# PRIVATIZATION AND ITS INFLUENCE ON DEFICITS: AN EMPIRICAL ANALYSIS OF THE EXPERIENCES IN ETHIOPIA

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#### Abstract

This paper examines the influence of privatization on deficits. Deficits, namely budget deficit, current account deficit and trade balance deficit, are the determining, but haunting issues in all economies, particularly in the Least Developed Economies (LDCs). Ethiopia is one of the LDCs that strive to control these deficits while implementing all possible measures of economic reform. Privatization as one of the measures was implemented in 1994, which resulted in privatizing about 60 percent of State Owned Enterprises (SOEs) in the country. It is, therefore, expected that it has had direct and indirect influence on these deficit variables. The study used data over ten years, 1994/95-2003/04, and simple econometric models to test whether there is any bearing on deficit variables in connection to privatization. The empirical results show that the connectivity of privatization in relation to these variables in general is fragile and weak because of the small sized and slow paced privatization program. The study also reveals that the weak export orientation and openness were other causes which may have locked the policies like privatization in successfully managing deficits. This study, therefore, suggests that the government should ensure that the privatization programme proceed hand in hand with practical economic reforms, coupled with creating a real outward and open economy to reduce these increasing deficits.

**Keywords:** Privatization, budget deficit, current account deficit, trade balance deficit and open economy.

JEL Classification: L33, F14, F32, H62

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## 1. Introduction

The term "deficit" means a havoc transaction in economic activities undertaken by either individuals or organizations. It is because of this common notion that it often reflects adversity in terms of their efficiency and effectiveness. Deficit in the macroeconomic view is, however, not considered a surprising phenomenon when applied to economy level as it occurs every year irrespective of their economic status. There is little evidence about any economy experiencing a steady surplus for too long. Budgetary, trade balance and current account deficits—called deficits hereafter—are prevalent phenomena, which have lavishly been discussed theoretically and empirically, leaving ample suggestions and implications as to how to prevent economies from being affected by the severe blow of these deficits.

There are many factors and reasons behind as to say that why deficits are unavoidable. The most important of these are the pace of economic development, economic dependency, lack of (trade) openness, tax system, uncontrolled expenditure, inflation and so on. In spite of these causes, being justified or unjustified for many reasons, the recent economic theories are less digestive towards deficits, pronouncing a new fashion that deficits could be reduced if appropriate macro-economic reforms, and adjustment programs were implemented. These programs included reforms to deregulate the economy, reduce state intervention in SOEs (State Owned Enterprises), establish a market-determined exchange rate, bring fiscal deficit under control, rationalize public investment and liberalize trade (Faruqee and Hussain, 1994).

The urgency behind implementation of these reforms owes to the accumulation of deficits-led-debts by governments all over the world in the 1970s and 1980s. While considering many options to lessen severance of this issue, reconsideration of state's dominance, particularly on SOEs came into the limelight in policies of many governments. The rationality was that many state owned enterprises (SOEs) had shown their robust contribution to these deficits owing to their weak operation and continuous losses (Winter, 1999), which would have been avoided if they were private ones (New African, 1999). Privatization is considered one among these programs since the 1980s with a view to developing an efficient private sector, substituting the weak SOEs and scaling down deficits in many developing and transition economies. Privatisation, in many cases, has been considered an attractive

way to help cope with budget deficit through sales proceeds not only in those developing economies (Agénor and Montiel, 1999; Abu Shair, 1997), but also in developed ones (Munday, 1996). It is also believed that significant reduction in budget deficit may bring improvement in the balances of current account (Cordon, 2001:15) and trade. But, to date no extensive and verifiable evidence is consistently available to ensure whether it has fulfilled its objective as expected on these deficits, particularly in the African economies.

The purpose of this paper is, therefore, to examine the influence of privatization on deficits in Ethiopia. Ethiopia, one of the least developed as well as centrally planned economies in Africa for seventeen years, has adopted privatization in the same fashion as much as other developing countries since 1994. As the country suffered from a long lasting decline of growth and productivity, increasing lag of technical progress, budgetary deficits and external imbalances, it was guite obvious that the issue of stabilization and adjustment of the balance of payments received priority on the way of transition. Generally speaking, privatization as one of the structural adjustment reforms aims at improving the government budget in the short run through the proceeds of sale, and enhancing a significant contribution to balance of payments and current accounts through an increase of operational efficiency. It was, therefore, expected in the country that the privatization programmes is to approach these issues in such a way that a reasonable reduction of deficits in their budget, balance of payments and current account could be accomplished. The paper is divided into four sections. The next section provides a brief note about the data and methods used for this study. Specification for the econometric models is also given in this section. Section III discusses the magnitude of deficits in relation to privatization by way of descriptive analysis, followed by empirical estimations and interpretation to examine whether or not the Ethiopian privatization influenced the selected deficits. Section IV ends the study with a summary and conclusions.

## 2. Data and Methodology

Data was collected from the Ethiopian Privatisation Agency (EPA), Ministry of Finance and Economic Development (MoFED), Central Statistical Authority (CSA) and also from the development reports of the World Bank. The data used for this study cover a period of over eighteen years, 1986-87-2003/04, but OLS(Ordinary

Least Squares) for the empirical testing has used the data of time series over ten years, 1994/1995<sup>1</sup> EFY (Ethiopian Fiscal Year)-2003/2004 EFY which is however, carefully interpreted, because of its lack of time coverage<sup>2</sup>. Regression models are used to accomplish the objective of the study, based on heterodox model. The models, which are explained with more details in the latter part of results and discussion of section III, are developed using the perspectives of the heterodox model which does not conclude that the non-significant variables necessarily imply that the hypothesized causal links are invalid. The privatization, the explanatory variable, for this study implies only the privatization of state owned enterprise (SOEs).

#### **Model Specifications**

Three different econometric models are constructed to find out the effect of privatization respectively for budget deficit, trade balance and current account deficits. The equation in all the models is fitted with privatization, an explanatory variable, with other required exogenous regressors. The model (1) is fitted with an

equation of four independent variables. These variables are the growth rate, inflation, interest rate and privatization. Privatization, the explanatory variable, is inducted to measure to what extent budget deficit has captured the effect of privatisation. The main hypotheses in this model is that the economic growth is expected to have an influence on the budgetary deficit since the higher rate of economic growth results in an increase in tax revenues for the year. The size of the budgetary deficit is also sensitive to inflation and the level of interest rates in the country. Ceteris Paribus, inflation tends to increase federal receipts more than federal outlays. As a result, an increase in the rate of inflation tends to reduce the nominal size of deficit. Other things being equal, increases in interest rate increases the size of the federal deficit because federal outlays for interest payments on the national debt go up (Hyman, 1997: 404-5). The hypothesis for the function of privatization in this model is that the privatization proceeds and minimization of opportunities, losses and costs involved in those privatized SOEs contribute to reduction of budgetary deficit. For empirical analysis, the model has been expressed as:

$$[Df/Y]_{t} = \beta_{0} + \beta_{2} [y]_{t-1} + \beta_{3} [p]_{t} + \beta_{4} [r]_{t} + \beta_{5} [PRIV/Y]_{t} + u_{t}$$
(1)

Equation (2) is specified in such a way that it embraces the growth rate, budget deficit, inflation, trade balance, terms of trade, foreign financing and privatization. The hypotheses are that economic growth rate improves current account whereas budget deficit, inflation and foreign financing worsen it. Of these variables, budget deficit and inflation correlate directly in plenty of cases as two problems co-exist (Cordon, 2001:29-30). The inclusion of trade balance can be justified in the sense that it correlates directly with current account on the assumption that the exchange rate is constant.

$$[CA]_{t} = \beta_{0} + \beta_{2} [y]_{t-1} + \beta_{3} [Df/Y]_{t} + \beta_{4} [p]_{t} + \beta_{5} [X/Y-N/Y]_{t} + \beta_{6} [FF]_{t} + \beta_{7} [PRIV/Y]_{t} + u_{t}$$
(2)

Equation (3) includes growth rate, openness and terms of trade which improves the balance of trade, whereas foreign financing diminishes the balance. Terms of trade also holds good for trade balance where any improvement in the terms of trade may be advantageous to its account balance. Privatisation is expected to increase the trade balance as it is believed that the export capacity and efficiency of private enterprises is well-off as compared to SOEs.

$$[B]_{t} = \beta_{0} + \beta_{2} [y]_{t} + \beta_{3} [Open]_{t} + \beta_{5} [T/T]_{t} + \beta_{6} [PRIV/Y]_{t} + u_{t}$$
(3)

Where t = 1, 10 and  $u_t$ = the error terms, which are independently and identically distributed with zero mean and finite variance. Each variable in the above three equations are empirically measured as follows:

 $[Df/Y]_{t=}$  Budget Deficit as a percentage of GDP.

[CA]<sub>t =</sub> Current Account Deficit as a percentage of GDP

[B]<sub>t</sub> = Trade Balance Deficit as a percentage of GDP

 $[y]_{t} = GDP$  Growth (Real) rate, lagged by one period for budget and current account deficits with the assumption that the effects of GDP growth is not contemporarily related.

 $[Open]_{t}$  = Openness<sup>3</sup> as a percentage of GDP;  $[TT]_{t}$  = Terms of Trade<sup>4</sup>

 $[FF]_t$  = Foreign Financing as a percentage of GDP, and

[PRIV/Y]<sub>t</sub> = Privatisation proceeds as a percentage of GDP

## 3. Privatization and Deficits: Results and Discussions

In the Ethiopian context, privatization is conceived as an important ingredient of the transformation from a command to a market oriented economy, reduction of alarming budget deficit and external debt, injection of openness into economy and development of private sector at macro level, and alleviation of problems such as managerial inefficiency and poor performance of SOEs at the micro level. Among all, budget deficit has perennially been at the centre of economic policy debates in the country because the operation of SOEs is a significant component of the government budget. For long in the past, the role of SOEs was perceived to be important both for ideological reasons as well as owing to the alleged productivity of public goods. However, SOEs had have become a drain on the budget, partly as a result of poor investment, the collapse in terms of trade and various structural problems.

Ethiopia was no exception to this experience of other developing countries. Many SOEs in the country were found working at the poor growth rate in the pre-reform period (Selvam, 2005). The annual report of MoFED (2004) indicates that the annual production performance and sales performance of SOEs accounted for 2.05 and negative 0.13 percent respectively in 1991/92, showing their dismaying performance. Mol (1992) also reveals that as of the same fiscal year, 33 percent of a total number of SOEs including small sized enterprises were under the category of loss-making enterprises, in which industries accounted for 55 percent and whereas, agriculture constituted 27 percent (Mol, 1992) resulted in widening the deficit in federal budgets which in fact severed other deficits of the country. Not in all the times, but budget deficit may even worsen the current account if the balance of payments is not supportive. These indications confirm that the SOEs contributed their share negatively to deficits which is strongly considered as one of the reasons for the government in privatizing its SOEs. The country privatized about 220 SOEs in which many of them were small sized enterprises. Consequently, the sales proceeds were very meager that the programme has yielded only USD 433.7 millions to the exchequer (see Appendix 3A).

Table 1 provides the data set for deficits over the pre-privatization period. Budget deficit recorded at 6.9 percent in 1986/87 that was surged to 11.1 percent in 1993/94 with the annual average of 10.05 percent over the period before privatization, 1986/87-1993/94. Miles et al.(2005) in the Index of Economic Freedom confirms that

the fiscal burden caused the economic freedom in Ethiopia to decline more than any other country in the world. Current account deficit was decreased by a meager of 0.08 percentage points over the period, but the annual average rate accounted for 4.79 percent. Trade balance deficit surged from 8.57 percent in 1986/87 to 10.64 percent in 1993/94 with the annual average rate of 8.65 percent. Current account improvement is normally brought about by a reduction in budget deficit. But the observed budget deficit seemed to be uncorrelated with current account deficit which might have been attributed to an excess of savings over private investment.

		Deficits					
Year	Budget Deficit*	Current Account Deficit	Trade Balance Deficit				
1986/87	-6.9	-5.8	-8.57				
1987/88	-8.8	-6.6	-8.80				
1988/89	-11.2	-3.6	-6.53				
1989/90	-13.8	-2.8	-5.40				
1990/91	-11.3	-5.2	-7.90				
1991/92	-9.7	-2.4	-9.58				
1992/93	-7.6	-6.9	-11.76				
1993/94	-11.1	-5.0	-10.64				
Annual Average	-10.05	-4.79	-8.65				

#### Table 1: Deficits, 1986/87-1993/94

Note: Deficits are given in percentage of GDP \*excluding grants Source: World Bank (1997)

Budget deficit was observed to have been a serious and prolonged issue in the preprivatization period. It should also be noted that the surged deficits over the period occurred in spite of high export taxes. If this extra government revenue were not spent, the budget and current account deficits would have been minimized. Furthermore, with more of inward orientation and less of openness, the revenues from exports would also be less attractive to prevent the country from rising deficits.

Table 2 shows that the budget deficit to GDP, which stood at 3.7 percent in the first fiscal year of the privatisation period, 1994/95, was raised to 7.13 percent in 2003/04, the last fiscal year of the study period. It grew at an annual average of 5.48 percent over the period. The deficit was very low only in the fiscal years of 1996/97 and

1997/98. But the post war effect on budgetary deficit was observed in the fiscal year 1998/99 and 1999/00 which recorded 6.54 and 10.25 percents, respectively. The observed rising phenomenon in the budgetary deficit, particularly after the war, continued throughout the study period. Furthermore, the deficit fluctuated rapidly over the period ( $\sigma$  = 2.29 percent).

Year	Budget Deficit (USD Million)	Budget Deficit/GDP (In %)
1994/95	214	3.7
1995/96	333	5.21
1996/97	98	1.46
1997/98	194	2.92
1998/99	462	6.54
1999/00	764	10.25
2000/01	350	4.32
2001/02	555	6.67
2002/03	435	6.55
2003/04	528	7.13
Annual Average	393	5.48

Table 2: Budget Deficit and its Share in GDP

Source: World Bank (2004) and MoFED (2004)

For the preliminary analysis, the effects of privatisation variables are linked to the size of the government budget deficit since privatisation may have been implemented as a quick solution to a budgetary problem in the country. In order to examine this effect, a simple correlation is applied. The result shows that there is a weak correlation (correlation coefficient is -0.268) found between privatisation and budget deficit.

There may be two reasons which justify this no effect phenomenon: first, the privatization proceeds brought by the size of privatization were too small to affect the budgetary deficit and second, the retaining of major SOEs by the government may leave the budgetary deficit to have little or no link to the privatisation. However, the tendency of the government's budget deficit reduces investment spending, which is otherwise called a crowding effect. Reduced investment spending implies a slower capital formation and lower economic growth. This adverse effect of budget deficit on

economic growth is probably the most important cost of deficit and a major reason why economists strongly advise governments to minimise this deficit.

### **Current and Trade Account Deficits Issues**

Trade and current account balances are the direct outcomes of these openness and export orientation, Ceteris Paribus. These balances are found to be negative in most of the developing countries, particularly in Africa. The reasons are: dominantly pastoral economy, inward orientation and less openness, weak industrialization, poor exim (export and import) policies, high degree of international dependability even on basic raw materials and so on. Ethiopia is also prevalent to these economic debacles.

Year	Trade Balance to GDP(%)	Current Account Balance to GDP(%)
1994/95	-9.25	-1.5
1995/96	-14.60	-7.4
1996/97	-5.74	-6.5
1997/98	-9.38	-5.1
1998/99	-14.90	-7.8
1999/00	-15.27	-5.1
2000/01	-16.31	-4.0
2001/02	-18.20	-6.0
2002/03	-19.45	-4.7
2003/04	-19.8	-13.24
Annual Average (%)	-14.29	-7.6

#### Table 3: Trade and Current Account Balances

Source: World Bank (2004), NBE (2003) and NBE (2004)

Table 3 illustrates the trade balance and current account deficits over the privatisation period. It indicates that the trade deficit increased slowly over the period, whereas the current deficit increased but with a relatively a lower fluctuation. This trend of increase in the export to GDP was expected to have smoothened the trade and current account balance over the period, but the analysis over export to import prevented the expectation from yielding a positive effect on these two deficits. It can be verified in many instances that openness and export orientation (export to import and export to GDP) are the main policy variables affecting deficits. Many developed countries have

made extensive use of privatisation as a policy tool in support of openness (Sadar, 1995: 33) which, in turn, inculcated in them a high degree of export orientation in their economies, ending up either as a less debit or credit balance in current and trade balances. Not only are these positive effects, but also a positive relation was found between openness and economic growth (Thirwall, 2004:640).

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Year	Openness	Export to Import	Export to GDP	
1994/95	18.74	59.54	13.61	
1995/96	19.97	47.54	13.23	
1996/97	17.77	73.36	15.80	
1997/98	20.23	62.73	15.80	
1998/99	19.73	48.80	14.19	
1999/00	19.76	50.20	15.40	
2000/01	18.2	48.04	15.08	
2001/02	17.51	45.51	15.20	
2002/03	29.91	46.89	17.10	
2003/04	28.9	45.88	16.78	
Annual Average	20.92	52.20	15.17	
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Table 4:	Openness	and Exp	ort Orientation
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Source: World Bank (2004) and MoFED (2004)

Table 4 shows the openness and export orientation of the country during the privatisation period. Openness started with 18.74 percent in the beginning of privatisation period and ended with 28.9 percent. Openness was relatively better in the fiscal years of 2002/03 and 2003/04. However, the annual average openness shown over the period was 20.91 percent with a standard deviation ( $\sigma$  = 4.27). Hence, the country failed to hold the openness high because a minimum of 30 percent is required to be achieved to call a country moderately open at this globalized economy. For instance, The Netherlands is considered an extremely open economy because its openness accounts about 50 percent (Baumol and Blinder, 1997). Openness is normally favorable provided export dominates over import despite the latter being an inevitable engine for a faster growth. There are two indicators taken into account for measuring the export orientation of the country: export to import and export to GDP, which are also furnished in Table 4.

Export to import, which stood at 59.54 percent in the first year of privatisation, 1994/95, was reduced to 45.88 percent in 2003/04. Import started to exceed exports particularly after 2002/03 which reveals a mixed signal: First, the country can been seen coming out of an inward oriented structure, and second, trade and current account balances may pose a high danger. The earlier outcomes are considered feasible as an outward economy is required to meet the growing needs of the private sector which requires enormous foreign technology and infrastructure, whereas the latter outcome is dangerous unless and otherwise the country enjoys ample foreign reserves.



Figure 1: Trend: Export, Trade and Current Deficits

Figure 1 exhibits the relationship between export to import ratios and deficits.

Nonetheless, the export in percent of GDP shows an increase over the period. It was 13.61 percent in the first fiscal year of privatisation—facing less fluctuation—rose to 16.78 percent at the end of the privatisation period. Ethiopian export is predominantly influenced by coffee, which constituted 37.2 percent in 2003/04 in total export earnings. MoFED (2004) reports that coffee alone brought foreign exchange earnings of USD224 million. As is already mentioned in this study, the country has not

increased the number of items which the country produces and imports during the post reform period and therefore, any change or fluctuation in the coffee market affects the trade and current account balance very severely.

As discussed earlier, the export to import ratio is found unfavourable to help reduce these deficits. The study also finds that the current account deficit increased but not proportionately to the increase in trade account deficit. The reason is that the international reserve in the country has risen remarkably from USD 20 million to USD433 million over the period, having as a soothing effect (World Bank, 2003).

The decreasing trend in the export to import ratio pushed the deficit lines down the zero point, whereas the increasing trend in the export pulled back the deficit lines from further going down the zero point. It shows that any increase in export to import causes a decrease in the trade and current deficits. The analysis after the fiscal year 1998/99 shows that the export to import slowed down, owing to an increase in imports.

The above discussion shows that the country improved moderately its openness over the study period. Export to GDP increased, but more slowly. Trade balance became wider because the export to import ratio slowed down during the study period. Current account deficit was under control—though it increased suddenly in the fiscal year, 2003/04 - which was due to the reason that the international reserves served a balancing effect.

While analysing all these effects, the most important variable influencing these is export. If export increases, the export to GDP and export to import increase, whereas the trade balance and current account deficit decline. But the question is that to what extent privatisation brought changes in these variables. To further deeper our understanding, privatisation is linked to current account and trade deficits along with export to GDP through simple correlation analysis, the result of which reveals that there exists either no or weak correlation between privatisation and these three inter linked variables (Appendix 3B).

The result may be substantiated to the extent that privatisation seldom touched the coffee processing industries which constitute a major portion in export. But the result may be explained by two important factors: first, export revenues from leather and

service sectors may not be ruled out because many of these industries were privatised over the study period, and second, the export orientation of the enterprises that was considered one of the important criteria for selecting buyers might have its own impact on the possibility of affecting exports.

The foregoing discussion and analysis reveal that there has been an improvement in the openness, export orientation and current account deficits. But attributing this development to privatisation is highly questionable because those sub-sectors such as coffee and other agricultural products were not amply subjected to privatisation and the other reason is obviously the small size of privatisation which, in fact, failed to have effect on exports.

#### **Empirical Estimation and Interpretation**

The results of the influence of privatisation on budget deficit, current account deficit and trade balance deficit, which are tested at 5 percent significance level, are presented in the specifications I, II and III respectively in Table 6.

Variable	Coefficient	T-statistic	Significance
Constant	-21.580	-4.214	0.014
GDP[y] <sub>t<sup>-1</sup></sub> ,	-0.795	-2.030	0.112
Inflation[p]t	-0.538	-1.700	0.164
Interest[r]t	1.127	3.173	0.034
Privatization (PRIV/Y)t	0.160	0.599	0.582
R <sup>2</sup>	0.733		
Adjusted R <sup>2</sup>	0.467		
F-statistic	2.749		
Significance (F-statistic)	0.175		
D/W statistic	2.893		

#### Table 6: OLS Result: Influence of Privatization on Deficits Specification I: On Budget Deficit

Notes: Dependent Variable: [Def/Yt]

Variable	Coefficient	T-statistic	Significance
Constant	-3.292	-0.485	0.676
GDP[y] <sub>t-1</sub>	-0.151	-0.142	0.900
Budget Deficit[Df/Y]t	0.127	0.063	0.956
Inflation[p]t	0.319	0.442	0.702
Trade Balance[X/Y-N/Y]t	0.158	0.073	0.948
Foreign Financing[FF]t	0.026	0.018	0.987
Privatisation (PRIV/Y)t	-0.342	-0.294	0.797
0			
R <sup>2</sup>	0.215		
Adjusted R <sup>2</sup>	0.000(-2.138)		
F-statistic	0.092		
Significance (F-statistic)	0.990		
D/W statistic	2.067		

#### **Specification II: On Current Account Deficit**

#### Specification III: On Trade Balance Deficit

Variable	Coefficient	T-statistic	Significance
Constant	-21566	-1.920	0.127
GDP[y] <sub>t-1</sub>	-0.220	-0.681	0.533
Openness[Open]t	-0.412	-1.305	0.262
Terms of Trade[TT]t	0.941	2.991	0.040
Privatisation (PRIV/Y)t	-0.319	-0.978	0.384
R <sup>2</sup>	0.798		
Adjusted R <sup>2</sup>	0.596		
F-statistic	3.953		
Significance (F-statistic)	0.106		
D/W statistic	1.818		

Table 6 reports the result of the heterodox specifications, estimated using OLS. The results indicate that privatisation is statistically not significant to all deficits which is not surprising because the magnitude is too small to have any effect on these deficits. This empirical result contradicts with the extensive empirical evidence that

privatization reduces fiscal deficit (Thobani, 1994). The results also show that the GDP growth of the country depicts that the correct sign in all specifications, but only significant to budgetary deficit. The significant contribution of GDP growth to budget deficit may be justified, owing to the relatively better performance of the economy over the study period. The growth, however, failed to have its share in reducing the current account and trade balance deficit because of the reasons that the attained growth is not adequately export oriented.

As far as inflation is concerned, it is insignificant in all specifications. It may be argued that the inflation rate that prevailed over the study period might not have brought any change in the budget and so was on current account and trade balance deficit. Inflation is said to have an influence, particularly on current account and trade balance deficits provided the economy is sufficiently open and outward economy. Interest rate, which is fitted in specification I, is positive and robustly significant, showing its direct correlation with budgetary deficit. The moderate increase in the interest rate increased the budgetary deficit of the country since there is the evidence of having repaid a lump sum amount of principal and interest towards internal and external debt. Budget deficit is found to have the right sign of direct correlation, but insignificant for the specification II. Similarly, the coefficients for trade balance and foreign financing are statistically insignificant. The model for specification II behaved abnormally to show any significant value at the step-by-step removal or inclusion of any of the variables fitted in the model. It is much surprising that the test of multicollinearity is also detected to be normal and ranged within 10 VIF [Variance Inflation Factor]. The result obtained for openness in specification III was completely insignificant and fragile, but the terms of trade shows a significant result.

## 4. Conclusion

This analysis has revealed that there is a weak and fragile connectivity between privatization and deficits, indicating its inability either to reduce these deficits during the study period. The surprising behaviour of models, particularly for current account deficits, exhibits a scenario that those chosen exogenous variables were not responsive to make any significant changes in the deficit. This happens in those countries where the advantage of earning foreign currency through trade is hardly witnessed except in foreign financing and aid. Hence, attempts should be made to earn foreign currency through trade rather than foreign financing or aid.

Whatever be the fact, the country needs to increase the possibilities of making its economy wide open through foreign trade in order to accomplish the objectives of deficit reduction, particularly the deficits in trade and current account. Furthermore,

the significance of the terms of trade is observed to be a disadvantageous effect to trade balance. This result discloses the country's obsessive dependence on agricultural products for foreign trade which yields normally a less competitive edge on their price. It could be overcome if the country gradually shifts from its dependence on the export of agricultural products to industry, particularly infra-structure industry where the benefits of terms of trade may become positive. The state of current account and trade balance may have an effect on confidence in the foreign exchange markets, which may in turn have 'knock-on effects' on the economy. Privatization in the country along with its private sector development initiatives should have brought an environment where openness, foreign trade and economic integration could be achieved. But, it has completely failed to show its influence on these deficits.

It is therefore suggested that the privatization program in the country should be revamped to make its impact stronger. It is, moreover, not to lose sight of the fact that privatization has to be an integral part of reform measures, but many segregated these two in the country. The prevailing inward orientation (closed economy) and tax system are a few among them. It is also suggested that the privatization of SOEs will have to proceed hand in hand with price and trade liberalizations, macro-economic stabilization and the reorganization of monetary and financial system.

This study may, however, lack the comprehensiveness as it has not included expenditure pattern and tax rates of the privatization period which need to be further studied if the relation between privatization and deficits is to be well understood.

#### NOTES

<sup>1</sup>The Ethiopian fiscal year begins on 8<sup>th</sup> July and ends on 7<sup>th</sup> July.

<sup>2</sup> As the privatization program commenced its first transaction in 1994/95, the period of study is limited only to ten years, lacking a sufficient data of time series for regression analysis.

<sup>3</sup>There are many ways to measure the degree of liberalisation—also called openness. The most commonly used standard measure referring liberalisation in the new growth theory literature is the ratio of total trade (export + import) to GDP (Thirwall, 2004:638-9). Baumol and Blinder (1997) in their book on macro-economics refer to openness as the average of exports and imports expressed as share of GDP. The same measurement is also used for openness in many studies including Ramakrishna et al. (2003).This study also uses the same standard to measure the openness of the country.

<sup>4</sup>Terms of Trade refers to the measure or relative movement of export and import prices. This series, which is included in the study, is taken from the WB indicators. It is calculated as a ratio of a country's export unit values or prices to its import unit values or prices. It shows changes over a base year (1995) in the level of export unit values as a percentage of import unit values (World Bank, 2004:147).

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## Appendices

#### Table 1 B

#### Magnitude of Privatization Transactions, 1994/95-2003/04

Year	No. of Privatizations	Privatization Proceeds (PP) (USD Millions)	GDP (USD Millions)	PP/GDP (In Percentage)
1994/95	14	29.54	5,779	0.51
1995/96	116	51.46	6,393	0.8
1996/97	26	18.72	6,725	0.28
1997/98	9	193.1	6,647	2.91
1998/99	21	89.12	7,067	1.26
1999/00	16	45.87	7,451	0.61
2000/01	11	2.97	8,106	0.04
2001/02	1	0.76	8,326	0.009
2002/03	3	0.56	6,638	0.008
2003/04	3	1.60	7,408	0.021
Annual Average	22	43.37	6,277	0.21

Source: EPA (2004) and World Bank (2004)

#### Table 3B: Correlation Matrix of the Selected Variables for all Specifications

CA	GDP	DEF	Interest	Open	INFL	TB	TT	FF	PV
1	158	.042	307	.070	.351	.131	.212	.031	155
	(.686)	(.914)	(.422)	(.857)	(.355)	(.737)	(.584)	(.936)	(.690)
158	1	.239	.438	656	400	.137	.015	322	227
(.686)		(.535)	(.238)	(.055)	(.286)	(.726)	(.969)	(.398)	(.558)
.042	.239	1	.136	442	006	.910**	.819**	705*	.502
(.914)	(.535)		(.727)	(.234)	(.987)	(.001)	(.007)	(.034)	(.168)
307	.438	.136	1	756*	981**	.040	289	023	078
(.422)	(.238)	(.727)		(.018)	(.000)	(.918)	(.451)	(.953)	(.841)
.070	656	442	756*	1	.656	455	229	.380	087
(.857)	(.055)	(.234)	(.018)		(.055)	(.218)	(.554)	(.313)	(.824)
.351	400	006	981**	.656	1	.111	.424	090	.125
(.355)	(.286)	(.987)	(.000)	(.055)		(.777)	(.255)	(.817)	(.748)
.131	.137	.910**	.040	455	.111	1	.817**	750*	.402
(.737)	(.726)	(.001)	(.918)	(.218)	(.777)		(.007)	(.020)	(.284)
.212	.015	.819**	289	229	.424	.817**	1	666	.675*
(.584)	(.969)	(.007)	(.451)	(.554)	(.255)	(.007)		(.050)	(.046)
.031	322	705*	023	.380	090	750*	666	1	566
(.936)	(.398)	(.034)	(.953)	(.313)	(.817)	(.020)	(.050)		(.112)
155	227	.502	078	087	.125	.402	.675*	566	1
(.690)	(.558)	(.168)	(.841)	(.824)	(.748)	(.284)	(.046)	(.112)	
Note: * Correlation is significant at the 0.05 level (2-tailed) ** Correlation is significant at the 0.01 level (2-tailed)									

Figures in Parentheses indicate the significance value