Beyond Overheated Economy: Comparative Analysis of Ethiopian Fastest Growing Economy Recent Figures

'Tackling the opportunity cost of holding foreign exchange reserves given the returns in highly profitable infrastructure projects' (IMF, 2012: Ethiopia Draft Review)

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Introduction

The term overheated economy in economics has two distinct avenues, but finally merged with same meaning. When fastest economic growth prolonged practice turned to high levels of inflation as per supply inefficiently to answer the economy demanded, it is taken as overheated economy. More simply, an overheated economy is the incompatibility of quick economic growth and the inability of supply to meet rising demand of goods and services.

On the other hand, the cause of overheated economy is mostly libeled to loose monetary policy over prolonged period of times. This is due to continuous low interest rate that stimulates credit in turn rapid money supply expansion extremely growing rapidly. The Asian financial crisis and the US sub-prim mortgage bubbles are best examples mentioned in many literatures of recent field economics. These studies assume that as money supply continues, it hampers GDP and the pressure of inflation results destroy a countries currency's beyond marketable exchange rat to float. Such studies finally recommend 'preventing an overheated economy through cooling measures like raising interest rates or putting more regulations on lending'.

However, the monetary policy of Federal Democratic Republic of Ethiopia is defined as 'maintenance of price and exchange rate stability and creating conducive macroeconomic environment for continuous economic growth.' Thus, the main operating tool for the implementation of monetary policy is sale of Treasury bills, setting of minimum deposit rate and reserve requirements. The attempts to slow down yearly inflation were done by the government not to have a loan of from National Bank of Ethiopia and foreign exchanges were set up to sale at satisfactory level.

Factors of broad money supply (M2) in Ethiopia are particularly domestic credit significantly claims on central government followed by net foreign assets shows momentous change in consecutive years. On the other hand, interest rate on both saving and time deposits had not significant change in the interest rate structure of the banking system. Though lending interest rate of commercial banks varies, the average point did not change that match among years. Significant difference observed among years in the exchange rate of birr per Dollar both in monetary policy decision (devaluation) and the market value deprecation of birr. The assignment thus tried to cover money supply market and foreign exchange rate Birr per Dollar in Ethiopia for the past five years both in short and long run.

The over all conceptual frame work in short run, the price P is sticky and the economy is not necessarily at full employment level of output (both P and Y exogenous). Thus, the interest rate R is the adjusting variable (equilibrating factor) of the money market. The temporary supply of money by the Central Bank causes interest rate to fall in turn the domestic currency to depreciate in the foreign exchange market, and then investors buy foreign currency than depositing domestic currency.

On the other hand, the relationship among money supply, price and foreign exchange market is defined in long run where the price P is endogenous and taken as equilibrating factor. Because, in long run price P are flexible and the economy is assumed at its full-employment level of out put Y. In this case the interest rate R reached its real rate as well.

Thus, the long run equilibrium level is just the value of P that satisfies the price level P depends on the 'full employment ' of interest rate R and real out put Y. The domestic money supply and price level have proportional relationship.

$$P = M^{s}/L(R, Y) \text{ where } L(R, Y) \text{ is aggregate money demand}$$

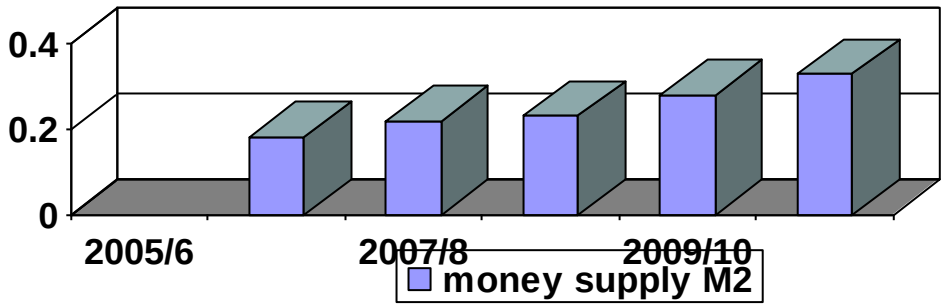
All else equal, an increase in a country's money supply causes a proportional increase in its price level. Money supply has obvious inflationary impact but also inflation arises when aggregate demand exceeds the value of aggregate supply at full employment level (Jackman, et al1981). Thus, excess demand creates disequilibrium and pulls up prices until adjusted.

2. The over all findings on the trends of money supply (Birr in million)

Ethiopian fiscal year	2006/07	2007/08	2008/09	2009/10	2010/11
Real GDP growth rates	11.8 %	11.2 %	10.0 %	10.6 %	11.4 %
Narrow Money supply (M1)	29773	36876	43176	52039	76171
Quasi Money supply	27087	33043	40646	52130.6	69206
Inflation	15.8%	25.3%	36.4%	2.8%	18.1%

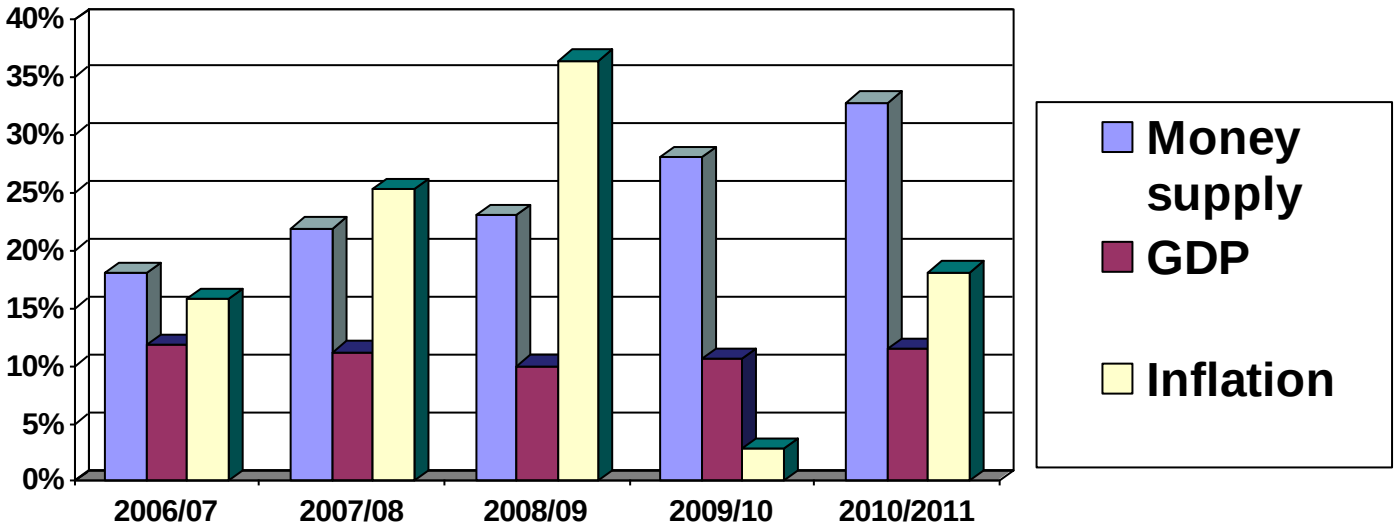
Source: MoFED, NBE

2.1 Trends of money supply



The expansionary monetary policy in the country is significantly increasing in aggregate or with the broad money supply observed from the above figure for all of the period. The impact of broad money supply (M2) from its initial increase 18% in 2006/07 of its preceding year continued to 32.75% in 2010/11 in birr money market. Thus, the trend of money supply on the five consecutive years is 18%, 21.9%, 23%, 28%, 32.75 and the 5% highest money supply difference on this period of an interval momentum observed in the year 2009/10.

2.2 The Relationship among Money supply, GDP and Price



Vividly shown the country experienced as money expansionary trend in the given phase has the episode of higher price hick of 25.3%, 36.4% above the percentage increase of the money supply in the years 20007/08 and 2008/2009 consecutively. But the three years trend: 2006/07, 2009/2010, 2010/11 monetary expansionary effect on price was not inflated beyond money supply (M2) observed. Especially in the year 2009/10, the general inflation was single digit (2.8%) because of the 'tight monetary and prudent fiscal policy measures as well as other structural corrective measures taken by the government'(MoFED,2010/11). This is paradoxical fact with overheated economy. In addition, the highest money expansion span within the period was highest in 2009/10 but the single digit (lowest inflation) also observed in this year. On the other hand, in 2010/11 inflation recurs to double digits but less than 25 and 36 percent of the 2007/08 and 2008/09 which were perceived as imported inflation of the Oil price hick and constraint of foreign exchange rate. Thus, the story is all about continuing the growing economy simultaneously and enables to answers the demand side rather than cooling down as the Prime Minister Meles Zenawi underlined it.

Period	Rates in Birr per USD	Amount traded in millions of USD	Number of Trades	Parallel market average rate
	End period rates			

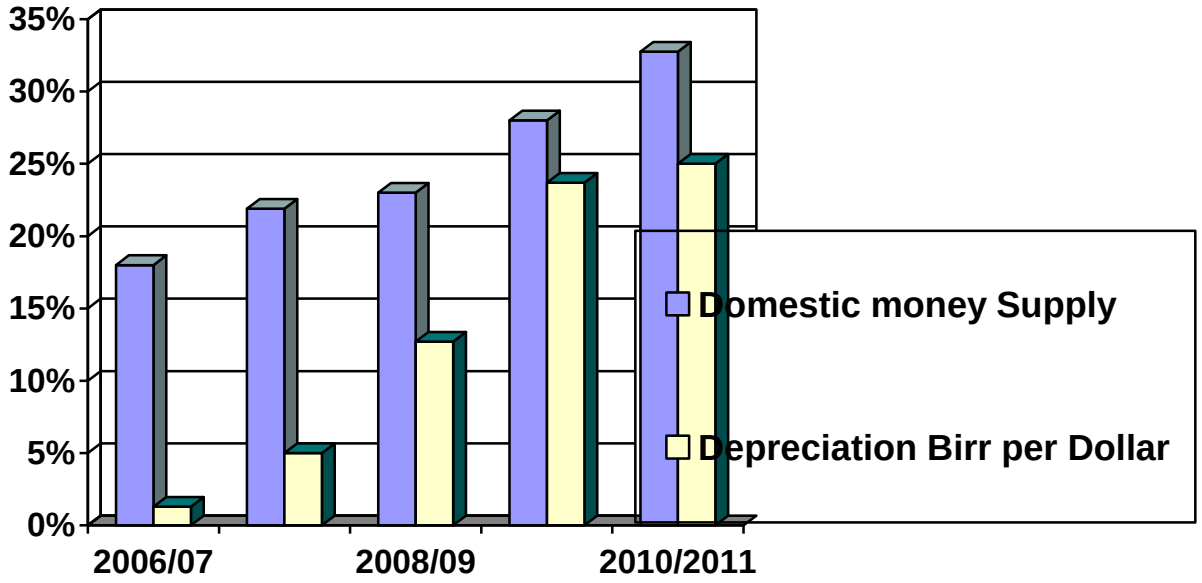
4. **<u>Analysis on trends of money supply and Exchange Market</u>**

	Weighted rate	Highest	Lowest	Weighted average rate	Total	O/w CBs	Total	O/w CBs	
2006/07	**9.0296**	**9.0296**	**8.7019**	**8.7943**	**189.8**	**59.4**	**1999.5**	**128**	**8.9570**
2007/08	**9.6100**	**9.6100**	**9.0382**	**9.2441**	**114.4**	**17.9**	**1694.0**	**47**	**9.5569**
2008/09	**11.3009**	**11.309**	**9.6929**	**10.4205**	**18.4**	**0.0**	**1818.0**	**0**	**11.8102**
2009/10	**13.5321**	**13.531**	**12.471**	**12.8909**	**12.6**	**0.0**	**252.0**	**0.0**	**13.6806**
2010/11	**16.9081**	**16.901**	**13.582**	**16.1178**	**90.2**	**26.1**	**284.0**	**11**	**16.5292**

4. Trends of price of Birr per Dollar in the five years

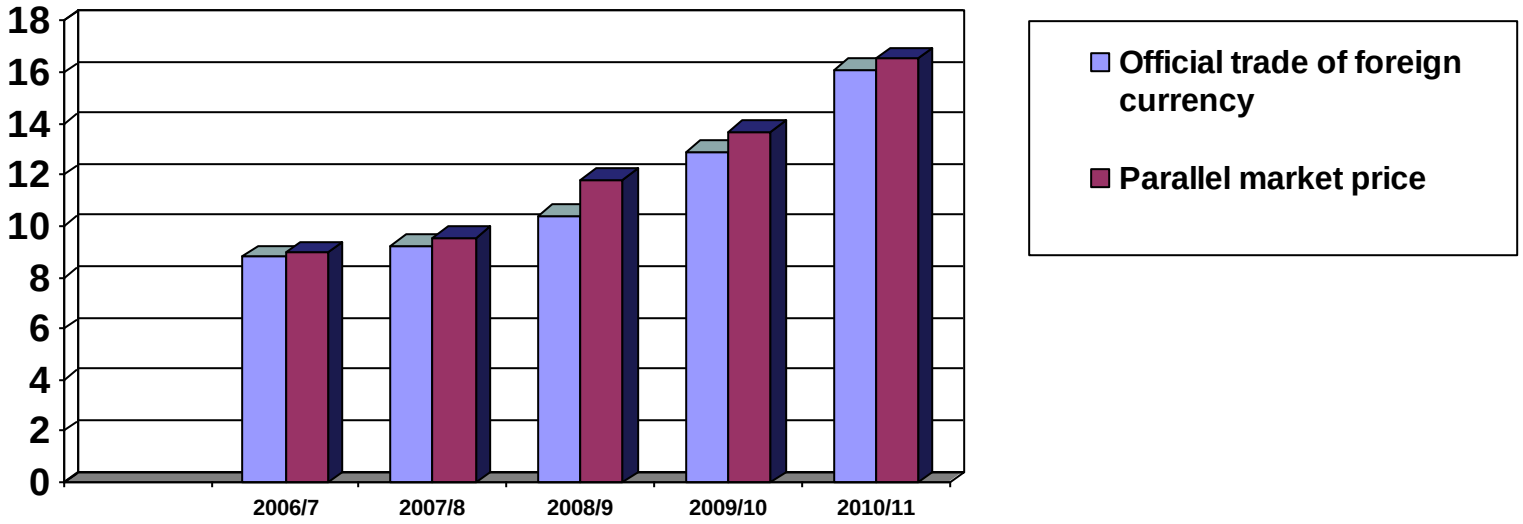
From the above general data of the National Bank of Ethiopia we can compare and contrast that the amount Dollar traded, the trend of formal and parallel exchange rate Dollar per birr in turn enables as in facilitation of analysis the money supply and deprecation.

4.1 Effects of Money Supply on Exchange Rate



The money supply effect on price deprecation of Birr per dollar grows at each percentage interval with preceding years were significant. The trend for money supply percentage interval 3.9%, 1.1%, 5%, 4.75% among preceding years are accompanied by deprecation of 3.7%, 7.7%, 11%, 1.8% for 2007/08, 2008/09, 2009/10, 2010/11 respectively. Especially the years 2007/08 and 2008/09 are the highest deprecation of birr remarked in the five years phase. Thus, the price of birr per dollar sounds in short run than the sticky price level. The interest rate R is the adjusting variable (equilibrating factor) of the money market. The temporary supply of money by the Central Bank causes interest rate to fall in turn the domestic currency to depreciate in the foreign exchange market, and then investors predict to buy foreign currency than depositing domestic currency.

4.1 Effects of Dollar in official vis-à-vis parallel markets



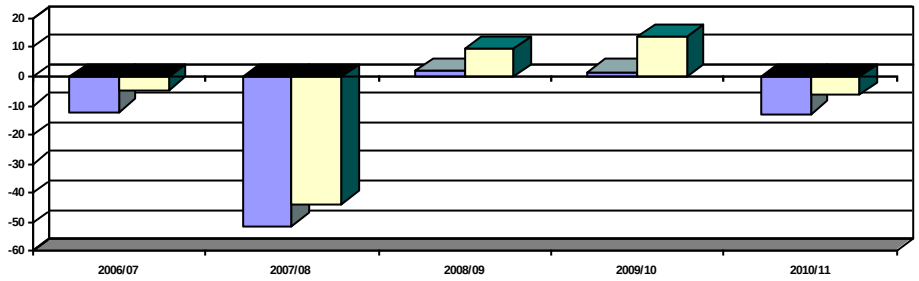
The trend for the official market following the monetary policy decision (devaluation) compared to the parallel market exchange rate determined by the amount of Dollar traded in the official market. Thus, the percentage increase of parallel (Unofficial) market for dollar money market exceeds insignificantly the official market. In such cases there will be no intentional capital flight in apprehension of depreciation of Birr other than other intentions for capital flight.

5. The relationship between exchange rate and domestic interest rate

5.1 Real Saving and lending interest rates of Domestic money (Inflation Adjusted)

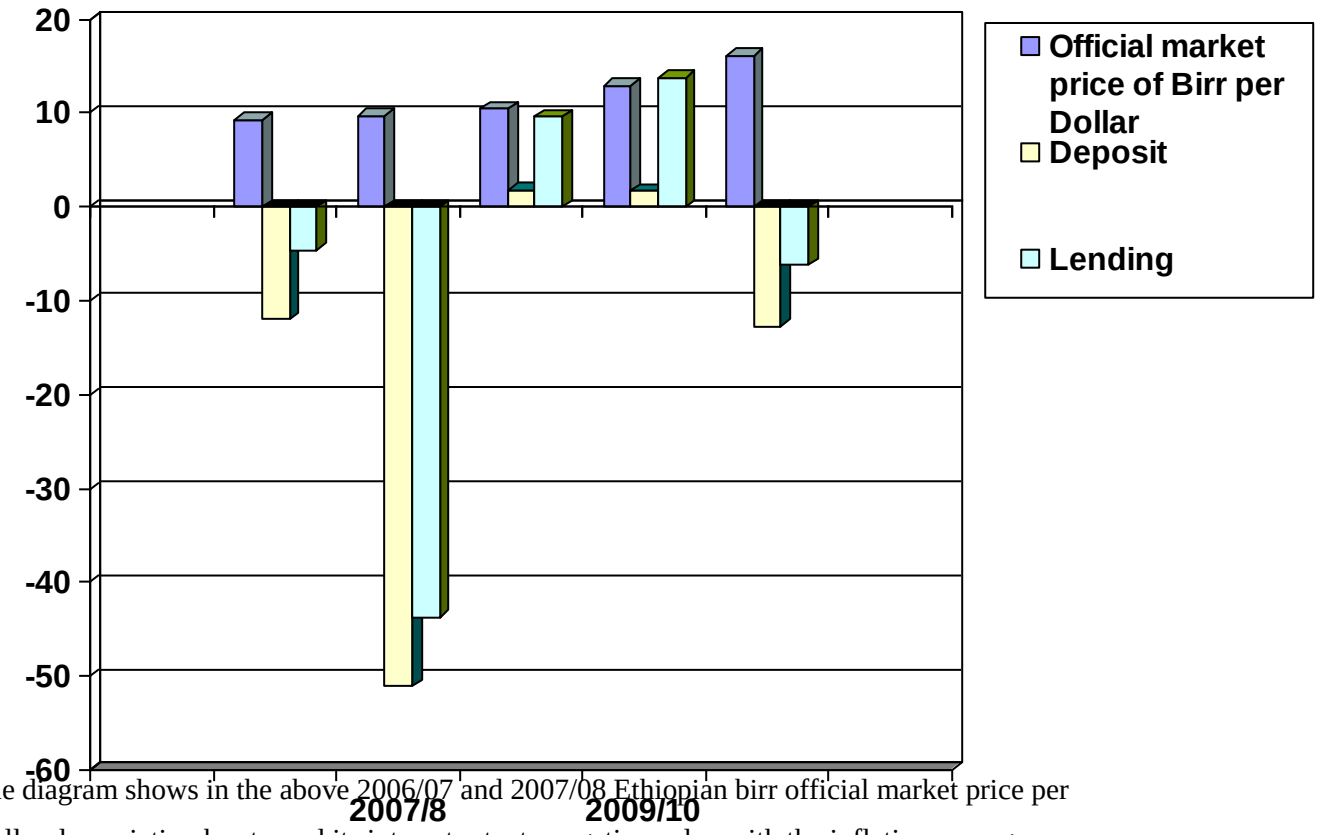
Real interest rate	2006/07	2007/08	2008/09	2009/10	2010/11
Deposit 1(computed on average inflation headline)	-12.03	-51.13	1.80	1.70	-12.70
Lending 1	-4.60	-43.70	9.55	13.70	-6.23
T-bills (Nominal)	**0.50**	**0.67**	**0.80**	**0.89**	**1.31**

Source: NBE



The monetary policy of Federal Democratic Republic of Ethiopia concerned in 'maintenance of price and exchange rate stability and creating conducive macroeconomic environment for continuous economic growth.' Thus, the main operating tools for the implementation of monetary policy are vividly shown as Sale of Treasury bills, setting of minimum deposit rate discourage by low interest rate. More over, the interest rate dominantly became negative that discourages depositors in Ethiopian birr as shown in this table. The treasury bills are continually growing as money supply (M2) grows and observed positive reward of interest rate in 2008/09 and 2009/10.

5.2 In tackle the opportunity cost of holding foreign exchange reserves given the returns in highly profitable infrastructure projects



The diagram shows in the above 2006/07 and 2007/08 Ethiopian birr official market price per Dollar depreciation has turned its interest rate to negative value with the inflation average headline adjustment. This is after the supply of Birr increased by 18% and 21.9% in the consecutive years. Thus, the value of Birr in the exchange rate depreciates by 1.3% and 3.7%. But later the deprecation of Birr per Dollar currency recovers to positive interest rate with the inflation average headline adjustment in years 2008/09 and 2009/10 though the money supply at that point was 23%, 28% consecutively. The interest rate positive reward of Birr in 2009/10 was increased by 43.4% from the prior year. The reason for this is, the priority given by the government to fight against inflation through foreign exchange currency sales (supply), and tackle the opportunity cost of holding foreign exchange reserves given the returns in highly profitable infrastructure projects (IMF Country Report 2012).