MACROECONOMIC PERFORMANCE UNDER SMALL-SCALE AGRICULTURE IN AFRICA: THE CASE ETHIOPIA

Melkamu Mada*

Abstract

This paper analyzes macro economic performance of small-scale based agrarian economy in Ethiopian. The study used secondary data and focuses on four key macro economic factors namely poverty reduction, economic growth, unemployment and Inflation. In the country incidence of poverty has declined significantly between 1995/96 and 2010/11 from 46% to 29.6% respectively. After averaging the economic growth the country achieved 7.03 percent per year in the fifteen years between 1992 and 2006/7 and in the last five years (2004/5-2008/09) the double digit growth was seen. In the country unemployment rate has been declining and almost constant for one decade. Ethiopian economy faced galloping or hyperinflation type of inflation, serious type of inflation to the economy in the past time. The analysis suggests that regional, rural and urban based poverty line would better estimate the poverty situation than single poverty line. The trade-off between inflation and economic growth can be avoided if an economy is able to increase potential output by improving their supply-side performance and domestic saving.

Key word:-Ethiopia, Poverty, Small-Scale Agriculture

* PhD Scholar (Agricultural Economics), *College of Agriculture, SK. Rajasthan Agricultural University, Bikaner- India.*

1. Introduction

The new government was established by ousting the previous socialist dictatorship by military force early 1990s. This government has also come up with the Agricultural Development Led Industrialization (ADLI) strategy, which emphasizes raising the productivity of smallholder agriculture and the importance of labor intensive industrialization. The policy toward the small-scale farmers (who produce nearly all the agricultural produce) is to provide appropriate incentive structures using agricultural extension as a vehicle. The Sustainable Development and Poverty Reduction Program (SDPRP) 2002/03–2004/05, which further realized the ADLI strategy, was prepared and implemented. The following development plan, Under the Plan for Accelerated and Sustained Development to End Poverty (PASDEP), was implemented in the country from 2005/06 to 2009/10. In the first three years of the PASDEP implementation period of 2005/06–2009/10, good performance was recorded in agricultural and industrial production as well as export. Subsequently, however, the Ethiopian economy experienced a slowdown accompanied by inflation, balance-of-payments pressure, and a severe shortage of foreign exchange. Ethiopia achieved rapid economic growth and laid a foundation for future growth by making substantial investments in infrastructure and human capital. Ethiopia's five-year Growth and Transformation Plan (GTP), which was approved by the Ethiopian Parliament in November 2010 and is currently in its fourth year, is largely driving Ethiopia's openness to foreign investment. The Growth and Transformation Plan (GTP) for 2010/11–2014/15, Ethiopia's new five year plan, sets even higher growth and investment targets.

In this paper, we investigate Ethiopia's small-scale based agriculture contribution for macroeconomic performance since early 1990s. The study focused on the analysis of four key macro economic factors namely poverty reduction, economic growth, unemployment and Inflation.

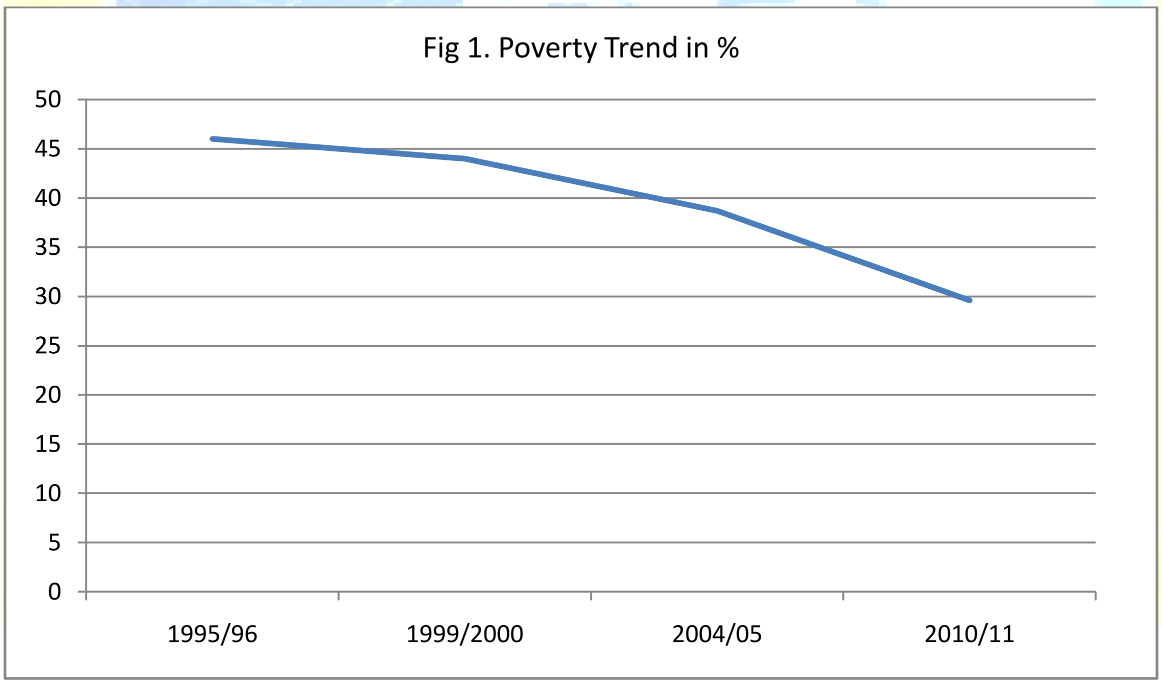
Poverty Reduction

Poverty reduction is the core objective of the Ethiopian government (MoFED, 2012). The Ethiopian government recognises that, without realistic and practical development policies, it is impossible to achieve poverty reduction objective. The government focused on pro-poor development polices and strategies that have been implemented in rural primarily focused on small-scale agriculture and urban areas. Analysing trends in poverty is extremely useful for assessing effectiveness of on-going policies and strategies on poverty reduction. The government of Ethiopia has formulated pro-poor and pro-growth development policies and strategies through public participation to ensure overall economic development and eradicate multidimensional poverty. The data reveals that incidence of poverty has further declined markedly between 1995/96 and 2010/11 from 46% to 29.6% respectively. The significant decline of 16.4% in poverty in the last one and half decade indicates that Ethiopia is applying appropriate macroeconomic policy. According Ethiopian government report economic growth has been the prime driving factor that resulted in the reduction of poverty.

Table 1 :- Poverty trend in Ethiopia

Year	1995/96	1999/2000	2004/05	2010/11
Poverty Trend in %	46	44	38.7	29.6

Source:- MoFED (2013)



Economic Growth

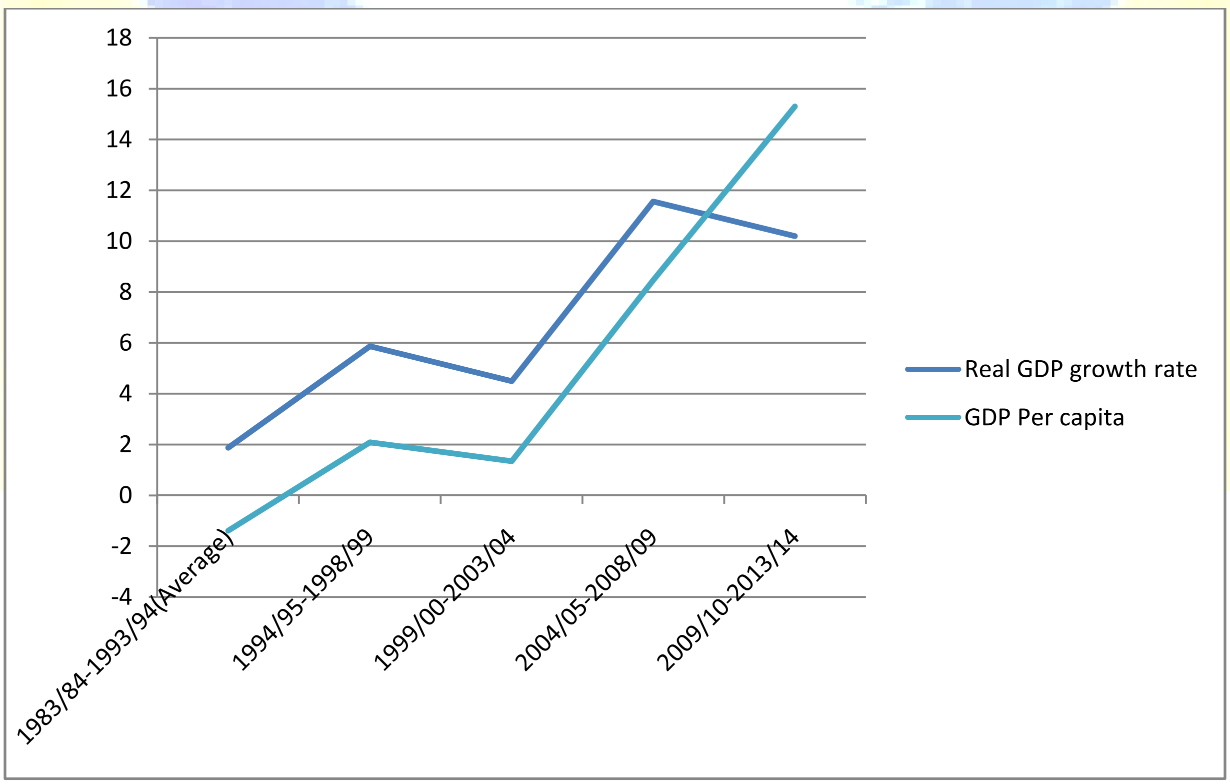
Economic growth is the principal yardstick of macroeconomic performance. By this standard, almost two decades since 1994 - 2013 have been better than previous Ethiopian economic performance (Table 2). After averaging the economic growth 7.03 percent per year in the fifteen years between 1992 and 2006/7, GDP growth accelerated to 28 per cent in the averaged even higher at 52 percent in the past five years

2004/05-2008/9 than previous regimes average. Furthermore, the growth performance of the last fifteen years was best performance. In the last five years (2004/5-2008/09) the double digit growth clearly show that, this has been a golden decade (almost) of growth for Ethiopia. The trend in one and half decade growth rates indicates that, even better when we look at per capita GDP growth, which accelerated from -1.4 percent in the previous regimes to 8.46 percent in the last five years. This shows that there is relatively 70 percent increase in per capita GDP. This analysis indicates that per capita GDP as a rough proxy for average living standards of Ethiopia's population, the last two decades have shown welcome improvement.

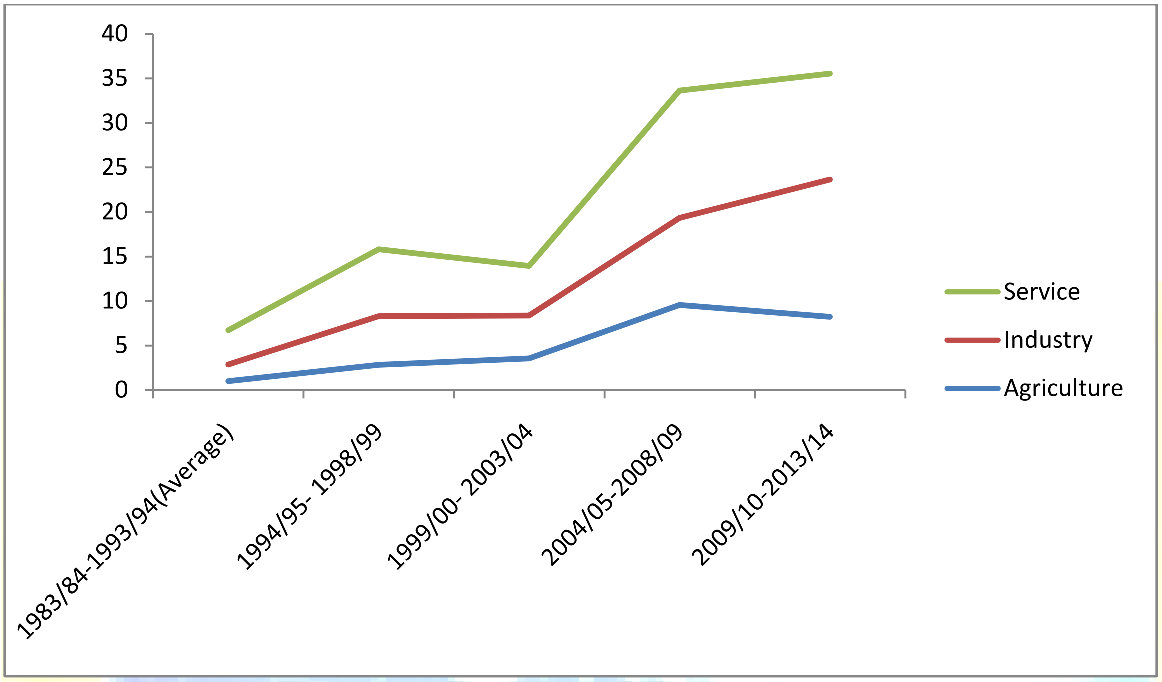
Table2. Average growth of real GDP over 30 years (%)

Indicators	Years (%)				
	1983/84-1993/94 average	1994/95-1998/99	1999/00-2003/04	2004/05-2008/09	2009/10-2013/14
Real GDP growth rate	1.86	5.86	4.48	11.56	10.2
Agriculture	0.98	2.82	3.54	9.54	8.2
Industry	1.89	5.48	4.82	9.8	15.44
Service	3.82	7.5	5.56	14.28	11.9
GDP Per capita (birr)	-1.4	2.08	1.34	8.46	15.3

Sources: Global Economy(2013) and own calculation



Growth rate by main Sectors



From table 2 we can see that in the last ten years the share of agriculture, industry and services sectors in total GDP growth were 41.5%, 10.9% and 47.7% respectively .This indicates that services sector is dominants which contributes about half of the total GDP growth, followed by agriculture but it contradicts with country's economic policy (i.e. ADLI).The unusual increment in the share of services in Ethiopia's economic growth may be due to rise in non -value adding services. Even in the last fifteen years the share of services sector increased from time to time which accounts nearly half of GDP growth. Furthermore, a part of the services sector growth in the last five years was "miracle" in the sense that it is result of recently implemented business processing re-engineering (BPR).

The above analysis shows the existence of much higher differences between potential and actual growth in the past regimes and recent government of EPRDF (Ethiopian People's Revolutionary Democratic Front) policy preparation and implementation. Although the study is not conclusive, it does suggest that macroeconomic policy has had greater success in attaining the economy's output potential in the last decade than in any previous period .Generally, the growth tend performance shows that EPRDF economic policy seem on the right track to achieve worldwide millennium development goal.

Ethiopia Growth Trends in international perspective

Ethiopia's growth performance in the last one and half decades of the twentieth century also looks good in international perspective. From table 2 ranks Ethiopia fifth in the world growth between Korea and India, even though, after China, Singapore, Mozambique, and Korea but before India, Uganda, Tanzania .This is certainly a far weep from the conventional image of the Ethiopian economy as a lumbering, shackled giant trailing far behind most significant emerging market economies in the growth race. Although, more promising result in our finding from the table 2 that Ethiopia retains in the sixth position when the ranking is redone in terms of per capita GDP growth better than India, Uganda and Hong Kong.

Table 3: Growth Trends for Low and Meddle income Countries: 1992-2007/8

S.No	Countries	Years			
		1971-1980	1981- 1990	1991-2000	2001-2010
1	Ethiopia	1.01	2.26	3.0	8.51
	High growth countries				
2	China	6.28	9.35	10.45	10.48
3	India	3.09	5.57	5.48	7.78
4	Thailand	6.89	7.89	4.63	4.37
6	Singapore	9.03	7.81	7.23	5.69
7	Uganda	2.04	3.91	6.55	7.39
8	Tanzania	3.07	3.54	3.06	6.96
9	Mozambique	4.23	0.5	5.55	7.95

Source: IMF and World Economic and Financial Surveys in SSA, 2009 and own calculation.

Table 1 presents more detail on Ethiopian growth in the most recent decade, including performance of the major sectors with their contribution for GDP growth. Furthermore, we subdivide the fifteen years following the 1994 up to 2008/9 are initially high growth period for the country. Several points are worth nothing. First, comparing performance in the last fifteen years to the previous regimes, it is interesting that the acceleration in GDP growth (from1.86 to 7.3 per cent on average) is entirely an indicators of better performance of recent government .when we look contribution of sectors in country GDP growth service, industry and agriculture contribution increased from (3.82% to 14.28%), (1.89 % to 9.8%) and (0.9% to 9.54%) respectively ,which indicates the existence of accelerated contribution of around 27% in service,41.% in industry and 87% in agriculture. Clearly, this performance is the result good economic policy. The good news ends when we look at the average growth performance in the five most recent years. Overall GDP growth rise up 11.5 per cent. Much more interesting is both service and industry growing significantly.

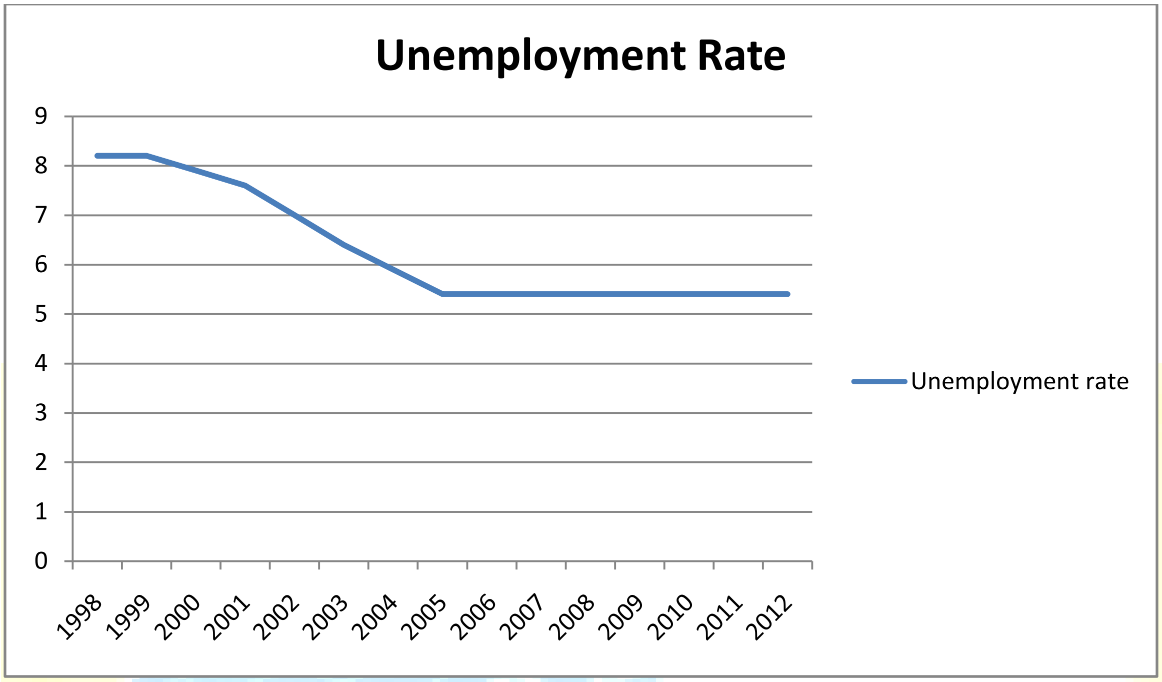
Unemployment

The level of unemployment of a country is widely used as an overall indicator in evaluating the current performance of its economy. Most literatures conclude that, if unemployment rate is high in the country it shows the country is unable to provide jobs for the available workers or the country may be in recession and economic conditions may be bad. Unemployment rate sometimes serves as gauge to evaluate macroeconomic performance of the country. In Ethiopia overall unemployment rate declined from 8.2 in 1997 to 5.4 in 2012 (Global Economy). This shows that the economic growth has contribution to provide jobs to the growing population in both rural and urban areas. The data revealed that unemployment rate has been declining and almost constant for one decade due to countries robust economic growth. From this we can see that Ethiopia has done well to keep the employment rate relatively constant during this decade. However, maintaining this rate will require that the economy is able to generate employment for new entrants to the labour market annually.

Table 4 : Unemployment rate in Ethiopia

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Unemployment rate	8.2	8.2	7.9	7.6	7.0	6.4	5.9	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4

Source:- Global Economy(2013)



Fiscal and Monetary Policy

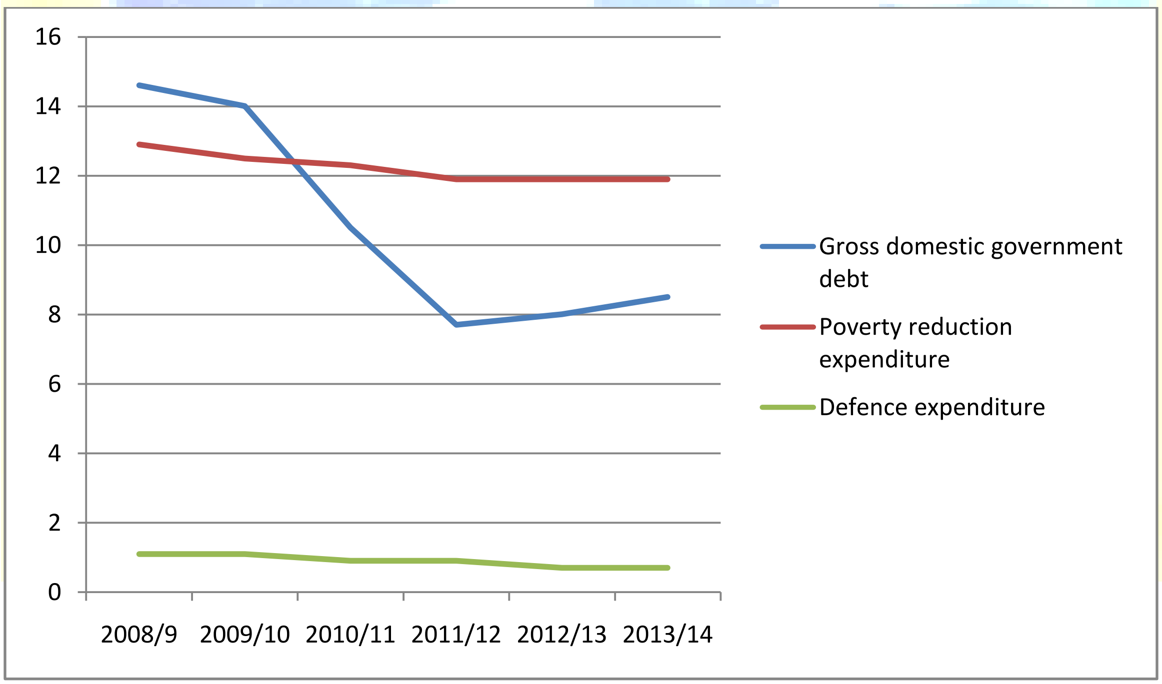
The fiscal sector showed a positive development during the period. Ethiopia's current fiscal policy objective is to achieve public debt sustainability and make the most of the efficient use of highly concessional resources for poverty reduction related activities by using medium and long term macroeconomic plan. The country fiscal policy stresses on two main objectives: (i) the re-orientation of budgetary resources away from defence toward poverty alleviation outlays; and (ii) tax reforms aimed at improving revenue.

Table 5: General Government Operation indicators in percentage (2008/9-2013/14)

Item	Years					
	2008/9	2009/10	2010/11	2011/12	2012/13	2013/14
Revenue	11.7	14.2	13.7	14	13.2	13.3
Grant	3.6	3.3	3.3	1.7	2.0	1.6
Total expenditure	17.7	18.8	18.5	16.9	18	17.9
Poverty reduction expenditure	12.9	12.5	12.3	11.9	11.9	11.9
Defence expenditure	1.1	1.1	0.9	0.9	0.7	0.7
Gross domestic government debt	14.6	14	10.5	7.7	8	8.5
Fiscal balance including grant	-2.3	-1.9	-1.7	-0.7	-2.3	-2.2

Sources: IMF Country Report No. 13/308 (2013)

Form the above table we observed that policy achieves its objectives by increasing allocation of budge to poverty reduction and reducing defence budget share. The Current Account which comprises goods, net income and current grant transfers was 11.7 % in 2008/9, 13.3 % in 2013/14. The government has continued with efforts to enhance domestic revenue mobilisation and pursue prudent public expenditure management. Several tax measures were implemented to promote revenue mobilisation, including the introduction of VAT. The Ethiopian debt position improved during the period under review. The overall fiscal deficit reached 14.6 % but after six year it deceased to 8.5 % this is around 6 % improvement in country's gross domestic debt. Form this it is possible to predicted the economy may be free of gross domestic debt with in 7 years. On the expenditure side, government of Ethiopia increased poverty-reduction spending on social services, especially education and health, and in other areas including roads and agriculture. This shows the effectiveness and efficient performance of recent government macroeconomic policy.



Monetary policy

Monetary policy should be directed to achieving the inflation and international reserves targets, but this will require more effective instruments. Monetary policy is focused on achieving stability in domestic prices and increasing external reserves.

Table 6: Money Supply in million birr

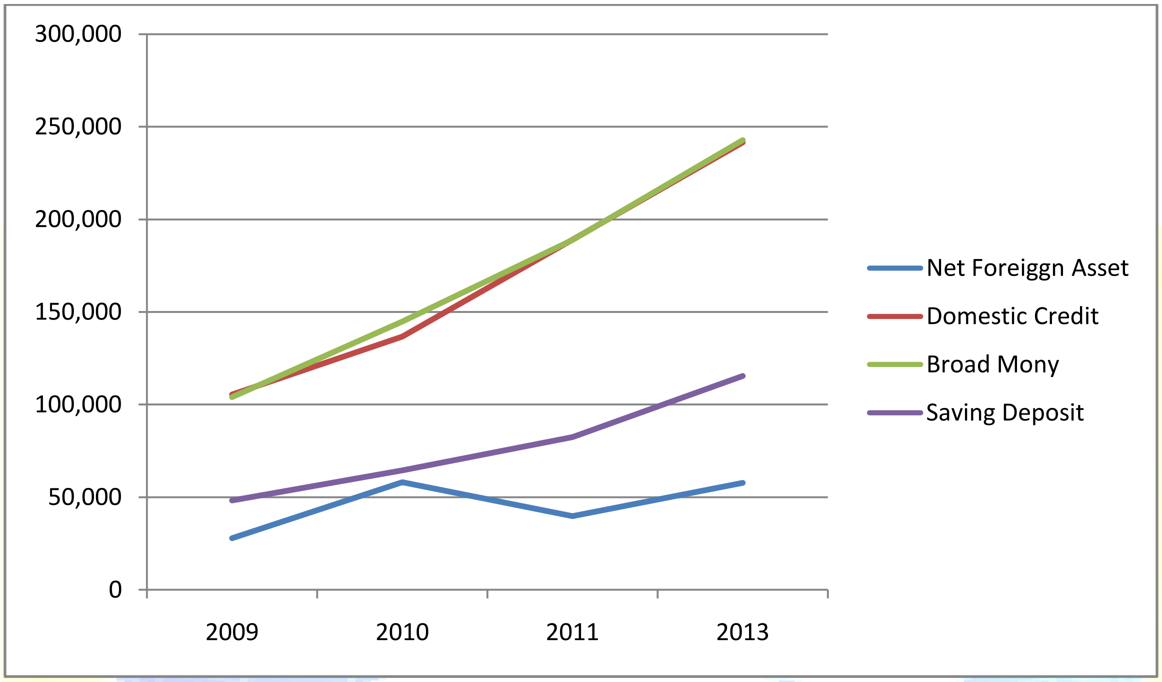
Indicators	Year				Change	
	2009	2010	2011	2013	In amount	In percentage
Net foreign asset	27,905	58,157	39,788	57,793	18,005	45.3
Domestic credit	105,407	136,696	189,060	241,464	52,404	27.7
Broad Money	104,117	144,892	188,838	242,713	53,875	28.5
Claims on government	34,695	31,655	21,571	27,527	5,956	27.6
National Bank	15,895	35,637	21,254	28,125	6,871	31.8
Commercial Bank	12,010	22,520	18,533	22,666	4,133	22.3
Claim on other sectors	70,712	107,041	167,510	264,104	96,594	57.7
Narrow money	51,965	75,763	94,280	118,912	24,632	26.1
Currency outside banks	23,950	32,768	38,537	45,432	6,895	17.9
Demand Deposits	28,034	42,996	55,743	73,480	17,737	31.8
Quasi-money	52,133	69,129	94,558	123,801	29,243	30.9
Saving deposit	48,196	64,405	82,489	115,490	33,001	40.0

Sources: International Monetary Fund Country Report No.13/308 (2013)

On the asset side, broad money is determined by the net foreign asset and domestic credit while on the liability side, it is determined by the developments in narrow money and quasi-money. On 2009, the position of net foreign assets of the country stood at Birr 27,905 million and increased by double to 57,793 million Birr (45.3 percent) by the end of 2013. This is mainly due to the increase in the foreign asset holding of National Bank. On the other hand domestic credit increased by 27.7 percent mainly due to a rise in claims on other sectors by 57.7 percent and claims on government by 27.6 percent.

In the period under consideration a similar trend was also witnessed on the liability side of broad money. During this period narrow money (M1) increased by 26.1 percent while quasi-money (M2) increased by 30.9 percent. During the fiscal year under review, demand deposits showed a 31.8 percent increase and currency in circulation showed about 17.8 percent increase. Likewise, saving deposits showed 40 percent increase. Thus, development in all determinants and components of M1 and M2 resulted in an overall increase in broad money by 28.5 percent.

Expansion in domestic credit was the main reason for the growth in domestic liquidity, which increased by 27.7 percent.



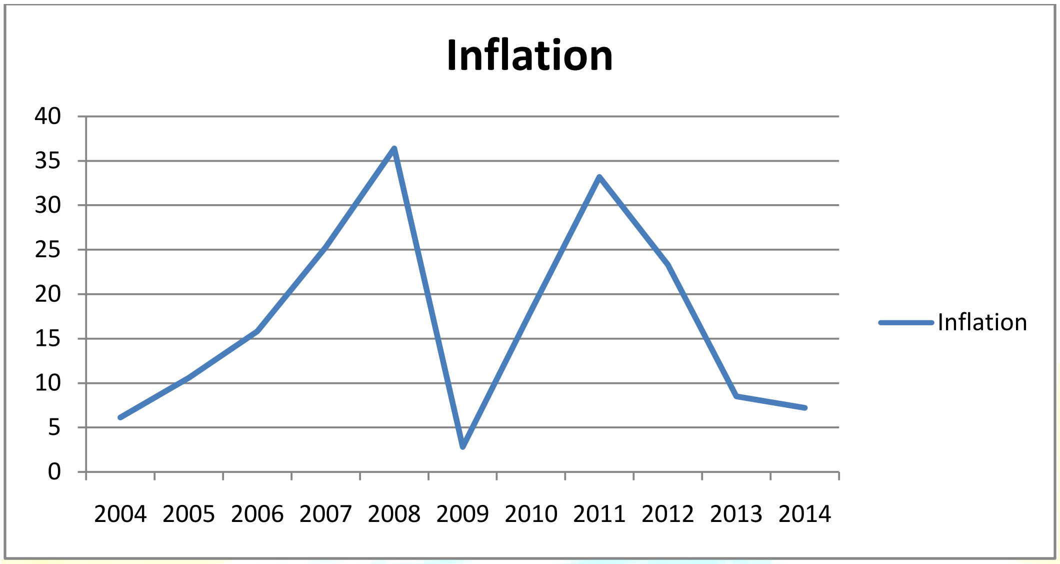
Inflation

In theory, inflation and economic growth can be controlled through monetary policy. Consistent with its mandate, the National Bank of Ethiopia conducts monetary policy so as to promote the economic and financial welfare of Ethiopians. It pursues this objective by keeping inflation low, stable and predictable, thus providing a climate that is more favourable to sound, sustained economic growth and job creation.

Table 7: Inflation Trend in Ethiopia

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Inflation (%)	6.1	10.6	15.8	25.3	36.4	2.8	18.1	33.2	23.3	8.5	7.2

Source:- Global Economy(2013)



In the last couple of years, the emergence of several macroeconomic imbalances has been a serious shortcoming of economic policy of Ethiopia. In particular, given the priority accorded to accelerating growth, the National Bank of Ethiopia challenged to achieve its main objectives of low inflation. Ethiopian economy faced galloping or hyperinflation type of inflation, serious type of inflation to the economy. Inflation rate rose to a peak of 36.4 % in 2008 and fell to 7.2 % in 2014.

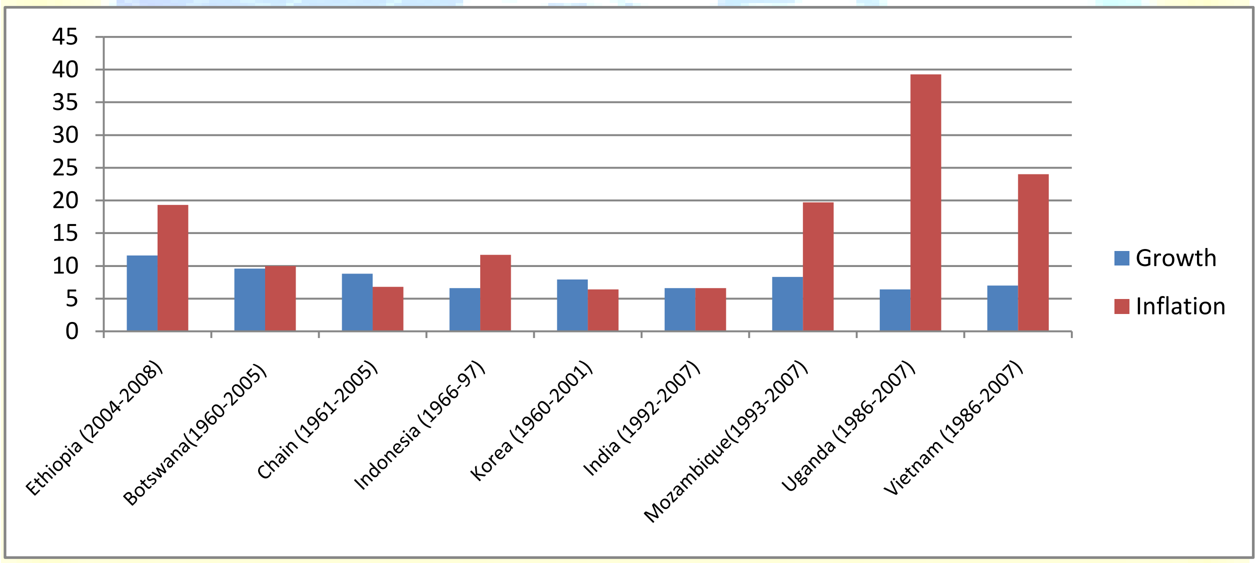
The possible reasons or situations which give rise to inflation in Ethiopian economy are. First, when an economy tries to grow more rapidly than the expected rate of growth. Second, if the government absorbs more resources than realised by the private sector at the existing price level. Third, when various groups in the economy attempt to improve their relative income shares more rapidly than the growth of their respective productivity. Fourth, when buoyant expectations cause the demand for goods and services to rise more rapidly than the capacity of the economy to expand output.

High growth countries during their years of most rapid growth had highest rate of inflation. South Korea during its years of most rapid growth sometimes had inflations rates of over fifteen percent.

Table 8:- Economic growth and inflation trend world wide comparison

Countries	Growth	Inflation	Reserved
Ethiopia (2004-2012)	10.9	18	2.5
High growth countries average	7.8	5.4	6.1
Botswana(1960-2005)	9.6	10	18.7
Chain (1961-2005)	8.8	6.8	7
Indonesia (1966-97)	6.6	11.7	2.7
Korea (1960-2001)	7.9	6.4	2.6
Average	7.8	5.4	6.1
Other high growth countries			
India (1992-2007)	6.6	6.6	7.4
Mozambique(1993-2007)	8.3	19.7	-15.7
Uganda (1986-2007)	6.4	39.3	-4.6
Vietnam (1986-2007)	7	24	-3.5
Average	6.5	17.4	-5.4

Sources: IMF (2012) and own calculation



Gross domestic saving and Gross domestic investment

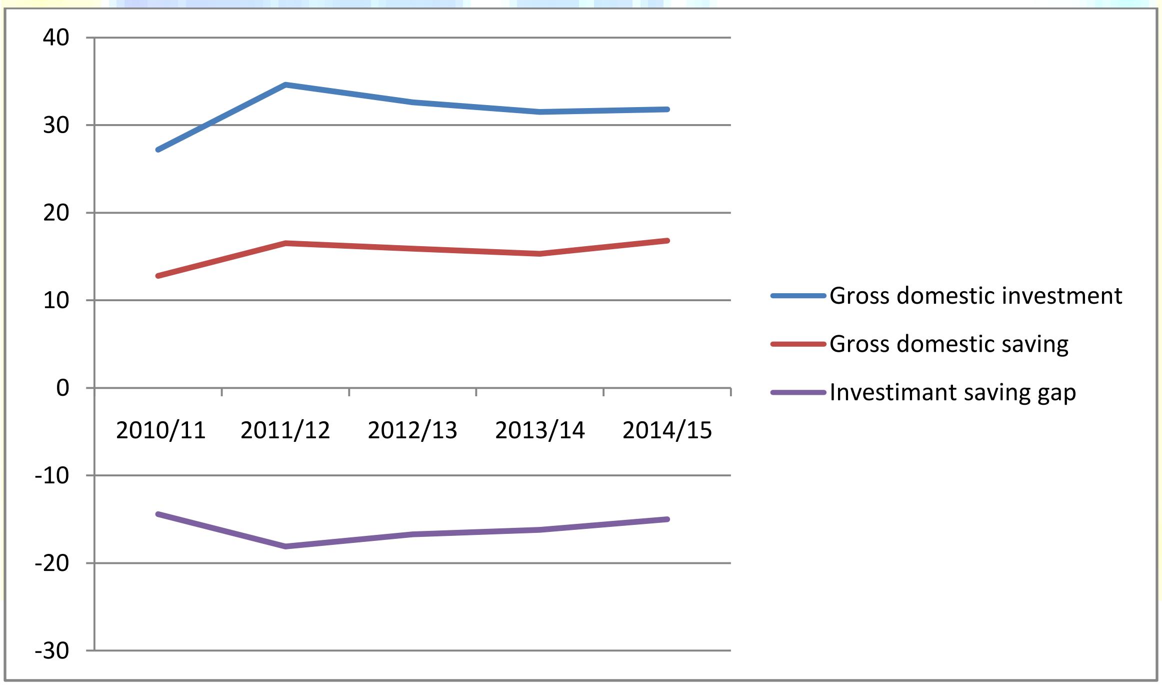
Saving is one of the main factors to economic growth. Accumulated saving can be believed as the sources of capital stock. Capital stock plays a crucial role in creating investment, production, and employment. This clearly shows that, saving is the backbone of investment. Higher savings lead to higher investment and to higher economic growth. In agriculture based economies like Ethiopia, household savings generally constitute the largest share in aggregate domestic savings.

Rural household may carry out both in financial and physical savings. Domestic investment always exceeds the domestic savings. The gross domestic investment rate increased to 31.8 per cent in 2014 from 27.2 per cent in 2010. This was primarily on account of high growth and economically conducive environment. The gross domestic savings rate also increased to 16.8 per cent in 2014 from 12.8 per cent in 2010. This increase in savings along with huge capital inflows had supported the investment growth. Growth in investment is true indicator of macroeconomic policy performance.

Table 9:- Domestic and foreign direct investment, Ethiopia, 2010–2014

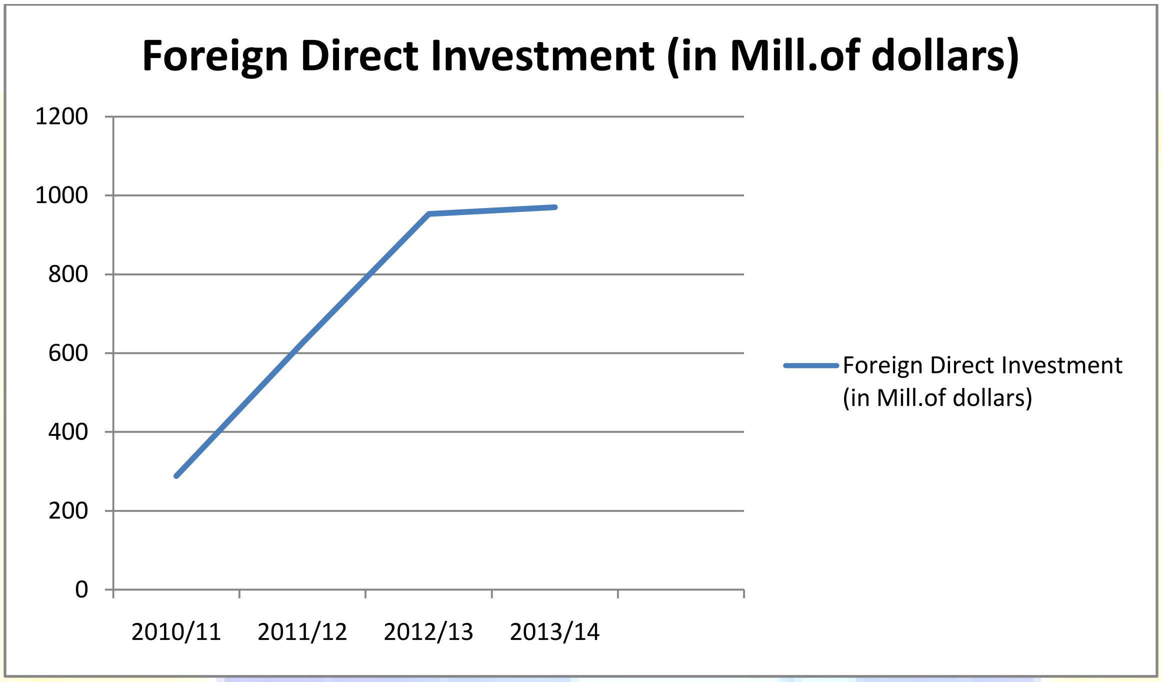
Indicator	2010/11	2011/12	2012/13	2013/14	2014
Gross domestic investment (%total)	27.2	34.6	32.6	31.5	31.8
Gross domestic saving (%total)	12.8	16.5	15.9	15.3	16.8
Investment saving gap	-14.4	-18.1	-16.7	-16.2	-15
Foreign direct investment (in Mill.of doll)	288.3	626.5	953	970.4	
Revenue (%total)	13.7	14	13.2	13.9	15.7

Sources: MoFED(2013) and UNCTAD (2014)



Foreign direct investment

In developing countries like Ethiopia, foreign direct investment plays a crucial role to economic growth. Developing countries have low domestic saving and low income to fund investment, FDI provides the capital to fill the saving and investment gap. Attracting capability of the country to foreign direct investment is an indicator of the strength of macroeconomic policy of the country. To attract foreign direct investment, Ethiopia made structural reforms and presented investment incentives. The above table shows that foreign direct investment (FDI) flows into Ethiopia have gradually increased. FDI data in the balance of payments suggest actual inflows rose from $288.3 million in 2010/11 to $970.4 million in 2013/14 as shown in table 9.



Conclusion and Recommendation

- Poverty reduction is the core objective of the Ethiopian government. Poverty reduction ensures that the benefits of growth accrue to all sections of the society. In Ethiopia incidence of poverty has further declined markedly between 1995/96 and 2010/11 from 46% to 29.6% respectively. The significant decline of 16.4% in poverty in the last one and half decade indicates that Ethiopia is applying appropriate macroeconomic policy.
- After averaging the economic growth the country achieved 7.03 percent per year in the fifteen years between 1992 and 2006/7. In the last five years (2004/5-2008/09) the double digit growth clearly show that, this has been a golden decade (almost) of growth for Ethiopia. The trend in one and half decade growth rates indicates that, even better when we look at per capita GDP growth, which accelerated from -1.4 percent in the previous regimes to 8.46 percent in the last five years. This shows that there is relatively

70 percent increase in per capita GDP. Economic growth performance of Ethiopia for the last fifteen years was best performance.

- Unemployment rate sometimes serves as gauge to evaluate macroeconomic performance of the country. The data revealed that unemployment rate has been declining and almost constant for one decade due to countries robust economic growth. In Ethiopia, economic growth has contribution to provide jobs to the growing population in both rural and urban areas.
- In the last couple of years, given the priority accorded to accelerating growth, the National Bank of Ethiopia challenged to achieve its main objectives of low inflation. Ethiopian economy faced galloping or hyperinflation type of inflation, serious type of inflation to the economy. Inflation rate rose to a peak of 36.4 % in 2008 and fell to 7.2 % in 2014.

- Application of a single poverty line for the whole country implicitly and dubiously assumes absence of price differential across the regions. The estimate of poverty based on this methodology also assumed a fixed consumption basket of the poor overtime, and a uniform consumption basket for all the regions in the country. Regional and rural and urban based poverty line would better estimate the poverty situation than single poverty line.
- The trade-off between economic growth and inflation can be avoided if an economy is able to increase potential output by improving their supply-side performance and saving is unquestionably an important part for sustainable economic performance.

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