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THE VALUE ADDED STATEMENT: AN INVESTIGATION OF SOME ACCOUNTING ISSUES

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Abstract: *It may be said that Value Added has no single and precise definition that can be universally accepted. However, there is a general agreement with regard to the concept of value added, i.e., it measures the wealth created by a business or industry. Both the economist's model and the Corporate Report assume that individual measures of value added, made by each firm should be able to be summed to equal the aggregate value added generated within the economy during a specific period of time. As a matter of fact, both the economist's model and The Corporate Report have either ignored or dealt, in a very primitive and simple way, with the accounting issues arising in the preparation of the Value Added Statement (VAS).*

Therefore, the major theme of this article is to highlight some key accounting problems that must be overcome before the preparation of the VAS. By doing so, the VAS can be regarded as a useful accounting tool in both social and financial reporting, especially when calculating the Value Added at the national level. Otherwise, it will not be more than a cosmetic rearrangement of the profit and loss account.

1. VALUE ADDED AND ITS USES

1.1 What is Value Added?

The author does not regard it as constructive to attempt to offer a precise definition of value added. This is due to the fact that adherence to a criterion of usefulness will dictate what is meant by 'Value Added'. Consequently, value added can and should, vary in different circumstances.

However, it will be helpful just to present some definitions of value added. In a definition presented by Wood, he says that value added may be defined as a form of wealth. But not all forms of wealth are value added. Value added is not the kind of wealth that occurs as natural resources. Value added is the kind of wealth generated by the efforts and ingenuity of mankind. The word 'wealth' may have come partly from natural resources and partly from the wealth created by people, i.e., value added. Much

of the value added created is consumed soon after it is generated. But some of it is accumulated in the form of buildings and capital equipment [18, pp. 1-3].

Morley gives a similar definition. He writes that:

Value Added (or wealth creation) is a performance measure and it reports the wealth created by a business entity over a period of time [12, pp. 2].

The definition given by Morley indicates that the wealth creation which is reported on is the outcome of trading and operating, and Value Added is not affected by capital gains. For instance, a business will add value if it makes and sells some furniture but no value will be added merely because the market value of the furniture factory has increased over the year.

The definition presented by Gray and Maunders, is:

Value Added may be taken to represent, in monetary terms and for a particular period, the 'net output' of an enterprise, i.e., the difference between the total value of its output and the value of the corresponding inputs (materials and services) obtained from other enterprises [8, pp. 1].

Schreduer also brings to our attention the consensus of opinion amongst leading industrial accountants in Germany regarding the nature of Value Added. They hold the view that it is "...the additional value created by an enterprise in a specific period... is identical to the corporate share in the National Product" [17, pp. 109-122].

Another similar definition which shows a similar relationship between corporate and societal value added has been inferred by Rutherford who suggested that "Value Added... represents a firm's contribution to the wealth generated within the economy" [16, pp. 215-220].

Finally, the Accounting Standards Steering Committee (ASSC) emphasizes the creation and disposal of value Added as follows. "Value Added is the wealth the reporting entity has been able to create by its own and its employees efforts. This statement would show how value added has been used to pay those contributing to its creation" [1, pp. 49].

It should be noted that the measure of Value Added is not the effort that has gone into the activity. Value Added is determined by the satisfaction of the customer,

not by the work of the producer. For instance, if nobody wants to buy quill pens, no value added has been generated. Similarly, when a business or industry has to be subsidized to keep it going, the cost of the subsidy, along with the cost of materials and purchased services, must be deducted from the sales revenue to calculate the value added properly.

To sum up, it appears very clearly from the various definitions of Value Added that there is no one precise definition that can be universally accepted. However, there is a general agreement as regards the concept of Value Added, i.e., it measures the wealth created by a business or industry. In other words, it can be said that value added has some specific characteristics such as:

- a) Value added is a created asset
- b) There are several people who contribute towards its creation.

1.2 Value Added or Added Value?

There are those who believe that we should reverse the word order used in this research and speak of Added Value. The reason given for this belief is that in normal English usage, the adjective precedes the noun. The arguments against this idea, and in favour of retaining the order 'Value Added' are:

- a) When adjectives are past participles, they do not invariably precede the noun. We already reverse the order in such cases as capital employed, capital invested, goods shipped... etc.
- b) Empirical studies have revealed that most British companies use Value Added rather than the alternative in their Value Added Statements.
- c) VAT is well established in modern English usage and nobody would now suggest a change to 'VAT' to become 'AVT'!
- d) The Corporate Report has used the term 'Statement of Value Added' rather than the alternative.
- e) Finally, most articles dealing with such a topic have been entitled 'Value Added Statements' rather than 'Added Value Statements'.¹

1.3 Why Produce a Value Added Statement?

The Corporate Report justified publication in the following terms [1, pp. 49-50]: There is evidence that the meaning and significance of profits are widely misunderstood. The need for the VAS arises because it is 'the simplest and most immediate way of putting profit into perspective vis-a-vis the whole enterprise as a collective effort by capital, management and employees. It usefully elaborates on the profit and loss account and in time may come to be regarded as a preferable way of describing performance. From value added must come wages, dividends and interest, taxes and funds for new investment. The interdependence of each is made more apparent by a Statement of Value Added. The Statement of Value Added provides a useful measure to help in gauging performance and activity. The figure of Value Added can be a pointer to the net output of the firm and by relating other key figures (for example capital employed and employee costs), significant indicators of performance may be obtained'.

Thus, the Corporate Report indicates the main uses of the Value Added Statement. Such main uses may be summarized as follows:

a) To measure wealth created by the company

The VAS focuses attention on the success of the company to create wealth and generate national income. This would be of general interest to the various stakeholder as a firm can only sustain its payments of wages, taxes, interest and dividends by creating wealth. By the same token, the levels of those payments can be increased by creating additional wealth over what the firm has achieved previously. For the general public, it can lead to a greater awareness of the role of the business in producing goods and services and in generating income for the society.

Moreover, profits only measure the owner's share of a company's results of activities. But Value Added shows another dimension to a company's performance and may as a result put profits in a different perspective.

However, as Cox notes, [6, pp. 6-8] it must be recognized that the Value Added has the potential to be cynically interpreted as a device to divert attention away from embarrassingly high profits when discussing results with employees.

b) To emphasize stakeholder interdependence

The VAS also emphasizes the interdependence of the various stakeholder, and it highlights the interactive effect of the policy decisions by anyone of these groups on the others. It has been argued that through such an emphasis, the VAS may lead to more cohesiveness among these groups [2, pp. 152] and especially to more positive attitude by employees towards the company [8, pp. 13], [14, pp. 257].

Greater cooperation is certainly laudable but it has also been pointed out that showing the relative share received by each stakeholder may also succeed in highlighting an antagonistic relationship since it might be seen that an increased share by one group can only be accomplished by a decreased share from another [7, pp. 10-12]. Thus, competition among stakeholder can exist.

c) To condition employee expectations regarding pay and prospects

By examining the relative share of Value Added Received (over time and compared to other companies), employees may find the VAS useful in forming attitudes about the equity and fairness of their pay levels. It may also indicate a company's ability to pay higher wages in the future. For example, if higher value added were predicted for the future, the amount could be regarded as available for distribution to employees. Thus, value added information could influence the aspirations of employees when engaging in wage discussions with management [8, pp. 10-11].

Morely also argues that employees have interest in the wealth created by their company during the year, the share they receive in the form of pay as well as the proportion reinvested to strengthen the company and enhance future job security. The VAS provides this information in a straightforward and understandable way. Morely also notes that the income statement, besides being more complex than a VAS, is not particularly relevant to employees anyway [13, pp. 235]. Employees are interested in information about their own achievements and future prospects, not those of the shareholders.

d) To form a basis for incentive schemes

Finally, value added can form the basis for productivity incentive schemes. Many U.K. companies have introduced bonus plans based on increases in the ratio of value added to payroll costs or value added per employee.²

Thus, VAS has potential uses by shareholders, financial analysts, lenders and others. Moreover, it is likely to be most relevant for the general public and the company's employees. The credibility of value added information can be enhanced by including it in the annual report.

In brief, the uses of value added can be grouped into four categories [18, pp. 19]:

- 1) For Measuring Output
 - a) Basis for national accounts
 - b) Measuring business performance
 - c) Measuring the productivity of manpower and capital
- 2) For Communication
 - a) Explaining what business is about
 - b) Presenting accounting information
 - c) Basis for employee participation
- 3) For Rewarding Employees
 - a) Basis for wage and salary policy
 - b) Basis for group bonus schemes
- 4) For Business Policy
 - a) Marketing strategy
 - b) Capital investment policy
 - c) Pricing policy
 - d) Business ratios

1.4 The Economist's Model of Value Added

The illustrative example of a VAS given by the Corporate Report is shown in figure 1, section 2. Although it contains a good deal of data, it adds little to the

information content of an annual report. The only information contained in the VAS which is not disclosed elsewhere is (a) total payroll costs and (b) total input costs.

The VAS then offers a fresh perspective rather than new scenery. Why is a fresh perspective necessary? To quote from the Corporate Report:

"There is evidence that the meaning and significance of profits are widely misunderstood. The need for the VAS arises because it is 'the simplest and most immediate way of putting profit into perspective...'"

However, if the VAS is to be seen as something more than a crude attempt to divert attention from profits, it is important that the new focus of attention should have some underlying rationale.

Use of the concept of value added has, until now, been largely restricted to the field of economics, where it is employed as one of several theoretical approaches to the measurement of national income [16, pp. 215].

Ruggles and Ruggles describe the rationale for the economist's model of value added as follows:

The Value Added by a firm, i.e., the value created by the activities of the firm and its employees, can be measured by the difference between the market value of goods that have been turned out by the firm and the cost of those goods and materials purchased from other producers.

Therefore, the value added measure assesses the net contribution made by each firm to the total value of production by adding up all of those contributions. Hence, it is possible to arrive at a total for the whole economy that will represent the market value of production [15, pp. 216].

It is suggested that this rationale should also be employed in financial accounting: an individual firm's value added is an important reporting measure because it represents the firm's contribution to the wealth generated within the economy during any particular period.

In brief, individual measures of value added should be able to be summed to equal the Aggregate Value Added.

The additivity requirement and the allocation of value added can perhaps be best

illustrated by way of an example. Suppose a village baker bakes and sells during the year bread with total sales value of \$40,000. Suppose further that (a) his expenses consist of flour purchased for \$ 15,000 and wages of \$ 5,000, (b) he draws \$5,000 from the business for his own consumption and reinvests the remaining surplus, (c) the farmer who supplies the flour does no other trade, has no expenses, consumes \$ 5,000 and invests the remaining surplus, (d) there are no stocks at the beginning or end of the period, and (e) there is no taxation.

The value added by the activities of the baker and farmer is:

	<u>Baker</u>	<u>Farmer</u>	<u>Total</u>
Sales	\$ 40,000	\$ 15,000	\$ 55,000
Input costs	<u>15,000</u>	<u>-</u>	<u>15,000</u>
Value Added	<u>25,000</u>	<u>15,000</u>	<u>40,000</u>
Wages	5,000	-	5,000
Withdrawals (Consumption by the self-employed)	5,000	5,000	10,000
Reinvestment	<u>15,000</u>	<u>10,000</u>	<u>25,000</u>
	<u>25,000</u>	<u>15,000</u>	<u>40,000</u>

2. SOME CONCEPTUAL ISSUES IN CALCULATING VALUE ADDED

This section highlights several important conceptual issues which arise when calculating the value added.

2.1 Sectoral Recognition of Value Added

The rationale discussed in section 1 provides a justification for focusing attention on value added. However, it does not provide a detailed prescription for its calculation. The process by which value is generated within an advanced economy is complex, diffuse and interactive. This is due to the fact that any attempt to allocate the aggregate value added between individual enterprises raises several conceptual problems, particularly if the additive quality of the model is to be preserved. The economist's model of value

added provides little assistance in dealing with these problems.

The model of the economy, on which the notion of Value Added described in The Corporate Report is based, is a highly simplistic one. Consider for example, the payment of interest by a manufacturing company to a financial institution. In such a case, interest paid could be regarded as either an input cost to the manufacturing company, or as part of its Value Added.

Ruggles and Ruggles [15, pp. 51] treat interest as a component of value added, whereas Brooman [3, pp. 22] argues that interest paid must be treated as an input cost when it is paid to banks and financial institutions in order to avoid double counting. He also added that financial institutions are located within the production sector, in which case their distributions are allocations of value added. Similar problems arise with rent, insurance payments, bad debts and royalties.

Finally, the recognition of value added may be better discussed under two models: a factor income model and a sectoral income model.

Following is a discussion of such two models [16, pp. 217-218]:

a) Factor income model

Under such a model, interest paid, rent expense... etc. are to be treated as components of value added by manufacturing companies regardless of the nature of the recipient. Therefore, banks, finance companies, renters and similar institutions are regarded as having a redistributive rather than a productive role in the economy. This is because interest, rent, dividends and similar distributions received from other entities in the production sector cannot be regarded as giving rise to value added.

b) Sectoral income model

Under this model, interest paid to a financial company is to be regarded as an input cost, whereas interest paid to individuals is to be treated as an allocation of value added.

To illustrate the aforementioned two models, let us assume a company with sales

of \$ 100, input costs of \$20 and interest income of \$10. Also assume that the company pays out \$50 in wages and \$40 in dividends.

Under a sectoral income model, interest income would be treated as giving rise to value added:

Sales (including interest income)	\$ 110
Input costs	<u>20</u>
Value added	90
	=====
Wages	50
Dividends	<u>40</u>
	90
	=====

Under a factor income model, interest income must be excluded from value added reducing it to \$80. Perhaps, the only way round this is to allow value distributed to differ from Value Added.³

Sales	\$ 100
Input costs	<u>20</u>
Value Added	80
Value received from other parts of the production sector	<u>10</u>
Value distributed	90
	=====

2.2 Value Added on Production or Sale?

One of the fundamental issues concerning the temporal recognition of value added in a manufacturing business is how to calculate such a value added. Should it be calculated at the time of production or sale?

If measurement is to be production oriented, then the emphasis must be on the value of output for the period irrespective of whether it has been sold. This will necessitate the valuation of stocks of finished goods and work in process at market selling prices in order to place a sales value on total or gross output for the period. Also necessarily included will be the firm's own-manufactured fixed assets. The external costs

of producing this output will then be deducted to arrive at net output or value added.

In practice, however, all companies in Britain have adopted a sales orientation whereby the calculation of value added is linked to conventional accounting principles of income measurement.⁴

Value added is thus sales income less external costs relating to sales. Consistent with the 'prudence' and 'realization' principles, stocks are measured at the lower cost and net realizable value. However, this approach gives rise to problems where, consistent with The Corporate Report, employee costs are treated as a distribution of value added on a production basis, i.e., the total amounts payable are reported, whilst the measurement of value added is carried out on a sales basis [1, pp. 50]!

Gray and Maunders [8, pp. 27-28] point out that calculating value added on a sales basis and showing total employee costs for the period as a distribution of value added (as recommended in The Corporate Report and practiced by U.K. Companies) is conceptually inconsistent in that the latter is reported on a production basis.

Thus, if the labour component of unsold inventory is to be shown as a distribution of value added, then the computation of value added itself should, likewise, consider unsold inventory, i.e., for consistency it should be calculated on a production basis.²⁶ Such an approach is common among German firms [11, pp. 31-56] and is adopted by the Egyptian Uniform Accounting System.

Meek and Gray argue that the difference between the two approaches is unlikely to be material despite such a conceptual inconsistency [9, pp. 73-81].

However, Cox points out that a statement on these lines should certainly not be referred to as added value. He added that companies should describe such a statement as what it is, namely "A Statement of Earnings and Their Distribution" [5, pp. 145-146]. To be consistent, value added should be recognized either at the point of production or on sale. Systematic application would require that other period flows giving rise to value added, for example interest, should also be apportioned between sales and closing inventory [16, pp. 219].

Figure 1. A Manufacturing Company Statement of Value Added

	Year to 31 st December 1974 £ m	Preceding Year £ m
Turnover	103.9	102.3
Bought-in materials and services	<u>67.6</u>	<u>72.1</u>
Value Added	<u>36.3</u>	<u>30.2</u>
Applied the following way		
To pay employees wages, pensions and fringe benefits	25.90	17.3
To pay providers of capital		
Interest loans	0.8	0.6
Dividends to shareholders	<u>0.9</u>	<u>0.9</u>
	1.7	1.5
To pay government corporation tax payable	3.9	3.1
To provide for maintenance and expansion of assets		
Depreciation	2.0	1.8
Retained profits	<u>2.8</u>	<u>6.5</u>
	<u>4.8</u>	<u>8.3</u>
Value Added	£ 36.3	£ 30.2
	=====	=====

SOURCE: Accounting Standards Steering Committee, *The Corporate Report*, ASSC, London, 1975, pp. 50.

Finally, as regards the choice of approach, the measurement of value added on a production basis would seem to offer a greater number of potential uses. Moreover, current market values have been advocated for many years by accounting theorists on the grounds of improved decision relevance to investors and other users [8, pp. 28].

2.3 Gross or Net Value Added (The Treatment of Depreciation)

The Corporate Report does not deduct depreciation in calculating value added (i.e., depreciation is included in the value added amount) and shows it as an item

reinvested in the business. This is known as the 'gross' method of calculating value added. This means that depreciation has been treated as a distribution of value added not as an external cost.

In a most recent survey, it has been indicated that 80 percent of U.K. companies calculate their value added on a gross basis [2, pp. 156].

Calculating value added on a gross basis is consistent with the idea that the reinvestment of used up productive physical capacity is necessary for a business to continue as a going concern. It has an advantage in that the value added figure is unaffected by the depreciation method used by the firm. As a result, comparability and consistency are enhanced and the subjectivity involved in determining the depreciation amount is removed from the value added number [9, pp. 79].

However, the treatment of depreciation as an allocation of value added is to be regarded as a reversion to a cash flow basis of accounting. This, of course, is to be considered a dramatic contrast with the conventional profit and loss account treatment of depreciation and would seem to emphasize the significance of management's role in the allocation of resources.

The alternative is the deduction of depreciation along with other 'materials and services used' to calculate 'net' value added. There are several arguments favouring this approach.

First, the most persuasive argument is that the fixed assets, whose costs are depreciated, are to be purchased from outside the stakeholder group just as materials and services are.

Second, depreciation represents an input cost and not treating it as such is not only inconsistent with how the other inputs are treated but also overstates the wealth created during the period.

Third, distributing 100 percent of the firm's gross value added would eventually deplete its capital base (thus turning the physical capital argument favouring the gross method on its head!).

Finally, the net method avoids the peculiar impression that depreciation is a member of the stakeholder team [9, pp. 79].

Brooman supports the calculation of the value added on a net basis. He writes:

"But plant and machinery, though not wholly used up, will be partly worn out in production, and its wear and tear should therefore be treated as an input on exactly the same footing as the input of materials and deducted accordingly from the value of output" [3, pp. 23].

Connock adds that the treatment of depreciation as an input cost accords with the view of depreciation taken in conventional profit calculations, and with the treatment in Yugoslav reports [4, pp. 42-44].

Finally, Reichman and Lauge [10, pp. 17-22] defended the calculation of value added on a net basis for the following reasons:

a) The Value Added Statement as part of social reporting should give details of the income that has been attained and is likely to be attained in the future by the coalition members. It follows, therefore, that one should basically proceed from a Net Value Added and consequently from a figure that has been reduced by depreciation. Expenditure for capital goods would have to be taken into consideration as bought-in goods from other companies and feature as deductible items. In distributive Value Added Statements, in view of the accrual concept, depreciation should be included as a bought-in cost.

b) It remains to be seen whether the problem of allocating the costs of an asset to the estimated number of useful periods and of possible biases in the periodical depreciation for balance sheet reasons and/or tax purposes could be so serious. It is essential first of all to differentiate between the allocation problem and 'accounting policy':

- 1) Excessive depreciation resulting from underestimating the expected useful life of an asset should be regarded as forecasting errors and consequently as unavoidable.

- 2) The use of accelerated depreciation methods is to be the responsibility of the management which prefers the adoption of such an accounting policy. In fact, the sum of depreciation charges of several accounting

periods must tally with the historical costs so that higher depreciation charges during the early years of an asset's life are to be balanced by lesser amounts in later years.

Excessive depreciation costs of a plant are, therefore, compensated for in the course of time. This means that there would be no absolute reduction in profit, only a temporary deferment. This also applies in principle to accelerated depreciation for that purpose.

2.4 Non-Operating Items: Are They Value Added?

All companies of any size will find that they will have some revenues resulting from non-trading activities. These non-trading credits affect the overall fortunes of the firm but do not arise from normal production activities.

These non-trading credits may include income from associated companies, receipts of investment income, rents, hire fees, royalties, interest, gains and losses on the sale of fixed assets or investments, and foreign currency translation gains and losses.

Firstly, it must be decided what are the possible treatments for such items in the Value Added Statement and then it must be decided which is the best.

Unfortunately, 'The Corporate Report' has ignored such a problem entirely. However, four ways (alternatives) are possible in order to incorporate a non-trading credit in the VAS [12, pp. 64]:

- a) Assimilate the credit into an existing heading. For example, it could be included with turnover, or deducted from bought-ins, or deducted from interest paid.
- b) Show the credit separately as an addition to value added.
- c) Show the credit separately as a deduction from the applications of value added.
- d) Omit the credit entirely from the Value Added Statement. This will oblige the company to supplement its statement with a reconciliation showing why

retained profit for the year in the VAS does not equal the figure shown in the income statement.

2.4.1 Income from Associated Companies

Some holding companies use method (b) when preparing their VAS. Hence, the VAS starts as follows:

Sales	XX
<u>Less</u> bought-in items	<u>XX</u>
Value added by the company	XX
<u>Add</u> the company's share of the profit of associated companies	<u>XX</u>
Total Value added available for sharing or retention	XX ===

This treatment makes clear what is happening and it enables the construction of accurate and relevant ratios. For example, if we wish to measure the productivity of the company's workers using value added per employee, then we should use the value added by the company not that available for sharing or retention. This is due to the fact that we want to evaluate the performance of the workers and this can be achieved only by looking at their output and not by looking at their output plus part of the output of associates.

Moreover, the above treatment avoids double-counting at the level of the economy as a whole due to the fact that such income has been reported as value added in the associate company's own Value Added Statement.

2.4.2 Receipts of Investment Income, Rents, Hire Fees, Royalties, Interest

These items may be assimilated into sales if they are trivial or if they are resulting from the sale of operating services, e.g., plant hire. Alternatively, they may be set off against bought-in items as done by some companies.

However, such a treatment involves a trivial amount of double-counting since the payer of the investment income will usually be treating it as an application of his value added.

In contrast, if these receipts are material, they should be separately disclosed and dealt with by method (b) as was done with associated companies. This will, in effect, exclude these receipts from 'value added by the company' but will include them in 'value added available for application' which reflects the facts of the situation. This separate disclosure will increase the chance that ratios will be fairly constructed since some ratios should be based on value added by the company and some on value added available depending on the purpose in mind.

However, it might be argued that method (d) would still be better. Perhaps we should exclude all these sorts of investment income entirely. This might be done on the grounds that this income is a reward for past outlays of capital and that therefore none of it should go to labour (if labour were to be remunerated by some formula related to value added available). Such an argument seems irrelevant because a labour incentive scheme should be based on 'Value Added by the Company' and not on 'Value Added available'.

2.4.3 Extraordinary Income and Gains

A multitude of different items may arise here, and the best treatment depends on the nature of the item. For example, profit and loss accounts of shipping company very often show realized capital gains or losses on sales of vessels. In my opinion, such gains are not really Value Added by the Company and should be excluded therefrom. If such gains are to be included in the 'Value Added by the company', seamen can ask for their wage increases by saying, 'Please may we have our share of profits on ship sales'. Clearly, the productivity of seamen is not measured by ship-dealing profits.

It is noteworthy to stress that unrealized profits arising on revaluation will be entirely excluded from the VAS and will have no effect on value added or ratios based thereon.

Of course, foreign currency translation gains and losses are to be distinguished from exchange differences. The former category arises out of the accounting process of consolidation and not from operations, but in contrast exchange differences arise from physical exchange of foreign currencies. Therefore, exchange differences constitute an integral part of the firm's trading activities and would need to be included in the calculation of value added through separate disclosure that may be warranted by their size. Moreover, it would be irrelevant to label such a category as extraneous.

To sum up, the emphasis of our argument is that items which can not be directly related to production activities should be separately categorized below the calculation of Value Added.

The point we have now reached is to recommend that the opening part of the Value Added Statement should be as follows:

Sales	XX
<u>Less</u> bought-in materials and	
services and depreciation	<u>XX</u>
(Net) Value Added by the Company	XX

Add:

The company's share of the profit of
associated companies

XX

Investment income

XX

Extraordinary profit

XX

Value Added available for sharing
or retention

XX

=====

2.5 Value Added and the Public (Government) Sector

The amount of value added distributed to the government may be limited to corporate income taxes or it may include social security and withholding taxes on

employees and sales and excise taxes paid and/or collected.

Most U.K. companies treat employee - related taxes, along with pay and pension contributions, as a distribution to employees [2, pp. 156]. Thus, employee - related taxes are seen as a benefit enjoyed by employees, paid by the company to the government on their behalf.

Sales and excise taxes paid on materials and services purchased from the outside can be considered as part of the cost of these materials and services and thus deducted when computing value added.

Alternatively, such sales and excise taxes may be regarded as part of value added and subsequently shown as distribution to the government [9, pp. 79]. Similarly, sales and excise taxes collected on products sold may be excluded from sales revenues (and therefore excluded from value added), or they may be included in the value of a firm's output and treated as a distribution to the government on the VAS.

Excluding sales and excise taxes from value added is consistent with the idea that the government sector has played no role in the wealth created by the firm. By excluding these taxes from the value added amount, only corporate income taxes would be left as a distribution to the government.

Including these taxes as part of the value added amount and, correspondingly, as a distribution to the government represents what McLeay terms the 'government as a public sector' view [11, pp. 31-56]. Here, the government is seen as contributing to the firm's success in creating wealth just as capital and labour do.

However, the prevailing attitude in the U.S.A on this philosophical point is probably against the 'government as a public sector', suggesting that sales and excise taxes should be excluded from value added amount [9, pp. 79].

The extent to which taxes are shifted between sectors would be reflected in the VAS drawn up to incorporate economic values [16, pp. 220]. Thus, if the burden of corporate tax was shifted to consumers, it might be deducted from turnover (on the same footing as VAT) due to the fact that the company has merely acted as an agent for the collection of the tax.

A further difficulty is that part of the expenditure which governments make from tax revenue represents the provision of inputs to the production sector free of charge, or at below market prices. This will result in losses to the government sector which must be subsidized from public funds.

Therefore, Rutherford sees that any tax borne by the company which is used by the government to provide inputs to the company should, in principle, be treated as an input cost rather than as an allocation of value added [16, pp. 220]. On the other hand, taxes which are borne by companies, for example, stamp duty, rates... etc., and for which revenue does not reflect corresponding benefit, constitute an allocation of value added.

2.6 Attachment of Flows

Finally, the VAS goes further than the calculation and allocation of value added. It also 'attaches' allocations to particular classes of recipients. Difficulties arise in the case of retained profits.⁶

The model upon which the VAS is based treats value added as created by the production sector and allocated amongst the consumption sector. Since the company itself is in the production sector, can it 'receive' some of its own value added?

The law and classical business finance regard retained profits as 'belonging' to shareholders, whereas The Corporate Report does not attach them to 'providers of capital' but, by implication, to the company itself, to be used 'to provide for maintenance and expansion of assets'.

3. SUMMARY AND CONCLUSIONS

This paper is an attempt to highlight the Value Added Statement. In my opinion, such a topic is more or less forgotten especially by accountants despite the usefulness of the VAS as an accounting tool in both social and financial reporting.

In section 1, the following topics have been addressed.

a) What is Value Added?

- b) Value Added or Added Value?
- c) Why produce a Value Added Statement?
- d) The rationale for Value Added Statement;
 - 1) The Economist's Model
 - 2) The Corporate Report

Section 2, highlighted some major conceptual issues that arise on the preparation of the VAS.

Among such important issues are:

- a) The point and timing of recognition of value added:
 - 1) Factor income model
 - 2) Sectoral income model
- b) Value added on production or sale?
- c) Gross or net value added (the treatment of depreciation)
- d) Non-operating items: are they value added?
- e) Value added and the government sector
- f) Attachment of flows: retained profits and to whom must they be attached?

As a matter of fact, both the economist's model and the Corporate Report have either ignored or dealt, in a very primitive and simple way, with the above mentioned conceptual problems arising in the preparation of the VAS.

Therefore, the major theme of this paper has been to highlight the aforementioned accounting issues that must be overcome before the preparation of the VAS. By doing so, the VAS can be regarded as a useful accounting tool in both social and financial reporting, especially when calculating the value added at the national level. Otherwise, it will not be more than a cosmetic rearrangement of the profit and loss account.

NOTES

- ¹ You can verify that by looking at the titles of articles in this research.
- ² Value Added is seen as superior to sales as a measure of output since sales revenue includes the value of work done outside the firm, whereas Value Added excludes it. See for example, Gray and Maunders, pp. 13.
- ³ It is noteworthy to mention that the Egyptian Unified Accounting System applied to public sector companies has adopted the factor income model when calculating the Value Added.
- ⁴ In this regard, review the major survey conducted by 'Gray on a sample of 620 companies': Gray S., pp. 39-63.
- ⁵ It is noteworthy to mention that the Egyptian Unified Accounting System calculates the Value Added on a production basis.
- ⁶ And possibly in the case of taxation.

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BUDGETARY TRADE-OFFS IN ETHIOPIA, 1965 - 1993

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Abstract: *This paper surveys the pattern of Ethiopian public finance in the period 1965/66-1992/93 with special emphasis on the government expenditures. The trends of security, education, and health expenditures as well as spending on economic services are examined. Then simple correlation, linear regression, and estimation of vulnerability indices and expenditure elasticities are used to test for the existence of budgetary trade-offs between the various expenditure categories. The results suggest that some trade-offs existed in the period studied, particularly the trade-off between security spending and human capital formation (using the spending on health and education as proxies). This crowding-out of human resource development by security spending was more obvious during the Derg regime (1974/75-1990/91).*

1. INTRODUCTION

In the last two decades, the Ethiopian economy has witnessed major transformations. On the one hand, the long Imperial feudal economy came to an end in 1974. Since then the economy was put under the control of the state with considerable socialist transformations. The development of the embryonic private sector was curtailed and the whole production and distribution processes were mainly carried out by the public sector. With the downfall of the Derg regime in May 1991, however, the newly established Transitional Government of Ethiopia reversed the economic policy in the country. It has envisaged the market-led forces to be the determinants of economic activity with the private sector as the engine of growth and development. On the other hand, the long-lived civil war in Ethiopia also came to an end in 1991 with the independence of Eritrea.

These transformations had an obvious impact on the process of socio-economic development in Ethiopia. The three Ethiopian regimes have had different visions for the process of development and particularly on the development of human resources. This was

reflected in the governments' commitment to human capital formation which can be seen from the budgetary allocations of these governments. In particular, the spending on health and education is considered by many development economists as good proxy for the development of human resources and governments' commitment to human capital formation.

The main aim of this study is to examine the trade-offs between various budgetary allocations in the period 1965-1993, with particular emphasis on the commitment of the three regimes to human resource development by examining budgetary allocations and the existence and extent of budgetary trade-offs. Such kind of studies will help to judge the declared objectives of governments against their actual commitments to the development of particular economic and social sectors.

The study is organized as follows. First the next section surveys the literature on the existence of budgetary trade-offs in LDCs. The patterns of Ethiopian public finance in the period 1965-1993 will be examined with the aim of distinguishing particular patterns for the three Ethiopian governments. Then special emphasis is given to the trends of security expenditure and spending on health and education as proxies for the governments' commitment to the development of human resources in the country. The paper lays down different tests for the existence of budgetary trade-offs and applies them to the Ethiopian budget figures for the period between 1965/66 and 1992/93, and finally the study summarizes its findings and conclusions are drawn.

2. PREVIOUS STUDIES ON BUDGETARY TRADE-OFFS

There is a vast literature on budgetary trade-offs in LDCs. The growth of interest in this subject did not see the development of any consensus, however. Different countries at different stages of development have different experiences. Moreover, a considerable number of studies have focused on one or more items of the budget according to the aims of the research. This is particularly true in most of the studies which tried to investigate the trade-offs between the development of human resources and military spending. For example, some studies concluded that there exists a negative trade-off between education and military

spending in LDCs (e.g., [3, pp. 37-48] and [7, pp. 161-164]). Other studies concluded that military spending did not bear negative consequences on education spending (e.g., Verner's [16, pp. 77-92] study of Latin American countries over 1948-79 period).¹

Harris et. al., [6, pp. 165-177] used several complementary methods to test for the existence and strength of military-education/health trade-offs in a large number of LDCs. Cross-sectional analysis of government expenditure did not confirm that countries which were low military spenders were high spenders on education/health; and that military expenditures were no less vulnerable to overall budget cuts, nor more likely to gain from budget increases than education and health.² Finally, their longitudinal regressions for twelve Asian countries over the 1967-83 period revealed that trade-offs between military expenditure and education/health were rare. Indeed, the discrepancies among these studies reflect the differences in their data bases, country samples and research designs or methods. Most of the tests that Harris et. al. [6, pp. 165-177] developed were again used by Mohammed [8] to verify for the existence of such trade-offs in the Sudan. His results suggest that during the period 1963-1987 military spending crowded-out spending on health and education.

Apart from the studies which focused mainly on budgetary trade-offs, many studies examined these trade-offs in a wider framework. The emphasis of these studies was on the economic impact of military spending on the economies of LDCs. The crowding out of spending on human resources was envisaged as one of the main indirect conduits through which military spending affects economic growth and development. Deger [3, pp. 37-48], Mohammed [8], and Mohammed [9, pp. 95-99] are examples of these studies.³ Deger [3, pp. 37-48] examined the interactions among defence, savings, human resources and growth in a framework of an interdependent model. She examined the possible trade-offs between defence and education spending as public goods. She asserted that public education spending as a proportion of national product is a crucial determinant of human capital formation. Moreover, Deger claimed that a proper evaluation of this nexus can only be understood in a simultaneous-equations model that takes into account these interdependencies. Then, she estimated a four-equation model, with one equation for each of growth, savings, military spending and the ratio of public education spending to GDP, for the previous sample and time period. The results confirmed the negative impact of defence expenditure on public

education spending and that its human-resource costs were exceptionally high.⁴ Similar findings were reached by Mohammed [8] for a sample of thirteen Sub-Sahara African countries (see also [2]).

Mohammed [10] studied the relationship between military spending and education spending in Ethiopia for the period 1967-1985. This was examined by a five-equation simultaneous model (one each for growth, education spending, investment, balance of payments and military spending). The multiplier of military spending/education spending (both as ratios of GDP) was not statistically significant, although the growth/military spending and balance of payments/military spending multipliers were both negative and statistically significant. The limitations of that study were the application of the model to a short time period (19 years), the exclusion of health spending, the use of military spending (not total security spending), and the employment of regression as the sole technique to test for trade-offs. These limitations are cared for in this study with the objective of better understanding of the budgetary trade-offs in Ethiopia.

3. PATTERNS OF PUBLIC FINANCE IN ETHIOPIA

Total government revenue in Ethiopia (both in current and constant prices) fluctuated during the period 1965/66-1992/93. In money terms revenues increased from ETB 473.3 million in 1965/66 to ETB 5,446.8 million in 1988/89 and then started to decline until they reached ETB 2,640.9 million in 1991/92. The trend was reversed in 1992/93 when total government revenues jumped to ETB 4,199.6 million (see Table 2 below). The rate of increase in constant 1987 prices was lower because of the rising trend of the deflator. For the period between 1965/66 and 1992/93 total revenues, in real terms, increased from ETB 1,637.7 million to ETB 2,315.1 million; an increase of about only 41.4% for the whole period.

The composition of revenue exhibits a heavy reliance on non-tax revenues with the major contribution of taxes (both direct and indirect). The average share of direct tax in total government revenue was about 24.3% in the period 1965/66-1992/93; while the average

percentage share of indirect taxes was about 21% in the same period. For thirteen years in the period 1965/66-1992/93 the contribution of non-tax revenues was above 50% of total government revenues, and slightly less than 50% for the rest of the years. The reduction in tax yields in the recent years resulted mainly from the erosion of tax base and deterioration in the system of tax administration (see Table 1).⁵

Table 1. The Growth of Tax Revenue, 1950-1991

Period	Average Annual Rate of Growth of Real Tax Revenue	Tax Revenue/ GDP at Current Factor Cost	Tax Revenue/ Total Expenditures
1950-1960	8.45	5.91	86.46
1961-1974	7.52	8.73	66.84
1975-1989	7.22	18.19	52.83
1975-1990	5.96	18.06	51.72
1975-1991	4.90	17.25	50.68

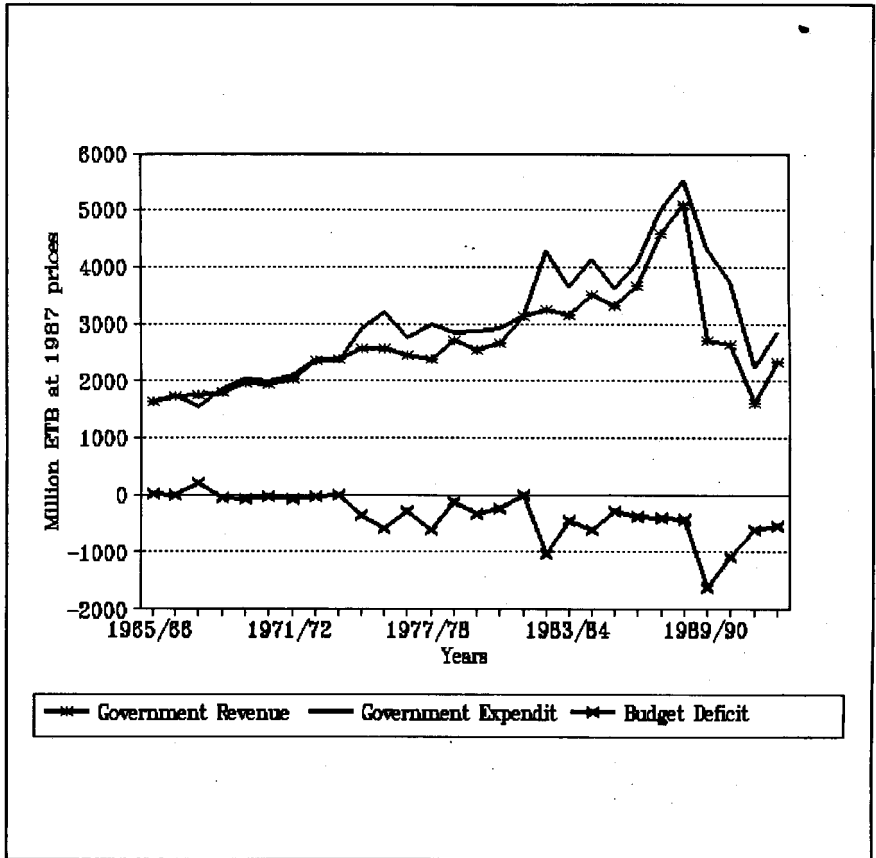
SOURCES: [13, pp. 73-100], Table 7, and own calculations.

Although total government revenues in constant prices experienced a rising trend over the period 1965/66-1992/93, this was not enough to match the rising trend of government expenditure. The government budget recorded surplus during the 1950-1955 period. Then the budget was balanced between 1955 and 1965, and small deficits and surpluses (e.g., 1965/66, 1967/68, and 1973/74) were observed in the period between 1965/66 and 1974/75. Nevertheless, the government budget had consistently been in large deficits since 1975/76 until 1992/93. The main reason was the higher growth of expenditures than revenues (see Figure 1).

In monetary terms, the total government expenditure increased from ETB 470.6 million in 1965/66 to ETB 1,048.9 million in 1974/75 and finally it reached ETB 5,176 million in 1992/93. The sharp increase in the government expenditure in the period 1974-1991 can be explained by the great expansion in the government bureaucracy, the launching of a series of expensive campaigns (e.g., National Development Through Cooperation, Enlightenment and Work), the literacy and villagization campaigns, and most importantly the wars in the Ogaden and Eritrea. During the pre-1975 period the ratio of government

expenditure to GDP was low and did not exceed 20%. Nevertheless, in the post-1975 period the ratio increased remarkably, and reached 45% of GDP in the late 1980s.⁶

Figure 1. Government Finance in Ethiopia, 1965/66-1992/93



SOURCES: Ministry of Finance.

Table 2. Ethiopian Government Finance, 1965/66-1992/93

Year	1	2	3	4	5	6
1965/66	473.3	1637.7	470.6	1628.4	19.1	23.7
1966/67	489.3	1722.9	493.3	1737.0	20.8	24.3
1967/68	499.3	1745.8	542.2	1895.8	20.0	27.0
1968/69	514.2	1797.9	531.6	1858.7	24.1	26.2
1969/70	565.4	1949.7	585.2	2018.0	24.1	27.0
1970/71	620.1	1937.8	631.5	1973.4	26.4	27.4
1971/72	650.1	2031.6	671.7	2099.1	27.1	29.5
1972/73	705.6	2352.0	716.2	2387.3	31.0	33.1
1973/74	778.9	2360.3	777.4	2355.8	24.6	27.2
1974/75	921.9	2560.8	1048.9	2913.6	24.9	27.3
1975/76	980.1	2579.2	1210.5	3185.5	22.3	22.3
1976/77	1198.9	2446.7	1344.4	2743.7	20.7	17.9
1977/78	1348.7	2366.1	1696.5	2976.3	19.0	15.7
1978/79	1761.8	2710.5	1846.0	2840.0	22.8	19.5
1979/80	1907.9	2543.9	2157.9	2877.2	24.3	23.8
1980/81	2092.2	2648.4	2296.3	2906.7	27.9	22.1
1981/82	2633.1	3134.6	2649.7	3154.4	30.1	21.1
1982/83	2877.9	3233.6	3807.8	4278.4	27.8	20.4
1983/84	2785.2	3165.0	3198.1	3634.2	28.6	21.6
1984/85	3331.5	3506.8	3924.6	4131.2	29.6	22.5
1985/86	3794.0	3328.1	4131.1	3623.8	26.4	19.1
1986/87	3741.8	3668.4	4137.1	4056.0	31.0	21.3
1987/88	4576.1	4576.1	4997.5	4997.5	29.8	21.2
1988/89	5446.8	5090.5	5912.3	5525.5	27.2	20.1
1989/90	3104.5	2699.6	4976.3	4327.2	29.4	24.7
1990/91	3179.0	2629.5	4503.2	3724.7	29.2	28.1
1991/92	2640.9	1609.3	3654.5	2227.0	28.7	24.7
1992/93	4199.6	2315.1	5276.4	2853.6	21.8	23.2

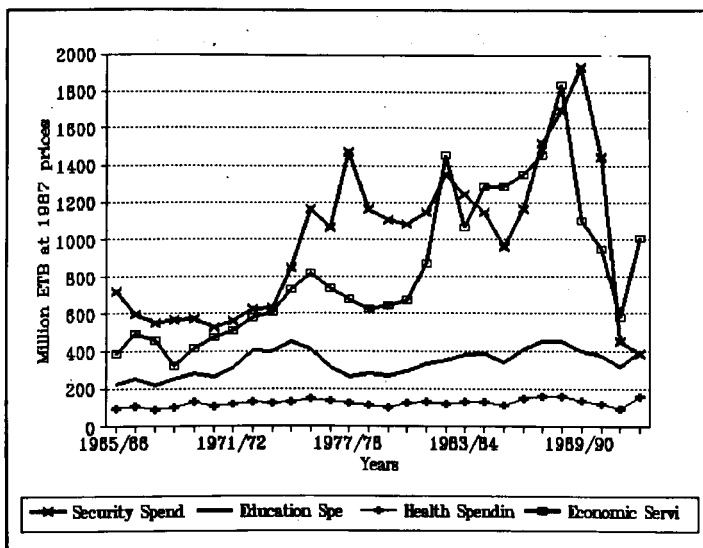
1. Total revenues in market prices (in million ETB).
2. Total revenues in constant 1987 prices (in million ETB).
3. Total Expenditure in market prices (in million ETB).
4. Total Expenditure in constant 1987 prices (in million ETB).
5. % share of direct tax in total government revenues.
6. % share of indirect tax in total government revenues.

SOURCES: Compiled from data obtained from the Ministry of Finance (MOF) and Ministry of Planning and Economic Development (MOPED).

4. TRENDS OF SECURITY, ECONOMIC SERVICES, AND EDUCATION/HEALTH EXPENDITURES

Table 3 shows the breakdown of total government expenditure into the various expenditure items. The share of security expenditure was very high in 1965/66 and accounted for 44.2% of total government expenditure. Nevertheless, the share of security expenditure in total government spending started to fall in the subsequent years until it reached 26.8% in 1973/74. A sharp increase took place in 1974/75 when the ratio was about 30%. Big increases were also noticed in the following years until it peaked in 1977/78 when the share of security spending in government expenditure was almost 50%. Gradual reductions in the share of security spending in total government spending took place in the period 1978/79-1985/86 until it reached 26.5% at the end of that period. The trend was reversed in the subsequent years until it peaked again in 1989/90 when it was about 44.7%. Sharp reductions in the security outlays were carried by the present government and in

Figure 2. Trends of Real Term Security, Education, Health and Economic Services Expenditures, 1965/66-1992/93



SOURCE: Ministry of Finance.

Table 3. Breakdown of Ethiopian Government Expenditure into Various Spending Items, 1965/66-1992/93

Year	1	2	3	4	5	6
1965/66	207.9	44.2	64.0	13.6	27.5	5.8
1966/67	169.2	34.3	70.8	14.4	30.5	6.2
1967/68	156.4	28.8	61.1	11.3	23.9	4.4
1968/69	161.9	30.5	71.1	13.5	27.9	5.2
1969/70	167.2	28.6	80.7	13.8	36.9	6.3
1970/71	168.7	26.7	84.3	13.3	33.2	5.3
1971/72	178.9	26.6	98.8	14.4	37.0	5.5
1972/73	186.8	26.1	120.7	16.9	38.8	5.4
1973/74	208.7	26.8	131.8	17.0	40.6	5.2
1974/75	305.4	29.1	161.5	15.4	46.4	4.4
1975/76	443.3	36.6	153.9	12.7	54.7	4.5
1976/77	522.0	38.8	153.8	11.4	66.3	4.9
1977/78	839.7	49.5	149.0	8.8	70.3	4.1
1978/79	755.3	40.9	183.2	9.9	71.6	3.9
1979/80	830.0	38.5	200.6	9.3	74.7	3.5
1980/81	855.7	37.3	228.3	9.9	96.6	4.2
1981/82	963.7	36.4	282.0	10.6	109.5	4.1
1982/83	1203.3	31.6	312.4	8.2	105.2	2.8
1983/84	1100.0	34.4	333.8	10.4	110.6	3.5
1984/85	1092.2	27.8	369.8	9.4	121.7	3.1
1985/86	1095.3	26.5	386.1	9.3	125.6	3.0
1986/87	1184.5	28.6	419.0	10.1	147.3	3.6
1987/88	1522.8	30.1	447.4	9.0	154.9	3.1
1988/89	1814.1	30.7	484.8	8.2	169.7	2.9
1989/90	2224.7	44.7	454.0	9.1	151.6	3.0
1990/91	1750.1	38.9	454.8	10.1	137.0	3.0
1991/92	737.3	20.2	510.5	14.0	155.2	4.2
1992/93	697.0	13.5	713.5	13.8	279.2	5.7

1. Security expenditure at current prices (ETB million).
2. % share of security expenditure in total government expenditure.
3. Education expenditure at current prices (ETB million).
4. % share of education expenditure in total government expenditure.
5. Health expenditure at current prices (ETB million).
6. % share of health expenditure in total government expenditure.

SOURCES: World Bank World Tables, Ministry of Finance (MOF) and Ministry of Planning and Economic Development (MOPEDE).

1992/93 a minimum record of 13.5% was reached. The trend of security expenditure, in constant prices, was very similar to the trend of its share in government spending (see Figure 2 above).

The shares of both education and health in total government expenditure have changed in a relatively modest fashion over the same period compared to that of security expenditure. The share of education has shown a steady rise in the first eight years, finally reaching 17% in 1972/73 from its initial level of about 14%. In the subsequent years, however, the share of education began to fall until it reached 9% in 1977/78, after that the trend was relatively stable between 9% and 10% of TGE. Such a passive trend of education expenditure continued until the fall of the Derg regime. Finally, in the first years of the Transitional Government of Ethiopia, it has shown sharp increases, when a record of about 14% was observed.

Although the share of health expenditure appears to be much more stable than that of education, the overall trend has been to fall until it finally reached 3% in 1982/83. However, this record of 3% prevailed until 1990/91, then a modest rise in the last two years of the period is noticed. The most striking observation one can make from Table 3 is the fact that the shares of education/health expenditures in the total government expenditure in 1992/93 are the same as that in 1965/66, 14% for education and 6% for health. It is evident from Figure 2 that the trend of real expenditures on education/health is similar to that of their relative spending.

Figure 2 also shows that the overall trend of the share of economic services in the total expenditure was, first, to rise until it peaked in 1976/77, reaching about 27%. Then, after a sharp decline in the subsequent years, the trend was again reversed until it reached a record of 36% in 1985/86. Recently, however, the share of economic services has fallen except that a record of a little more than one-third of the total expenditure was recorded in 1992/93.

5. TRADE-OFFS BETWEEN SECURITY SPENDING AND THE DEVELOPMENT OF HUMAN RESOURCES

Mohammed [8] points to the trade-off between military spending and government spending on health and education as an important conduit through which military spending affects human capital formation and consequently economic growth and development. This section uses a number of methods to test for the existence and strength of budgetary trade-offs. The analysis, however, faces three main problems. Firstly, in Ethiopia, although aggregate data on government budget do exist, there is some doubt about the reliability of the data that exist. This is particularly true for data on security spending.⁷ Secondly, the categorization of expenditure into particular items is not very accurate. Thirdly, "since government expenditure increases from year to year, it is an increasing rather than zero sum game in which faster or lower growth of expenditure in the different categories is the norm" [6, pp. 165]. Therefore, the identification of such trade-offs might not be straightforward.

The relationship between the three variables is tested initially by means of simple correlations. The correlation coefficient between security and education's spending shares was negative (-0.44), and the coefficient between health and security share was negative (-0.22) for the period 1965/66-1992/93. Moreover, the correlation coefficient between security share and the share of economic services was also negative (-0.39). However, the correlation between education and health shares was positive and high (0.82) over the same period. This suggests some trade-off between security spending and spending on health, education and economic services, but it is very difficult to draw a strong conclusion about the existence of a crowding-out from these simple correlations, although they can serve as good indicators for the existence of trade-offs.

Moreover, in the period 1965/66-1992/93, average security spending was about three-fold of education spending, more than eight-fold of health spending, and more than two-fold of the combined spending on health and education. Figure 2 above shows in this period the government spending on security surpasses the combined spending on health and education.

The second test for the budgetary trade-offs employs multiple regression analysis.

It tests for the influence over time of security spending as a proportion of total government expenditure (TGE) on education, health and economic services expenditure, all as proportions of TGE. This regression analysis treats the ratio of education (health or economic services) expenditure to TGE as the dependent variable; security spending share in TGE as the independent variable; and the annual average growth rate of GDP as a control variable. Economic growth also measures the level of the growing resources available to the public sector. Moreover, the effect of security expenditure on the combined spending on health and education is also investigated. Thus we have;

$$\frac{E}{TGE} = \alpha_0 + \alpha_1 \frac{S}{TGE} + \alpha_2 g + \epsilon_1 .$$

$$\frac{H}{TGE} = \beta_0 + \beta_1 \frac{S}{TGE} + \beta_2 g + \epsilon_2 .$$

$$\frac{C}{TGE} = \gamma_0 + \gamma_1 \frac{S}{TGE} + \gamma_2 g + \epsilon_3 .$$

$$\frac{HR}{TGE} = \rho_0 + \rho_1 \frac{S}{TGE} + \rho_2 g + \epsilon_4 .$$

where E represents education expenditure, H represents health expenditure, S represents security expenditure, C represents spending on economic services, HR stands for the combined spending on education and health, TGE stands for total government expenditure, g is the annual average growth rate of GDP, and ϵ_i constitutes the disturbance term. The coefficient of the security spending, α_1 (β_1 , γ_1 or ρ_1), indicates the direction and magnitude of the trade-off between security and education (health or economic services) expenditure.

The above four equations assume that the trade-off is constant (linear). Verner [16, pp. 77-92], however, points to the possibility of an increasing larger (non-linear) trade-off as the share of security expenditure in TGE increases. He suggests the use of both linear

and non-linear (quadratic) functions to determine the form of the trade-offs. Both methods (linear and non-linear) were tried and the linear regression did better than the non-linear regression. The OLS estimation of the four linear equations, however, reveals the presence of serial correlation. Therefore, the equations are estimated by Cochrane-Orcutt iterative procedure, AR(1).⁸ The results of the estimation are summarized in Table 4.

Close analysis of the results contained in Table 4 points to the following remarks. First, economic growth did not play an important role in deciding the level of budgetary allocations for various sectors. The rate of economic growth had a positive and statistically significant effect on the spending on economic services only. In the rest of the equations its effect is statistically insignificant. The current levels of government spending on many categories were rigid in the downward direction because it is likely that there will be some hangover from previous expenditures and commitments to various programmes, or simply because of a ratchet effect as in Peacock and Wiseman [14]. Second, the intercepts of all the equations were statistically significant and their magnitude corresponds with our earlier analysis of the trends of these four sectors. Finally, the effects of security spending on education spending and the combined spending on health and education was negative and statistically significant. However, its effect on health spending was negative but not statistically significant and its effect on spending on economic services was negligible and statistically insignificant as well. The results of this test, however, suggest that trade-offs between security spending and education spending (and the combined spending on education and health) took place in the period between 1965/66 and 1992/93, although the evidence on the existence of trade-offs between security spending and health (and economic services) is not strong enough to draw any conclusion.

The third method to test for the existence of budgetary trade-offs was suggested by Harris et. al. [6, pp. 165-177].⁹ The test measures the vulnerability of a sector to government expenditure decline and the elasticity of the sector to government expenditure increases. In the period 1965/66-1992/93 the Ethiopian government cut its, real term, TGE in ten years. Security expenditure was, however, reduced in thirteen years; while health expenditure was cut in twelve years; education expenditure in eleven years; and spending on economic services was reduced in ten years. Moreover, the vulnerability index V

(defined as the ratio of proportional reduction in each sector expenditure to total government reductions) for five sectors is estimated. The results are shown down in Table 5 below.

Table 4. Estimation Results of Budgetary Trade-offs Regressions, 1965/66-1992/93

Dependent Variable	Constant	Coefficient of S	Coefficient of g	Method of Estimation	Number of Iterations	R ²	F (3,23)
E	15.39 (8.71)	-0.133 (-2.89)	-0.057 (-1.03)	AR(1)	3	0.74	22.00
H	5.03 (6.12)	-0.028 (-1.20)	0.005 (0.18)	AR(1)	3	0.58	10.47
C	27.07 (6.52)	0.001 (0.01)	0.418 (3.29)	AR(1)	4	0.56	9.58
HR	20.37 (8.34)	-0.159 (-2.46)	-0.053 (-0.68)	AR(1)	3	0.72	19.47

* Figures between brackets are t-ratios.

** 28 observations are used for estimation from 1965/66 to 1992/93.

Table 5. Vulnerabilities of Expenditure Items to Spending Cuts.

Year	V _S	V _E	V _H	V _C	V _O
1968/69	-1.8	-8.4	-8.6	14.80	-2.3
1970/71	3.9	2.4	8.4	-6.50	1.2
1973/74	-1.2	0.5	3.7	-3.90	7.2
1976/77	0.6	1.6	0.4	0.70	1.8
1978/79	4.6	-1.7	2.3	1.60	10.7
1983/84	0.5	-0.5	-0.4	1.80	1.3
1985/86	1.3	1.1	1.1	0.01	1.7
1989/90	-0.7	0.6	0.8	1.80	2.1
1990/91	1.8	0.3	1.0	1.00	-0.7
1991/92	1.7	0.4	0.4	1.00	0.1

V_S : Vulnerability of security expenditure to TGE cuts.

V_E : Vulnerability of education expenditure to TGE cuts.

V_H : Vulnerability of health expenditure to TGE cuts.

V_C : Vulnerability of economic services spending to TGE cuts.

V_O : Vulnerability of "other unclassified" expenditure to TGE cuts.

The results demonstrate that education spending was vulnerable only three times in the ten years of expenditure cuts ($v > 1$), while security and health expenditures were vulnerable five times, economic services six times and the other unclassified expenditures seven times. This suggests that education and security spending were more immune from expenditure cuts than the other sectors. Indeed, in three years the shares of security and education spending in TGE were increased ($v < 0$) when, real term, government expenditures were cut. The other categories of expenditures had negative vulnerability index twice in the ten years of real expenditure cuts.

On the other hand, total government expenditure, at constant prices, increased in 17 years in the period 1965/66-1992/93. In the same period security spending increased in 14 years, health spending in 15 years, education spending in 16 years, and spending on economic services increased in 17 years. Moreover, the sectoral elasticities (e_s) are estimates during the years of government expenditure increases (at constant prices) and the results are presented in Table 6 below.¹⁰

The elasticities' test suggests that economic services were more elastic to increases in government expenditures than other budget categories. In the seventeen years of real term expenditure increases, the elasticity of economic services to TGE increases was greater than unity in eleven years, while e_s and e_E were greater than unity in eight years and e_H and e_O were greater than unity in seven years only. These elasticities show that health and other unclassified spending were less elastic to expenditure increases than other expenditure categories. Security and education spending were on the same level but were both less elastic than the elasticity of the spending on economic services.

Taking the results of the three tests together we can conclude the following. First, from simple correlation results, the share of security spending in TGE appears to move in the opposite direction of other expenditure categories (education, health, and economic services) in the period 1965/66-1992/93. The magnitude of security share was also higher than other categories and exceeded the average share for other LDCs [8]. Second, linear regression analysis also suggests that the security share in TGE had a negative and statistically significant impact on shares of education spending and the combined spending on education and health, a negative but not a statistically significant impact on health

spending, and negligible and statistically insignificant impact on spending on economic services. Third, security and education spending were less vulnerable to expenditure cuts than expenditures on health and economic services. Fourth, the elasticities of education and security spending to increases in TGE are higher than the elasticities of health and other unclassified expenditures in the period 1965/66-1992/93. Therefore, from the three previous tests it can be concluded that a trade-off between security spending and health/education spending (as proxies for human capital formation) took place in the period 1965/66-1992/93.

Table 6. Elasticities of Expenditure Categories

Year	e_s	e_E	e_H	e_c	e_o
1966/67	-2.6	1.9	1.9	4.3	5.90
1967/68	-0.9	-1.6	-2.4	-0.9	11.60
1969/70	0.2	1.4	3.6	3.3	-0.03
1971/71	1.0	2.7	1.8	1.3	-0.10
1972/73	1.0	2.2	0.9	0.9	0.60
1974/75	1.4	0.5	0.2	0.9	1.20
1975/76	4.0	-1.0	1.3	1.3	-1.60
1977/78	4.5	-2.0	-1.0	-1.0	-1.10
1979/80	-3.6	-3.9	-7.3	2.0	11.60
1980/81	-2.1	8.0	22.5	4.4	-2.30
1981/82	0.7	1.9	0.8	3.5	-1.10
1982/83	0.5	0.1	-0.3	1.9	1.40
1984/85	-0.6	0.2	0.1	1.5	3.20
1986/87	1.7	1.8	2.6	0.4	0.60
1987/88	1.3	0.4	0.3	0.3	1.90
1988/89	1.1	0.1	0.2	2.5	-0.20
1992/93	-0.5	1.0	2.2	2.6	0.50

e_s : Elasticity of security expenditure to TGE increases.

e_E : Elasticity of education expenditure to TGE increases.

e_H : Elasticity of health expenditure to TGE increases.

e_c : Elasticity of economic services spending to TGE increases.

e_o : Elasticity of "other unclassified" expenditure to TGE increases.

6. THE PERFORMANCE OF THE THREE ETHIOPIAN GOVERNMENTS

The results presented in the previous sections examined the existence of budgetary trade-offs in the period 1965/66 - 1992/93 as a whole. But as we mentioned in the introduction of this study, one of the main purposes of this study is to judge the declared objectives of the three Ethiopian governments against their actual commitment to economic and social sectors. Therefore, in this section we will examine the existence and the extent of the trade-offs in three periods: 1965/66 - 1973/74 which represents the Imperial era; 1974/75 - 1990/91 which represents the Derg regime; and 1991/92 - 1992/93 which constitutes the first two years of the Transitional Government of Ethiopia.

From the trends of, real term, expenditures of the three governments on various expenditures' categories, it is noticed that the commitment of the Imperial government to human resource development was more than the commitment of the Derg and the current transitional government. 14.5% of TGE in the period 1965/66-1973/74 was allocated for education. This was reduced to only 8.9% of TGE during the Derg era, and was increased again during 1991/91-1992/93. Similarly the share of health spending in the period between 1965/66 and 1973/74 was 5.5%, dropped to only 3.2% during the Derg period, and was increased to 4.9% of TGE in the first two years of the transitional government. The share of the economic services was, more or less, stable over the whole period of the three governments (see Table 7 below). Nevertheless, the trend of the share of security spending in TGE was the reverse of the spending on human capital development. The share was 29.6% in the period 1965/66-1973/74, but jumped to 34.3% during the Derg era, and declined sharply to a minimum of 16.2% in the first two years of the transitional government.

These trends suggest that the Imperial government devoted more budgetary resources than the Derg government for education and health and less budgetary share was devoted to security spending. The transitional government increased the budgetary shares of education and health spending to levels higher than was the case during the Derg period, but they were still less than the shares during the Imperial period, although it managed to

reduce the share of security spending to levels even lower than the share during the Imperial era. Mulat [13, pp. 94] documented this pattern of decline in spending on human resources during the Derg regime. He concluded that "increasing levels of government expenditures have been made in 'defence' with noticeable neglect of the social and economic sector development. As a result health and educational standards have deteriorated and the rate of economic growth decelerated considerably."

Table 7. Percentage Share of Expenditure Categories of the Three Ethiopian Governments (1965-1993)

Period	% Share of Security spending in TGE	% Share of Education Spending in TGE	% Share of Health Spending in TGE	% Share of Spending on Economic Services in TGE	% Share of "Other Unclassified" Spending in TGE
1965/66-1973/74 (Imperial Government)	29.6	14.5	5.5	28.4	22.0
1974/75-1990/91 (Derg regime)	34.3	8.9	3.2	29.0	24.6
1991/92-1992/93 (Transitional Government of Ethiopia)	16.2	13.9	4.9	31.5	33.5

SOURCES: Compiled from data from the Ministry of Finance.

Moreover, if we look at the estimated vulnerability indices and expenditure elasticities (Tables 5 and 6) during the Derg era we find that security spending was less vulnerable to expenditure cuts than all other expenditure categories and was more elastic to increases in TGE than education, health, and the "other unclassified" spending (but not more than spending on economic services). Furthermore, the regression analysis for the existence of budgetary trade-offs was repeated for a shorter period (1974/75-1990/91) to examine the trade-offs during the Derg period. The magnitude of the estimated coefficients, their signs, and t-ratios, however, did not change significantly. They confirm the same pattern of trade-offs for the whole period.¹¹

7. SUMMARY AND CONCLUSIONS

This study surveyed the patterns of Ethiopian public finance in the period between 1965/66 and 1992/93. It pointed to the increasing structural deficits during the Derg era which were caused mainly by structural changes in the expenditure structures. The trends of security, health, economic services and education spending and their shares in TGE were examined over the whole period. It was shown that security allocation over this period was very high compared with other countries and compared with other expenditure categories. In the period 1965/66-1992/93, average security spending was about three-fold of education spending, more than eight-fold of health spending, and more than two-fold of the combined spending on health and education.

To examine the existence and extent of budgetary trade-off between the various expenditure categories, and particularly between security spending and human resource development, various complementary tests were employed. The first used simple correlation between various expenditure items, and confirmed that the correlation between security share in TGE and the shares of education, health, and economic services were all negative for the period studied. However, the correlation between education and health shares was positive and high.

The second test relied on estimating linear regression equations for each item of the expenditure categories as a dependant variable. The explanatory variables were the share of security spending in TGE and the average annual growth rate of GDP. The results of this test also suggested that security spending crowded-out education expenditure and the combined spending on health and education, although the negative impact of security spending on health spending was negative but not statistically significant, and the relationship between security spending and spending on economic services was weak and statistically insignificant.

Estimating the vulnerability of expenditure categories to cuts in TGE and their elasticity to increases in TGE was the third method to investigate the existence of budgetary trade-offs between the shares of security, education, health and economic services expenditures. The shares of security spending were found to be less vulnerable to cuts in

TGE and were more elastic to increases in TGE than most of the other expenditure categories.

Taking the results of the previous tests together, it was concluded that noticeable budgetary trade-offs took place in Ethiopia in the period between 1965 and 1993. In particular, the shares of security spending crowded-out spending on human capital formation (education and health) and economic services. Then the period of study was broken down into three periods: the imperial era, the Derg regime, and the current transitional government. The trade-offs were analyzed in each period separately, and it was found that the commitment of Derg regime to the security sector was more than its commitment for human resources compared with the other two governments. The transitional government increased the budgetary allocations for health and education and reduced significantly the security outlays, but still the shares of education and health spending in TGE were below the shares during the Imperial time. Given the collapse in government revenues since 1991, it is expected that the spending on human resource development will increase if government revenues increase in the future.

8. DEFINITIONS OF VARIABLES AND DATA SOURCES

1. Total Government Expenditure (TGE)- refers to the total spending of the central government- both recurrent and capital- including external assistance and transfers.
2. Security Spending (S)- refers to the total expenditure of the central government on "national defence" and "internal order and justice". This includes both the outlays of the Ministry of Defence as well as spending on security, police and paramilitary forces.
3. Education Spending (E)- refers to the total spending of the central government on "education and training"- both recurrent and capital.
4. Economic Services Spending (C)- refers to the total spending of the central government on "agriculture and land resettlement", "industry", "mining and energy", "transport and communication", "construction", "water resources", "commerce and tourism", and "financial agencies" - both recurrent and capital.
5. Others Unclassified (O)- in this study includes both recurrent and capital spending of the central government on all items other than security, education, health, and economic services. It is simply the excess of TGE over S,E,H, and C.
6. Total Revenue - refers to the total revenue of the central government and includes "total tax revenue", "total non-tax revenue", "special contributions", "foreign loans and credits", and "external assistance".
7. All real expenditure magnitudes are arrived at using Consumer Price Index at 1987 constant prices.

8. Average annual growth rate of real GDP (g) is at constant factor cost.
9. The data for the Total Government Expenditure and Total Revenue and their components are compiled from data obtained from the Ministry of Finance (MOF) and Ministry of Planning and Economic Development (MOPED).
10. The data source for average annual growth rate of GDP is Ministry of Planning and Economic Development (MOPED).
11. All expenditure and revenue figures are given in millions of Ethiopian Birr (ETB).

NOTES

¹ An example of other studies on warfare-welfare trade-offs is Dixon and Moon's [4, pp. 660-684] study on the military burden and the provision of basic human needs. The regression analysis corroborated that, when controlling for the size of the military establishment, military spending tends to inhibit welfare outcomes in LDCs.

² The main limitation of the analysis is that it depends on only one or two years of data.

³ See also [11, pp. 411-433] and [12].

⁴ The estimated multiplier of defence spending on the ratio of education spending to GDP was -0.33.

⁵ The figures for 1991/92 and 1992/93 are the budget estimates and not the actual figures. Therefore, care should be taken in interpreting the estimates of the last two years, despite the fact that the diversion between actual and budgeted figures in Ethiopia is very small.

⁶ See [13, pp. 74].

⁷ Bevan [1, pp. 4] points also to the huge off-budgetary allocations to the military hardware.

⁸ For the estimation with the presence of serial correlation and the use of Cochrane-Orcutt iterative method, see [5, pp. 353-389].

⁹ This test was also used by Mohammed [8] to test for budgetary trade-offs in the Sudan. His results conform the existence of some level of trade-offs.

¹⁰ Let s_i : sector (i) expenditure and TGE: total government expenditure, then,

$$e_i = \frac{\delta s_i}{s_i} + \frac{\delta TGE}{TGE}.$$

¹¹ Of course the number of observations (and degrees of freedom) were reduced considerably.

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FISCAL DEFICITS AND THE MONETARY SECTOR IN ETHIOPIA: IMPLICATIONS FOR REFORM

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Abstract: *Large macroeconomic disequilibria characterized by a deteriorating current account, inflation and rising debt burden have been major features of the Ethiopian Economy for many years. Fiscal policy can be used as tool of sustained growth and a means to avoid such imbalances. This paper looks into the relationship between fiscal deficits and money supply, price level and public debt. An examination of Ethiopian data for the period 1976-1991 shows that fiscal deficits have been at the root of monetary expansion, inflation and increasing debt burden. The implication is that in the short to medium period, such imbalances may be redressed through setting limits on government bank and external borrowing while simultaneously reforming the expenditure side of the budget.*

1. INTRODUCTION

Ethiopia is one of the countries with the lowest per capita income. About 40 percent of GDP at factor cost comes from agriculture, while industry, construction and public utilities contribute only 16 percent of GDP. GDP growth from 1977 to 1991 averaged only 2 percent per annum. In 1990, GDP growth dropped down to zero and in 1991 it turned negative.

Because of slow growth in exports and a deteriorating trading position, the economy is now suffering the consequences of foreign exchange shortages, mounting external debt obligations and an overvalued exchange rate. Although domestic savings and fixed investment were low, 3-5 percent of GDP and 10-15 percent of GDP, respectively, external finance ranging from 7-10 percent of GDP facilitated internal balance to some degree [25].

It was against this background that macroeconomic imbalances developed in the fiscal and monetary sectors. In fiscal year 1990, the fiscal deficit deteriorated to 15 percent of GDP with bank borrowing of about 10 percent, while broad money grew by 18 percent. In 1991, inflation as measured by the retail price index for Addis Ababa reached about 21 percent.

The growth in reserve money was dramatic. It rose from -3 percent in 1975 to 23 percent in 1991. The percentage shares of M_1 ¹ and M_2 ² in GDP rose from 15 percent and

21 percent, respectively, in 1975 to 51 percent and 68 percent, respectively, in 1992. The velocity of circulation (GDP/M_2), however, consistently declined from 4.8 to 1.5 during the same period. Thus, while steady monetary deepening was underway, a simultaneous decline in the velocity of money eased the inflationary impact of budget deficits to some degree. However, with the semi-liberalization of the economy and favourable opportunities for the private sector to spend its money holdings, the change in velocity of money could be reversed and induce severe inflationary conditions in the coming years.

Recent developments in the budget also favour this hypothesis. Despite the decrease in government expenditures, due to the decrease in defence spending following the overthrow of the previous regime, the advantage that could have been reaped from this has virtually been lost by an offsetting decline in government receipts, leaving the deficit and bank financing at more or less the same level. For example, total expenditure in 1992 fiscal year declined by 23 percent, while revenue fell by 20 percent. The overall deficit, therefore, remained at about 12 percent of GDP and bank financing at about 9 percent of GDP.

These developments show that the government has been using its tax regime, borrowing and spending powers to influence aggregate economic performance. With the continued legacy of budgetary expansion, a fiscal analysis of the macro-economy would be necessary. Hence, the need to focus on fiscal policy both as a tool of sustained growth and as a means to avoid sources of macroeconomic imbalances in the Ethiopian economy is apparent.

This study takes up one aspect of fiscal policy, i.e., the management of fiscal deficits in Ethiopia. It is organized as follows: the next section outlines the major concepts of fiscal deficits followed by a section discussing causes and consequences of fiscal deficits, the fourth section attempts to estimate the effect of fiscal deficits on monetary, price and debt variables using econometric techniques and, after raising major issues for reform in the fifth section, the paper concludes with a summary.

2. CONCEPTS OF FISCAL DEFICITS

Any attempt to assess budgetary impact on macro variables such as money supply, balance of payments, the public debt and aggregate economic activity requires a specific measure of the fiscal deficit. However, several concepts of the fiscal deficit seem to be in circulation. Despite the variations in definition, a deficit has tended to be viewed as a summary of government receipts and payments in a single budget year. In this context, the conventional deficit is defined as follows:

Fiscal deficits as conventionally defined on a cash basis, measure the difference between total government cash outlays, including interest outlays, but excluding amortization payments on the outstanding stock of public debt and total cash receipts, including tax and non-tax revenue and grants but excluding borrowing proceeds... In this manner fiscal deficits reflect the gap to be covered by net government borrowing including borrowing from the central bank [21].

Although the cash versus the accrual accounting methods of calculating the deficit pose conceptual variations and result in significant differences in policy making, it is sufficient for our purpose to take the conventional deficit measure as a core concept of fiscal deficits. Having done that, it would be relevant to move to certain major purpose-oriented deficit measures. The most widely used purpose-oriented deficit measures are the current account deficit, the structurally adjusted deficit, the primary deficit, and the operational deficit.

2.1 Current Account Deficit

The current account deficit is the excess of non-capital expenditures over non-capital revenues. It depicts government dissaving and could be used as a measure of the extent to which government exercises prudence in its financial management.

However useful the current account deficit may be, the problems surrounding its calculation are intractable. A case in point is the treatment of depreciation. In enterprise accounts depreciation is recorded on accrual basis³. However, in public sector accounts it becomes available on cash basis. Moreover, the accounting treatment of investment in human capital as current outlay despite its importance in explaining growth is at odds with the economic treatment [5]. Furthermore, the recurrent component of any capital project is

likely to be manipulated in many ways to give different pictures of government saving. Finally, in the context of economic adjustment, the difficulty of separating adjustment induced effects on the budget from those introduced by external shocks limits the use of the current account deficit as a measure of fiscal stance.

2.2 Cyclically Adjusted Deficit or Trend Deficit

That the budget and aggregate demand influence each other hardly needs evidence. The cyclically adjusted deficit cleans the budget from the effects of business cycles. It is used as a tool to assess the adequacy of the stance of fiscal policy [7]. In practice an assessment of the adequacy of the stance of fiscal policy involves three simple steps.

First, let us define the cyclically adjusted budget (CAB). This involves developing a budget profile that allows for the impact of the economy on the budget. It should be noted that the choice of a base year when the budgetary position was consistent with a satisfactory level of economic performance is central to the CAB. Thus the CAB can be stated as follows:

$$CAB = g_o PGDP - t_o AGDP \quad (1)$$

where CAB = cyclically adjusted budget

PGDP = potential GDP

AGDP = actual GDP

g_o = base year ratio of government expenditure to actual GDP

t_o = base year ratio of revenue to actual GDP.

Note that relating expenditure and taxes to potential GDP and actual GDP, respectively, allows the budget to vary with the cyclical position of the economy. That is, the deficit will rise during a recession and fall during a boom.

Let us next see the calculation of the cyclical effect of the budget. This is accomplished by comparing the actual deficit with the cyclically neutral budget. Thus,

$$CEB = (G - T) - CAB \quad (2)$$

where CEB = cyclical effect of the budget

G = government expenditure

T = government revenue

Whether fiscal policy was expansionary or contractionary is indicated by the sign of the CEB. A positive CEB points to the former while a negative one indicates the latter.

Third, the stance of fiscal policy is assessed. The appropriateness of fiscal policy is evaluated by comparing the CEB with the cyclical situation. For example, an expansionary CEB would be considered countercyclical if the economy were in a slump and procyclical if it were in a boom.

Sometimes the fiscal impulse, i.e., the change in the impact rather than the impact itself, is used to assess the adequacy of fiscal stance. The fiscal "impulse" is measured by the change in CEB. A positive movement of the CEB indicates fiscal injection while a negative change shows a withdrawal of fiscal stimulus. The reason for using the fiscal impulse is to get around the problem of the choice of a base year.

The need for other deficit measures free from the assumption of the existence of cycles around a stable trend was recognized later [2], [19]. Accordingly, the conventional deficit was adjusted for interest payments and for inflation.

2.3 Primary and Operational Deficits

Recall that the CAD includes an important non-discretionary variable, interest payments, which usually depends on previous deficits. The primary deficit (non-interest deficit) is a measure of the fiscal deficit adjusted for interest payments. It is computed by subtracting net interest payments by the government from total government expenditure. The implication is that the primary balance should eventually turn surplus to provide at least in part the wherewithal for paying interest on current debt.

This, however, is not required in a situation where government revenue and GDP grow faster than the real interest rate. What are required are similar growth rates for interest payments, debt and GDP so that they remain constant in relative terms [23]. In any case,

it is difficult for debt and GDP to grow faster than the real interest rate.

One basic problem with the primary deficit is that it does not exclude the part of interest payments induced by inflation. This is particularly important in high inflationary situations. To alleviate this problem the effect of inflation on interest payment should be removed to get an inflation-corrected deficit known as operational deficit.

The economic underpinning of operational deficit is that inflation-induced interest payments are similar to amortization in that they constitute payments for the value of capital eroded through inflation and do not affect aggregate demand in real terms. Thus, the question is whether inflation-generated interest payments are used to buy new bonds to make up for the loss in the value of capital through inflation or to finance consumption without affecting the net wealth position of the creditor⁴.

Although the practical significance of this deficit measure is clear, it has a macroeconomic deficiency, i.e., by correcting the deficit for the impact of inflation on it, the ability to assess the impact of the deficit on inflation is lost [3]. Nevertheless, it is useful as a guide for practitioners, as it brings out the size of overstatement of the fiscal imbalances given by the conventional deficit during periods of high inflation and high nominal interest rates.

The different deficit measures outlined above are used for different purposes. One can therefore use any one of them depending on the purpose to be served. In particular, where an economic adjustment program is underway, it would be useful to measure the fiscal deficit from different angles. This being the purpose for reviewing the main variants of the fiscal deficit, the conventional deficit measure has been used in the analysis of macroeconomic imbalance of the Ethiopian economy to be presented in the following sections. The reasons for selecting the conventional deficit are firstly, it is the core concept of the fiscal deficit from which all other measures are derived. Secondly, it is relatively easier for computation.

3. FISCAL DEFICITS: CAUSES AND CONSEQUENCES

3.1 Causes of Fiscal Deficits

The government's attempt to influence aggregate demand through changes in the fiscal balance is an area of increasing concern in developing and formalizing a consistent and desirable macroeconomic policy, particularly in the context of economic adjustment programs. Although fiscal indiscipline is considered a major factor underlying the expansion of fiscal deficits, there are other structural variables which play no lesser role in explaining budgetary developments. Ethiopia's experience in fiscal policy during the last seventeen years attests to the importance of structural variables in the expansion of budget deficits.

Structural variables are defined as factors that are unchangeable in the short run. Such factors are strongly rooted in the state of the economy. The government is, therefore, unable to control them or to reverse the process underway in the short term [15]. Hence, in this spirit, we shall in what follows list and review the factors, considered to be relevant to the Ethiopian economy:

- (a) level of economic growth;
- (b) size of government;
- (c) growth rate of revenues; and,
- (d) government control over expenditures.

3.1.1 Level of Economic Growth

Countries with low level of economic development (as measured by per capita income) are likely to face difficulties in bringing their fiscal balance to reasonable levels. Three factors are at play against this objective. Excessive pressures on spending, low private saving, and (even if potential private savings are high) poor financial systems and low tax revenues. This has often led governments to impose savings through deficit financing even if its perceived inflationary, costs and debt burden are onerous.

In Ethiopia, average per capita GDP at market prices during 1975-1991 stood at Birr 215.1. This puts the country in the lowest category of level of economic growth. Such a

low level of per capita income leaves very little for savings. It was with this background that the fiscal deficit soared to about 15 percent of GDP in the late 1980s.

3.1.2 Size of Government

The relative size of the government sector tends to be highly correlated with increased government role in production, consumption and distribution of goods and services. This induces an upward pressure on spending and is a difficult process to reverse in the short run.

The extent of government participation in economic management in Ethiopia has been extensive following the "revolution" of 1974. This factor as estimated by the share of total government expenditure in GDP reached over 40 percent in the late 1980s and had a significant influence on the fiscal balance.

3.1.3 Growth in Government Revenue

The need for deficit financing decreases when revenues grow rapidly while expenditures grow at a lesser pace or remain constant or decrease. However, where a sound fiscal management is not underway, revenue growth may induce higher deficits, particularly if the government is a "revenue follower".

3.1.4 Government Control over Expenditures

The government's ability to control expenditures is often influenced by institutional, ideological and structural factors. Among the factors which put upward pressure on spending are lack of coordination between financial and physical plans, development theorizing⁵, high share of recurrent expenditures and revenue and expenditure instabilities.

3.2 Consequences of Fiscal Deficits

Fiscal deficits provide a measure of the excess of the government's spending over its revenue and, as such, indicate budgetary addition to domestic demand. A simple accounting relationship can be established between budget deficits, private investment/savings balance and the external balance. GDP can be defined in terms of expenditure components as follows:

$$GNP = C_p + I_p + G + X - M = C_p + S_p + T + NTR \quad (3)$$

where C_p = private consumption

I_p = private investment

G = Government spending

X = exports of goods and services

M = imports of goods and services

S_p = private savings

T = Government revenues

NTR = net current transfers

Rearranging,

$$G - T = (S_p - I_p) + (M - X + NTR) \quad (4)$$

$$\begin{array}{rcl} \text{Fiscal} & = & \text{Net private} + \text{Foreign} \\ \text{deficit} & & \text{savings} \quad \text{savings} \end{array}$$

Equation (4) shows the fiscal balance as the counterpart of the private sector's savings-investment balance and the current account balance. It can be seen that an increase in the fiscal deficit must be matched by an increase in private savings (increase in net private savings or decrease in private investment, or both) or an increase in the current account deficit or a combination. The specific behavioral relationship will depend on the impact of fiscal deficits on the private sector's investment-savings balance and the relation between budget deficits and current account deficits, since budget deficits respond to as well as influence external balances.

An important point to note is that budget deficits in themselves do not imply automatic macroeconomic difficulties. An efficient and productive employment of resources can meet debt servicing requirements easily. Deficits induced by natural disasters or wars can be accepted as a way of inter-generational distribution of costs. Hence deficits can be easily borne by efficient economies with high private savings and well-developed financial markets. However, in highly distorted and low-saving economies, even a small deficit may be

destabilizing [23].

The link between Ethiopia's low savings rate and the deteriorating fiscal situation and the possible spill-over to the current account deficit can be seen from Table 1.

Although the private sector consistently maintained positive resource balances, the dissaving by the government, added to negative public enterprise resource balances, brought the overall public sector balance to an average of about -15.1 percent of GDP over the ten-year period (see Table 1). This was mainly driven by the growth of government consumption, which averaged 32.2 percent of GDP per annum. It is also interesting to note that while private sector investment fell from 2.7 percent of GDP in 1984 to 1.5 percent of GDP in 1990, it was the major source of surplus funds to the government and the public enterprise sector. However, since private sector surplus alone often cannot cover additional public deficits, a spill-over to the current account of the balance of payments is bound to occur. It is, nevertheless, difficult to separate the effect of the budget on the current account and its response to the current account.

Table 1. Public, Private and External Sectors Resource Balances (% of GDP)

Fiscal Year	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Public Sector:										
+ Government										
Revenue	19.7	20.5	21.7	22.9	23.5	25.9	26.1	28.7	29.9	24.4
Consumption *	21.7	23.6	32.4	27.5	33.5	31.0	31.0	38.3	36.7	35.8
Savings	-2.0	-3.1	-10.7	-4.6	-10.0	-5.1	-4.8	-9.5	-6.8	-11.6
Investment	3.8	4.1	4.9	3.8	4.7	5.5	4.2	2.1	2.9	3.3
Balance	-5.8	-7.2	-15.5	-8.4	-14.7	-10.6	-9.0	-11.6	-9.8	-15.0
Public Enterprises:										
Savings	1.7	1.8	1.4	2.2	2.4	2.0	3.0	3.1	2.8	2.7
Investment	4.1	5.1	3.9	6.3	7.1	5.2	8.4	11.3	8.7	7.2
Balance	-2.3	-3.3	-2.4	-4.1	-4.7	-3.3	-5.4	-8.2	-5.9	-4.5
Total Public Sector:										
Balance	-8.1	-10.5	-17.9	-12.5	-19.4	-13.9	-14.4	-19.8	-15.7	-19.4
Private Sector:										
Savings	3.2	3.3	11.7	4.3	9.7	4.8	4.5	9.8	6.4	8.6
Investment	2.5	2.6	2.5	2.7	2.2	2.0	2.0	1.9	1.7	1.5
Balance	0.7	0.7	9.2	1.6	7.6	2.8	2.5	7.9	4.8	7.1
External Sector:										
Current Account										
Balance	-7.2	-9.1	-7.6	-8.6	-8.8	-5.8	-9.0	-9.8	-5.7	-4.9

* Government consumption is defined as central government current expenditure plus non-investment capital expenditure.

SOURCES: The World Bank, *Ethiopia: Financial Sector Review*, 1990.
IMF, *Recent Economic Developments in Ethiopia*, 1984.

Having reviewed the broad macroeconomic relationships of the budget, the private sector balance and the external balance, we shall next analyze the effects on monetary aggregates and the public debt of the budget deficit from the financing side.

4. FINANCING THE DEFICIT

Once budgetary gaps are created, whether they promote desired macroeconomic goals such as controlling inflation, boosting private investment and growth and maintaining external credit worthiness, or induce adverse effects on these goals depend, to a very large extent, on the way they are financed.

There are two options for the government to finance its deficit: domestic financing and external financing. The former includes borrowing from domestic bank and non-bank sectors including printing new money, and the latter refers to borrowing from the rest of the world or from part of its savings.

Government borrowing from the central bank directly affects reserve money and the total money supply. Recourse to commercial bank finance may also have similar effects, if banks are not forced to constrain credit to other borrowers. In this context the government sector would be the primary source of monetary expansion, and excessive growth in the money supply is likely to induce higher inflation and external imbalances. In Ethiopia, when the fiscal deficit soared to 15 percent of GDP in the 1990 fiscal year, broad money growth reached an all time high of 18 percent compared to the preceding years.

Reliance on non-bank finance adversely affects the structure of demand and growth potential. In a world of administered interest rates and controlled credit supplies, private investment would be retarded not through the cost-of-capital route but by the limit to the availability of credit to the private sector [6], [8], [13], [16].

Excessive resort to foreign borrowing leads to overvalued exchange rates, deteriorating current account deficits, higher external debt (and the consequent debt service burden which may constrain domestic investment and growth) and dwindling foreign exchange reserves. Financing through the accumulation of arrears has similar

macroeconomic effects to other forms of public borrowing, endangering future financing and the integrity of the budget as well [9], [12].

It is interesting to note that the worsening budget deficit in Ethiopia and the higher external financing (ranging between 7 and 10 percent of GDP) occurred side by side with an appreciating exchange rate, higher external debt (over 50 percent of GDP) and falling foreign exchange reserves. Recent developments in the budget also indicate that external debt including arrears as a share of GDP has reached around 90 percent.

So far, we have considered the options available for the government to finance its deficit and partly touched upon parallel developments in other variables. An attempt is made, in the next sub-section, to approximate the effects of the fiscal deficit and/or its financing components on monetary and debt variables using regression techniques. Data on the concerned variables were compiled from the Ministry of Finance and the National Bank of Ethiopia and OLS regression analysis was undertaken. Only equations that had passed the standard tests of significance have been reported (see annex).

4.1 Fiscal Deficits, Money and Inflation

Fiscal deficits when financed through credit expansion obviously result in increased money supply. Regression results between narrow money and deficits, broad money and deficits, and reserve money and deficits, indicate that there exists a fairly significant relationship between the monetary aggregates and the fiscal deficit. The Durbin-Watson statistic also indicates that first order serial correlation is not serious at all (see appendix).

The impact of the fiscal deficit on inflation has been measured by running OLS regression of the Addis Ababa CPI (Consumer price index for Addis Ababa) on its one-year lagged value and the fiscal deficit lagged similarly. The results show that, while the lagged CPI value significantly explains the inflationary situation (pointing to the role of expectations in price developments), the lagged fiscal deficit tends to be a contributory factor to inflation, though at 15 percent level of significance.

However, in an economy with a shallow monetary depth, the impact of money creation brought about by the need to finance fiscal deficits is cushioned by the growth in demand for money.

The government can, therefore, finance its expenditures by expanding the monetary base and increased monetary deepening without causing inflation⁶. Inflation would occur to the extent that the rate of money creation exceeded the growth in money demand. Monetary deepening was significant in Ethiopia over the last fifteen years. The M_1/GDP and M_2/GDP ratios grew from 15 and 23 percent in 1977 to 51 and 68 percent in 1991, respectively. Moreover, the velocity of circulation (GDP/M_2) consistently declined from 4.3 to 1.6 during the same period.

All these developments indicate that the Ethiopian government was to some degree able to finance its deficits without causing full inflation. Thus, seigniorage revenue - the government's claim on resources in return for issuing currency - of the order of 2 percent of GDP per annum on average were raised in the 1980s [25].

Having put this caution - the dampening effect of seigniorage on inflation - one can tentatively conclude that inflation in Ethiopia is partly expectations-motivated and partly a fiscal phenomenon.

4.2 Fiscal Deficits and Public Debt

The fiscal deficit has a direct effect on domestic debt through borrowing from the non-bank and banking sectors. External borrowing to finance the deficit is also expected to influence external debt.

Regressing government domestic debt (GDDT) on its lagged value and the current fiscal deficit produced significant results. The Durbin h-test was also found to be acceptable.

While external borrowing seemed to have partly influenced changes in external debt, other factors tended to have been largely at play in causing its evolution.

All said, the fiscal deficit has been the major cause for creating an unsustainable debt situation, which increases the debt service burden and jeopardizes access to future financing. Moreover, if the debt service burden is excessive, it constrains domestic investment and growth. In the Ethiopian situation, fiscal retrenchment is a necessary condition for controlling inflation, encouraging private investment and growth, easing the debt service burden, and facilitating access to foreign finance.

5. ISSUES FOR REFORM

As shown earlier, resource use in Ethiopia over the last decade centred on the financing of the fiscal deficit (see Table 1). The deficit was financed from three sources: the financial sector (NBE and CBE), the rest of the world and public enterprises. The CBE finances the government through purchases of treasury bills and treasury bonds by mobilizing private sector savings. NBE lends the government through its Ways and Means Advance from its holdings of CBE's excess reserves⁷. Public enterprises capital charges and residual surpluses⁸ finance government spending. External borrowing and grants also constituted one means of financing the deficit.

As reviewed in the preceding chapter, the fiscal deficit had adverse effects on monetary aggregates, prices and the public debt. It was also shown that private investment declined consistently in the 1980s, when the fiscal deficit was rapidly expanding. One can therefore assess the appropriateness of the deficit by relating it to the promotion of private investment and growth, the control of inflation and the maintenance of a serviceable debt level to ensure credit worthiness.

The relationship between the fiscal deficit and monetary expansion in Ethiopia can be seen from the following identities:

$$\Delta MS = \Delta IR + \Delta DC \quad (5)$$

$$\Delta DC = \Delta DC_p + \Delta DC_g \quad (6)$$

where MS = end-of-year money stock

IR = international reserves

DC = domestic credit (net)

DC_p = credit to the private sector

DC_g = credit to the government

Δ = a one period change.

The external debt situation can also be presented by

$$\Delta ED = \Delta ED_p + \Delta ED_g \quad (7)$$

where ED is national external debt and

ED_p and ED_g are the private and public held components of the national external debt.

Introducing the government budget constraint gives the following relationship:

$$G-T = \Delta DC_g + \Delta ED_g \quad (8)$$

where G = total government expenditure

T = total government revenue

$G-T$ = fiscal deficit.

It is clear that the last three identities [6], [7], [9] establish the relationship between monetary growth and the fiscal position of the government. This provides a rationale for controlling the public sector deficit through imposing ceilings on both the magnitude of external borrowing (ED_g) and the amount of bank financing (DC_g) carried out by the government. This being the principal means of monitoring the public sector financial balance from the financing side, the policies underlying that balance are essentially concerned with expenditures and revenues. For lack of space and as a matter of relative practical expediency, the former will be dealt with here, without, of course, disregarding the importance of the latter in fiscal reforms. Moreover, the issues of revenue revitalization in Ethiopia belong to long-term economic policy reform programs, while the immediate concern of this paper is to raise issues of fiscal reform relevant to the short and possibly the medium term.

Policies regarding public spending structures can be summarized in three main sub headings:

- a) Expenditure Reductions
- b) Expenditure Rationalization
- c) Budget Planning and Control

5.1 Expenditure Reductions

Faced with a serious resource constraint, the public sector in Ethiopia should carefully consider the areas where its involvement is necessary. This issue has been deeply debated and has produced what are known as the "crowding-out" and "crowding-in" effects of public spending.

In this context, Ogura and Yohe [1977] distinguish between three types of public spending:

- a) those that provide services that are direct substitutes for goods and services provided by the private sector;
- b) those that provide direct consumption benefits to the private sector and;
- c) those that are complementary to private investment.

Accordingly, it is suggested that the expenditure-cutting priorities should first concentrate on category (a) before touching category (b) or (c). The implication is that category (b) has an outright "crowding-out" effect on private investment, while the remaining two categories should be carefully analyzed as to their "crowding-in" effects.

Several studies have shown that public investment in infrastructure is complementary to private investment and hence has a "crowding-in" effect on private investment [1,4,6]. Moreover, these studies favour the hypothesis that non-infrastructure public investment has a negative effect on private investment.

If Ethiopia is to launch an economic adjustment program, fiscal stimulus to aggregate demand through increased public spending should be controlled by first considering withdrawal from the areas of public spending that have replaced the private sector. This would be one factor that would contribute eventually to bringing the fiscal deficit to a

sustainable level. A gradual phasing out of programs as opposed to shock-therapy or quick-fix solutions is considered to be superior and effective, without taking gradualism as a means for delaying the introduction of adjustment programs.

5.2 Expenditure Rationalization

Expenditure reform can greatly contribute to higher productivity and greater utilization of existing capacity. Government investment that is productive should be encouraged. Projects should be subjected to a number of economic tests and those that are found to be unproductive must be eliminated. These assessments should be made in the context of general policies to correct distortions in relative factor and commodity prices [10].

The issue of funding operations and maintenance should also be addressed. In many cases the maintenance and repair of existing capital could be more effective than undertaking new capital investment. Inadequate spending operations (whether supplies or personnel costs) can lead to low levels of effectiveness in areas such as education and health. Add to that the possibility of a rapid deterioration of physical capital owing to inadequate spending on maintenance and repair [23].

Sources of low productivity in the public sector should also be taken into account in an attempt to rationalize expenditures. Low pay and inadequate salary differentials and the public sector acting as the employer of last resort may discourage work effort and contribute to low productivity in the public sector. This has a particular importance in the Ethiopian economy. It needs to be underscored that an efficient civil service that is commensurate with the capacity of the economy is a precondition for development.

Government objectives of income distribution, external or internal security and self-sufficiency need also to be attached to cost-effective expenditure policies. In this regard consideration of replacing general food subsidies by targeted schemes is necessary based on matters of cost-effectiveness as well as fulfilment of government objectives.

Constraining government consumption to raise national savings and to reduce the need for raising taxes is also a matter of importance. Gradually diminishing less productive forms of government consumption could also contribute largely to financing growth.

5.3 Budget Planning and Control

In the medium term, efficiency and effectiveness of public spending can be raised by undertaking fiscal planning, budgeting, implementing and monitoring of government operations. Fiscal planning involves the formulation of a phased investment program, the projection of current spending needs and assessing revenue availability and borrowing requirements consistent with other macroeconomic objectives in the medium term. The annual budget should then be a one-year slice of the medium-term plan, emphasizing firm budget constraints. With a strong and increased transparency and timeliness of fiscal reporting, effective fiscal management and the ability to monitor the public sector, including public enterprises, can be facilitated.

In summary, the fiscal deficit in Ethiopia has been the major source of monetary expansion, and hence inflation and unsustainable growth in the public debt. Increased fiscal deficits financed through domestic credit expansion, particularly credit going to the government have produced inflationary conditions and were associated with a fall in private investment growth. This also resulted in the growth of domestic debt. Higher external borrowing to finance part of the deficit raised the external debt level. The emergence of arrears financing on the budget, though a recent phenomenon, has put the country at the risk of deteriorating external credit worthiness.

Hence, if one approaches the budget from the financing side, sound fiscal management calls for setting a limit on domestic credit to the government and controlling external borrowing. While this is important in the short run, reforming the expenditure side in the medium term is crucial for controlling inflation, promoting growth and maintaining external credit worthiness in the country.

A critical problem in the short run is the size of the bank financed component of the fiscal deficit, which is about 7-8 percent of GDP. This problem must be addressed immediately if the deficit is to be brought to a controllable level within the medium term. To eliminate the bank-financed part of the deficit, the government must "demonetize" it. This can be attained through selling publicly owned urban houses to the private sector and using the proceeds to cover the deficit. The government, in so doing, loses nothing in terms of asset ownership because government owned assets in the form of urban houses would now

be owned in other forms. * In other words, the government can use such proceeds to construct infrastructure facilities.

The act of selling public urban houses to the private sector should, however, be well thought of as part of an overall program to privatize urban land and housing and not as a quick-fix solution to the budgetary problem. With such caution, this measure would contribute much to the overall effort of easing the incipient upward pressure on inflation that otherwise could materialize given the persistence of the monetized deficit at its current level.

NOTES

¹ $M_1 = M_2$ less quasi-money (i.e. time and saving deposits).

² M_2 (End of year stock of broad money) is defined as the sum of currency outside banks, demand deposits and quasi-money.

³ The current account measure of the fiscal deficit is basically used for comparing the government with other parts of the national accounts or evaluating government accounts using private sector accounting standards. However, while detailed public sector accounts are available on financial basis those of the private sector are available on accrual basis.

⁴ The effect of inflation-induced interest payments on aggregate demand is zero or positive depending on whether such payments exactly compensate or more than offset the value of capital eroded through inflation. If their effect is the former, then the impact on aggregate demand is neutral because such payments do not represent new incomes to the bond holder. With the latter, however, real interest payments could be consumed without affecting the net wealth position of the bond holder which would have an expansionary impact on aggregate demand.

⁵ Theories of development of the 1950s accorded the state an ever greater role in the overall all effort to bring about development and the state believed that this would materialize through increased involvement in economic management and thus through higher spending. Moreover, the ever increasing demand for goods and services in a world of inelastic supply induced the state to use its spending powers more intensively.

⁶ The impact of the deficit on inflation was weakened by monetary deepening. Three major factors underlie monetary deepening in Ethiopia. (1) interest rate structure which allowed the government to borrow at low interest rate (3% on treasury bills) while offering positive real interest rates on small savings (6%) and penalizing large depositors (0 and 1% on demand deposits and time deposits, respectively). (2) adverse policies of licensing, ceilings and collateral requirements applied on the private sector and (3) with excessive foreign exchange shortages enterprises were forced to borrow less from banks to finance imports. All this led to the accumulation of financial assets deposited as excess reserves with the Commercial Bank of Ethiopia.

* I owe this to Ato Taye Mengistae, Addis Ababa University, Economics Department.

⁷ CBE's reserve requirement is 5% of total deposits (demand, time and saving deposits). However, actual reserves are reserve with NBE plus cash in hand. The difference between the latter and the former has been large and positive which served as a source of lending to the government through NBE's Ways and Means Advance.

⁸ Public enterprises, apart from paying profit taxes, were subject to a capital charge of 5% on the book value of state capital invested in them. In addition, they were allowed to retain only 10% of after-tax enterprise profits. The remaining had to be transferred to the treasury as residual surplus.

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Annex
OLS Regression Results

Equation N°	Equations
1	$M_1 = 664.2157 + 3.8137 DF$ (13.792) $R^2 = 0.931 \quad DW = 1.7 \quad F = 190.2$
2	$M_2 = 419.3335 + 2.9884 DF$ (12.932) $R^2 = 0.928 \quad DW = 2.1 \quad F = 167.2$
3	$RM = 510.8130 + 2.2612 DF$ (10.569) $R^2 = 0.889 \quad DW = 1.7 \quad F = 111.7$
4	$COB = 351.8176 + 1.6048 DF$ (10.870) $R^2 = 0.894 \quad DW = 2.03 \quad F = 118.2$
5	$CPI = 61.3795 + 0.8243 CPI_1 + 0.0466 FD_1$ (6.494) (1.562) $R^2 = 0.917 \quad Dh = 0.60 \quad F = 83.9$
6	$CPI = 274.9730 + 0.2337 BD$ (4.104) $R^2 = 0.529 \quad DW = 0.83 \quad F = 16.3$
7	$d = 90.5408 + 0.0285 BD$ (3.859) $R^2 = 0.498 \quad DW = 0.67 \quad F = 14.9$
8	$CPI = 256.3447 + 0.2014 DF_1$ (5.648) $R^2 = 0.70 \quad DW = 1.6 \quad F = 31.89$
9	$GDDT = -74.9533 + 0.9271 GDDT_1 + 0.7947 DF$ (26.214) (7.331) $R^2 = 0.996 \quad Dh = 0.58 \quad F = 1780.0$
10	$DTE = -25.2953 + 1.4428 BE$ (3.509) $R^2 = 0.468 \quad DW = 2.10 \quad F = 12.3$

SOURCE: Estimations based on data from Ministry of Finance and National Bank of Ethiopia.

NOTES: - Figures in brackets are t-ratios.

- All the regression coefficients are significant at 1% except the coefficient of DF_1 in equation (5) which is significant at the 15% level.
- R^2 is the adjusted R-Squared.
- RM (Reserve money) is defined as the sum of currency outside bank and bank reserves. Bank reserves are equal to cash in the Commercial Bank plus reserve requirements with the National Bank.
- COB = Currency outside banks.
- DF = Fiscal deficits (conventional measure).
- DF_1 = The fiscal deficit lagged by one year.
- CPI = Consumer price index for Addis Ababa.
- CPI_1 = The CPI lagged by one year.
- GDDT = Government domestic debt.
- $GDDT_1$ = GDDT lagged by one year.
- BD = Domestic borrowing, including borrowing from the National Bank.
- d = GDP deflator.
- DTE = External public debt.
- BE = External borrowing used to finance the deficit.

CAN SUB-SAHARAN AFRICA LEARN FROM THE EXPERIENCES OF EAST ASIAN AND LATIN AMERICAN NEWLY INDUSTRIALIZING COUNTRIES (NICs)? ¹

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Abstract: *The spectacular development experiences of East Asian Newly Industrializing Countries (EANICs) and Latin American NICs (LANICs) is compared. Growth in EANICs was driven by non-dogmatic, export orientated policy based on adequate understanding of factor intensity. Export orientation came late in LANICs; was denied the course of comparative advantage; and also suffered from deficient leverage the state had enacting policies. Sub-Saharan Africa (SSA) is a total contrast to NICs in terms of development orientation and policy. Economic liberalization and stabilization promoted in the right sequence is considered key to success. This however needs a radical redefinition of the SSA state itself.*

1. INTRODUCTION

A newly industrializing country (NIC) is a country with its economy characterized by visible structural change: rising share of industry and industrial employment, accelerated growth of Gross Domestic Product (GDP) out pacing that of developed countries (DCs), falling share of agriculture in the GDP, and aggressive penetration of the world market by manufactured exports. Recently, structural transformation within manufacturing itself is added to this list [6, pp. 301-302]. Sustained high rate of growth in a group of East Asian and Latin American NICs (henceforth EANICs and LANICs) has called for closer scrutiny of the path traced in search of a workable alternative for ailing economies. Some theorists maintain every economy is a case of its own; economic actors and resources vary; and hence the stance hewn out of "success" cases is of little practical relevance; even more so with respect to SSA.

This paper attempts to look at the issues involved keeping allegiance to common sense. The particular NICs concerned will be Singapore, Hong Kong, Taiwan and South Korea from EANICs and Brazil, Mexico and Argentina from LANICs. The NICs group

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includes some others which remain controversial, and rather erroneously, a bunch of newly exporting countries (NECs). Some doubt the prospects of the latter group [(also called next tier NICs (NTNICs)) and would like to see NICs as special cases [6, pp. 301], [5, pp. 1].

2. EXPLAINING RAPID ECONOMIC PROGRESS

Excepting Argentina (3.4%), up until the 1980s, the NIC group grew by at least 2.5 percentage points more than DCs. Growth in EANICs and Brazil averaged above 9%. The last decade has seen considerable slow down in LANICs but EANICs continued to grow rapidly though the average growth rate was down to about 7%. Similarly, excepting Argentina, manufacturing value added (MVA) grew by more than half of the rate of growth

Table 1. Growth and Structural Change in NICs

NIC	Index of Structural Change	Growth Rate (%)		
		of MVA	GDP 1965-80	GDP 1980-91
Korea	31.37	18.99	9.5	9.6
Taiwan	n.a.	n.a.	9.8	7.5 ^b
Hong Kong	9.87	6.05	8.6	6.9
Singapore	48.32	11.41	10.1	6.6
Brazil	30.03	9.6	9.0	2.5
Mexico	14.83	7.09	6.5	1.2
Argentina	15.90	3.12	3.4	-0.4
DCs	10.40	4.66	3.9	2.9
World	10.60	4.85	3.5 ^a	3.0

NOTE: MVA = Manufacturing Value Added; GDP = Gross Domestic Product; n.a. = not available;
a = 1970-80; b = 1980-88.

SOURCE: Bradford, C., 1987, pp. 301.

World Bank, *World Development Report 1992*.

World Bank, *World Development Report 1993*.

"Book of Vital World Statistics", *The Economist*, pp. 44-57.

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in DCs. The index of structural transformation (details in [6, pp. 301]) was also two to three times higher as compared to DCs. In addition, according to statistics by *The Economist* [32, pp. 44-57], the NICs under concern are among the top 20 countries with highest manufacturing share of GDP (except Hong Kong whose economy is largely textile and service based); top 35 countries in volume of GDP (except Singapore).

The level of social development is also worth noting. The social development record was already better in EANICs. They managed to reduce infant mortality rates even further (by more than three-quarters); life expectancy has risen by about ten years from the levels 25 years ago, as the following table indicates.

Table 2. Social Development Indicators

NIC	L.E. 1965	L.E. 1987	IMR 1965	IMR 1991	ILL 1980	Unmp 1986	Gini Coef
Hong Kong	66	76	28	7	23	2.8	.396
Korea	57	69	63	16	13	3.8	.378
Singapore	66	73	26	6	17	6.5	.422
Taiwan	76	73	24	7 ^a	10	2.7	.326
Argentina	66	71	58	25	6	4.4	.442
Brazil	57	65	104	58.	25	5.3	.569
Mexico	60	69	82	36	17	4.9	.523

NOTE: L.E. = Life Expectancy at birth; IMR = Infant Mortality Rate; ILL = Illiteracy Rate; Unmp = Rate of Unemployment; a = 1987 data.

SOURCE: Balassa, B., 1991, pp. 19-22.

Gillis, et al., 1992, pp. 76.

World Development Report, 1993.

UNICEF, *The State of the World's Children*, 1994.

Progress in LANICs is also similar, though, due to the low level of social development they started with, they still need to do a lot more. EANICs still boast a low rate of unemployment excepting Singapore, and have achieved equitable income distribution with growth.

2.1 The Background

2.1.1 History

Modern history of NICs is closely linked to the slave trade and Spanish/Portuguese colonization of LANICs and that of Japanese in Asia. Early independence of LANICs helped promote Latin American identity but also nationalism and the creation of structured class ideology which ranges from Populism (with occasional tilt to Marxism) to military dictatorship. Singapore and Hong Kong are primarily British and *entrepot* trade creation. Racial diversity in LANICs and the "Chinese factor" in EANICs is sometimes invoked for growth and income distribution argument [5, pp. 30 and 73], [8, pp. 1-64, 123-140, 205-215].

The Korean war is of some significance in explaining growth pattern in East Asia. It resulted in human loss of about one million to Korea alone; more than half of its manufacturing capacity, railway network and power generation capacity were destroyed. Though the war ended the Cold War did not. Korean industrialization, and for that matter development of EANICs as a whole, had to take account of this [5, pp. 46], [11, pp. 97-127].

2.1.2 Resources

LANICs are better placed with regard to natural resources endowment. They possess vast, wet-tropical agricultural land, strategic mineral and petroleum reserves and a favorable population/land ratio. Latin America as a whole commands 15 positions among leading mineral producers. On the other hand, Singapore and Hong Kong are mere city states; South Korea's mountainous terrain has little mineral resources and is ill-suited for cultivation; Taiwan has fertile land but also high population density, a common feature of Asia [8, pp. 50-64], [5, pp. 30 and 47]. The implications of resource abundance did not escape controversy as LANICs grew relatively slowly; evidence suggesting even higher resource intensity through time, perverse foreign exchange incentive and a "Dutch Disease" condition [6, pp. 302].

Technological capability and human resource development was better in EANICs prior to industrialization. This should be contrasted to resource based LANICs which displayed

weak artisan class accounting, in 1925, for only 10% of industrial employment, 4% of total output, and 30% of manufactured output when industry employed 4% of the total work force. In EANICs artisan employment exceeded factory employment long into the modern era. The impact of this on consumption patterns has to be particularly noted [14, pp. 1460]. In addition, Japanese export of important production units to Korea and Taiwan has had considerable impact on the growth of technology [26, pp. 110].

2.2 Institutional Matters

Secularism in thinking, egalitarianism in practice and nationalism in locating socio-cultural identity are linked to growth. These values characterize the Confucian ideology widespread in EANICs. Accordingly, work ethics, claim of community feeling and understanding of obligation are attributed to impacting growth and policy choice [26, pp. 108], [11, pp. 101], [30, pp. 1443-1453]. An unqualified blessing is but far from sight as Confucianism is also linked to authoritarian rule and adverse effect on motivation [3, pp. 280].

On the other hand, weaker relative autonomy of states in LANICs is implicated for reluctant adjustment measures when such are believed necessary. Unlike Confucian subordination, interest groups manipulated governments. It is argued that, higher growth during repressive regimes in LANICs suggests the merits of decision making autonomy if not autarky [18, pp. 197-231].

2.3 Economic Policy Making and Government Intervention

Varying arguments with respect to NICs' policy making are sometimes considered analogous to "viewing the glass either half full or half empty" for even within EANICs there are discernible differences [20, pp. 45]. Policies and experiences are likewise diverse ranging from near *laissez faire* condition in Hong Kong (though Hong Kong is a very special case) to a more consistently upper handed Korean government, from substantial multinational companies (MNCs) involvement in Singapore to development of domestic based large scale companies focusing on heavy industry in Korea, to promotion of numerous small scale and medium sized industries in Taiwan [5, pp. 30-120]. But, is that all?

2.3.1 Choice of Trading Regimes before the 1960s

Most view EANICs and LANICs as having divergent trading policies. Differences in performance are ascribed to a dichotomy between inward-looking strategies of LANICs derived from a home grown structuralist paradigm, and outward orientated policies of EANICs. The dichotomy however needs further illumination.

Import substitution industrialization (ISI) is (and should be) pursued by all late industrializing countries. But the way it is done is of considerable significance. Experience of NICs indicates that too much of a focus on ISI to the point that other economic activities are discriminated against might actually lead to even more payment problems and economic decline.

LANICs, with the view to get rid of the allegedly bleak outlook of primary product prices and satisfy the ever increasing demand for manufactured products in the home market concentrated on massive state-led/supported ISI program. Protection from 'invasion' by foreign manufactures was accorded to industries producing consumer goods. Tariff and quota barriers were widely used. Favorable importing (intermediate and capital goods) arrangements were introduced to encourage investors. Government manipulation of factor prices (in the form of underpricing of investment goods) and differential access to financial resources was actively promoted (through controlled credit allocation and interest rate policy). Industrial targeting helped establish industries believed to be critically important. As a result, LANICs were able to produce most of manufactures at home. They were able to persuade foreign producers to relocate production units. In this regard, the motor industry in Brazil is frequently cited as an example [5, pp. 1-25], [23, pp. 160], [17, pp. 66-96].

The same was true for EANICs, apart from Hong Kong [3, pp. 282]. The pattern, however, differed slightly. EANICs were conscious of resource limitations and even scantier possibilities of using scale economies on the home demand only. The crucial difference even at this first stage of ISI was a non-dogmatic view on the extent of protection. Effective protection in EANICs remained well below that of LANICs even with declared ISI aim. For example, in the 1960s effective protection rate was four to ten times higher in Argentina as compared to Korea and Taiwan [23, pp. 156]. Selective protection measures can still be justified both theoretically and practically. Proven anti-dumping measures are the foremost

examples in this case.

2.3.2 Trading Regimes after 1960s

More divergence occurred in the early 1960s where EANICs shifted from first stage of ISI (i.e. labor intensive consumer goods production) to exports based on similar factor proportions. Further, financial reforms were undertaken to raise the domestic saving ratio. These two variables (saving to GDP and capital-labor ratio) were perceived as key indicators of competitiveness. In contrast, having observed that excessive ISI measures gave rise to a new set of payments problem, LANICs sought to cover the technological gap by producing intermediate goods at home. This went ahead despite wage rigidities and rising level of differential inflation (which resulted in negative real interest rates). In the words of Balassa [5, pp. 12], they "... shifted to second stage import substitution which proved costly as the commodities in question did not conform to the production possibilities of countries concerned." Such denial of capacity and neglect of scale economies and factor intensities tied LANICs to continued inward orientation. Whatever was left of the export impetus had thus to be entrusted to the primary sector or to the export of goods higher on the factor intensity scale, goods which least conform to competitiveness.

Added to this was trade union action which exacerbated wage rigidities. On the contrary, a steady supply of migrant labor (Hong Kong and Taiwan), existence of unemployment (Singapore), low initial wages (Korea), and weak organized labor action in all of them kept real wages low (and hence labor market intervention minimal) giving EANICs a competitive edge [20, pp. 52-54]. Only Brazil managed considerable reform towards export orientation [5, pp. 12].

As real wages began to rise in EANICs, maintaining the lower capital-labor ratio was no longer possible as the initial labor surplus was absorbed. A recognition of this led them to concentrate on increasing savings. Some (example Singapore), however, intervened in the labor market to effect smoother transition into skill-intensive production [20, pp. 55].

It is now fairly established that outward orientation produces higher growth [12, pp. 39-58], [5, pp. 1-20]. Nevertheless, like most other interventions, it entails some degree of market distortions. But anti-growth distortions are associated to sustained discriminatory

incentives, whether outward or inward orientated, or for that matter, whether primary production or manufacturing. In this regard EANICs were particularly less tempted to use price (including interest rates) and administrative controls even when this meant potentially lower rate of growth [2, pp. 215].

2.3.3 Adjustment to Shocks and Investment Efficiency

External shocks are bound to affect an economy whether inward or outward orientated. Such shocks included the two oil price shocks, appreciation of real interest rates and the resultant debt crisis. The response to these shocks is believed to derive from the trade regime followed, financing versus adjustment.

EANICS resorted to stabilization measures to mitigate imported inflation. Taken in tandem were measures to improve savings to avoid debt (Korea, an adventurous borrower, being exception). They also avoided fluctuations in factor productivity/efficiency. The practice of EANICs has proved that control of the financial sector, but more importantly, control of inflation and hence financial outflow was critical for industrial efficiency [23, pp. 190], [5, pp. 4-6].

Contrary to such a practice, policies in LANICs after the first oil shock centered on external financing of payments problem at the then negative real interest rates or depletion of reserves. The uncontrolled inflationary differential was transmitted to exchange rate overvaluation and loss of export competitiveness. Overvalued currency resulted in the loss of domestic currency holding and undermined financial intermediation. In LANICs this problem was compounded by the weak leverage the government had in the financial market.

The second oil shock (1979) was accompanied by increased import bills and rise in real interest rates on existing debt as well as new drawings. Even sharper adjustment policies were needed to maintain competitiveness. LANICs were again reluctant or unable to undergo a shock treatment; in fact with the enormous servicing difficulties that ensued, they had to settle for reduced (or negative) growth rates. Commenting on the use of policy reforms in the two sets of countries in dealing with bad luck and managing good luck, Easterly and Pritchett [10, pp. 38-41] have stressed that good long-term sectoral and macroeconomic policies that lead to high educational enrollment rates, deep financial

markets, increased equipment investment, stable and undistorted prices and realistic interest rates are the only convincing foundations for future growth.

2.3.4 Government Intervention

Sound economics is the basis for growth, claims a World Bank comparative study on eight 'high performing' Asian economies, as these countries managed to get economic fundamentals right: unusually stable macro-economy providing the necessary framework for private investment, integrity of the banking system, investment in basic education, stress on agricultural productivity change as opposed to taxing the rural economy, keeping price distortions within reasonable bounds and productivity improvement in industry based on positive assimilation of foreign ideas and technology [27], [28, pp. 2-6].

The extent, form and economic impact of intervention in NICs remains controversial [22, pp. 10-37]. The discussion above depicts purposive government action yielding varied results even when they were in the desired direction. The aforementioned World Bank study accepts that, sound economics alone could not have produced the 'East Asian Miracle.' The 'miracle' has more to do with judicious combination of these fundamentals with purposive intervention to accumulate physical and human capital, and allocate this capital to highly productive areas by combining with skillfully acquired and mastered technology. A blanket application of these same policies in other countries are however doubted raising some pertinent questions on the assertion [27], [28, pp. 2-6], [13, pp. 2-4].

Evidence from Latin America shows negative but inconclusive impacts of government expenditure suggesting some form of crowding out [9, pp. 60]. On the other hand, the Brazilian economic 'miracle' is associated with the repressive military junta which also invested heavily in some sectors of the economy, especially mining [17, pp. 83-88]. Extensive investment in infrastructure gave EANICs the needed springboard while state-owned companies operated as market driven units [16, pp. 2-6].

The controversy is likely to persist for some time until further studies shed light on the various aspects. Part of the problem is methodological as the diversity of experience, variety of interventions and differences in policies used preclude authoritative judgement. Nevertheless, getting economic fundamentals right, the EANICs experience suggests, may

be augmented by other institutionally demanding strategies based on specific understanding of and the confidence on circumstances that may make them viable. The capacity to do so becomes the critical variable in this regard.

Most agree that EANICs were more suited to keep generally positive real interest rates on deposits with prudential regulation and supervision concurrently with a mild financial repression which included directing credit based on performance while creating the infrastructure and investment friendly tax and incentives atmosphere. Production and export subsidies were the chief means of attaining investment targets while the theoretically inefficient measures of trade restrictions have been kept low and used rather sparingly to protect domestic industries that would eventually 'grow' into export orientation [27], [28, pp. 2-6].

The essence of these policies, against what the long list suggests is targeting minimalist intervention without being fetters to the market. Lindauer and Roemer [24] have clearer message in this regard after reviewing the experiences of Indonesia, Malaysia and Thailand which have also industrialized rapidly as outward looking economies. African governments might find it advantageous to intervene even less to establish credibility for the new policies after decades of poor performance [24].

3. LESSONS TO AFRICA

3.1 Experience So Far and Constraints

The following, unless otherwise mentioned, is based on Killick [19, pp. 1-55], which is a fairly detailed account of post independence experience of SSA.

3.1.1 Domestic Policy and Performance

Africa (SSA) stands in clear contrast to NICs in terms of growth performance. Though a paucity of data and enormous diversity precludes generalizations, it can be said that SSA is moving in the opposite direction to what its people hoped for. Half of its population live in persistent poverty and private consumption is falling. Structural change is very low; gradual move away from primary production; low and stagnating energy consumption, small

overall economic size, heavy dependence on foreign aid signifying lack of savings, and similar structural constraints [19, pp. 1-7].

A persistent macroeconomic imbalance has resulted in huge import cuts since 1986, 30 countries visited IMF [25, pp. 20-24], a further 5 denied access because ineligible; and unmatched, growing current account deficit indicate severe financing problem [19, pp. 7-8].

Many poor countries, several of them in SSA, are closer today to meeting most basic needs of their population than many considerably wealthier countries. Mean life expectancy has increased by a fifth, mortality is down by a third. Mauritania, Zambia, Tanzania and Madagascar have even achieved the reduction of malnutrition, measured in terms of low birth weight, below 15% which is less than half of the average for developing countries [33]. In this sense, the dismal performance in economic growth goes opposite to improvements in the social front, calorie intake always being an exception. In recent years, there has however been stagnation even decline (Niger, Rwanda, Eritria, Ethiopia, Guinea-Bissau and Nigeria being the examples), in the social development sector [33]. In SSA as a whole, still more than half of the population has no access to health services, two-thirds lack potable water, preventable diseases claim lives, and currently the spread of AIDS presents a real threat. Adverse calorie supply, reflecting poor agricultural record and import capacity, declining quality of education as well as declining returns to education costs pose serious obstacles to human capital development. Even then, there is discrepancy between women and men, nations, nationalities and ethnic groups. The effects of population pressure, desertification, expansion of the Sahara and global warming may remain debatable but the environmental threat is nowhere more serious than in SSA [19, pp. 42-43].

3.1.2 Government Intervention

Heavy Government intervention overextended the sphere of the state, but with a good deal of substandard performance both in efficiency or weighed against expectations it created. After political independence, inspired by the then influential view of structuralism and apparent success of planned intervention in the former USSR, SSA governments heavily resorted to medium term planning. Market failure and resource mobilization arguments are invoked even in those countries reluctant to embark on ambitious state capitalism (or

socialism). Extremists resorted to 'dependency' rhetoric: import protection, Africanisation, nationalization and economic independence [19, pp. 29-33].

But Africa failed to see what now hindsight suggests: inappropriateness of the socio-political foundations on which such interventions were carried out, illegitimacy of its rulers; and perhaps redrawing of its arbitrary boundaries. Most African nations derive polity defining their nationhood from the colonial background or annexation and ethnic domination. In search of legitimacy, its rulers sought the cover, or yield to the pressure, of clientalist based politics. The economic good of patrimonial, personal, unrepresentative states, unlike other authoritarian states, boils down to being predatory [19, pp. 32-41], [7, pp. 293-416].

Moreover, most suffer from "synthetic nationalism" - working class militancy, replacing markets by the state, 'delinking' and ultimately, selective patronage to their interest groups and sympathizers [30, pp. 1443-1453]. Some define goals clearly, but forget the basics of economic motive. The result, awkward it might seem, as remarked in the Tanzanian case, "never was there a more noble social experiment, never was there a (more) miserable failure. Apparently, we have here that is fairly rare in human history - a perfect failure" [35, pp. 839-849].

3.1.3 Trade Policy

Trade and investment regime following this background was discriminatory against exports (primary or manufactured) and agriculture. A lax fiscal system coupled to sub-market interest rates, tax on export trade, overvalued currency and rising inflation meant decreasing saving rates, worsened budget and payments deterioration. Existence of parastatals operating under x-inefficiency (roughly, increasing overhead costs) sent wrong signals to markets. Investment is politicized; direct control and pro-urban bias complicated the system. Entrepreneurship is gradually replaced by rent seeking. The result was a complete failure; for instance, manufactured exports of SSA fell from 9.3% to 0.4% of share of developing countries [19, pp. 24-37].

What characterizes African development can be seen from the table below. Even in Africa countries like Kenya, Cote d'Ivoire, Malawi, Mauritius, Togo and Cameroon (division by Balassa [4]; note that this division excludes countries like Botswana which are considered

even better but special too) fared better as compared to the other group which has barely moved since the 1960s. The small growth (1965-85) was said to be the result of market-oriented, peasant based development strategies which embodied adoptive research, and encouragement to entrepreneur farmers [1]. The domestic saving-investment relationship strongly suggests that in the statist group governments were major economic actors.

Table 3. Economic Performance in Selected SSA Countries

	GDP Per Capita \$ /Growth Rate % a				GDI/GDS/ Deficit % in GDP
	60-78	65-83	65-85	80-91c	1991
Ethiopia	120/1.5	120/0.5	120/-0.1	-1.6	10/0/10
Somalia	130/-0.5	250/-0.8	170/0.5	-2.2d	34/3/...e
Sudan	320/0.1	400/1.3	480/0.0	-4.2d	10/7/...e
Tanzania	230/2.7	240/0.9	160/-0.5	-0.8	22/-11/33
Mozambique	140/0.4	...	100/...	-1.1	42/-10/52
Zaire	120/1.1	170/-1.3	170/-2.1	-2.1d	11/8/...e
Kenya	330/2.2	340/2.3	370/1.9	0.3	21/19/1
Cote d'Iv.	840/2.5	840/2.5	770/0.9	-4.6	10/15/5b
Malawi	180/2.9	210/2.2	170/1.1	0.1	20/9/11
Mauritius	830	1160/2.8	1800/2.9	6.1	28/23/5b
Togo	320/5	280/2.1	370/0.0	-1.3	19/10/9
Cameroon	460/2.9	820/2.7	1010/3.7	-1.0	15/15/0

NOTE: a = GDP per capita figure is for the final year in the range; b = Budget surplus;
c = Figure denotes growth rate; d = 1980-88; e = 1988.

Final column is introduced as proxy indication of government intervention in the economy.

GDP = Gross Domestic Product; GNP = Gross National Product; GDS = Gross Domestic Saving;
GDI = Gross Domestic Investment.

SOURCE: World Bank, *World Development Report*, 1978, 1980, 1990, 1993.

UNDP, *Human Development Report*, 1991.

IMF, *International Financial Statistics*, January 1992.

It was demonstrated that economic behavior of small actors in Africa is not perverse [34, pp. 7-8, 72-73]. Africa's growth is shown to be sensitive to changes in export earnings. Despite the fact that SSA's social record is the worst, it has been indicated that human development gaps can be closed in a relatively short period of time [19, pp. 9-15, 17]. Above all, as the above table shows, resource constraint is less binding as against common conception. With or without the state, gross domestic investment is more than 10% of GDP in almost all African countries. What excessive government consumption did was to aggravate the resource balance. Contemplating as to what would have happened had expenditure been lower, would require investigation into the structure of such expenditures. Even without such a scrutiny, it is readily observable that very little has translated into growth. This signifies the need to attach considerable significance to investment efficiency with rise in the actual volume and opening up of the domestic market to global competition.

The experience of LANICs suggests that, one consideration deserves cautioning, i.e., social and institutional capability of catching up can be a more binding constraint. Ways devised around the problems of SSA's late colonization, limited capital stock (material and human), small market size, and initial low income need to be especially effective [19, pp. 37-46].

3.1.4 External Environment

Though to a lesser extent, external economic environment contributed to the dismal performance of Africa. The terms of trade outlook has not been favorable for primary exports. Growing evidence attests to this [29, pp. 1485-1496]. But a similar deterioration in prices of food, a growing import category for SSA, needs to be taken into account. On the other hand, the deleterious effect of aid dependency and debt overhang must be weighed against Africa's consistently better deal in DCs markets and aid. Similarly, considerable evidence of export earnings instability, to have emanated from supply fluctuations, forbids sweeping generalizations [19, pp. 16-21].

3.2 Conclusion

The primary lesson of NICs' experience to SSA is that growth should come from the best of the impetus exploited based on comparative advantage and this is better achieved through export orientation. In addition this will remove market constraints and facilitate the use of scale economies. Even with larger domestic markets, opening up forces domestic firms to be competitive and innovative. Total factor productivity is shown to grow faster with export orientation [3, pp. 274-290].

Dissenters hold the view that this would represent a "fallacy of composition" since all should not resort to export promotion of presumably same articles at the same time. But the question should rather be "can all do it at once?" [21, pp. 457-474]. As it appears, it would be too simplistic to assume that all SSA countries have the capacity and can engage in export orientation overnight.

Secondly, macro policy management requires discipline, that is, pragmatism should win over dogma. Continuous flexibility in responding to the conflicting effects of policies is necessary. EANICs experience of having no real (dogmatic) preference over either strategy, state or private capital, or if need be factor market interventions under the overall guidance of market forces is particularly worthwhile. Ensuring adequate infrastructure, investment in human capital development, stability of the incentive system, and bureaucratic efficiency will promote state market relations [3, pp. 274-290], [31]. Structural distortions should be kept under careful scrutiny. The state and market should not conflict. It is necessary to stress that there is ample scope to ride in tandem 'getting policies right' and 'getting prices right' as they are less contradictory than often understood [6, pp. 314].

Finally, institutional and political reorganization of SSA is long overdue. A radical shift in attitude and work ethics is necessary to clean up decades of rent seeking, personal aggrandizement and internal colonialism. Such a shift can only give patrimonial Africa the right institutional atmosphere where reward depends on entrepreneurship, and not on kinship.

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Glossary of Economic Terms Nos. 133 - 155

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133. Law of diminishing returns (n)	የተጨማሪው ዕቃ የጥቅም ስራ /አ/
134. Multiplier (n)	አብጂ /አ/
135. Subsidy (n)	ድጋፍ /አ/
136. Value - Added (n)	ተጨማሪ እሴት /አ/
137. Vicious circle of poverty (n)	የድህነት አቆፋት ክብ /አ/
138. Efficiency (n)	ትልቅነት /አ/
139. Efficient (adj.)	ተልዕኮ /ት/
140. Inefficient (adj.)	ትልቅነት አለብ /ት/
141. Resource (n)	ሃብት /አ/
142. Property (n)	ንብረት /አ/
143. Average propensity to consume (n)	አግካይ የጥቅም ስራ ምግብ /አ/
144. Marginal propensity to consume (n)	ተጨማሪ የጥቅም ስራ ምግብ /አ/
145. Black market (n)	ጥቅም ገበያ /አ/
146. Budget line (n)	የበጀት መስመር /አ/
147. Classical (adj.)	ዘላቂ /ት/
148. Competition (n)	ውድድር /አ/
149. Pure competition	የጠፋ ውድድር /አ/
150. Imperfect competition (n)	ያልጠፋ ውድድር /አ/

151. Division of labour (n)	ፖረ ክፍል /ሰ/
152. Income distribution (n)	ገቢ ክፍል /ሰ/
153. Indifference curve (n)	ገደብአዊ ከርባ /ሰ/
154. Inflation (n)	ጥጋ ገረት /ሰ/
155. Infrastructure (n)	መሠረተ ልማት /ሰ/

No Special comments are needed on our part for the above coinage. The only comment we want to make is on the coinage for the terms pure completion and perfect completion. The coinage ፖረ ግጥም can serve for both terms even though polysemy is considered as a disadvantage by some. The second comment may perhaps be on the coinage for the term classical. We thought the Amharic coinage ዘላቂ (it is actually an existing word) is inappropriate because it means something that lasts long or goes all the way through like classical economics.

Commentary on Glossary of Economic Terms Nos. 133-155

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137. Avoid ከብ as it is redundant.

140. I prefer ኢተኦግፋ or even better ታተኝ

143. I prefer አግካይ የፍጆታ ዝንባሌ

144. Same as (143)

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137. Avoid ከብ as it is redundant.

140. I prefer ኢተኦግፋ or even better ቶተኛ

143. I prefer አግካይ የፍጆታ ዝንባሌ

144. Same as (143)

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