

Egyptian Money Supply

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Historically, Egypt was highly regulated, with fixed prices and exchange rates. The inflation rate remained around 3.9% until 1975 when an open door economic policy was established in order to allow market forces to play a role in the economy. After this event, the budget deficit continued to increase to more than 20%. This deficit was financed mainly by growth of the money supply and borrowing. Because of this deficit and increase in the money supply, inflationary pressures worsened and prices rose. In order to combat inflation, the Egyptian government increased expenditures on subsidies. The deficit in the balance of payments worsened and inflation reached a maximum of 24% in 1986. In 1990, significant policy changes were implemented, including using treasury bills “as a means of non-inflationary finance”, which led to lowered inflation and progression toward macroeconomic stabilization (El-Sakka, Ghali, 2005).

Since 1995, Egypt has experienced a steady increase in their money supply (**See Figure 1**). As a result of this increase, other factors have been affected. Egypt experienced a consistent decline in the discount rate from 1995 to 1996. The discount rate and the money supply are inversely related (**See Figure 2**). This is consistent with the ERM diagram seen in **Figure 3** because, as the money supply increases, M/P moves out, resulting in a lower interest rate, thereby causing an increase in the exchange rate (Parker, 2008). It would now take fewer (more EP) dollars to buy 1EP (USD). This is precisely what happened with Egypt. The direct exchange rate for Egypt moved opposite to the money supply from 1995 to 2004 before the exchange rate appears to be flattening, relative to the dollar (**See Figures 4&5**).

It was in 2001 that the Egypt began experiencing another depreciation of their currency. This is the result of Egypt moving the pound from being pegged against the U.S. dollar in 2000; they then continued by imposing an adjustable currency band against the dollar in 2001. They did this in order to strengthen the external position of Egypt. When this occurred, the pound experienced a cumulative depreciation of about 25% relative to the dollar (El-Sakka, Ghali, 2005).

Excess money supply would also have a positive effect on inflation, causing prices to increase (**See Figure 6**). An increase in the money supply has been used to finance the budget deficit; therefore, a continued deficit has caused a problem in creating price stability and credibility for the central bank. The large deficit has increased

pressures to print money, resulting in more inflation and a higher deficit, which has turned into a vicious cycle between the deficit, money supply, and inflation (El-Sakka, Ghali, 2005). This is why there is a positive correlation between the money supply and the percentage change in the Consumer Price Index (**See Table 1**).

The percentage change in the CPI decreased from 1995 to 2001. At this point, inflation increased for three years, peaking at 16.2% in 2004. It then returned to its usual rate at 3.1%. There is somewhat of a negative correlation between the percentage change in the CPI and the discount rate between 1995 and 2005, but this is probably due to the large inflation in 2004. There should be a positive correlation between interest rate changes and inflationary pressures because “it is the indirect cost of high interest rates that contributes to inflation” (El-Sakka, Ghali, 2005). When interest rates rise, the factors of production become more expensive, thereby leading to an increase in prices, passed along to consumers. The high interest rates lead to recession and unemployment.

Egypt’s gross domestic product has an upward trend from 1995 to 2006. There were declines in 2001 and 2003. It appears as if there may be somewhat of a direct correlation between the money supply and GDP; however, there may be a lag of one year. As money supply has increased in Egypt between 1995 and 2007, GDP has followed the same pattern, with a slight variation in 2001/2 (**See Figure 7**).

Gross domestic product and inflation are inversely correlated. As inflation decreased in the period 1996-2000, GDP was steadily increasing. In 2004, the percent change in the CPI was approximately 16%; this occurred with a decreased GDP in Egypt to about \$70,000,000,000 (USD).

The exchange rate has been found to have a significant effect on inflation. It has been confirmed that the “depreciation of the nominal exchange rate is correlated with temporary increases in consumer prices” and “the effective exchange rate has a positive significant effect on inflation in Egypt” (El-Sakka, Ghali, 2005). This makes sense because, as inflation occurs, foreigners are less willing to invest in Egypt; therefore, there is less demand for Egyptian pounds, resulting in a depreciation of the currency.

If the money supply is increased too much in hopes of combating changes in interest rates, recession could result. Vicious cycles between the balance of payments deficit, money supply, interest rates, and inflation occur because of the correlations

between these factions. Therefore, the economic situation of a country must be thoroughly analyzed before the central bank begins to intervene.

References

El-Sakka, M, & Ghali, K (2005). The Sources of Inflation in Egypt: A Multivariate Co-integration Analysis. *Review of Middle East Economics and Finance*, 3, Retrieved April 7, 2008, from <http://www.bepress.com/cgi/viewcontent.cgi?article=1046&context=rmeef&r=1>.

(E Parker, personal communication, April, 2008)

(2008). Retrieved April 7, 2008, from Global Market Information Database Web site: <http://www.portal.euromonitor.com/portal/server.pt?control=SetCommunity&CommunityID=207&PageID=720&cached=false&space=CommunityPage>

Figure 1.

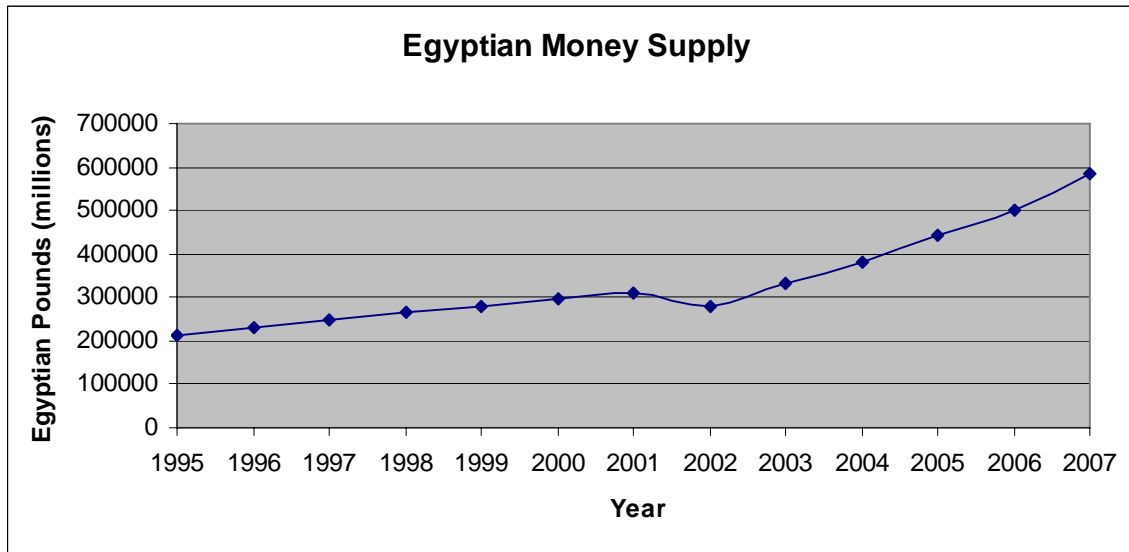


Figure 2.

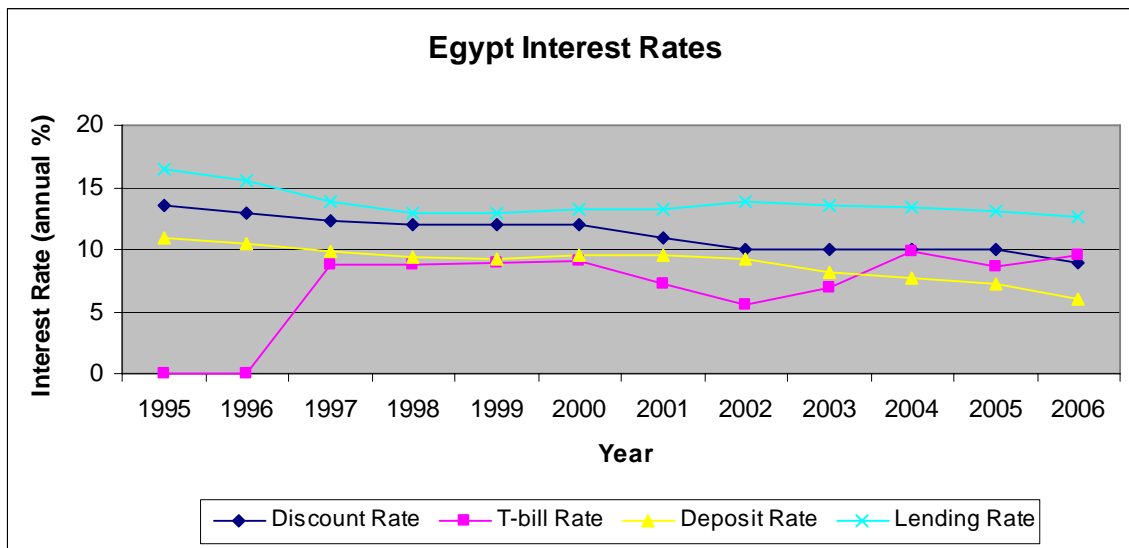


Figure 3.

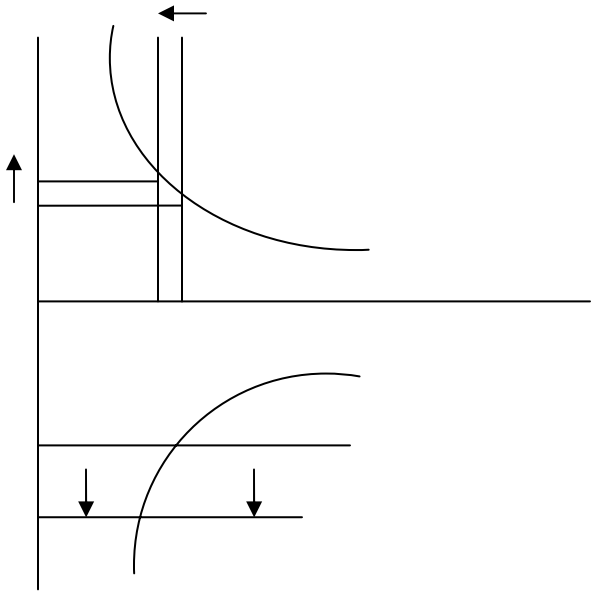


Figure 4.

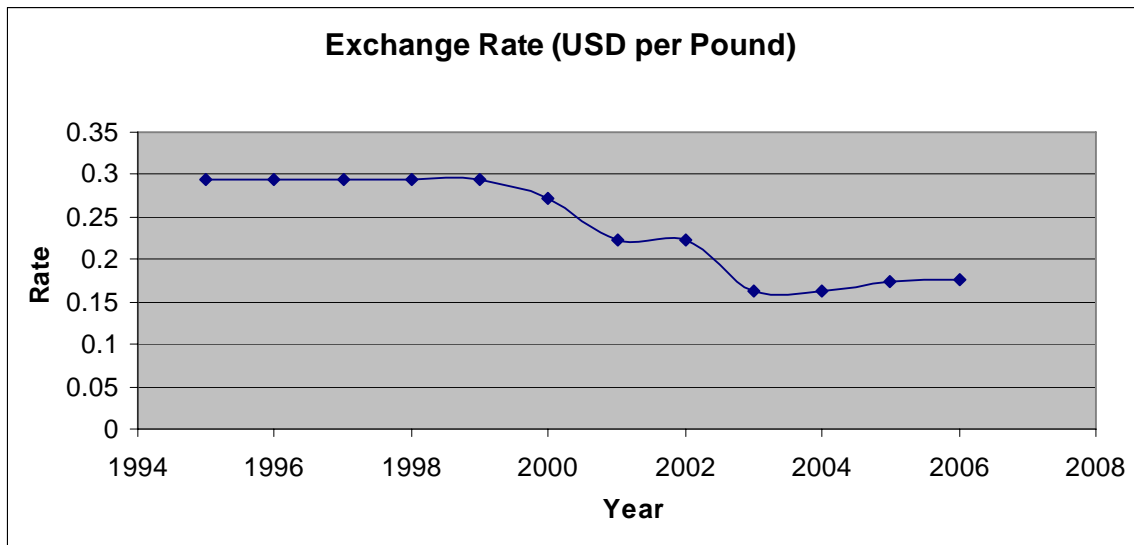


Figure 5.

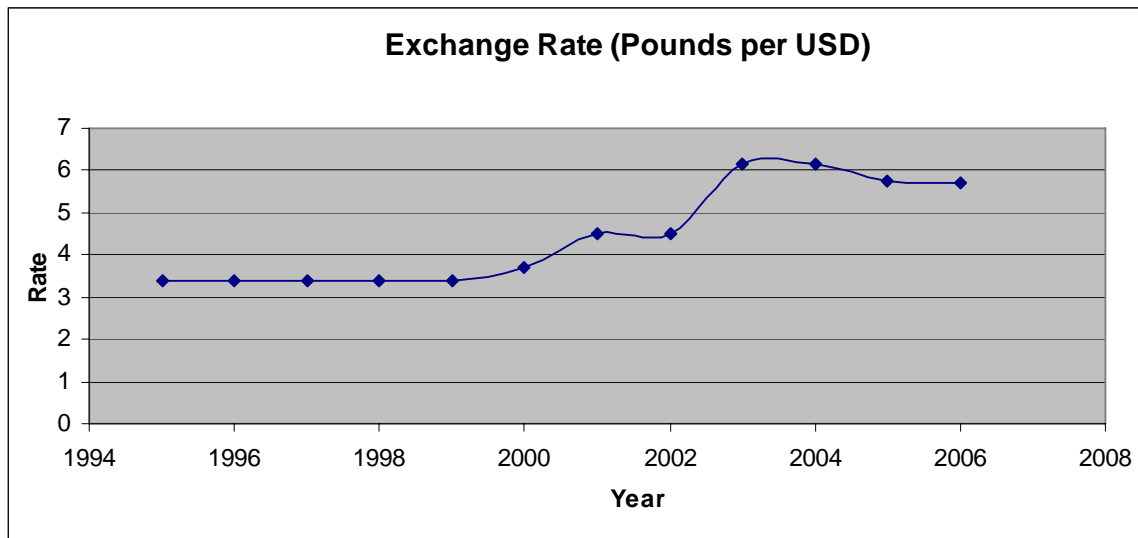


Figure 6.

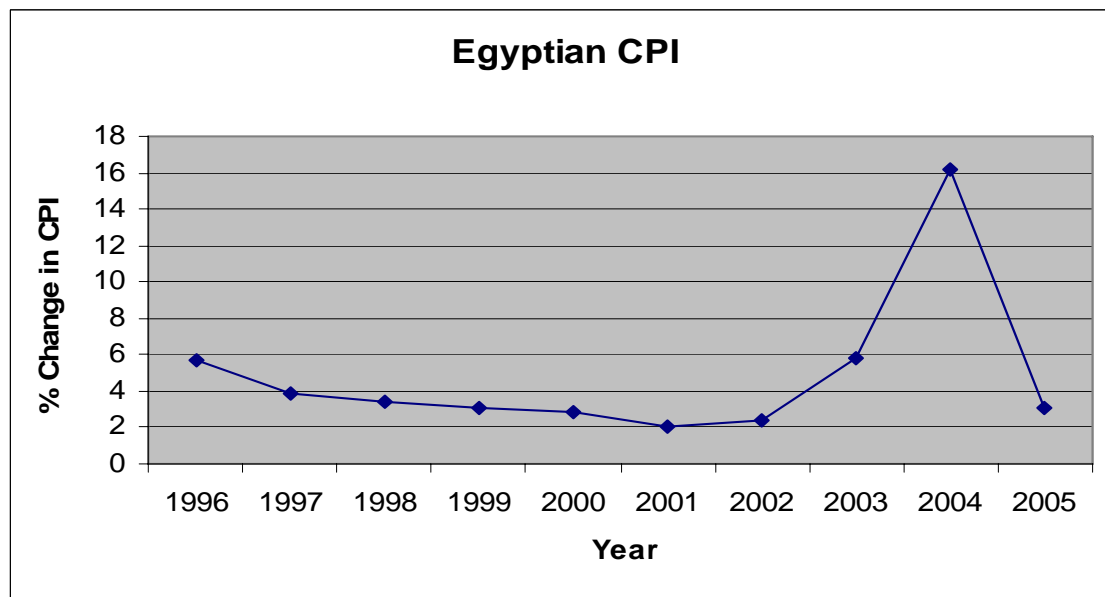


Table 1.

	<i>Money Supply</i>	<i>CPI</i>	<i>Discount Rate</i>
Money Supply	1.0000		
CPI	0.3297	1.0000	
Discount Rate	-0.8533	-0.3912	1.0000

Figure 7.

