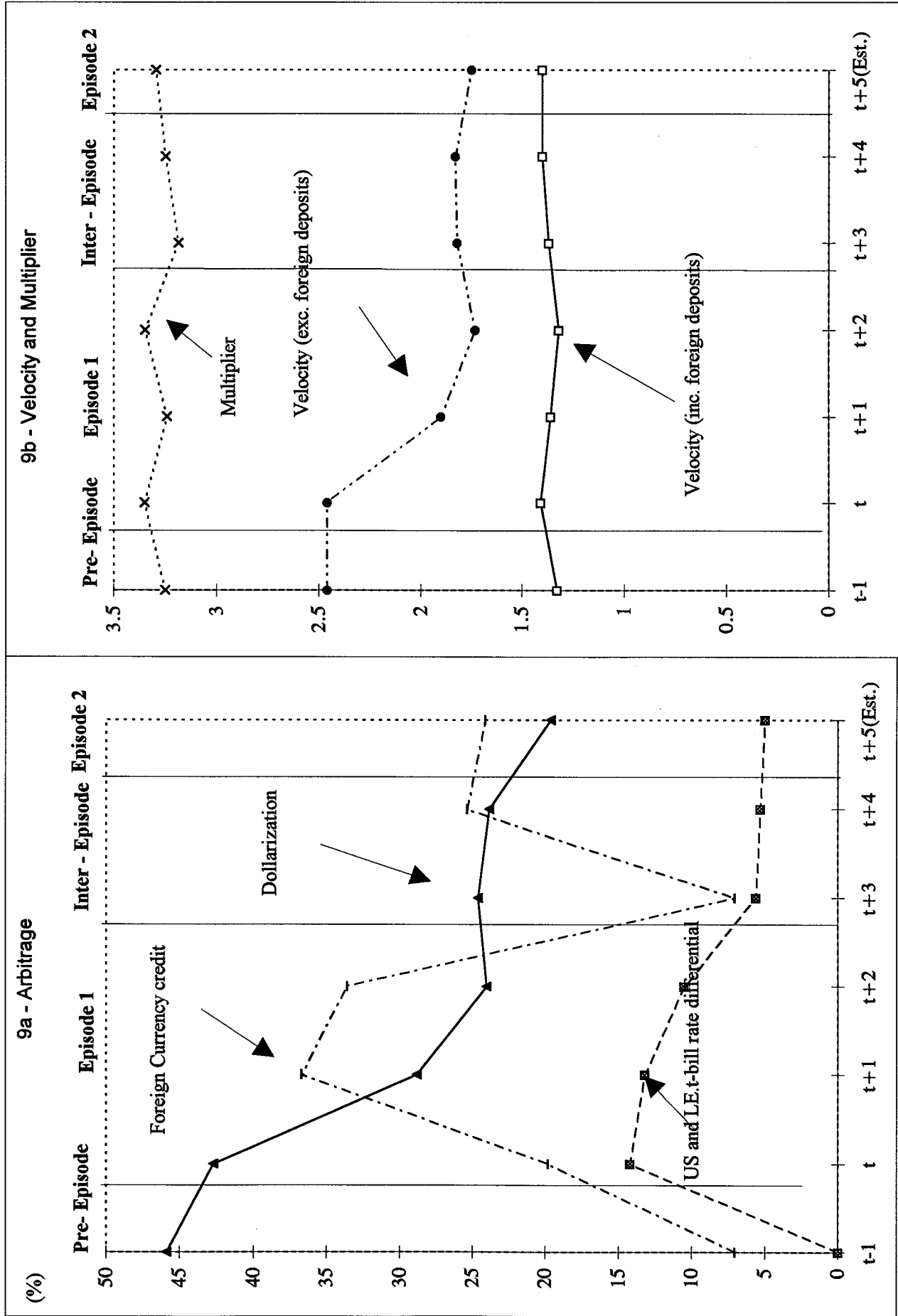6/ End-period stock. Pre-inflow episode 1 figure refers to June 1990.
7/ Negative sign denotes depreciation; pre-episode 1 figure is cumulative beginning 1988/89.
8/ Owing to a revision in methodology pre-and post-inflow episode 1 figures may not be comparable.

Chart 9. Capital Inflows-Confidence Indicators, 1990/91-1996/97

9b - Velocity and Multiplier

9a - Arbitrage

C. Was Money too Tight?

Typically, the real output consequences of a disinflation strategy provoke the question as to whether monetary policy may have been overly tight. Three pieces of evidence point to a negative response. First, the recession induced by tight disinflationary policies was not protracted: three years into the disinflation strategy, output rebounded to about 3 percent; a moderate real squeeze incommensurate with a large fiscal adjustment would point to a relatively relaxed monetary policy as a plausible attenuating factor. Second, except for 1991/92, when NDA and domestic credit were squeezed in response to capital inflows, credit to the private sector and public sector companies substantially exceeded nominal GDP growth. Real credit growth to the non-government sector remained substantially positive through the disinflation program, averaging over 11 percent since 1992/93 (Chart 10). Third, while real interest rates jumped from financially repressed levels prior to the stabilization, they were quickly brought down. Real interest rates on deposits declined from 4.7 percent in 1991/92 to 2.9 percent in 1994/95 (Chart 11). Real lending rates were also brought down, even faster than deposit rates, helped by the fact that spreads eased gradually a few years into the stabilization. Also, the debt forgiveness and ensuing capital inflows were timely in easing the external constraint which led to and permitted interest rate reductions without compromising external viability.

D. Why was Dollarization Successfully Reversed?

A striking feature of the Egyptian stabilization was the successful reversal of dollarization from a peak of about 50 percent in 1990/91 to 37 percent the following year and steady reductions thereafter, with the ratio standing at about 20 percent this year. An earlier analysis of the phenomenon of currency substitution in Egypt (El-Erian (1987)) indicated that residents' demand for foreign currency holdings was sensitive to the expected real returns to holding them, and hence especially vulnerable to inflationary pressures and expectations of an exchange rate depreciation occasioned by weak external balances.

Three distinct phases during the stabilization serve to illustrate why dollarization was reversed. In the first phase, between 1991/92 and 1993/94, the large interest differential between Egyptian and dollar-denominated assets (initially almost 15 percentage points) spurred de-dollarization. But even as this differential started declining sharply de-dollarization continued as the implementation of a credible disinflation strategy, backed by a fiscal adjustment, led to diminishing fears of inflation and exchange rate instability (Chart 9). Both the size of the adjustment and its speed led to a correspondingly swift change in investor sentiment. At the same time, the capital inflows and the burgeoning stock of foreign exchange reserves also contributed to the growing credibility of the exchange rate peg.

In the second phase, between 1994/95 and 1995/96, de-dollarization halted temporarily as the interest differential narrowed and uncertainties increased. However, in

Chart 10. Capital Inflows: Monetary Indicators, 1990/91-1996/97
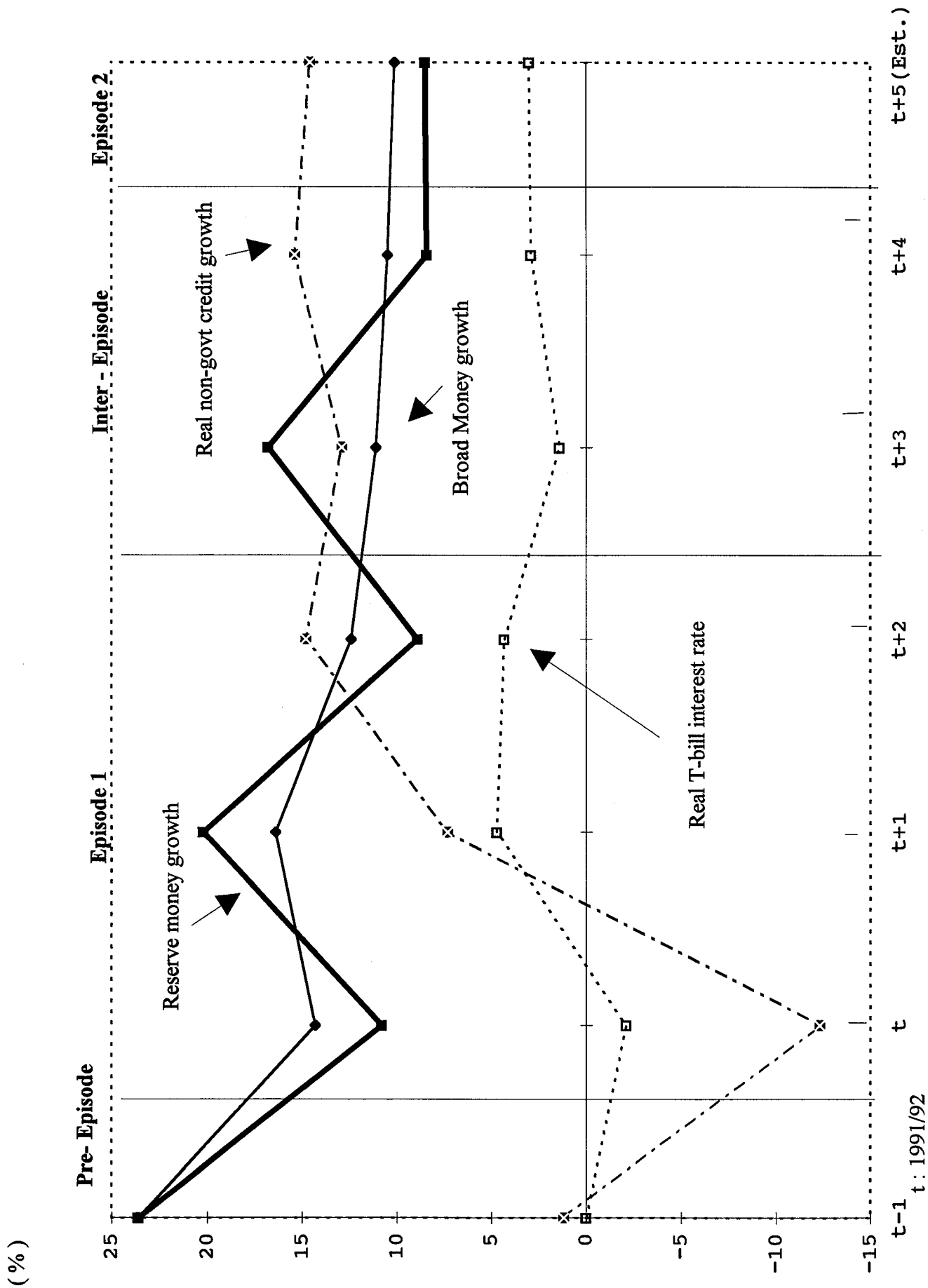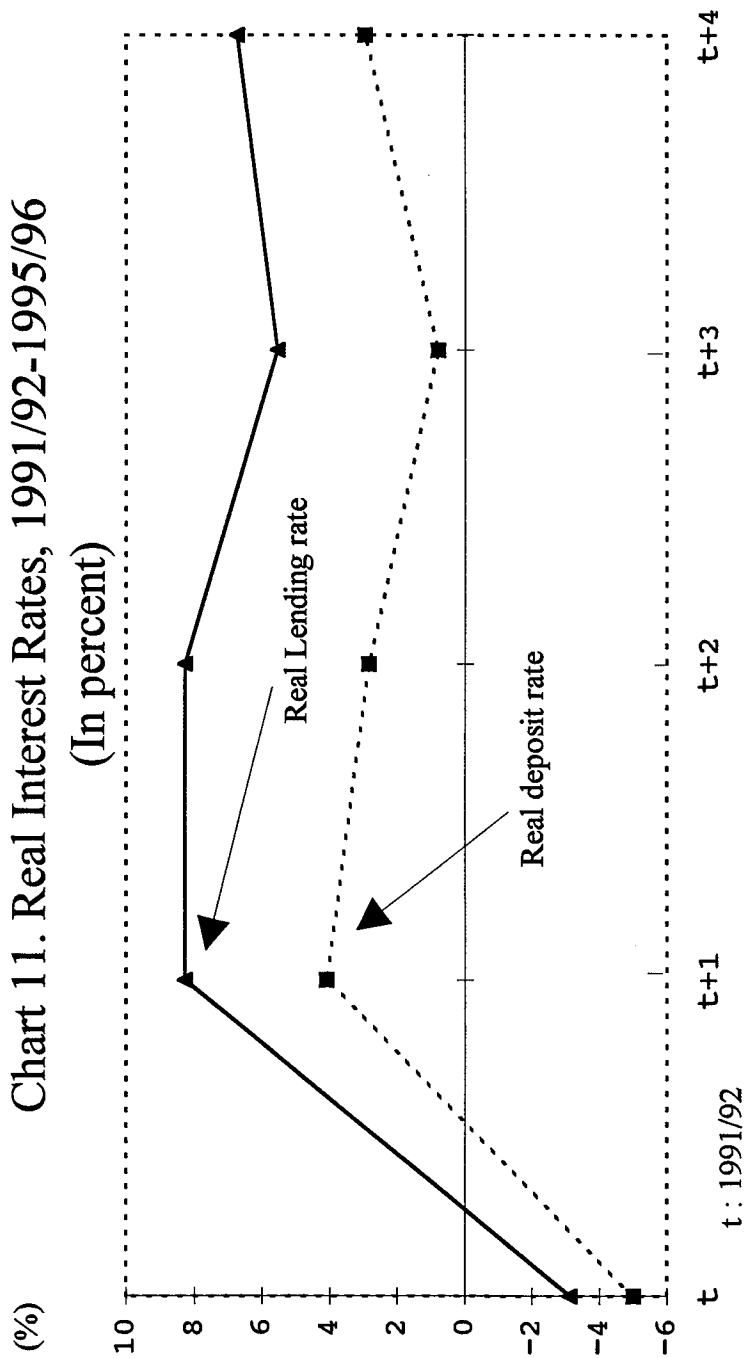
(In percent)

Chart 11. Real Interest Rates, 1991/92-1995/96
(In percent)

1996/97, de-dollarization resumed its pronounced downward even though the nominal interest differential declined relative to the two preceding years (Chart 9), suggesting the inference that perceptions of risk diminished considerably in the wake of the acceleration of the structural reform program and renewed confidence in the Egyptian economy. Indeed the lull years of 1994/95 and 1995/96 provide strong negative evidence that de-dollarization was strongly linked to perceptions of risk and confidence in the Egyptian economy.

E. Why did Interest Rates Fall in the Face of Aggressive Sterilization to Respond to Capital Inflows?

Reflecting the return of confidence, Egypt witnessed a surge in capital inflows between 1991/92 and 1993/94 amounting (cumulatively) to about $5 billion or about 10.6 percent of GDP. In principle, surges in capital inflows should ease conditions in the domestic money market as the supply of loanable funds increases, and ceteris paribus, entail reductions in interest rates.[16]

The Egyptian case is interesting for two reasons. First, after the initial year of inflows which coincided with tight credit, conditions eased considerably. In 1993/94, the last year of the inflows episode, nominal interest rates had fallen by over 4 percentage points and real credit growth had rebounded (Chart 10). Second, that this fall in the nominal interest rate ensued in the face of aggressive sterilization and increased money demand (the latter reflected in a drop in velocity between 1991/92 and 1993/94) both of which tended to put upward pressure (or limit downward pressure) on interest rates. Between 1991/92 and 1993/94, sterilization led to an increase in the stock of treasury bills of about LE 31 billion (over 80 percent of the average stock of reserve money during this period), mirroring an offsetting decline in the NDA of the Central Bank of Egypt (Table 2).

The apparent paradox of declining interest rates is attributable to what might be called a **credibility** effect. Sterilization and the concomitant increase in reserves, which were unprecedented when expressed in terms of import cover and of cumulative inflows (see Table 2), lent increasing credibility to the fixed exchange regime. Investors were becoming convinced that the government had the **ability** to defend the peg if it so wished, leading to diminishing risks of an exchange rate depreciation. As a result, there was a downward shift in

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[16]There are two qualifications to this direction of impact: first, if the increase in inflows is a response to increased demand for credit from hitherto credit-starved domestic residents. And second, if the response to inflows is aggressive sterilization, the increased supply of government securities would limit any drop in interest rates.

the supply of loanable funds schedule which, despite increased money demand and increased supply of treasury bills, reduced interest rates.[17]

V. The Financial System

A. Background

Many reforming economies experience difficulties in the financial system during transition (see Sundararajan and Balino (1991), Sundararajan (1996), Lindgren et al (1996)). A review of the experience of 181 Fund member countries reveals that 133 have experienced significant banking sector problems, including serious crises in 36 countries. Banking system soundness in general is related to the soundness of the economic environment; correspondingly, sharp or abrupt changes in this environment impact crucially on the banking system. A banking problem could be triggered or exposed by a large variety of macroeconomic factors; these include a cyclically weak economy, rapid changes in relative prices, including exchange rates and other asset prices (see Lindgren et al (1996), Mohieddin (1997)). Interestingly, a significant reduction in the rate of inflation can have adverse effects on the banking system, and this appears to have been an important factor in 21 of the 34 problem cases studied in Lindgren et al (1996).

The manifestations of crises are manifold. Money demand or monetary relationships become unstable; the money multiplier can increase sharply as in Argentina, Chile, Ghana, and the Phillippines; the currency-deposit ratio could rise (with a concomitant reduction in the base money multiplier) as in Estonia; or the interest elasticity for currency and for broad money could be altered.

At the beginning of the stabilization in 1990/91, Egypt's financial system was in crisis as a result of long-standing structural weaknesses, deriving in turn from an unstable environment and stifling, over-regulated financial sector policies. In 1990/91, commercial banks suffered heavy losses and were highly underprovisioned. To address the problem, the government injected funds to recapitalize the commercial banks to the tune of 5.5 percent of GDP.

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[17]In terms of the interest parity equation, where the domestic interest rate is the sum of the given foreign interest rate and the expected depreciation of the domestic currency, the evolution in reserves and the attendant growth in credibility led to reduced expectation of a depreciation, resulting in lower domestic interest rates.

B. Egypt Avoided Serious Financial Sector Problems During Stabilization

However, the striking feature of the Egyptian stabilization experience was the avoidance of serious banking sector problems in the wake of a sharp fiscal contraction-led reduction in inflation, and attendant depressed real sector activity. Several financial sector indicators paint a picture of the improving financial health of the public sector banks. As Table 3 shows, the **profitability** of the four public sector banks, comprising 60 percent of the banking system, improved steadily from LE 1.4 billion in 1990/91 to LE 2.7 billion in 1995/96, an increase of 93 percent over a five year period. Over the same period, the size of **provisioning** by the banking system as a whole increased in absolute terms and as a share of total loans and discounts, from 11 percent in 1990/91 to 15 percent in 1994/95.[18] In addition El-Refaie (1997) presents evidence of improving financial performance of the banking system as measured by the average return on equity for the banking system.[19]

Another symptom of the apparent financial health of the banking system is manifested in the spread between the lending and deposit rates. Following liberalization of interest rates in 1991, **spreads** widened initially to reach a peak of 5.4 percent in 1993/94 but declined very quickly and appreciably thereafter to a level of 3.8 percent in 1995/96. The decline in spread is noteworthy as it took place against the background of high and rising levels of excess reserves which dented the profitability of banking operations.[20]

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[18]Loan loss provisioning figures are not available and the figures cited above relate to overall provisioning. However, changes in overall provisioning during this period should broadly correspond to changes in loan loss provisioning, which is likely to have been the main impetus for greater provisioning. The decline in loan loss provisioning in 1995/96 to about 14 percent from peak levels of nearly 17 percent in 1992/93 could be indicative of an improving quality of loan portfolio, a development that is consistent with the rising share of credit accounted for by the private sector. Also, capital adequacy ratios are not publicly available, but tentative estimates suggest that the ratio of capital and reserves to risk-weighted assets for the banking system excluding the specialized banks and branches of foreign banks was about 9.5 at end–June 1996, which is likely to have been substantially higher than at the start of the stabilization.

[19]Between 1992/93 and 1995/96 the return on equity for the banking system increased from 10.2 percent to about 12 percent.

[20]Excess reserves rose from LE 1.1 billion in 1992/93 to LE 3.6 billion in 1995/96, averaging about 3 percent of domestic liquidity. Also, declining spreads did not result from changing legal reserve requirements during this period.

Table 3. Selected Financial System Indicators

(In billions of Egyptian pounds, unless otherwise indicated)

	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96
Spread (in percent) 1/		4.3	4.2	5.4	4.8	3.8
Share of total credit to private sector (in percent)	28.8	27.3	27.9	31.7	38.4	42.8
Provisional (as percent of loans)	11.3	15	16.7	16.4	14.8	13.9
Stock of government Securities	3.1	12.6	23.5	28.9	25.1	26.8
Percent of total	77.7	73.8	76.9	82.1	84.1	88.6
Income from government securities	0.4	1.3	3.5	3.6	2.8	2.6
As percent of GDP	0.4	0.9	2.2	2.1	1.4	1.2
Increase in provisions	1.2	1.8	2.6	2.0	2.7	2.1
As percent of income from government securities	300	138	74	56	96	81
Pre-tax profits of 4 public banks	1.4	2.8 2/	1.7	1.9	2.2	2.7

Sources: Central Bank of Egypt; and IMF staff estimates.

1/ Six-month lending rate minus deposit rate.
2/ Exceptional increase owing to the LE 6 billion recapitalization.

C. How was the Financial System Strengthened?

Two sets of factors conspired to produce a benign, or rather prevent a malign, impact on the banking system—**macroeconomic factors and bank-specific assistance**. The macroeconomic factors related to the behavior of interest rates and general stance of monetary policy during the transition (see Charts 10 and 11). Following the liberalization of interest rates in 1991, these rose from financially repressed levels, but eased very quickly and sizably: nominal deposit rates reached 16 percent in 1991/92 but declined to 10 percent in 1995/96; at the same time, lending rates declined from 19 percent to 14 percent, and in the recent past lending rates have declined by more than deposit rates, reflecting improved intermediation and a consequent decline in banking spreads. At the same time, fiscal policy and the lack of an external constraint permitted sufficient ease in monetary policy to allow a healthy growth of credit to the private sector. Relatively easy monetary conditions meant that the Egyptian banking system was not buffeted by the pressures that are transmitted from high interest rates and depressed activity to enterprises' balance sheets. Smooth disinflation also prevented banks from being exposed to sudden swings in economic variables.

However, the key factor sustaining the viability of banks was indirect **bank-specific assistance**, in the form of treasury-bill issuance, the costs of which were borne by the budget.[21] Since 1991, when the treasury bill issues commenced, the vast bulk of these (between 77 percent in 1990/91 and 88 percent in 1995/96; Table 3) has been held by the commercial banks. Banks' holdings of securities as a share of their total assets increased from 13 percent at end–December 1991 to 23 percent in 1993 before easing to 16 percent at end–1995 (see El-Rafaie (1997). In absolute terms, these holdings increased from 3.1 billion in 1990/91 to 26.8 in 1995/96. Income from treasury bills increased from LE 0.9 billion in 1990/91 to LE 3.99 billion in 1993/94 to LE 2.75 billion in 1995/96. Moreover this income was tax exempt. That this tax exempt income was vital to the health of the banking system is revealed in a comparison with the increase in provisioning, which also serves as a proxy for both pre-**and** post-tax profits of banks.[22] All the increase in provisioning—and all the profits—are more than accounted for by the income from treasury bills. Indeed, during the stabilization profits and changes in provisioning averaged about 70 percent of income from government securities, establishing the latter's contribution to banks' viability.

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[21]There are alternative ways of measuring these costs. One would be to equate the costs with the treasury-bill income received by banks which amounted to about 8.2 percent of GDP between 1990/91 and 1995/96. An alternative would be to calculate the taxes foregone on this income as the fiscal cost which amounted to about 3.3 percent of GDP. The rejoinder that the taxes foregone do not represent a fiscal cost, because interest rates (and hence government interest expenditures) were lower, presupposes full interest rate flexibility that was not borne out in practice.

[22]In other words, during the stabilization period, banks paid virtually no income taxes.

It is interesting that even though banks had not fully provisioned themselves against their bad debts in the initial stabilization period, they nevertheless did not increase or maintain high spreads (as was the experience of some transition countries (see Begg (1996))[23] to generate the profits necessary for maintaining adequate provisioning. Had such spreads been maintained, the possibility of financial disintermediation and/or tighter credit conditions, both with adverse macroeconomic consequences, would have been greater. One explanation for this behavior, namely, a more gradual pace adopted by the banks in building up capital adequacy, could be the knowledge or guarantee of an assured future supply of tax-exempt treasury bills that would shore up profits and allow respectable provisioning levels to be attained. In the event, this expectation was more than fully validated during the stabilization period.

D. Stock and Flow Problems

It is useful to think of the banking system as potentially prone to stock and flow problems. Stock problems stem from the accumulation of bad debts which leaves banks insolvent and invite remedying through an infusion of capital at a significant budgetary cost. This happened in Egypt in 1990/91 at a fiscal cost totaling 5.5 percent of GDP. Solving stock problems are however not sufficient to preserve banking system viability. Flow problems also need to be addressed. These relate to the incentives for banks to remain healthy following a recapitalization and not lapse into the bad practices that led to the stock problem in the first place. Flow problems are also averted through better regulation and oversight of the banking system.

It is too early to say whether the flow problem has been addressed decisively in Egypt. But there are 5 interesting elements that bear on such an assessment. First, it is important to note that in Egypt there has not only been fiscal support to address the stock problem, but also the flow problem: large and continual holdings by banks of government securities is tantamount to ongoing **fiscal support**, estimated at about 10 percent of GDP. This has contributed significantly to restoring the financial viability of the banking system. Second, one indicator suggests that banks' lending practices are moving in a direction that is less likely to repeat historical experience. This relates to the **share of lending to the private sector** which has grown sharply (see Chart 12) as the rate of growth of credit to the private sector has consistently exceeded that to the public sector and the government in the recent past. As of January 1996, the share of credit to the private sector stands at 43 percent, compared with 29 percent in 1990/91. Third, the government has embarked upon a series of actions to prevent the recurrence of a flow problem. These include the **privatization of the banking**

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[23]Begg (1996) notes that in the transition economies the prevalence of wide spreads reflected the need to provision against bad debts and build up capital adequacy. In the Czech Republic, about 72 percent of the spread was attributable to the need to provision against bad debt.

Chart 12. Credit Developments, 1987/88-1996/97
(In billions of Egyptian pounds)

(L.E. bn)

Liquidity

Net Credit to Govt.

Private sector credit

Public sector credit

t : 1991/92
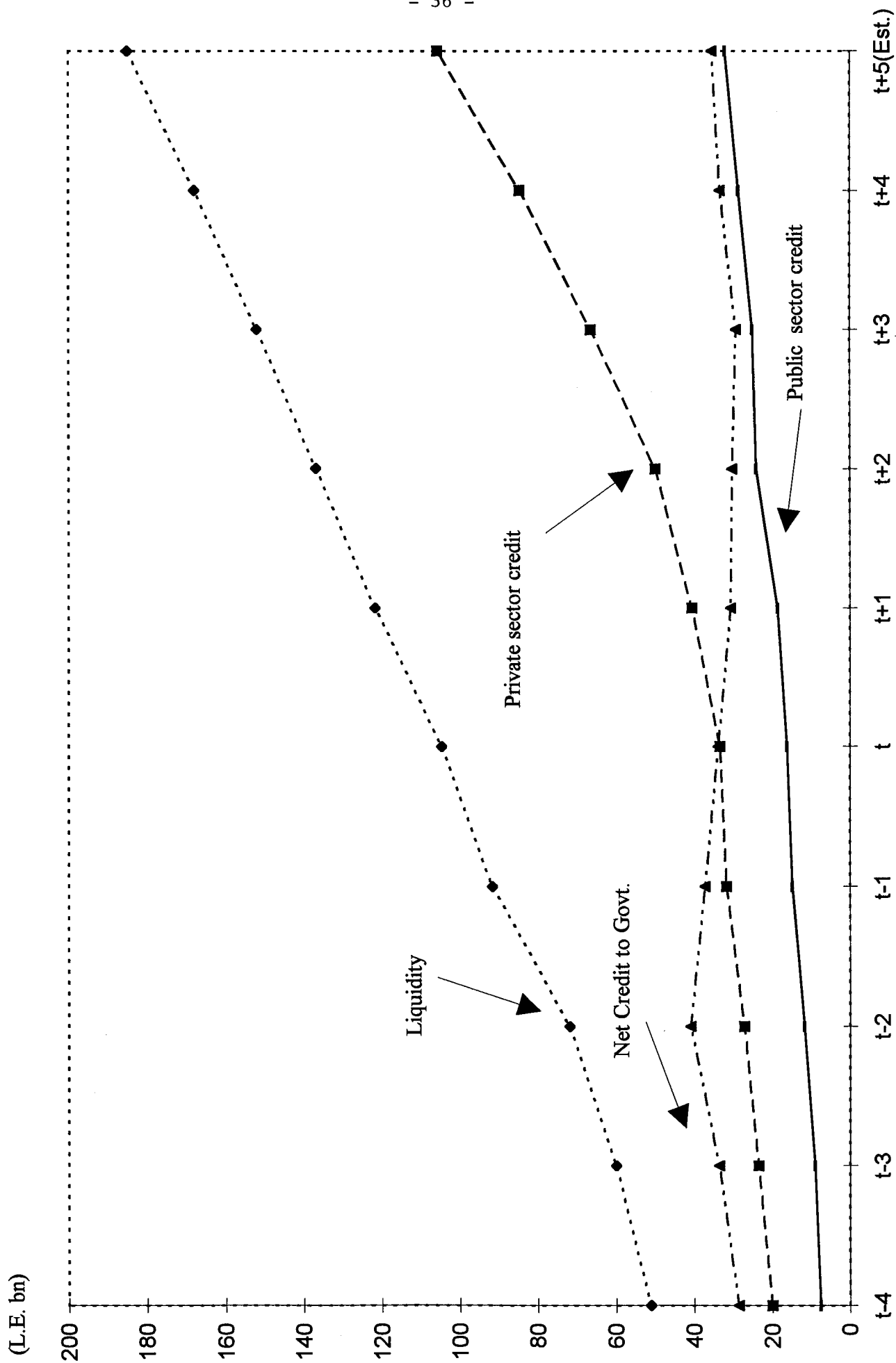
system and actions to strengthen prudential supervision.[24] Fourth, residual concerns about a flow problem derive from the large **exposure of the banking system to public sector companies**. At LE 25 billion at end–December 1996, exposure to public sector debt remains substantial, albeit a diminishing share of total exposure. Even if a preponderant share of this debt is bad,[25] some or all of this (or at least all of the bad debt that is not already provisioned for) could be recovered through a successful program of privatization and the use of proceeds to settle outstanding debts. In 1996 alone, LE 1.8 billion (accounting for about 50 percent of total gross proceeds) was used to settle such debts. Finally, concerns about the financial health of the large public sector banks, which are disproportionately exposed to high-risk public sector debt, could be overstated to the extent that they have **equity holdings in joint venture banks** which are currently under-recorded in their balance sheets. As these holdings are divested and used to shore up the reserves of these banks, the picture could improve even further.
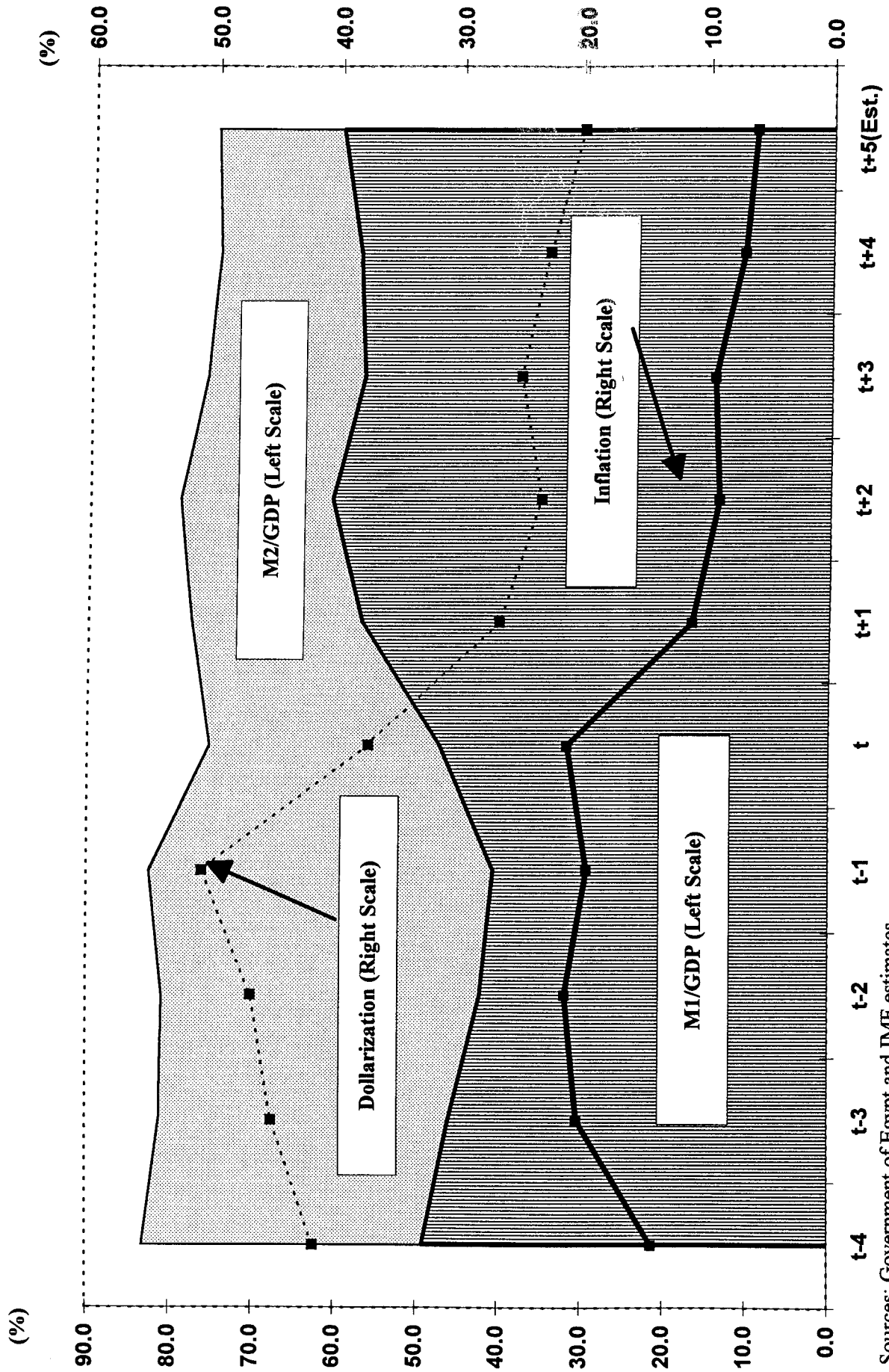
E. Financial Deepening

The Egyptian system has emerged relatively unscathed from the exacting process of transition that usually buffets financial systems. This has been an achievement in itself, and has also facilitated the conduct of monetary policy, in particular by permitting the move from direct to indirect monetary control, which began early on in the stabilization.

While Egypt exhibits the characteristics of a financial system that is deepening—low and declining spreads, decisive reversal of dollarization, low and declining currency-deposit ratios—one puzzle endures, and even more so in light of these other accomplishments. This has to do with the level of monetization of the economy as reflected in the inverse velocity of money. Viewed over a longer period of say 10 years, the inverse velocity has declined from about 83 percent in 1987/88 to about 74 percent today (Chart 13). Analyzing the dollarization

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[24]Since 1996, the government has accelerated the privatization of the joint venture banks with a view to completing this process in the near future. A significant strengthening of market-based supervision, in the form of fuller, more accurate and timely disclosure, has been the recent requirement, issued by the CBE in April 1997, that banks comply with international standards for reporting and disclosure.

[25]Analysis of the financial statements of the Law 203 companies indicates that enterprises that had accumulated losses accounted for a disproportionate amount of the debt owed by the public enterprise sector. In 1993/94, they accounted for less than 30 percent of total sales but over 60 percent of total debt; this latter figure, amounting to about LE 15 billion, provides an approximation of the potential size of bad or doubtful public enterprise debt. However, this picture of public sector fragility should be seen against the fact that the government owes an estimated LE 12 billion to the public sector enterprises, which could be used to settle public sector debts owed to the banks.

Chart 13. Monetization, Dollarization, and Inflation, 1987/88-1996/97

(%)

60.0
50.0
40.0
30.0
20.0
10.0
0.0

t-4   t-3   t-2   t-1   t   t+1   t+2   t+3   t+4   t+5(Est.)

M2/GDP (Left Scale)

Dollarization (Right Scale)

Inflation (Right Scale)

M1/GDP (Left Scale)

(%)

90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0

Sources: Government of Egypt and IMF estimates

t : 1991/92

episodes in Latin America, Savastano (1992) makes the distinction between the flight from domestic money and the flight from the domestic financial system. In a number of Latin American countries that witnessed significant dollarization in the 1980s and 1990s, rapid disinflation did not result in a corresponding reversal of the dollarization, as noted above. However, irrespective of the evolution in de-dollarization, in almost all countries the degree of monetization or deepening of the domestic financial system (as measured by movement in the broadest monetary aggregate) displayed a pronounced improvement as disinflation was achieved (see Table 4).

In Egypt, on the other hand, while dollarization was reversed successfully and decisively, nevertheless there was not a corresponding return to monetization of the economy even 5 years into the successful disinflation. In other words, a return in confidence in domestic money did not also translate into an attendant return in confidence—at least not commensurate with the ensuing stabilization—in the banking system as a whole.

One possible explanation, which points in the direction of accelerated, rather than retarded, deepening, is the following. Even during the peak years of financial instability in the late 1980s, Egypt was a highly monetized economy, with a broad money to GDP ratio at 83 percent, which compares favorably with a number of similar developing countries that have reestablished financial stability and even with industrial countries.[26] Financial instability in the late 1980s eroded confidence in domestic money and the banking system reflected in an increase in dollarization and a reduction in the broad money to GDP ratio (see Table 5). Correspondingly, as financial stability was restored and credibility regained these adverse developments were reversed, but with a key difference in that the level of monetization peaked in 1993/94 at 79 percent (below pre-stabilization levels) and has started declining thereafter, reaching 74 percent in 1996/97.

This decline in the importance of the banking system could mirror, and in part caused by, a growing importance of capital markets, prompting the verdict that these monetary developments signal deepening of the financial system, albeit partially at the expense of the banking system. Table 5 presents some indicators of capital market deepening. Beginning 1993/94 (not fortuitously the year of peak monetization), the capital market has started to grow in size and importance. Market capitalization increased by 2 percentage points of GDP in 1993/94, followed by striking gains of nearly 6 percentage points in 1995/96 and 1996/97, an increase of 16 percentage points over a four-year period; over this same period, the money

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[26]Comparable figures for broad money (widest definition) to GDP are: Brazil (1995)—70 percent, Argentina (1994)—16 percent; Chile (1994)—38 percent; Poland (1994)—36 percent; Czech Republic (1994)—83 percent; Slovak Republic (1994)—71 percent; India (1995)—56 percent; UK (1995)—89 percent; U.S. (1995)—59 percent; and Germany (1995)—74 percent.

Table 4. Monetization and Dollarization in Selected Countries

	T	T+1	T+2	T+3	T+4
Argentina					
Inflation	3,078	2,314	172	25	11
Dollarization	n.a.	34.2	35.1	37.1	40.4
Monetization	182	100	134	190	254
Bolivia					
Inflation	11,750	276	15	16	15
Dollarization 1/	70.8	76.8	80.8	83.9	81.9
Monetization	18	36	67	72	72
Mexico					
Inflation	132	114	20	27	23
Dollarization	n.a.	n.a.	n.a.	n.a.	n.a.
Monetization	110	96	66	100	137
Peru					
Inflation	7,482	410	74	49	24
Dollarization	n.a.	59.9	65.0	70.2	64.2
Monetization	100	126	182	231	252
Egypt					
Inflation	21	11	9	9	7
Dollarization	43	29	24	25	24
Monetization	71	74	76	73	71

Sources: International Financial Statistics; and staff estimates.

T: year of peak inflation in recent years.
Dollarization: foreign currency deposits as percent of total liquidity.
Monetization: Money and quasi-money as percent of GDP (index).

1/ For Bolivia, figures for dollarization begin in 1990, while those for inflation are from 1986.

Table 5. Egypt: Indicators of Financial Deepening, 1989/90-1996/97

	1989/90	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97 (est.)
Monetization (as percent of GDP)	81	75	78	79	76	75	74
Non-government credit (as percent of GDP)	44	34	38	43	46	50	55
Nominal Market capitalization							
Exchange rate	1.6	3.3	3.3	3.4	3.4	3.4	3.4
(In billions of Egyptian pounds)	4.7	9.8	11.8	13.6	21.0	37.8	59.0
Nominal Market capitalization							
(In billions of U.S. Dollars)	3.0	3.0	3.5	4.0	6.2	11.1	17.4
Nominal market capitalization							
(In percent of GDP)	5	7	8	8	10	17	24
New issues (in billions of Egyptian pounds) 1/	n.a.	n.a.	n.a.	3.5	7.1	12.9	17.9
New issues (in percent of GDP) 1/	n.a.	n.a.	n.a.	2	4	6	7
Value of trading							
(In billions of Egyptian pounds)	0.3	0.5	0.6	1.6	3.2	7.4	20.5
Value of trading (in percent of GDP)	0.3	0.4	0.4	0.9	1.6	3.3	8.2

Sources: Capital Market Authority; and staff estimates.

1/ Excludes government securities.

to GDP ratio declined by 5 percentage points and the credit to GDP ratio increased by 12 percentage points. That this increase in capitalization has been caused by increases in underlying volumes rather than price increases alone is indicated by the market capitalization figure deflated by price increases, which shows a near-threefold increase as well as by data on new issues,[27] which registered an increase of 2–4 percentage points of GDP in the last three years.[28]

These data point to incipient competition to the banking system from the rest of the financial system. These pressures, occasioning banking disintermediation or securitization, are likely to affect both sides of banks' balance sheets. On the liability side, as the range of financial instruments is enlarged, bank deposits will have to compete with new instruments for the pool of household savings. Institutional developments and an inelastic demand for money with respect to wealth could well lead to a proportionate decline in the share of wealth allocated to banking deposits. Some evidence to this effect is presented in El-Refaie (1997) who estimates that the share of financial assets accounted for by the banking system declined from 67 percent in 1992 to 58 percent in 1996;[29] declining money-to-GDP ratios corroborate these developments. At the same, on the asset side of the balance sheet, firms, in search of longer term and more state-contingent financing, are likely to turn to capital markets, thereby reducing reliance on bank borrowing and the relative evolution in credit and stock market capitalization indicators presented above could reflect these pressures on banks.[30]

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[27]The data on new issues, however, underestimate the extent of reliance on capital markets insofar as they ignore privatization of Law 203 companies which has accounted for a substantial volume of stock market activity since 1994/95.

[28]Chile witnessed a similar rise in the importance of capital markets relative to the banking system (see Suarez and Weisbrod (1994)).

[29]Between 1994/95 and 1996/97, the number of local mutual funds increased from 5 to 17, reflecting an increase in assets managed from LE 1.1 billion (.5 percent of GDP) to LE 3.4 billion (1.4 percent of GDP).

[30]As the capital market develops, aided by increased supplies of assets through privatization and by institutional development, and price-earnings ratios rise, firms will find it progressively more attractive to substitute capital for bank financing. Intimations of these developments are discernible in the number of new capital issues by companies in 1997.

VI. THE EXCHANGE RATE

A. Exchange Rate Policy

At the beginning of the stabilization in 1991, Egypt opted to use the exchange rate as a nominal anchor in support of the stabilization effort. This choice was deliberate and, as noted above, had as much to do with their respective merits under a disinflation strategy as the fact that the exchange rate was seen as a symbol of stability. It was an end to be pursued as much as a means to disinflation. The exchange rate has been virtually unchanged since unification of the exchange markets in early 1991, a period of six years.[31]
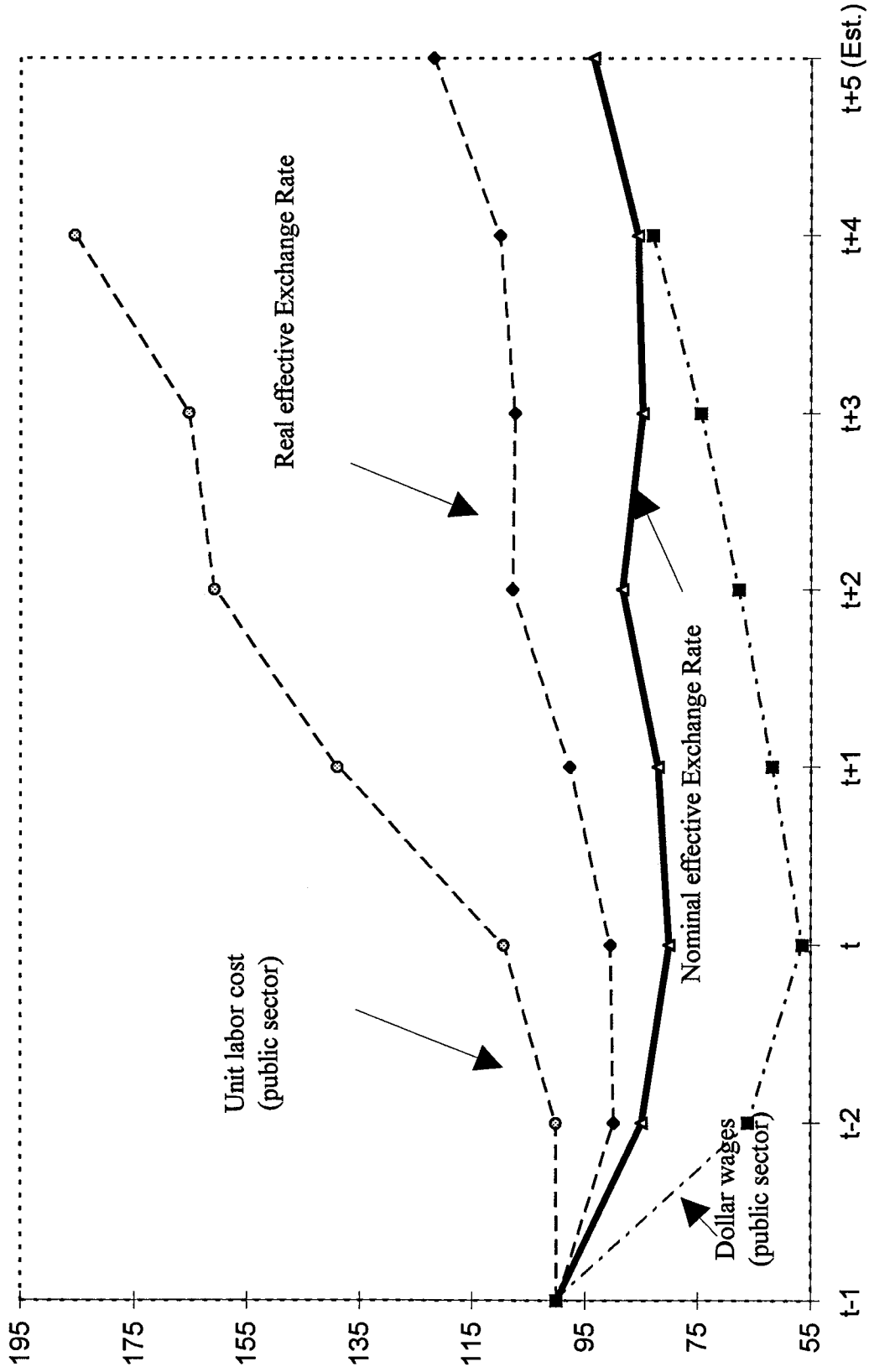
B. Exchange Rate Developments

The evolution of the Egyptian pound has been consistent with the pattern observed in many transition countries (Halpern and Wyplosz (1996). Following a series of nominal depreciations in the years immediately preceding the commencement of the stabilization effort, the nominal anchor policy has resulted in a real appreciation between July 1991 and December 1996 of about 30 percent as measured by the real effective exchange rate index which uses consumer price differentials as the basis for the measurement. Of this 30 percent, about 9 percentage points can be ascribed to the appreciation of the nominal rate and the rest is accounted for by the differential in inflation rates between Egypt and its partner countries. Two alternative measures of competitiveness have also been computed and are shown in Chart 14. An index based on unit labor cost developments in the public sector suggests a deterioration in competitiveness of 57 percent for the period 1991/92–1994/95.[32] Finally, a dollar wage index has also been computed which suggests a deterioration in competitiveness but of a smaller magnitude, about 25 percent between 1990/91 and 1995/96. Thus all indicators point to deteriorating competitiveness, albeit to varying degrees.

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[31]Begg (1996) notes two prerequisites for the maintenance of a successful anchor: fiscal adjustment and adequate reserves to cushion against swift shifts in investor sentiment. Both were resoundingly delivered in the Egyptian case.

[32]While unit labor costs developments in the public sector are an imperfect indicator of economy-wide competitiveness—and likely overstate the increase in unit labor cost growth on the assumption that the private sector was witnessing greater changes in efficiency—they are nevertheless suggestive of more aggregate developments because the public sector accounts for about 70 percent of the gross value of industrial production and about 56 percent of non-oil exports. Even in relation to the textile sector, which accounted for about 41 percent of non-oil exports in 1994, the public sector's share of total exports was 62 percent in 1994 (See Kheir El-Din and El-Sayed, 1996). Moreover, reliable wage and labor productivity data are unavailable for the economy as a whole, whereas they can be derived with a greater degree of confidence for the public sector based on enterprises' financial statements.

Chart 14. Competitiveness Indicators, 1989/90-1996/97 1/
(Index: 1989/90=100)

Real effective Exchange Rate

Unit labor cost
(public sector)

Nominal effective Exchange Rate

Dollar wages
(public sector)

t-1   t-2   t   t+1   t+2   t+3   t+4   t+5 (Est.)

195 175 155 135 115 95 75 55

t: 1991/92

Sources: Government of Egypt and staff estimates; public sector labor cost is derived from public sector nominal value added
        deflated by manufacturing price deflator.

C. Is the Appreciation a Problem?

Six years into the transition, the continuing appreciation of the real exchange rate in the face of capital inflows, has prompted the question of whether this appreciation is an equilibrium phenomenon or whether it signals a serious deterioration in competitiveness, presaging unsustainability in the future.[33] With Mexico deeply embedded in policy makers' consciousness that is a question that looms large. Each has different implications for the conduct of policy. If the former, a more sanguine approach might be warranted, whereas the latter would necessitate expeditious action to arrest or reverse the loss in competitiveness.

An evaluation, however, requires that a benchmark equilibrium exchange rate be posited. In general terms, an equilibrium exchange rate is one which ensures internal (output, employment, and inflation) and external equilibrium, where the latter can be defined as the maintenance of current account balances that are consistent with sustainable capital inflows. In practice, it is more difficult to measure this benchmark; and proxies such as the different indicators of competitiveness are inadequate because of the lack of historical points against which comparisons can be made and also because actual developments in these indicators may reflect endogenous responses to real changes affecting the economy.[34]

1. Is the exchange rate appreciation an equilibrium phenomenon because it reflects productivity gains?

Instead of assessing competitiveness through price changes, an alternative approach would be to analyze the outcomes that are conditioned by price and productivity developments. If the appreciating exchange rate were an equilibrium phenomenon, motored by productivity gains in the economy, there would be some improvement in tradable goods, particularly non-oil exports, performance.

Chart 15 casts doubt on this possibility. In 1996/97, non-oil export volumes are over 10 percent lower than at 1989/90, an indictment of productivity performance. Apart from 1994/95, when exports surged on the strength of a record, one-off cotton crop, export performance has been poor. Even allowing for the collapse of Egypt's traditional export markets, performance remains lackluster. There was a 10 percentage point drop in the share of Egyptian exports accounted for by the FSU countries; but even if recent export

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[33]One caveat needs to be noted. The discussion of the equilibrium exchange rate in this section is narrow, focussing on balance of payments developments. In principle, the equilibrium rate is determined by a host of factors, including the evolution in the investment-savings balance in the economy (See Edwards, 1989).

[34]For this reason, it is difficult to assess whether the real depreciation prior to the stabilization effort attenuates the effects of the later real appreciation.

Chart 15. Capital Inflows: External Indicators, 1990/91-1996/97
(In billions of U.S. dollars)
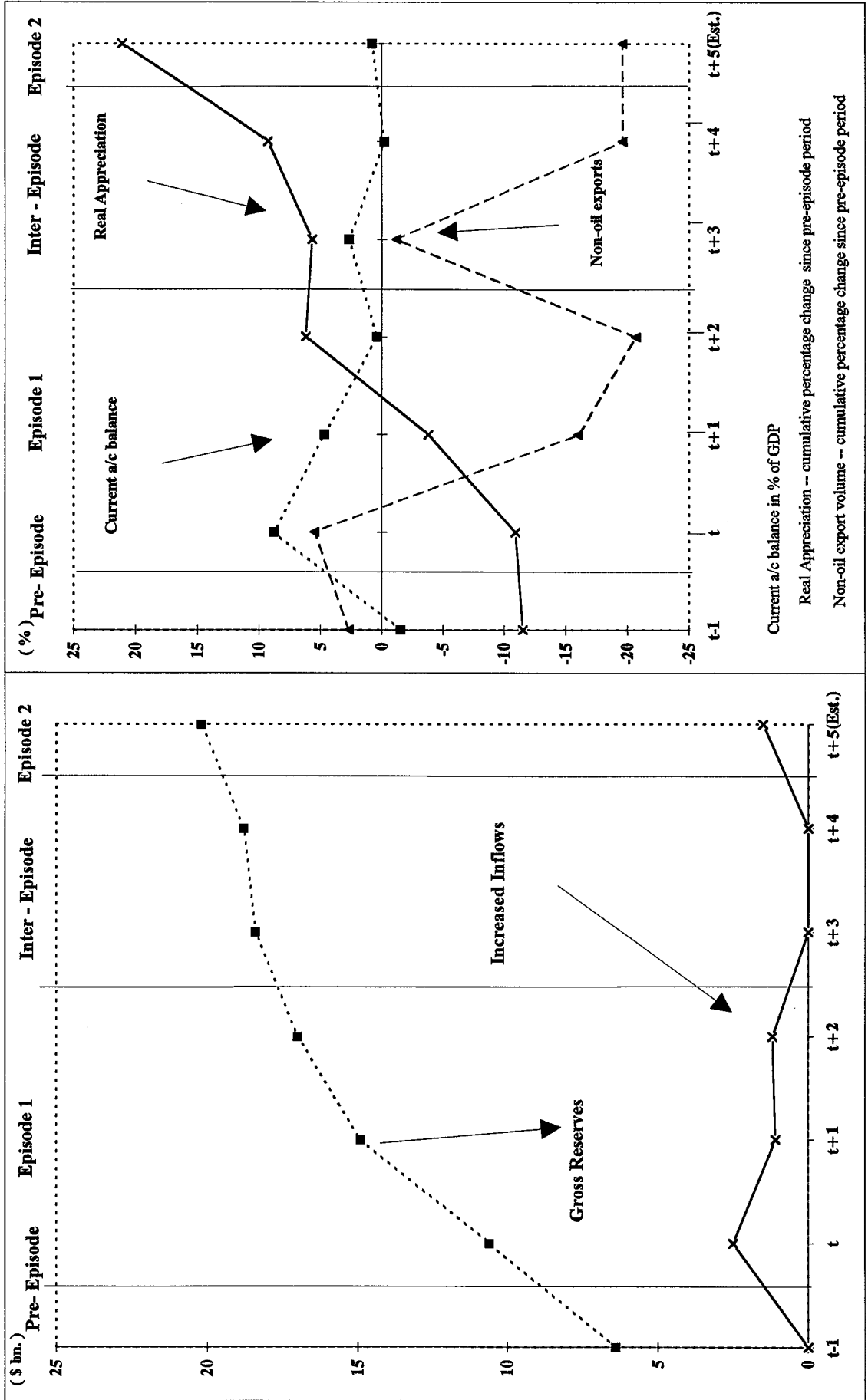
Sources: Government of Egypt; and IMF staff estimates.

t : 1991/92

performance is compared with the post-collapse year (1991), volume growth has been negligible. Further this lack of export growth cannot be ascribed to depressed demand conditions in export markets. Demand in partner countries grew by about 13 percent between 1991 and 1996, which should have led to some growth. Hence, explanations for the decline in export volumes are likely located inter alia in unfavorable price developments that were not offset by productivity improvements.

Moreover, data for the public economic sector portray a picture of declining productivity, a deterioration of 9 percent between 1991/92 and 1994/95. Hence, the limited data that area available are not likely consistent with the hypothesis of productivity growth. Thus, in this respect, the Egyptian experience seems to diverge from some of the more successful transition economies of Eastern Europe where productivity improvements during the transition were achieved.[35]

2. Could the exchange rate appreciation reflect an equilibrium phenomenon even if there are minimal productivity gains in manufacturing?

It could be argued that the sustainability of the external accounts depends not merely on performance in the goods sector but also in other elements of the balance of payments.[36] Three such elements may be pertinent to an assessment of whether external viability is achievable with a more appreciated exchange rate. **First, there is the services account** and here developments have been less unfavorable. Receipts from services have grown by 29 percent between 1991/92 and 1996/97, with tourism receipts having been buoyant, growing by over 75 percent over the same period.

The second relates to the debt forgiveness and debt rescheduling resulting from the Gulf war and Paris Club agreement. Between 1990/91 and 1996/97, these debt-alleviating actions have improved the balance of payments (on a flow basis) by an estimated $15.5 billion (cumulative), accounting for all the increase in gross reserves between the two dates.[37] This figure represents an annual improvement in the balance of payments of about $2.2 billion. To

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[35]Data on export growth rates of selected Eastern European countries.

[36]This view would argue in favor of shedding the "goods" (or manufacturing matters) bias (see Bhagwati (1989)) that afflicts economists.

[37]Of the $15.5 billion, $11.1 billion was reaped in 1990/91, with $6.4 billion as stock of arrears forgiveness, $1.3 billion as debt service forgiveness, and $3.4 billion as official transfers from the Gulf countries. Between 1991/92 and 1996/97, the Paris Club agreement has resulted in lower debt service to the extent of about $2.5 billion (cumulative). In addition, forgiveness by the United States of Egypt's military debt that was not in arrears ($5.3 billion) resulted in a further savings in interest service of about $1.9 billion (cumulative).

arrive at a measure of equilibrium appreciation consistent with such an improvement, one could pose the question as to how much exchange rate depreciation would be necessary (assuming plausible import and export demand elasticities) to generate an equivalent annual improvement in the balance of payments. With an import price elasticity of 1 and an export price elasticity of about 0.5, this magnitude of improvement would require a real depreciation of about 17 percent. Hence, a debt write-off of the magnitude that was conferred on Egypt could in principle have allowed for a sizable equilibrium exchange rate appreciation.

The **third factor relates to sustainable capital inflows,** which are integral to the notion of external viability. As a result of the stabilization and structural reform efforts, and the ensuing improvement in the credibility of the economy, the financing possibility set has been enlarged, which is consistent with some equilibrium appreciation of the exchange rate. This has been vindicated by the experience of the capital inflows, which over a five year period (in two bursts) has been about $6 billion or over $1 billion per annum. While these flows are vulnerable to changes in investor sentiment and hence reversible, they have nevertheless contributed to higher levels of reserves and the consequent attainment of external viability without unsustainably increasing the indebtedness of the economy.[38] Moreover, the stock of foreign exchange reserves, amounting to over four times the cumulative inflows could absorb any shocks emanating from the vicissitudes of financial market developments.

VII. SIMILARITIES AND DIFFERENCES WITH RECENT STABILIZATION EPISODES

Egypt's experience offers a rich variety of similarities and contrasts with the stabilization experience of other developing countries. This section summarizes what these are and offers tentative explanations for them.

1. *The fiscal adjustment was enormous, among the highest in recent experience.*

A comparison with fiscal adjustment efforts in OECD countries sets in perspective the magnitude of the Egyptian effort. Mcdermott and Westcott (1996), for example, define a "large" fiscal action as an improvement of at least 1.5 percentage points in the primary structural government balance over two years, with no decrease in either of the two years; and a successful fiscal adjustment is defined as a reduction of at least 3 percentage points in the ratio of gross public debt to GDP by the second year after the end of the two-year fiscal tightening. On these criteria, Egypt would easily qualify as a successful adjuster. Indeed Egypt's adjustment in its primary deficit of 17 percentage points over 4 years and reduction in

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[38]Indeed the debt- and debt-service ratios have fallen dramatically during the stabilization period; the latter from a peak of 74 percent in 1989/90 to less than 13 percent in 1996/97, while the debt to GDP ratio has fallen from about 83 percent in 1990/91 to about 41 percent in 1996/97.

gross debt by about 12 percentage points over 6 years, comfortably surpasses the largest fiscal adjustment effort achieved by any OECD economy in recent history, namely, that of Denmark in 1987/88, which reduced the primary balance by 11 percentage points (see Alesina and Perotti (1996).[39] The comparison shows Egypt in even better light if account is taken of the evolution in the debt-GDP ratios—a reduction in Egypt's case but a large increase in the case of Denmark.[40]

Even in comparison with fiscal adjustment efforts undertaken by developing countries, Egypt's experience is noteworthy. In a sample of eight developing countries (Bangladesh, Chile, Ghana, India, Mexico, Morocco, Senegal, and Thailand) studied by Mackenzie et al (1997), the largest fiscal adjustment in terms of the improvement in the primary deficit was by Morocco to the extent of about 11 percent of GDP over a 13 year period and by Mexico to the extent of 10 percent of GDP over a four year period. Within the region, there have been notable adjustments, by Algeria and Jordan. Jordan improved its overall and primary balance between 1989 and 1992 by 16 and 18 percentage points, respectively, surpassing the Egyptian effort; however, there has since been a deterioration in Jordan's fiscal position while Egyptian fiscal consolidation endures.

2. *Despite the magnitude of the fiscal adjustment, Egypt avoided a collapse in output.*

Stabilization has undoubtedly affected real economic performance as evidenced in the fact that the post-stabilization average growth rate still lags its pre-stabilization counterpart (Chart 3); there is also evidence of stagnant, or moderately rising, levels of unemployment and poverty. These are serious issues that need to be addressed with urgency. Nevertheless, in a comparative sense, Egypt's output performance has been less dire.

After low growth rates in the first two years of the stabilization, it has rebounded and reached 5.0 percent in 1996/97, and expected to continue at a rising trend. Cumulative output in 1996/97 is about 17 percent higher than at the start of the stabilization, which is markedly better than most transition economies where output has not recovered to its pre-stabilization level (Begg (1996)). Wages, at least in the government sector, were also not as adversely

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[39]These magnitudes were achieved despite massive sterilization to counter the liquidity impact of capital inflows between 1991/92 and 1993/94 (see below). It should be noted that the contribution of debt relief to this adjustment was small, on average about 1.4 percent of GDP during the stabilization period (see Section III).

[40]Even the Irish fiscal adjustment, involving an 8 percentage point reduction in the primary balance and some modest decline in the debt-GDP ratio, pales in comparison with the Egyptian performance. A few developing countries, especially in the region, also undertook significant fiscal adjustment, and in one case—Jordan—the adjustment matched, even surpassed, that of Egypt.

affected as in other reforming economies. For example, wage data show that in the civil service and the public industrial sector nominal wages have outstripped inflation since 1991/92.[41]

This achievement must be set against the generally accepted view that disinflation from lower initial levels of inflation is more difficult and comes at a higher cost in terms of foregone output (See Coorey et al (1997)). The relatively muted impact on output and its relatively short-lived nature (compared with international experience) invite explanation particularly in view of the large fiscal adjustment that accompanied the stabilization.

First, the fact that the adjustment was **swift** helped establish credibility and prevented the need to maintain tight financial policies for longer than necessary. In particular, the rapid decline in inflation allowed interest rates to be reduced decisively and avoided imperilling the balance sheets of enterprises. The direct aggregate demand effect of the fiscal contraction was to some extent offset by the credibility gains that facilitated lower interest rates and relaxed but not lax monetary policy. A related though distinct point is that successful fiscal policy allowed the **banking system** to be supported explicitly and meant that it emerged relatively unscathed, without adding to the burdens that vulnerable or collapsing systems typically do.

Third, while the fiscal adjustment was severe in magnitude, the economic hardships in the short-term were minimized because of the **composition** of the adjustment: the brunt of the adjustment was borne by investment cuts on the expenditure side and by rent-related receipts on the revenue side which together accounted for close to 60 percent of the total fiscal adjustment. Investment goods tend to be predominantly imported. Hence cuts in investment were absorbed through the trade account, mitigating the impact on domestic output. Over the three year period, 1991/92–1993/94, when the bulk of the fiscal adjustment took place, import

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Nominal and Real Wages in Government, 1990/91–1995/96

	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96
Civil Service						
Nominal wage	100.0	108.5	127.9	141.4	155.8	171.3
Real wage	100.0	89.6	95.1	96.4	97.1	99.5
Public Industrial Sector						
Nominal wage	100.0	106.6	117.6	129.8	143.0	159.1
Real wage	100.0	88.1	87.4	88.5	89.1	92.4
Consumer prices	100.0	121.1	134.5	146.7	160.5	172.2

volumes fell by about 5 percent in the face of a cumulative real appreciation of about 20 percent which was not discernibly offset by productivity improvements. Revenue increases, emanating from the exchange rate adjustment, had the economic impact of increasing the rents extracted from foreigners rather than reducing aggregate demand via lower disposable income of residents. The components of the fiscal adjustment that explicitly imposed hardship and/or reduced private income were the reductions in subsidies and transfers and the increase in the sales tax, whose combined effect was about 3 percent of GDP during the stabilization period.[42]

Of course, these cuts in investment could be a source of concern because of undermining future growth prospects. An examination of the composition of cuts indicates that expenditures on health and education were unaffected and that the bulk of cuts were borne by economic infrastructure and manufacturing and tourism. To the extent that a greater role for the private sector is envisaged in these areas, the effects on future growth of cuts in investment could be mitigated.

Finally, there were fortuitous external conditions (Gulf war, Paris Club) that reduced debt service payments significantly and relieved the external viability constraint that would otherwise have necessitated tighter policies and placed greater strains on the stabilization effort.

3. *Unlike many reforming economies, Egypt's financial system has emerged unscathed, and even strengthened.*

Section V described why Egypt's financial system emerged unscathed, even strengthened, from the stabilization experience. A stable and favorable macroeconomic environment coupled with bank-specific assistance in the form of treasury bill holdings by banks contributed to this favorable development. A comparison with other reforming economies is instructive. One indicator of the financial health of the banking system is the spread between lending and deposit rates. Following liberalization of interest rates in 1991, **spreads** widened initially to reach a peak of 5.4 percent in 1993/94 but declined very quickly and appreciably thereafter to a level of 3.8 percent in 1995/96. The decline in spread is noteworthy as it took place against the background of high and rising levels of excess reserves which dented the profitability of banking operations requirements.[43] The contrast with the behavior of spreads in other countries undergoing stabilization is noteworthy. Spreads

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[42]Cuts in investment expenditure affected economic (electricity and tourism) sectors rather than social services, mitigating the hardship on more vulnerable sections of the population.

[43]Excess reserves rose from LE 1.1 billion in 1992/93 to LE 3.6 billion in 1995/96, averaging about 3 percent of domestic liquidity. Also, declining spreads did not result from changing legal reserve requirements during this period.

declined in Egypt (whereas in many Eastern European countries they increased, for example, Poland and Hungary (see Begg (1996)), and have reached levels that are well below those in the transition economies and even stand up in comparisons with spreads in certain OECD countries such as Italy, Spain, and Denmark (Table 6).

4. *Notwithstanding the use of the exchange rate as a nominal anchor and an attendant appreciation of the real exchange rate, Egypt has maintained a sound balance of payments.*

As described in section VI, competitiveness indicators have deteriorated during the stabilization period. Consistent with these developments, productivity growth and non-oil export performance has remained unremarkable. In contrast, a number of transition economies in Eastern Europe and in Latin America, including those that used the exchange rate as a nominal anchor exhibited much larger growth rates of export, driven by rapid rates of growth of productivity. Ironically, whereas many of these countries have faced external pressures, even crises, Egypt has remained immune to them; in other words some of the notable productivity and export victors have been subject to external stresses, while Egypt, a relative laggard, has avoided them (Table 7). Which suggests the conclusion that Egypt's external viability has been attained despite the lack of robust productivity and export performance and is attributable to other developments in the external accounts, including debt reduction and increase in sustainable capital inflows, which have been quantitatively very significant (see Section VI).

5. *Related to the above, Egypt's external viability has been robust and less vulnerable to sudden shifts in investor sentiment.*

Against the background of an appreciating exchange rate and stagnant exports, concerns about viability, especially the vulnerability to sudden shifts in investor sentiment, are high in policy makers' minds, and heightened in the aftermath of the Mexican crisis. Parallels with Mexico are frequently drawn. But a comparison with a number of countries in Asia and Latin America that are potentially prone to or have experienced external pressures points to the relative robustness, at least for the moment, of Egypt's external situation (Table 8).

The reserve position of Egypt remains strong. Throughout the stabilization, reserves as a ratio of imports have remained high (averaging about 16.3 months of imports during the stabilization) and as Table 8 shows substantially higher than comparator countries. But in an era of globalization and international capital mobility, it is arguably more important to compare the reserve position in relation to capital flows. First, Egypt's reserve accumulation between 1991 and 1996 has resulted from current account surpluses and exceptional financing rather than current account deficits and capital account surpluses. Of the reserve accumulation of about $17 billion between 1990/91 and 1996/97, cumulative current account surpluses and exceptional financing accounted for over 90 percent of it. In contrast, in Mexico in the three years prior to the crisis, the reserve accumulation of $15 billion occurred in the face of a

Table 6. Spreads Between Lending and Deposit Rates in Selected Countries

Country (Year)	Spread between lending and deposit rate
Poland (1994)	9 percent
Czech Republic (1994)	6 percent
Slovak Republic (1994)	4 percent
Hungary (1994)	6 percent
Albania (1994)	6 percent
Estonia (1994)	13 percent
Italy (1993)	5.4 percent
Spain (1993)	5 percent
Denmark (1993)	4.9 percent
Sweden (1993)	3.3 percent
Egypt (1995/96)	3.8 percent

Sources: Begg (1996); and Central Bank of Egypt.

Table 7: Comparative Export Performance of Stabilizing Economies

Country	Growth rate of exports	Period	External pressures
Poland	48	1990–95	Poland devalued 3 times between 1/90 and 5/95
Czech Republic	65	1993–95	Recent pressures have led to a large devaluation
Slovak Republic	58	1993–95	One devaluation in 7/93
Hungary	41	1990–95	Spate of devaluations between 91 and 3/95
Argentina	79	1990–95	Serious pressures in the wake of the Mexican crisis
Mexico	95	1990–95	Crisis at end—94 and large devaluation forcing the abandonment of the peg
Thailand	143	1990–95	Crisis in 1997, forcing devaluation
Philippines	113	1990–95	Pressures in 1997, leading to widening of trading band
Egypt	19	1990–95	No discernible pressures

Sources: International Financial Statistics; and staff estimates.

Table 8: Measures of External Viability: A Comparison

	Reserves as percent of short–term debt	Reserve cover in months of imports	Current account deficit as percent of GDP	Reserves as percent of cumulative portfolio inflows 1/
Indonesia (1996)	73	4.4	3.4	140
Malaysia (1996)	146	3.7	9.7	n.a.
Philippines (1996)	84	3.4	1.7	136
S. Korea (1996)	147	3.2	2.3	91
Thailand (1996)	109	6.6	7.7	279
Mexico (1994)	20	1.0	7.8	40
Argentina (1995)	n.a	9.2	1.0	38
Czech Republic 2/ (1995)	n.a	6.6	4.1	68
Egypt 3/ (1996/97)	1,347	16.3	-0.8	321

Sources: IFS; Economist, August 24–30, 1996; and staff estimates

1/ Cumulative capital inflows refer to the following years: Indonesia (1993–1995); Philippines (1992-1995); Thailand (1992–1995); S. Korea (1991–1995); Czech Republic (1993–95); Argentina (1991–1995); Mexico (1990–1993); Egypt (1991/92–1996/97).
2/ Capital inflows include "other investment liabilities."
3/ Reserves exclude about $2 billion held by the Central Bank with local banks.

cumulative current account deficit of $63 billion and a cumulative capital account surplus of about $82 billion. As Table 8 shows, Egypt is the only country running a current account surplus.

A second indicator of resilience to sudden capital outflows is the ratio of reserves to cumulative capital (private speculative) inflows. It measures the extent to which the authorities can weather a flight back of the incoming capital. For Egypt, this ratio stands at about 3.2 (again substantially higher–by multiples of 2–10 than comparator countries shown in Table 8), suggesting that even if all the capital leaves the country the reserve position would still be able to withstand the shock. In contrast, the comparable figure for Mexico in 1994 (the peak year of reserve stock) was 0.47.[44] In the same vein, as of end–June 1997, Egypt's stock of reserves as ratio covers short-term debt almost 14 times (about 10 times if foreign holdings of treasury bills are included). Table 8 shows that this is substantially greater than other countries such as Mexico, Indonesia, and the Phillippines whose short-term debt exceeds the stock of reserves.

6. Successful stabilization has led to a decisive reversal of dollarization, but not to increased monetization; the latter, however, is probably a symptom of accelerating financial development rather than the converse.

Section IV described how dollarization was reversed. There remains however the issue of why Egypt's experience did not resemble that of certain Latin American countries such as Bolivia, Argentina and Peru (see Savastano (1992) or the East Asian transition countries (notably Lao PDR and Cambodia), which were characterized by hysteresis in dollarization despite the subsequent attainment of financial stability (see Guidotti and Rodriguez (1992) and Sahay and Vegh (1995). One response would be that inflation was not as protracted and also never reached the hyperinflationary levels which leads to a permanent alteration of public preferences or the transactions technology;[45] on this view, dollarization never reached threshold levels (of over 70 percent) above which foreign currency started providing important liquidity services rivaling and eventually replacing domestic money as a means of exchange.[46] It is possible that had the imbalances remained at the levels of the early 1980s and had they not been tackled decisively, just such an obdurate dollarization could have taken hold in Egypt, complicating considerably the conduct of monetary and fiscal policy.

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[44]Over the period 1990–1993, cumulative net portfolio investment was $53.2 billion, while reserves stood at $25.1 billion.

[45]Another contributing factor was that indexation was not as explicit and pronounced.

[46]In other words, the Egyptian experience of initial dollarization and its subsequent reversal appears to reflect portfolio considerations, rendering it an asset phenomenon rather than a currency substitution phenomenon (Sahay and Vegh (1995)).

As Section V suggested, while Egypt exhibits the characteristics of a financial system that is deepening, the level of monetization of the economy as reflected in the inverse velocity of money has declined. Viewed over a longer period of say 10 years, the inverse velocity has declined from about 83 percent in 1987/88 to about 74 percent today (Chart 13). Analyzing the dollarization episodes in Latin America, Savastano (1992) makes the distinction between the flight from domestic money and the flight from the domestic financial system. In a number of Latin American countries that witnessed significant dollarization in the 1980s and 1990s, rapid disinflation did not result in a corresponding reversal of the dollarization, as noted above. However, irrespective of the evolution in de-dollarization, in almost all countries the degree of monetization or deepening of the domestic financial system (as measured by movement in the broadest monetary aggregate) displayed a pronounced improvement as disinflation was achieved (see Table 4).

In Egypt, on the other hand, while dollarization was reversed successfully and decisively, nevertheless there was not a corresponding return to monetization of the economy even 5 years into the successful disinflation. In other words, a return in confidence in domestic money did not also translate into an attendant return in confidence—at least not commensurate with the ensuing stabilization—in the banking system as a whole. One possible explanation that was described in Section V is that the decline in the importance of the banking system mirrors and is caused by emerging competition that affects both sides of banks' balance sheets. On the liability side, there is increased competition for household savings from other financial instruments; and on the assets side, firms are increasing their reliance on financing through the capital markets at the expense of bank financing.

7. Egypt's stabilization benefited from a favorable constellation of external factors.

While the policy effort underlying the stabilization effort was enormous, Egypt was also favored by benign external factors. The most important of these was the debt reduction and write-offs that contributed to fiscal consolidation and balance of payments viability. In turn, the alleviation of the external constraint facilitated more relaxed domestic monetary policies and helped avert any sharp contraction in domestic activity.

VIII. MACROECONOMIC CHALLENGES

By any standard, the Egyptian macroeconomic stabilization experience has been one of unambiguous success. But as with any success story enough challenges loom ahead to not warrant complacency. This section spells these out the **financial** vulnerabilities that could yet dog the Egyptian economy and threaten the successes of the recent past (the more important growth challenge is addressed in the final section).

A. Capital Flows

Of immediate concern to the stabilization effort is the recent surge in capital inflows, triggered by the acceleration of the structural reform and reflecting increased confidence in the Egyptian economy. Excessive capital inflows can pose problems for macroeconomic management as well as test the resilience of domestic financial institutions in successfully intermediating (and indeed disintermediating) them. On the macroeconomic front, inflows put upward pressure on the exchange rate and threaten to puncture any export revival on which a growth effort hinges. Central bank intervention to absorb the inflows prevents a nominal appreciation but, absent sterilization, the liquidity consequences worsen competitiveness any way through domestic inflation. Preventing a real appreciation thus requires sterilization, which can be fiscally expensive, or a fiscal adjustment, which is more difficult, but is the only durable way of averting the competitiveness consequences of capital inflows.

A further issue is the composition of inflows. The more inflows are of the portfolio kind, the greater the threat of reversal and less attractive compared with direct investment, which carries the advantages of inflows of technology and managerial capital that bolster the real side of the economy (see IMF (1996), Schadler et al (1995), Calvo et al (1995) for a further discussion of the implications of and responses to capital inflows). In the Egyptian case, while the threat of reversal need not pose immediate problems because of the robustness of the external accounts (see Section VII above), it is still true that the benefits of capital inflows would be larger the more inflows take the form of direct investment.

B. Fiscal

Although fiscal adjustment has underpinned the whole adjustment effort, a medium-term prognosis of fiscal developments would make the case for further efforts. Since the beginning of the stabilization period, revenue developments have moved adversely. Total revenue to GDP has declined from 31 percent in 1991/92 to 26 percent in 1996/97. Structurally, the potential problems include high dependence on the three big contributors–EGPC, the Suez Canal Authority, and the Central Bank, at least two of which are expected to exhibit secular decline. There has also been a decline in the contribution of revenue sources excluding these 3 entities, from 21 percent in 1991/92 to 19 percent in 1996/97, reflecting inter alia the lack of buoyancy of income tax receipts.

Finally, looming ahead is the likely further erosion of the tax base as tariffs are reduced both unilaterally and pursuant to the imminent EU–Egypt partnership agreement. Unless these structural deficiencies are addressed through an expansion of the tax base—indirect and direct—pressures could emerge on the fiscal front.

C. The Challenge of the Tradable Goods Sector

As described above, while stabilization has been attained, a concomitant vibrancy in the tradable goods sector that could act as an engine of growth is still not apparent. Several indicators point to progressive disintegration from the world economy: Egypt's share in world exports has declined from over 0.2 percent of world exports to about 0.08 percent in 1993 and 0.07 percent in 1995; over the same period, the share of Asian developing countries has increased from 11.5 percent in 1985 to over 18 percent in 1995. Egypt's share of world imports has also declined from 0.5 percent in 1985 to 0.2 percent in 1995, while that of the Asian developing countries increased from 12 percent in 1985 to about 19 percent. Another indicator of tradable goods sector performance is the openness index, which is measured as the share of exports and imports of goods and nonfactor services as a share of GDP. Here Egypt's situation has undergone a dramatic change: in 1985 the openness index stood at 88 percent, whereas the share in 1996/97 is about 47 percent, a decline of over 40 percentage points. A permanent reversal of these trends is essential if Egypt is to achieve its objective of outward oriented growth and integration in the world economy.

IX. CONCLUSIONS

By the standards of recent international experience with stabilization efforts, Egypt stands out as a remarkable success story. This stabilization has established enviable pre-conditions as Egypt embarks on its next phase of take-off into a higher growth trajectory.

Looking ahead, the challenge is one of building on this financial stability to achieve high levels of real economic growth that can raise living standards, increase gainful employment opportunities, while ensuring that the fruits of economic growth are shared by all strata of society. This is important in itself as well as to maintain popular support for the reform in the period ahead. These objectives entail the pursuit of a formidable reform agenda encompassing privatization (to include utilities and infrastructure sectors), deepening and further strengthening the financial system to improve national savings while creating a resilient system capable of withstanding shocks, further accelerating the trade liberalization program to further integrate in the world economy and reap the associated benefits, and accelerating deregulation to elicit the investment response from foreigners and nationals necessary to sustain growth. Improvements in economy-wide productivity to achieve export-led growth and maintain external viability will need to be effected continually. Strong institutions to undergird the reform effort will also become a priority in the period ahead.

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