MDG-based Debt Sustainability Analysis

Egypt

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Comments welcome

MDG-based Debt Sustainability Analysis: Egypt

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Abstract

The paper demonstrates that domestic debt in Egypt has replaced foreign debt as a major issue for macroeconomic managem ent and socioeconomic progress. It discusses the background on domestic debt issuance in Egypt, its size and structure. Domestic debt indicators are also examined. Government policy regarding domestic debt is assessed. The paper summarizes the status of po verty and prospects of MDG achievement. Based on estimates of resources needed to achieve the MDGs in Egypt by 2015, the paper examines domestic debt sustainability. Special attention is given to the implications of the impossible trinity for macroeconomic and debt management.

I- Introduction

In 2000 the United Nations adopted the Millennium Development Goals (MDGs), and the member states signed the Millennium Declaration, including a commitment to achieving the MDGs by 2015. Supportive policy measures are a prerequisite to reaching the MDGs, and financial resources of the right amount are particularly crucial in this respect. In countries with heavy debt burdens, allocations for debt service compete with funds required to finance investments for MDG achievement. Egypt is a case in point.

Only in recent years has the issue of domestic debt in Egypt become important. Until the 1990s external debt in Egypt was uppermost on the agenda of the government, at one point (in 1990) hitting 144% of GDP with large arrears accumulating. With the adoption of the Economic Reform and Structural Adjustment Program (ERSAP) in 1991, foreign debt was significantly reduced through write-offs, Paris-Club rescheduling, and a debt-equity swap. As a result of premature liberalization of the capital accounts against the backdrop of misaligned macro-fundamentals, domestic debt accumulated rapidly under ERSAP and is currently at record levels.

The overall aim of this paper is to assess the level of domestic indebtedness which is still consistent with achieving the MDGs. To this extent the paper has two objectives: **First** to explore the domestic debt burden in Egypt and contrast it with the country's ability to reach the MDGs. **Second**, to suggest macroeconomic measures that would ensure any debt restructuring is in line with MDG based sustainability and serves pro-poor growth.

In addition to the introduction, the paper consists of four sections. Section II provides a background on Egypt's domestic debt. In Section III, we detail the MDG status and poverty situation in the country. Section IV examines the nexus between domestic public debt and sustainable development. And the papers conclusions are contained in Section V.

II- Background on Domestic Debt in Egypt

1. Brief history of domestic debt issuance in Egypt

Domestic debt rose steadily after WWII, rising from LE 175 (US$500) million in 1951 to LE 579 (US$1664) million in 1961, then again to LE 2.797 (US$6.4) billion in 1971. But it made a quantum leap during the 1980s, when it increased from LE 11.0 (U$15.7) billion in 1981 to LE 97.4 (US$32.6) billion in 1991. Throughout this period, external debt, rather than domestic debt, was the major concern of Egyptian policy makers. Debt outstanding and disbursed hit the US$50 billion mark by the end of June 1990, a staggering 144% of GDP, and cumulating debt arrears reached US$11 billion in 1988/89- all clear symptoms of debt overhang.

It was due to a partial debt write-off by the United States and Arab countries, coupled with a Paris Club rescheduling under the ERSAP in 1991, as well as the Egyptian authorities' commitment to maintain a ceiling on external debt that the burden of

external debt was considerably reduced.[1] In 2004/05 Egypt's external debt stood at approximately US$ 29 billion, representing 31% of GDP with debt service less than 10% of exports of goods and services.[2] Furthermore, there is a blocked account with the Central Bank of Egypt (CBE) dedicated to repaying external debt at the new rescheduled dates. The cumulative balance in that account reached LE 76 billion in December 2004.[3] Consequently, Egypt's current external debt poses no significant problems to achieving the MDGs.

For Egypt the serious problem now lies with domestic debt. Domestic debt rose sharply under ERSAP, surpassing external debt both in terms of stock ratios to GDP as well as flows of debt-service expenditure. Beginning in the 1990s to date, domestic debt has come to occupy center stage. According to the latest figures of the CBE (June 2006), domestic debt has reached LE 593.5 billion (US$100bn), representing 102.1% of GDP.[4] This is a record high in Egypt's economic history. Table 1 presents data on the ratio of public (domestic and external) debt in Egypt and comparators for 2000 and demonstrates that this ratio is much higher in Egypt. Since external debt of Egypt has been brought to manageable levels, these comparators suggest that Egypt is carrying a significant domestic debt burden.

Table 1
Public Debt/GDP Ratios (2000)

Egypt	*100*
Average Lower Middle Income	57
Selected Comparators:	
Argentina	45
Brazil	32
Philippines	63
Malaysia	43
Thailand	24
Turkey	63

Source: World Bank, quoted in Alba *et al.* (2004)

Figure 1 shows the development of the domestic debt/GDP ratio and domestic debt per capita during 1981-2005. On the basis of Egypt's own postwar historical record and relative to its comparators, the current level of domestic debt may be prohibitive. If nothing else, it raises serious concerns regarding long-term sustainability.[5]

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[1] Abdel-Khalek, 2001: 44

[2] CBE, *Annual Report 2004/05*

[3] People's Assembly, 2006: 31

[4] A word on the definition of public debt is in order. For analyzing sustainability, it is essential to have as wide a coverage of public liabilities as possible. In addition to the central government liabilities, those of sub-national governments and public sector enterprises should preferably be included and contingency liabilities should also be added (IMF 2003). In Egypt's case the CBE defines domestic public debt as the total of government debt, National Investment Bank debt, and debt of Public Economic Authorities. On the other hand, the Ministry of Finance (MoF) defines domestic public debt to include only government debt. Only CBE publishes long time series data on domestic debt. In this study we rely on CBE domestic public debt data in gross terms (i.e., without netting out assets).

[5] Abdel-Khalek, 2000, Abdel Latif and Shehata, 2005; Alba *et al*., 2004; IMF, 2005

In summary, the high ratio of domestic public debt in the 1980s and 1990s reflects a shift in deficit financing from foreign borrowing and inflationary financing to domestic debt. This, and the use of treasury bills to sterilize capital inflows, has led to a significant change in the composition of total public debt; wherein domestic debt is increasingly replacing foreign debt during the 1990s.[6]

Figure 1
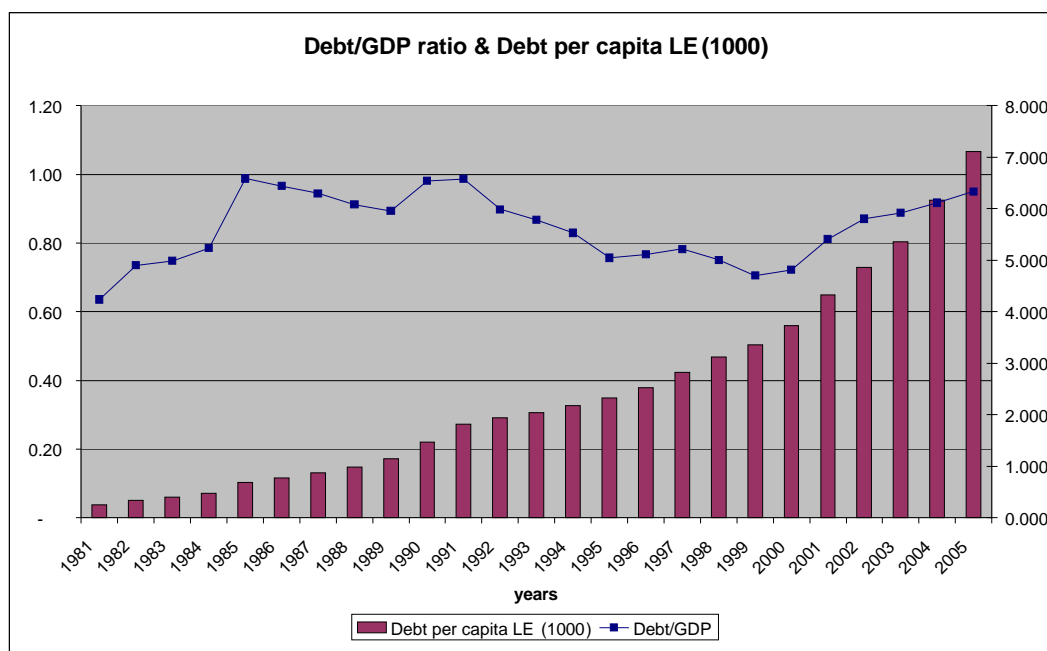
Source: Data in Table A1 in Annex.

An initial reading of Figure 1 suggests that the domestic debt/GDP ratio remained relatively constant over the period 1985 to 2005. But a closer look reveals that debt to GDP fell between 1991 and 1999, but has risen since. In 2006, the domestic debt/GDP exceeded 100%.

We hypothesize that the increase of domestic debt during the 1990s and early 2000s is the logical conclusion of the nominal exchange-rate anchor and a strong monetary stance in the context of capital mobility. It is a familiar story that, with liberalization of capital transactions in many countries, the policy response to massive capital inflows predominantly driven by changes in international interest rates is sterilization. In Egypt's case under ERSAP, this led to large accumulation of foreign reserves and rising domestic debt.

Our previous analysis indicates that the policy response to high portfolio capital inflows has been to sterilize such inflows in order to avoid unwarranted increase in the monetary base.[7] The end result was accumulation of international reserves in parallel with the accumulation of domestic public debt. But this process essentially

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[6] World Bank, 1995, Vol. I : 6; Abdel-Khalek, 2000
[7] Abdel-Khalek, 2000

involves an asset swap involving substantial quasi-fiscal cost: selling high-yielding domestic assets and buying low-yielding foreign assets.

2. Domestic Debt by Category

According to the CBE, domestic public debt is composed of three components: government debt, debt of National Economic Authorities, and debt of the National Investment Bank (NIB)[8]. Government debt represents more than 70% of domestic public debt, consisting of debt from the central and local government, as well as non-financial public entities known as service corporations. The government borrows from the public (including the financial sector) directly by issuing securities, and indirectly through NIB resources.

Figure 2 depicts the development of government domestic debt by category during 1985-2005. The share of government securities exhibited cyclical behaviour- initially rising until the early 1990s under ERSAP, then falling till 2000, only to rise sharply during the 2000s again. Government borrowing from NIB resources increased until 1997, then fell afterwards. The share of government balances with banks mirrors the movement of the shares in government securities and NIB resources combined. The negative (positive) sign means the government is in a creditor (debtor) position *vis-à-vis* banks. The steep increase in the share of government balances with banks may be interpreted as an indication of government over-borrowing.

Figure 2
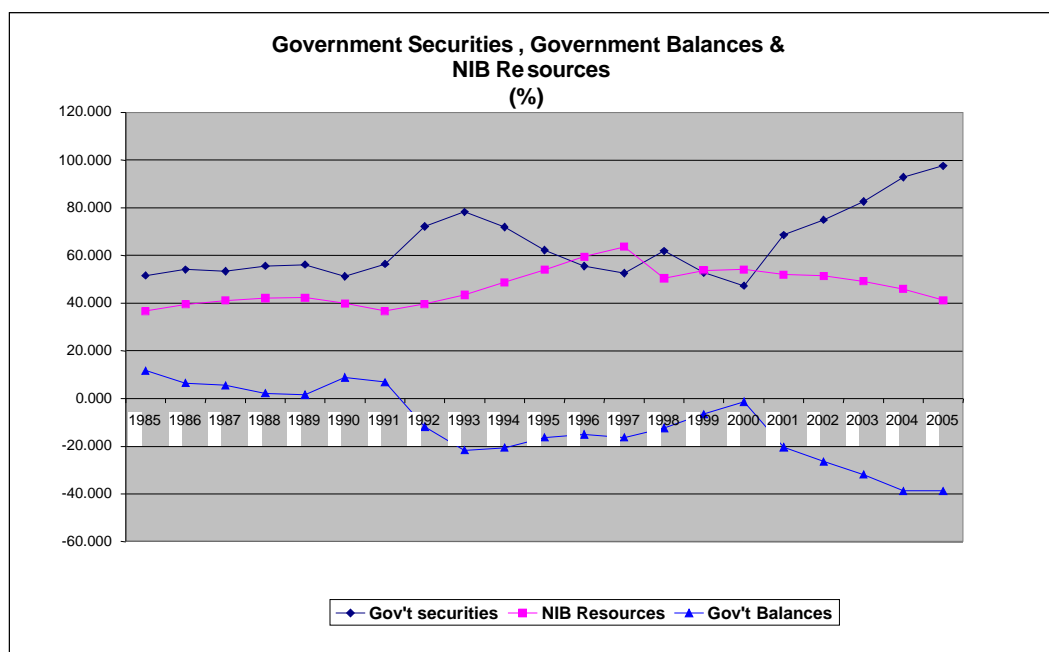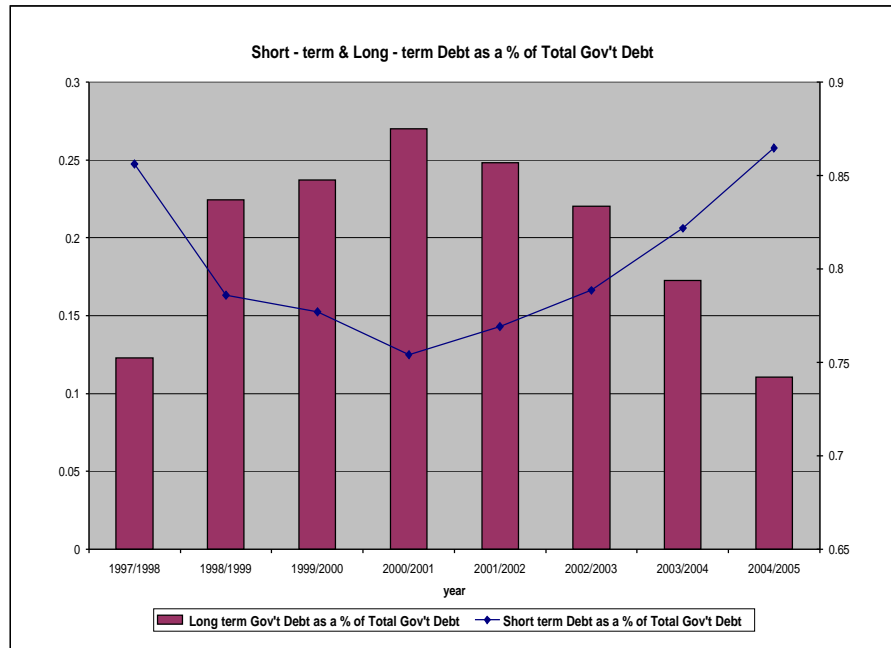

Source: CBE

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[8] The NIB, established in 1980, is really an intermediary fund for investment: it collects resources from the Social Insurance Fund for Government Employees, the Social Insurance Fund for Business Sector Employees, proceeds of Investment Certificates and deposits of the Postal Saving Fund, and then allocates them to finance public investment, mostly on a loan basis.

3. Domestic Debt by Maturity, Currency and Purchasers

The term and currency structure of domestic debt has undergone significant modifications since 2000/01. Figure 3 reveals how the short-term component of domestic debt more than doubled, exceeding 25% of total domestic debt in 2004/05. This is the result of the fast increase in Treasury Bond and Treasury Bill issuance, and underscores the increased risk of debt roll-over.

Figure 3

Short - term & Long - term Debt as a % of Total Gov't Debt

Source: CBE

With regard to the currency composition, over 95% of Egypt's domestic debt is in Egyptian pounds, as shown in Figure 4. This is comparable to the case of Brazil.[9] The spike in the share of foreign-currency denominated domestic debt in 2002/03 is related to the purchase by resident financial institutions of a large part of sovereign dollar bonds that the Egyptian government placed on international financial markets in June 2001. As to purchasers, more than 85% of the outstanding stock of TBs during 1996-2004/05 were held by banks. Banks' portfolio of securities in 2005 consisted mainly of Treasury Bills and Treasury Bonds- respectively 43.1% and 31%.[10]

Figure 4
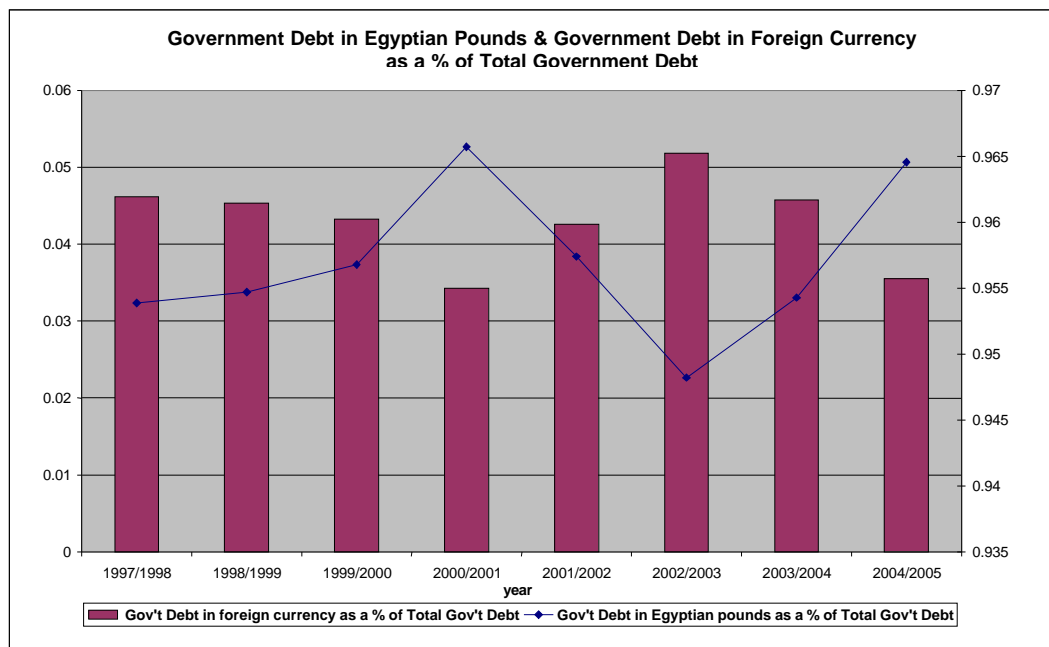
Source: CBE

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[9] Herrera, 2005
[10] CBE, Annual Report 2004/05, p. 57

4. Domestic Debt Service

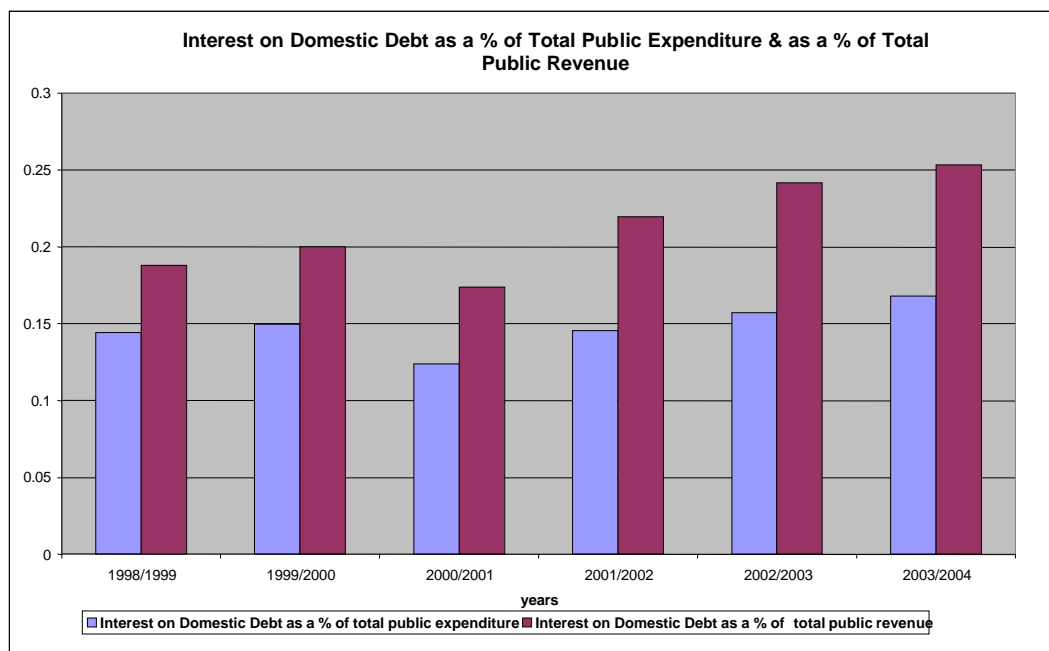As shown in Figure 5, interest payments on domestic debt have risen as a share of both public expenditure and public revenue since 2000/2001. Recently total domestic debt service has exceeded wage allocations, both in relation to public revenue and expenditure. As we shall demonstrate, this is significant from the standpoint of achieving the MDGs.

Figure 5

Source: CBE

5. Some Implications of the Level and Structure of Domestic Debt

Domestic debt in Egypt has important implications for growth, equality and poverty reduction. It implies higher domestic interest rates and crowds out public and private investment, hence constraining growth. It also affects bank behaviour in favour of investing in government securities and against extending credit to productive investment. Figure 6 illustrates the persistent decline in the share of investment in public expenditure. Furthermore, domestic public debt may have resulted in redistributing income from the poor (stakeholders in Social Insurance Funds- SIFs) to the rich (banks and beneficiaries of domestic debt-financed expenditure).[11]

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[11] Abdel-Khalek, 2000

Figure 6

Investment as a % of Total Public Expenditure
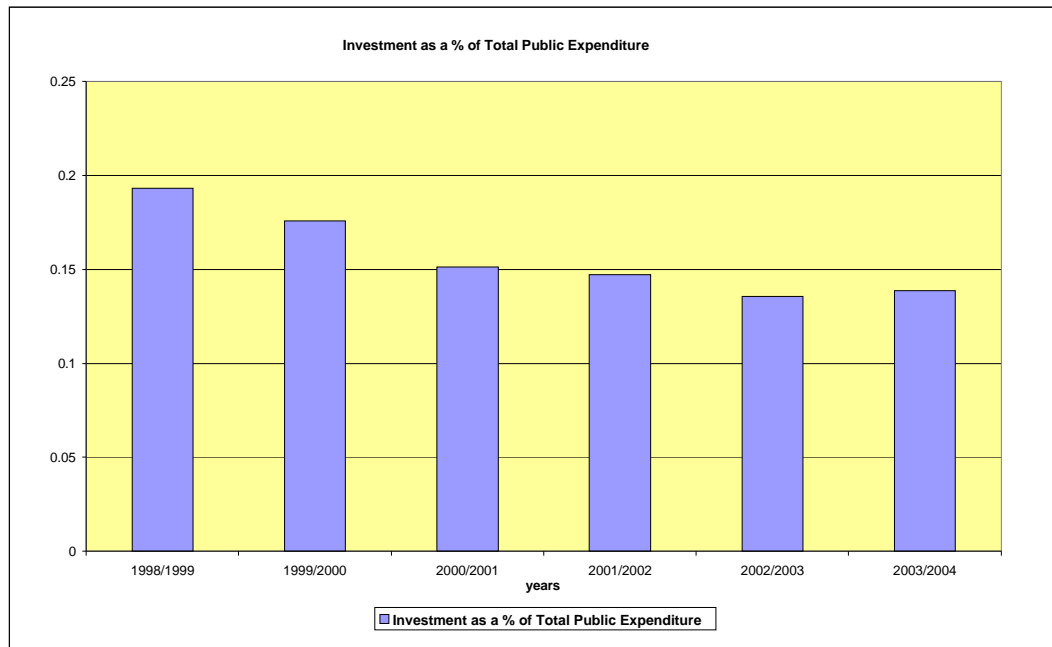
Source: Government of Egypt

Fast accumulation of domestic public debt and mounting debt-service payments has negative implications for social expenditure and human development. Compare the evolution of interest payments on domestic debt with relevant items in the government budget as total current expenditure: wage payments, subsidies, and expenditure on education and health. A previous study has shown that interest payments on domestic debt have outpaced social-expenditures. From being about one half of subsidy expenditure on average prior to 1989, it has become 2-3 times subsidy expenditure during the 1990s. In 1995, interest payments on domestic debt reached four times current non-wage expenditure on education and health combined. In proportion to total wage payments, interest payments on domestic debt were equivalent to 42.5% during 1985-89, jumping to 85.1% during 1993-97. Put in a more telling way, for every pound paid to compensation of labour as wages through the budget, *twice* was paid as interest to domestic debt holders during 1993-97 compared to 1985-89 and this trend continues.[12]

5.1- Implications for Bank Behaviour

By placing securities on the market (treasury bills and bonds), the government has provided the banking system with an attractive alternative with low risk and reasonable returns. This has affected banking portfolios by increasing the share of government securities as compared to loans to the business sector.

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[12] Abdel-Khalek, 2000

Available evidence demonstrates that over the period 2001-2005 the share of securities (including TB repos) in total bank asset portfolios increased from 17.4% to 24.4%. More significant perhaps is the increase in the ratio of securities to loans from 36.2% to 55.9% over the same period.[13] Financial portfolios of banks consist overwhelmingly of government paper. At the end of the 2004/05 fiscal year, bank holdings of TBs and government bonds accounted for 43.1% and 31.2% respectively of their financial portfolio, against only 13% for equity participation, 7.2% for foreign securities, and 5.5% for non-government bonds. This suggests that government borrowing from banks has crowded out the private sector.

Official sources indicate that the larger part of domestic debt (59.7%) is used to finance the budget deficit, while only 33.5% is used to finance investment and 6.8% to finance the deficit of Public Economic Authorities (PEAs).[14] This pattern of use of publicly borrowed domestic funds has obvious negative implications for the rate of investment and growth. If investment falls, then the growth rate is also likely to suffer.

5.2- Implications for Pension Funds

Through the conduit of the NIB, government borrowing from the Social Insurance Funds (SIFs) was compulsory, with borrowing usually significantly below market interest rates. This was a unique mechanism of financial repression, tantamount to implicit taxation.[15] As shown in Table 2, over the decade 1980-1990 the implicit tax rate occasionally exceeded 100%. The interest rate on SIFs' funds increased recently, but has remained below market interest rates. Through the SIFs-NIB-Government nexus, funds were siphoned off from the poor to the rich.

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[13] CBE, Annual Report 2004/05: 55
[14] As per statement by the Chairman of the Central Accounting Agency to the People's Assembly, 9th legislative cycle, first sitting.
[15] Abdel-Khalek, 2000

Table 2
Implicit Tax Imposed on Social Insurance Funds
1985-1997

Period	(r_t) Interest Rate on Debt to SIFs	(r_2) Interest Rate on Investment Certificates*	Implicit Tax	
	% (1)	% (2)	Rate (timp) % (3)	Revenue (LE Million) (4)
1/7/1985 - 30/6/1987	6 [x]	12	100	710[+]
1/7/1987 - 30/6/1989	7	13.25	89	1159[+]
1/7/1989 - 14/9/1990	8	17	112	2152
15/9/1990 - 30/6/1991	9	17.5	94	2396
1/7/1991 - 30/6/1992	11	17.5	59	2182
1/7/1992 - 30/6/1997	12	13.9	16	1120[+]
Total, 1987 – 1997				16778

Notes : x Effective beginning 1/7/1980
   * Average for the corresponding period of interest rates on current income certificates, which account for more than 75% of gross sales of investment certificates.
   + Annual average for corresponding period.

Sources: Column (1), unpublished data obtained from the National Investment Bank.
   Column (2), CBE, *Annual Report*, Various volumes.
   Column (3), Calculated from columns (1) & (2) using the formula: timp = $[(r_1-r_2)/r_1]$ x100.
   Column (4) calculated by applying the implicit tax rate from column (3) to interest income on government debt to SIFs.

Together sections 5.1 and 5.2 show that there are negative equity implications to Egypt's domestic public debt. It may be fitting perhaps to say that the accumulation of such debt has involved redistribution from the working class to the 'coupon- clipping' class- to use a term coined by Keynes. Furthermore, to the extent that TBs are held by non-residents, it may be said that there is also redistribution from Egyptians to foreigners.[16]

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[16] Abdel-Khalek, 2000

6. *Stated Government Policy on Domestic Debt*

Government policy towards domestic debt has evolved considerably. Initially, the government stance was that unlike external debt, domestic debt did not represent a burden on the economy.[17] Subsequent analysis has shown that domestic debt is a burden on future generations- debt today simply means taxes tomorrow. But in the context of achieving the MDGs, domestic debt is also a burden on the current generation, as debt service obligations compete with investment to achieve the MDGs."

The Central Accounting Agency (CAA) has been critical of government policy on domestic debt. The CAA has called for restructuring domestic debt through a number of measures- including redeeming high-interest bonds and restricting TB issuance to only financing seasonal budget deficits.[18]

The IMF notes that Egypt's public debt is excessively high, and maintains that the official deficit reflects only a fraction of borrowing- being much less than total financing to the general government.[19] High levels of government borrowing and debt in Egypt are inimical to growth and impede increases in private investment. The IMF advises that net domestic public debt should be reduced in the medium term, particularly in view of the cost of the planned financial sector reforms. A multi-year strategy of fiscal consolidation is needed to lower borrowing and put public debt on a declining path.[20]

Recently, the government has become more aware of the increasing burden of domestic debt. In its statement on the State Budget Proposal for 2006/07, the Minister of Finance reiterated that special attention will be given to public debt and its sound economic management. According to him, this calls for full and timely payment of debt service, and bringing debt under control.[21]

The state budget proposal for 2005/06 targets a 1 percentage point annual reduction in the budget deficit. Authorities are in the process of preparing a package of measures aimed at reducing the deficit in the coming years by at least 1 percent of GDP annually, including streamlining subsidies and reducing the growth of the government wage bill.

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[17] Thus, one reads in the Fiscal Statement by the Minister o f Finance regarding the budget proposal for 1997/98 that "*Internal public debt* in contrast with external public debt *- is not a burden on the national economy*; its role is confined to transferring part of the national income from the hands of lenders to th e government. It therefore does not increase the burden on national net worth . In addition, it involves using real savings with no inflationary effects . Ministry of Finance, 1997, P.27; quoted in Abdel-Khalek, 2000- emphasis added)

[18] It should be noted that TB issuance in Egypt's case is not mainly to finance the budget deficit. Rather, it has been largely motivated by the requirements of sterilizing capital inflows and mopping up excessive liquidity (Abdel-Khalek, 2000; People's Assembly, 2006). This is a c lear example of the impossible trinity/trilemma.

[19] For example, total financing amounted to 6.6% of GDP, while borrowing to finance the deficit was only 2.5%. The difference is represented by other debt -creating operations- most notably those related to the NIB (IMF, 2005: 9). Furthermore, since budget estimates are made on a cash rather than on an accrual basis, the budget proposal usually underestimates the deficit. Consequently, it under -estimates the increment to domestic debt.

[20] IMF, 2005 & 2006

[21] Ministry of Finance, 2006

7. Future Strategy for Bringing Down Budget Deficit and Reducing Public Debt

The budget proposal for 2006/07 entails a monetary deficit of 8% of GDP and an overall deficit of 9.4% of GDP[22]. This deficit implies a net increase in borrowing of LE 59.2. billion. To address this situation, broad ranging measures and a systematic strategy are needed to turn around the deficit and bring down public debt. The MoF targets reducing monetary deficit from 8% to 4% of GDP within five years, i.e. an annual reduction of the monetary deficit by 1 percentage point of GDP during 2006/07-2010/11. This is to be done through a combination of expenditure-reducing and revenue-enhancing measures.[23].

According to the MoF, through the following proposed measures the annual growth rate[24] of public expenditure will be brought down steadily from 15.7% in 2006/07 to 11.7% in 2010/11 (i.e. by 1 percentage point annually):

(i) reducing the wage bill.

(ii) restructuring and pruning subsidies.

(iii) revamping the pension system

(iv) revising the financing structure of Public Economic Authorities.

(v) focusing public investment on vital areas of state responsibility, and intiating private public partnerships (PPPs) to reduce the burden of financing public investment.

On the other hand, public revenues will be increased through the following measures:

(a) Increasing taxes; especially broadening the coverage of sales tax and revising real estate taxes

(b) Strengthening income tax collection.

It should be noted that the revenue-enhancing measures focus mainly on indirect taxes, which are regressive by nature. This means that poorer people pay a proportionately larger share of their earnings in tax. The expenditure-reducing measures emphasize cutting investment and social expenditure (on wages and subsidies). Both of these again have negative implications for income distribution and poverty, and reduce the prospects of achieving the MDGs.

With regard to public debt and cash-flow management, the MoF suggests three broad directions:

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[22] In the jargon of the MoF, **monetary balance** is the difference between total revenue and total expenditure. **Overall balance** equals monetary balance plus net financial assets' holding (MoF, 2006: 107).

[23] In discussion with the offic er in charge of the Macrofiscal Unit in the MoF (Mr. Hany Kadry), he emphasized institutional reform, mechanization of government wage payments, revamping real -estate tax and broadening the coverage of sales tax. MoF, 2006

[24] Year-on year (y-o-y).

(i)   Introducing the single treasury account (STA) to control monetary inter-linkages of various government levels/agencies.

(ii)   Pursuing cheaper sources of borrowing.

(iii)   Aiming for an integrated menu of external loans and grants.

Taken together these measures do not constitute a specific and coherent debt management policy. First, it ignores the underlying factors behind the increase in the debt/GDP ratio. Such a strategy should take into account that the increase in the domestic debt/GDP ratio in the 2000s is due to both monetizing the fiscal deficit and sterilizing capital inflows.[25] Second, it does not identify the objectives of debt-management policy.[26] Third, it does not specify clear means of achieving the objectives. And fourth, it fails to set a specific target for the size of domestic debt relative to GDP.

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[25] The rise in the domestic debt/GDP ratio in the second half of the 1980s was driven mainly by monetization of the fiscal deficit, while the rise in the ratio during the 1990s was due mainly to sterilization of capital inflows (Abdel -Khalek, 2000).

[26] In general terms, debt management may have several objectives, such as minimizing the borrowing costs, achieving a balanced maturity structure, creating a secondary market for government securities, developing long-term instruments for private savings and improving the distribution of income (OECD, 1982). Achieving these (or any other objective) calls for some course of action by the debt -issuing authority, which, in the case of public debt is the government or the Central Bank acting for it.
With regard to the Egyptian case, and on the basis of the foregoing analysis in this paper, several of the above objectives may be relevant.

III Poverty, MDGs and Sustainable Development

1. MDG and Poverty Situation in Egypt

For the purpose of monitoring poverty, it is now standard practice to use the Foster-Greer-Thorbecke (FGT) class of decomposable poverty measures.

$$P_\alpha = 1/n \sum_{i=1}^{q} [(z-y_i)/z]^\alpha \qquad \alpha = 0, 1, 2$$

Where

$$\alpha = \begin{cases} 0 \text{ for the head count measure } (P_0) \\ 1 \text{ for the poverty gap measure } (P_1) \\ 2 \text{ for the poverty severity measure } (P_2) \end{cases}$$

y_i = the income or expenditure of the i-th poor household .

z = the (household) income of expenditure poverty line.

q = the number of households whose income or expenditure is less than the poverty line.

n = the total number of population (households).

P_0 is the head count index, which indicates the proportion of the population who are poor; but it is insensitive to the distribution of the poor below the poverty line.

P_1 is the poverty gap index, which measures the depth of poverty. With perfect targeting P_1, indicates the amount of transfers needed to bring all poor households to the poverty line.

P_2 is the poverty severity index, which measures the degree of inequality of the distribution below the poverty line; it gives more weight to households at the bottom of the distribution.

Table 3
Poverty Measures 1990/91-2004 and Projections for 2015

Headcount (% households below)	1990/91	1995/96	1999/2000	2002	2004	2015 projection
National poverty line +	24.32	19.41	16.74	20.4	20.16	10.80
US $1/day (PPP) poverty line	8.24	2.50	0.68		0.94	0.8
US $2/day (PPP) poverty line	39.45	41.52	24.84		14.4	16.49
Food Poverty Line	8.93	3.05	2.87		4.64	1.94
Subjective Poverty Line				31.8		
Gini Coefficient			0.310		0.352	

Sources: Data for 1990/91, 1995/96 and 1999/2000 are from MOP (2004), Table 1. Data for 2004 are from MOP (2005), Table 1.1. Data for 2002 from UNDP, 2003, Table 4.1. The projections for 2015 are those of the Ministry of Planning. Gini Coefficients from MOP (2005), Table A1.2.

Note: + This is the national lower poverty line. [27] The national poverty line is estimated for the whole of Egypt from The Household Income, Expenditure, and Consumption Survey (HIECS) conducted for the relevant years by the Central Agency for Public Mobilization and Statistics (CAPMAS). The methodology used relies on estimating the cost of basic (food and non-food) needs. Two alternative values are calculated: lower and upper. The first is the "ultra" poverty line, which is used here for estimating the headcount ratio.

The bulk of poverty analysis in Egypt is based on consecutive rounds of the HIECS conducted by the CAPMAS. For the purpose of examining MDG achievement, we rely on results of the last four rounds covering the years 1990/91, 1995/96, 1999/2000 and 2004,[28] detailed in Table (3).

How accurate is the information regarding the level and development of poverty over the period 1990/91-2004 as portrayed in Table 3? The data in the table reveals a moderate level of poverty, if judged by the national poverty line. Yet this does not seem consistent with other evidence. For 1999/2000, the World Bank (2002) estimated the headcount ratio according to the upper poverty line at 42% compared to 16.7% based on the lower poverty line shown in Table 3. Using a subjective poverty line for 2002, UNDP (2003) estimated the headcount ratio at 31.82%.[29] On the basis

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[27] MOP, 2004: 11

[28] Fieldwork of the 2004/05 HIECS started in July 2004 and was finished by the end of June 2005 Estimates for 2004/05 are based only on data for the first half of 2004. (MOP, 2005, P. 10, footnote #1)

[29] The subjective poverty line approach is an alternative to the traditional income/expenditure line approach. Instead of basing the poverty line on estimates of necessary con sumption, the subjective poverty line approach focuses on the individual perception of income adequacy. Through the Subjective Poverty and Social Capital Survey (SPSCS) conducted in December 2002, several questions were used to gauge the respondent's opini on on income adequacy-including a minimum income question (UNDP, 2003).

of these alternative estimates, the incidence of poverty is 2-3 times that shown in Table 3 for 1999/2000. This may be an indication that the national lower poverty line significantly under-estimates the incidence of poverty.

Table 3 also indicates a decline in the incidence of poverty throughout the 1990s[30]. However, there was a significant rise in the poverty incidence from 16.74 in 1999/2000 to 20.4% in 2004. Ministry of Planning (MOP) attributes this increase in the prevalence of poverty to the negative distributional effects resulting from the devaluation of the Egyptian pound in January 2003. Table 3 shows that the Gini coefficient increased from 0.310 in 1999/2000 to 0.352 in 2004. In our view, this is too significant an increase in inequality to be explained by devaluation and its inflationary consequences. Additional factors should be considered– the slow pace and pattern of GDP growth in particular.

There is clear evidence that growth achieved during 1999/2000 – 2004/05 was not pro-poor. Between 2000 and 2004, the combined share of the lower two expenditure deciles fell from 13.5% to 11.8%, while that of the upper two deciles rose from 27.2% to 30.3%.[31] A recent report using official data indicated that the real wage per worker decreased by about 6% over the period 2001/02-2004/05.[32] Pro-poor policies applied in Egypt were unsatisfactory both in terms of their coverage as well as with respect to the amount of assistance received by the beneficiaries.[33]

National poverty measures mask quite significant regional differences. Generally, poverty is concentrated in rural areas with uneven distribution across geographical regions. Rural Upper Egypt accounts for 55% of the poor and only 26.8% of the population.[34] These regional disparities may be explained by differences in educational attainment, employment opportunities, the availability of public services, and markets. Furthermore, differences in land ownership and cropping patterns explain poverty differentials in rural areas. Efforts to achieve the MDG goal on income poverty must address these root causes.

Accordingly, it may be difficult to concur with the World Bank (2004) that overall poverty in Egypt is shallow with most of the poor clustered just below the poverty line. It is more likely that the headcount index based on the national poverty line underestimates the prevalence of overall poverty in Egypt. We suspect that the true poverty rate lies somewhere between that based on the national poverty line (20.4%) and that based on the subjective poverty line (31.8%) and that the true poverty rate for 2004 may be around 30%.

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[30] On the face of it, all poverty measures have fallen substantially during that period except for the US $ 2/day which increased in 1995/96 compared to 1990/91.
[31] MOP, 2005, Table A1.2
[32] INP, 2006, Table 1 -7. According to this source, real wage per worker averaged LE 6240.0 in 2001/02 and LE 5879.5 in 2004/05.
[33] Korayem, 2002
[34] MOP, 2005: 10

<u>Poverty Projections</u>

The MOP projected poverty levels for 2015 on the basis of estimates of the elasticity of poverty with respect to mean expenditure and levels of inequality for each of the 5 regions of the country: Metropolitan, Urban Lower Egypt, Rural Lower Egypt, Urban Upper Egypt, and Rural Upper Egypt.[35] They assume that per capita expenditure grows by 1.5% per annum, and income inequality changes (declines) by 1%.[36] Those projections appear in the last column of Table 2. By 2015, the projected value of the headcount index would reach 10.8% on the basis of the national poverty line and 16.49% on the basis of the US $ 2 per day poverty line. This represents a significant decline compared to the initial (1990/91) values for the incidence of poverty of 24.32% and 39.45%, respectively. These official projections show that Egypt could achieve its MDG on income poverty- given the growth and distribution assumptions over the 10-year period 2004/05-2015.

However, such conclusions may be hard to accept for two reasons.[37] First, the growth and distribution assumptions underlying these projections may prove too strong. Witness the proposal from the MoF to increase revenue by increasing sales tax, which would be regressive, heavily taxing the poor. Also, the government is strongly committed to the macroeconomic and microeconomic policies reflecting the Washington consensus. Egypt's own experience under ERSAP provides evidence that such neo-liberal economic policies are inimical to distribution and even growth. Furthermore, according to the "poverty multiplier" as defined by Korayem (2002), the number of the poor will rise if the poverty-reduction effort is insufficient. Additionally, the projections are based on an underestimate of the headcount for the base-year (2004).

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[35] MOP, 2005; Table AA.1

[36] MOP, 2005: 12

[37] Identically the same projection of poverty measu res was also made in the Egypt MDGs Second Country Report, based on values for each poverty measure for the years 1990/91, 1995/96 and 1999/2000 (UN/MOP, 2004, Table 1), while the projection in the 2005 report was based on values for somewhat different yea rs- 1990/91, 1995/96, and 2004). This is illogical; using **different** data inputs but adopting the **same** growth and inequality assumptions cannot yield **identical** projections for the poverty measures. Compare MOP/UNDP, 2004, Table 1 and MOP, 2005, Table 1.1).

2. *Prospects of MDG Attainment, Poverty Reduction and Sustainable Development*[38]

The Challenge of the MDGs:

According to the 2000 Millenium Declaration, Egypt agreed to (1) half income poverty and hunger; (2) achieve universal primary education; (3) promote gender equality; (4) reduce under-five mortality by two thirds; (5) reduce maternal mortality by three quarters; (6) combat HIV/AIDS, malaria and tuberculosis; (7) ensure environmental sustainability; and (8) build a global partnership for development. The MDGs contain various targets corresponding to each goal. The declaration stipulated that each country should strive to achieve those goals and corresponding targets by 2015, taking the status in 1990 as the reference point.

In accordance with the Millennium Declaration, poverty reduction has been declared one of the main objectives of Egypt's long-term development strategy through 2022.[39] As already mentioned above, official estimates revealed that extreme poverty (proportion of households with expenditure below US $1/day) is less than one percent, while overall poverty according to the (upper) national poverty line is only 20% and shallow. As previously contended such estimates are doubtful.

Table 4 Millennium Development Goals: Summary Tracking Indicators

Indicator	Level in 1990	Level in 2004	Target for 2015	Potential for achieving target
Goal 1. Eradicate extreme poverty and hunger				
1. Percentage of population below $1 per day	8.2	0.94	4.1	Met
1a. Percentage of population under national poverty line	24.3	20.2	12.1	Probable
2. Poverty gap (using national poverty line)	7.1	3.9	3.6	Met
3. Share of poorest quintile in national consumpti on		8.3		
4. Prevalence of underweight children under 5	9.9[a]	8.6[b]	5.0	Possible
5. Percentage of population below minimum level of dietary energy consumption	25.6[c]	14.0[d]	12.8	Possible
Goal 2. Achieve universal primary education				
6. Net enrolment ratio in primary education	85.5[e]	94.0[f]	100	Probable
7. Percentage of pupils who reach grade 8	83.9[g]	86.8[h]	100	Probable
8. Literacy rate of 15 -24 years-olds	73[i]	87[f]	100	Probable
Goal 3. Promote gender equality and empower women				
9a. Ratio of girls to boys in pri mary education	81.3[c]	90.9[j]	100	Probable
9b. Ratio of girls to boys in secondary education	77.0[c]	104.3[j]	100	Met
9c. Ratio of girls to boys in tertiary education (physical sciences)	51[e]	66[b]	100	Unlikely
9d. Ratio of girls to boys in tertiary education (so cial sciences and humanities)	65[e]	99[b]	100	Met
10. Ratio of literate women to men, 15 -24 years old	84.7[i]	86.4[f]	100	Possible
11. Share of women in wage employment in the non -agriculture sector	19.2	20.6[k]	50	Unlikely
12a. Percentage of seats held by women in People's Assembly	4.0	2.6	50	Unlikely

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[38] This part depends largely on MOP, 2005.
[39] World Bank, 2004

12a. Percentage of seats held by women in Consultative Council		8.0	50	Unlikely
Goal 4. Reduce child mortality				
13. Under-five mortality rate	56.0	35.4[k]	18.7	Probable
14. Infant mortality rate	37.8	28.2[k]	12.6	Possible
15. Proportion of 12-23 months old children immunized against measles	81.5[a]	95.6[b]	100	Probable
Goal 5. Improve maternal health				
16. Maternal mortality ratio	174[a]	67.6	43.5	Probable
17. Proportion of births attended by skilled health personnel	40.7[a]	69.4[b]	100	Probable
Goal 6. Combat HIV/AIDS, malaria and other diseases				
18. HIV prevalence among pregnant women aged 15-24 years	Not available		0.0	
19. Condom use rate among married women using contraceptives	4.2[a]	1.5[b]		
20. Number of children orphaned by HIV/AIDS	Not available			
21. Prevalence of malaria		0.0	0.0	Met
23. Incidence of tuberculosis	18.6	14.0[b]		
24a. Proportion of tuberculosis cases detected under DOTS		58		
24b. Proportion of tuberculosis cases cured under DOTS		88		
Goal 7. Ensure environmental sustainability				
25. Proportion of land area covered by forest				
26. Ratio of area protected to maintain biological diversity to surface area	6.5	10	17	
27. Energy use (metric ton unit equivalent) per $1000 GDP	3.9	6.3		
28a. Carbon dioxide emission per capita	2.0[l]	3.1		
28b. Consumption of ozone-depleting CFCs	2.144	1.335[k]		
29. Proportion of population using solid fuels	Not available			
30a. Proportion of urban population with sustainable access to an improved water source	96.9[a]	100	98.5	Met
30b. Proportion of rural population with sustainable access to an improved water source	61.1[a]	95	80.6	Met
31a. Proportion of urban population with access to improved sanitation	94.7[a]	100	97.4	Met
31b. Proportion of rural population with access to improved sanitation	--	--		
32. Proportion of households with access to secure tenure	Not available			
Goal 8. Develop a Global Partnership for Development				
47. Telephone lines and cellular subscribers per 100 population	8.3[l]	21.2[b]		
48a. Personal computers in use per 100 population	1.2[l]	2.2[b]		
48b. Internet users per 100 population	0.3[l]	3.9[b]		

Source: MOP, 2005, p. vii.

Notes: [a] data for 1992 [b] data for 2003 [c] data for 1990/91 [d] data for 1999/2000 [e] data for 1995 [f] data for 2005- [g] data for 1991/92 [h] data for 1992/93 [i] data for 1996 [j] data for 2002/2003 [k] data for 2001 [l] data for 1999

Table 4 gives summary indicators, which show the extent of achievement to date of the 8 MDGs and corresponding targets and prospects of achievement by 2015, according to the Ministry of Planning. We briefly discuss the prospects of achieving the MDGs with reference to this information.

Goal 1: Eradicating Extreme Poverty and Hunger: According to official sources, starting from an initial value for the percentage of the population under the national

poverty line of 24.3% in 1990/91, a value of 10.8% for 2015 is projected (see Table (2) above). This is lower than the target value of 12.1% as per MDG1. Therefore, according to this official projection, Egypt could achieve the first MDG with modest annual increases (at 1.5%) on average per capita expenditure and minor reduction (at 1%) in income inequality. However, we have great doubts regarding the assumptions underlying this projection.

As already argued above, this projection is based on an underestimation of the prevalence of poverty in 2004 and an overestimation of the reduction in income inequality through 2015. The author contends that contrary to the official view, it is more likely that MDG1 will not be met by 2015. A number of strategies and their costing are listed in the 2005/06-2006/07 Poverty Reduction Action Plan (PRAP) as needed to achieve MDG1. This includes income generation initiatives, investment in human capital, and safety nets. However, a change in the underlying macroeconomic policy is also required.

Goal 2: Achieving Universal Primary Education: Under the slogan "Education for All", the decade of the 1990s witnessed major progress in expanding access to primary education and a steady increase in enrollment rates. Projections based on recent trends imply that Egypt will be able to achieve universal primary education by 2015. But fighting adult illiteracy, ensuring equality and improving quality of education continue to be major challenges.[40]

Goal 3: Promoting Gender Equality & Women's Empowerment: Despite the efforts made to promote gender equality and enhance women's empowerment, progress in this area is hindered by the prevalence of conservative ideologies emphasizing gender stratification on the basis of biased cultural and religious perceptions.[41] Changing such perceptions is necessary for societal endorsement of human rights and gender equality as basic tenets of Islam and Egyptian culture. Barring such change, it is unlikely that Egypt will achieve this MDG. The obstacles are largely socio-cultural rather than substantive.

Goal 4: Reducing Child Mortality: The prospects of achieving the fourth MDG of reducing child mortality vary depending on the specific target under this goal. For example, Egypt is clearly on track to achieve the target related to under-five mortality by 2005. But more concerted action is needed to reduce the infant mortality rate and narrow its variations across regions and social groups. There is government concern with maternal and reproductive health, as neonatal mortality rates have risen relative to under-five mortality.

Goal 5: Improving Maternal Health: Thanks to various improvements in maternal health Egypt has managed to reduce maternal mortality rates significantly over the last decade. Achievement of the target set by MDG 5 for maternal mortality is probable by 2015. The government is attempting to integrate reproductive health services in the primary health care package. But government plans to implement a cost-recovery system may have indiscriminately negative impacts, as this may be prohibitive to the poorest.

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[40] MOP, 2005, p. IV
[41] MOP, 2005, p.V

Goal 6: Combating HIV/AIDS Malaria and other Diseases: Prevalence of HIV/AIDS is low in Egypt; as crucial preventive measures have been implemented for two decades. Malaria is not endemic in Egypt; no malaria cases have been reported since 1998. However malaria-carrying mosquitoes in areas along the southern border with Sudan are monitored and regular blood-surveillance campaigns are conducted. The incidence of tuberculosis has experienced a decline with both preventative and curative approaches applied to combat tuberculosis. As a result of this campaign the illness is no longer a major public health issue in the country. Schistosomiasis has ceased to be a serious epidemic disease in Egypt- thanks in large part to upgrading water and sanitation networks. But the incidence of diseases such as Hepatitis Virus C and kidney failure appear to be on the rise.

Goal 7: Ensuring Environmental Sustainability: Egypt is seeking to integrate an environmental dimension in national policies and programs. To that end the National Environmental Action Plan (2002-2017) was designed and is being monitored by the Ministry of State for Environmental Affairs. The plan's ultimate goal is to ensure that development is sustainable. This includes measures to reduce current pollution levels and to preserve the natural-resource base and biodiversity. According to the official view, the MDG targets here are met.

Goal 8: Developing a Global Partnership for Development: Egypt is investing in ICT, which has made possible significant increases in the number of land line telephone and mobile phone subscriptions. The number of personal computers and internet users per 100 population has also increased substantially (Table (4)).

In summary, we have argued that the official estimates for MDG achievement are overly optimistic. The considerable resources needed to achieve the MDGs will be much more than those envisaged by the national authorities. Furthermore, the considerable resources that are required for MDG investment are being undermined by high domestic debt servicing costs.

IV- Nexus between Domestic Debt Policy and Sustainable Development:

In this section, we take achieving the MDGs as tantamount to sustainable development, although in practice they will differ. As we have already seen in section III above, achieving the MDGs calls for allocating enough resources to defray the requisite costs in various areas. In other words, allocations for debt service will compete with allocations for sustainable development (MDGs) mainly through the state budget - i.e., fiscal space. Thus the nexus between domestic debt policy and sustainable development is defined as allocations through the state budget.

Based on the above conceptualization, we shall address two questions (i) what are the implications of domestic debt practice and policy for achieving the MDGs in Egypt? (ii) What is the nature of domestic debt policy which maximizes the net benefit of the MDGs?

1. Implications of Policy and Practice on Domestic Debt for Efforts to Achieve Sustainable Development

We have already shown that public domestic debt has been outpacing GDP in Egypt since 1999, raising serious questions regarding debt sustainability. As a result, allocations for total debt service (interest and installments) have increased significantly in proportion to both public expenditure and revenue. As a proportion of total expenditure, debt service rose from 19.9% in 2000/01 to 25.6% in 2003/04. Recent budget estimates confirm the same trend- with increases to 29.5% and 32.3% in 2005/06 and 2006/07, respectively.[42] On the other hand, budget allocation for wages has declined from 23.5% to 22.6% of total expenditure between 2000/01 and 2003/04. According to the latest budget estimates, the share of wages in total expenditure fell to 19.1% and 18.8% in 2005/06 and 2006/07, respectively.[43] Allocation for investment fell drastically as a proportion of expenditure– from 19.3% to 13.9% between 2000/01 and 2003/04. Budget estimates for 2005/06 and 2006/07 indicate further drops in the share of investment in total expenditure to 9.0% and 7.4%, respectively.[44] All this represents a direct threat to MDG achievement.
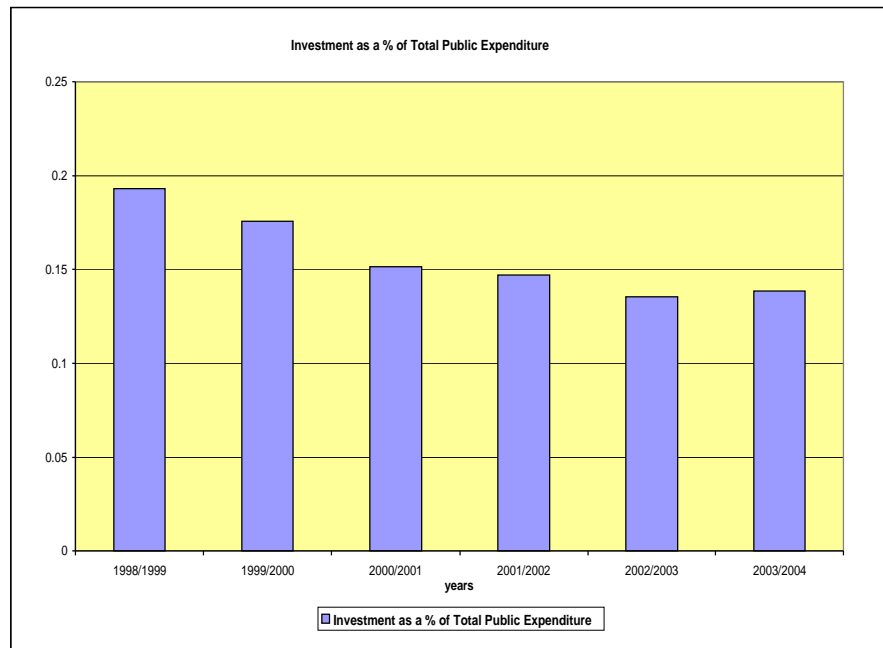
Figure 6
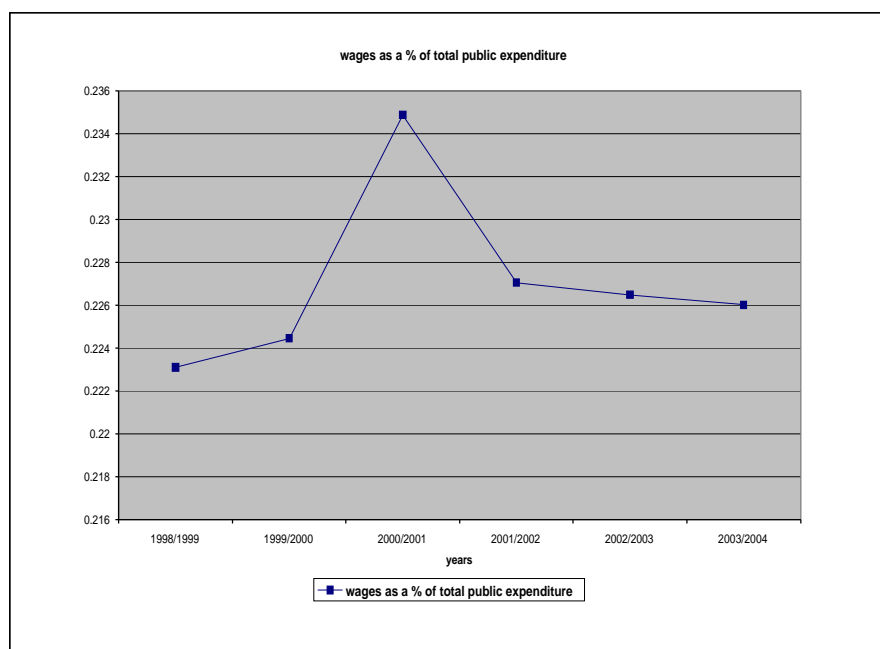
Source: Government of Egypt

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[42] MoF, 2006: 61
[43] MoF, 2006: 61
[44] MoF, 2006: 61

Figure7

Investment as a % of Total Public Expenditure

Source: Government of Egypt

Such a pattern of public expenditure may lead to two consequences. **First** it tends to depress the share of wages in GDP. **Second**, it reduces overall GDP growth, thanks to the lower rate of public investment and reduction in aggregate demand.[45]. Both factors work in the opposite direction to reducing income poverty and achieving the MDGs

As a result, public debt, particularly domestic public debt, is a serious cause for concern with respect to achieving the MDGs in Egypt. With a very tight fiscal constraint, budget allocations to domestic debt service crowd out allocations for investment, wages and social services in general. While government wage payments usually benefit the lower-income strata of the population, benefits of interest payments on domestic debt accrue mainly to the rich. For example, one important component of domestic debt such as treasury bills is largely held by the rich. The data in the Table 5 strongly supports this claim. Over the period 2000/01–2004/05; more than 70% of TBs were held by banks.[46] The same applies to treasury bonds.

The Egypt Human Development Report (EHDR) estimates a budget gap for MDG program funding totaling LE 181.0 billion during the period 2005-2015. This implies a disparity for the annual budget totaling LE 18.1 billion. Securing such additional resources may be difficult, however. According to the current size of the budget deficit and its pattern of funding through borrowing from the domestic banking system, domestic debt largely eats up domestic credit and crowds out investment.

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[45] In Egypt's case private investment has not expanded to compensate for the relative decline in public investment. As a result, the total (public plus private) rate of investment has fallen under ERSAP (Abdel-Khalek, 2001).
[46] CBE, Monthly Statistical Bulletin, Vol. 116, November 2006, Table 39

Budget allocation for interest payments on domestic debt for 2006/07 amounts to 260% of this modest level of additional annual resources for MDG achievement (LE47.1 vs. LE18.1).

Table 5
Holders of Outstanding Stock of Treasury Bills
(%)

Holders / End of June	1996	1997	2000	2001	2002	2003	2004
1- Banks	80	79	95	97	97	98	64
Commercial Public sector	46	48	75	70	69	72	43
Joint Venture & Private	34	31	20	27	28	26	21
2- Insurance Companies	8	4	5	3	3	0	0
Public sector	4	2	1	1	0	0	0
Private sector	4	2	4	2	3	0	0
3- Business sector	7	4	0	0	0	1	1
Public sector	0	0					
Private sector	7	4					
4- Households	5	5	0	0	0	1	0
5- Others	0	8	0	0	0	0	35
Total	100	100	100	100	100	100	100
Memo item							
Total Public	51	50					
Total Private	49	50					

Source: Central Bank of Egypt, *Monthly Statistical Bulletin*, various issues.

According to the EHDR 2005 best-case scenario, which is consistent with achieving the MDGs, investment is expected to increase at an annual rate of 11.4% over the period 2005-2015. Most of this ambitious increase in investment is to be financed from domestic sources, requiring a steady increase in the domestic saving rate to 30% of GDP by 2015.[47] This amounts to an almost doubling of the saving rate, which entails significant increases in both private and public saving. But the required increase in government saving will be much greater. This raises the critical issue of fiscal policy and domestic debt sustainability.

Mobilization of the additional budget resources of LE 18.1 billion average needed annually to achieve the MDGs as per the EHDR 2005 vision requires drastic adjustment on the revenue and expenditure sides of the budget. The thrust of the required fiscal adjustment is to bring down government borrowing needs, with clear implications for both the revenue and expenditure sides of the budget. But for the purpose of our study we focus on debt management in accordance with MDG achievement.

The EHDR rightly stresses that recently recorded high levels of government borrowing and growth of domestic debt are impeding productive investment and constraining GDP growth. But instead of going to the heart of the matter by

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[47] EHDR 2005, pp 90-91

emphasizing the need for sound debt and macroeconomic management, the report simply advocates fiscal consolidation.[48] The IMF, noting that the official budget deficit accounts only for part of total government borrowing, suggests adopting a multi-year program for lowering government debt on a steadily declining path.[49] Although the IMF focuses on expenditure reducing measures (namely, reducing subsidies and lowering wages), it recognizes the importance of revenue-enhancing measures. The IMF directors advocated a more ambitious pace of fiscal adjustment to reduce the deficit by more than 1% of GDP per year (2006), and to take more explicitly into account the fiscal cost associated with financial sector reform.[50]

2. Domestic Debt Policy for Maximizing Net Benefit to Sustainable Development

As mentioned, achieving the MDGs in Egypt calls for an additional budget infusion averaging LE 18.1 billion annually during 2005-2015- based on the estimates in the EHDR 2005. Of course this is just the average, and does not mean that each and every year exactly LE 18.1 billion will be required for investment expenditure towards achieving the MDGs. In the early years, annual expenditure will be lower, and rise as time progresses. In relative terms, this additional **average** annual MDG-related expenditure represents 3.6% of the 2004/05 GDP.[51] Achieving the MDGs in Egypt therefore calls for expanding the fiscal space at least to that extent through a combination of expenditure-reducing and revenue-enhancing measures. Such expansion of the fiscal space to achieve the MDGs is obviously much bigger than the intended reduction of the budget deficit by 1% of GDP per year for the next five years 2006/07-2010/11.[52] This shows that a more intensive effort than contemplated by the MoF is necessary in order to reduce government borrowing and reduce domestic debt to sustainable levels **consistent with achieving the MDGs**.

The issue really boils down to putting in place a debt management policy which ensures sustainability and creates the necessary fiscal space to achieve the MDGs. The fiscal policy stance announced by the MoF is far short of the mark.

A recent World Bank study concluded that Egypt's debt-GDP ratio is high both relative to comparators (such Argentina, Brazil and Turkey) as well as in respect to what is desirable for macroeconomic stability. The study suggests that fiscal adjustment within a reasonable range can improve the debt trajectory.[53] The study argues that the most promising sources of growth lie in private sector development and deeper integration with world markets, instead of restructuring expenditure by raising public investment and reducing current spending. But raising public

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[48] EHDR 2005, p. 94: This means incorporating the fiscal account of the General Authority of Supply Commodities (GASC), the intra-governmental transfers from social insurance funds (SIFs), and Public Economic Authorities' net debt. But SIFs' resources are not public funds; rather, they are the private savings of subscribers to the SIFs.

[49] IMF, 2005, p.16

[50] Such cost is estimated at about 8% of the 2004/05 GDP (IMF, 2005, p. 77).

[51] GDP at factor cost amounted to LE 504.6 billion in current prices (CBF , *Monthly Statistical Bulleti*n,Vol.112, July 2006, pp.125-6, Table 44).

[52] MoF, 2006, pp. 110-113

[53] Alba *et al*., 2004: The study deals with total public debt, and adopts the CBE definition of domestic public debt, which includes: the debt of government, Public Economic Authorities, and NIB.

expenditure is essential from a MDGs perspective. Even aside from MDG achievement, raising public investment significantly in Egypt's case is necessary at least in order to reverse the current falling ratio of public investment to total public expenditure.[54]

Like many Latin American countries, Egypt switched to domestic debt financing as a means of sterilizing capital inflows. This has negatively impacted debt sustainability through higher real interest rates and lower income growth.[55]

Although the cost of debt service in Egypt is excessively high, the objective of debt management policy should not be confined to minimizing such cost. Rather, debt management policy should seek to establish an optimal trade-off among multiple and competing objectives- most notably achieving the MDGs, among other fiscal, growth and financial objectives.[56]

The primary (fiscal) surplus is a key variable in the calculation of sustainability. But it should be noted that debt sustainability is an integral part of macroeconomic stability; interactions between different variables such as fiscal, monetary, exchange rate and GDP growth determine debt sustainability. Egypt should strive to simultaneously maintain macroeconomic stability and achieve a permanent increase in primary surplus through expenditure-reducing and revenue-enhancing measures in a manner consistent with achieving the MDGs.[57]

A government can finance its current and capital expenditure by borrowing, through income taxation, or by printing money ("inflation tax" or *seignorage*). There are three circumstances where public debt may be better than taxation, i.e. tilting, smoothing and stability.[58] But excessive rapid accumulation of domestic debt can result in severe macroeconomic problems, and can even make it difficult to control the fiscal deficit itself. This is the case of Egypt, where domestic public debt is rising rapidly and new debt is being issued to meet interest payments. This might be denoted as a Minskian "Ponzi" game.[59] Interest payments in this cycle are becoming so high as to squeeze development and social spending.

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[54] Such ratio fell steadily form 17.6% in 1999/00 to 13.9% in 2003/04 (People's Assembly 2006, p. 182).

[55] The debt dynamics equation may be written as: $?b_t = d_t + (r^*_t - g^*_t)b_{t-1}/(1+g_t)$; where b_t is the ratio of debt to GDP, d_t is the ratio of primary fiscal balance to GDP, r^*_t and g^*_t are real interest rate and growth rate. For details, see Abdel-Khalek (2000).

[56] Montiel (2003) argues that reducing debt servicing cost through financial repression is socially costly. Egypt's case provides testimony to this view.

[57] Some analysts favour raising primary surplus *via* expenditure reduction as this lowers the real interest rate, enhances income growth, and increases the demand for monetary base as a result of lowered inflationary expectations (Garcia, 1997). But this ignores the negative effect of indiscriminate expenditure reduction on growth.

[58] Tilting means allowing a more inter-temporally equitable formula for exploiting investment opportunities with long gestation periods. Smoothing means allowing a more efficient manner for conducting counter-cyclical policies or meeting emergency expenditure needs. Stability means avoiding excessive reliance on printing money, which is inflationary (Gill and Pinto, 2005: 2).

[59] According to Minsky (1992), a Ponzi unit is one whose cash flows from operations are not sufficient to either repay the principle or pay the interest on outstanding debt. Such unit can sell assets or borrow. For a government, a Ponzi game is a situation that involves both a primary deficit and real interest rates

In the current rapidly globalizing world economy, a liberal capital regime has often been promoted in the interest of optimal international allocation of capital. Under certain conditions, large capital inflows can make some positive contributions: securing capital for higher economic growth; smoothing out consumption over time; and acquiring new technology and know-how through FDI. On the other hand, unrestricted capital inflows also pose major challenges for the conduct of monetary policy. If the monetary authority attempts to sterilize capital flows, the domestic monetary base becomes endogenous. In addition, sterilization produces quasi-fiscal costs for the central bank to the extent that authorities purchase low-yielding foreign assets and sell high-yielding domestic assets.[60] The latter has been the outcome of liberalizing Egypt's capital account.

The Egyptian economy is now caught in a debt-interest spiral.[61] Moreover, there is evidence that fiscal policy in Egypt during the 1990s and 2000s was pro-cyclical rather than counter-cyclical.[62] To maximize Egypt's chances to achieve the MDGs, a debt management policy with clear objectives and instruments is sincerely needed. Some fiscal rules are necessary in order to reign in the widening budget deficit and escalating domestic debt. In addition, capital mobility which has been adopted since the early 1990s must be reconsidered in light of the country's experience. In Egypt's case, sterilization of capital inflows during the 1990s involved significant quasi-fiscal cost- thereby widening the fiscal deficit and raising domestic debt. The other side of the coin was excessive accumulation of foreign reserves, implying high opportunity cost in terms of foregone productive investment. It also caused real appreciation of the pound, which negatively impacted Egypt's competitiveness.[63] Rising government domestic borrowing pushed up interest rates on local-currency balances, thus inducing enterprises to increase foreign-currency borrowing from local banks. With later depreciation of the pound, this contributed to a significant problem associated with non-performing loans, while capital flows also invoked instability in the financial market.[64] One may also add to this the turbulences in the foreign exchange market.

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exceeding GDP growth rates. Effectively, this means debt roll -over with the debt/GDP ratio continuing to rise on end.

[60] If sterilization is achieved through increased reserve requirements, it acts as a tax on the banking system and may promote disintermediation. If the money supply has to bear the burden of adjustment from the fiscal side and from that of international capital flows, it would be difficult to pursue stabilization policy (Jha, 2001).

[61] Abdel-Khalek, 2005

[62] Alba *et al.*, 2004

[63] Abdel-Khalek 2001

[64] Financial markets in emerging economies have certain characteristics: shallow and illiquid markets; high transaction cost; weak regulatory framework; and high degree of concentration. Consequently, liberalizing the capital account in such economies often leads contribute to financial crises. Those are episodes of financial turbulences that leads to distress (i.e., significant liquidity problems and insolvency) among market participants, and/or official intervention to contain those consequences. Distinction is made between two types of financial crises: currency crises and banking crises. Currency crisis may force a charge in parity (devaluation) or abandonment of a pegged exchange rate. Banking crises are manifested by significant banking -sector problems that are resolved by a fiscally - underwritten bank restructuring.

(i) The Problem of Non-performing Loans

Non-performing loans (NPLs) rose to 21.5% of total bank loans in 2003/04, up from 15.6% in 2000/01. At the beginning of the 1990s, this proportion did not exceed 5% (NCPEA, nd.). Although some of the apparent increase in NPLs may be attributed to better reporting, there has been a significant increase in the incidence of NPLs during the 2000s. Public sector banks account for the lion's share of NPLs, mainly due to their loans to the government. The MoF is considering issuing 20-year bonds to finance such loans– a glaring example of contingency liabilities. There has been a fast rise in foreign-currency loans to producers for the domestic market (more than 80% of which is to the private sector), resulting in currency mismatch. The real-estate sector has a large share of bank loans, a clear indication of Dutch disease caused by exchange rate misalignment. The cumulative devaluation of the pound during 1996-2003 (by about 80%) caused mainly by capital outflows, contributed to increased incidence of NPLs.[65]

(ii) Financial Market Instability:

Capital market indicators and stock market index exhibited a roller-coaster pattern in the 2000s. In April 2005 the Capital Market Authority index rose by 73.4%, and the Stock Market index jumped by 165.6%. This pattern is not warranted by changes in the country's macroeconomic fundamentals; and less than a year later the Stock Market index took a free fall.[66] The trigger was large-scale selling by Arab investors anxious to obtain liquidity to pay back their loans and compensate for losses sustained by stock exchanges in the Gulf.[67]

The question of debt sustainability in Egypt's case is therefore closely related to problems of macroeconomic management, which may be characterized by the macroeconomic trilemma (or the impossible trinity). According to this trilemma, it is impossible to maintain **exchange rate stability**, **monetary autonomy**, and **full capital mobility** simultaneously. Since the beginning of 2003, Egypt shifted the exchange rate regime from a dollar peg to a floating system. The CBE announced its commitment to targeting inflation. And as already mentioned, capital mobility has taken place since the early 1990s. The interest rate differential was used to defend the exchange rate under the peg, leading to accumulation of international reserves and domestic debt.[68] Under the floating exchange rate, stability was maintained by accumulating excessively large international reserves.[69] Such an excessive level of reserves is only justified by the commitment to capital mobility, and involves a high

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[65] The problem is further compounded by the high degr ee of loan concentration both by sector and by borrower. 28 customers obtained LE 26.7 billion in 2001, representing 13%, of credit to the private sector. Out of these, 8 customers obtained LE 12.4 billion, amounting to 60% of capital and reserves in the entire banking sector (**NCPEA, n.d**.).

[66] That was on what came to be known as black Thursday, March 14, 2006. Just during the first two hours of the start of trading the index dived by 12%, triggering mass protest by thousands of small investors, as reported by the local press (**Akhabr El Yom**, 18/3/2006).

[67] The introduction of margin buying contributed to the problem.

[68] Abdel-Khalek, 2001

[69] The level of international reserves was $ 24.1 billion at end -September 2006. This represents about 9.5 months wor th of imports. At one point, the World Bank referred to this as "Embarrassment of Riches".

quasi-fiscal cost. It also involves a high social opportunity cost in terms of foregone investment in high priority areas.

V. Conclusion

Egypt's external debt poses no problem at present- thanks to Paris Club rescheduling, debt write-offs in 1991 in addition to a debt-equity swap and the authorities' commitment to maintain a ceiling on external debt. The latter stood at around US$ 29 billion in 2004/05, representing 31% of GDP with debt service less than 10% of exports of goods and services. But, domestic debt rose sharply under ERSAP, surpassing external debt both in terms of stock ratios to GDP and flows of debt-service expenditure. From the early 1990s to date, domestic debt has come to occupy center stage. According to the latest figures by the CBE, it reached LE593.5 billion in June 2006, representing 102.1% of GDP. This is a record high in recent Egyptian economic history.

The structure of domestic debt has undergone significant change since 2000/01. The short-term component has more than doubled- exceeding 25% in 2004/05. With regard to the currency composition, over 95% of Egypt's domestic debt is in Egyptian pounds. Domestic debt in Egypt has had important implications: for growth, equality and poverty. It has led to higher domestic interest rates and crowded out both public and private investment, hence retarding growth. It also affected bank behaviour in favour of investing in government securities and against extending credit to productive investment. There has been a persistent decline in the share of investment in public expenditure. Furthermore, it may have resulted in redistributing income from the poor.

Government policy towards domestic debt has evolved considerably. Initially, the government held the position that unlike external debt, domestic debt did not represent a burden on the economy. Lately, however, the government is more aware of the increasing burden of domestic debt. In its statement on the State Budget Proposal for 2006/07, the Minister of Finance reiterated that special attention will be given to public debt and its sound economic management. According to him, this calls for full and timely payment of debt service, and putting debt under control. The budget proposal for 2006/07 entails a monetary deficit of 8% of GDP and an overall deficit of 9.4% of GDP. Such deficit implies a net increase in borrowing of LE 59.2. billion. This calls for broad ranging measures and a systematic strategy to turn around the deficit and bring down public debt. The MoF targets reducing the monetary deficit to 4% of GDP within five years, i.e. targeting an annual reduction of the monetary deficit by 1 percentage point of GDP.

According to the World Bank, overall poverty in Egypt is shallow and most of the poor are clustered just below the poverty line. Assuming perfect targeting of transfers for poverty eradication, it would require about $ 700 million per year to bring all poor households above the national (expenditure) poverty line. However, national poverty measures mask quite significant regional differences. Generally, poverty is concentrated in rural areas with uneven distribution across geographical regions.

Official projections show that Egypt could achieve its MDG on poverty- given certain growth and distribution assumptions over the 10-year period 2004/05-2015.The EHDR 2005 estimates of the additional budget necessary for MDG programs totals

LE 181.0 billion for the period 2005-2015. This leaves an annual budget gap of LE 18.1 billion. According to the current size of the budget deficit and its pattern of funding through borrowing from the domestic banking system, domestic debt largely eats up domestic credit and crowds out investment. This in turn makes it less likely that sufficient investment will be protected for the MDGs.

Mobilization of the additional budget resources of the LE 18.1 billion average needed every year to achieve the MDGs as per the EHDR 2005 vision requires drastic adjustment on the revenue and expenditure sides of the budget. In relative terms, this **additional average annual** MDG-related expenditure represents 3.6% of the 2004/05 GDP. Achieving MDGs in Egypt therefore calls for expanding the fiscal space through a combination of expenditure-reducing and revenue-enhancing measures. Such expansion of the fiscal space to achieve the MDGs is obviously much bigger than the intended reduction of the budget deficit by 1% of GDP per year for the next five years 2006/07-2010/11.

The Egyptian economy is now caught in a debt-interest spiral. Evidence from the 1990s and 2000s indicates that fiscal policy in Egypt was pro-cyclical rather than counter-cyclical. The government is inflating away domestic debt, which does not support sustainable development. Furthermore, the traditional debt-sustainability analysis calculates the reduction in resources is needed to meet debt service as a priority. Ensuring debt sustainability in this traditional sense means sacrificing the expenditures required to meet the MDGs. An alternative approach to debt sustainability in the context of the MDGs might be viewed as providing a long–term perspective to debt servicing, compatible with the long-term development objective of achieving the MDGs.

To maximize Egypt's chances to achieve sustainable development, a debt management policy with clear objectives and instruments is sincerely needed. Some fiscal rules are necessary to reign in the widening budget deficit and escalating domestic debt. But this is not enough; adequately addressing the question of MDG-consistent debt sustainability in Egypt necessitates radical change in macroeconomic management. Specifically capital mobility should be abandoned, and at the least selective controls should be introduced. This will add one valuable degree of freedom in the conduct of macroeconomic policy which should facilitate achieving debt sustainability.

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Table A1

year	Debt(billion)	GDP (billion) factor cost current prices	Population (million)	Debt/GDP	Debt per capita LE (1000)
1981	11.000	17.300	43.322	0.64	0.254
1982	15.300	20.800	44.506	0.74	0.344
1983	18.100	24.200	45.721	0.75	0.396
1984	22.400	28.500	46.990	0.79	0.477
1985	32.698	33.100	47.308	0.99	0.691
1986	37.108	38.400	48.254	0.97	0.769
1987	42.797	45.300	49.257	0.94	0.869
1988	49.780	54.600	50.280	0.91	0.990
1989	58.780	65.800	51.345	0.89	1.145
1990	77.215	78.700	52.391	0.98	1.474
1991	97.416	98.700	53.480	0.99	1.822
1992	106.115	118.200	54.591	0.90	1.944
1993	113.667	131.100	55.726	0.87	2.040
1994	123.667	149.100	56.884	0.83	2.174
1995	134.969	178.308	58.065	0.76	2.324
1996	149.898	195.448	59.272	0.77	2.529
1997	170.800	218.367	60.504	0.78	2.823
1998	198.100	263.973	63.500	0.75	3.120
1999	216.989	307.786	64.600	0.71	3.359
2000	245.523	340.060	65.900	0.72	3.726
2001	290.777	358.541	67.200	0.81	4.327
2002	329.800	379.080	67.900	0.87	4.857
2003	370.619	417.364	69.200	0.89	5.356
2004	434.846	474.205	70.500	0.92	6.168
2005	510.800	506.500	71.900	1.01	7.104
2006	593.493	581.115	73.600	1.021	8.064