Sources of Inflation and Economic Growth in Ethiopia

Part II

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1. Introduction

Part I of this brief paper tried to present the major sources of inflation in Ethiopia. Between 2004 and 2008, the higher desires to spend and higher import price with slow growth of aggregate supply contributed to inflation in the country². The higher aggregate demand or desire for spending was influenced by private consumption spending which takes 91 percent of the total consumption spending. Further, the increase in import value also contributed to the rising of price in the country. During the study years (2004 and 2008), the value of the imported item increased by 29 percent as compared to a percent increased in the amount of imported items. These indicate that the sources of inflation in Ethiopia are both demand and supply side inflation. Theoretically many believe that the higher inflation reduces investment and purchasing power of the consumer that in turn affects the economic growth. But the question is, what is the relationship between inflation and economic growth in Ethiopia? What is the nature of the economic growth during higher inflation? What are the major challenges of economic growth in Ethiopia? This paper (part II) will address the above questions.

The next section presents the theoretical relationship between inflation and economic growth. Section three will explain the linkages between inflation and economic growth in Ethiopia. Section four will discuss the nature of economic growth in the country. Section five identifies the major challenges of economic growth and the last section is summary.

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²Personally I am not comfortable to say inflation in Ethiopia has monetary phenomena. Any time anywhere inflation is many. There are few people or institutions who suggest controlling money supply in Ethiopia reduce inflation. According to these people argument to control inflation we must control money supply. That means no money, no inflation for them. For me these arguments hinder the fast growth of the nation economy. We need money for transaction purpose. We need more and more money for social development. By stopping the injection of money to economy we cannot stop inflation. If we control the supply of money, price may not be reduced due to the high velocity of money. The higher velocity of money arises due to the growth of financial institution and economic transaction in the country. See what happen in UK, when broad money decline, the nominal GDP increase, due to the higher growth of velocity of money.
2. Theoretical relationship between inflation and economic growth

There is no any theoretical study that presents a clear relationship between economic growth and inflation. Before 1936, the economic theory was influenced by an idea which says market forces play major role in stabilizing the price of goods and services. According to this thought (classical economic thought), any surplus/deficit output reduces/increase price and maintains stable price. But this argument was criticised when the USA economy faced a great depression. Then since 1927, the country experienced higher price rise (inflation), higher unemployment rate and surplus production. In 1936, the high government involvement was suggested to adjust the market failure. One of the instruments for the involvement of government was fiscal policy that is higher government spending to increase investment and employment opportunity. This argument believes that inflation and economic growth have positive relationships. The higher government spending in various activities stimulates higher consumption or investment spending which attracts higher price for goods and services in the economy. The higher desire for spending encourages producer to produce goods and services that demanded by the consumers. Such situation enables the country to achieve economic growth with higher inflation.

But this argument was challenged when the world faced stag-inflation (Higher inflation and higher unemployment). During 1970s, the higher government spending attracts higher inflation and at the same time higher unemployment. Actually the objective of higher government spending was not to increase unemployment it was rather to reduce unemployment. This situation challenged the effectiveness of higher government spending in stabilising the economy. At this time, the neo-liberal argument dominated the world. In their argument, neo-liberal believes that inflation and economic growth have negative relationships. The higher inflation reduces investment and foreign reserve which lead to lower economic growth. The market mechanism was used to stabilise the price of goods and services. But the latest study conducted by a number of researchers produced different outcomes regarding the relationship between inflation and economic growth.
Today, the question is not about the relationship between inflation and economic growth, rather the level of inflation threshold that affects economic growth. In this case someone must look at the threshold of inflation that affects economic growth. We may not need the same inflation rate in Ethiopia and USA/Europe to know its impact on economic growth. Khan and Senhadji (2000) find a significant negative effect of inflation that starts above a certain “threshold” inflation rate level and continues for all higher rates. The threshold inflation rate is found to be 1% for industrial countries and 11% for developing countries; below these rates the inflation growth effect is positive. Recently, IMF forecasted lower Ethiopia economic growth for 2011/12 by mentioning inflation as a major reason for low economic growth. There is no clear criterion provided by IMF for such kind of conclusion. It is important to study the threshold level of inflation of individual country before saying inflation reduces economic growth.

3. Economic growth and inflation in Ethiopia

I hope my reader have got clear picture about the theoretical relationship between inflation and economic growth. In section two the study presented how it is difficult to make any generalization about the exact linkages between inflation and economic growth. The structure of government spending and the nature of economic growth highly influence the impact of inflation in the economy. In this section, we will see the relationships between inflation and economic growth. For the sake of comparison, I will use both Ethiopia and Sub Saharan Africa (SSA) countries average economic growth and inflation in the years between 2004 and 2010. This will give a clear understanding about inflation and economic growth trends during the last six years. In 2004, the average SSA countries economic growth was 7.2 percent. In the same year, the inflation rate in SSA countries was 7.5 percent. More or less both inflation and economic growth were the same. In Ethiopia in 2004, the economic growth was 11.7 percent when inflation reached 8.6 percent. The economic growth is 4 percent higher than the annual inflation rate. After two years, in 2006, the average SSA inflation declined to 6.9 percent as compared to 2004 while in Ethiopia inflation grow to 12.6 percent in the same period. The 0.2 percent decline inflation in average SSA contributes for an additional 0.8 percent economic growth. But in Ethiopia 3.6 percent an increase in inflation reduced economic growth only by 0.2 percent. During these years inflation and economic growth have shown negative relationships.
In 2008, as compared to 2006, the inflation rate increased by 4.8 percent in SSA whiles the economy decline by 1.6 percent. In contrast to this, in Ethiopia the additional 13 percent inflation came with additional 0.7 percent economic growth. In these years, the different relationship between inflation and growth was observed in Ethiopia (positive) and SSA (Negative). In 2010 in SSA, inflation rate and economic growth declined by 4.2 percent and 1.2 percent respectively as compared to 2008. In the same period, inflation and economic growth in Ethiopia declined by 22.5 percent and 4.2 percent respectively. Despite the variation in magnitude, between 2008 and 2010 in both SSA and Ethiopia, inflation and economic growth have shown positive relationship.

In general, the average inflation between 2004 and 2010 in Ethiopia and SSA were 15.4 and 6.4 respectively. In the same period, the average 11 percent economic growth in Ethiopia was higher than that of 6.4 percent economic growth in SSA countries. Ethiopia experienced higher economic growth and inflation as compared to average SSA countries. This support the idea that say higher inflation rate is not the only factor that is to be considered when we talk about the relationship between inflation and economic growth. We must analyse further the nature of economic growth to understand the influence of inflation on economic growth. The next section explains the nature of economic growth with high inflation.
4. Nature of economic growth in Ethiopia

In section three the study observed the positive relationship between economic growth and inflation in Ethiopia between 2006 and 2010. Many people may be surprised to see such kind of situation in Ethiopia. Some may ask “How is higher economic growth associated with higher inflation?” Actually the nature of economic growth in the country would influence the impacts of inflation in economic growth\(^3\) of any countries. The nature of economic growth in Ethiopia is characterises as pro-poor economic growth\(^4\). Unlike the traditional economic growth, pro-poor growth refers to the economic growth that achieved by the involvement of the majority of the population or the use of economic growth for social development. In other words during economic growth, there should be a change in the quality and quantity of life in the country. Besides, the economic growth should bring broad base and structural change. This section presents the nature of economic growth: continuous, broad base and social development nature of economic growth.

As mentioned above, the country achieved an average of 11 percent economic growth between 2004 and 2010\(^5\). In these years, the country experienced continuous economic growth. This growth was above the 7 percent annual growth rate targeted by the Millennium Development Goals (MDGs). This is the first experiences in the history of Ethiopian economic growth for the last five decades. The other nature of economic growth was its broad base economic growth. During the last six years, economic growth in the country was achieved by the growth of all three sectors (agriculture, industry and service sectors) in the economy. Figure 2 below shows the economic growth by different economic activities. During 2004 and 2010, the agricultural and manufacturing sector increased by 10.3 percent and 9.7 percent respectively. In the same years the transport and communication increased by 11.1 percent and construction increased by 11.8 percent. The growth of all economic activities would directly or indirectly affect the structure of the economy. According to access capital projection, service sector will take 50.9 percent of

\(^3\) Economic growth refers to the change in the national output over the years.

\(^4\) Ethiopia has been one of the fastest-growing non-oil economies in Africa, with double-digit average growth at just over 10 percent over the last 6 years.

\(^5\) The per capita income increased from $ 138 in 2004 to $ 344 in 2009. In other word the per capita income increased by 149 percent during the last six years (Africa Development Fund, 2011).
national economy while the industry and agricultural sector take 13.2 and 37.5 percent in 2011 respectively. Like other African countries, Ethiopian economy started to be dominated by service sector than agricultural sector. The services sector has—for the first time in the country’s history—overtaken agriculture as the largest segment of the Ethiopian economy.

In addition to continuous and broad base economic growth, the last six years economic growth witnessed wide range social development in the country. The main social indicators are health, education, drinking water and infrastructure development. Any economic growth without social development cannot attain sustainable economic development. Table 1 below shows the social and infrastructure development in the country. For instance, the number of primary emolument increased from 79.8 percent in 2004 to 95.9 percent in 2009. In the same way, the health status in the country highly improved due to the construction of various health institutions. Some can see the improvement of health status by looking at selected health indicators like maternal and under five child mortality rates. In 2004, the maternal mortality was 673 per 100,000 births. This death declined to 123 in 2009. That mean during the last six years the country saved more than 500 mother death during birth. In the same way, under five child deaths was declined from 200 in

Figure 2: Growth of economic activities in selected years

Source: Africa Development Fund, 2011
2000 to around 75 children in 2009. The country also recorded marvellous changes in infrastructure and communication. These include road sector development, mobile and internet provision. During 2004 and 2008, the country managed to construct around 9.76 thousand km road which is higher by 4.1 thousand km as compared to between 2000 and 2004.

Table 1: Social and infrastructure development indicators in selected years in Ethiopia

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2000</th>
<th>2004</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education Sector</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary enrolment</td>
<td>61</td>
<td>79.8</td>
<td>95.9</td>
</tr>
<tr>
<td>Secondary enrolment</td>
<td>17</td>
<td>23</td>
<td>38</td>
</tr>
<tr>
<td><strong>Health Sector</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal mortality rate per 100,000</td>
<td>871</td>
<td>673</td>
<td>123</td>
</tr>
<tr>
<td>Under five child death rate per 1,000</td>
<td>200</td>
<td>-</td>
<td>74.9</td>
</tr>
<tr>
<td><strong>Water supply and sanitation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural water supply (in percentage)</td>
<td>17</td>
<td>25</td>
<td>65.8</td>
</tr>
<tr>
<td>Urban water supply (in percentage)</td>
<td>92</td>
<td>92</td>
<td>91.5</td>
</tr>
<tr>
<td>National water supply (in percentage)</td>
<td>28</td>
<td>36</td>
<td>68.5</td>
</tr>
<tr>
<td><strong>Infrastructure development</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Road network (in kilometre)</td>
<td>32,871</td>
<td>37018</td>
<td>46,812</td>
</tr>
<tr>
<td>Mobile subscription (in thousands)</td>
<td>27</td>
<td>115</td>
<td>4,041</td>
</tr>
<tr>
<td>Internet subscription (in thousands)</td>
<td>4</td>
<td>12</td>
<td>71</td>
</tr>
<tr>
<td>Percentage of poor (Under poverty line)</td>
<td>44</td>
<td>38</td>
<td>29</td>
</tr>
<tr>
<td><strong>Human Development Index (HDI)</strong></td>
<td>0.250</td>
<td>0.287</td>
<td>0.328</td>
</tr>
</tbody>
</table>

Source: CSA, 2010 and ADF, 2011

6 The paradox is during high inflation period the road network constructed was 100 percent higher than between 2000 and 2004: before inflation.

7 In 2009, Ethiopia social indicators like infant mortality, under five child mortality and maternal mortality were lower than the average SSA a compared to 2000. This is the sign of fast social development in the country.

8 The road network data for 2008/09.
In the same way, the number of mobile subscription increased from 115 thousand in 2004 to 4.1 million in 2009. The number of mobiles subscription increased by 3413 percent in 2009 as compared to 2004. Regarding internet subscription, the number of internet subscription increased from 12 thousand in 2004 to 71 thousand in 2009.

All such deep and broad base economic growth improved the Head Counting Index (HCI)\(^9\) and Human Development Index (HDI)\(^10\) of the country. The percentage of poor people under poverty line declined from 38 percent in 2004 to 29 percent in 2009. That means the incidence of poverty was declined by 23 percent between 2004 and 2009. The HDI which is published annually by UNDP was 0.250 in 2000. It increased to 0.287 in 2004. During these years, the HDI increased only by 14.8 percent. As compared to 2000, the HDI increased by 31.2 percent. That makes the country the second fast growing human development in the world (see 2010 Human Development Report). The reasons for the progress of HDI were due to an improvement in life expectancy\(^11\), expected years of schooling\(^12\) and increase in per capita income\(^13\).

These all social and economic developments have been achieved with higher economic growth. During deflation years in 2000 and 2001, the country could not experience such kind of high economic growth. There is no any other option for Ethiopia other than economic growth. Ethiopia is not like western countries that can bring social development through income redistribution without high economic growth, because these countries already achieved continuous economic growth for more than three decades. We as a nation lost more than four decades economic growth due to many factors. Today we should not allow any economic and political policies that hinder/compromises our economic growth. Higher economic growth enables the country to accumulate capita and wealth. At this time we should recognise that there

\(^{9}\) HCI is an index that measures the incidence of poverty in the country. The higher HDI indicate the higher prevalence of poverty.

\(^{10}\) HDI is an index that measures the economic development in the country by taking the development of health, education and per capita income in the country.

\(^{11}\) Life expectancy increased from 51.4 years to 56.1 years in 2010.

\(^{12}\) Expected years of schooling increased from 4.4 years in 2000 to 8.3 years in 2010

\(^{13}\) Per capita income increased from $ 567 in 2000 to $ 992 in 2010
are a number of undesirable outcomes due to higher economic growth. The next section identifies the major challenges of economic growth in Ethiopia.

5. Challenges of economic growth in Ethiopia

In the previous section I tried to present the linkage between economic growth and inflation in Ethiopia. For the matter of fact the higher inflation in Ethiopia\(^\text{14}\) could not reduce economic growth due to the broad base economic growth achieved in the country. This does not mean that inflation is not harmful for Ethiopian economy. If we experience continuous and persistence inflation it may affect the investor confidence and consumer purchasing poor that directly affect economic growth. The lower agricultural productivity, slow sectoral transformation, higher consumption spending, high inflation expectation, high foreign trade imbalance, market imperfection, low tax collection capacity, supply side constraint and external shock are the main challenges of Ethiopian economic growth.

6. Summary

Ethiopia experienced an average of 11 percent economic growth between 2004 and 2010. In the same period the inflation rate was 16 percent. The higher inflation did not significantly reduce the economic growth. In some years, inflation and economic growth have positive relationships. The higher desire for consumption spending and increase imported price are considered as a major sources of inflation in the country. The major challenges for the economy are: the lower agricultural productivity, slow sectoral transformation, low tax collection capacity, imperfect market, supply side constraint and external shock. For Ethiopia, economic growth is not the matter of choice. The government must work on how to achieve economic growth in the country. The main focus should be in reducing the supply side constraint. Encourage more investment in agricultural sector and selective import substituted product. Intensify the modernization process of the nation tax collection system. Introduce capital market that gives an option of public at large to invest their money on capital than spending on consumption. To implement such kind of wide range activities, the economy need the availability of money that facilitate easy

\(^{14}\) Ethiopia may not be what other wants her to be. To my understanding looking at one problem from different angles can increase the depth of our reasoning.
Further research needed to compute the threshold of inflation that affects economic growth in the country.

**Reference**

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Reducing money supply to control inflation affect the availability of financial resource in the economy. The advice by IMF to reduce money supply cannot control inflation. The first reason is the country has limited monetary policy instrument to control inflation through money supply. Second we must understand the nature of broad money in the economy. The other things we should consider the low level of broad money GDP ratio in Ethiopia as compared compared to average SSA countries.