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Towards Inflation Targeting in Egypt
Fiscal and institutional reforms to support disinflation efforts

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Towards Inflation Targeting in Egypt

Fiscal and institutional reforms to support disinflation efforts

Hoda Abdel-Ghaffar Youssef *

September 2007

Abstract: Inflation targeting has emerged in recent years as a leading and increasingly advocated framework for conducting monetary policy in order to achieve and maintain price stability. Like many other developing countries, Egypt is now aspiring to introduce inflation targeting as a framework for its monetary policy. In its monetary policy statement issued in June 2005, the Central Bank of Egypt (CBE) explicitly indicates its intention to "put in place a formal inflation targeting framework to anchor monetary policy once the fundamental prerequisites are met". Indeed, there is now a wide consensus on the necessity of meeting a set of economic, institutional and technical preconditions before being able to successfully adopt an inflation targeting regime. This paper reviews the prerequisites of inflation targeting, analyses the extent to which they are met in Egypt and examines whether the Egyptian economy, under its current status, is ready to formally adopt an inflation targeting regime. It discusses why developing strong fiscal, financial and monetary institutions is so critical to the success of inflation targeting and explains how, even if the prerequisites are not stringently fulfilled in the beginning of its adoption, the move towards them is believed to contribute to the macroeconomic stability of the country. More particularly, the focus is being put on fiscal balance, the financial sector and central bank independence. Since we believe that the latter is the most important condition in the inflation targeting implementation process, the paper discusses the CBE's independence and underlines the importance of issues related to transparency, credibility, technical capabilities and accountability. Finally, the paper draws some conclusions and formulates some policy recommendations on the adjustments the country should put in place in order to ensure a successful transition towards an inflation targeting regime.

Keywords: Egypt, Inflation targetting, Financial reforms

JEL Classification: E50, E52, E58, E61

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Table of contents

Introduction.....	3
I- Inflation targeting: the fundamental conditions.....	6
II - Is Egypt ready for inflation targeting?	10
1. Macroeconomic overview.....	10
a) Fiscal policy.....	11
b) The financial sector.....	21
2. Monetary policy and the role of the Central Bank of Egypt (CBE)	22
a) Objectives, independence & relations with government.....	22
b) Technical capabilities.....	24
c) Transparency, credibility & accountability.....	27
III- Conclusion and policy recommendations.....	29

Introduction

Inflation targeting has emerged in recent years as the leading framework within which monetary policy is conducted in order to achieve and maintain price stability. Like many other developing countries, Egypt is now aspiring to introduce inflation targeting as a framework for its monetary policy, not only for its expected benefits on inflation rates relative to other strategies, but for its positive effects on the whole economy. In its monetary policy statement issued in June 2005, the Central Bank of Egypt (CBE) explicitly indicates its intention to "*put in place a formal inflation targeting framework to anchor monetary policy once the fundamental prerequisites are met*".

Inflation targeting is a framework for monetary policy that involves the public announcement of a numerical target for inflation. The commitment of the central bank to price stability becomes the primary goal of monetary policy, while other goals are subordinated to the achievement of the inflation target, which comes as a first priority. Information about monetary aggregates is hence used for setting the policy instruments. An important component of the inflation targeting framework is the continuous communication with the public and the markets about the plans, objectives and decisions of the monetary authorities, which entails an increased transparency of the monetary policy strategy and an increased accountability of the central bank for attaining its inflation objective. Inflation targeting is also believed to affect the public's expectations about inflation. In particular, expectations about inflation at longer horizons should be "anchored" by the target, and thus should be less affected by changes in actual inflation.

While inflation targeting seems to represent a promising and flexible monetary policy framework, there is now a wide consensus on the necessity of meeting a set of economic, institutional and technical preconditions before being able to successfully adopt an inflation targeting regime. The specificity of Egypt comes from its being a developing country. As stressed by many economists, developing economies differ from advanced ones in their greater vulnerability, which is due to the weakness of fiscal and financial institutions, the low credibility of monetary institutions, the problem of currency substitution and liability dollarization and the vulnerability to sudden stops of capital inflows (Mishkin, 2004). The road to inflation targeting is thus a demanding one in terms of institutional, economic and technical requirements, the most important of which relates to the central bank's degree of autonomy and independence, the absence of fiscal dominance, the flexibility of the exchange rate and the availability of well-developed financial markets, in addition to a good understanding of monetary transmission mechanisms and the development of a reliable inflation forecasting system.

In Egypt, following the move to a floating exchange rate regime in February 2003, inflation rates have increased considerably, reaching 17% according to official statistics and much higher according to many international organizations and observers. This rise in the inflation rate was mainly due to the pass-through effect of the Egyptian pound's depreciation. In this context of uncertainty about future price trends, the monetary authorities not only had to deal with high levels of inflation, but also had to face a surge in inflation expectations.

In 2003, an amendment to the CBE charter defined price stability as the primary and overriding objective of monetary policy. It also announced the CBE's intentions to put in place a formal inflation targeting framework to anchor monetary policy *once the fundamental prerequisites are met*. However, other features and practices leave room for debate about the degree of the central bank's independence and autonomy, which is a fundamental condition for the successful implementation of inflation targeting. The paper will look closely at these practices and highlight the reforms that are needed to give the CBE more independence.

A sound fiscal position is essential to any engagement in an inflation targeting regime. Large budget deficits and large government debt hamper the controlling of inflation and can lead to the abandoning of the inflation targeting policy or the excessive tightening of monetary policy. Indeed, fiscal policy can affect monetary policy and inflation in various ways (monetization of public deficit, reluctance to raise interest rates when necessary, aggregate demand...etc). The multiplicity of the channels through which the fiscal stance can affect monetary policy underlines the importance of limiting the fiscal deficit to a level that can be financed through the operation of the capital market. On that front, the Egyptian economy suffers from unsustainable fiscal imbalances. The budget deficit and public debt in Egypt are relatively high, and cannot be sustained at current levels without compromising Egypt's economic potential. Such imbalances also suggest the existence of fiscal dominance over monetary policy and do not help to reinforce central bank independence. Therefore, substantial fiscal reforms are needed in order to rebalance the government budget, increase its transparency and reduce the public debt. In the present analysis, particular attention will be devoted to the government budget, the structure of public expenditure and receipts, the sustainability of the public debt, as well as the problem of subsidies and administered prices and their impact on both the budget balance and the measurement of inflation.

The soundness and stability of the financial system is also a necessary condition for the success of an inflation targeting regime. By reinforcing the credibility of the monetary policy, financial stability helps to anchor inflation expectations. In implementing its monetary policy, the Central Bank also needs to have a good knowledge of how its policy and decisions are transmitted through the economy, affecting aggregate demand, inflation expectations and the rate of inflation.

It is important to note that the non fulfillment of *all* of these “preconditions” in the initial stages is not in itself an impediment to the adoption and success of inflation targeting. A special survey conducted by the IMF¹ on 21 inflation-targeting central banks and 10 non-inflation-targeting emerging market central banks² found that none of the inflation targeters had all these prerequisites in place prior to the adoption of inflation targeting. Nevertheless, a minimum of economic and institutional conditions should be in place prior to the formal adoption of inflation targeting. This suggests that implementing inflation targeting – especially in a developing country like Egypt – is

¹ World Economic Outlook, "Does Inflation Targeting Work in Emerging countries?", September 2005.

² These included Botswana, Guatemala, India, Indonesia, Malaysia, Pakistan, Russia, Tanzania, Turkey, and Uruguay.

more of a gradual process. Hence, the focus should be on the commitment to make the required institutional changes before and after the introduction of inflation targeting.

The main aim of this paper is to review the abovementioned preconditions of inflation targeting, analyse to what extent they are met in Egypt and examine whether the Egyptian economy, in its current status, is ready to move to inflation targeting. It also aims at identifying the adjustments that are necessary for a smooth transition towards inflation targeting. While there have been numerous studies reporting the success of inflation targeting in both industrial and emerging countries, there has been little analysis of the transition period and of the reforms needed before the actual move to an explicit inflation targeting monetary policy is made, especially in the countries of the MENA region. On that front, Egypt is the only country to have announced its intention to adopt inflation targeting in the short-to-medium term, and to have taken its first steps towards the effective implementation of this monetary policy.³

The paper is organized as follows. The first section will describe the preconditions for the adoption of an inflation targeting regime. It will discuss why developing strong fiscal, financial and monetary institutions is so critical to the success of inflation targeting and explains how, even if the prerequisites are not stringently fulfilled in the beginning, the move towards them is believed to contribute to the macroeconomic stability of the country. The second part analyses the case of Egypt, the only country in the MENA region that has explicitly announced its intention to adopt inflation targeting. The core of the analysis will focus on the three preconditions mentioned in the first section, namely fiscal balance, the financial sector and the independence of the central bank. We believe that the latter of these is the most important condition in the inflation targeting implementation process. However, when governments are faced with large budget deficits and large public debts, they usually show reluctance to undertake the reforms that are necessary to give central banks their full independence. Even when they do, one should rather consider the *de facto* autonomy of these central banks. In our view, these are the main challenges that are facing Egypt in its move towards inflation targeting. Based on national statistics, as well as on international sources⁴, this part will provide an analysis of the evolution and current state of the main macroeconomic indicators during recent years (2002 to the present), as well as the fiscal, financial and institutional changes that have recently been made to support disinflation efforts. In its last part, the paper draws conclusions and examines the implications of the adjustments the country should have in place in order to ensure a successful transition towards an inflation targeting regime.

³ Israel and Turkey are already adopting inflation targeting as a monetary policy framework.

⁴ IMF and European Commission reports

I - Inflation targeting: the fundamental conditions

Inflation targeting can be described as a choice by the monetary authorities to target the inflation rate in the short-to-medium term, giving a clear indication that hitting the inflation target takes precedence over all other objectives of monetary policy such as the exchange rate, economic growth or the level of employment. Some preliminary steps include the setting of explicit quantitative targets for inflation for several periods ahead, as well as setting up a model or methodology for inflation forecasting that uses a number of indicators containing information on future inflation. In order to do that, the monetary authorities must have the technical and institutional capacity to model and forecast domestic inflation and have a well-informed view of the relative effectiveness of the various instruments of monetary policy at their disposal.

Inflation targeting is incompatible with a fixed exchange rate regime in a context of free capital movements. As the quantity theory of money puts it, the price level is directly related to the stock of money or monetary base (Fisher, 1911). Giving priority to exchange rate stability means completely sacrificing monetary policy, which can no longer be used for any domestic economic purposes. Therefore, countries wishing to move to inflation targeting are required to abandon their fixed exchange rate regimes and adopt a floating exchange rate policy.

However, a pure float of the nominal exchange rate and its consequent fluctuations can be very costly for emerging markets: real appreciations might hinder the competitive power of the tradable goods industry, while local currency depreciation can lead to destruction of the balance sheet of domestic firms because their debt is often denominated in foreign currency. The strength of the exchange rate pass-through has resulted in many developing countries adopting a floating exchange rate regime while keeping their *de facto* exchange rate policy « managed », a behaviour that is known in the economic literature as the « fear of floating ». This is a source of concern for developing countries which consider adopting an inflation targeting regime, as there is a risk of seeing the exchange rate becoming the main focus and objective of the central bank, thus dominating the *supposed* primary objective of the monetary authorities, which is the rate of inflation. One suggested way to limit the over-vulnerability of the economy to exchange rate fluctuations is to increase the openness of the economy. The increased openness can lessen the exposure of businesses in the tradable sector to the negative consequences of a depreciation of the currency because, even when their debts are denominated in foreign currency, the goods they produce are more likely to be traded internationally and priced in foreign currency.

In addition to the abovementioned preliminary requirements, there are three initial conditions that are essential to support an inflation targeting monetary policy.

First condition: central bank independence and accountability

The importance of central bank independence for the adoption of inflation targeting has been extensively discussed in the economic literature. The theoretical argument that explains the negative relationship between central bank autonomy and inflation is based on the well accepted

rule which states that the achievement of price stability requires the imposition of constraints on monetary expansion. Since policy makers are often tempted to use monetary policy to achieve quick but temporary objectives, such as financing of the budget deficit, high employment or low interest rates to reduce the government's financing costs, they are likely to induce increases in inflation expectations and in actual inflation that persist after the desirable effects of monetary expansion have disappeared. Giving sufficient independence to central banks allows the monetary authorities to focus on the price stability objective, even at the expense of other objectives that may seem more appealing in the short term.

The essential features of an independent central bank can be summarized under five broad headings: (i) a very well defined primary objective that takes priority over all other objectives; (ii) political independence for the design of monetary policy; (iii) economic independence for the execution of monetary policy; (iv) financial autonomy; and (v) clearly defined accountability procedures.

Accountability can be seen as a natural counterpart of central bank independence. The existence of mechanisms to ensure public accountability increases the credibility and the effectiveness of monetary policy. Moreover, they provide a channel for the central bank to explain and justify its policy decisions. In addition, the design of the board and management should guarantee that the decision making process is protected against any political influences.

To summarize, it seems that good governance is a key element for any central bank to achieve its objectives. This implies that central banks should have clearly defined and prioritized objectives, be given sufficient authority and autonomy to achieve their objectives and functions, and be held accountable to increase the credibility and the effectiveness of monetary policy .

Examples of inflation targeters include – among many others - New Zealand (which was the first country to introduce a target for inflation, in 1989), the United Kingdom (UK), Sweden, Canada, many emerging market countries such as Chile, Brazil, South Africa and Thailand, as well as several middle-large economies among new member states in the European Union, such as Poland, the Czech Republic and Romania.

Second condition: fiscal consolidation

A strong fiscal position is essential in order to engage in an inflation targeting regime. Large budget deficits and large government debts can lead to a failure to control inflation and the abandonment of the inflation targeting policy. Indeed, fiscal policy can affect monetary policy and inflation in a variety of ways.

First of all, in the case of large budget deficits, central banks are required to finance public sector deficits through monetization, which generates higher inflation. Second, in case of large (especially if short term) public debt, monetary authorities might be reluctant to raise interest rates if such a

move is necessary to fight inflation pressures, because an increase in interest rates raises the cost of debt service and the debt level. Higher debt also increases the default probability and the country premium, generating capital outflows and leading to a depreciation of the exchange rate. Again, if debt is largely denominated in foreign currency, a depreciation of the domestic currency vis-à-vis the denominated foreign currency causes a further increase in the value of debt. Moreover, depreciation of local currency also introduces higher prices through “imported inflation”. The end result is a rise in inflation expectations and, eventually, in inflation itself. Aggregate demand is another way through which fiscal policy can affect inflation. For example, a tax cut does not only decrease the government revenues, it also increases real household wealth, and boosts both aggregate demand and the price level.

The multiplicity of channels through which fiscal policy affects monetary policy underlines the importance of limiting the fiscal deficit to a level that can be financed through the operation of the capital market, especially in economies where there is limited access to financial markets to finance government deficits. In countries suffering from structural fiscal imbalances, substantial fiscal reforms which increase transparency of the government budget and budget rules, rebalance the government budget and reduce public debt and default probability are needed as a fundamental condition for adopting inflation targeting.

Third condition: sound financial system and understanding of transmission mechanisms

In implementing its monetary policy, the central bank needs to assess the impact of its decisions as well as the necessary timespan before they affect the economy. This is particularly important for the adoption of the inflation targeting regime, which is a forward-looking monetary policy. More precisely, it is important to have a good knowledge of how changes in the central bank policy rate are transmitted through the economy, affecting aggregate demand, inflation expectations and consumer prices.

Channels through which decisions about the official interest rate affect economic activity and inflation are known as the ‘transmission mechanisms’ of monetary policy. Adopting inflation targeting requires a sound definition and understanding of these mechanisms and their way of functioning within the economy. For example, the authorities need to know to what extent the central bank rate movements are passed through to banks' borrowing and lending rates, and whether the response of the economy to official rate changes is symmetric. Monetary policy can only be effective where transmission channels are properly understood by the policy makers, and are working effectively. In addition to this, the credibility of the monetary policy is crucial for managing inflation expectations.

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In developing countries, financial systems are often characterized by the dominance of the state over financial activity, especially the banking sector, which leads to inefficiencies in running banking operations and the absence of market competition. Therefore, strengthening the soundness of the financial system might require to close insolvent financial institutions and to adopt sound supervisory practices, because financial vulnerability can undermine any attempts to control

inflation. If the banking system is weak, and this weakness is recognized by the markets, there is a risk of a reversal of capital flows out of the country (a sudden stop) which can cause a sharp depreciation of the exchange rate, leading to upward pressures on the inflation rate.

Therefore, it is important for a country – before it adopts a new monetary policy - to undergo a financial reform programme, in order to be able to attain the goals of the new policy. Strengthening the financial system requires several types of institutional reforms. For instance, prudential regulation of the banking and financial system must be strengthened to ensure that currency mismatches are limited, in order to prevent currency devaluations from destroying balance sheets. Other problems need to be resolved, such as the problem of non-performing loans, and other government policies may be needed to limit liability euroisation or dollarization or at least reduce the incentives for it. Financial markets should also be sufficiently developed to enable inflation targeting to be implemented using market-based instruments.

The next section attempts to analyze the extent to which the Egyptian economy meets the above pre-requisites. While being aware that the issue of full central bank independence is unavoidable and crucial to any disinflation effort, we will begin with an overview of the Egyptian economy, focusing especially on the two other conditions which are, in our view, the most important challenges in the coming period, namely fiscal balance and the soundness of the financial system.

II - Is Egypt ready for inflation targeting?

1. Macroeconomic overview

In 1990, after a period of poor economic conditions due to a sharp fall in oil prices and a decline in Suez Canal revenues and workers' remittances, Egypt started to implement an economic reform and structural adjustment programme (ERSAP) supported by the IMF and the World Bank. The programme aimed at improving both monetary and fiscal policy, and the outcomes of these economic reforms were encouraging during the first years of the 1990s. The inflation rate declined sharply from over 20% in 1990/1 to only 4.1% in 1997/8. There was also a significant decrease in the budget deficit as a percentage of GDP over the period from 1990/1 to 1997/8, declining sharply from about 18.2% to only 1%. Like many other developing countries, Egypt also had a multiple exchange rate system which was replaced by a single rate. However, since 1997, the Egyptian economy has been subject to exogenous shocks such as the Asian crisis, the Luxor incidents⁵, the deterioration of oil prices and the effects of the attacks of 11 September 2001. The major economic indicators started to deteriorate and the growth rate was insufficient to ensure growth in per capita GDP.

After two significant devaluations of the Egyptian pound in 2001 and 2002, and realizing that official attempts to support it were being counterproductive, the Egyptian government announced in January 2003 the floating of the Egyptian currency, abandoning the "managed peg system" of the central rate to US dollar. The new floating foreign exchange system was introduced mainly because of the unavailability of dollars at the official price, which resulted in the growth of black market transactions in which the spread between the black market and official rate was continuously increasing. The floatation was thus expected to allow hard currency to flow back into the banking system rather than on to the black market. Following the floatation, the pound depreciated and lost 50% of its value. As a result, inflation rates rose to 18% in 2004 (according to official statistics)⁶.

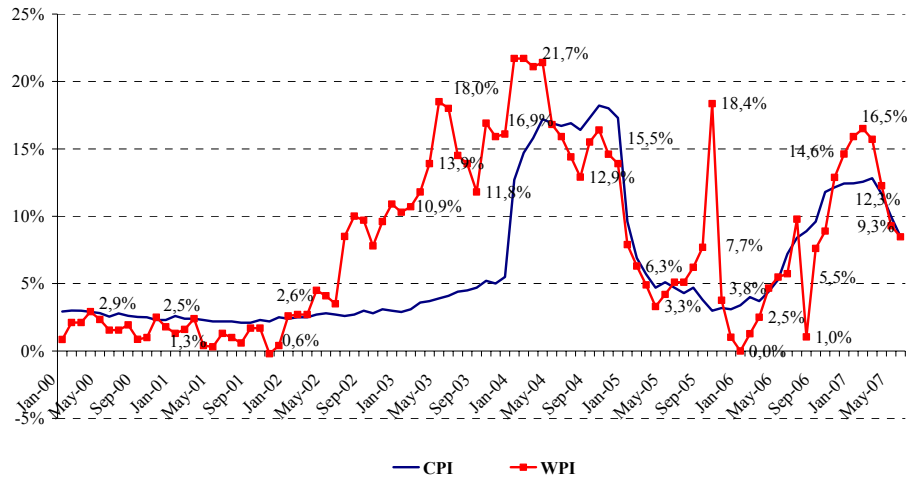
This pass-through effect of the local currency depreciation had a negative impact on corporations and businesses, which usually have their liabilities denominated in dollars, while their assets and earnings are in Egyptian pounds. Besides, the high share of the high share of intermediate inputs and investment goods in Egypt's imports increases price sensitivity to developments in the exchange rate. For these reasons, it is believed that the Egyptian monetary authorities are not allowing a totally free floating currency. During the remainder of the transitional period until the application of inflation targeting, the CBE is continuing to intervene on the market to manage the float in addition to targeting M2 growth rate. The introduction of the Interbank Currency Exchange System in January 2005 stabilized the Egyptian pound against other currencies, but liquid security markets still have to be developed to reduce the reliance on the central bank for intermediating transactions.

⁵ Terrorist attacks on the Luxor city in 1997 seriously affected tourism revenues.

⁶ MOFT, Monthly Bulletin, September 2006

More recently, CPI inflation has come down from double-digit levels as of imported inflation effects on headline inflation have been largely reduced. However, starting 2006, the trend was reversed, as year-on-year CPI inflation rose to 9.3% in September 2006, triggered by price liberalisation, accelerating economic activity and the impact of bird flu on food prices.

Chart 1 – Inflation rate in Egypt (2000-2007)

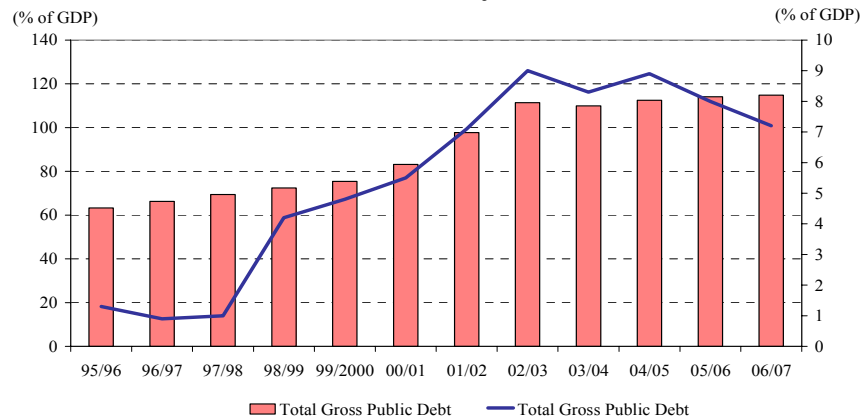


Source: MOFT, Monthly Bulletin, September 2006

a) Fiscal Policy

The following charts show the trend in the budget deficit since the beginning of the ERSAP programme in 1990. It clearly shows the deterioration of fiscal conditions starting FY 1997. The budget deficit rose to 9% in FY 2002/03 before falling back slightly to around 7% in 2006/07. Public debt has also continued to increase, and currently stands at around 114%.

Chart 2 - Evolution of major fiscal indicators



Source: CBE

As stated by the IMF⁷, Egypt's budget deficit and public debt - although still manageable - are relatively high, and cannot be sustained at current levels without compromising its economic potential. Besides, fiscal conditions play a central role in helping a country to achieve its inflation targets.

Given the increasing interdependence between fiscal and monetary policies, fiscal performance cannot be treated in isolation from other economic policies; it must be adjusted as an integral part of the policy framework. Table 1 presents the components of the government budget during the recent years.

Table 1 - General Government Operations

	02/03	03/04	04/05	05/06	06/07
Real GDP growth rate (%)	3.1	4.1	4.5	6.8	6.8
General Government Operations					
▪ Total Revenues (% of GDP)	26.2	25.6	24.7	28.3	26.1
▪ Total Expenditures (% of GDP)	32.2	31.6	31.7	35.7	32.1
▪ Budget deficit (% of GDP)	-9.0	-8.3	-8.9	-8.0	-7.2
Gross public debt (% of GDP)	111.4	109.9	112.5	114.1	114.8

Source: IMF, European Commission

On the positive side, a sustained high real GDP growth rate and a slight improvement in the budget deficit can be noted. Indeed, the high growth rate, in addition to the revenues coming from the privatization process, have both contributed to a lower deficit. However, these improvements are not sufficient to adjust the structural disequilibrium in public finances. Even with a cut in fuel subsidies (see box 1 on the problem of subsidies in Egypt), public expenditure rose to 35% of GDP in 2005/06. The public debt is also growing and putting an extra burden on the state budget through debt interest payments.

Table 2 compares the debt-output ratio in Egypt to that of selected groups and countries. It is clear from the comparison that Egypt has the highest debt-output ratio among the selected countries, even those that have similar economic conditions.

⁷ *IMF Country Report No. 06/253, July 2006*

Table 2 – Comparative public debt-to-GDP ratios

	02/03	03/04	04/05	05/06 prel	06/07 proj
Egypt	111.4	109.9	112.5	114.1	114.8
Mediterranean countries (average)	88.5	85.7	84.7	81.3	-
CIS countries ⁸ (average)	36.3	28.5	22.4	19.4	-
EU 27	61.8	62.2	62.9	61.7	-
EU 25	62.1	62.5	63.3	62.2	-
<u>Other selected emerging countries</u>					
Chile	44.6	39.4	31.7	28.0	28.0
Philippines	100.8	95.4	86.3	77.4	72.7
Malaysia	68.8	66.7	62.5	56.5	55.6
Thailand	49.5	47.4	42.3	39.2	49.5
Peru	44.4	37.7	32.0	31.2	30.5

Source: World Bank

1) Sustainability of the public debt

The link between debt management and monetary policy is intuitively clear. Since the objective of monetary policy is to ensure price stability, one can see the impact on the money supply of financing provided by the Central Bank to the Treasury. If the public debt rises to unsustainable levels, the debt can end up being financed by printing bank notes, especially if legal arrangements allow for it. The eventual monetization of the public debt, which could result in high inflation, underlines the importance of budgetary consolidation.

One of the most widely used indicators for assessing fiscal sustainability is the *primary gap indicator*, which measures the difference between the actual primary deficit and the primary balance required to stabilize the debt-to-GDP ratio.⁹ This indicator is useful and needs a minimum amount of information, namely actual primary deficit, debt-to-GDP ratio, real interest rates and real GDP growth rate.

The indicators are constructed in two stages. First, the sustainable level of the primary balance (the primary balance required to stabilize the debt-to-GDP ratio) is calculated. This can be done using the following equation¹⁰:

⁸ Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia and Ukraine

⁹ Another approach is to calculate an indicator *on tax gap indicator*, which measures the difference between the current tax ratio and the one required to stabilize the stock of public debt in relation to GDP, but this goes beyond the scope of this paper.

¹⁰ For more details about the Domar (1944) sustainability condition, see Blanchard, O.; J. C. Chouraqui, R. P. Hagemann and N. Sartor (1990a): “*The Sustainability of Fiscal Policy: New Answers to an Old Question*”, OECD Economic Studies, No. 15, pp. 7–36.

$$pd^* = (r_t - g_t) d_t - \Delta B_t \quad (1)$$

where:

d_t stands for the debt-to-GDP ratio at time t

pd^* stands for the primary deficit (as a percentage of GDP) required to stabilize the debt

g and r stand respectively for the real GDP growth rate and the real interest rate on the debt.

ΔB_t is the change in currency in circulation, which corresponds to seigniorage.

Or, by ignoring ΔB and supposing there is no resort to seigniorage to finance the debt, equation (1) becomes:

$$pd^* = (r_t - g_t) d_t \quad (2)$$

Equation (2) means that an interest rate exceeding the rate of economic growth leads to a higher primary deficit, *ceteris paribus*. The government will in this case need to run an operating surplus in order to prevent the debt-to-GDP ratio from rising. Given the size of the gap between interest rates and growth, the size of the operating surplus required will depend on the size of the existing debt-to-GDP ratio; the higher the debt-to-GDP ratio, the bigger the operating surplus needed to stabilize it. A very important policy implication emerging from this is that starting the adjustment towards a sustainable deficit path as soon as possible will minimize the extent of the action needed.

The equation also signifies that the primary deficit must be zero to stabilize the debt-to-GDP ratio if the interest rate equals the GDP growth rate. It is worth noting that, since there is no theoretical argument for choosing a certain debt level, flexibility can be introduced by varying the debt target, depending on the current economic situation of the country.¹¹

Second, the primary balance gap is defined as the difference between the sustainable primary balance (the one that stabilizes the debt-to-GDP ratio) and the current level of the primary deficit:

$$pd^* - pd_t = (r_t - g_t) d_t - pd_t \quad (2)$$

where pd_t stands for the current primary deficit.

Hence, the sustainable primary deficit (pd^*) can be used directly as a target guiding the government towards a sustainable deficit path.

To analyse the Egyptian case, we first calculate the primary balance which is required to stabilize the government debt to GDP ratio (pd^*) from the relationship given in equation (1), and then we calculate the gap between the sustainable primary deficit and the current level of the primary deficit (equation 2). Table 2 shows the main economic indicators for the fiscal year 2005/2006.

Table 3 - Main economic indicators - 2005/06

Real GDP growth (% change) (g)	6.8
General government primary balance, % of GDP	-2.4
Public sector gross debt, % of GDP	114.1
Inflation (period average)	3.9
Nominal interest rate	8.8
Real interest rate (r)	4.9

Source: CBE, Ministry of Foreign Trade (MOFT), IMF and author's calculation

Using the figures from Table 3.a, we can calculate the primary deficit (pd*) required to stabilize the public debt at different levels.

Table 3.a – Calculations of the primary deficit that stabilizes the debt-to-GDP ratio at different levels

Targeted debt-to-GDP ratio	r	g	d	$pd^* = (r_t - g_t) d_t$	Primary balance gap (pd*-pd)
114% (current)	4,9	6,8	1,14	-2,17	0,23
60% (Maastricht)	4,9	6,8	0,6	-1,14	1,26
40%	4,9	6,8	0,4	-0,76	1,64
80%	4,9	6,8	0,8	-1,52	0,88

Source: CBE, MOFT, IMF and author's calculation

According to equation (1), if the government wants to stabilize the debt-to-GDP ratio at the 2006 levels (114%), the primary deficit has to be 2.17%. Supposing that the desired level of the public debt is lower than the current (very high) level, for example a Maastricht-type limit on the value of the public debt (60% of GDP), then the primary deficit that stabilizes the debt-to-GDP ratio would, *ceteris paribus*, be equal to 1.14% of GDP. In this case, the primary balance gap, defined as the difference between the sustainable primary deficit (the one that stabilizes the debt-to-GDP ratio at the 60% level) and the current level of the primary deficit would be around 1.26%.

However, it should be borne in mind that, while countries like EU member states use a 60 percent benchmark, developing countries often need to have a lower ceiling due to their higher funding problems. In the economic literature, a 40 percent debt-to-GDP ratio is considered as critical or as a turning point at which the risk of debt exposures starts to increase. An opposite point of view would argue that, for a developing country where initial levels of debt-to-GDP ratio are too high, one should be less ambitious and allow higher ceilings for the targeted ratio.

Table 3.b - Calculations using 2005 to 2007 real interest rate levels

	r	g	d	$pd^* = (r_t - g_t) d_t$	Primary balance gap ($pd^* - pd$)
2004/05	-1,2	6,8	0,6	-4,80	-2,40
2005/06	4,9	6,8	0,6	-1,14	1,26
2006/07	-3,1	6,8	0,6	-5,94	-3,54

Source: CBE, MOFT, IMF and author's calculation

Table 3.b uses the 2005 to 2007 real interest rate levels to calculate the primary deficit that stabilizes the debt-to-GDP ratio. It appears that negative real interest rates leave more room for the government in terms of primary deficit. However, both the government and the central bank should be aware that real negative interest rates have a distorting impact on the economy due to the absence of any incentives to save money, while for those who are having debt there are no incentives at all to reduce it. Real negative interest rates are also inconsistent with the efforts to attract international capital, which moves from countries that offer low or negative real rates of interest to countries that offer higher interest rates.

The importance of the primary gap indicator lies in its ability to measure the size of the adjustment needed in order to return the fiscal balance to its sustainable level. However, it does not answer the question of what adjustment is desirable from the economic point of view: cuts in spending, increases in taxes or social transfers?

2) Analysis of budget expenditures

The Egyptian government budget structure is shown in tables 3 and 4. An analysis of the breakdown of total expenditures (table 3) shows that *subsidies, grants and social benefits* are the major component of government expenditures, occupying 30% of the total expenditures. Within this category, subsidies are in first place with 18% of total expenditures, of which 62% are directed to the petroleum sector.

It is also noticeable that the share of *wages and salaries* occupies second place among total expenditures (with around 25%). In spite of the growing government wage bill in nominal terms, the increasing inflation rates are causing a decline in real wages of government employees, thus resulting in an increasingly impoverished middle class. Finally, the share of interest payments on government debt is a sizeable one, reaching 20% of total expenditures. Altogether, wages, subsidies and interests account for around 75% of total expenditure.

These figures show that there is little room for discretionary spending. Moreover, a large share of government spending is unproductive and encourages the misallocation of resources, with subsidies being the most obvious example.

Table 4 - Government expenditures

<i>(percentage of total expenditures)</i>	2003/2004	2004/2005	2005/2006
Compensations of employees	25%	25%	24%
Purchases of goods & services	6%	7%	7%
Interests	18%	17%	20%
Subsidies, Grants & social benefits	23%	24%	30%
Subsidies	7%	8%	18%
<i>to petroleum (%of total expenditures)</i>	<i>n.a</i>	<i>n.a</i>	11%
<i>to petroleum (% of total subsidies)</i>	<i>n.a</i>	<i>n.a</i>	62%
Grants	1%	1%	1%
Social benefits	15%	15%	11%
Other	0%	0%	1%
Other Expenditures	14%	13%	10%
Purchases of non-Financial Assets (Investments)	15%	14%	9%

Source: MOFT, monthly bulletin, Sept 2006, author's calculations.

Box 1 - The problem of subsidies

The subsidies system in Egypt is an untargeted programme open to all income classes, including non-poor Egyptians. These subsidies are often criticized because of the burden they put on the government budget and their contribution to the budget deficit, not to mention the fact that the poor do not always receive the benefits. In Egypt, the current subsidy system includes food, transportation, oil, as well as water and electricity. Items like water and electricity are considered as implicit subsidies because they are not included in the government budget list of subsidies. The value of these subsidies is represented by the losses of public sector companies providing the service to the public. As for the explicit subsidies (such as food), they are always "explicitly" listed as a line item in the government budget. Moreover, much of the subsidized food (wheat and wheat flour) is imported, which is a further burden on the Egyptian trade balance.

In spite of the criticism directed at the subsidy system in Egypt for being economically inefficient and socially poorly targeted, policy makers are reluctant to cut back on subsidies because of the political unrest and social disturbances it might generate when non poor categories are excluded.

Reforming the Egyptian subsidy system is becoming imperative, but policy makers have to consider more efficient alternatives capable of reaching the neediest categories in the population, while ensuring overall fiscal consolidation. This is a challenging objective, because in Egypt – as in most developing countries – selecting the beneficiaries on the basis of income (i.e. identifying the poor) is not an easy task due to the unavailability of accurate data on income, and the weight of the informal sector and activities in the economy.

2) Analysis of budget revenues

On the revenue side – and although not considered as an oil producer country – Egypt is in fact an oil exporter and relies to a large extent on oil and gas revenues. Revenues also depend heavily on the profitability of the Suez Canal authority. Historically, this has been an obstacle to fiscal consolidation because of the little interest in (non-oil) tax revenues and, consequently, the lack of an incentive to develop effective revenue administration. Besides, the relative importance of these revenues creates more difficulties in predicting the government total revenues and in linking key revenues to economic activity.

More recently, there have been encouraging attempts to reform the revenue administration and tax collection procedures. On the one hand, the Egyptian government seems to realize that oil and gas revenues are indeed exhaustible and volatile, and cannot be counted on to support macroeconomic development for ever. On the other hand, the formal move to an inflation-targeting monetary policy requires fiscal accommodation and a strong financial balance sheet. Given that the monetary financing of fiscal imbalances is inflationary, Egypt needs a legal framework that fully supports the independence/autonomy of the central bank.

In 2004, Egypt embarked on fiscal reforms intended to increase tax revenues and to make the tax administration more transparent and fair. Reforms involved tax cuts, widening of the tax base and improvement of tax collection. They were also supported by an awareness campaign and training of tax officers.

Table 5 – Government revenues

	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007 (proj)
<u>Total Revenues (% of GDP)</u>	26.2	25.6	24.7	28.3	28.6
Tax Revenues (% of total)	62	69	68	63	65
(growth rate in %)		33	7	2	29
Grants (% of total)	4	3	3	2	2
Other revenues (% of total)	34	28	29	35	33
of which privatization receipts					
(% of other revenues)	0	10	6	11	18
(% of total revenues)	0	3	2	4	6
<u>Total revenue growth rate (%)</u>		21	9	11	26

Source: Egyptian Ministry of Finance

The figures in table 5 show that the government total revenues kept on increasing as a percentage of GDP, even with rate cuts. It is true that the pace of tax revenue growth slowed down following the tax cuts in 2004, but this is to be expected in the initial period of any reforms. However, fiscal year

2006/07 shows a return to higher levels of tax revenue growth rates (29%), which suggests that the tax base must have expanded. The government has also announced its intention to continue establishing proper tax policies and administrative structures for a modern and effective tax system based on voluntary compliance.

The recent tax revenue reforms constitute an important development, but they need to be complemented by prudent government expenditures. An ambitious and credible fiscal consolidation strategy for the medium-term is required to put the public debt as a share of GDP on a declining path.

Box 2 - What about a privatization fund in Egypt?

In the early 1990s, Egypt realized that the poorly performing state-owned enterprises (SOEs) were a drag on the economy. With the assistance of the IMF, the country embarked on a privatization process that entailed the sell-off of these poorly performing enterprises.

However, resistance to the privatization process persists because privatizing the overstaffed SOEs leaves a large number of unemployed people, and because of a general concern about how the government is spending the proceeds from privatization. In Egypt, the largest portion of the proceeds usually goes to the Ministry of Finance, while the remaining part is used in SOE debt settlements, early retirement pensions, and a very small portion is spent on restructuring.

Most of the workers who lose their jobs or take early retirement find it hard to get new jobs in the private sector. In this light, privatization funds may represent a good solution to the unemployment problem generated by the privatization process, for example by providing support to small and medium enterprises (SMEs). Proceeds can also be used to fund social programmes or spent on poverty alleviation priorities. However, concerns remain about whether these funds will be able to receive and disburse revenues transparently and in a manner that is relatively immune to political influence. If wisely used, one-off resources can contribute to the development of social and poverty alleviation programmes, thus providing a foundation for sustainable economic growth.

3) Fiscal sustainability and budgetary institutions

When talking about the necessity of embarking on budgetary reforms, it is important to stress that these reforms should not consist solely of discretionary cuts in public expenditures on a year-to-year basis in order to achieve fiscal balances. Indeed, short-term fiscal adjustments such as cuts in wages, subsidies or other social expenditures are not enough to ensure fiscal sustainability. Since the main purpose of the government budget is to collect revenues and deliver public services, the budgetary reforms should aim at achieving macro-fiscal balance along with the efficient provision

of public services. Hence, another important component of fiscal reforms is the reform of budgetary institutions, which encompasses all the rules and regulations according to which budgets are drafted, approved and implemented. In addition to short-term adjustments, emphasis should be put on institutional reforms such as improving fiscal transparency and accountability, the interactions between different players in the budgetary process as well as governance measures. The latter would include, for example, using better than expected budgetary outcomes for reducing deficits and debt instead of using them to increase current expenditures. The effectiveness of expenditure can be increased through the use of cost-benefit analysis techniques in the selection of projects, and periodic reviews of programmes. Finally, effective fiscal management needs to rely on sound and transparent fiscal data (Herzberg and Watson, 2007).

To summarize, good budgetary institutions should regulate the extent to which discretion is to be used in planning budgetary expenditures and, at the same time, ensure accountability on how well budgetary resources are spent.

Box 3 - Inflation targeting and fiscal consolidation: the Chilean experience

The Chilean experience was one of the most successful in implementing a monetary framework for fully-fledged inflation targeting. Average inflation fell from close to 30% in the 1990s to 2.4% in 2004. A gradual disinflation process started in 1990 and, in 1999, the Central Bank of Chile announced its commitment, starting 2001, to pursuing the mid-point of the 2-4% inflation target range over the medium term. In September 1999, the Central Bank of Chile also abandoned its policy of targeting the nominal exchange rate, which it had pursued since 1984. The central bank now uses the overnight money market interest rate as its main policy instrument.

Of all the factors underpinning this success, the fiscal consolidation effort has been the key instrument in reducing inflation and ensuring high economic growth. Fiscal policy has so far been guided by the structural budget surplus rule (SB), introduced in 2000¹, calling for a budget surplus of 1% of GDP adjusted for the effects on public finances of the business cycle and fluctuations in the price of copper. In other words, the rule puts a ceiling on expenditure: it has to remain 1% below the cyclically adjusted revenues. The introduction of the SB helped strengthening the fiscal discipline and accountability, thus reinforcing the credibility already acquired in the 1990s. As a result of sustained fiscal prudence, public indebtedness was reduced from 45% of GDP in 1990 to 13% of GDP in 2004. The fall in public indebtedness has contributed to a reduction in the cost of borrowing, and thus in government spending on debt service, which in its turn created room in the budget for increasing expenditure on selected items such as social expenditures. In this field, the strengthening of social safety nets is particularly noteworthy.

The structural budget surplus rule has special provisions for the management of copper-related revenue. The aim is to protect the fiscal stance from fluctuations in the price of copper, ensuring the accumulation of resources during booms and the withdrawal of funds during cyclical downturns.

Institutional reforms have also contributed to the success of the Chilean experience. The rules governing the formulation, approval and implementation of the budget have been readjusted by successive legal and constitutional reforms. Significant progress has been made in strengthening the fiscal institutions by providing more timely, transparent and comprehensive reporting of fiscal accounts and debt statistics. An effective communication strategy has been put in place, especially with the publication of a quarterly Monetary Policy Report (*Informe de Política Monetaria*) and the minutes of the monthly monetary policy meetings.

Source: OECD Economic Surveys – Chile, 2005.

¹ The rule is not enshrined in law; it was announced and self-imposed by the government.

b) The financial sector

As discussed earlier, Egypt's financial sector is characterized by a strong state presence. The banking sector currently represents around 80%-90% of the total Egyptian financial sector. Before the privatization of Bank of Alexandria in 2007¹², the four large state-owned banks (Banque Misr, Banque Du Caire, the National Bank of Egypt and Bank of Alexandria) accounted for 80% of commercial deposits in the country. Since 2005, the government's programme to privatise state-owned banks, in addition to the introduction and enforcement of a new minimum capital requirement in July 2005, resulted in a decline in the number of operating banks from 57 in 2004 to 39 in 2007.

This overhaul of the banking industry is due to the fact that it is not performing as efficiently as it could. More particularly, it was important to address the problem of non-performing loans, which officially reached EGP 26 billion (around 4.5 billion dollars) in 2004, owed by public business enterprises to the four state-owned banks.¹³ To deal with this significant problem, an "NPL Management Unit" was established at the CBE who also required public and private sector banks to establish similar units.

However, and despite the accelerated pace of banking sector reform and privatisation, the state-owned banks still need to improve their performance with respect to non-performing loans.

¹² Sold to the Italian bank SanPaolo IMI SpA

¹³ An amount of LE 6.9 billion representing non-performing loans owed to the Bank of Alexandria was repaid in cash in January 2006.

Moreover, the Egyptian financial sector as a whole still suffers from insufficient private sector participation. On this point, it is worth stressing the importance of communication with the public, especially the affected parties (namely the employees of public banks) who see bank privatizations as a threat to their jobs (see box 2).

Table 6 – Selected financial indicators

	2001/2002	2002/2003	2003/2004	2004/2005	2005/2006
NPLs (% of total loans)	16.9	20.2	24.2	26.3	25.0
Provisions (% of NPLs)	67.5	62.3	57.0	53.1	54.9
Return on average assets (%)	0.7	0.5	0.5	0.6	0.6
Government debt held by financial sector (% of total assets)	38.2	40.4	43.8	45.2	42.8
Credit to private sector (percent change)	11.0	7.3	4.1	3.8	6.8

Source: IMF.

Emphasis also needs to be put on disclosure and transparency, quality of intermediaries, development of the bond market and new products. The benefits of a developed financial system for monetary transmissions should prompt the central bank to spur financial reforms.

2. Monetary policy and the role of the CBE

a) Objectives, independence & relation with government

In its monetary policy statement issued in June 2005, the CBE clearly indicates its intention to "*put in place a formal inflation targeting framework to anchor monetary policy once the fundamental prerequisites are met*". During the transitional period, the CBE continues to target M2 growth rate.

Law No. 88/2003 and its amendment regulate the activities of the CBE. According to the decree, the bank shall, in agreement with the government and through a coordinating council, "*set the targets of the monetary policy in a way that realizes price stability and banking system soundness, within the context of the general economic policy of the State*".¹⁴ Other functions include the CBE's responsibilities for the supervision of payment systems, management of liquidity, international reserves and external debt.

Under this "unified banking law" approved by the People's Assembly in April 2003, the Governor of the Bank reports to the State President rather than to the prime minister, which should strengthen central bank independence. However, the same law provides that the monetary policy decisions are taken by the CBE's Monetary Policy Committee (MPC), which has nine members: the Governor of

¹⁴ Presidential Decree No. 17 for 2005

the CBE, the two Deputy Governors, four representatives of the government¹⁵, a representative of the Capital Market Authority and for a representative of Misr Bank - a state-owned bank.

The composition of the MPC raises a major concern. While the involvement of ‘outsiders’ in the committee seems to be a good idea (provided members have sufficient expertise and are truly independent), the official representation of the government casts some doubt on the decision-making process, the extent to which it is influenced by the government and the level of government interference in the Bank's policies.

In addition to composition of the MPC, there are some articles in the CBE law and its amendments that suggest that the bank is only partially independent. For instance, Article 39¹⁶ states that the CBE "*shall extend financing to the government, upon its request, to cover the seasonal deficit on the general budget. The Bank, in agreement with the Ministry of Finance, shall determine the conditions concerning this finance, according to the prevailing monetary and credit situations, provided that the amount of such finance shall not exceed 10% of the average revenues of the general budget in the three previous years*". It also states that "*the net profit of the Bank shall be transferred to the Public Treasury of the State, after deducting the workers' profit share as determined by the Board of Directors of the Bank, and the reserves it determines to form*"¹⁷, which clearly contradicts its status as a private fund and may be considered as a sign of implicit fiscal dominance.

Other lacunae in the CBE law include the absence of any procedure for conflict resolution, should conflict occur between the CBE and the government. Besides, some articles, which are written using ambiguous words, leave room for a wide range of interpretations and debate on the effective conduct of monetary policy.

Regarding **the management of the Central Bank**, the statutes of the CBE covers the appointment of the Governor, his deputies and the other nine members of the Board of Directors, as well as their mandate. While all board members (Governor, deputies and nine experienced persons) are nominated by a decree of the President of the Republic, the remuneration and attendance allowances of the nine specialised members are determined by decree of the Prime Minister, upon a proposal from the Governor¹⁸. One can only criticize the subordination of the board members' remuneration to the head of the government because, in such circumstances, the autonomy of the members' decisions becomes questionable.

There is no doubt that there have been positive steps towards an increased autonomy of the CBE. However, the previous analysis of the CBE's objectives and its relationship with the government suggests that, in spite of the positive changes it has made to the Central Bank Law in the direction

¹⁵ Ministers of Finance, Industry and Foreign Trade, Economic Development and Investment

¹⁶ Presidential Decree No 64 of the Year 2004

¹⁷ Article 36

¹⁸ Article 18

of increased autonomy, other measures and changes in the CBE law are still needed to ensure the *full* independence of the bank. Moreover, some changes that have been introduced recently, such as the removal of the article which prohibited the dismissal of the CBE governor before the end of his mandate, can be considered as a retrograde step.

To summarize, the CBE can still be seen as partially independent, with some indicators pointing to an implicit fiscal dominance. Thus, it is recommended to amend the relevant legislation to prohibit the monetary financing of fiscal deficits. A revision of the Monetary Policy Committee membership and/or the limitation of the right of government members to vote are also highly recommended as ways of ensuring greater independence. The article which prohibited the dismissal of the CBE governor before the end of his mandate should be reintroduced into the current law.

Finally, it is worth mentioning that, as in most developing countries, it is difficult to assess the degree of central bank independence because of the discrepancies between the *de jure* degree of independence as conferred by law on the one hand, and actual practice on the other¹⁹. Indeed, laws in developing countries are often incomplete or ambiguous, and/or their enforcement is weaker, which makes the analysis of the central bank charter a poor proxy for its *de facto* autonomy.

b) Technical capabilities

i. Construction of CPI

The adoption of IT requires the construction of an appropriate price index on which the inflation target is to be based. As in all developing countries, choosing such an index is problematic. The first reason is that foodstuffs, which make up a large part of the basket, have highly variable prices because of their sensitivity to weather conditions. This high variability translates into more volatile CPI inflation. Second, goods and services with subsidized prices have a substantial share the basket. Large movements in regulated prices, which have a direct impact on the overall price level, may lead to poor control of inflation and damage the central bank's credibility.

A common practice between inflation targeting central banks consists of targeting an inflation index that excludes items which are especially prone to supply shocks, and items over which they have no control (such as food and energy). Using a core inflation measure should thus limit the risks of missing the target and any resulting loss of credibility for the central bank.

However, an important criticism usually addressed to the so-called "core inflation" is that such an index would not accurately reflect the trend in the cost of living because of the important weight of these items within the basket of goods and services. The following tables show the composition of the Egyptian CPI. Table 7.1 shows the weights of the basket components derived from the consumption and expenditure survey of 1995/96, as from July 1998. These weights have then been modified on the basis of a more recent consumption and expenditure survey (conducted in 1999/2000) and used as from January 2004. In the Egyptian case, food & non alcoholic beverages

¹⁹ For more details on attempts to quantify the CBE independence, see Kamaly, A. and Farrag, N., 2005.

accounted for more than 50% of the old CPI basket, and still account for almost 40% of the current one. Within this category, bread, cooking oil and sugar benefit from consumption subsidies. Also subsidised are petroleum products (rent, power and fuel represent around 10% of the basket) pharmaceuticals (medical care represents 4%), water, electricity & gas (around 12%).

Table 7.1 CPI general index – base year 1995/96

Items	Weight
<u>General Index</u>	1000
Food, beverages and tobacco	502.2
Clothes & footwear	97.1
Rent, power & fuel	92.9
Furniture & housing services	50.1
Medical care	40.7
Transportation & communications	61.7
Education, culture & recreation	91.5
Miscellaneous goods & services	63.8

Breakdown of food & beverages items

Food, beverages and tobacco	502.2
- Grains & starch	74.7
- Meat & poultry	115.8
- Fish	30.1
- Milk, cheese & eggs	60.1
- Oils & fats	36.5
- Fresh & preserved fruits	34.8
- Fresh & preserved vegetables	47.6
- Pulses	9.9
- Sugar & sweets	21.1
- Other foodstuffs	22.0
- Beverages	15.3

Table 7.2 CPI general index – base year 1999/2000

Items	Weight
<u>General Index</u>	<u>1000</u>
Food & beverages	389.1
Tobacco	28.1
Clothes & footwear	104.2
Housing, water, electricity, gas & others	116.8
Furnishings, HH equipment & routine house maintenance	49.4
Health	45.5
Transport	55.5
Communications	20.1
Recreation & culture	59.2
Education	57.3
Hotels, cafes & restaurants	25.1
Miscellaneous goods & services	49.7

Source: CAPMAS, Sept 2005

Table 8 shows the trend in prices for each component between 2000 (when news weights were adopted) and 2005. As expected, the "food" category has seen the highest inflation rate over the period (44.6%). On the other hand, inflation in the power and fuel category was the lowest, with a rate of 12.8% over the five-year period.

Table 8 - Changes in CPI components prices (in %)

	2000	2001	2002	2003	2004	2005	% change 2000-2005
Food, beverages and tobacco	101.5	102.7	106.3	114.9	142.7	146.8	44.6
<i>Annual growth rate</i>	2.9	1.2	3.5	8.1	24.2	2.9	
Clothes & footwear	101.2	103.5	105.2	108.7	124.4	128.4	26.9
<i>Annual growth rate</i>	2.6	2.3	1.6	3.3	14.4	3.2	
Rent, power & fuel	101.0	101.7	102.1	103.8	109.4	113.9	12.8
<i>Annual growth rate</i>	2.0	0.7	0.4	1.7	5.4	4.1	
Furnishings and house maintenance	100.0	100.6	102.1	110.4	124.9	126.8	26.8
<i>Annual growth rate</i>	0.5	0.6	1.5	8.1	13.1	1.5	
Health	101.0	101.9	103.1	105.3	116.0	119.7	18.5
<i>Annual growth rate</i>	1.5	0.9	1.2	2.1	10.2	3.2	
Transports & communications	100.9	101.0	102.9	109.0	127.6	137.6	36.4
<i>Annual growth rate</i>	2.9	0.1	1.9	5.9	17.1	7.8	
Education, culture & recreation	102.7	115.4	116.0	116.4	116.8	118.5	15.4
<i>Annual growth rate</i>	5.7	12.4	0.5	0.3	0.3	1.5	
Miscellaneous goods & services	100.9	102.9	103.6	109.8	120.4	122.0	20.9
<i>Annual growth rate</i>	1.6	2.0	0.7	6.0	9.7	1.3	

Source: CAPMAS, Sept 2005, author's calculations.

To summarize, a timely and accurate measurement of inflation is needed for policymakers to conduct Egypt's monetary policy. However, a measure of core inflation that reduces the importance of food and regulated prices may not adequately reflect the trend in households' cost of living. Given that the index is used by the public to monitor price developments, it definitely contributes to forming inflation expectations, which are a cornerstone of inflation targeting. In a country where independent measures of inflation are unavailable, it is recommended to choose an index that helps enhancing the central bank's credibility and transparency. A sound strategy would suggest keeping a watch on core inflation – even if it is not used as a target – in order to evaluate the economic conditions and set the appropriate policies. An independent statistical office is required for a public and, as stressed before, a regular and timely provision of detailed price statistics.

ii. Technical capabilities: transmission mechanisms and forecasting models

It follows from the previous point that well developed technical capabilities of the central bank are a major factor in implementing a framework to target inflation. Building a convenient and reliable index is just one aspect of this requirement. In fact, the implementation of inflation targeting requires a very good knowledge of all the aspects of the monetary transmission mechanism in the country, which underlines the importance of improving the operational and analytical capabilities of

the central bank. For this purpose, the central bank needs to invest in human capital to put together a qualified team of staff who are capable of understanding the functioning of the economy and are familiar with the requirements of an inflation targeting regime.

Forecasting techniques are also crucial and need to be improved. Producing forecasts on the trends in the main macroeconomic indicators and making projections on inflation dynamics requires the development of macroeconomic modelling capabilities, as well as the data needed to implement them. Indeed, inflation targeting is simply inflation forecast targeting: the central bank's inflation forecast becomes an explicit intermediate target. Quantitative projections of the economy's expected future course form the basis of the central bank's decisions about the appropriate level of short-term interest rates and other appropriate instruments. The public discussion of those projections should also be part of the process whereby the central bank explains and justifies the conduct of monetary policy to the public.

c) *Transparency, credibility & accountability*

Inflation targeting can only function if monetary policy and its full decision-making process are conducted in a transparent and credible manner. The principal argument in favour of more transparent objectives and actions is that, by making it easier for markets to interpret central bank policy, inflation expectations are anchored more firmly, which in turn helps to lower the costs of meeting the target.

A transparent framework is also essential to establishing and maintaining the credibility of the monetary authorities and their policy. Indeed, the Central Bank has to build its credibility as a monetary authority committed to price stability, which requires actions consistent with the inflation-targeting framework combined with high levels of transparency and communication with the public. Ideally, a transparent inflation targeting framework involves communicating the central bank's objectives, deliberations, and policy decisions to the public. This is usually done by publishing a regular monetary policy report, which includes not only information about the current state of the economy but also the bank's forecast on inflation and other variables and its own analysis, which are based on these forecasts. All these elements provide the rationale for the central bank's policy decisions.

Regarding the CBE, an effort has been made recently to strengthen communication with the public through the regular publication of monthly, quarterly and annual reports. Press releases on the main considerations underlying monetary policy decisions are also available on the CBE's website. The country's general economic situation is analysed in the bank's regular publications, but these reports do not compare the outcomes of the monetary policy against the initial (un)declared objectives, as this does not help in building credibility. A major step to enhance CBE transparency would be to issue an *Inflation Report* that includes an assessment of current and future economic developments for the public and analyses the major risk factors that are identified during each round of forecasts. Producing such a report, which explains the conduct of policy in more qualitative terms, would definitely reinforce credibility and confidence building.

One of the main challenges for Egypt is related to the statistical reporting system. In the current state, there is concern about the quality of available data (coverage, periodicity, timeliness, integrity and access by the public). One of the positive steps in this direction was Egypt's subscription to the IMF's Special Data Dissemination Standard (SDDS), which aims at implementing international standards in statistics. However, the Egyptian authorities still have a lot to do on this front to harmonize data, methodologies and compilation practices from different sources. Besides, the absence in Egypt of a *statistical office that is fully independent* - in the sense of institutional, financial and political independence - can only be denounced. The existence of such an institution, endowed with sufficient financial and human resources, is crucial to ensure the credibility of the inflation targeting framework.

With credibility being a key factor in the success of inflation targeting, close and regular communication with the public appears to be the most important way to enhance the authorities' credibility. Explaining what inflation targeting is all about will influence how inflation is perceived. Since consumers' overestimation of inflation can have a negative impact on inflation expectations and on the credibility of the CPI index and its capacity to measure price developments, insufficient communication can lead to a loss of credibility that may hamper the proper conduct of monetary policy.

Conclusions and policy recommendations

Over the past 16 years, many countries have adopted explicit inflation targeting as a framework for conducting their monetary policy. Initially adopted by industrial countries, inflation targeting has since been adopted by a large number of emerging market economies too, encouraged by its perceived success. Most of this success can be attributed not only to the progress that has been made toward meeting the (relatively low) inflation targets, but also to the improvements it has brought in the form of regular communication with the public, which means more transparency and better mechanisms by which the monetary authority is held accountable.

The question for Egypt is no longer whether it should move to inflation targeting or not, but rather when it should do so and, more importantly, how. This is because, in its move towards inflation targeting, the country has to undergo a set of economic, institutional and social reforms that are crucial to the success of the new monetary policy. Indeed, these conditions are necessary in order to achieve price stability and macroeconomic stability. The multiplicity of channels through which fiscal policy affects monetary policy and inflation prompted this paper to focus on the current fiscal policy and institutional requirements to implement an inflation targeting regime in Egypt.

The analysis of the fiscal stance in Egypt shows that the country is suffering from a structural budget deficit. As a result, the debt keeps on growing, which - in its turn - places a higher burden on the government budget through interest payments. Because of this "snowball effect", the rise in the debt level persists. The major policy implication emerging from this analysis is that the Egyptian fiscal strategy should focus on three main issues. The first issue is to rationalize and improve the efficiency of public expenditures as a way to stop the ongoing increase in the ratio of expenditure to GDP. In our view, expenditure rationalization should be performed according to the relative efficiency of the major spending categories in terms of performance outcomes, and should not rely on ad hoc cuts. As for the subsidies, as they are gradually removed, they should be replaced by better targeting mechanisms and accompanied by measures to strengthen the social safety net and introduce appropriate compensatory schemes. Second, privatisations of state owned enterprises should not be considered as a permanent source of revenue. They should be undertaken primarily for reasons of efficiency rather than for the purpose of deficit financing or debt reduction. At the same time, greater efforts should be deployed to improve public sector management. Thirdly, rules should be laid down relating to the use of higher than expected revenues. Lastly, all these measures should be implemented in parallel with structural reforms, such as the necessary reform of the system of subsidies, as well as institutional reforms to ensure transparency and accountability.

The paper also focused on the role of the CBE as the authority responsible for the formulation and implementation of an inflation targeting monetary policy. Giving sufficient independence to central banks is a fundamental condition in targeting inflation, because it allows the monetary authorities to focus on the price stability objective.

Regarding the CBE, steps have been recently undertaken to reinforce its independence by making several amendments to the law. However, there are some policy recommendations regarding the measures that still need to be put into effect in order to ensure its full independence. First of all, the membership of the CBE board, on which government officials are heavily represented, and the issuance of decisions according to the absolute majority of the votes of the Board members indicates that there is a certain degree of interference in the Bank's policies. Hence, it is highly recommended to review the composition of the Monetary Policy Committee and to limit the right of government members to vote. A government representative may be present to ensure coordination, but should not have voting rights on the executive board. Second, the relevant legislation needs to be amended to ensure that monetary financing of fiscal deficits is prohibited. The procedures for nominating and appointing members of the governing bodies are also especially important for establishing the autonomy of the central bank, as well as for ensuring the integrity of central bank officials. Another key element in ensuring the CBE's autonomy is to have a provision in the CBE law that protects against arbitrary dismissal of the Governor and board members. Finally, communication with the public should be increased via regular publications (inflation reports, annual reports, press releases...) with a full explanation of the reasons underlying the CBE's actions. Indeed, the effectiveness of monetary policy largely depends on the impact it has on expectations and confidence, underlining once again the importance of a credible and transparent monetary policy. We would even go so far as to say that the primary policy problem facing the CBE during this period is the acquisition and maintenance of credibility for its commitment to low inflation.

On the technical side, transmission mechanisms and channels of the monetary policy actions have to be defined, taking into considerations the characteristics of the Egyptian economy. Therefore, it is important to work on improving the CBE's technical capabilities, including its forecasting capabilities and the statistical reporting system. As for the definition of the targeted inflation rate, it should be communicated to the public.

This paper is optimistic about the possibility of undertaking the needed reforms without jeopardizing Egypt's economic growth, especially in the current conditions where Egypt is enjoying strong real GDP growth. However, because of the political sensitivity of most of the measures and their consequences in the short run, successful implementation of the above reforms requires broad public consensus. And last but not least, all the abovementioned reforms can have little effect without adequate political support for the changes to be implemented in practice.

References

Arestis, P (2000), "Financial Sector Reforms in Developing Countries with Special Reference to Egypt", Levy Economics Institute of Bard College

Blanchard, O. (2004) "Fiscal Dominance and Inflation Targeting - Lessons from Brazil", Working Paper 10389, NBER

Bryan, M. F. and S. G. Cecchetti (1993). "Measuring Core Inflation", NBER Working Paper N°4303

Bryan, M. F. and S. G. Cecchetti (1993). "The Consumer Price Index as a Measure of Inflation", NBER Working Paper N°4505

Crandall, W. and J-P. Bodin¹ (2005), "Revenue Administration Reform in Middle Eastern Countries, 1994–2004", IMF WP/05/203

CAPMAS (2005), "Trends over the Last Ten Years", September

Central Bank of Egypt (CBE), Annual Report, various issues

Central Bank of Egypt (2005), Monetary Policy Statement, June

Central Bank of Egypt Website

Cevik, S. (2007) "Egypt: Tip of the Iceberg" Morgan Stanley Research

Cevik, S. (2006) "Egypt: The Dangers of Overheating" Morgan Stanley Research

Crawford, A.; J-F Fillion, and T. Laflèche (1997) "L'IPC est-il une mesure adéquate pour la définition de la stabilité des prix?" Actes du colloque *Stabilité des prix, cibles en matière d'inflation et politique monétaire*, Banque du Canada, mai.

Cukierman, (1992) "Measuring the independence of central banks and its effect on policy outcomes", *World Bank Economic Review*, 6: 353-398

Eid, N. (2007) "The Political economy of the Central Bank of Egypt – cautious or bold", presented at the *Eight Mediterranean Social and Political Research Meeting*, Robert Schuman Institute for Advanced Studies, European University Institute, March.

European Commission (2007), "European Neighbourhood Policy: Economic Review of EU Neighbour Countries", Occasional papers No. 30, June

Herzberg V. and M. Watson M. (2007), "Growth, risks and governance: the role of the financial sector in southeastern Europe", European Commission, Occasional papers No. 29, April.

Hogan, S.; M. Johnson and T. Laflèche (2001) "Core Inflation", Technical Report No. 89, Bank of Canada.

International Monetary Fund (2006) Country Report No. 06/253, Arab Republic of Egypt: Article IV Consultation, June.

International Monetary Fund (2005) "Does Inflation Targeting Work in Emerging Markets?" World Economic Outlook, Chapter IV, September

Kamaly, A. and N. Farrag. "Measuring the degree of independence of the Central Bank of Egypt", Economic Research Forum, September 2005.

Koskinen, J-P, T. Koivu and A. Chowdhury (2004) "Selecting inflation indicators under an inflation targeting regime: evidence from the MCL method" BOFIT Discussion Papers No. 16, Institute for Economies in Transition, Bank of Finland.

Krejdl, A. (2006), "Fiscal Sustainability - Definition, Indicators and Assessment of Czech Public Finance Sustainability", the Working Paper Series of the Czech National Bank (CNB)

Ministry of Industry and Foreign Trade (MOFT), Egypt, monthly & quarterly reports, various issues

Mishkin, F. (2000) "Réflexions sur la poursuite de cibles en matière d'inflation" Actes du colloque *La stabilité des prix et la cible à long terme de la politique monétaire*, Banque du Canada, juin

OECD Economic Survey (2005), Chile, Volume 2005/19 – November

Rivas, L.A. (2002) "Core inflation and inflation targeting in a developing economy" Working Paper 02-W07, Vanderbilt University

Woodford, M. "Control of the public debt: a requirement for price stability?", NBER WP N° 5684

Wozniak P. (1997) "Relative prices and inflation in Poland 1989-1997, the special role of administered price increases", Studies and analysis no. 121, Center for Social and Economic Research CASE, Poland

Zoli, E. (2005)," How does fiscal policy affect monetary policy in emerging market countries?", BIS Working Papers N° 174, April