



**Monetary and Fiscal Policies Post 25th January Revolution:
Fighters against Windmills**

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Abstract

The political events that unfolded in Egypt since the 25th January revolution took its toll on the Egyptian economy. Almost all sectors of the Egyptian economy were deeply hit by the rising political unrest and the gloomy outlook prevailed during the transitional period. Monetary and fiscal policies could be considered as main victims, with monetary policy torn between sluggish growth, rising inflation and depreciating domestic currency, fiscal policy was under pressure due to increasing socially-geared spending, weakening public revenues, rising fiscal deficits and debt stock. This study aims at identifying the repercussions of the recent political events upon the fiscal and the monetary sides of the economy as well as identifying how fiscal and monetary policies were managed during the transition period.

I) Introduction

With the aftermath of the revolution, the political economic landscape in Egypt was altered considerably. The political turmoil that followed the revolution undermined confidence in the Egyptian economy, leading to severe economic repercussions. Accordingly, growth slowed down, monetary situation deteriorated and public finance came under severe pressure.

Authorities restored to monetary and fiscal policy to correct for the economic imbalances. The two policies were fighting the fire, with monetary policy juggling between sluggish growth, rising inflation and deteriorating domestic currency and fiscal policy torn between the escalating socially-geared spending, weak growth of revenues, widening budget deficit and elevating debt stock.

To that end, the Central Bank of Egypt (CBE) used unconventional policy tools to manage monetary policy. Adjusting reserve requirements, increasing domestic liquidity and intervention in the foreign exchange market were among these measures. On the fiscal side, the reform measures adopted prior to the revolution tolerated the Egyptian economy for the escalating fiscal deficit in 2011, however, with the start of 2012, the fiscal authorities announced the adoption of austerity measures to restrain the growth of government spending and budget deficit.

The research aims at identifying the fiscal and monetary repercussions of the revolution as well as the direction of both fiscal and monetary policy post the revolution. In light of these objectives, the research starts by a theoretical framework for managing fiscal and monetary policies during crisis. Then, it presents a general overview about the Egyptian economy prior and post the revolution. The rest of the study is divided into two parts, one devoted to the monetary policy and the other to fiscal policy. On each part, general framework for the underlying policy is presented along with the repercussion of the revolution upon it. Then, the different measures adopted as well as general assessment for the underlying policy are discussed. Finally, the study ends with a set of policy implications that might help in stimulating the Egyptian economy.

II) Managing Monetary and Fiscal Policy during Crisis:

Theoretical Review

Monetary policy used to affect the money supply in any economy, through open market operations, domestic interest rates, reserve requirements and other tools. Specifically, there are three channels through which monetary policy has its effects upon the economy; interest rate channel, exchange rate channel and credit channel. Interest rate channel reflects the effects of monetary policy upon the economy through changes in real interest rates (changes in real interest rates affect aggregate demand and hence output and prices). Exchange rate channel refers to the outcomes of monetary policy upon the economy via real exchange rate changes (changes in real exchange rate alters the relative prices of exports and imports and hence amount of net exports and aggregate demand). Credit channel on the other hand, reflects the effect of monetary policy through adjusting supply and demand for credit (Abel et al. 2005, 542-543).

Fiscal policy affects the domestic economy through its effect on aggregate demand, government capital formulation and incentives. Since public spending is part of the aggregate demand, increasing government spending on goods and services boost the aggregate demand. Government capital formulation contributes to the productive capacity of the economy.¹ Incentives refer to the

¹ Though official measures of government investment refer to investment in physical capital only, government capital formulation reflects both investment in physical capital and human capital.

effect of fiscal policy upon economic behavior, for instance, tax policies can affect economic behavior by changing the financial rewards to various activities (Abel et al. 2005, 573-576).

During crisis, monetary and fiscal policies can be countercyclical or procyclical. *Countercyclical policies* refer to policies that can stabilize the business cycle by reining in economic activity during booms and bolstering it during downturns. For monetary policy, this means increasing the real policy rates during booms and lowering it in recessions. As for fiscal policy, it reflects cutting government deficit during booms and widening it during recessions. On the other hand, *procyclical policies* refer to policies that are positively correlated with business cycles, they actually accelerate business cycles. A procyclical monetary policy implies cutting real interest rates during booms while increasing it during downturns. Similarly, procyclical fiscal policy refers to rising deficits during booms while narrowing it during recessions (Takáts 2012).

Policy preferences along with economic and institutional framework are used to direct the choice between procyclical and countercyclical policies. As for fiscal policy, the structure of government revenues and spending affect the policy option. On the revenue side, high reliance on non-tax revenues limits the government's ability to implement countercyclical fiscal policies as non tax revenues are often procyclical and outside the control of the government. On the expenditure side, large share of wages and interest payments coupled with small share of transfers restrict the ability of conducting a countercyclical fiscal policy. As interest payments may increase during recessions (due to higher country's risk premium). Also, it is always politically difficult to manage fiscal policies that involve substantial changes in public sector employments and wages. While a small share of transfers encourages procyclical fiscal policies. As these transfers are often linked to unemployment and are the main fiscal automatic stabilizers. The lack of these automatic stabilizers is one of the causes of the procyclical fiscal policies that characterize many emerging markets (Panizza 2001 and Abel et al. 2005, 574).²

² Automatic stabilizers refer to provisions in the budget that automatically produce countercyclical fiscal policy, i.e. cause government spending to rise and taxes to cut during economic boom and vice versa. Examples for automatic stabilizers are employment benefits and income tax.

To measure how far monetary policy is countercyclical, the correlation between business cycle and policy interest rates is estimated, controlling for other relevant factors. A positive correlation implies countercyclical monetary policy while a negative correlation reflects procyclical one. Likewise, estimating the correlation between business cycle and budget balance reveals the type of fiscal policy adopted. A countercyclical fiscal policy is reflected in a positive correlation, while procyclical one is translated into negative correlation (Takáts 2012).³

Traditionally, monetary policies in emerging markets used to be ineffective due to fiscal dominance while fiscal policies used to be procyclical. However, as part of the recent developments, emerging markets were able to pursue countercyclical monetary and fiscal policies that helped in containing output volatility (Takáts 2012).

III) The Egyptian Economy prior to the 25th January Revolution: An Overview

Since the adoption of market oriented policies and the structural reforms in the 1990s and the early 2000s, the Egyptian economy has been consolidating its position as one of the leading economies of the African continent and the Middle East. It was considered as one of the fastest growing economy among emerging markets, with the average annual GDP growth reaching 6.4 percent during the period 2004-2008. The major driver of GDP growth is domestic demand and mainly private consumption that constitutes more than 70 percent of GDP. The high dependence of the GDP upon private consumption reflects an unsustainable growth as it depends on consumer's spending activity rather than capital formulation and investment (Ministry of Investment 2009 and MoF Monthly 2012).

On the external sector, positive performance of the balance of payments and piling up of net international reserves (NIR) characterized the underlying period. Yet, a deeper analysis for the different components of the balance of payments would reflect huge vulnerability and risky external position. The surplus generated was due to volatile unstable sources of foreign currency.

³ Taylor rule was developed to capture the degree of countercyclicality of both fiscal and monetary policy, as explained in the Appendix. Note that a positive correlation between budget balance and output gap is equivalent to a negative relation between budget deficit and output gap.

Specifically, the current account surplus was attributed to surplus in the services balance (tourism revenues and Suez Canal receipts) and private transfers in the form of workers' remittances. Such means of financing are volatile in nature and are mainly affected by external factors outside the control of the Egyptian economy. In addition, volatile capital flows was among the major sources of foreign currency for the Egyptian economy. In addition to that, the Egyptian economy experienced structural economic problems like rising inflation, high budget deficit and public debt figures (MoF Financial Monthly 2012).

Accordingly, with the onset of the global financial crisis in 2008, the Egyptian economy suffered from the repercussions of the crisis that hit the major sources of foreign currency, namely, tourism revenues, Suez Canal receipts and workers' remittances. Thus, the current account recorded a deficit of US\$ 4.4 billion in the fiscal year 2008/09.⁴ Portfolio outflows reached US\$ 9.2 billion leading to a deficit in the balance of payments and a decline in the NIR figure to US\$ 31.3 billion in June 2009 compared to US\$ 34.6 billion in June 2008 (CBE Annual Report 2008/09, Abu Hatab 2009, Kandil 2011c and MoF Financial Monthly 2012).

Owing to the solid macroeconomic policies and the structural reform measures adopted prior to the crisis, the Egyptian economy was able to manage the crisis and rebounded quickly by 2009/10 (Abu Hatab, 2009; MoF, 2009; Ministry of Investment, 2009 and Herrera et al, 2011).⁵

⁴ The fiscal year in Egypt starts July 1st and ends June 30th.

⁵ The Egyptian government intervened through its fiscal and monetary policies to stimulate the domestic demand and fight recession. On the fiscal side, the government introduced a stimulus package that depended on increasing government spending by EGP 15 billion and a range of EGP 5.5-6 billion in 2008/09 and 2009/10 respectively. Additional measures included freezing the energy subsidy phase-out plan until July 2010, lowering tariffs on over 250 items of imported intermediate and capital goods as well as offering sales-tax exemptions on capital goods. On the monetary front, the CBE adopted an accommodative monetary stance as it cut its key deposit and lending rates by 3.25 percent and 3.75 percent respectively between February 2009 and November 2009.

IV) The 25th January Revolution: Political Developments and Economic Implications

After the Egyptian economy started to recover from the negative consequences associated with the global financial crisis and the first two quarters of 2010/11 registered an average growth rate of 5.6 percent. The economy was hit dramatically with the January 2011 revolution and the associated political uncertainty. During the first days of the protests, several rating agencies downgraded Egypt's ratings ⁶ and the Credit Default Swap (CDS) ⁷ for the country rose sharply, reflecting negative outlook. Trading on the domestic stock market was suspended for 38 working sessions and Banks were closed for 5 business days (Kandil, 2011b and CBE Annual Report 2010/11).

Throughout 2011, Egypt political upheaval continued, triggered by growing domestic bickering, escalating sectarian conflicts, series of violent attacks and the extension of the transitional period. Such political turmoil along with the contagion effect that followed in the MENA region had its toll upon the Egyptian economy and its growth prospects. The external sector was under severe pressure with the sharp decline in sources of foreign currencies. Capital inflows recorded a dramatic reduction with portfolio investments reversing its trend to record an outflow of US\$ 2.6 billion in 2010/11 compared to an inflow of US\$ 7.9 billion a year earlier (132.4 percent reduction). Similarly, FDI fell by 68 percent to register an inflow of US\$ 2.2 billion in 2010/11. The overall political uncertainty deprived the economy of its lucrative touristic seasons and tourism income plunged by 9 percent. In addition, the slowdown in both domestic and external demand as well as lingering disruption in production activity led to a contraction in the domestic economy. For instance, real GDP growth rate fell to an annual level of 1.8 percent in 2011/12 (CBE Annual Report 2010/11 and Kandil 2011c).

⁶ For instance, Moody's Investors Services lowered Egypt's government bond rating to Ba2 from Ba1; Standard and Poor's (S&P) lowered the long-term foreign currency debt rating on Egypt to BB, two levels below investment grade and lowered long-term and short-term ratings of local currency bonds to BB+/B from BBB-/A-. Finally, Fitch revised the outlook for Egypt to "Negative" from "Stable".

⁷ Egypt's 5 year CDS reached the 450.15 level on January 28th, 2011 compared to 241.75 on January 3rd, 2011.

Conversely, the year 2012 witnessed remarkable improvements on the political arena due to the shaping of the new political milieu and landscape. These improvements were attributed to the successful completion of upper and lower house elections on schedule, the formulation of the committee responsible for the formulation of the constitution, the handover of military power, the end of the transitional period and the election of the first president after the revolution, Mohamed Morsi. Such positive developments over weighed other negative developments, like the dissolution of the parliament and other violent acts (i.e. Port Said attack).

In view of these positive political steps, the Egyptian economy observed some improvements. Real GDP grew by 2.2 percent in 2011/12, while it grew by 3.3 percent in Q4 2011/2012. Also, FDI recorded an inflow of US\$ 1.9 billion in Q4 2011/12 and portfolio outflows was limited to US\$ 0.5 billion during the same period as opposed to US\$ 1.6 billion outflow in Q4 2010/11. Despite being resilient after the dramatic deterioration, capital inflows did not regain momentum as investors are still waiting for more solid and stable conformation for political and economic stability (CBE Monthly Bulletin 2012 and MoF Financial Monthly 2012).

Given such improvements, both the monetary and fiscal fronts were dramatically affected as explained in the subsequent sections.

V) Monetary Policy

Monetary Policy Framework: A Retrospective

Since 2004, the monetary policy in Egypt has witnessed remarkable improvements as the CBE took serious steps to develop its monetary policy framework with the intention to adopt inflation targeting over the medium term.⁸ The monetary strategy, including the ultimate, intermediate and the operational target, was reshaped. To enhance the effectiveness of monetary policy towards achieving its objectives, the implementation framework and the communication strategy were

⁸ Such steps include all the institutional and operational reform measures applied to facilitate the move towards the implementation of the inflation targeting. Among these measures were the launch of the comprehensive banking sector reform program (privatization of banks, restructuring of Non-Performing loans (NPLs), liberalization of foreign exchange and money markets) as well as the release of the banking law no 88 of 2003 that granted the CBE instrument independence and strengthened its supervisory power.

also modernized. Currently, the ultimate targets of monetary policy in Egypt are focused on achieving and maintaining price stability as the primary objectives (Moursi et al. 2007, Al-Mashat 2008, Kandil 2011c and Fayed 2012).

As for the intermediate targets, in its monetary statement the CBE refers to developments in money supply and credit, as well as a host of other factors, including inflation and output gap forecasts, which may influence the underlying rate of inflation. It is notable that monitoring domestic liquidity is the key to the effective transmission of monetary policy instruments towards achieving the ultimate targets. The operational target is the overnight interbank rate. The CBE uses two standing facilities (an overnight lending facility and overnight deposit facility) as its main policy instruments, providing the outer bounds of a corridor within which the overnight interbank rate fluctuates.⁹ The interbank market enables banks to manage their liquidity in light of demand developments. To further reinforce its ability for effective liquidity management, the CBE conducts open market operations, buying or selling government securities, to inject or absorb available liquidity (Moursi et al. 2007, Al-Mashat 2008, Kandil 2011c and Fayed 2012).

Monetary Situation Post the Revolution

Monetary conditions in Egypt in 2011 were marked by deterioration in international reserves, depreciation of local currency against the US dollar, sustained high level of inflation rates and small expansion in money supply with liquidity tightening in the banking sector. However, such conditions improved relatively in 2012 with resilient NIR and subdued inflation. Each of these developments is explained below.

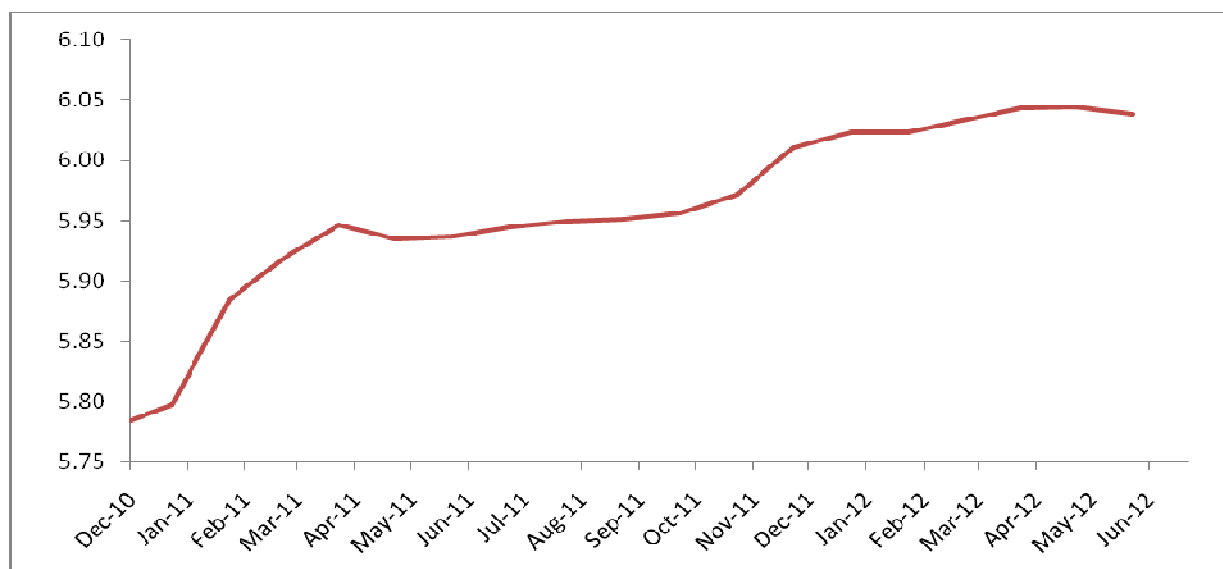
➤ *Domestic Currency*

Following the local political uprisings, the external sector deteriorated rapidly. In addition to the deterioration in tourism receipts and FDI, a massive wave of foreign sale in both the domestic equity and debt markets took place, leading to a portfolio outflow of US\$ 2.6 billion and US\$ 5.0 billion in 2010/11 and 2011/12 respectively. On the domestic side, confidence in the domestic currency ebbed, stirring a strong appetite for locals to increase their holdings of foreign currency

⁹ The corridor system was established in 2005 as the new operational framework for monetary policy.

against the domestic one. Yet, such dollarization trend decelerated slightly in 2012 with the improvement in the political arena and relative stability of the currency. Domestic deposit dollarization inched up slightly to 20.7 percent in June 2012 compared to 20.2 and 21.0 percent in June 2010 and December 2011 respectively. In addition, M2 dollarization reached 17 percent in June 2012 as opposed to 17.2 and 17.4 percent in June 2010 and December 2011 respectively.¹⁰ Consequently, domestic currency was under severe pressure in 2011 leading to around 6 percent depreciation with monthly average exchange rate surging to 6.011 in December 2011. However, with resilient capital flows and lower dollarization level in 2012, the pace of depreciation of the currency slowed down to some extent (CBE Monthly Bulletin 2012 and MoF Financial Monthly 2012).

Figure 1: Monthly Average Exchange Rate (US\$/EGP) (December 2010 – June 2012)



Source: Done by the researcher based on data from the MoF Financial Monthly (2012).

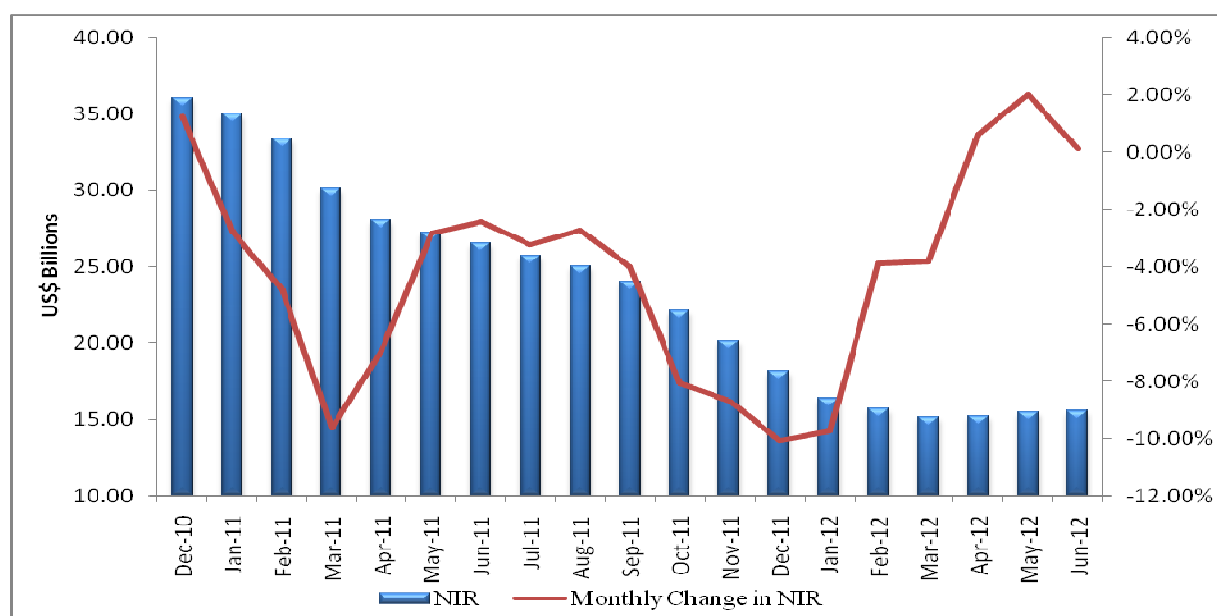
➤ *Net International Reserves (NIR)*

The deterioration in external environment was even compounded by the situation in Europe, which is the major trading partner to Egypt, leading to deterioration in the balance of payments

¹⁰ Domestic deposit dollarization is calculated as ratio of foreign currency demand, time and saving deposits to total deposits. While M2 dollarization refers to the ratio of foreign currency deposits to domestic liquidity (M2).

(BOP) position and hence deterioration in NIR. After reaching its peak in December 2010, NIR depleted by around 50 percent to US\$ 18.1 billion in December 2011 (3.7 months of imports). Yet, with the relative stabilization in the external sector along with financial assistance provided to the Egyptian economy in 2012, the rate of depletion of NIR slowed down. In June 2012, the NIR reached US\$ 15.5 billion and its import cover ratio was 3.2 months (Kandil 2011a and CBE Monthly Bulletin 2012).

Figure 2: Development of NIR (December 2010 – June 2012)



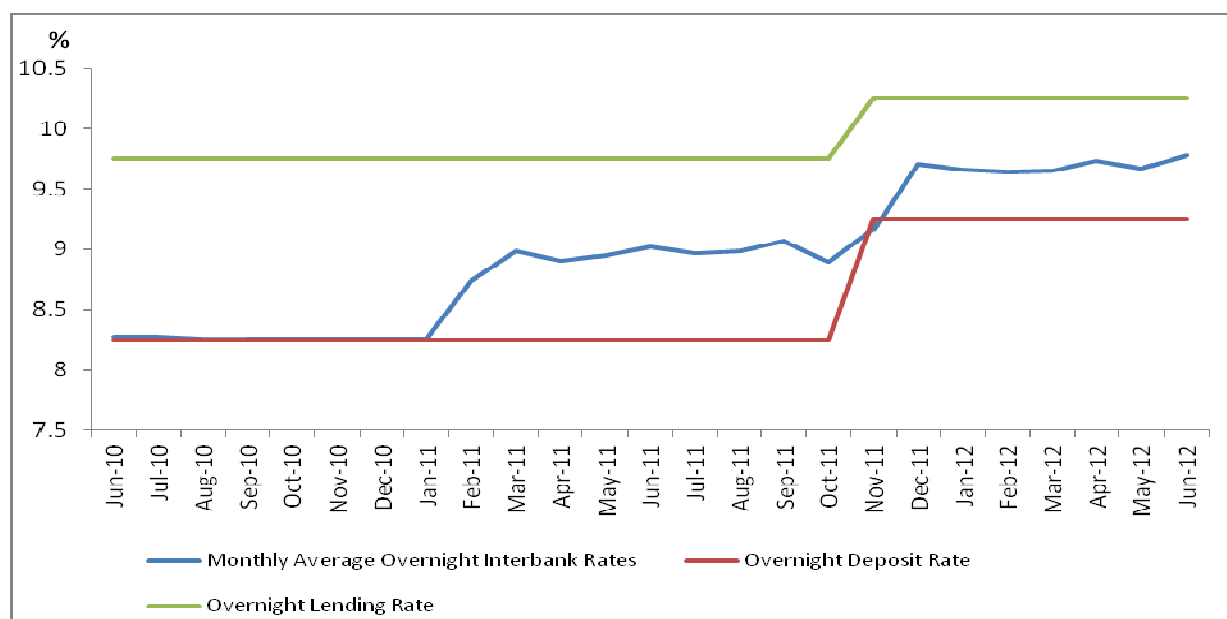
Source: Done by the researcher based on data from the CBE.

➤ *Domestic Liquidity*

Prior to the revolution, the banking sector was characterized by excess liquidity, evident by the falling loans to deposits ratio that reached 52.2 percent in 2009/10 compared to 83 percent in 2000/01. Despite being healthy, such liquidity reflected failure of monetary authorities to capitalize on available liquidity, in the form of credit to private sector, towards mobilizing economic activity. Another indicator for such surplus liquidity is the difference between the weighted average interbank rates and the CBE key rates. The closer the average interbank rate to the CBE deposit rate reflects excess liquidity and vice versa. During the period 2009-2010, the two rates were very close (as shown in figure 3) (Kandil 2011c and Fayed 2012).

With the political uprisings and its economic repercussions in the form of foreigner's exit from the domestic market, domestic liquidity in the banking sector came under pressure. The weighted average interbank rates rose in 2011 and first half of 2012, hovering around the middle of the corridor rates, as depicted in figure 3 (CBE Economic Review 2010/11 and Fayed 2012).

Figure 3: Weighted Average Interbank Rates and Policy Rates (June 2010 – June 2012)



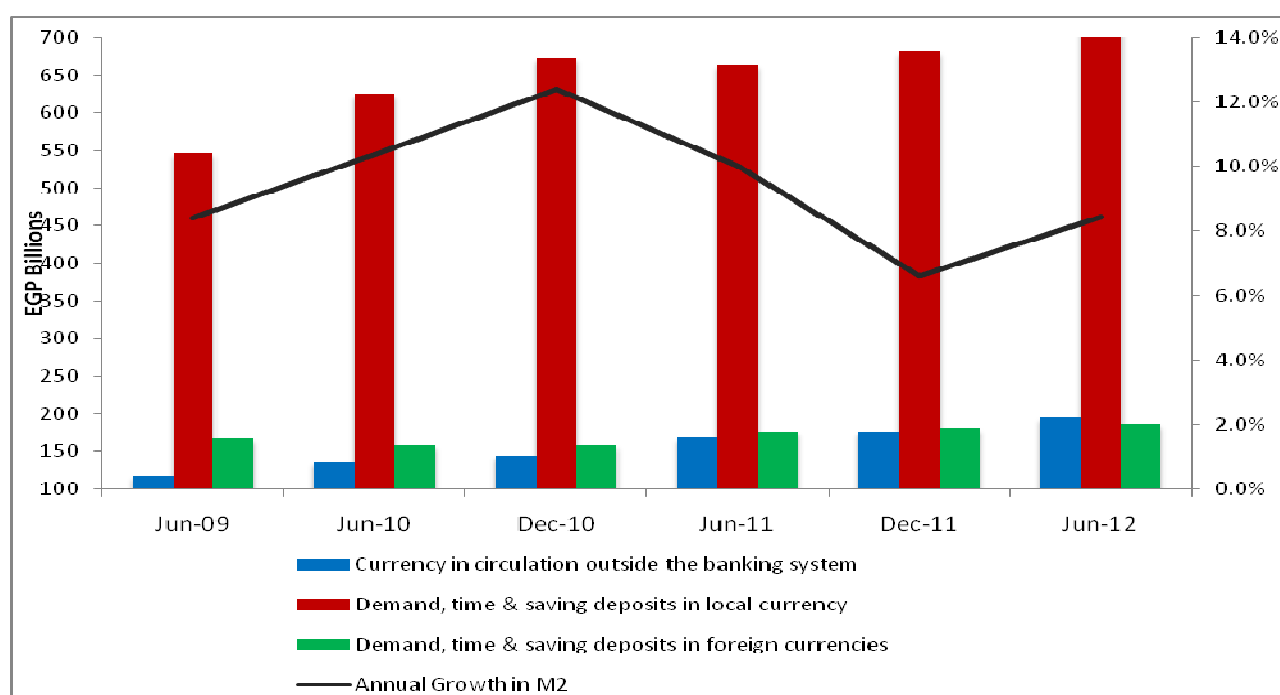
Source: Done by the researcher based on data from the CBE and MoF.

Liquidity squeeze is also apparent when analyzing the total domestic liquidity (inside the banking sector and outside it). Specifically, the rate of growth of domestic liquidity (M2) slowed down in 2011. In December 2011, M2 grew by an annual rate of 6.6 percent compared to 12.4 percent in December 2010. On the contrary, Currency in circulation outside the banking sector and foreign currency deposits accelerated significantly in December 2011 (as shown in figure 4), reflecting deteriorating confidence in the domestic economy and growing appetite for dollarization (Fayed 2012 and CBE Monthly Bulletin 2012).¹¹

¹¹ In December 2011, currency in circulation increased by 22.94 percent compared to 13.4 percent a year earlier, while foreign currency deposits accelerated to 14.5 percent. Yet, local currency deposits recorded a growth rate of 1.3 percent as opposed to 15 percent in the previous year.

With the improvement in the overall sentiment and political stability in 2012, M2 started to accelerate with its annual growth rate reaching 8.4 percent in June 2012. In addition, currency in circulation and foreign currencies deposits slowed down to an annual growth rate of 15.6 percent and 5.1 percent respectively in June 2012, as shown in figure 4 (CBE Monthly Bulletin 2012 and MoF Financial Monthly 2012).

Figure 4: Domestic Liquidity and its Components (June 2009 – June 2012) ¹²



Source: Done by the researcher based on data from Fayed (2012), CBE and MoF.

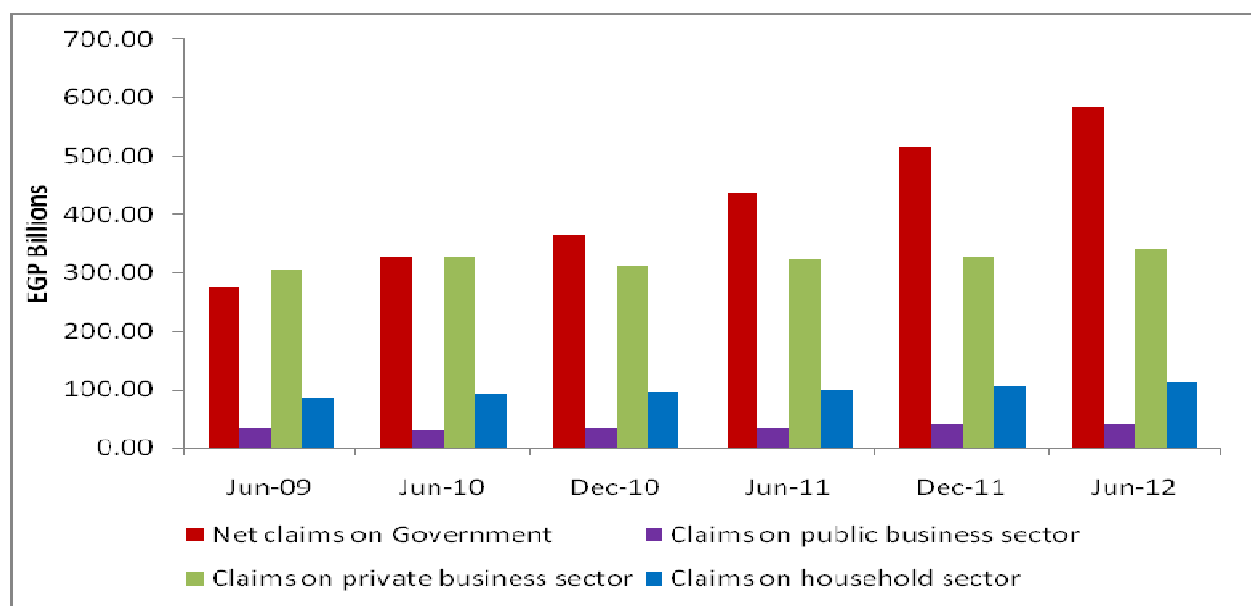
➤ *Domestic Credit*

Despite negative sentiment towards the Egyptian economy, domestic credit growth accelerated significantly in 2011. In December 2011, domestic credit by the banking sector grew by an annual rate of 22.65 percent compared to 7.8 percent in December 2010. Such surge was basically triggered by boom in net claims to the government and public sector by domestic banks. This trend prevailed also in 2012 with the absence of significant foreign participation in local debt markets (Fayed 2012 and CBE Monthly Bulletin 2012).

¹² Data for June 2012 was not available during the time of writing.

The cautious stance adopted by foreign investors towards Egypt's debt market coupled with increased issuance of debt papers by the government to finance the widening fiscal deficit, motivated domestic banks to increase their holdings of government securities. As it offered higher yields relative to the pre-events period and provided an alternative to support operating revenues and, at the same time, allowed banks to maintain liquidity levels. In addition, banks' lending activity was naturally directed towards the public sector due to their greater borrowing requirements on account of social discontent. On the other hand, subdued credit growth to the private sector was due to the slowdown in economic activity as well as domestic banks' reluctance to engage in further lending activities to the private sector in an attempt to maintain their balance sheets as liquid as possible (Fayed 2012 and CBE Monthly Bulletin 2012).

Figure 5: Domestic Credit (June 2009 – June 2012)



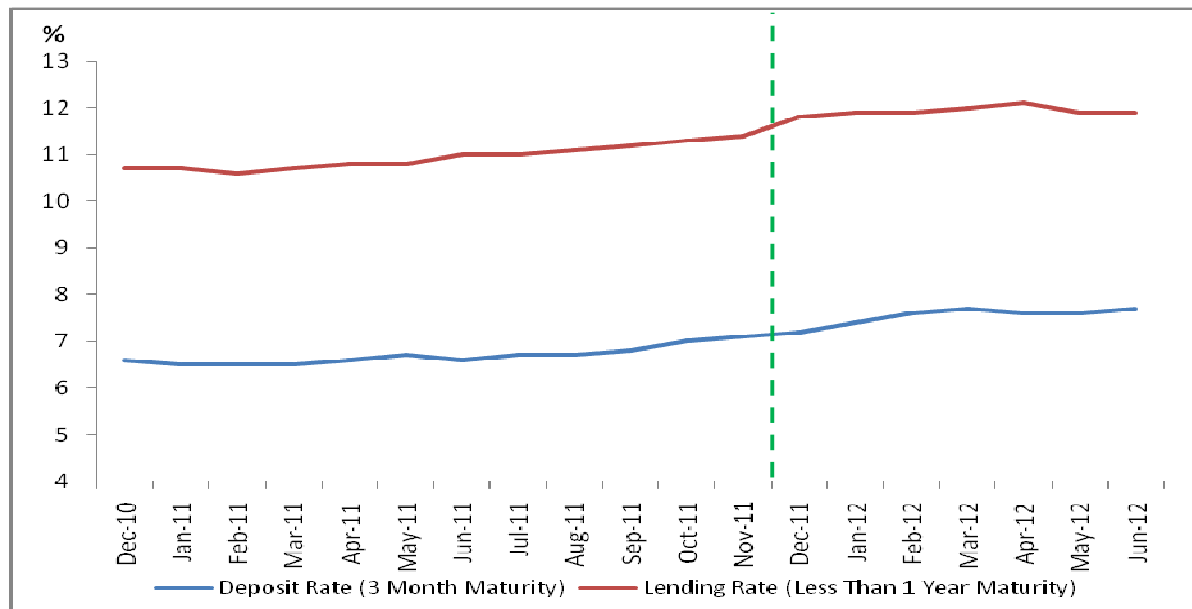
Source: Done by the researcher based on data from CBE.

➤ *Domestic Interest Rates*

With tighter liquidity conditions, declining confidence in the domestic currency along with the dollarization appetite, domestic interest rates for customers' deposits and loans remained resilient

with tiny monthly changes. It is notable that customers' rates rose slightly in November 2011 driven by the CBE's decision to hike its key policy rates.¹³

Figure 5: Customer's Deposit and Lending Rate (December 2010– June 2012)



Source: Done by the researcher based on data from CBE and MoF.

➤ *Inflation Rate*

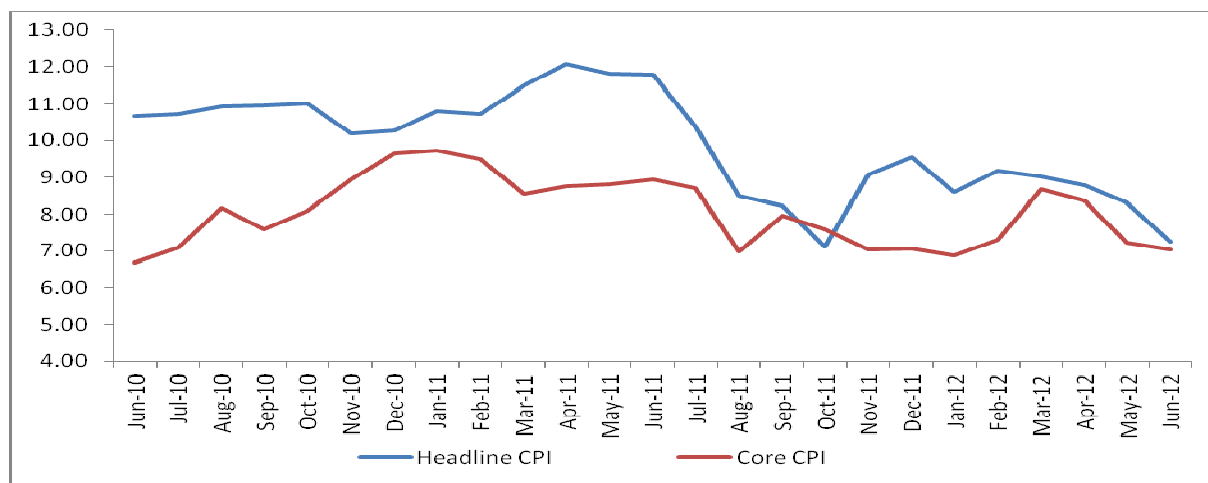
Historically, domestic inflation varied over time with international shocks and domestic pressures. Prior to the revolution, inflation surged on account of high international prices before the global crisis. In 2008, it moderated with the slowdown in economy and the gradual vanishing of the base effect (Kandil 2011c).

Prior to 2011, Egypt was running one of the highest annual food price inflation regionally and globally. Rising inflation was basically triggered by growing food prices, i.e. food and beverages represent around 40 percent from the CPI basket. This has been due to a persistent structural deficiency in agricultural and retail sectors as well as rising global food prices (Farid et al, 2011).

¹³ CBE's decision is discussed in the next section (Monetary Policy Post the Revolution).

With the onset of the revolution, inflation displayed a volatile trend, reflecting the conflicting factors affecting inflation. On one side, depreciation of the domestic currency, local supply bottlenecks, rising global food and oil prices resulted into heightened inflationary pressures during the first half of 2011. On the other side, the slowdown in the domestic economy and domestic demand along with favorable base effects outweighs the effect of other inflationary factors, leading to a fall in inflation during the second half of 2011 and 2012. Annual headline inflation plunged to 7.26 in June 2012 compared to 10.28 and 11.79 in December 2010 and June 2011, respectively. Likewise, annual core inflation recorded 7.04 percent in June 2012 as opposed to 9.65 and 8.94 in December 2010 and June 2011, respectively (CBE Monthly Bulletin 2012).¹⁴

Figure 6: Headline and Core Annual Inflation (June 2010 – June 2012)



Source: Done by the researcher based on data from CBE.

Monetary Policy Post the Revolution: Measurements and Assessment

In the wake of the revolution, *Egypt's monetary policy was juggling between sluggish growth, growing inflation and depreciating domestic currency.* It was trying to keep balance between curbing inflationary pressures, preserving domestic currency, stimulating credit growth and ensuring sufficient liquidity levels to boost slowing economic growth. Accordingly, the CBE

¹⁴ Core inflation is a measure for inflation calculated by the CBE. It reflects the changes in prices of all CPI items except for volatile items, namely, fruits and vegetables and regulated items.

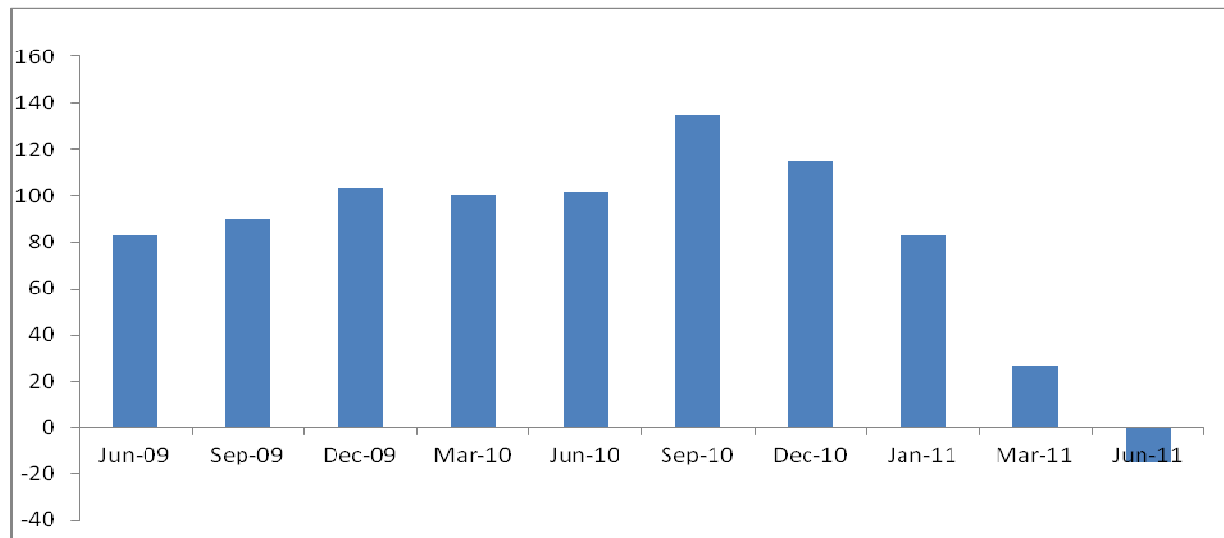
resorted to unconventional tools for monetary policy besides adjusting interest rates in an attempt to achieve the required balance between the conflicting underlying objectives.¹⁵ Measures taken by the CBE are highlighted below.

➤ Open Market Operations

In response to the tight liquidity conditions, low effectiveness of interest rates and rising inflation, the CBE used its open market operations to provide liquidity for the domestic market. In March 2011, the CBE introduced the repo facility as part of its monetary policy framework, through which banks can swap their holdings of T-bills for liquidity. The duration of the transaction was 7 days. Later, in June 2012, the CBE introduced also the 28 day repo operations. The introduction of the repo operations was considered an appropriate mean for liquidity injection due to the mounting banks' holdings of T-bills. In addition to repo operations, the CBE continued to provide liquidity for the market through its corridor system. With the liquidity squeeze in 2011, the CBE started to inject liquidity in the banking sector, after being an absorber of excess liquidity for a prolonged period of time, as depicted by figure 7 (CBE Annual Report 2010/2011 and Fayed 2012).

¹⁵ Previous studies found that interest rates in Egypt are not very effective in stimulating credit due to inelastic demand for credit to interest rates.

Figure 7: Amount of Liquidity Absorbed by CBE from the Banking Sector (June 2009 – June 2011) (in EGP Billions) ¹⁶



Source: Done by the researcher based on data from CBE.

➤ Key Policy Rates

After a prolonged period of neutral monetary stance, the CBE decided to hike its mid key rates in November 2011, for the first time since 2008, by almost 0.75 percent; 1 percent in deposit rate and 0.5 percent in lending rate, to reach 9.75 and 10.25 respectively. Such move was surprising to the market as annual inflation figures was slowing down at that time. However, the CBE attributed such move to the need to limit potential upside risks to inflation and ensure balance with growth. There was a growing consensus at that time that such decision was triggered by the CBE's intention to support the domestic currency, boost local currency deposits and fight dollarization (CBE Annual Report 2010/2011, CBE MPC Press Release November 2011 and Fayed 2012).

¹⁶ Negative amount implies an injection of liquidity by the CBE.

➤ Reserve Requirements Ratio

Historically, this measure was not extensively used by the CBE. However, the CBE adjusted banks' reserve the reserve requirements ratio twice in 2012, in an attempt to pump permanent liquidity in the banking sector. It reached 10 percent compared to 14 percent prior to the revolution.

➤ US Dollar Denominated T-Bills

In an attempt to increase sources of foreign currency and stop the depletion of NIR, the CBE issued dollar denominated T-bills for the first time in November 2011 and later in December 2011 and 2012 (Williams et al. 2012).

➤ Direct Intervention in the Foreign Exchange Market

Despite the adoption of flexible exchange rate regime, the CBE held direct intervention in the foreign exchange market to combat dollarization activities, ensure the stability of the domestic currency and preserve its NIR. It intervened in February 2011 by selling foreign currency to the domestic market.

➤ New Sources of Foreign Currency

In addition to measures stated above, the CBE took other steps to increase its sources of foreign currency and rebuild its NIR. Such measures comprised the launch of land auctions to expatriates, the issuance of Diaspora bonds, which are certificate of deposits to national citizens living abroad, the announcement of possible issuance of Islamic Sukuk and pursuing the IMF for financial support. Though, the deal with the IMF has not been materialized yet, it is expected that the negotiations would end by 2012. Such loan is expected to boost global confidence in the Egyptian economy and could trigger the disbursement of aid from other agencies. Also, financial support packages were provided from Gulf countries like Saudi Arabia and Qatar during 2011 and 2012 (Faird 2012 and Williams et al. 2012).

- *Assessment of the monetary stance* post the revolution requires an extensive quantitative analysis, which is not possible due to the limited number of data points available, thus, qualitative analysis was used instead. Despite the fact that key interest rates was altered once during the underlying period, the CBE used different unusual measures to manage the monetary position. The implementation of these tools reflected the CBE's objective of increasing domestic liquidity. Thus, it could be argued that the CBE adopted a *countercyclical monetary policy* using measures other than interest rates, due to the ineffectiveness of interest rates and the desire to balance between boosting growth, curbing inflation and preserving domestic currency, especially at the first half of 2011.

VI) Fiscal Policy

Fiscal Policy Framework: A Retrospective

In 1991, Egypt launched its Economic Reform and Structural Adjustment program (ERSAP) in an attempt to rectify macro imbalances at that time.¹⁷ One of the main pillars of the program was implementing a comprehensive fiscal adjustment program through increasing revenues as well as restraining expenditures and reducing it. The leading edge of the program was in the area of fiscal policy. As the program was able to cut the overall fiscal deficit significantly to reach 2-3 percent of GDP in the mid 1990s, such magnitude was remarkable by standards of other reform countries. However, by 1998/99, the fiscal position deteriorated and budget deficit surged once again (Subramanian, 1997; Korayem, 1997; Handy, 2001 and El-Shazly, 2011).

Accordingly, the Ministry of Finance (MoF) has taken many steps since 2004 to correct for structural fiscal problems and address fiscal vulnerability. Budget classification, treasury single account, public revenues and spending and debt management are among the major areas that witnessed strategic reform. In addition to all that, the government designed a medium term fiscal

¹⁷ The Egyptian government signed the Economic Reform and Structural Adjustment Program (ERSAP) with the IMF in 1991/92. The main objectives of the ERSAP were to eliminate economic imbalances and distortions by transforming the economy into a market-based one and to restore the country's creditworthiness. The reform agenda included the implementation of a comprehensive fiscal adjustment plan and reforming the public sector.

consolidation plan in 2010 to cut the budget deficit by one percent each year, to be reduced by 5 percent by 2014/15 (IMF 2010).

On the budget side, budget classification, management and reporting witnessed significant improvement. Such progress comprised the adoption of cash basis for budget recording in 2006, which complies with international standards; the establishment of macro fiscal units in 2004 to undertake medium term macro fiscal projections; enhancement of budget transparency and accountability through designing a medium term fiscal framework, disclosure of budgetary documents to the public and enhancing the quality and dissemination of fiscal data (MoF undated and IMF 2012).

Heading towards a lower budget deficit and more progressive public finance, the treasury single account was created at the CBE in 2006 and the MoF was authorized accordingly to close down commercial bank accounts of budget authorities and transfer their balances to the CBE. On the debt management side, the debt management unit at the MoF was able to extend the government debt maturity in order to avoid fluctuations in the interest rates and to reduce both domestic and external debt (MoF undated and Farid et al. 2011).

On the revenues side, different efforts were exerted to mobilize additional sources of public revenues. The reforms included the income tax law of 2005 that enhanced the transparency of the Egyptian tax system through reduction of personal and corporate income taxes, broadening of tax base and unification of tax exemptions and legislations. In addition, the issuance of real estate tax law in 2008 created a transparent and straight forward real estate tax system. Adding to all this, the continuous improvement in the administration and the automation of the government receipts and tax collection (MoF undated).

To reduce spending inefficiencies, restructuring the subsidy scheme, especially energy subsidies, was a key objective for the reform agenda.¹⁸ Since the subsidy system in Egypt entails a lot of waste of government resources and does not achieve its objective of reducing inequality, the

¹⁸ Around two thirds of the total subsidies are directed to fuel products while less than one quarter is directed to food subsidy.

government launched a plan in 2007 to phase out the energy subsidies.¹⁹ However, the plan was postponed till 2010 on the back of the global financial crisis in 2008. In addition, the government introduced a public private partnership (PPP) policy and program in 2006 through the establishment of the PPP central unit within the MoF (MoF undated; IMF 2010 and Kandil 2010).

Fiscal Developments Post the Revolution

Egypt's public finance conditions came under significant pressure with the political uprisings in 2011. With rigid government spending and weak growth of revenues, budget deficit widened and fiscal imbalances exacerbated.

➤ Public Expenditures

Basically, public spending scheme in Egypt is rigid and does not allow great flexibility. It is mainly directed towards achieving social welfare through wages and subsidies that constitute more than 50 percent from the total expenditures. Interest payments also represent a significant share due to high stock of public debt (Kandil 2011b).

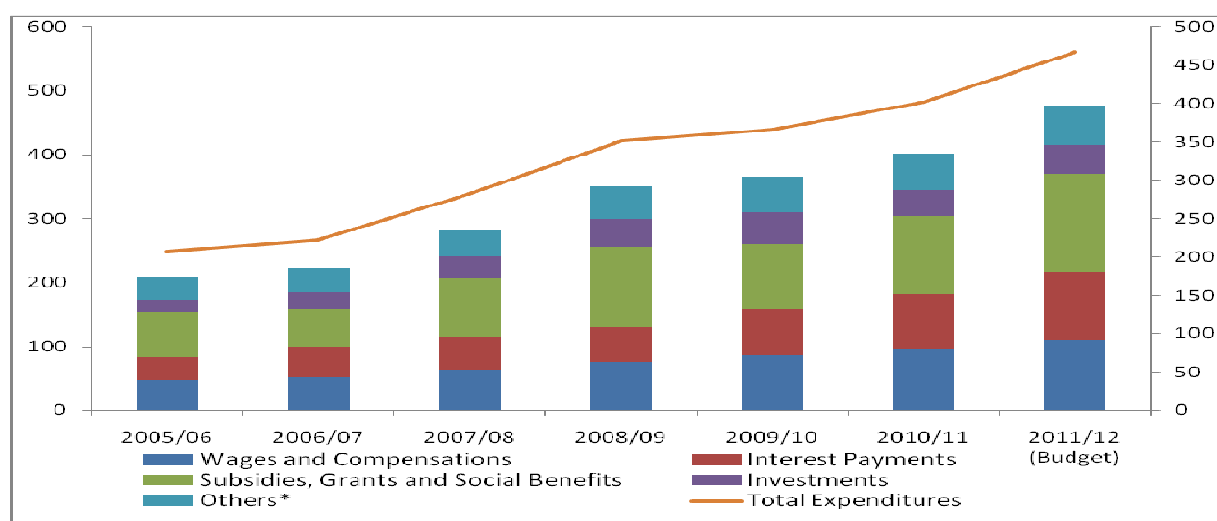
With political uprisings and escalating social pressure to increase public spending in 2011, the fiscal policy remained supportive to social welfare areas of spending, with additional socially-g geared public spending announced by the government. Subsidies and wages accelerated significantly in 2010/11 by 19.6 percent and 12.8 percent, respectively. It is notable that the unfavorable rise in global food and energy prices as well as the depreciation of the domestic currency, added more pressure to the subsidy bill. In addition, interest payments boosted by 17.6 percent, such increase was due to increasing the supply of government debt paper to finance the widening budget deficit as well as the higher cost of borrowing as response to the downgrading of Egypt's sovereign rating (Kandil 2011b, Metwaly 2011 and MoF Financial Monthly 2012)

Despite the relative stability on the political arena and accompanied positive sentiment in 2012, the public spending increased further in 2011/12 due to the rise in subsidies, interest expenses

¹⁹ The plan entailed an immediate increase in the energy prices for energy intensive industries and a one year grace period for non-energy intensive industries.

and wages.²⁰ Such stance reflects the rigidity of the spending system and the government's intention to avoid socially unfavorable fiscal policies. Generally, public spending accelerated by 9.8 percent and 16.3 percent in 2010/11 and 2011/12 respectively. Figure 8 displays the developments of public spending and its components from 2005/06 to 2011/12 (MoF Financial Monthly 2012).

Figure 8: Public Spending and its Components (2005/06 – 2011/12) (in EGP Billions)



Source: Done by the researcher based on data from CBE and MoF.

* include purchases of goods and services as well as other spending like defense.

➤ Public Revenues

Tax revenues are considered the major source of public revenues in Egypt. They constitute more than 50 percent of public revenues. Taxes on income and profit represent the largest share from tax revenues.

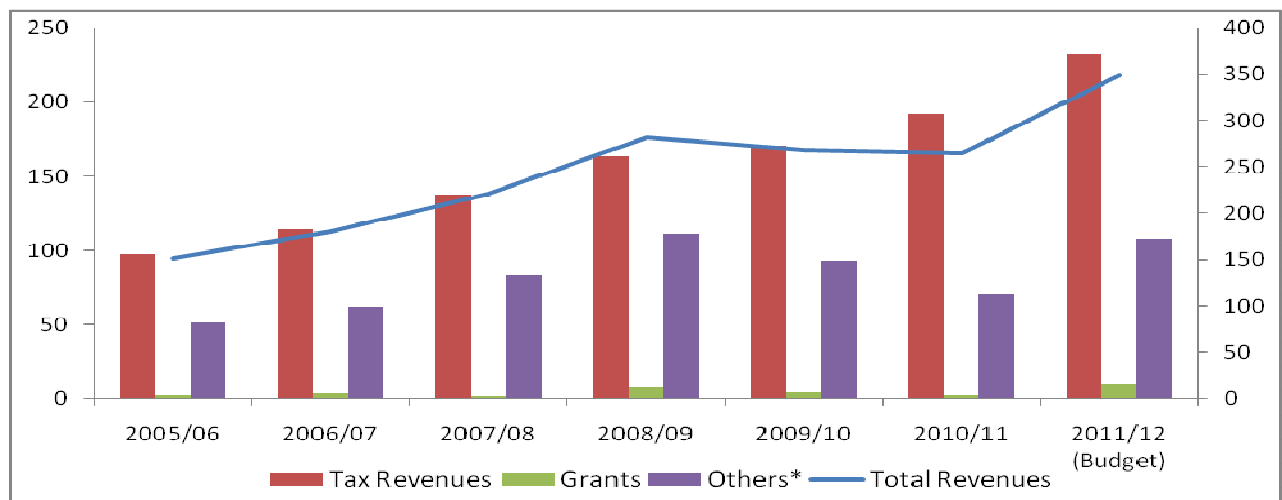
The economic downturn witnessed led to difficulties in amassing public revenues in 2010/11, especially at the level of non tax revenues. Non tax revenues deteriorated sharply on the back of lower property income and grants from foreign governments. Unpredictably, tax revenues surged slightly motivated by temporary measures taken by the government to ease economic burden on

²⁰ Due to the unavailability of the actual fiscal data for the year 2011/12 at the time of writing, the budget figures were used.

companies and business establishments at the beginning of the revolution (MoF Financial Monthly 2012).²¹

Conversely, budget figures for 2011/12 reveal around 32 percent rise in public revenues driven by massive increase in grants and significant surge in tax revenues, to level even higher than the pre-revolutions levels (MoF Financial Monthly 2012).

Figure 9: Public Revenues and its Components (2005/06 – 2011/12) (in EGP Billions)



Source: Done by the researcher based on data from CBE and MoF.

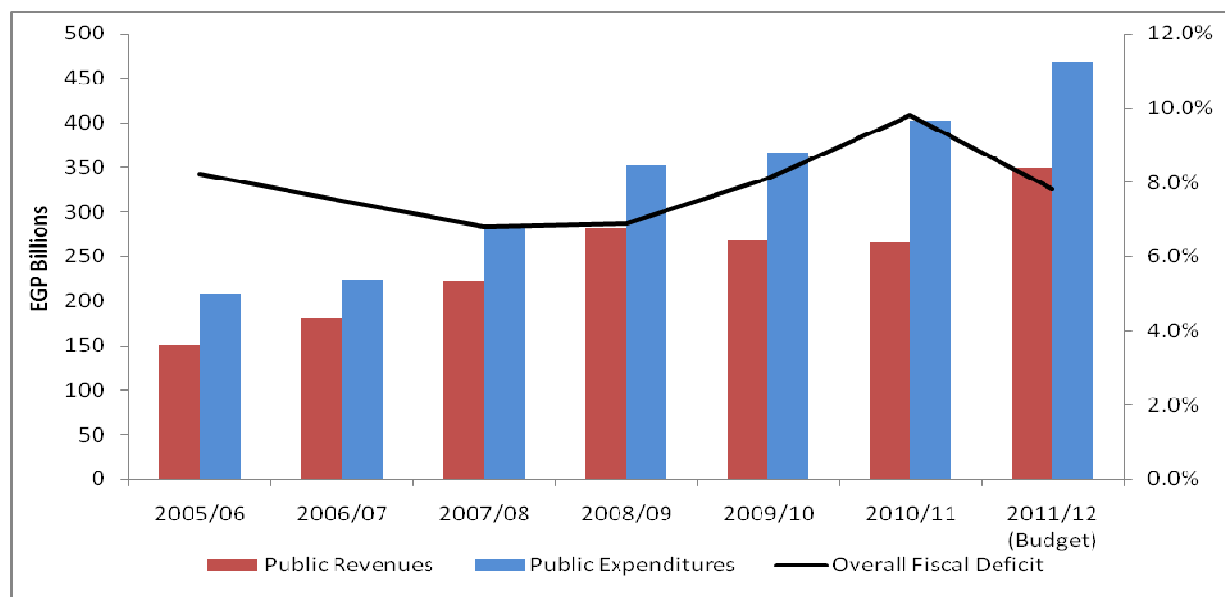
* include property income and revenues from sale of goods and services.

➤ Budget Deficit

The slowdown in growth of public revenues coupled with the significant increase in public spending led to a sharp widening in the overall budget deficit to reach 9.8 percent in 2010/11, a level close to pre fiscal reform measures in 2005. However, it is expected that the budget deficit in 2011/12 would decline to 7.8 percent, as per the budget figure.

²¹ Measures taken by the government are discussed in details in the next section.

Figure 10: Deterioration in Egypt's Fiscal Position (2005/06 – 2011/12)

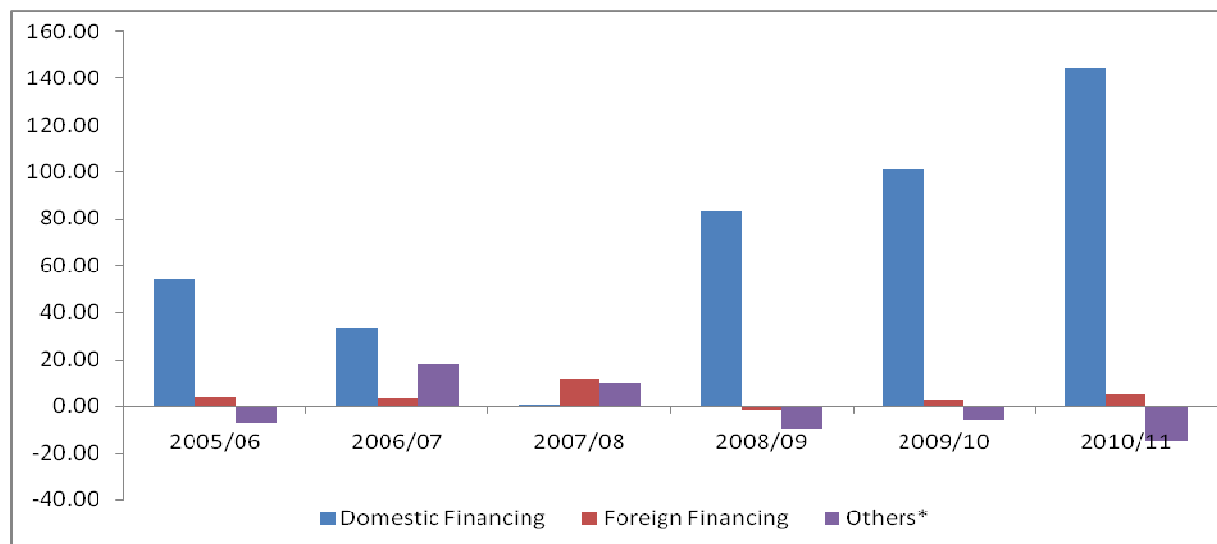


Source: Done by the researcher based on data from CBE and MoF.

To finance the widening budget deficit, the government depended mainly on the domestic sources of finance; the CBE, banking sector and other non-bank institutions like the National Investment Bank and Social Insurance Funds. Historically, domestic sector used to fund more than 80 percent of the government's fiscal shortfalls, yet, banking finance augmented notably in 2010/11 to substitute for the reduction in non-banking finance. Such increase reveals banks' growing appetite for government securities. It is remarkable that funding the rising deficit has been lately more delicate given the rising yields on government securities and the liquidity squeeze in the banking sector.²²

²² Data for 2011/12 was not available during the time of writing.

Figure 11: Developments of Different Sources of Financing the Fiscal Deficit (2005/06 – 2010/11) (EGP Billions)



Source: Done by the researcher based on data from MoF.

* include net privatization proceeds, payment of outstanding arrears, special accounts for budget entities, exchange rate revaluation, difference between T-bills face value & present value and discrepancies.

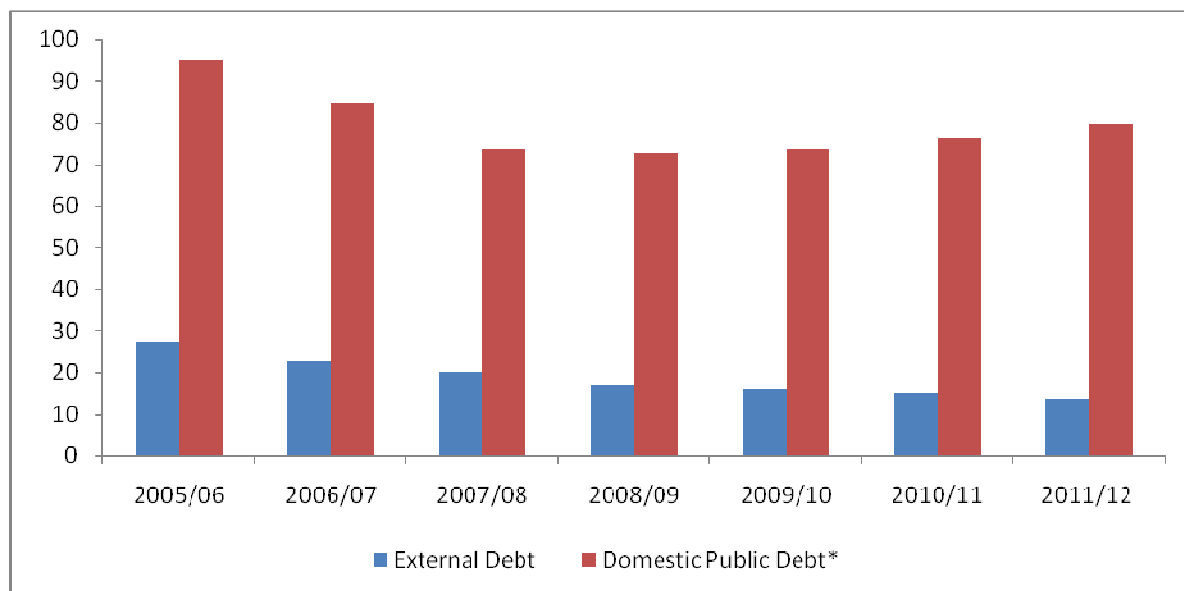
➤ Public Debt

The Egyptian government used to rely on domestic debt rather than external one to finance its deficit. Notwithstanding the high government debt/GDP figure that surpasses the global average, the institutional characteristics of Egypt's public debt suggest that outstanding debt could be managed in an orderly fashion. As most the debt is held by domestic institutions rather than external ones, even external debt is mainly a long term debt held by official sources and not commercial banks or bondholders (World Bank 2005 and IMF 2010).

With the lingering political instability, the corresponding deterioration in public finance conditions and widening budget deficit, public debt rose significantly. Domestic public debt rose by 18 percent and 20 percent in 2010/11 and 2011/12, on the back of higher net government debt. The rise in net government debt was induced by around 18 percent annual increase in the outstanding balance T-bills and bonds in 2010/11 and 2011/12 (CBE Monthly Bulletin 2012).

On the other hand, external debt witnessed a mild increase in 2011/12 to record US\$ 34.4 billion against US\$ 33.7 billion in 2009/10. Despite the comfortable external debt levels, the government rejected calls to increase its external debt rather than domestic debt to finance the escalating deficit. This was prompted by the growing social opposition against external borrowing as well as the higher cost of borrowing internationally after the sovereign rating downgrade for Egypt and the increasing concerns about fiscal sustainability of the Egyptian economy (CBE Annual Report 2010/11 and CBE Monthly Bulletin 2012).

Figure 12: Domestic Public and External Debt (% of GDP) (2005/06 – 2011/12)



Source: Done by the researcher based on data from CBE.

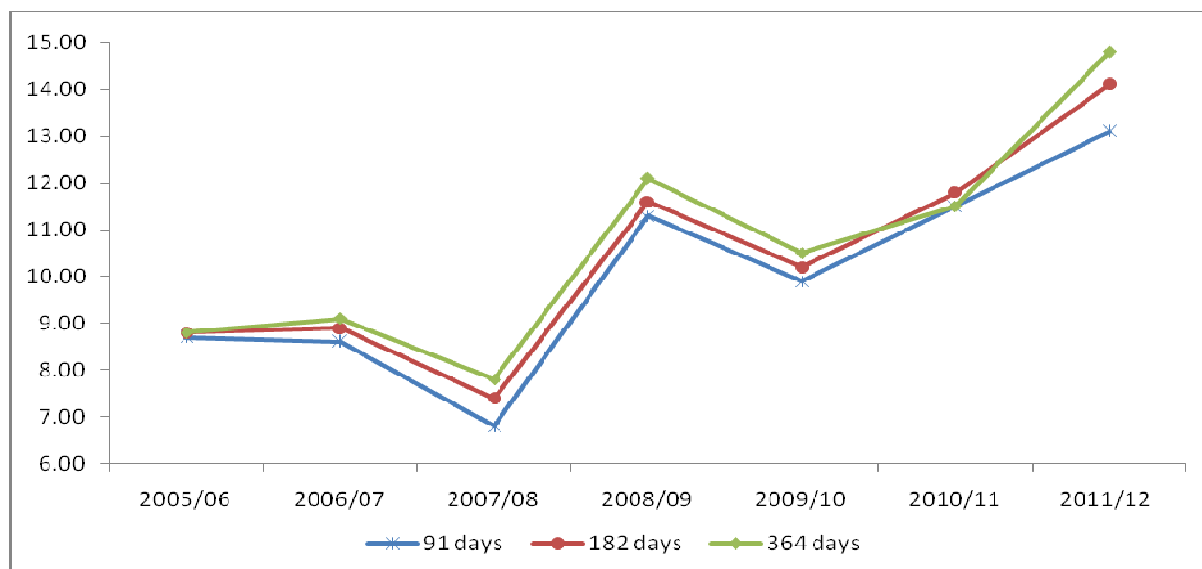
* is composed of net debt of the government, economic authorities and National Investment Bank.

➤ Yields on Government Securities

Government debt papers came under severe pressure post the revolution. This was due to the massive sell off by foreign investors in the domestic debt markets, increasing supply of government debt paper and mounting concerns about Egypt's fiscal sustainability. Accordingly, prices of debt papers plunged drastically and yields surged to unprecedented levels. For instance, average yields on three months T-bills reached 11.5 percent 2010/11, against 9.9 percent in 2009/10 (MoF Financial Monthly 2012).

As previously mentioned, domestic banks were the major holders of government debt papers, especially, after the wave of selling by foreigners. However, domestic banks started to lose their appetite to absorb additional government debt on the back of domestic liquidity shortage. Such trend put much more pressure on yields, leading to another surge in 2011/12 (as shown in figure 13). With interest payments representing around 20 percent from the public spending, higher yields imply higher public spending and hence growing fiscal deficit (MoF Financial Monthly 2012).

Figure 13: Average Annual Primary Market Yields on Government Securities (2005/06 – 2011/12)



Source: Done by the researcher based on data from MoF.

Fiscal Policy Post the Revolution: Measurements and Assessment

With the onset of the political uprisings and its economic repercussions, *fiscal policy was torn between the growing socially-geared spending, weak revenues and the widening fiscal deficit*. Coupled with an elevating indebtedness ratio, the issue of fiscal sustainability has arisen. On the positive side, the pre revolution fiscal reforms, allowed some flexibility in tolerating the widening fiscal deficit at the beginning of the revolution, i.e. 2010/11. However, with the

continuous deterioration in the fiscal position, the MoF announced set of measures to curb the rising deficit in 2012.

➤ Public Spending

Mounting concerns about inequality and rising pressures from the most vulnerable groups forced an expansionary fiscal policy in 2010/11. The government introduced a 15 percent increase in wages and pensions in March 2011 and employees working on contract basis for 3 years or more were permanently appointed in their jobs. Subsidy bill grew as well to compensate for the rise in international prices. In addition, the government decided to roll out some of the planned spending reforms and legislations that are either socially unpopular or could stir up further tensions if implemented, i.e. restructuring the energy subsidies plan (Kandil 2011a and CBE Monthly Bulletin 2012).

With the severe deterioration in fiscal position, the government shifted its policy stance and declared the adoption of austerity measures in 2012 to curtail the growth of public spending. A law was released on January 2012, approving budget expenditures cut by EGP14.3 billion through reducing salaries and employees' benefits, purchases on goods and services, interest expenses, subsidies and government investment. Specifically, the finance Minister announced the government's intention to hike natural gas and electricity prices by 33 percent for energy-intensive industries, which include steel, fertilizers, cement, and ceramics.

➤ Public Revenues

With the onset of the revolution, the government adopted several temporary measures to ease the economic burden of the revolution upon companies and business establishments. Companies were allowed to settle their unpaid corporate income tax, due for 2010, over three installments by a maximum period of June 30, 2011 without penalty. In 2012, reform measures comprised the recouping of deferred taxed and revision of custom duties. Moreover, part of the planned revenues reform measures, like the introduction of the value added tax, were postponed due to the escalating social pressure following the revolution.

➤ Financing the rising deficit

With the widening fiscal deficit and rising cost of borrowing, the government resorted to alternative financing opportunities. Specifically, the issuance of US Dollar Denominated T-Bills and two-year government debt papers, selling Diaspora bonds to expatriates and the announcement of possible issuance of Islamic Sukuk were among these measures. In addition, the government received financial support package from international institutions and Gulf Countries. Currently, the Egyptian government is negotiating with IMF for a loan facility which is expected, when materialize, to pave the way for further funds flocking into the country.

- ***Assessment of the fiscal stance*** post the revolution requires a comprehensive quantitative analysis for estimating the direction of fiscal policy post the revolution. Yet, as previously mentioned, the unavailability of reliable long data series post the revolution hindered such analysis, thus, qualitative analysis was used instead. Notwithstanding the large share of wages and interest payments from government spending, a countercyclical fiscal policy in Egypt could be prompted by the considerable share of social transfers that act as automatic stabilizer as well as the low share of non-tax revenues from the government revenues. With the widening budget deficit following the revolution (lower budget balance with the slowdown in economic activity), it seems that the Egyptian government resorted to *countercyclical fiscal policy* to stimulate the economy.

VI) Conclusion

Prior to the revolution, the Egyptian economy was suffering from structural economic problems; however, such problems were masked by the rapid growth and the boom conditions that the economy was facing. Accordingly, with the onset of the revolution and the prevailing political turmoil, confidence in the Egyptian economy eroded, growth depressed and many sectors were hit sharply. Thus, what is henceforth required is *a comprehensive reform agenda* to correct for the structural imbalances in the economy rather than short term solutions.

First of all, the primary objectives for the economy should include poverty alleviation and improving living standards to avoid any further social pressure that directs the government from

its reform agenda. To that end, the proposed economic agenda should focus on achieving sustainable growth and addressing social concerns like high unemployment and poverty.

On the fiscal front, the government should proceed with its postponed fiscal reform measures on both the expenditure side and the revenues side, especially the restructuring of energy subsidies. Second, prioritization of government spending and mobilization of additional revenues is needed to reduce the growing fiscal deficit and the elevating debt figures. On the spending side, the government should cut down on extravagant spending and introduce institutional and administrative reforms for public entities. On the revenues side, widening the tax base, increasing compliance and fighting corruption and tax evasion are among the potential solutions.

On the monetary side, maintaining price stability should continue to be the primary objective of monetary policy to contain inflationary pressure and reserve competitiveness. Encouraging more stable sources of foreign financing as well as addressing structural deficiencies in agricultural and retail sectors are among the requested measures. Also, Domestic credit should be directed to the private sector rather than financing the budget deficit, to stimulate growth.

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Appendix

To measure the degree of countercyclicality of monetary and fiscal policies, Taylor rule is estimated.

➤ *Monetary Policy*

To capture the countercyclicality of monetary policy, policy rate is modelled as responding to several variables:

$$i = \pi + \alpha (y - y^*) + \beta (\pi - \pi^*) + r^*$$

where i is the nominal policy interest rate, π is the rate of inflation, π^* is the (explicit or implicit) inflation target, $y - y^*$ is the output gap, r^* is the “equilibrium” real interest rate, and α and β are parameters that represent the degree to which central bank responds to output and inflation developments, respectively. The intuition behind the Taylor rule is that: monetary authority should adjust the policy rate one-for-one for changes in inflation (π) and should respond positively to business cycle fluctuations ($y - y^*$) and the deviation of inflation from the inflation target ($\pi - \pi^*$). In particular, a larger α captures a more countercyclical monetary policy, while a negative value would imply a procyclical monetary policy.

➤ *Fiscal Policy*

Similarly, the direction of fiscal policy is captured through:

$$b = b^* - \gamma (y - y^*)$$

where b denotes the general government budget balance as a percentage of GDP, b^* the cyclically adjusted deficit, $y - y^*$ the output gap, and γ the degree of sensitivity of budget balance to the output gap. The coefficient γ can be used to measure for the degree of countercyclicality; the larger γ becomes, the more countercyclical is fiscal policy, while, negative γ implies a procyclical fiscal policy.