The Coordination of Monetary and Fiscal Policies in Egypt

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Abstract

This paper reviews the rationale for the coordination of fiscal and monetary policies and operations, and the pillars on which such coordination rests. It assesses the coordination of monetary and fiscal policies in Egypt during the 1990s in terms of objectives, instruments, and operational procedures, and looks for the best mode of coordination in the future, given the depth of the financial markets and the exchange rate regime.

The paper finds that while Egypt's coordination proved successful up to 1997/1998 in achieving financial stability and high economic growth, the coordination onward was not as effective. The restrained fiscal policy became an expansionary one, bringing the targeted budget deficit to GDP up from 1 percent to a high level of 4.2 percent in 1998/1999. Monetary policy continued to be restrictive with high short-term injections of liquidity. This resulted in the deepening of stagnation in the economy, instability in the exchange rate as well as a sharp reduction in international reserves. These developments, along with the initiation of the new Public Debt Management Program in September of 2000, plans for a new unit at the Ministry of Finance to act as a fiscal agent for the government, and the move since June 2000 towards a flexible exchange rate regime, have brought to the forefront the issue of coordination between monetary and fiscal policies in Egypt. Looking ahead, the paper proposes a mode of monetary and fiscal policy coordination that suits such recent developments.

ملخص

تستعرض هذه الورقة موضوعية وأهمية التنسيق بين السياسات المالية والنقدية وآليات تنفيذهما، وكذلك الركائز التي يجب أن يقوم عليها هذا التنسيق. كما تقدم الورقة تقييماً للتنسيق بين السياسات النقدية والمالية في مصر خلال عقد التسعينيات، وذلك من حيث الأهداف والأدوات وآليات التنفيذ وتنظر في الأسلوب الأمثل للتنسيق مستقبلاً، أخذا في الاعتبار مدى عمق الأسواق المالية ونظام سعر الصرف.

وقد خلصت الورقة إلى أنه بالرغم من أن التنسيق أثبت نجاحه حتى عام ١٩٩٨/١٩٩٧ في تحقيق الاستقرار المالي والنمو الاقتصادي المرتفع، إلا أنه لم يكن بنفس الدرجة من الفاعلية فيما بعد. إذ تحولت السياسة المالية الانكماشية إلى سياسة توسعية مما أدى إلى زيادة نسبة العجز المستهدف في الموازنة للناتج المحلي الإجمالي من ١% إلى ٢ر٤% في ١٩٩٩/١٩٩٨. أما فيما يتعلق بالسياسة النقدية، فظلت انكماشية مع ضخ جرعات كبيرة لكنها قصيرة الأجل من السيولة، وهو أمر أدى إلى تعميق الركود الاقتصادي وعدم استقرار سعر الصرف، فضلاً عن انخفاض حاد في الاحتياطيات الدولية.

وقد أدت تلك التطورات، ومع بدء "برنامج إدارة الدين العام" في سبتمبر عام ٢٠٠٠، والتخطيط لإنشاء وحدة جديدة في وزارة المالية تتولى دور الوكيل المالي للحكومة إلى جانب الاتجاه منذ يونيو ٢٠٠٠ نحو نظام مرن لسعر الصرف، إلى إبراز أهمية موضوع التنسيق بين السياسات المالية والنقدية. وبنظرة مستقبلية، تقدم هذه الدراسة مقترحا لأسلوب تنسيق بين السياسات المالية والنقدية يتفق وتلك التوجهات الحديثة.

I. Introduction

In recent years, monetary authorities around the world have increasingly focused on implementing policies to ensure price stability. At the same time, financial market developments have allowed public debt managers to focus more on cost minimization (Laurens and Piedra, 1998). These two trends made coordination of monetary and fiscal policies and operations assume particular significance to avoid counterproductive behavior. This is especially true for economies in transition because their financial markets, in the broad sense, are not fully mature and accordingly monetary and debt management cannot strictly be separated (Sandararajan et al, 1998). The issue becomes even more critical when the country follows a flexible exchange rate regime.

In the case of Egypt, fiscal, monetary and financial reforms played a key role in its overall structural adjustment program applied since the beginning of the 1990s. The success of such reforms was, to a large extent, a result of full coordination of monetary and fiscal policies and operational management. Policy targets were consistently set. Being a newly liberalized economy with an emerging financial market, the playing field for both was the primary market and the instrument was short-term government securities, i.e. Treasury Bills (TBs). Fiscal policy reforms to reduce budget deficit were primarily aimed at enhancing revenue, reducing subsidies, separating public companies from the budget, attracting foreign grants, and limiting new employment in the public sector. Public debt management also became market oriented relying on TBs to finance the deficit. Monetary policy, on the other hand, used TBs to sterilize the effects of excessive capital inflows in order to achieve stability in the nominal exchange rate (as a macro-policy anchor), and reduce the rate of inflation. There was a great deal of harmony between the two policies and instruments used. From the operational point of view, coordination ensured that the issuance of TBs was undertaken smoothly and efficiently by the CBE under its mandates governing these operations.

In the last few years, however, coordination has become more demanding. The budget deficit exceeded targeted rates in 1998/1999 and 1999/2000 – a time when the Balance of Payments (BOP) was weakening and the exchange rate was under pressure. Additionally, the Ministry of Finance (MOF) announced in September of 2000 its intention to establish a new debt management unit at the Ministry that will focus on cost minimization of debt service and the attraction of foreign investment. While this announcement seemed to be a step in the right direction, it created a considerable degree of uncertainty about the future since it was made without specific reference to the mandates or banking and credit laws governing the CBE's debt management activities, or to the anticipated mode of

coordination that would enable the CBE to conduct monetary policy using open market operations (OMO) in government securities. In view of these developments, this paper seeks to contribute to the discussion of future coordination of monetary and fiscal policies and operations in Egypt by searching for the best set of arrangements within the framework of the present stage of the financial market and the new exchange rate regime.

This paper is organized as follows: Following this introduction**,** Section II deals briefly and broadly with the rationale for monetary and fiscal policy coordination and then identifies the appropriate mode of coordination for the different phases of financial development under their prevailing exchange rate regimes. Section III identifies Egypt's exchange rate regime and the stage of development of its financial markets. Section IV explores the coordination between monetary and fiscal policies and operations in Egypt during the 1990s (differentiating between the two distinct periods of 1991/1992 – 1996/1997 and 1997/1998-1999/2000) and analyzes the implications of such coordination. Section V discusses options for future modes of coordination in Egypt by discussing the types of policy objectives, instruments, operations, and institutional and legal arrangements they will require. Finally, Section VI concludes the study.

II. Rationale and Determinants of Monetary and Fiscal Coordination

Rationale

The ultimate goal of macroeconomic policy is to achieve sustainable economic growth, price stability, and viable external accounts (the overall balance of payments and the sub-balances). In an open economy, i.e. one with liberal trade and capital movements, the coordination of monetary and fiscal policies is essential since measures taken in either of the two inevitably affect the other. Lack of policy coordination has many potential negative effects, from financial instability to very low overall economic performance. Lax fiscal policy in reaction to a recession, for example, will put pressure to tighten monetary policy, even if the latter cannot fully compensate for the fiscal imbalance. Under such conditions, monetary policy might not achieve price stability. Similarly, a tight monetary policy in the face of large capital inflows may have budgetary implications as it may affect the size of the deficit, the level of debt, etc. through seigniorage, sterilization, and swapping effects.[1]

This interaction can be seen from the following government budget constraint stated by Sundararajan et. al (1994):

Annual budget deficit = Net bond issue to non CB parties + CB credit to the government

[1] See Momi Dahan (1998) for a detailed discussion of this topic.

Certainly, when the government borrows from the Central Bank (CB), this results in an increase in the monetary base (currency in circulation and banks reserves). In a country like Egypt where the financial market is still developing and its absorption of government securities are limited, fiscal authorities and the CB cannot take decisions independently about the size of the fiscal deficit. Furthermore, because neither the interest rates nor the exchange rate are flexible, adjustment to bring about the necessary alignment to satisfy the equation (government budget constraint) is lacking. Policy coordination should therefore be undertaken in two different time frames:

1) *In the short term*, the key objective for both monetary policy and public debt management should be to establish well functioning financial markets by way of price stability.
2) *In the longer term*, policy coordination should aim at designing a balanced monetary and fiscal mix that is conducive to maintaining the economy on its equilibrium growth path. This implies limiting the fiscal deficit to a level that can be financed through the operation of the capital market without creating distortions in the allocation of resources in the economy.

Determinants of Coordination

The rationale behind the policy coordination discussed above might seem to suggest that similar coordination is needed in all economies. However, this would only be true if all economies were alike. In actuality, the form of coordination required largely depends on a country's exchange rate regime and the depth of its domestic financial markets. Whereas the depth of financial markets determines the degree of independence in decision-making and in instruments used by the monetary and fiscal authorities, the exchange rate regime determines the relative strength of the role that each policy is playing in the economy. In order for policy coordination to be effective, each country must clearly identify their exchange rate regime and the depth of their financial markets, and then devise a plan accordingly.

Such assessment is more difficult than one might think. This is because of the diversity of exchange rate regimes and the stages of financial market development. In what follows, a description of the different exchange rate regimes that countries may adopt in practice is given. The paper then moves on to give a brief summary of financial market development over time, outlining four distinct phases of market maturity and the associated mode of coordination that each requires.

The exchange rate regime

Coordination of monetary and fiscal policies differs under different exchange rate regimes because of the relative importance of the roles played by each.[2] The following summarizes the role of monetary and fiscal policies under fixed vs. flexible exchange rate regimes:

Exchange Rate Regime	**Other Characteristics of the Economy**	**Policy Effectiveness**
Fixed	Perfect capital mobility Large volume of traded goods	Fiscal policy effective in influencing aggregate demand. Monetary policy ineffective and interest rates will always be equal to international one.
Fixed	Less perfect capital mobility Large volume of non-traded goods	Monetary policy and Fiscal policy plays active Roles in influencing aggregate demand. (both effective)
Flexible	Perfect capital mobility Large volume of traded goods	Solely monetary policy effective (External shock absorber)
Flexible	Less perfect capital mobility Large volume of non-traded goods	Fiscal policy and monetary policy both effective through interest rate and exchange rate movements.

But fixed and flexible exchange rate regimes are only the polar cases. There are many types in between. The IMF categorization of exchange rate arrangements identifies the following eight types of exchange rate regimes:

1) Exchange rate arrangements with no separate legal tender.
2) Currency board arrangements.
3) Other conventional fixed pegs (including the *de facto* peg under managed floating).
4) Pegged exchange rates within horizontal bands (cooperative or other bands).
5) Crawling pegs.
6) Exchange rates within crawling bands.
7) Managed floating with no pre-announced path.
8) Independently floating.

[2] The exchange rate regime reflects a longer-term commitment of a country's national policies to have a certain behavior of its exchange rate vis-à-vis the currencies of other countries. The system is expected to persist over a more extended period of time in order to provide a stable atmosphere for business to make decisions, and thus make the economic system function on a sustainable basis (see Mussa, 2000).

Normally, individuals identify a country's exchange regime in accordance with the official classification deemed by authorities and published by the IMF. However, several other methods of classification do exist. While these systems do not differ largely in the types of regimes they identify (such as a pegged or a floating regime), they do differ significantly in the methodology they use to *determine* that regime.

Acknowledging that countries may actually be following a regime different from what they declare, Yayati and Sturzenegger (1999) developed a statistical test based on three main indicators in order to identify the system in practice. These indicators are:

1) *The volatility of the exchange rate:* measured by the absolute monthly percentage change in the nominal exchange rate during the year;
2) *The volatility of exchange rate changes:* measured by the standard deviation of the monthly percentage changes in the exchange rate during the year; and
3) *The volatility of reserves:* measured by the yearly average of the absolute monthly change in international reserves relative to the monetary base lagged one month, in order to proxy the monetary impact of these changes. According to Yayati and Sturzenegger, this is calculated by subtracting government deposits at the central bank from its net foreign assets (in order to correct for variations in international reserves that do not lead to changes in base money) and divide its monthly change by the monetary base lagged one month.

Based on the assessment of these three indicators, a country is classified according to the following table of reference: [5]

Table 1. Identification of the Exchange Rate Regime: Yayati and Sturzenegger's boundaries for indicator behavior

Characteristics of indicator behavior*			**The boundaries (%)**						**Type of regime**
Volatility of Exchange Rate	**Standard Deviation of Exchange Rate**	**Volatility of International Reserves**	**Volatility of Exchange Rate**		**Standard Deviation of Exchange Rate**		**Volatility of International Reserves****		
			Min	**Max**	**Min**	**Max**	**Min**	**Max**	
Low	Low	High	0.0	4.5	0.0	8.3	12.4	41.8	Fixed
Med./high	Low	Med/high	3.5	9.8	0.9	15.1	2.2	28.6	Crawling Peg/ Dirty Float
Med	Med	Med	7.4	12.0	16.1	28.9	1.5	18.5	Dirty Float
High	High	Low	1.1	4.9	0.2	6.9	0.1	13.0	Float

Note: * When the behavior of all three indicators is low, the system is inconclusive (i.e. cannot be classified).
** Based on Net Foreign Assets (NFA)
Source: Yayati and Sturzenegger (1999)

[5] This table summarizes the results of using the K-means procedure of cluster analysis, after eliminating all yearly observations for which one of the variables was unavailable and after normalizing. For details on this statistical method, see Auderberg (1973).

This statistical method enabled Yayati and Sturzenegger to identify the exchange rate regime of some 79 countries in their 1999 study, the results of which often differed from the IMF classification.

Frankel,[3] on the other hand, developed a system that differentiates between nine regimes, eight of which broadly correspond to the IMF categorization. However, unlike the IMF system, he identifies a ninth regime termed the "target zone", which can fall under any of the non-fixed arrangements.

The three classification systems compare as follows:

Classification of the Exchange Rate Regimes

Yayati and Sturzenegger*	**Frankel****	**IMF**
Fixed	Currency Union	No separate legal tender
	Currency Board	Currency Board
	Truly Fixed	Other conventional fixed peg
Crawling Peg	Adjustable peg	Within crawling band
	Crawling peg	Crawling peg
	Basket beg	Pegged within horizontal band
Dirty Float	Managed Float	Managed floating
Flexible	Free Float	Independently floating

Notes: * As Yayati and Sturzenegger indicated: when the rate hits one of the bands, it behaves as a crawling peg; if it fluctuates within the band, it behaves as a float; and if there is intra-marginal intervention, it is a dirty float.
**The "target zone" classified by Frankel (ninth regime), the arrangement can be identified under any of the last three exchange rate regimes.

Considering that Yayati and Sturzenegger system of evaluation is based on actual rather than declared systems of operation, it seems that it may be more useful for determining Egypt's exchange rate, which will follow later in the study.

The depth of domestic financial markets

As to the depth of the domestic financial markets, four district phases of market maturity[4] and their required modes of coordination is summarized in the following table:

[3] Jeffrey Frankel (1999), and IMF survey no. 17 (August 2000).
[4] More elaboration of these phases can be found in: Laurens and Piedra (1998).

Phases	**Framework of Coordination**
Phase I No or a tiny market for securities	In this phase, the CB tends to finance fiscal deficits almost entirely. Formal rules to limit CB financing of the budget are needed to avoid excessive expansion in domestic credit and money creation. A broad money programming framework for coordination that projects the demand for money and the sources of domestic credit is useful.
Phase II Initial stage of market development	In this phase, the financial market witnesses the introduction of short-term government securities (TBs), the interbank market is still immature, the secondary market is not yet developed, and interest rates are still controlled by the authorities or are, at best, insufficiently flexible. Coordination to reduce the costs of debt service while ensuring the attainment of monetary policy objectives would still be undertaken within the framework of broad money programming and the use of TBs and other indirect instruments of monetary policy.
Phase III Less than fully developed financial market	In this phase, there is some flexibility in the determination of interest rates. Further use of TBs and credit auctions is undertaken for monetary management, while bad loans are replaced with government securities. Medium-term debt securities are introduced with rates set administratively or tied to TB rates. There is also a building volume and widening range of holders, and plans for regulatory and institutional arrangements for secondary trading. The CB remains the major source of liquidity to government debt instruments. Inter-bank markets are strengthened and clearing and settlement arrangements are initiated. At this phase, it is also typical that a process of reviewing the adequacy of banking supervision relating to assets/liabilities management gets underway. In this framework, broad money programming tends to be less important and reserve money programming gains importance for monitoring financial and money markets to guide CB intervention under fiscal discipline.
Phase IV A mature financial market	The financial market in this final phase becomes fully developed. Interest rates are completely flexible. Institutional arrangements for secondary markets are expanded and strengthened with appropriate regulatory and supervisory arrangements. The financial market ensures the liquidity of public debt instruments and the CB manages liquidity at its own initiative (CB independence is established) using market-based instruments (repos, intervention in secondary trading etc.). Auctions of medium- and long-term debt instruments are introduced. Expansion of book entry, clearing and settlement systems are consistent with the overall reform of payment system. In this stage, financial markets react very rapidly and strongly to monetary policy signals. Institutional arrangements may delineate separate objectives for debt management and monetary management, supported by greater reliance on market operations, market signals and practical arrangements between policy makers to ensure coordination and fiscal discipline. This is because the CB can only successfully pursue monetary policy if accepted by the MOF and the public.

III. The Exchange Rate Regime in Egypt and the Depth of its Financial Markets

Acknowledging that the type of coordination required between monetary and fiscal policy depends, to a large extent, on two main pillars: (a) the type of the exchange rate regime in practice, and (b) the stage of development of the financial market, it is necessary for the purposes of this study to attempt to identify these two pillars in the case of Egypt.

The Exchange Rate Regime in Egypt

According to the IMF, Egypt operated under a conventional fixed peg arrangement at the beginning of the decade, but then switched to a managed peg from 1991-1997. Following this interlude, the international organization officially deemed that Egypt resumed its conventional fixed peg – a judgment that held through June of 2000. These conclusions differ from those of Yayati and Sturzenegger (1999), who classified Egypt's exchange rate regime from 1990-1998 as follows:

Table 2. The Yayati and Sturzenegger Exchange Rate Classification for Egypt: 1990-1998 (%)

	Volatility of the Exchange Rate	Standard Deviation of the Exchange Rate	Volatility of the International Reserves*	Exchange Rate Classification
1990	7.4	24.7	1.5	Dirty
1991	5.1	15.1	2.7	Dirty / Crawling peg
1992	0.1	0.1	2.9	Inconclusive
1993	0.1	0.1	3.0	Inconclusive
1994	0	0.1	3.8	Inconclusive
1995	0	0.1	2.5	Inconclusive
1996	0	0	2.0	Inconclusive
1997	0	0	2.2	Inconclusive
1998	0	0	1.5	Inconclusive

Note: * Based on Net Foreign Accounts (NFA)
Source: Yayati and Sturzenegger (1999).

To overcome Egypt's inconclusive status, which was common for other developing countries as well, Yayati and Sturzenegger conducted a second round of classification. However, even in this second round, the classification of Egypt's regime was inconclusive for most years.

From the perspective of the author of this paper, it seems that these conclusions suffer from two shortcomings: First, the years 1990 and 1991 should be excluded, as they were characterized by a series of nominal depreciations prior to the liberalization of the Egyptian pound in 1991.

Second, the definition of the third indicator (c) should perhaps be changed to Net International Reserves (NIR), since using the Net Foreign Assets (NFA) of the CBE could

lead to misleading conclusions. This is because foreign liabilities in Egypt include a big balance in a "blocked account" representing installments paid in Egyptian pounds by domestic borrowers at the original due dates that are kept on the CBE books until the new due dates agreed upon under the rescheduled arrangements with Paris Club members. For the purpose of this study, such an account should obviously not be considered as foreign liabilities in the calculation of the CBE net foreign assets. However, since figures for the blocked account are not published to facilitate the necessary adjustments, an alternative indicator should be used. NIR (defined as total reserves minus short-term (within one-year) foreign liabilities of the CBE) is perhaps the best option, as it is consistent with the definition of available foreign exchange for balance of payments (BOP) support.

Recognizing these two major shortcomings, the present study conducted its own calculations using the suggested corrected methodology and obtained the following results:

Table 3. Volatility in the Nominal Exchange Rate of the Egyptian Pound and in NIR (1992-2000)

Year	Volatility of the Exchange Rate	Standard Deviation of the Exchange Rate	Volatility of Net Income Reserves
1992	0.14	0.13	3.61
1993	0.12	0.13	3.81
1994	0.13	0.10	2.48
1995	0.11	0.10	3.05
1996	0.07	0.04	2.01
1997	0.02	0.04	1.74
1998	0.00	0.01	0.75
1999	0.02	0.05	1.06
2000	0.12	0.20	1.44

Source: Author's calculations. For complete data, see Table 1, Annex I.

The classifications of the exchange rate regime of Egypt on the basis of the above outcome in comparison with those of the IMF and Yayati and Sturzenegger's own results are given in Table 4 below.

Table 4. Egypt's Exchange Rate Regime: A Comparison

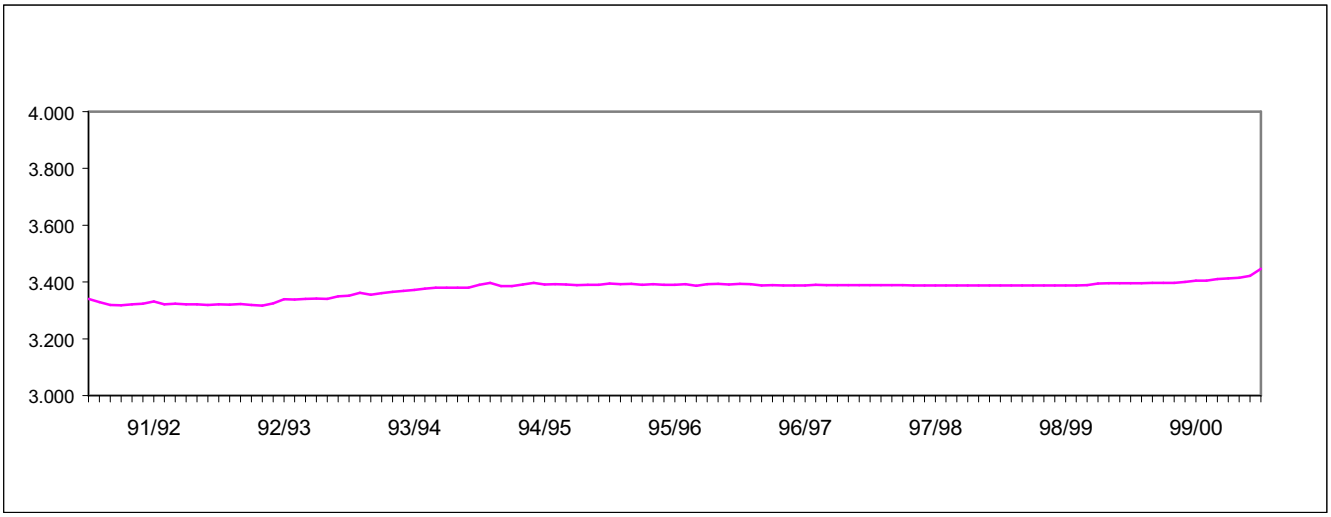
	Present Study	IMF *	Yayati & Sturzenegger
1990	----------	Conventional fixed peg arrangement	Dirty
1991	----------	Managed Floating	Dirty / crawling peg
1992	Fixed	Managed Floating	Inconclusive
1993	Fixed	Managed Floating	Inconclusive
1994	Fixed	Managed Floating	Inconclusive
1995	Fixed	Managed Floating	Inconclusive
1996	Fixed	Managed Floating	Inconclusive
1997	Fixed	Managed Floating	Inconclusive
1998	Fixed	Conventional fixed peg arrangement	Inconclusive
1999	Fixed	Conventional fixed peg arrangement	--------
2000**	Fixed	Conventional fixed peg arrangement	--------

Notes: * Yayati has just put the IMF classification for Egypt in all years as "dirty". The classification for the IMF as shown in this table is drawn from the IMF, "IFS" and the IMF Annual Book on the "Exchange Rate Regimes and Restrictions", several issues. Conventional pegged arrangement includes de facto peg arrangement under managed floating.
**Up to June 2000.

The conclusion arrived at by the independent calculations presented in this study – *that of Egypt holding a fixed exchange rate regime from 1992 up until June of 2000* – is consistent with the use of the exchange rate as a nominal anchor in support of the stabilization effort and as a means to fulfill the disinflation strategy Egypt followed during the 1990s. Also, the result is in essence very close to what the IMF labels a "conventional fixed peg arrangement," in which a country pegs its currency (formally or *de facto*) at a fixed rate to a major currency or a basket of currencies where the exchange rate fluctuates within a narrow margin of at most ± 1 percent.

This classification can also be supported by a survey of the country's actual monetary and exchange rate activity during this time. In reality, the CBE nominal exchange rate was virtually unchanged with extremely low volatility from the time of the unification of the rate in October 1991 up until mid-2000 (even after the 1997 shocks, which required significant adjustments in both the nominal exchange rate and international reserves). Furthermore, the CBE intervention was continuously passive (i.e. buying foreign currency only) as a result of an overall BOP surplus during the period. The official CBE exchange rate of the pound against the US dollar witnessed less than 1 percent monthly changes (Chart 1). To a certain extent, at least equivalent to the accumulated inflation differentials minus any improvement in costs and labor productivity, competitiveness may have been eroded.

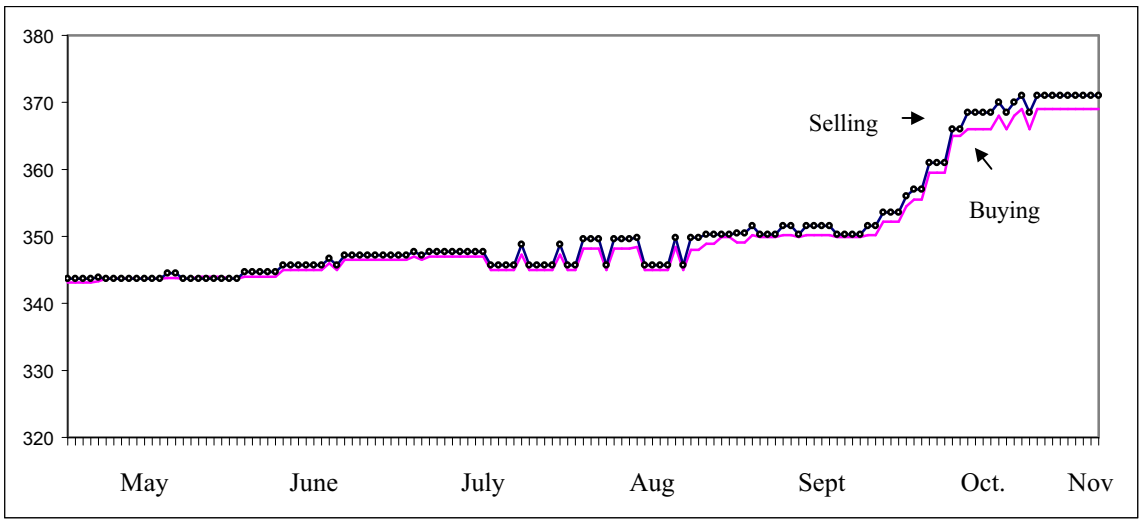
Chart 1. Development of Nominal Exchange Rate for the Egyptian Pound against the US Dollar (90/91 – 99/00)



Sources: Collected from CBE, *Economic Review*, *Monthly Statistical Bulletin,* (several issues) and IMF, *IFS* CD-ROM (May 2000). For complete data, see Table 1, Annex I.

However, as one might guess from the upward slope shown in the far right side of Chart 1, a break in this trend occurred halfway through 2000. In response to domestic and international conditions, Egypt's philosophy since June of 2000 seems to have moved toward a type of flexible exchange rate regime (Chart 2) under which banks are allowed to determine the rate more freely than before with little use of reserves at discrete times.

Chart 2. Development of the Daily Exchange Rate of the Egyptian Pound against the US Dollar (May October, 2000)



Source: Al-Ahram Daily newspaper. For complete date, see Table 1a, Annex I.

Thus, this study argues that, with the exception of the last six month of 2000, the coordination between monetary and fiscal policy in Egypt over the last decade has been undertaken within the framework of a *fixed exchange rate regime.*

The Depth of the Financial Markets in Egypt

As discussed earlier, several factors must be considered in order to make a valid assessment of the depth of a country's financial markets; namely, the organization, regulation and size of

the market. In the case of Egypt, the structural adjustment program, which began a decade ago, focused on strengthening the financial market as a policy target. In the early stages of the reform, efforts were made to develop a vital money market through a wide spectrum of institutional and legal changes. However, at this time, the market is still fragile and requires further development. A symptom of this fragility is the large volatility in inter-bank rates despite stability in the discount rate. Other indications include that the CBE intervention in the money market through repurchase agreements (Repos) oscillates very heavily and that the discount of TBs among banks and between banks and the CBE are still limited. In order to reach a new stage of development, many observers feel that Repos need to be standardized and that their operations be conducted on auction basis.

Steps to revamp the Egyptian stock exchange during that time, on the other hand, show much stronger signs of market advancement. In order to enable the market to become an important vehicle for the mobilization and allocation of savings to the most productive channels, a series of organizational and regulatory reforms were made in a addition to the introduction of measures to enhance the size of the market. In terms of organization, reform efforts include the merging of the Cairo and Alexandria stock exchanges, the introduction of electronic settlement and clearing, and the control of settlement risk through the establishment of a guarantee fund. Furthermore, a new capitalization weighted index comprising the thirty most actively traded companies was initiated.

Concerning the regulation of the market, fairly adequate prudential regulations are in place. They comprise margin trading, reporting, licensing, insider trading, other regulations on improper conduct, the trading of shares of newly listed companies (now permitted), the promulgation of a code of conduct for portfolio management companies and brokerage firms, the amendment of the corporate law to allow companies to buy back their outstanding shares under certain conditions, and the permission for companies to issue bonds (provided they receive a credit rating from a certified agency). The Egyptian government also recently began to make notable revisions of the existing capital market law in order to ensure full compliance with the international standards; including laying out the legal framework for new financial instruments (including derivatives to be permitted only as the market matures).

In terms of sheer size, the allowance for foreign participation, the introduction of medium and long-term government securities, the encouragement of private bond issues, and the formation of public shareholding companies all contributed to the deepening of Egypt's financial markets. These actions led growth rates in the number of listed and traded companies to increase despite the decline in 1999/2000. Market capitalization also significantly increased over the decade as well as the average nominal capital per company.

Furthermore, in relation to GDP, the value of trading increased to 15.1 percent in 1999/2000 after being as small as 0.9 percent in June of 1992 (Table 5).

Table 5. Major Indicators of the Egyptian Capital Market, 90/91– 99/00 (Growth Rates %)

	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00
No. of listed companies	9.1	3.0	2.8	6.8	-5.3	-2.8	6.2	36.7	7.9
No. of traded companies	9.6	10.5	13.6	17.3	0.6	17.5	32.5	20.3	-17.8
Capitalization (market value)	n.a.	n.a.	n.a.	93.9	35.4	106.8	15.2	33.8	26.2
Average nominal capital* (LE mn)	9.8	10.2	12.9	13.3	18.5	22.3	33.0	42.6	67.1
Total value of trading,	23.2	5.7	42.7	93.6	75.5	375.7	417.6	-265.5	165.8
Trading in Shares	*17.4*	*9.9*	*46.4*	*94.1*	*370.2*	*9.7*	*37.1*	*37.0*	*67.4*
Value of trading to GDP (%)	0.9	0.8	0.9	1.5	2.5	7.7	29.2	10.2	15.1
Market index (CMA)	100	124.4	176.8	219.7	204.6	348.1	363.9	480.3	615.2

Note: * Per listed companies.
Sources: CMA and the CBE Department of Economic Research. For complete data, see Table 5, Annex I.

Despite these developments, in comparison to other emerging markets, the size of the Egyptian stock exchange in terms of trading is still relatively small; in terms of instruments is limited; and in terms of market capitalization is up-to-now concentrated in a limited number of stocks (companies). In addition, interest rates are not yet flexible and the TBs, which constitute a large volume of government securities, are non-marketable on the stock exchange.

High growth, the introduction of TBs, as well as the move towards indirect monetary control in the early part of the decade moved the capital market in Egypt from Phase I to Phase II of the four phases described earlier in Section II. However, since 1996, steps have been taken to move Egypt beyond Phase II. These include the implementation of Repos by the CBE, as well as the government's introduction of medium and longer-term securities (5-year and 7-year T-bonds), which can be traded on the stock exchange to ensure a wider range of holders of government securities and restructure its domestic debt. Also, regulatory and institutional arrangements for secondary trading began to develop. Clearing and settlement arrangements were introduced. Also, assets/liabilities management began to receive importance in banking supervision. The impact of these efforts made since 1996/1997 effectively moved the financial markets from Phase II to Phase III.

On the basis of these findings, it is argued that the depth of the Egyptian financial market can be reasonably categorized as a less than fully developed one, i.e. Phase III of the financial market development scale outlined earlier in Section II.

IV. The Evolution and Implications of the Coordination of Monetary and Fiscal Policies in Egypt During the 1990s

In this section, the evolution of the coordination of monetary and fiscal policies in Egypt and their ensuing implications during the 1990s are scrutinized under two distinct periods: 1991-1997 and 1998-2000. This assessment takes into account the state of development of Egypt's exchange rate regime and financial markets elaborated above.

Coordination and Implications: 1991-1997

During 1991-1997, Egypt's financial markets experienced two district evolutions. In 1991, the market moved from Phase I, with a very small market for securities, to Phase II, where the use of indirect monetary instruments initiated the issuance of short-term government securities (TBs). In 1996, the market moved from Phase II to Phase III. In this phase of development, medium and long-term government securities were issued and traded in the market and a move from broad money to reserve money programming took place. Yet, throughout the whole period, the exchange rate (a fixed peg to the US dollar) was being used as a nominal anchor for monetary stabilization. What then, were the objectives of monetary and fiscal policies during this period? In the following, the study explores this question by determining concrete policy stances, the instruments used, and the implications of each.

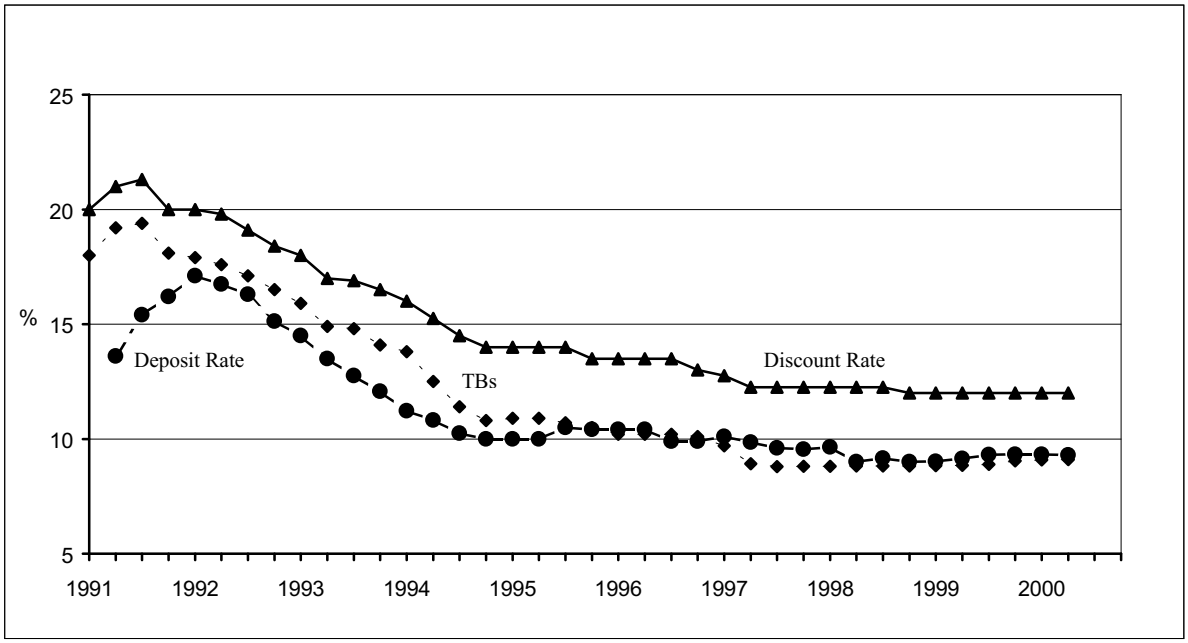
Monetary policy stance and instruments

Since the beginning of the reform program in 1991 the stance of monetary policy was characterized by tightness so as to foster economic stability. The two final objectives set for monetary policy were:

1) *Price stability*, in terms of lowering the inflation rate on a gradual basis in order to reach the weighted average of Egypt's trading partners or come near to it, and then maintain the rate as low and steady as possible thereafter (Table 2 in the Statistical Appendix).
2) *Maintaining the stability of the nominal exchange rate* of the pound against the US dollar.

With tight monetary policy, interest rates were high. However, the discount rate, interest on 3-month deposits and TBs rate all started to decline from 1992 until 1996, and remained constant afterwards (Chart 3). This trend was a result of coordination to ensure balance between monetary policy impact on budget deficit (stemming from the issuance of TBs to absorb excess liquidity caused by large capital inflows in response to the liberalization of interest and exchange rates), fiscal deficit restraints, and growth targets.

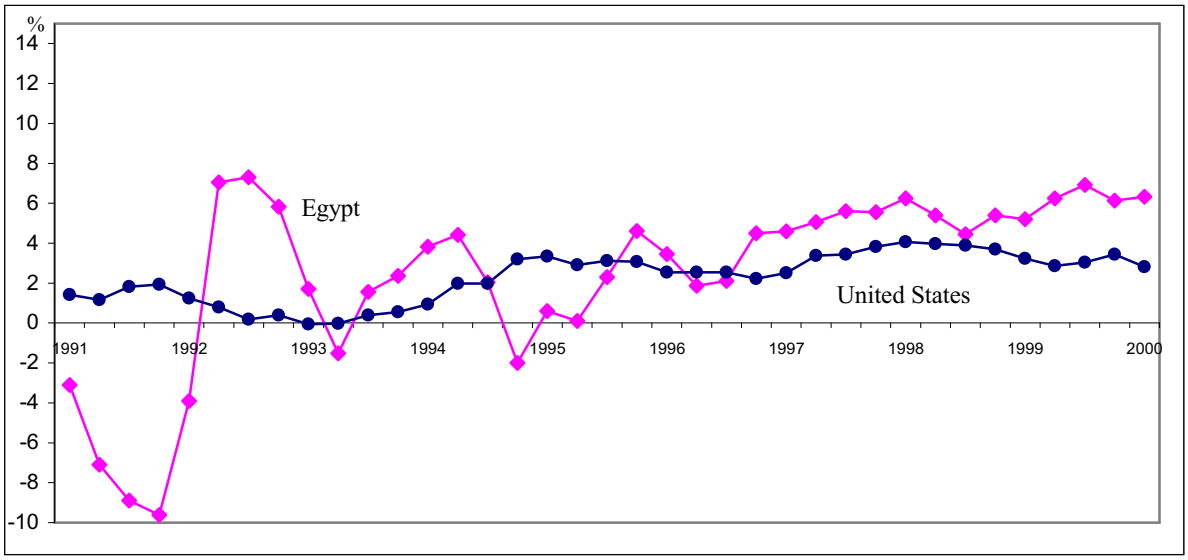
Chart 3. Interest Rates for the Egyptian Pound, 1991-2000 (End of Month)



Sources: For complete data, see Tables 2, 2.a and 3, Annex I.

Despite this, nominal interest rates remained relatively high with a noticeable positive real differential between interest rates on the Egyptian pound and the US dollar (Chart 4).

Chart 4. Real Interest Rates between the Egyptian Pound and the US Dollar



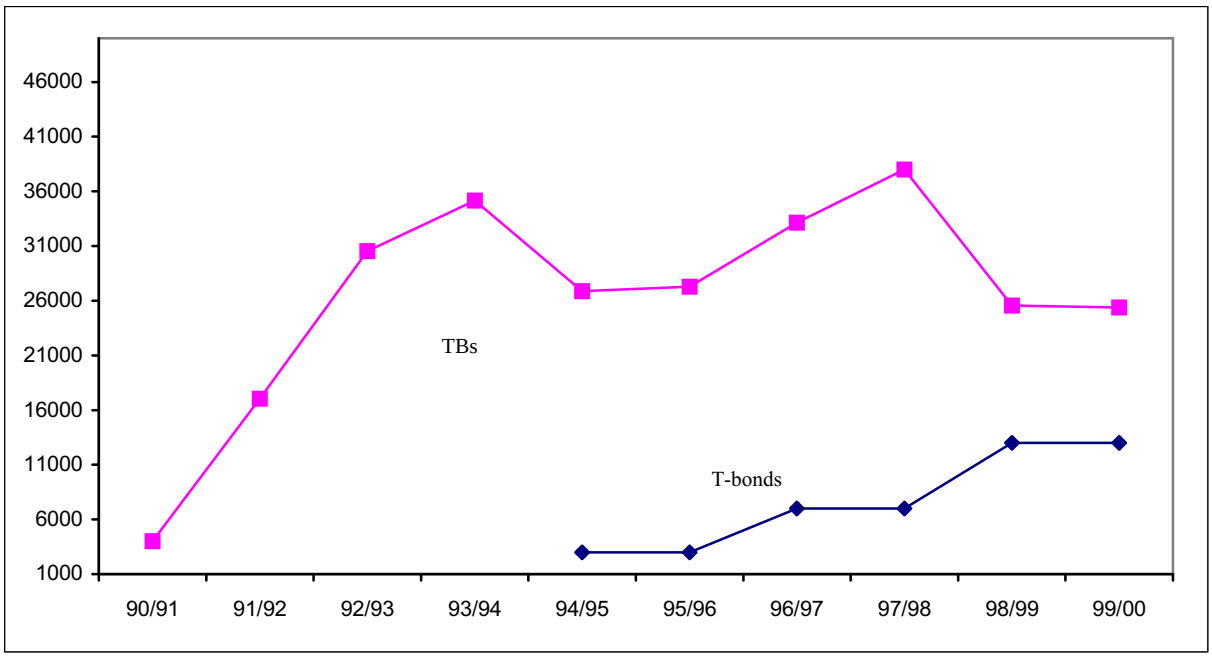
Source: For complete date, see Table 2, Annex I.

This real interest rate differential attracted capital inflows, which continued until 1997. The CBE had to intervene by buying excess foreign currency to avoid nominal appreciation of the Egyptian pound. Thus, from 1991 through 1997, foreign exchange operations (with the issuance of TBs, i.e. sterilization) was the most active instrument of monetary policy. Sterilization was made through the issuance of short-term TBs (3-month followed by 6-

month and then one year maturity bills). Coordination between the MOF and the CBE during this period was ideal. The volume of TBs in 1991/92 was as large as LE 4.0 billion. This is because they served several purposes, including: a) absorbing liquidity; b) financing the current budget deficit; c) financing the budget deficits from previous years; and d) financing past years' deficits of public economic authorities covered by the treasury.

Aiming to strengthen the indirect monetary management, all credit ceilings were abolished in 1992/93. The CBE started to gradually rely on other instruments than TBs such as the acceptance of term deposits in Egyptian pounds with remuneration (invited deposits), and repurchase agreements (Repos). In the context of public debt restructuring, T-bonds of longer-term maturities (5-year bonds) were first issued in 1995 followed thereafter by 7-year and 10-year maturities (Chart 5).

Chart 5. Development of TBs and T-bonds in Egypt, 1991-2000* (in LE mn)



Note: * The issuance of TBs started on January 3,1991 on a weekly auction basis with 91-maturity bills, followed by 6-month, and one-year maturity in 1992.
Source: MOEFT *Monthly Economic* Digest (Sept. 2000), and CBE, *Economic Review* and *Monthly Statistical Bulletin*, (several issues). For complete date, see Table 6, Annex I.

Towards the mid-1990s, the CBE moved from broad money to reserve money management, where the operating target was banks' reserves in Egyptian pounds at the CBE and the intermediate targets were banks' net domestic assets. The reserve requirement in local currency was not an active monetary instrument to affect domestic liquidity simply because liquidity growth was too fast for a reserve requirement adjustment to accommodate.[6] Growth in domestic liquidity is shown in Table (6) below.

[6] The reserve requirements in local currency remained unchanged at 15 percent throughout the 1990s.

Table 6. Egypt's Annual Growth Rates in Domestic Liquidity

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00
Growth rate (%)	27.5	14.3	16.4	12.9	11.0	10.5	15.1	8.5	11.4	8.8

Source: MOEFT, *Monthly Economic* Digest (Sept. 2000); CBE, *Monthly Statistical Bulletin*, (several issues), and the Egyptian Ministry of Planning. For complete data, see Table 4, Annex I

Fiscal Policy Objectives and Instruments

The two main objectives of fiscal policy during the period from 1991 through 1997 were to:

1) *Gradually reduce the annual budget deficit* as a ratio to GDP to alleviate its impact on the growth of government domestic debt and eventually achieve a reduction on it; and
2) *Restructure government domestic debt* towards longer-term maturities.

To achieve these objectives, the MOF devised a strategy to affect both sides of the equation by increasing government revenues and rationalizing spending. Revenues were increased through the introduction of sales tax (on goods, but later extended to services as well), the application of a unified and adjusted income tax, introducing new fees, improving tax administration, and reducing customs to enhancing long-term revenue. On the spending side, a substantial reduction in subsidies, control of wage increases, and the exclusion of public sector companies from the budget in preparation for restructuring and privatization were among the most prominent actions taken. (See Table 10 for the overall budget, current, and capital balance positions during this period).

Although there is a degree of conflict between these objectives, particularly in terms of both removing subsidies (fiscal objective) and lowering inflation (monetary objective), coordination of instruments was implemented in harmony to achieve all objectives.

Implications

Against this background, the analysis of monetary policy implications on Egypt's fiscal position during this period will be traced. Theoretically, seven different effects have been identified in this respect: 1) Debt (flow and stock) effects; 2) Sterilization effects; 3) Expenditure effects; 4) Revenue effects; 5) Seigniorage effects; 6) Price (inflation tax) effects; and 7) Swapping (of domestic for foreign debt) effects.

While each of these might have a small effect individually, the cumulative overall impact on fiscal position could be relatively high. In order to assess this overall impact, a single

identity model was developed by Dahan.[7] However, since the issue of the fiscal effects of monetary policy is more relevant in the short-run, Dahan's assessment included short-run effects only. While this assessment would be useful for Egypt, it is not possible at this time due to lack of detailed information. Instead, we shall deal with these effects separately under the following four headings: 1) The level of public debt; 2) The government budget deficit; 3)The seignior age and price effects; and 4) The swapping effect.

The level of public debt

As indicated earlier, the capital inflows attracted by solid macroeconomic policies and the relatively high interest rates from 1991 through 1997 put persistent pressure on the pound to appreciate. To alleviate this pressure, the CBE absorbed the excess supply of foreign exchange. This brought some US$ 15 billion to the stock of Egypt's international reserves. However, virtually two thirds of this intervention was sterilized during this period through TBs, which were sold on weekly auction basis. This caused a considerable rise in the level of public debt.

The extent of the impact of monetary policy sterilization on government domestic debt can be traced by subtracting the volume of TBs issued for financing government deficit from the total TBs issued, and then adding the T-bonds issued since 1995 to substitute TBs in the context of domestic debt restructuring (Table 7).

Table 7. Sterilization and Domestic Debt (LE bn)

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00
Outstanding TBs	4.0	17.1	30.5	35.2	26.9	27.3	33.1	38.0	25.5	25.4
TBs to finance budget deficit	--	--	0.5	0.8	2.4	1.2	1.4	1.8	2.1	2.0*
TBs issued for sterilization	4.0	17.1	30.0	34.4	24.5	26.1	31.7	36.2	23.5	23.4
T-bonds (debt restructuring)	--	--	--	--	3.0	3.0	7.0	7.0	13.0	13.0
Sterilization**	4.0	17.1	30.0	34.4	27.5	29.1	38.7	43.2	36.5	36.4
Domestic debt (DD)***	86.0	90.9	99.8	110.8	120.7	132.3	148.5	159.9	182.1	201.9
Change in Sterilization to DD (%)	4.7	14.4	12.9	4.0	(5.7)	1.2	6.5	2.8	(3.6)	(0.0)

Notes: * Provisional
** The sum of T-bonds and TBs issued for sterilization. This appears to be on the high side. It should be mentioned, however, that the MOF places at the CBE most of the sterilization proceeds as interest bearing (2 percent less than the 91-day TBs rate) deposits.
*** Domestic debt includes government and public economic authorities.
Source: MOEFT *Monthly Economic* Digest (Sept. 2000), and CBE, *Economic Review* and *Monthly Statistical Bulletin*, (several issues). For complete data, see Tables 6 & 7, Annex I.

[7] Dahan (1998) put most of the effects into a simple framework. Calvo, Leiderman and Reinhart (1996) and Frenkel (1994) emphasized the fiscal cost of sterilization and Tobin (1987) focused on the debt effect.

Based on this calculation, the increase in government domestic debt as a result of monetary policy sterilization amounted to LE 17.1 billion at end of June 1992 and increased to LE 43.2 billion by end of June 1998, accounting for 13.4 percent of GDP.

The size of the budget deficit

Tight monetary policy, along with the liberalization of interest rates and the decision not to finance any budget deficit through borrowing from the CBE, have influenced the size of the budget deficit and its service. An analysis of interest payments as a ratio of current government revenues, outlays, size of the deficit, and GDP is given in Table 8 below.

Table 8. Interest Paymentson Public Debt

	91/92	**92/93**	**93/94**	**94/95**	**95/96**	**96/97**	**97/98**	**98/99**	**99/00***
Interest payment	6,359	9,315	11,816	11,177	12,231	12,337	12,219	14,081	5,705
As a % of:									
Current expenditure	17.57	22.56	26.06	23.47	23.54	23.09	21.94	23.04	18.59
Current revenue	16.81	21.32	24.16	21.12	21.19	20.31	19.13	20.95	20.16
Overall balance	103.28	168.75	326.95	440.56	408.24	529.94	433.30	110.61	56.85
Nominal GDP	5.73	6.70	6.75	5.48	5.34	4.82	4.36	4.66	3.36
% Change in int. pay.	52.27	46.49	26.85	-5.41	9.43	5.87	-0.96	15.24	---

Note: * For the first half year only.
Source: For interest payments: MOEFT, "Monthly Economic Digest", and CBE, "Economic Review" and "Annual Report", several issues. For other data, see Tables 4 and 8, Annex I.

Interest payments registered at a record of 6.7 percent of GDP in 1992/1993 but declined thereafter. Although interest payments have pushed the size of the budget deficit upward, several factors contributed to a decline in the fiscal deficit ratio to GDP. *First,* government finances since 1992/1993 have experienced coverage revision where public sector companies' investments and financing were included in preparation for privatization. The impact of this on the reduction of the fiscal deficit was remarkable. *Second,* a progressive reduction in subsidies was implemented on a wide scale. *Third,* price adjustment was effectively carried out and supported by the gradual privatization program and the expansion of the private sector role in economic activities. All these factors helped to strictly enforce the annual targets for the overall budget deficit until 1997/1998. The deficit to GDP ratio declined from 3.5 percent in 1992/1993 to 1.0 percent in 1997/1998. (Table 9)

Table 9. Development of the Budget Deficit Ratio toGDP, 1991/1992 – 1999/2000 (%)

	90/91	**91/92**	**92/93**	**93/94**	**94/95**	**95/96**	**96/97**	**97/98**	**98/99**	**99/00***
Budget deficit to GDP Ratio	17.0	5.4	3.5	2.1	1.3	1.3	0.9	1.0	4.2	3.4

Note: * Provisional.
*Source***:** MOEFT, *Monthly Economic Digest*, (Sept. 2000); CBE, *Economic Review* and *Monthly Statistical Bulletin*, (several issues); and the Egyptian Ministry of Planning. For further data, see Tables 4 & 8a, Annex I.

The seigniorage revenue

Generally speaking, the seigniorage effect on the economy and public finance revenue is measured by the change in reserve money as a share of GDP, i.e. Δ RM/GDP (Subramanian, 1997). This is given in Table 10.

Table 10. The Seigniorage Revenue

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00
The seigniorage revenue	3.2	4.1	5.4	1.9	3.0	1.6	2.6	1.0	1.9	1.1

Source: MOEFT, *Monthly Economic Digest* (Sept. 2000); and the Egyptian Ministry of Planning; see also Table 9, Annex I.

As the table shows, the seignior age revenue was high at the beginning of the reform because monetary policy relied heavily on issuance of TBs to absorb excess liquidity emanating from capital inflows. It reached as high as 5.4 percent of GDP in 1992/1993, but then declined to 3.0 percent in 1994/1995, and then further to 1.0 percent in 1997/1998.

The swapping effect

The swapping effect of monetary policy on fiscal finances deals with the transformation of government borrowing from domestic to foreign markets to benefit from the lower cost of the latter relative to the former.

In case of Egypt, where real interest rates in 1990/1991 and the first three quarters of 1991/1992 (Table 2, Annex 1) were lower for the Egyptian pound relative to the U.S. dollar, moving to domestic borrowing was justified. Although interest rate differentials became positive and high for the pound, preference for borrowing from the domestic market continued. When T-bonds were introduced in 1994/1995 in an attempt to restructure government debt towards longer-term maturities, they also contributed to revitalizing the capital market. Furthermore, following the debt reduction and rescheduling agreement with Paris Club, restriction on government foreign borrowing continued (irrespective of interest rate differentials) to the extent that net foreign financing for the government registered an increasing net payment to abroad. Thus, the swapping effect was negative in a trade-off with the positive results on the foreign exchange market and the inflation rate. Again, this reflects an ideal degree of coordination between monetary and fiscal policies.

Coordination and Implications: 1998–2000

Fiscal and monetary policy stance

As has been demonstrated, economic performance during the first seven years of the reform program (from 1991/1992 until 1997/1998) was strong, spurred by coordination of a major fiscal consolidation and credible monetary policy with wide economic restructuring.

Less favorable trends, however, have emerged in recent years. The fiscal deficit sharply increased in 1998/1999 and 1999/2000, growth performance in the real sectors slowed down, and the balance of payments switched from a surplus into a growing overall deficit with a negative current account.

The large fiscal imbalances during the last two years indicate that Egypt's fiscal authorities switched from a tight fiscal policy to an expansionary one. (Table 11)

Table 11. Egypt: Current, capital, and overall budget position (90/91– 99/00) (in LE mn)

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00*
Current balance	-4,071	1,636	2,391	3,570	5,293	5,741	7,323	8,199	6,090	-1,546
Capital balance	-12,880	-7,793	-7,911	-7,184	-7,830	-8,737	-9,651	-11,019	-18,820	-8,489
Overall position	-16,951	-6,157	-5,520	-3,614	-2,537	-2,996	-2,328	-2,820	-12,730	-10,035

Note: * Up until March of 2000.
Source: CBE, *Economic Review* (several issues); and MOEFT, *Monthly Economic Digest* (Sept. 2000). For complete data, see Table 8, Annex I.

The large overall budget deficit in 1998/1999 was partially financed by a surplus on the current account. However, in 1999/2000 (up until March), the deficit was as a result of current (after 8-years of surpluses) and capital imbalances. Financing of the budget deficit was largely in the form of borrowing from the banking sector, especially from the CBE. This was reflected in the size of the government domestic debt (excluding economic authorities), which increased by LE 17.3 billion in 1999/2000. (See Table 7, Annex II)

On the other hand, as a result of the reversal of capital movements since the beginning of 1998, sterilization stopped. Capital outflows produced an overall deficit in the BOP to the order of US$ 2.1 billion in 1998/1999 and US$ 3.0 billion in 1999/2000.[9]

It is worth noting that the interest differential for TBs reached 4.05 percent in June 2000 and 4.3 percent for 10-year bonds. But, in view of the shortage in foreign exchange, the government domestic debt expansion, and the budget stance, there seems to be a change in policy strategy for the government towards borrowing from abroad.

Monetary policy objectives, on the other hand, remained the same. To this effect, the CBE sold foreign currency to fill the market gap and dampen the depreciation move. This led to shortage of liquidity in LE. To an extent, this seems to be consistent with the expansionary fiscal stance. Nevertheless, the CBE injected into the market during 1998/1999 alone some LE 42.0 billion in local currency through highly short-term Repos (up to 9 days). This jeopardized the exchange rate and did not resolve the longer-term nature of liquidity shortage in the Egyptian economy.

[9] For the development of capital inflows and phases of sterilization in Egypt, see El-Refaie (1998).

Implications

The expansionary fiscal policy had monetary implications, as it imposed pressure on monetary management to keep the interest rate high or further raise it. This in turn, had deflationary effects on investment, output and growth.

The new stance of fiscal policy has made it difficult for the CBE to maintain the orderly behavior of both the monetary aggregates and the credit to the private sector. This crowding out of the private sector imposed pressure on the CBE to undertake Repos to offset the resulting shortage of liquidity caused by this and the selling of foreign exchange. Thus, the new strategy of the government fiscal stance affected in many ways the conduct of monetary policy during this period and influenced liquidity, its distribution in the economy, and the exchange rate.

On the other side, the financial markets witnessed during this period large volatility over a sliding downward trend in response to high interest rates and international capital market conditions. This slowed down further development of the market towards a fully matured one. This mix of policy objectives, instruments and results strongly suggests the need for a new mode of coordination of monetary and fiscal policies.

V. The Future Mode of Coordination in Egypt

The growing budget deficit, in addition to the MOF's plan to establish a new debt management unit and the move towards a flexible exchange rate regime since June 2000 require coordination at the policy objectives and instruments level and new legal, institutional and operational arrangements to take place. However, before discussing this, a few remarks should be made to highlight the differences between the mode of coordination needed in a mature financial market versus that in economies in transition.

In economies with fully matured financial markets, the coordination of policy objectives and instruments as well as the institutional and operational arrangements of monetary and public debt management can either be achieved through: a) sharing of common objectives and the pursuit of joint actions, *or* b) market forces. In the latter case, coordination is achieved by allowing the CB to exercise operational autonomy in designing and implementing monetary policy, while the fiscal authorities operate in different segments of the financial markets. In other words, there must be a separation of debt (primary market) from monetary instruments (secondary market). In all cases, however, coordination that ensures the balanced sharing of required information and responsibilities is necessary to support the day-to-day execution of monetary and debt management and to achieve the stabilization goals (Sundararajan et al, 1994).

Based on these general characteristics, many economists argue that in countries with fully developed markets, the CB and the treasury (The MOF, in the case of Egypt) should work together to design, implement, monitor and, when necessary, revise the entire body of macroeconomic policies. They should also provide the public with information on economic progress and interpretation of the macroeconomic strategy. Furthermore, it is necessary to establish a legal framework to govern the relationship between the CB and the Treasury with clearly defined lines of responsibility. Under this framework, the CB should be granted the tools, including government securities, for conducting monetary policy without prior approval of the treasury, and be restricted to lending to the government and public entities only on market terms and in specified limits.

In economies in transition, however, stabilization and the development of financial markets are common objectives binding monetary and fiscal authorities, and monetary and public debt management policies cannot be strictly separated. Accordingly, policy coordination has to be achieved through sharing common objectives and the pursuit of joint actions.

Coordination in all cases has to be supported by concrete institutional (organizational and legal) as well as operational arrangements. To illustrate, the operation and settings of indirect monetary instruments have to take into account when determining projections of government cash flows based on programmed debt sales. Appropriate organizational arrangements are needed to facilitate such projections and related decisions on instruments. Legal and operational arrangements are also needed relating to constraints on CB credit to government, the disposition of CB profits, and the division of various debt management functions between different agencies.

The discussion of the new mode of coordination arrangements in Egypt will be organized under three main headings:

1) Coordination of policy objectives, instruments, and operations;
2) Legal arrangements; and
3) Coordination framework and the collection of information and projections.

In this exercise, reference is made to the mandates governing the relationship between the CBE and the MOF in Egypt, which comprise the Banking and Credit Law, the CBE statutes and its executive regulations, the Foreign Exchange Law, the Fiscal Budget Law, and the law for Issuance of Treasury Bonds. (See Legal Abstracts in Annex II). Reference will be also drawn on the new Public Debt Management Program (PDMP) summarized in Annex III.

The Coordination of Policy Objectives, Instruments, and Operation

If one of the fiscal objectives of a country is cost minimization of government debt service (as was spelled out in Egypt's PDMP), its attainment presupposes that debt management policies are part of a system that includes:

1) Macro policies geared towards economic stability;
2) Fully matured financial markets;
3) A regulatory framework that supports voluntary holdings of government debt;
4) Constraints that limit the CB financing of the government;
5) A requirement for maintaining positive cash balances; and
6) Responsibility placed on the CB to determine the overall monetary stance.

Not all of these six conditions are met in Egypt, especially a fully matured financial market. The result is that if cost minimization is attained, this will be at the expense of other direct or indirect (not immediate) losses on the side of monetary objectives (i.e. exchange rate risk if done through swapping, or exchange rate stability if achieved through domestic operations). Close coordination is necessary not only on objectives but also on instruments and operations, which are discussed in the following paragraphs.

Coordination Committees

In most countries, coordination in the execution of monetary and fiscal policies is achieved through the establishment of coordination committees. These committees normally meet on a regular basis to exchange information with respect to government financing requirements, analyze and discuss the results of the government cash balance projections, monitor overall liquidity and market developments, and discuss the strategy for achieving public debt and monetary management objectives. Yet, as markets develop, formal contact is generally reduced as meetings become frequent – but informal.

While the mandates of these committees vary across countries, one can observe some similarities in the activities and functions of the coordination committees in several OECD countries (Sandararjan et al, 1994). These include:

1) *Planning the regular sale of securities*, setting quarterly and yearly targets on the basis of government cash-flow needs, and assessing the absorption capacity of the market taking into account monetary policy considerations;
2) *Discussing the results of consultations with financial institutions* regarding their preferences on existing and planned debt instruments;
3) *Making changes in secondary market arrangements* (clearing and settlement, automation, regulatory and supervisory questions, etc.);

4) *Making changes in primary market arrangements* (auction procedures, the frequency of offerings, and the introduction of new instruments, etc); and

5) *Conducting studies and issuing recommendations* on longer-term issues (the use of distinct debt instruments for monetary management purposes, modernization of government securities markets, etc).

It is clear that the Egyptian authorities recognized the necessity of coordination from the beginning of the implementation of the reform program, as the CBE formed a TBs committee that involved a representative from the MOF. However, the tasks required for the future will be much wider than the responsibilities of this committee. Thus, there is a need to establish a committee to handle the five functions mentioned above that will also be mandated to make recommendations on the weekly auction volumes of TBs and the volume and timing of Repos operations.

The CBE also needs to establish a *Monetary Management Committee* to be in charge of formulating monetary and exchange rate policy, setting the parameters and the instruments for the CBE operations, making ongoing assessment of the appropriate policy stance, and ensuring that factors affecting bank reserves and money supply are consistently projected. Another committee will be required for the day-to-day setting of monetary policy instruments and the daily strategy for market intervention. Sharing of information with the MOF is critical. Included in this committee should be representatives from the MOF (the debt management unit) in addition to the ministry representative on the CBE Board of Directors.

It also seems appropriate for Egypt to establish a new *Debt Management Office* at the MOF to be in charge of policy, planning, fiscal, and accounting functions only, supported by a *Debt Management Committee*. This latter may include other external members with relevant experience and/or academic backgrounds. The CBE should continue to be in charge of primary issuance, selling, secondary market, and issuance and redemption functions.

A *Joint Coordination Committee* whose formation, tasks, procedures are clearly defined and agreed upon by the two bodies is also needed. This committee should be limited to the two institutions (CBE and MOF) and its decisions should be final.

Intervention instruments for monetary management

The coordination of operating arrangements can help to achieve debt and monetary policy goals. Three types of operating arrangements may be distinguished (Sandararajan et al, 1994):

1) *Same market (primary) / same instruments:* where government securities are used for both debt and monetary management in the primary market in the absence of a

developed secondary market. This regime is dominant in developing countries and provides the strongest degree of coordination.

2) *Same market (primary) / different instruments:* where the CB securities, special issue of treasury securities or CB credit auction is used for monetary management. The secondary market has not yet developed. This type of arrangement is dominant in countries in transition and requires a lesser degree of coordination.

3) *Different markets / same instrument:* where the primary market is used for debt and the secondary market for monetary management (OMO). This system is dominant in developed countries and requires the lowest degree of coordination.

It is essential for these three types of operational coordination that the treasury regards the interest rate as endogenous, i.e. influenced jointly by monetary management of the CB and by market conditions, which are influenced by debt management operations. (See Laurens and Piedra, 1998)

Although the legal framework in Egypt and other papers (see Presidential decree 59, article15 and State Budget Law, article 8 in Annex 2) give the CBE ample opportunity for autonomy in implementing monetary policy and conducting OMO in Egyptian government securities, in practice, the CBE does not have the instruments to do so. This is because the bulk of its government securities holdings are non-marketable even though virtually all hold near market rates (between 6 percent and 10 percent). More importantly, these securities are used as a formal cover of more than 85 percent of the currency issued. Moreover, TBs are not marketable and the CBE's holdings of T-bonds are quite small. In addition, the secondary market has not yet been fully developed. Because of this, the suitable approach to develop the secondary market is to enable the CBE to use government securities in this market for monetary management.

While the creation of the public debt management unit at the MOF is desirable for fiscal reasons (as mentioned earlier), the results of this current study point to the importance of coordination between the Ministry and the CBE in the future. This is crucial to ensure that any conflict is resolved in favor of better economic performance.

As stated in the program, where the level of financial development allows, there should in principle be a separation of debt management and monetary policy. However, when this separation is effected, two overriding considerations will be to ensure that the debt management process is not influenced by inside information on interest rate decisions and that the cost/risk minimization objective is not seen as either a justification for influencing

domestic monetary policy, or for the extension of low-cost central bank credit to the government.[8]

The institutional arrangements for public debt management and the relationship between the CB and the MOF

As a general rule, the MOF delegates debt management functions to the CB, or alternatively to a separate statutory agency (the debt management unit) so that it can focus on its primary responsibilities – financial planning of government operations, control of budgetary execution, and cash management (Sundararjan et al, 1994). However, the minimum responsibilities a CB normally has in debt management are: a) as advisor on volume, structure, and timing of government securities; b) As issuing agency and redemption agent, setting procedures for implementation; and c) As fiscal agent, i.e. playing the government cashier role, which requires government deposits to be held at the CB.

Historically, this was the case for Egypt, whose arrangements were built on the grounds of sociopolitical and economic reasons. Still, according to the position of this study, the distribution of functions as recommended above is the most suitable arrangement for Egypt, looking ahead in the medium-term.

Legal Arrangements

Limiting direct credit to the government

This issue is closely related to that of central bank independence. While it is accepted for the CB to directly lend to the government in the absence of securities markets, it is not appropriate in the context of liberalization for the government to heavily rely on the central bank to finance growing expenditures. Such actions pose a threat to macroeconomic outcomes in terms of stability and credibility. The recent trend has been to incorporate in the Central Bank Law a provision establishing limits on the total amount of outstanding CB credit to the government.

The Egyptian experience indicates that the legal limitations governing the CBE credit to the government exist (Presidential Decree No. 59, article 8 in Annex II). However, government borrowing from the CBE (mainly in overdrafts) practically exceeds these limits and is not settled at the legal due dates.

Obviously, adhering to legal mandates is crucial and should be strictly observed in the future.

[8] This postulate is quite interesting and vital because the CBE has been and is currently financing the government by way of permitting overdraft balances without any charges.

Public deficit limitation clause

There is wide-spread concern about the lack of institutional arrangements to promote fiscal discipline. A growing number of countries are considering the introduction of fiscal rules (balanced or deficit limitation clauses) such as "The Growth and Stability Pact" that has been agreed upon by the members of the European Monetary Union (Laurens and Piedra, 1998).

Although Egypt targeted budget deficit as a percentage of GDP during the stabilization program, this was not spelled out in the annual budget plans as a limitation. Moreover, after the program ended with the IMF in 1997, the fiscal deficit target was breached in 1998/1999 and 1999/2000. This is because there are neither appropriate deficit limitation clauses stipulated in the state budget law nor elsewhere.

A mandate for a deficit limitation clause would be significantly helpful in facilitating coordination in Egypt in the future.

The CB profits and losses

The profits or losses of the CB can be substantial and their treatment can have important implications for both monetary policy and public debt management. To support stabilization goals, CB profits, when distributed to the treasury, should be immediately netted out against the MOF debt to the CB rather than deposited into its current account at the CB. The budget law should consider CB profits as extraordinary revenue that should only be used to repay government debt to the CB.

As with profits, CB losses should be offset. There should be charges to the MOF in the form of a loan or placement of securities carrying market rates to be repaid within a specified period of time.

In this context, it is important to avoid "leaks" (off-budget transactions) as happened in Egypt in the last two years. It is also equally important to make appropriate arrangements in advance (to avoid a quasi-fiscal deficit caused by central bank losses or high profits) in order to support the government at the expense of monetary objectives. Notably, the transfer of annual net profit of the CBE to the government is mandatory (Presidential Decree 59, article 17 and Law 163, article 11 in Annex II), but there are no similar mandatory statements for the coverage of losses.

Mandatory statements for the coverage of losses need to be spelled out in the banking law.

Coordination Framework and the Collection of Information and Projections

Coordination at the operational level encompasses macro (monetary programming) and micro (day-to-day implementation) frameworks.

The macro framework of coordination

Monetary programming is simply a framework for designing monetary policy to achieve certain monetary targets within a specific time horizon. In practice, this captures the interaction between monetary and fiscal policy. It includes monthly and quarterly projections of key monetary aggregates (such as domestic liquidity, net domestic assets, net foreign assets, etc., included in the broad money program); and weekly and daily forecasts of the main items of the central bank balance sheet (reserve money program). The broad money program obviously reflects an assessment of the monetary stance (i.e. monetary targets) in relation to the fiscal accounts and the balance of payments. The use of indirect instruments requires a reserve money program for weekly and daily operations of the central bank.

Since 1995/1996, Egypt has moved from direct to indirect monetary management. This framework needs a policy mix to reflect the main sources of reserve money growth (the counterpart items on the CBE balance sheet), i.e. net credit to the government, net credit to the banking sector, and net foreign assets. The effectiveness of this indirect monetary management is highly related to the institutional arrangements governing the relationship between the CBE and the MOF to ensure fiscal discipline. Also in addition to Repos, the CBE should be carrying out OMO using marketable government securities. Clearly coordination to ensure consistency with debt management operations is necessary.

As Egypt achieves higher degrees of financial sophistication and development, more reliance on interest rates and market mechanisms for policy coordination may be considered.[10] At this stage, the full PDMP could be implemented in way that coordination would rely on market signals and informal means. In such a case, cost minimization of public debt management would have a significant scope.

Micro framework of coordination

The micro framework of coordination refers to the cash flow projections that help the CB daily monetary management. It relates, therefore, to government cash balances, the level of CB credit to the government and other governmental bodies (as permissible). Whether a single account for the treasury at the CB is followed, or the government is allowed to place deposits with commercial banks for cost minimization reasons, information on cash-flow forecasts will need to be shared for both the debt and monetary management.[11] This is crucial for monetary policy to decide, in addition to the amount, the timing of the central bank intervention. Obviously, if forecast methods used by the MOF and the CB are efficient, each may perform its forecasting independently (because they

[10] Sustainable monetary and fiscal policy stances would be always required, especially fiscal discipline as it takes quite a long time to alter fiscal stance through policy actions.
[11] Such as in the UK, USA, Germany, Canada, France, and Malaysia (see Laurens and Piedra, 1998).

are supposed to be so close) (see Sandararajan et al, 1994). Reliance on a one party forecast in a developing country like Egypt is not advisable. Discussion of forecasts between the two bodies is crucial and necessitates in all cases mandatory schemes.

VI. Conclusion

This paper found that until 1997/1998, the coordination of monetary and fiscal policies in Egypt was highly successful, but that the new trend in fiscal policy stance and debt management arrangements (the establishment of a new PDMP with a new unit for debt management at the MOF) and the changes in the exchange rate regime since June 2000 towards more flexibility necessitate a new concrete mode of coordination.

The paper concludes that: a) it is too early to separate completely the debt from monetary management. But, looking ahead, preparation for a separate public debt management office is useful; b) it is necessary to establish a public debt unit (fully automated) at the MOF with certain functions (managing cash balances, measuring the records for flow and stock of debt, and formulating a debt program); c) establishment of committees within the MOF and the CBE as well as a joint coordination committee whose decisions are final need to be made; and d) several legal mandates to assist this process relating in particular to the formation of committees, deficit limitations, limitations on credit to the government, division of responsibilities of public debt management, and the treatment of the CB profits and losses are necessary.

Needless to say that a demarcation line of responsibilities between the different bodies, identification of the tasks of each committee in a clear manner, the design of the best ways and means of their functioning, as well as methods used to ensure adherence to the mandates and laws are all necessary prerequisites for a successful mode of coordination of monetary and fiscal policies in Egypt in the future.

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ANNEX I

STATISTICAL TABLES

Table 1. Egypt: Volatility of Exchange Rate and International Reserves*, 1991-2000

	Nominal Exchange Rate	Volatility of the Exchange Rate**	NIR (US$)	NIR (LE)	Change in NIR	Reserve Money	Volatility of NIR***
90 / 91							
June	3.341	0.120	3,856	12,884	219	29,963	0.69
91 / 92							
July	3.329	0.359	3,877	12,907	24	31,071	0.08
August	3.319	0.300	4,094	13,587	680	31,379	2.19
September	3.318	0.030	4,260	14,134	547	31,990	1.74
October	3.321	0.090	4,723	15,684	1,550	31,869	4.84
November	3.323	0.060	4,813	15,995	310	32,020	0.97
December	3.332	0.271	5,325	17,744	1,749	32,356	5.46
January	3.321	0.330	5,605	18,614	870	31,499	2.69
February	3.323	0.060	5,796	19,260	646	32,782	2.05
March	3.321	0.060	6,381	21,190	1,930	33,336	5.89
April	3.321	0.000	6,592	21,894	704	33,656	2.11
May	3.319	0.060	6,998	23,225	1,331	32,495	3.95
June	3.321	0.060	8,108	26,926	3,701	32,629	11.39
92 /93							
July	3.320	0.030	8,053	26,737	-189	34,257	-0.58
August	3.322	0.060	8,610	28,603	1,866	34,970	5.45
September	3.319	0.090	9,641	31,998	3,395	32,867	9.71
October	3.317	0.060	10,244	33,978	1,980	35,450	6.03
November	3.325	0.241	10,387	34,537	559	36,655	1.58
December	3.339	0.421	10,810	36,094	1,557	35,712	4.25
January	3.338	0.030	11,411	38,091	1,997	35,274	5.59
February	3.341	0.090	11,851	39,595	1,504	34,983	4.26
March	3.342	0.030	11,378	38,026	-1,569	36,757	-4.48
April	3.340	0.060	11,367	37,967	-59	36,522	-0.16
May	3.350	0.299	11,702	39,201	1,234	38,729	3.38
June	3.352	0.060	11,670	39,117	-84	39,016	-0.22
93 / 94							
July	3.362	0.298	10,970	36,880	-2,236	40,293	-5.73
August	3.355	0.208	11,488	38,541	1,660	40,316	4.12
September	3.361	0.179	12,002	40,337	1,796	38,069	4.46
October	3.365	0.119	12,235	41,169	832	40,081	2.19
November	3.369	0.119	12,598	42,444	1,275	41,739	3.18
December	3.372	0.089	12,904	43,513	1,069	42,554	2.56
January	3.377	0.148	12,766	43,111	-401	43,826	-0.94
February	3.380	0.089	12,696	42,912	-199	43,091	-0.45
March	3.380	0.000	12,832	43,371	459	41,945	1.07
April	3.380	0.000	12,795	43,247	-125	43,417	-0.30
May	3.380	0.000	13,149	44,442	1,196	45,109	2.75
June	3.390	0.284	13,381	45,357	914	42,248	2.03
94 / 95							
July	3.397	0.227	13,316	45,237	-119	44,075	-0.28
August	3.386	0.332	13,416	45,428	190	45,173	0.43
September	3.386	0.012	13,739	46,514	1,086	47,481	2.41
October	3.391	0.159	13,723	46,533	19	48,352	0.04
November	3.397	0.177	13,797	46,867	333	48,533	0.69
December	3.391	0.177	13,481	45,713	-1,153	47,888	-2.38
January	3.392	0.029	13,307	45,138	-575	46,502	-1.20
February	3.391	0.029	13,450	45,608	470	46,630	1.01
March	3.389	0.059	13,824	46,849	1,240	47,556	2.66
April	3.390	0.030	13,794	46,761	-88	45,255	-0.18
May	3.390	0.000	16,624	56,355	9,594	48,227	21.20
June	3.395	0.147	16,015	54,372	-1,983	49,973	-4.11

Table 1. Egypt: Volatility of Exchange Rate and International Reserves*, 1991-2000 (continued)

	Nominal Exchange Rate	Volatility of the Exchange Rate**	NIR (US$)	NIR (LE)	Change in NIR	Reserve Money	Volatility of NIR***
95 / 96							
July	3.392	0.088	16,165	54,831	459	50,091	0.92
August	3.393	0.029	16,075	54,541	-290	50,321	-0.58
September	3.390	0.088	16,404	55,608	1,067	50,661	2.12
October	3.392	0.059	16,410	55,661	53	50,302	0.10
November	3.390	0.059	16,488	55,894	233	51,253	0.46
December	3.390	0.003	16,181	54,856	-1,038	45,730	-2.03
January	3.392	0.056	17,853	60,557	5,702	44,727	12.47
February	3.387	0.147	18,029	61,064	507	44,554	1.13
March	3.392	0.148	18,278	61,999	935	46,629	2.10
April	3.393	0.029	18,448	62,594	595	46,274	1.28
May	3.391	0.059	18,544	62,883	289	47,122	0.62
June	3.393	0.059	18,491	62,740	-143	46,523	-0.30
96 / 97							
July	3.392	0.029	18,325	62,158	-582	46,949	-1.25
August	3.388	0.118	18,466	62,563	404	47,098	0.86
September	3.389	0.030	18,407	62,381	-181	45,625	-0.39
October	3.388	0.030	18,675	63,271	890	46,913	1.95
November	3.388	0.000	18,929	64,131	861	47,901	1.83
December	3.388	0.000	19,132	64,819	688	48,088	1.44
January	3.390	0.059	18,755	63,579	-1,240	47,723	-2.58
February	3.389	0.029	19,004	64,405	825	49,595	1.73
March	3.389	0.000	19,482	66,024	1,620	50,184	3.27
April	3.389	0.000	19,746	66,919	895	52,397	1.78
May	3.389	0.000	20,199	68,454	1,535	53,872	2.93
June	3.389	0.000	20,346	68,953	498	53,162	0.92
97 / 98							
July	3.389	0.000	20,277	68,719	-234	53,682	-0.44
August	3.389	0.000	20,493	69,451	732	56,271	1.36
September	3.389	0.000	20,647	69,973	522	55,405	0.93
October	3.388	0.030	20,565	69,674	-298	53,962	-0.54
November	3.388	0.000	20,421	69,186	-488	54,292	-0.90
December	3.388	0.000	20,211	68,475	-711	54,412	-1.31
January	3.388	0.000	20,340	68,912	437	54,438	0.80
February	3.388	0.000	20,077	68,021	-891	55,313	-1.64
March	3.388	0.000	20,115	68,150	129	53,847	0.23
April	3.388	0.000	20,188	68,397	247	54,611	0.46
May	3.388	0.000	20,157	68,292	-105	55,817	-0.19
June	3.388	0.000	20,118	68,160	-132	55,961	-0.24
98 / 99							
July	3.388	0.000	20,066	67,984	-176	57,903	-0.31
August	3.388	0.000	20,128	68,194	210	58,491	0.36
September	3.388	0.000	20,183	68,380	186	58,553	0.32
October	3.388	0.000	20,049	67,926	-454	57,275	-0.78
November	3.388	0.003	20,004	67,776	-150	57,541	-0.26
December	3.388	0.000	19,801	67,088	-688	59,194	-1.20
January	3.388	0.000	19,503	66,078	-1,010	60,735	-1.71
February	3.389	0.032	19,319	65,476	-602	59,627	-0.99
March	3.395	0.171	18,920	64,233	-1,243	62,040	-2.08
April	3.396	0.027	18,690	63,469	-764	60,069	-1.23
May	3.396	0.000	18,226	61,894	-1,576	60,102	-2.62
June	3.396	0.003	18,066	61,352	-542	61,831	-0.90

Table 1. Egypt: Volatility of Exchange Rate and International Reserves*, 1991-2000 (continued)

	Nominal Exchange Rate	Volatility of the Exchange Rate	NIR (US$)	NIR (LE)	Change in NIR	Reserve Money	Volatility of NIR
99 / 00							
July	3.396	0.000	17,582	59,708	-1,644	63,463	-2.66
August	3.396	0.012	17,471	59,339	-370	63,633	-0.58
September	3.396	0.000	17,030	57,841	-1,498	62,093	-2.35
October	3.397	0.003	16,558	56,239	-1,601	63,961	-2.58
November	3.400	0.103	16,176	54,998	-1,241	65,145	-1.94
December	3.405	0.147	15,632	53,227	-1,771	63,736	-2.72
January	3.405	0.000	15,176	51,674	-1,553	64,569	-2.44
February	3.410	0.147	15,099	51,488	-187	64,214	-0.29
March	3.413	0.091	15,031	51,302	-185	64,921	-0.29
April	3.415	0.059	15,004	51,240	-62	64,090	-0.10
May	3.421	0.179	15,068	51,551	310	64,631	0.48
June	3.446	0.725	15,130	52,138	587	65,693	0.91

Notes: * End of month data for the nominal exchange rate (ER), net international reserves (NIR), and reserve money (RM). ER is for purchase (transfers). NIR is defined as total international reserves minus short-term (one year) foreign liabilities.
** Volatility of the Exchange Rate: Volatility of the ER measured by the absolute monthly percentage changes in the nominal official exchange rate as announced by the CBE.
*** Volatility of NIR: Volatility of NIR measured by the yearly average of the absolute monthly change in NIR relative to the reserve money (RM) lagged one month.

Source: Raw data for nominal ER, NIR, and RM are collected from: CBE, "Economic Review", "Monthly Statistical Bulletin", several issues, and IMF, "IFS' CD-ROM, May 2000.

Table 1a. Daily Exchange Rate of L.E. against US$, May-Nov. 2000 (in Piasters)

Working Day	Transfer			Banknote		
	Purchase	Sale	Difference*	Purchase	Sale	Difference*
May 1	343.1	343.7	0.6	343.1	343.7	0.6
2	343.1	343.7	0.6	343.1	343.7	0.6
3	343.1	343.7	0.6	343.1	343.7	0.6
4	343.1	343.7	0.6	343.1	343.7	0.6
7	343.3	343.9	0.6	343.3	343.9	0.6
8	343.7	343.7	0	343.5	343.7	0.2
9	343.7	343.7	0	343.5	343.7	0.2
10	343.7	343.7	0	343.5	343.7	0.2
11	343.7	343.7	0	343.5	343.7	0.2
14	343.7	343.7	0	343.5	343.7	0.2
15	343.7	343.7	0	343.5	343.7	0.2
16	343.7	343.7	0	343.5	343.7	0.2
17	343.7	343.7	0	343.5	343.7	0.2
18	343.8	344.5	0.7	343.8	344.5	0.7
21	343.8	344.5	0.7	343.8	344.5	0.7
22	343.7	343.7	0	343.5	343.7	0.2
23	343.7	343.7	0	343.5	343.7	0.2
24	344.0	343.7	-0.3	344.0	344.7	0.7
25	344.0	343.7	-0.3	344.0	344.7	0.7
28	344.0	343.7	-0.3	344.0	344.7	0.7
29	344.0	343.7	-0.3	344.0	344.7	0.7
30	343.7	343.7	0	343.5	343.7	0.2
31	343.7	343.7	0	343.5	343.7	0.2
June 1	344.0	344.7	0.7	344.0	344.7	0.7
4	344.0	344.7	0.7	344.0	344.7	0.7
5	344.0	344.7	0.7	344.0	344.7	0.7
6	344.0	344.7	0.7	344.0	344.7	0.7
7	344.0	344.7	0.7	344.0	344.7	0.7
8	345.0	345.7	0.7	345.0	345.7	0.7
11	345.0	345.7	0.7	345.0	345.7	0.7
12	345.0	345.7	0.7	345.0	345.7	0.7
13	345.0	345.7	0.7	345.0	345.7	0.7
14	345.0	345.7	0.7	345.0	345.7	0.7
15	345.0	345.7	0.7	345.0	345.7	0.7
18	346.0	346.7	0.7	346.0	346.7	0.7
19	345.0	345.7	0.7	345.0	345.7	0.7
20	346.5	347.2	0.7	346.5	347.2	0.7
21	346.5	347.2	0.7	346.5	347.2	0.7
22	346.5	347.2	0.7	346.5	347.2	0.7
25	346.5	347.2	0.7	346.5	347.2	0.7
26	346.5	347.2	0.7	346.5	347.2	0.7
27	346.5	347.2	0.7	346.5	347.2	0.7
28	346.5	347.2	0.7	346.5	347.2	0.7
29	346.5	347.2	0.7	346.5	347.2	0.7

Table 1a. Daily Exchange Rate of L.E. against US$,May-Nov.2000, (in Piasters) **(continued)**

Working Day	Transfer			Banknote		
	Purchase	Sale	Difference*	Purchase	Sale	Difference*
Jul. 2	346.5	347.2	0.7	346.5	347.2	0.7
3	347.0	347.7	0.7	347.0	347.7	0.7
4	346.5	347.2	0.7	346.5	347.2	0.7
5	347.0	347.7	0.7	347.0	347.7	0.7
6	347.0	347.7	0.7	347.0	347.7	0.7
9	347.0	347.7	0.7	347.0	347.7	0.7
10	347.0	347.7	0.7	347.0	347.7	0.7
11	347.0	347.7	0.7	347.0	347.7	0.7
12	347.0	347.7	0.7	347.0	347.7	0.7
13	347.0	347.7	0.7	347.0	347.7	0.7
16	347.0	347.7	0.7	347.0	347.7	0.7
17	345.0	345.7	0.7	345.0	345.7	0.7
18	345.0	345.7	0.7	345.0	345.7	0.7
19	345.0	345.7	0.7	345.0	345.7	0.7
20	345.0	345.7	0.7	345.0	345.7	0.7
23	347.3	348.8	1.5	347.3	348.8	1.5
24	345.0	345.7	0.7	345.0	345.7	0.7
25	345.0	345.7	0.7	345.0	345.7	0.7
26	345.0	345.7	0.7	345.0	345.7	0.7
27	345.0	345.7	0.7	345.0	345.7	0.7
30	347.3	348.8	1.5	347.3	345.8	-1.5
31	345.0	345.7	0.7	345.0	345.7	0.7
Aug. 1	345.0	345.7	0.7	345.0	345.7	0.7
2	348.2	349.6	1.4	348.2	349.6	1.4
3	348.2	349.6	1.4	348.2	349.6	1.4
6	348.2	349.6	1.4	348.2	349.6	1.4
7	345.0	345.7	0.7	345.0	345.7	0.7
8	348.2	349.6	1.4	348.2	349.6	1.4
9	348.2	349.6	1.4	348.2	349.6	1.4
10	348.2	349.6	1.4	348.2	349.6	1.4
13	348.4	349.8	1.4	348.4	349.8	1.4
14	345.0	345.7	0.7	345.0	345.7	0.7
15	345.0	345.7	0.7	345.0	345.7	0.7
16	345.0	345.7	0.7	345.0	345.7	0.7
17	345.0	345.7	0.7	345.0	345.7	0.7
20	348.4	349.8	1.4	348.4	349.8	1.4
21	345.0	345.7	0.7	345.0	345.7	0.7
22	348.0	349.8	1.8	348.4	349.8	1.4
23	348.0	349.8	1.8	348.4	349.8	1.4
24	348.9	350.3	1.4	348.9	350.3	1.4
27	348.9	350.3	1.4	348.9	350.3	1.4
28	349.9	350.3	0.4	349.9	350.3	0.4
29	349.9	350.3	0.4	349.9	350.3	0.4
30	349.1	350.5	1.4	349.1	350.5	1.4
31	349.1	350.5	1.4	349.1	350.5	1.4

Table (1a): Daily Exchange Rate of L.E. against US$ (in Piasters) **(continued**

Working Day	Transfer			Banknote		
	Purchase	Sale	Difference*	Purchase	Sale	Difference*
Sept. 3	350.2	351.6	1.4	350.2	351.6	1.4
4	349.9	350.3	0.4	349.9	350.3	0.4
5	349.9	350.3	0.4	349.9	350.3	0.4
6	349.9	350.3	0.4	349.9	350.3	0.4
7	350.2	351.6	1.4	350.2	351.6	1.4
10	350.2	351.6	1.4	350.2	351.6	1.4
11	349.9	350.3	0.4	349.9	350.3	0.4
12	350.2	351.6	1.4	350.2	351.6	1.4
13	350.2	351.6	1.4	350.2	351.6	1.4
14	350.2	351.6	1.4	350.2	351.6	1.4
17	350.2	351.6	1.4	350.2	351.6	1.4
18	349.9	350.3	0.4	349.9	350.3	0.4
19	349.9	350.3	0.4	349.9	350.3	0.4
20	349.9	350.3	0.4	349.9	350.3	0.4
21	349.9	350.3	0.4	349.9	350.3	0.4
24	350.2	351.6	1.4	350.2	351.6	1.4
25	350.2	351.6	1.4	350.2	351.6	1.4
26	352.2	353.6	1.4	352.2	353.6	1.4
27	352.2	353.6	1.4	352.2	353.6	1.4
28	352.2	353.6	1.4	352.2	353.6	1.4
Oct. 1	354.5	356.0	1.5	354.5	356.0	1.5
2	355.5	357.0	1.5	355.5	357.0	1.5
3	355.5	357.0	1.5	355.5	357.0	1.5
4	359.5	361.0	1.5	359.5	361.0	1.5
5	359.5	361.0	1.5	359.5	361.0	1.5
8	359.5	361.0	1.5	359.5	361.0	1.5
9	365.0	366.0	1	365.5	366.0	0.5
10	365.0	366.0	1	365.5	366.0	0.5
11	366.0	368.5	2.5	366.0	368.5	2.5
12	366.0	368.5	2.5	366.0	368.5	2.5
15	366.0	368.5	2.5	366.0	368.5	2.5
16	366.0	368.5	2.5	366.0	368.5	2.5
17	368.0	370.0	2	368.0	370.0	2
18	366.0	368.5	2.5	366.0	368.5	2.5
19	368.0	370.0	2	368.0	370.0	2
22	369.0	371.0	2	369.0	371.0	2
23	366.0	368.5	2.5	366.0	368.5	2.5
24	369.0	371.0	2	369.0	371.0	2
25	369.0	371.0	2	369.0	371.0	2
26	369.0	371.0	2	369.0	371.0	2
29	369.0	371.0	2	369.0	371.0	2
30	369.0	371.0	2	369.0	371.0	2
31	369.0	371.0	2	369.0	371.0	2
Nov. 1	369.0	371.0	2	369.0	371.0	2
2	369.0	371.0	2	369.0	371.0	2
5	369.0	371.0	2	369.0	371.0	2

Note: * Sale minus purchase. ***Source****:* Al-Ahram Daily Newspaper.

Table 2. Nominal and Real Interest Rates for 3-month Deposits (Egyptian Pound vs. the US Dollar) and Real Differentials, 90/91 – 99/00

	Egypt			United States			RIR****
	Inflation*	Nom-IR**	RIR	Inflation*	Nom-IR***	RIR	Differential
90/91							
Q3	15.1	12.00	-3.10	5.28	6.71	1.43	-4.53
Q4	20.7	13.60	-7.10	4.85	6.01	1.16	-8.26
91/92							
Q1	24.3	15.40	-8.90	3.88	5.7	1.82	-10.72
Q2	25.8	16.18	-9.62	2.99	4.91	1.92	-11.54
Q3	21.0	17.09	-3.91	2.87	4.12	1.25	-5.16
Q4	9.7	16.74	7.04	3.09	3.89	0.80	6.24
92/93							
Q1	9.0	16.30	7.30	3.09	3.27	0.18	7.12
Q2	9.3	15.12	5.82	3.05	3.44	0.39	5.43
Q3	12.8	14.50	1.70	3.20	3.14	-0.06	1.76
Q4	15.0	13.49	-1.51	3.15	3.13	-0.02	-1.49
93/94							
Q1	11.2	12.76	1.56	2.75	3.14	0.39	1.17
Q2	9.7	12.07	2.37	2.73	3.28	0.55	1.82
Q3	7.4	11.22	3.82	2.51	3.45	0.94	2.88
Q4	6.4	10.81	4.41	2.38	4.35	1.97	2.44
94/95							
Q1	8.2	10.25	2.05	2.88	4.86	1.98	0.07
Q2	12.0	10.00	-2.00	2.66	5.86	3.20	-5.20
Q3	9.4	10.00	0.60	2.84	6.18	3.34	-2.74
Q4	9.9	10.00	0.10	3.10	6.01	2.91	-2.81
95/96							
Q1	8.2	10.50	2.30	2.64	5.76	3.12	-0.82
Q2	5.8	10.41	4.61	2.65	5.72	3.07	1.54
Q3	6.7	10.16	3.46	2.75	5.28	2.53	0.93
Q4	8.3	10.16	1.86	2.84	5.39	2.55	-0.69
96/97							
Q1	7.8	9.90	2.10	2.94	5.48	2.54	-0.44
Q2	5.4	9.90	4.50	3.18	5.41	2.23	2.27
Q3	5.5	10.10	4.60	2.93	5.44	2.51	2.09
Q4	4.8	9.85	5.05	2.32	5.69	3.37	1.68
97/98							
Q1	4.0	9.60	5.60	2.16	5.60	3.44	2.16
Q2	4.0	9.55	5.55	1.91	5.73	3.82	1.73
Q3	3.4	9.65	6.25	1.48	5.55	4.07	2.18
Q4	3.6	9.00	5.40	1.63	5.59	3.96	1.44
98/99							
Q1	4.7	9.15	4.45	1.64	5.53	3.89	0.56
Q2	3.6	9.00	5.40	1.51	5.20	3.69	1.71
Q3	3.8	9.01	5.21	1.67	4.90	3.23	1.98
Q4	2.9	9.14	6.24	2.12	4.98	2.86	3.38
99/00							
Q1	2.4	9.31	6.91	2.35	5.38	3.03	3.88
Q2	3.2	9.33	6.13	2.62	6.06	3.44	2.69
Q3	3.0	9.33	6.33	3.22	6.03	2.81	3.52
Q4	2.5	9.29	6.79	3.24	6.57	3.33	3.46

Notes: * Inflation rate for the year ending the reference period (month/month).
** Banks average nominal interest rate (Nom-IR) for 3-months deposits.
*** Unweighted average of offered rates quoted by at least five dealers early in the day for 3-month certificate of deposits in the secondary market. Monthly figures are averages of business day data.
**** The difference between real interest rate (RIR) on the Egyptian pound and the US Dollar.

Source: Inflation rates and Nom-IR are collected from: CAPMAS "Monthly Statistical Bulletin of Consumer Price Index", several issues; MOEFT "Monthly Economic Digest", September 2000; CBE "Monthly Statistical Bulletin" and "Economic Review', several issues; IMF, IFS, CD-Rom, May 2000 and "IFS", October 2000.

Table 2a. Real Interest Rates for the Egyptian Pound and the US Dollar (TBs Rates), 90/91 –99/00

	Egypt			United States			RIR***
	Inflation	TBs*	RIR	Inflation	TBs**	RIR	Differential
90/91							
Q3	15.1	18.00	2.90	5.28	6.05	0.77	2.13
Q4	20.7	19.20	-1.50	4.85	5.59	0.74	-2.24
91/92							
Q1	24.3	19.40	-4.90	3.88	5.41	1.53	-6.43
Q2	25.8	18.10	-7.70	2.99	4.58	1.59	-9.29
Q3	21.0	17.90	-3.10	2.87	3.91	1.04	-4.14
Q4	9.7	17.60	7.90	3.09	3.72	0.63	7.27
92/93							
Q1	9.0	17.10	8.10	3.09	3.13	0.04	8.06
Q2	9.3	16.50	7.20	3.05	3.08	0.03	7.17
Q3	12.8	15.90	3.10	3.20	2.99	-0.21	3.31
Q4	15.0	14.90	-0.10	3.15	2.98	-0.17	0.07
93/94							
Q1	11.2	14.80	3.60	2.75	3.02	0.27	3.33
Q2	9.7	14.10	4.40	2.73	3.08	0.35	4.05
Q3	7.4	13.80	6.40	2.51	3.25	0.74	5.66
Q4	6.4	12.50	6.10	2.38	4.04	1.66	4.44
94/95							
Q1	8.2	11.40	3.20	2.88	4.51	1.63	1.57
Q2	12.0	10.80	-1.20	2.66	5.28	2.62	-3.82
Q3	9.4	10.90	1.50	2.84	5.78	2.94	-1.44
Q4	9.9	10.90	1.00	3.10	5.62	2.52	-1.52
95/96							
Q1	8.2	10.70	2.50	2.64	5.38	2.74	-0.24
Q2	5.8	10.50	4.70	2.65	5.27	2.62	2.08
Q3	6.7	10.20	3.50	2.75	4.95	2.20	1.30
Q4	8.3	10.20	1.90	2.84	5.04	2.20	-0.30
96/97							
Q1	7.8	10.20	2.40	2.94	5.14	2.20	0.20
Q2	5.4	10.10	4.70	3.18	4.97	1.79	2.91
Q3	5.5	9.70	4.20	2.93	5.06	2.13	2.07
Q4	4.8	8.92	4.12	2.32	5.07	2.75	1.37
97/98							
Q1	4.0	8.80	4.80	2.16	5.06	2.90	1.90
Q2	4.0	8.81	4.81	1.91	5.09	3.18	1.64
Q3	3.4	8.81	5.41	1.48	5.08	3.60	1.81
Q4	3.6	8.82	5.22	1.63	5.01	3.38	1.84
98/99							
Q1	4.7	8.82	4.12	1.64	4.88	3.24	0.87
Q2	3.6	8.82	5.22	1.51	4.31	2.80	2.42
Q3	3.8	8.84	5.04	1.67	4.42	2.75	2.28
Q4	2.9	8.85	5.95	2.12	4.46	2.34	3.60
99/00							
Q1	2.4	8.90	6.50	2.35	4.70	2.35	4.15
Q2	3.2	9.05	5.85	2.62	5.06	2.44	3.41
Q3	3.0	9.08	6.08	3.22	5.54	2.32	3.76
Q4	2.5	9.09	6.59	3.24	5.78	2.54	4.05

Notes: * 91-days bills, last auction in the month.
** Discount on new issues of 3-month bills and annual averages of these.
*** See definitions and abbreviations in Table (2)

Source: Inflation rates and Nom-IR are collected from: CAPMAS "Monthly Statistical Bulletin of Consumer Price Index", several issues; MOEFT "Monthly Economic Digest", September 2000; CBE "Monthly Statistical Bulletin" and "Economic Review', several issues; IMF, IFS, CD-Rom, May 2000 and "IFS", October 2000.

Table 2b. Real Interest Rates for Egyptian Pounds and US Dollar Treasury Bonds, 1995-1999 (%)

	Egyptian Treasury Bonds						US Bonds*			
	Issue Date	Maturity Date	Nominal Interest Rate	Value (LE bn)	Inflation Rate	Real Interest Rate		Nominal Interest Rate	Inflation Rate	Real Inflation Rate
5-year bonds	01/05/95	01/05/00	12	3.0	9.9	2.1	**3-year bonds**	5.8	2.9	2.9
							10-year bonds	6.2	2.9	3.3
7-year bonds	01/10/96	01/10/03	11	4.0						
	16/08/98	16/08/05	10	0.5						
	16/09/98	16/09/05	10	0.5						
	16/10/98	16/10/05	10	0.5						
	15/01/99	15/01/06	10	0.5						
	03/05/00	03/05/07	11	2.0						
10-year bonds	01/03/99	01/03/09	9.5	2.0	2.5		**10-year bonds**	5.23	2.0	3.23
	16/04/99	16/04/09	10	2.0	2.5			5.18	2.0	3.18

Note: * US Governmnet bonds are issued in 3- and 10-year maturities only.
Source: CBE, "Monthly Statistical Bulletin", October and July 2000.

Table 3. Egypt: Discount Rates on the Egyptian Pound, 1991 – 2000 (%)

End of period	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
March	20.00	20.00	18.00	16.00	14.00	13.50	12.75	12.25	12.00	12.00
June	21.00	19.80	17.00	15.25	14.00	13.50	12.25	12.25	12.00	12.00
September	21.30	19.10	16.90	14.50	14.00	13.50	12.25	12.25	12.00	--
December	20.00	18.40	16.50	14.00	13.50	13.00	12.25	12.00	12.00	--

Source: CBE, "Economic Review" and "Monthly Statistical Bulletin" several issues.

Table 4. Egypt Nominal GDP and Domestic Liquidity, 91/92 – 99/00 (LE bn)

	Domestic Liquidity	GDP (Nominal)
91/92	104.6	111.0
92/93	121.8	139.0
93/94	137.7	175.6
94/95	152.6	204.8
95/96	168.5	229.5
96/97	193.9	256.5
97/98	210.5	280.5
98/99	234.6	302.4
99//00	255.3	339.0

Source: MOEFT, "Monthly Economic Digest", September 2000, and CBE, "Monthly Statistical Bulletin", several issues, and ministry of planning.

Table 5. Development of the Capital Market in Egypt, 90/91 – 99/00 (LE bn)

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00
No. of listed companies	582	635	654	672	718	680	661	702	960	1,036
No. of traded companies	218	239	264	300	352	354	416	551	663	545
Capitalization (market value)	n.a.	n.a.	n.a.	11,324	21,965	29,743	61,503	70,873	94,843	119,734
Capitalization (nominal capital)	5,718	6489	8,432	8,936	9,476	12,552	14,663	23,172	40,897	69,535
Value of trading	**457**	**1020**	**1,078**	**1,538**	**2,977**	**5,225**	**19,634**	**81,999**	**30,875**	**51,189**
Listed shares and bonds	n.a.	553	615	703	1,583	3,741	16,643	18,358	24,940	44,938
Unlisted (over the counter)	n.a.	467	463	835	1,394	1,484	2,991	3,641	5,935	6,251
In bonds	19	68	32	7	4	4	302	792	1,814	2,532
In shares**	438	952	1,046	1,531	2,973	5,221	19,332	21,207	29,061	48,657
Market index CMA	**--**	**100**	**124.4**	**176.8**	**219.7**	**204.6**	**348.1**	**363.9**	**480.3**	**615.2**

Notes: *Calendar year.

** denominated in LE or foreign currency

Source: CMA and CBE (Department of Economic Research).

Table 6. Egypt: Outstanding balances of TBs and T-bonds, 90/91 – 99/00 (LE mn)

	Treasury Bills				T-Bonds
End-June	**3-months**	**6-months**	**One-year**	**Total**	
90/91	4006.7*	0	0	4006.7	--
91/92	6296.0	8405.8	2351.4	17053.2	--
92/93	5564.0	8364.0	16608.0	30536.0	--
93/94	5421.0	9375.0	20375.0	35171.0	--
94/95	4049.0	5284.0	17549.0	26882.0	3000
95/96	8660.0	18622.0	0	27282.0	3000
96/97	11902.0	18829.0	2400.0	33131.0	7000
97/98	9635.0	17220.0	11145.0	38000.0	7000
98/99	6495.0	7918.0	11145.0	25558.0	13000
99/00	5585.0	8676.0	11132.0	25393.0	13000

Note: * The first issue was in January 3, 1991.
Source: MOEFT, "Monthly Economic Digest", September 2000; CBE, "Economic Review", and "Monthly Statistical Bulletin", several issues.

Table 6a. Egypt: CBE Invited Deposits, 1994 -2000 (LE mn)

End of		**Value**
March	1994	1400
June	1994	1400
September	1994	1250
December	1994	1400
March	1995	1250
June	1995	1100
September	1995	1100
December	1995	1000
March	1996	1000
June	1996	1200
September	1996	700
December	1996	1200
March	1997	900
June	1997	1600
September	1997	1700
December	1997	1400
March	1998	300
June	1998*	300

Note: *No invited deposits (deposits in LE accepted by the CBE from banks with interest to absorb excess liquidity) were made from July 1998 till June 2000 because of shortage of liquidity.

Source: El-Refaie, F. (1998), "The Conduct of Monetary Policy with an Open Capital Account", MDF, Sept. (Morocco), and CBE, "Annual Report" 98/99.

Table 6b. Egypt: Repos operations & Total Outstanding Balance s, 93/94 – 99/00 (LE mn)

	Operations (Nominal Value)	Duration (Days)
93 / 94		
27/06	15.0	14
25/08	8.0	14
28/09	5.0	14
26/10	10.0	14
30/11	20.0	14
28/12	5.0	14
25/01	5.0	14
22/02	5.0	14
29/03	10.0	14
26/04	71.3	14
24/05	5.5	14
Total	**159.8**	
94 / 95		
05/07	125.0	14
16/08	0.5	14
07/03	82.0	14
16/05	11.2	14
Total	**218.7**	
95 / 96		
--	**--**	
96 / 97		
18/08	20.50	14
01/10	0.5	14
06/11	328.1	14
20/11	400.0	14
03/12	365.0	14
10/12	400.0	14
17/12	306.0	14
24/12	262.6	14
08/01	479.0	13
14/01	137.1	14
02/02	878.0	4
11/02	331.0	9
16/02	331.5	4
23/02	296.0	4
Total	**4535.3**	
97 / 98		
04/11	455.0	9
11/11	211.0	9
18/11	132.6	9
02/12	276.0	9
09/12	170.0	9
16/12	301.0	9
Total	**1770.6**	

Outstanding balances	
During 97/98	7500.0
During July-Dec 99/00	60100.0
During 98/99	9940.0

Source: CBE, "Annual Report, 98/99 and El Refaie, F. (1998), "The Conduct of Monetary Policy with an Open Capital Account", MDF, Sept. (Morocco).

Table 7. Egypt Public & Government Debt, 89/90 – 99/00

end of	89/90	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00
	(LE mn)										
Domestic Debt	**66,554**	**86,029**	**90,938**	**99,766**	**110,787**	**120,747**	**132,257**	**148,470**	**159,919**	**182,071**	**201,927**
Government Domestic Debt	**55,845**	**71,411**	**81,207**	**87,328**	**95,935**	**10,5013**	**114,098**	**125,493**	**136,745**	**147,155**	**164,392**
Total outstanding balance of Bonds & Bills	39,501	54,470	76,373	88,776	88,743	83,690	83,296	90,065	84,654	77,684	77,89
Treasury Bonds	34,108	34,245	42,604	41,079	38,007	40,959	39,848	40,446	35,446	40,830	40,30
Treasury Bills	--	4,007	17,053	30,536	35,171	26,882	27,282	33,131	38,000	25,558	25,93
Other	5,393	16,218	16,716	17,161	15,565	15,849	16,166	16,488	11,208	11,296	11,66
Balance with the Banking system (net)	3,345	1,889	-10,985	-22,410	-21,167	-15,276	-13,840	-20,031	-16,793	-9,528	-2,44
Borrowing from NIB (net)	12,999	15,052	15,819	20,962	28,359	36,599	44,642	55,459	68,884	78,999	88,47
Econ. Authorities Domestic Debt	**10,709**	**14,618**	**9,731**	**12,438**	**14,852**	**15,734**	**18,159**	**22,977**	**23,174**	**34,916**	**37,35**
Balance with the Banking system (net)	2,243	4,459	-1,729	-2,257	-4,267	-6,755	-8,352	-7,869	-11,393	-4,471	-3,40
Borrowing from NIB (net)	8,466	10,159	11,460	1,4695	19,119	22,489	26,511	30,846	34,567	39,387	41,75
	(in percent)										
Government Domestic Debt											
Total outstanding balance of Bonds & Bills	70.7	76.3	94.0	101.7	92.5	79.7	73.0	71.8	61.9	52.8	47.3
Treasury Bonds	86.3	62.9	55.8	46.3	42.8	48.9	47.8	44.9	41.9	52.6	52.7
Treasury Bills	--	7.3	22.3	34.4	39.6	32.2	32.8	36.8	44.9	32.9	32.7
Other	13.7	29.8	21.9	19.3	17.6	18.9	19.4	18.3	13.2	14.5	14.6
Balance with the Banking system (net)	6.0	2.6	-13.5	-25.7	-22.1	-14.5	-12.1	-16.0	-12.3	-6.5	-1.4
Borrowing from NIB (net)	23.3	21.1	19.5	24.0	29.6	34.8	39.1	44.2	50.4	53.7	54.1
Econ. Authorities Domestic Debt											
Balance with the Banking system (net)	20.9	30.5	-17.8	-18.1	-28.7	-42.9	-46.0	-34.2	-49.2	-12.8	-10.5
Borrowing from NIB (net)	79.1	69.5	117.8	118.1	128.7	142.9	146.0	134.2	149.2	112.8	110.5

Source: CBE, "Economic Review," 3rd Quarter (July 99 / March 00)

Table 8. Egypt: Government Budget*, 90/91 –99/00 (LE mn)

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00****
Current expenditure	29,679	36,198	41,292	45,340	47,632	51,967	53,430	55,690	61,117	45,798
Current Revenue	25,608	37,834	43,683	48,910	52,925	57,708	60,753	63,889	67,207	44,252
Current Surplus (Deficit)	**-4,071**	**1,636**	**2,391**	**3,570**	**5,293**	**5,741**	**7,323**	**8,199**	**6,090**	**-1,546**
Capital Expenditure	15,831	11,365	10,931	9,985	10,624	11,922	13,396	15,093	24,892	11,726
Capital Revenue	2,951	3,572	3,020	2,801	2,794	3,185	3,745	4,074	6,072	3,237
Capital Surplus (Deficit)	**-12,880**	**-7,793**	**-7,911**	**-7,184**	**-7,830**	**-8,737**	**-9,651**	**-11,019**	**-18,820**	**-8,489**
Overall Surplus (Deficit)	**-16,951**	**-6,157**	**-5520**	**-3614**	**-2537**	**-2996**	**-2328**	**-2820**	**-12730**	**-10035**

***Notes**:* * Including public economic authorities.
** For the first three quarters of the year.
Source: CBE, "Economic Review", several issues and MOEFT, "Monthly Economic Digest", September 2000.

Table 8a. Structure Of Financing Government Budget, 90/91 – 99/00 (LE mn)

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00*
Financing the budget deficit	**16,951**	**6,157**	**5,520**	**3,614**	**2,537**	**2,996**	**2,328**	**2,820**	**12,730**	**7,912**
Foreign (Net)	13,512	1,783	298	443	-278	-1,340	-1,575	-1,328	-1,914	-893
Domestic	5,591	4,222	5,222	3,171	2,815	4,336	3,903	4,148	16,549	10,210
Domestic banking	1,635	-3,456	-3,202	126	-1,117	4,565	3,402	1,929	9,383	6,570
Domestic Non-banking	3,956	7,678	8,424	3,045	3,932	-229	501	2,219	7,166	3,640
TBs	890	3,594	2,580	-765	-2,386	-1,156	1,419	-1,841	-2,115	476
T-bonds**	--	--	--	--	705	-19	407	23	1000	-282
Others	3,066	4,084	5,844	3,810	6,318	927	-918	1,060	9,281	3,164
Statistical Discrepancies	(2,152)	152	--	--	--	--	--	--	-1,905	-1,405

Notes: * For the first half year-only.
** T-bonds were first issued in 1995.
Source: CBE, "Economic Review", several issues and MOEFT, "Monthly Economic Digest", September 2000.

Table 9. Egypt: The Seigniorage Revenue 90/91 – 99/00, (LE bn)

	Reserve money (End-June)	**GDP**	**Δ RM/GDP % (Seigniorage revenue)**
89/90	18.30	79.0	--
90/91	21.42	99.0	3.2
91/92	25.91	111.0	4.1
92/93	33.44	139.0	5.4
93/94	36.69	175.6	1.9
94/95	42.89	204.8	3.0
95/96	46.52	229.5	1.6
96/97	53.16	256.5	2.6
97/98	55.96	280.5	1.0
98/99	61.83	302.4	1.9
99/00	65.69	339.0*	1.1

Note: ******* Estimated on the basis of 5% real growth in GDP and inflation rate of 2.5%.
Source: Table (1) above, MOEFT, "Monthly Economic Digest", September 2000, and the Ministry of Planning.

ANNEX II

LEGAL ABSTRACTS

The following is a summary of the Egyptian Presidential decree and laws pertaining to the operations and responsibilities of the CBE and the MOF.

Presidential Decree No. 59 of 1993

Per the following articles of this decree, the CBE is entrusted with the responsibilities of:

Article 5: Regulating monetary, credit, and banking policy and supervising its implementation according to the general plan of the state in order to help develop the national economy and ensure the stability of the Egyptian currency.

Article 5, Item D: Assisting the governmental agencies concerned with devising the financial and economic plans of the state.

Article 5, Item E: Participating in the arrangement of foreign exchange credit to fulfill the requirements of foreign finance for the economic plans and meet the foreign exchange requirements of the state.

Article 7: Acting for the government in managing, issuing, servicing and mortising the public debt. In doing that, the bank shall not bear any obligations or receive any right consequent thereupon.

Article 7: Advising the government on local and foreign loans and credit facilities.

Article 8: Offering loans for the government to cover any seasonal deficit in the budget on condition that: (i) the amount shall not exceed 10 percent of the average revenues of the budget during the preceding three years; (ii) the loan will be for a period of three renewable months; and (iii) the repayment be settled within a maximum of twelve months from the date of extending it. The terms and conditions of these loans shall be in agreement between the MOF and the CBE, and according to the monetary and credit conditions at the time of providing the loans.

Article 15: If necessary, Conduct OMO in Egyptian government securities and other papers guaranteed by the government, bonds, bills, promissory notes and other commercial papers with the aim of increasing or reducing money in circulation according to monetary and credit policy.

Article 16: Having the sole right to issue Egyptian banknotes.

Article 17: Guaranteeing loans, credit, and investments to be obtained by the government and other public legal entities from foreign banks, and establishments, and international organizations according to terms and conditions to be agreed upon with the Minister of Economy and Foreign Trade.

Article 18: Ensuring that the note issue is covered at all times and in equivalent amount by a balance composed of gold, foreign exchange, foreign securities issued or guaranteed by governments, Egyptian treasury bonds and bills, bonds guaranteed by the Egyptian government, and commercial papers eligible for discounting.

Law No. 163 of 1957 as amended:

Article 11: The net profits accruing from the note issue operations, after deducting the expenses as approved by the auditors, shall be divided between the government and the bank at a ratio of 85 percent for the government and 15 percent for the bank. Any increase arising from the revaluation of gold in the note issue cover accrues to the government.

Article 12: The net profit of the CBE shall be transferred to the MOF after deducting the reserves that the Board of Directors shall decide to form for distribution among its personnel as profit bonuses according to the rules to be set by the bank in this respect.

Law No. 53 of 1973 amended by Law No. 11 of 1979, executing regulations No. 323 of 1983 and Law No. 40 of 1996 in respect of State budget:

Article 18*:* The MOF is responsible for the preparation of the state budget. In this role, it should study the budgets submitted to it by different public agencies whose budgets are incorporated in the state budget and consult with the CBE in order to ensure coordination between fiscal, monetary, and credit policies within the framework of both the approved annual plan targets and the overall policies of the state.

Article 19: All concerned entities are required to submit the information, statistics, and explanations that are requested by the MOF and the CBE and other parties concerned with the preparation of the state budget. The MOF, the CBE, and other parties shall have the right to review all the information and studies necessary for the preparation of the state budget.

Law No. 4 of 1995 – Authorizing the Minister of Finance to issue treasury bonds (T-bonds):

Article 1: The MOF is authorized to issue treasury notes denominated in Egyptian pounds guaranteed by the treasury called “Egyptian Treasury bonds” in a total amount of LE 15 billion to be issued for public offerings in installments to be decided upon by

consensus between the Minister of Finance and the Governor of the CBE. The Minister after consultation with the Governor shall determine the periodicity of payments for the yield for each issue.

Article 2: The treasury bonds shall be issued in maturities ranging between 5 and 15 years to be agreed upon between the Minister of Finance and the Governor of the CBE. The rate of return on such bonds may be fixed or variable at a rate to be agreed upon between the Minister of Finance and the Governor of the CBE.

Article 7: The CBE shall undertake the issuance operations of these bonds and shall service it.

Article 8: The Minister of Finance in consultation with the Governor of the CBE shall issue the required executive regulations to this law.

The Annual State Budget Law:

Article 8: The MOF is authorized to issue TBs and T-bonds (whose terms and conditions to be agreed upon with the CBE) to:

1. Cover the treasury deficits of past years.
2. Finance public economic authorities' deficits transferred from past years in amounts proved to be eligible for the budget to bear.
3. Cover the monetary deficit (overdraft) in the government current account with the CBE.
4. Face the cost of monetary policy implementation under the financial stabilization and economic reform program.

ANNEX III
EXTRACTS FROM THE NEW PUBLIC DEBT MANAGEMENT PROGRAM (PDMP)

The following extracts from Egypt's new PDMP appear as they were presented at the Euromoney Conference entitled "Emerging Arab Economies: Breaking New Ground in the Global Market", held in Cairo in September of 2000.

1. Mission Statement

To ensure that the government's financing needs and its payment obligations are met at the lowest possible cost and at a prudent degree of risk over the long-run.

2. Vision Statement

In the short run, the magnitude of the debt limit should be closely linked to both the fiscal policy and the budgetary process.

In the long run, the magnitude of the debt limit should be linked to the sustainability of debt financing.

In establishing and implementing a strategy for managing the central government's debt, the central government should consider the exposures that may arise from guaranteeing the debt of sub-central government bodies and state-owned enterprises.

3. Debt Management Objectives

Debt management objectives should be clearly defined and publicly disclosed.
In achieving its mission, the debt management unit should also realize other objectives:

- Maintaining tradability and liquidity for debt instruments;
- Diversifying borrowing venues and broadening debt distribution;
- Promoting balanced maturity structure;
- Minimizing cost volatility;
- Avoiding market disruption;
- Maintaining credit worthiness;
- Keeping debt operations consistent and transparent;
- Developing domestic debt markets;
- Encouraging savings of the public;
- Supporting monetary policy and fiscal policy; and
- Attracting foreign investors.

As a Matter of Principle:

Where the level of financial development allows, there should be a separation of debt management and monetary policy objectives and accountabilities.

The Guiding Principles:

- Borrowing programs are based on the economic and fiscal projections contained in the government budget;
- Debt management process should not be perceived to be influenced by inside information on interest rate decisions; and
- The Cost/risk minimization objective of the debt management program should not be seen either as a justification for influencing domestic monetary policy, or for the extension of low-cost central bank credit to the government.

4. Debt Management Functions

Function	Description
Policy	- Formulation of debt management objectives; - Setting of instruments to meet these objectives;
Planning	- Projection of fiscal requirements; - Formulation of debt program regarding frequency, volume and issuance by instrument
Primary Issuance	- Short-term management of primary market including management of issuance volumes and borrowing calendar.
Fiscal	- Management of cash a balances; - Short-term projection of cash balances requirements.
Selling	- Management of selling arrangements (auctions, subscriptions, etc.)
Secondary Market	- Management of outstanding stock on secondary market; - Development of active secondary market: depth and liquidity.
Issuance/Redemption	- Administration of delivery and redemption of securities versus receipt/payment
Accounting	- Management of records of debt instruments and stock of debt.

5. Debt Management Authority & Institutions (and their respective agents)
Objectives:

- Debt management unit/Ministry of finance;
- Central bank;
- Primary dealers group;
- Stock exchange;
- Central securities depository vs. electronic book-entry;
- Capital Market Authority (CMA); and
- Debt consultation groups.

Guiding Principles:

- The clear definition of roles, responsibilities and objectives of agencies responsible for debt management;
- The availability of information on debt management policies to the general public; and
- The accountability and assurance of integrity of operations performed by agencies responsible for debt management.

Governance:

- The legal framework should identify a Debt Management Authority as the sole governmental body eligible to borrow and to issue new debt, invest and undertake transactions on the government's behalf.
- The organizational framework for a Debt Management Authority should be well specified with well-articulated mandates and roles.

Management of Internal Operations:

The risk that the government may suffer losses as a result of inadequate operational controls should be managed by having well articulated sets of responsibilities for staff, clear monitoring and control policies, and reporting mechanism for the Debt Management Authority.

Roles of Primary Dealers in the Secondary Market	
Role	**Description**
Price Stabilizer	Maintains an elastic inventory of securities (expandable and contractible) to absorb imbalances in the supply and demand of securities in order to keep markets continuous and maintain pricing of the securities close to their equilibrium values.
Information Processor	Incorporates available information into the pricing of securities by taking trading (principle) positions in the market; the market price thus reflects all relevant information.
Supplier of Immediacy	Provides firm bids and offers and is prepared to take principle positions, thereby providing traders with immediacy of execution.
Active Sales Distributor	Maintains a sales unit that actively solicits buying interest in the securities.
Educator	Educates investors as to the characteristics of securities and their suitability, and the advantages of holding and trading securities.

6. Policy Choices & Instruments Objectives

- Developing a policy framework to enable debt managers to consistently and systematically identify and manage the trade-off between expected cost and risk in government debt portfolios;
- Developing and maintaining an efficient market for government securities, taking into consideration:
  - (i) Portfolio diversification;
  - (ii) Various selling techniques;
  - (iii) Primary market structure; and
  - (iv) Secondary market structure.

- Using a conceptual ALM (Asset and Liability Management) framework for the debt management function can be a useful approach for several reasons:
  - (i) It enables the government to consider other types of assets and liabilities portfolios, which the government manages, beside its tax revenues and direct debt portfolio;

(ii) Matching assets and liabilities to the greatest extent possible can reduce balance sheet risk without incurring unnecessary transaction costs; and

(iii) The ALM approach also provides a useful framework for policy decisions such as whether the government should maintain an ownership interest in producing particular goods and services, and the best organizational structure for managing the assets it wishes to retain.