ECONOMIC DEVELOPMENT IN ETHIOPIA: AGRICULTURE, THE MARKET AND THE STATE

by

JAMES PICKETT

PARIS 1991
This publication has been presented by CTA as part of its programme to improve the availability of information on agricultural development in ACP States.

Cette publication vous est offerte dans le cadre de la contribution du CTA à l'amélioration de l'accessibilité de l'information agricole aux États ACP.

**CTA** – Technical Centre for Agricultural and Rural Cooperation (ACP-EEC Lomé Convention)

Postbus 380
6700 AJ Wageningen
The Netherlands

Tel. ..31 8380 60400
Fax..31 8380 31052

**CTA** – Centre Technique de Coopération Agricole et Rurale (Convention ACP-CEE de Lomé)

Postbus 380
6700 AJ Wageningen
Pays-Bas

Telex 30169 cta nl
ECONOMIC DEVELOPMENT IN ETHIOPIA:
AGRICULTURE, THE MARKET AND THE STATE

BY
JAMES PICKETT
Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

— to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
— to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and
— to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original Member countries of the OECD are Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries became Members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971) and New Zealand (29th May 1973). The Commission of the European Communities takes part in the work of the OECD (Article 13 of the OECD Convention). Yugoslavia takes part in some of the work of the OECD (agreement of 28th October 1961).

The Development Centre of the Organisation for Economic Co-operation and Development was established by decision of the OECD Council on 23rd October 1962.

The purpose of the Centre is to bring together the knowledge and experience available in Member countries of both economic development and the formulation and execution of general economic policies; to adapt such knowledge and experience to the actual needs of countries or regions in the process of development and to put the results at the disposal of the countries by appropriate means.

The Centre has a special and autonomous position within the OECD which enables it to enjoy scientific independence in the execution of its task. Nevertheless, the Centre can draw upon the experience and knowledge available in the OECD in the development field.

Publié en français sous le titre :
LE DÉVELOPPEMENT ÉCONOMIQUE EN ÉTHIOPIE :
L'AGRICULTURE, LE MARCHÉ ET L'ÉTAT

THE OPINIONS EXPRESSED AND ARGUMENTS EMPLOYED IN THIS PUBLICATION ARE THE SOLE RESPONSIBILITY OF THE AUTHOR AND DO NOT NECESSARILY REFLECT THOSE OF THE OECD OR OF THE GOVERNMENTS OF ITS MEMBER COUNTRIES

© OECD 1991
Applications for permission to reproduce or translate all or part of this publication should be made to:
Head of Publications Service, OECD
2, rue André-Pascal, 75775 PARIS CEDEX 16, France
FOREWORD

This study forms part of the Development Centre's programme of research on Developing Country Agriculture, under the direction of Ian Goldin.
ALSO AVAILABLE

Development Centre Seminars
Agricultural Trade Liberalisation. Implications for Developing Countries edited by Ian Goldin, Odin Knudsen (1990)
(41 90 04 1) ISBN 92-64-13366-6 FF180 £18.00 US$32.95 DM60

Development Centre Studies
Agricultural Policies for the 1990s by Sartaj Aziz (1990)
(41 90 01 1) ISBN 92-64-13350-X FF120 £14.50 US$25.00 DM47
Agriculture and Economic Crisis. Lessons from Brazil by Ian Goldin, Gervasio Castro de Rezende (1990)
(41 89 09 1) ISBN 92-64-13392-5 FF90 £11.00 US$19.00 DM35
(41 89 08 1) ISBN 92-64-13369-0 FF50 £6.00 US$11.00 DM20
(41 90 02 1) ISBN 92-64-13354-2 FF120 £15.00 US$25.00 DM47

ORDER FORM

Please enter my order for:

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OECD Code</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total:  

Payment is enclosed □
Charge my VISA card □ Number of card .................................................
(Note: You will be charged the French franc price.)
Expiration of card ........................................... Signature  ...........................................

Send invoice. A purchase order is attached □
Send publications to (please print):
Name ........................................................................................................................................
Address ......................................................................................................................................
................................................................................................................................................

Send this Order Form to OECD Publications Service, 2, rue André-Pascal, 75775 PARIS CEDEX 16, France, or to OECD Publications and Information Centre or Distributor in your country (see last page of the book for addresses).

Prices charged at the OECD Bookshop.

THE OECD CATALOGUE OF PUBLICATIONS and supplements will be sent free of charge on request addressed either to OECD Publications Service, or to the OECD Distributor in your country.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREFACE</td>
<td>9</td>
</tr>
<tr>
<td>AUTHOR'S NOTE</td>
<td>11</td>
</tr>
<tr>
<td>SUMMARY</td>
<td>13</td>
</tr>
<tr>
<td><strong>Chapter 1</strong></td>
<td></td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>23</td>
</tr>
<tr>
<td>Notes and References</td>
<td>27</td>
</tr>
<tr>
<td><strong>Chapter 2</strong></td>
<td></td>
</tr>
<tr>
<td>THE ETHIOPIAN ECONOMY</td>
<td>29</td>
</tr>
<tr>
<td>Notes and References</td>
<td>45</td>
</tr>
<tr>
<td><strong>Chapter 3</strong></td>
<td></td>
</tr>
<tr>
<td>ECONOMIC GROWTH IN A LOW-INCOME COUNTRY</td>
<td>47</td>
</tr>
<tr>
<td>1. Theory and experience</td>
<td>48</td>
</tr>
<tr>
<td>2. Industry and agriculture</td>
<td>52</td>
</tr>
<tr>
<td>3. The market, the state and comparative advantage</td>
<td>59</td>
</tr>
<tr>
<td>4. Resource allocation in Ethiopia</td>
<td>92</td>
</tr>
<tr>
<td>Notes and References</td>
<td>97</td>
</tr>
<tr>
<td><strong>Chapter 4</strong></td>
<td></td>
</tr>
<tr>
<td>ECONOMIC PERFORMANCE</td>
<td>101</td>
</tr>
<tr>
<td>1. Economic change before 1974</td>
<td>103</td>
</tr>
<tr>
<td>2. Economic performance, 1974-1987</td>
<td>107</td>
</tr>
<tr>
<td>3. Comparative performance</td>
<td>112</td>
</tr>
<tr>
<td>Notes and References</td>
<td>140</td>
</tr>
<tr>
<td><strong>Chapter 5</strong></td>
<td></td>
</tr>
<tr>
<td>AGRICULTURE, THE MARKET AND THE STATE: THE WAY FORWARD</td>
<td>143</td>
</tr>
<tr>
<td>1. Agriculture as a leading sector</td>
<td>148</td>
</tr>
<tr>
<td>2. The market and the state</td>
<td>157</td>
</tr>
<tr>
<td>3. International economic relations</td>
<td>168</td>
</tr>
<tr>
<td>Notes and References</td>
<td>174</td>
</tr>
</tbody>
</table>
TABLES AND CHARTS

Table 1  Selected Economic and Social Indicators for Ethiopia and Other Areas, 1987 .................................................. 177
Table 2  Crop Production in Ethiopia: Area, Output and Yield by Category and Model of Production, Average 1979/80-1985/86 .................................................. 178
Table 3  "Normal" Food Grain Supply in Ethiopia ........................................................................................................... 179
Table 4  Grain Market Size, 1970/71 and 1986/87 ........................................................................................................... 180
Table 5  Economic Standing of Selected Economics, 1987 ............................................................................................... 181
Table 6  Characteristics of African and Other 1965, 1987 and 1965-1987 ........................................................................ 182
Table 7  Comparison of African and Asian Costs Relevant to the Public Sector in the 1980s ........................................... 183
Table 8  Sectoral Labour Productivity in Ethiopia and the United Kingdom ........................................................................ 184
Table 9  Domestic Resource Cost Ratios, Selected Products ............................................................................................. 185
Table 10 Leading Economic Indicators, 1960-1987 ........................................................................................................ 186
Table 11 Ethiopian Gross Domestic Production by Industrial Origin, Selected Years ...................................................... 187
Table 12 Food Production Per Head, 1960-1987 ................................................................................................................. 188
Table 13 Food Supply in Ethiopia in Selected Years ........................................................................................................ 189
Table 14 Rates of Growth of Real GDP in Ethiopia and Other Low-Income Economies of Sub-Saharan Africa, 1960-1987 ........................................................................... 190
Table 15 Changes in Daily Grain Production Per Head ................................................................................................ 191
Table 17 Production Costs, Prices, Market Shares and Margins in Shoa, 1980/1981 and 1985/1986 ............... 193
Table 18 Real Exchange Rate, 1960-1988 ......................................................................................................................... 194
Table 19 Income Elasticity of Demand, Selected Products .............................................................................................. 195

Chart 1  Real Income Per Head, 1960-1987 ..................................................................................................................... 196
Chart 2  Distribution of GDP by Industrial Origin ........................................................................................................ 197
The OECD Development Centre in recent years has conducted research focusing on two broad themes. First, the analysis of exogenous changes on developing country agriculture, notably, bio-technology, the food system, and international demand and supply trends; and second, the interaction of macroeconomic policies and agricultural development. Research on this second theme took the form of a series of country studies — China, Thailand, Pakistan, Mexico, Brazil, Argentina, Ghana and Ethiopia — and a synthesis, undertaken by Sartaj Aziz.

This study investigates Ethiopia’s economic predicament with a special focus on agriculture, which is the central economic activity. Ethiopia provides a severe challenge for those concerned with development. It is among the poorest countries in the world, and, in terms of fixed and human capital, among the least developed.

The dominance of traditional agriculture reflects the poverty of the country, but, the study convincingly notes that, contrary to current thinking, Ethiopia is not poor because agriculture is traditional. On the contrary, agriculture is traditional and unable to keep pace with population growth because the economy is poor; the capital stock is small and the labour force largely untrained.

Climatic disaster and civil war have compounded the problems, stretching further the already desperately weak economy. These factors, however, cannot alone account for the levels of poverty. Even with a favourable environment Ethiopia is unlikely to achieve food security for many years to come. The role of the international community in Ethiopia’s reconstruction is vital, as is the introduction of appropriate economic policies. Here, the study offers a powerful rejoinder to the too-often ideologically, rather than empirically, determined views on issues as important as the relationship between peasant and large farmers or the market and state. In these areas, the need for balance is clearly articulated, with neither the highly imperfect market, nor the largely incapable state, being able to lay claim to the monopolisation of economic activity.

On the basis of detailed examination of the structure of the Ethiopian economy and comparative analysis of other growth experiences, the study concludes that increasing agricultural productivity is a key to future progress. In this area as in others, progress will, none the less, remain slow in face of the terrible scale of Ethiopian poverty.
Overcoming poverty and the provision of economic growth provide the cornerstones of development. Nowhere is this challenge greater than in Ethiopia. This book offers an important contribution to development thinking which, we trust, will be widely read and translated into development practice.

Louis Emmerij
President, OECD Development Centre
July 1991
AUTHOR’S NOTE

This study is one of a series on changing comparative advantage in agriculture organised by the OECD Development Centre. Participating in this work and related meetings — normally under the genial but efficient and instructive chairmanship of Albert Simantov — has been a pleasant learning process. Thanks are therefore due to Louis Emmerij, President of the Centre, for setting the process in motion and seeking from time to time to keep it on the rails. Thanks are also due to Martin Brown — for administrative efficiency, access to material, and helpful discussion based on courageous unwillingness to shrink from the near-unmanageable complexity in which the project was set; to Ian Goldin for comments on and efficient processing of the manuscript; and to my fellow participants, from whom I really did learn.

Much of the ground work for the study was done in a period when I was advising the African Development Bank. I am grateful to Mr. Tekalign Gedamu and Mr. Delphin Rwegasira for creating the freedom that made this possible. In Ethiopia, Dr. Teshome Mulat was of great help, as were Mersie Ijuku and officials in a number of ministries and agencies. Gratitude is also due to the heads of mission of the World Bank and the FAO for time and materials, and to the representative of the African Development Bank for help in arranging the programme of visits. The project as a whole depended on the generous support of the Finnish and Swiss Governments. Neither they, nor any other institution or expert is, however, responsible for the contents, interpretations and conclusions of the study: these are the responsibility of the author alone.

This study was completed in the early summer of 1990. In the light of the traumatic upheavals that have occurred — with, as this note is being drafted, still uncertain consequences — in May 1991, it may be appropriate to make it clear that the work is being published as it was written. Nevertheless I believe that the text that follows remains relevant to the economic development of Ethiopia. It shows that the poor performance of the economy after 1974 had some policy cause. And, in this regard, it documents the failure of the attempt to run agriculture by government fiat, and so — I hope — offers a lesson for future policy makers. In the same vein, the text makes clear the continued importance of the agricultural surplus and it urges that this can best be increased by allowing peasants maximum freedom to buy and sell. Whatever else changes, for some time to come, Ethiopia is fated to remain a poor country dominated by low-productivity agriculture. Though there are limits on what may be done quickly to alter this situation, an important lesson study is that it is all too easy to introduce measures that can make a difficult task an impossible one.

James Pickett
Glasgow, May 1991
Ethiopia is among the poorest countries in the world. Income per head is US$120. Population is about 45 million and increasing at an annual rate of 2.9 per cent. Poverty is widespread. Graphic indication of this — and confirmation of the limited scope for distributive justice — come from asking how many annual incomes of US$1 million the gross domestic product could provide. The answer is less than 5,000. Some corresponding figures are: 8,000 for Burma, 49,000 for Nigeria, 52,000 for Turkey, 98,000 for South Korea, 468,000 for the United Kingdom, and 4.2 million for the United States.

Why is Ethiopia so poor? The tempting answer is the dominance of traditional agriculture in total economic activity. To accept this, however, is to confuse effect with cause. Ethiopia is not poor because of its traditional agriculture; but its agriculture is traditional because the country is poor. The essential fact is that Ethiopia has come late to modern economic growth. History and geography combined to keep the country largely isolated until relatively late. Cut off from the mainstream of technical progress and lacking the stimulation that comes from international commerce, the economy could not progress more quickly than simple techniques and nature allow. Science and technology have yet to make any widespread impact on Ethiopian production, and the capital stock is small and the labour force is largely untrained.

Beginning from the prevailing low incomes, remedying these supply-side defects is unlikely to be easy. As just tersely implied, it is ironically likely to be more difficult than otherwise because the aid-supported application of medical science has resulted in unprecedentedly high rates of population increase. In Ethiopian conditions it is difficult to equip a rapidly growing labour force with complementary factors, so that population increase has been a drag on rather than a boost to economic growth. Traditional agriculture has remained the main source of sustenance, and it has had increasing difficulty in keeping pace with the increase in the numbers to be sustained.

What, then, is to be done? In seeking to answer this question, attention is first given to the characteristics of the economy. Theory and experience are then selectively scanned for clues on how poor countries may grow. The resultant framework is used to organise description and scrutiny of economic performance in Ethiopia over the last 30 years. Thereafter, increasing agricultural productivity is seen as the key to future progress. And the respective roles of the market and the state in this regard are examined. It is recognised that, even if efficiency were higher than it has been, Ethiopia would not be food secure until many years had passed.
The time taken may be altered by changes in the international economy, and — going beyond commercial exchange — the willingness of the international community to help.

1. The economy

As of now, Ethiopia’s principal natural resource is its arable land, of which only 15 per cent is farmed. With respect to its cattle population, it is first in Africa and tenth in the world. There is potential for a great expansion of fishing in the Red Sea and the inland lakes. Tourism is also underdeveloped. And hydro-electric power could, it is thought, be expanded, as could geo-thermal power.

Agriculture accounts for about half of Ethiopia’s gross domestic product. It thus supports about four-fifths of the population and supplies 90 per cent by value of all exports. Of the agricultural GDP about one-fifth comes from livestock and the rest from crops, with roughly one-half of the crop value added coming from coffee, which accounts for some two-thirds of export earnings. Industry provides less than 16 per cent of the GDP, with about half of its contribution coming from manufacturing. Manufactured exports do not normally reach 10 per cent of the total. Food processing, textiles, footwear and clothing account for most of the output and employment in factories. And food processing is even more important in small-scale production, accounting for little under two-thirds of the total output in this sub-sector. Industry employs under 5 per cent of the labour force.

The service sector has provided one-third of the GDP in recent years, with transport and communications supplying just under half of this. Elsewhere, administration and defence together account for the lion’s share and have been growing rapidly. The balance of payments is as expected. The balance of trade is normally negative and imports largely comprise machinery, transport equipment and other manufactured goods, while exports are dominated by primary commodities. The exchange rate is widely held to be over-valued. Ethiopia has, however, hitherto had a good reputation for monetary management and inflation has been lower than in other developing countries.

Small-scale peasant farming is the predominant mode of cultivation. Of the area devoted to crops other than coffee in the period 1979-86, some 95 per cent was worked by private peasants. These produced 94 per cent of total output, with the rest coming from state and co-operative farms. Cereals accounted for 83 per cent of the cultivated land and 84 per cent of the non-coffee output. The main food grains are teff, barley, wheat, maize and sorghum. On the peasant farms teff, maize and sorghum each account for 19 per cent of output, barley accounts for 15 per cent and wheat provides less than 10 per cent.
There has been little comparative study of the economic efficiency of the three modes of production. The state farms and the co-operatives have been favoured by the government in the supply of capital services, fertilizers and improved seeds. Their yields should be higher. They are, but perhaps not to the extent expected. The yield superiority of the large-scale farm over the peasant is 1.19:1 for wheat and 1.43:1 for maize. It seems, however, to cost the state farm 150 per cent more than the peasant to produce a given quantity of wheat, and 250 per cent more to produce a given volume of maize. The co-operative farms also seem to use land less intensely and production inputs less efficiently than the peasant farmer.

Most Ethiopians live in the highlands where small-scale peasant farming mainly produces the five cereals identified above. The peasants use little capital — sickles, hoes, wooden ploughs, and machetes — and virtually no skills that result from systematic training. Power comes from humans and scrawny draught animals. There is little scientific seed selection, and sowing practices have been unchanged since time immemorial. The harvest involves cutting stalks by sickle, trampling the cut crop by oxen and winnowing by tossing into the wind. The average farm size is not much above one hectare. A crude production function suggests that 16 quintals of crop per annum come from combining one hectare of land with the labour of three persons, one ox, and implements to the value of US$13. Less than 14 per cent of the peasants use fertilizer, no more than 2 per cent use improved seeds, less than 5 per cent use herbicides and fewer than 1 per cent use pesticides. Irrigation is available to less than 5 per cent of all farmers. And more than half of these literally carry what little surplus they produce to the local market.

Though traditional techniques have not been completely static, they have not only failed to keep pace with population growth but, in conjunction with this, they have contributed to soil erosion and degradation. The upshot is that in a "normal" year — in which there is adequate and timely rainfall, no shortage of seed or labour, and no serious pest damage — the surplus (over the emergency ration of 500 grams) is some 18 grams per person per day. Many are chronically food insecure. The average diet is but 74 per cent of what the FAO/WHO think adequate. Nor could general food security be easily secured. Even if — against the long-run trend — cereal production were to grow at an average annual rate of 3 per cent for a decade, food security at the end of that time would still need a staggering increase in food imports. This puts food security beyond any reshuffling of entitlements.

Coffee is, as measured by its contribution to GDP, as important as cereal production, and is the principal source of foreign exchange. Annual production is about 2 million quintals, with 99 per cent of this coming from small peasant holdings. Most exports go, under quota of the International Coffee Agreement, to Western Europe, the United States and Japan. Non-quota markets are in Eastern Europe and the Middle East. In recent years quota and non-quota exports combined have been only 85 per cent of Ethiopia’s entitlement under the Coffee Agreement. In addition to drought, the relatively low level of production has been due to poor
husbandry, management, marketing and the spread of coffee berry disease. Peasant husbandry does not normally go beyond slashing and hoeing weeds and makes little use of herbicides or fertilizer.

Animals provide virtually all of the power used in agriculture and much of the transport for people and goods. Exports mainly take the form of hides and skins, although cattle and meat are sold in the Middle East. The livestock industry, which is mostly in the hands of the peasants, suffers from a shortage of grazing and fodder and from omnipresent disease.

Much of the peasantry is in Peasant Associations that use Service Co-operatives to market their surpluses, purchase and distribute inputs and run retail shops. In the last 15 years or so the market surplus of grains has increased absolutely and in relation to GDP. Some 60 per cent of the population is still, however, in the subsistence sector. In that sector food consumption per head has fallen, as it has among those who are market-dependent. The surplus of peasant agriculture — what is over and above the needs of the peasants for food — is about 16 per cent of the GDP. Given the weight of agriculture in the economy, this confirms that savings and investment are likely to be low. It also emphasizes the need for careful surplus extraction if the economy is not suffer a fall in the provision of wage goods. Expansion of the peasant surplus is the main hope for future economic progress.

The Ethiopian economy is not well articulated. Grain price differences persist across locations even when they are larger than could be explained by transport and other margins. Moreover, surplus grain production is highly concentrated, particularly in areas that are within reach of Addis Ababa. Some 31 per cent of the population is to be found in these areas.

2. Growth in the low-income economy

Ethiopia’s experience of modern economic growth is limited, so that there is little scope for study of economic success there. And development theory does not specifically cater for Ethiopia. With care, however, these limitations are not crippling; and insights can be derived from analysis and history.

The relationship between industry and agriculture is of central concern. Though few would expect Ethiopia soon to be an industrial power, policies that give special encouragement to industry in low-income countries have had influence there. The appeal of these in Ethiopia and elsewhere may be traced to the belief that productivity is higher in industry than in agriculture, and that manufacturing can deliver dynamic benefits that are not expected from farming.

Even diluted, this is dangerous medicine for a poor economy. The very circumstances that are thought to make a "big push" necessary, make it impossible. How, it has to be asked, are efficient industries to be established in poor countries?
Where are the markets to come from for manufactures? Moreover, the implied causal association of agriculture with poverty and industry with prosperity is not valid. Related to this, clear-headed economists have long seen that resource allocation is to be guided by returns rather than sectoral preference. There is no economic virtue in industry as such or agriculture as such.

Adam Smith saw clearly the dangers of preferential treatment. The regulation of production and trade does not increase the output obtained from given resources. It simply reallocates these with, normally, negative effect. Adam Smith's natural progress of opulence runs from agriculture to domestic manufacturing to foreign trade. In the early stages of growth, however, agriculture is preferred because investment there pays best. Growth comes from frugal accumulation and the spontaneous and uninhibited application of the surplus by individuals to areas of highest return, many of which are to be found in agriculture. Spontaneous progress is hence possible, and sets a standard for government intervention. This is justified only if it results in a higher-than-spontaneous rate of growth.

Is there some combination of spontaneity and intervention that would improve on spontaneity alone? Gerschenkron's careful analysis of European historical experience and the participation of government in the rapid growth recorded by some Asian countries in the 20th century suggests that there is. Yet caution is needed. The effectiveness of government intervention has been questioned. And the bias of the Asian policies, which favoured direct production may be difficult to secure elsewhere. These doubts are increased by a review of economic performance in sub-Saharan Africa since independence.

Little growth was achieved in this period, and agricultural production was stagnant, where it did not actually decline. The poor African countries did much less well than equally poor countries elsewhere. External and domestic factors outside the control of governments help explain the poor results. Policy nevertheless is to be indicted. It generally favoured industrial development and was associated with economically active government. Flawed trade and exchange rate policies were central to it. In terms of the domestic currency exports earned less and imports cost less than they would have at a more realistic rate of exchange. This harmed agriculture, as did other aspects of policy. Public expenditure was excessive, based largely on the exploitation of the peasant, and wrongly composed. State factories and farms were inefficient. So were the state marketing bodies, which added their own squeeze to the exploitation of the farmers.

These discouraging lessons of experience are boosted by analytical consideration. At low levels of development, an efficient and widely interventionist state is inherently implausible. Administrative skills are particularly scarce, as is most of the information that would be needed to run the economy with any success. This enhances the natural advantage that the market has in processing information and so in delivering efficient decisions. Moreover the market imposes a discipline in
relating cost to revenue. The absence of this in the public sector makes for inefficiency and worse. And the absence of property rights dampens incentive, and it may give rise to corruption. More generally, state-run economic activity is unlikely to be efficient and innovative since, lacking market standards, it is not exposed to well-focused scrutiny, and it offers no clear reward for invention.

In an inter-related way, theory and experience have been associated with a resurgence of the market in recent years. Nevertheless the theoretical prize of Pareto efficiency is likely to remain elusive in practice, since markets are imperfect or missing. There are, however, pragmatic arguments for the market that serve. These include its virtues as a decentralised co-ordinator of millions of decisions, the stimulus it gives to growth and technical change, the objectivity it imposes on decisions, and the discipline it gives through the earlier noted link between cost and revenue. Neo-classical economics does not necessarily have a monopoly on these virtues. Nor are they complete. The market has its defects. It is, however, still the best option.

Adam Smith's argument in favour of agriculture is to be seen empirically. If resource allocation is left to the market it will be determined by comparative advantage. That there are gains from trade has long been well-known. Growth prospects are also affected by the domestic distribution of these gains. In this regard sub-Saharan Africa, including Ethiopia, is well-placed. Trade based on peasant agriculture is good for growth and distribution. Though on a simple and speculative measure it might appear that Ethiopia had an advantage in manufacturing, more solidly based — but still less than perfect — domestic resource cost ratios confirm that agriculture is more in keeping with the country's comparative advantage than industry.

3. Economic performance

It is possible to see 1973 as a watershed in the world economy and in Ethiopia. There radical political change gave rise to sweeping changes in economic organisation. It is tempting to associate these with change in economic performance, though this is not easily done.

The Ethiopian economy did better before 1973 than subsequently. Income per head rose sharply and more or less continuously until then. Thereafter the movement was more erratic, but the drift was unmistakably downward. Throughout a disappointing feature was the failure of agricultural production to keep pace with population growth. Nor did this failure reflect changing comparative advantage. Ethiopia's ability to make its people food secure through production and trade was no higher at the end of the 1980s than it had been at the beginning of the 1960s. Thus, in 1960 the available food supply per head (in grain equivalent) was 175 kilogrammes; and it was but 114 kilogrammes in 1980.
Between 1965 and 1973 total output expanded at an average annual rate of 3.9 per cent; between 1973 and 1980 the rate of growth was 1.6 per cent; and by the period 1980-1987 it had slowed to 0.9 per cent. Given that population has been increasing by almost 3 per cent per annum, it is clear that income per head has been declining since 1973. The proximate explanation for this, and for the post-1973 deterioration, is the slow (sometimes negative) rate of growth of farm output. This rose by less than 1 per cent in the 1970s, but in the period 1980-1987 it fell at an average annual rate of 2.1 per cent.

Among the factors that help explain the disappointing agricultural performance, prominence has been understandably given to drought and famine. These were recurrent in the 1980s and were particularly devastating in 1984-1985, when they may have caused 1 million deaths. Nevertheless cruel nature and political upset cannot hide the fact that policy was also at fault. Drought led to famine, and famine caused widespread damage because policy failed to allow agriculture to escape from the tyranny of the weather. Ethiopia has not been the worst offender as far as policy-induced distortions of resource allocation are concerned. Still, before 1973 the exchange rate was consistently over-valued, industry was protected, and land ownership may have reduce the size and distorted the use of the agricultural surplus. Though sweeping land reform took place in 1974, economic policy continued to discriminate against agriculture after 1973. The exchange and trade policies remained in place, and the discouragement of the peasant was increased by steps to introduce a command economy.

That this was so is seen from a detailed examination of the critical area of grain marketing. This was the responsibility of the Agricultural Marketing Corporation. And the experience of the AMC confirms that even honest bureaucracy is ill-fitted to the task of setting prices and finds it difficult to run commercial operations efficiently. Even the simple-seeming task of setting quotas was a major headache, which tied up administrative and managerial talent, generated friction, and resulted in targets that were never met. The attempt to set prices was cumbersome, inconsistent, and bedevilled by lack of information. And it is important to appreciate that these difficulties were not accidental, but intrinsic to the attempt to replace markets with administrative fiat.

The international competitiveness of an economy is a good measure of its general health. This may be expected to decline if government-induced distortions in resource allocation increase. It is consequently interesting to note that the real exchange rate, which may be taken as a measure of competitiveness, increased over time and so confirmed growing weakness in the economy. The decline in competitiveness was not steady. It was, however, sharper and more persistent after 1974 than it had been before.
Agriculture, the market and the state

It is not easy to see how Ethiopia is to be developed. Its markets are small and poorly integrated; and its stocks of human capital and administrative skills are — certainly in relation to the size of the task — diminutive. Thus to rely on the market is to have faith in the very imperfect; and to turn to the state is to embrace the economically unlikely. It is emerging that the command economy is inherently incapable of producing sustainable, long-run growth. In Ethiopia, however, the trained talent, insights, information and all-round competence that would be the minimum requirements for an effective, comprehensive, planned and government-led leap forward have been missing. In such conditions the state as an omnipresent economic agent is bound to carry little conviction. And in these matters ideology is no substitute for efficiency. No government, no state is obliged to pursue economic growth. Any that does in good faith, however, ipso facto constrains its choice of instruments.

In the past, economic analysis and practice alike have taken a passive view of agriculture’s contribution to growth. Essentially the sector was there to be squeezed. Adam Smith, however, has come back into his own. It is now widely recognised that substantial and sustained agricultural improvement is a sine qua non of successful industrialisation. Progressive agriculture can ensure that food supply keeps pace with population; provide materials, labour and capital to other sectors; boost exports; and offer a growing market for wage goods and manufactured farm inputs. And these functions are consistent with the decline in agriculture’s share of employment and output that characterises modern economic growth. Thus, if the agricultural sector is set free in Ethiopia within a market environment to pursue these ends, growth of total output would be higher than otherwise, and so, quite possibly, would the growth of employment.

Limited evidence on rural income elasticities of demand suggests that growing agricultural incomes would be associated with a fairly buoyant demand for agricultural and non-agricultural produce. They would also be associated with increased specialisation and so a rise in the range and number of rural craftsmen and an increase in the demand for rural services. A substantial part of the income increase would be directed toward manufactured goods. Evidence from the textile, footwear and sugar industries indicates, however, that the relevant factories could be efficiently located in the rural areas.

Small-scale agriculture is relatively efficient. The sector is consequently characterised by a multitude of decision-takers. These cannot be controlled or encouraged other than through the market. Recognising this may give rise to increasing concentration and possibly income inequality. In Ethiopian conditions, however, poverty is so widespread that if the market is good for growth, it should not be shunned in the interests of equity — particularly since intervention seeking to increase equality could on past evidence have the opposite effect.
Government should act to improve markets. This may be done by increasing and improving information flows and showing appropriate concern about competition. Government should, however, retreat from direct production. Manufacturing should be returned to the private sector, or, if it is so inefficient that buyers cannot be found, be closed down. The state farms should also be returned to the private sector or, perhaps, given to the peasant.

Getting the prices right is of course not enough. Public goods are still necessary as is the framework within which the economy operates. This concession should not, however, lead to long lists of market failures that the state is invited to remedy. Government has to act in keeping with its comparative advantage also. It has to apply a trade and sector neutral macroeconomic policy; it has to stimulate agricultural productivity through research, extension and improved rural infrastructure; and it has a responsibility for infrastructure more generally. This represents a most substantial programme, in which the critical task is that of boosting agricultural production. Scarce administrative skills should be allocated accordingly.

Ethiopia has a small, moderately open economy. It is, however, a major supplier of the international coffee market. Its costs of production are low, and available data confirm the strength of its comparative advantage. Policy-induced distortions (including grain shortages) may have caused some coffee farmers to switch to other crops. A realistic exchange rate and market freedom should reverse such changes, and should encourage coffee production. Since the producers are small, many and widely scattered, marketing has to be considered. This should largely be undertaken by private merchants. The outlook for coffee prices is not cheerful. This is unfortunate, but not decisive. As long as coffee production is profitable and in keeping with comparative advantage it should be expanded. And international agreements should not be allowed to impede economically justified expansion.

Ethiopia could benefit or suffer from external policy changes and technical progress. Whether it will do either is a speculative question in the present state of knowledge. Policy reform that lowered developed country prices for agricultural products could adversely affect Ethiopia's ability to get humanitarian aid as and when necessary. Commercial imports would, of course, be *ipso facto* cheaper, but not necessarily thereby affordable enough to provide universal relief from famine.

If Ethiopia's ability to maintain "normal" levels of food consumption is periodically in doubt, it should be remembered that, for most people, these are usually below what is needed for food security. One reason for this is the rapid rate of population growth. This may create a moral responsibility in donor countries.
Whether it does or not those who wish to help should give aid in keeping with the principles that guide domestic intervention. In this regard much of what has to be done is suitably technocratic. And if the eradication of poverty is a challenge to the international community, it could nowhere be more appropriately taken up than in Ethiopia.
INTRODUCTION

*It is a capital mistake to theorize before one has data*

Sir Arthur Conan Doyle

Ethiopia can stake an unenviable claim to being the poorest country in the world, and so economically compares unfavourably with most others. Consider, for example, the small country in northern Europe that gave David Hume, Adam Smith and James Watt to the world, and that, in liquid form, has a single commodity export that not even the Japanese can match. There when the natives tire of football, golf, fishing and even television, they divert themselves with a question: should they reassert the independence that they voluntarily diluted in union with others as long ago as 1707? In this regard beguiling comparisons are made with other small countries that are rich and independent, with Norway and Denmark being favoured choices. What, however, of countries that are independent, large in population and poor in even the necessities of life? If these were many, would that not suggest that — viewed strictly as an explanatory economic variable — the importance of independence is overdone?

Certain it is that the gross domestic product of Scotland, with a population of 5.5 million, is some 14 times that of Ethiopia, with a population of 48 million. Scotland is one of the less affluent regions of contemporary western Europe, yet average income there is thus more than 100 times that of Ethiopia. Nor is this all. Seven years before the publication of the *Wealth of Nations*, James Bruce of Kinnaird landed at Massawa. He then, over the next six months, walked to Gondar, the capital of Ethiopia at the time. He stayed there for almost two years, during which time he went to Lake Tana and so rediscovered the source of the Blue Nile — though he himself believed that he had found the source of the Nile or at least of its major branch. Bruce’s subsequent account of his travels was greeted in London with incredulity, not least by Samuel Johnson, a great authority on the frailties of the
Scots. But though to Johnson he was a liar, the intrepid Bruce was an honest enough narrator. What he had seen and described was that far removed from Johnson’s London. Moreover, and this is here the point, it is possible that a substantial economic distance still separates present-day Ethiopia from the Scotland that, whether Adam Smith knew it or not, was about to cradle the first industrial revolution. The Carron Iron Works was, after all, within spitting distance of James Bruce’s lairdship; and the royalties he received from the Carron Company for the pit coal under his land contributed to his independence.

To consider modern Ethiopia with the Scotland of James Bruce and Adam Smith is, of course, to make heroic comparison. Some Ethiopians now have access to the internal combustion engine, antibiotics, television, radio and micro-computers and so to a richer basket of goods than either Bruce or Smith, who were very comfortably off by the standards of their day. Yet the general contrast is not fanciful. Relatively few Ethiopians can match the level of Adam Smith’s formal education, and most are fully occupied in scraping the ground for a living with little more than a hoe. For Adam Smith productivity increased with the division of labour, which was limited by the extent of the market. Progress should thus correlate inversely with the proportion of the labour force that has to be employed in feeding the population. The larger this is, the less the division of labour outside the household, and so the lower production per head. For Ethiopia the relevant ratio has been put at 77 per cent. No corresponding statistic is readily available for 18th-century Scotland. From Adam Smith himself, however, the indication is that it was smaller. True, "in so desert a country as the Highlands of Scotland, every farmer must be butcher, baker and brewer for his own family." However, in, for example, Smith’s discussion of the country workmen — in which the carpenter is also "a joiner, a cabinet maker, and even a carver in wood, as well as a wheelwright, a ploughwright, a cart and waggon maker" there is a richness of occupation that is greater than that of present-day rural Ethiopia. There there is no large number of specialised carpenters. Those who shape wood also farm and do other things besides. Even Adam Smith’s famous pin-making factory has had until recently no counterpart in the African country. Moreover in his native place Smith had the choice of three universities for his education. And if the one to whose students he first lectured was then in its relative youth, that where he made his reputation as a professor was already 300 years old, and the third was older still. University education did not come to Ethiopia until the mid-1950s.

What, then, does it signify that a well-populated African country is poorer now than a small and middle-ranking developed market economy, and poorer even than that economy was 200 years ago? How did this come about? What, if anything, can be done? And what, if anything, should be done? These are large questions, and are so unlikely to command agreed answers. For some the relative poverty results from market failure on a grand scale, so that the solutions lie substantially in the achievement of commutative and distributive economic justice, or in revolution. "Fair" terms of trade and a justice-serving transfer of resources from the richer
countries are not all that would be needed, but they form an essential part of any rescue package. For others, however, the relative standing of Scotland and Ethiopia are part of a natural order. Whether or not sustained economic growth came first to western Europe by accident, its subsequent spread was bound to be slow. Progress consequently is but a matter of time, provided that markets are allowed to emerge and operate. There is, however, hardly any question of Ethiopia following — slavishly as it were — the path that led from Adam Smith’s Scotland to the contemporary United Kingdom. The greatly enlarged and improved world stock of technology alone makes that unlikely.

This thought serves as a cryptic reminder of the complexity of the underlying issues. That registered, the starting point of what follows is Ethiopian poverty. It is taken for granted that the accelerated eradication of this is desirable. It is, however, accepted that, for reasons of history and geography, Ethiopia has come late to modern economic growth. And it is acknowledged that the initial conditions are liable to constrain the pace and pattern of progress. Moreover, comparative advantage is seen as the key to success, with the exploitation of this being best left, as far as possible, to the market. In the economic field government should also act in keeping with its relative strengths as these are determined by rational calculus. The market, however, is not taken as the exclusive property of capitalism; but the analysis is avowedly and, no doubt for some, narrowly economic.

It has become fashionable to contrast economic chaos in sub-Saharan Africa with political rationality. Rent-seeking and bribing numerically-small but politically-powerful constituents may explain economic failure. In poor countries, however, it does not excuse — or even extenuate — it. Moreover, even Leviathans, as Findlay has reminded us, run short of funds, and so perforce become aware of the limits that economic reality imposes on political aspiration. More generally, political, social and cultural factors no doubt have their place in the economic story. There are, after all, those who have seen Adam Smith primarily as a sociologist. Still, even in the multi-disciplinary study of economic growth the central question, round which all else revolves, is: what are the economic conditions of economic progress? How should scarce resources be allocated? This may seem a dull question to visionaries, but it is the beginning of wisdom if one would eradicate poverty.

In this regard it would be wrong to think that Ethiopia is poor because, as will emerge, its economy is dominated by low-productivity peasant agriculture. On the contrary, Ethiopia has its present agricultural system precisely because — having failed to progress beyond a primitive level of specialisation — it is poor. Nevertheless, the dominant agriculture is a central consideration. Is its promotion in keeping with Ethiopia’s comparative advantage — as this now is, and how it may be in the light of policy reforms (in the major producing and trading countries) and of technical progress? Moreover, if substantial and sustained economic growth does depend on successful agricultural transformation, how is this to be achieved? What role is there for the market, and what for the state? And how would the
transformation of peasant agriculture lead on to more general growth? Though these questions are as difficult to answer as they are to avoid, they provide the theme of much of what follows.

In this respect the first task is to identify the salient features of the Ethiopian economy. Demanding scrutiny of how this has performed over time then calls for an analytical framework, so that this has to be provided. That done, through consideration of theory and experience, Ethiopia's economic record has to be examined in critical detail. And in the light of such examination attention has to focus on what should now be done. What policy and institutional changes, runs the crucial question, could deliver a higher and more sustained rate of growth than has been achieved in, say, the last fifteen years? From its own standpoint, Ethiopia has significant links with the world economy, and these have also to be allowed for in considering future policy.

In keeping with the foregoing the economy is described in Chapter 2. Aspects of economic growth in poor countries occupy most of Chapter 3, which ends with an examination of resource allocation in Ethiopia as this would be dictated by comparative advantage. Drawing on the argument of Chapter 3, the following chapter describes Ethiopia's economic performance over the last thirty years, considers how far this is to be explained by policy, and looks in detail at trends before and after 1973. Chapter 5 then draws conclusions and attempts to chart the way ahead in the light of the Ethiopian conditions and changing world circumstances.

As things are, any analysis of the Ethiopian economy is bound to be data and knowledge constrained. Thus, for example, at the time of writing it was difficult to carry the story beyond 1986 or 1987. That the latest available data may be two or three years out of date, however, may be less serious than the weaknesses of such data as are available or the gaps caused by data that are completely unavailable. Whatever its composition, the limitation is sufficiently strong that it commands immediate attention. Increase and improvement in understanding and statistics would rank far from last in a list of desiderata of Ethiopian economic progress.
NOTES AND REFERENCES

1. For a brief account of Bruce's life, see C.B. Beckingham's introduction to James Bruce, *Journey to Discover the Source of the Nile*, Edinburgh University Press, Edinburgh, 1969. This edition is an abridged but still substantial account of Bruce's Ethiopian adventures.


4. *Ibid*.


Chapter 2

THE ETHIOPIAN ECONOMY

It is the surplus produce of the country only, or what is over and above the maintenance of the cultivators, that constitutes the subsistence of the town, which can therefore increase only with the increase of this surplus produce.

Adam Smith

When calamity threatens, the distribution of misery becomes unimportant.

C.B. MacPherson

This chapter describes the Ethiopian economy. The treatment is, however, somewhat unbalanced, being influenced by subsequent interests and the availability of information. Thus although money and finance are not entirely ignored, most of the attention is given to the real economy. For convenience description is separated from performance, and, as far as possible, analysis is saved for subsequent sections.

Ethiopia is an ancient polity located in the Horn of Africa. It now occupies a land area of 1.2 million square kilometres. This largely comprises a central highland mass bisected by the Rift Valley and surrounded by lowlands along the borders with the Sudan and the Red Sea. There are thought to be reserves of oil, natural gas, gold, platinum, copper, potash, zinc, nickel, iron ore and coal. Of these gold, copper and potash are now either mined or have been exploited in the past. In general, however, little has yet been proven commercially, so that the country’s principal natural resource is its arable land, of which only 15 per cent is farmed at present. With respect to its cattle population, Ethiopia is first in Africa and tenth in the world. The methods of livestock raising are, however, backward. There is potential for a greatly
expanded fishing catch from the Red Sea and the inland lakes, and tourism is also under-developed. Hydro-electric power, currently put at 1.2 billion kwh annually, could be expanded, as it is thought, could geothermal power 1.

The population in mid-1987 was estimated at 44 million, and it is thought to be growing at an annual rate of 3 per cent. About half of it is in the working age group (15-59 years), and three-quarters of those of working age are reckoned as being economically active. This gives a labour force of more than 16 million. It has, however, to be remembered that most workers are unskilled, and that the capital stock is so small that over much of the economy the capital-labour ratio is negligible.

In 1987 income per head in Ethiopia was US$130 and so, according to the World Bank, the lowest in the world 2. Low income has many and inter-related economic and social consequences. Poor people can save little. They consequently cannot afford greatly to improve their lot, to acquire much education, or to command comprehensive health services. They thus die younger than richer people, run perhaps more easily into debt, and are more heavily dependent for their livelihood on what they can do with unimproved soils. Table 1 captures some of these contrasts for Ethiopia, sub-Saharan Africa, lower middle-income countries and the developed market economies.

As expected, the indicators all tell broadly the same story. The only measure on which Ethiopia does better than any of the others is public debt. Thus though the Ethiopian burden has been growing quite quickly in recent years, it is still less than that carried by sub-Saharan Africa as a whole and by the lower middle-income countries. Ethiopians, however, have smaller incomes and eat less than those who live elsewhere. Consistent with this, they save a smaller proportion of their incomes; have more primitive agriculture, as measured by fertilizer use; and have a lower life expectancy, resulting inter alia from the sparseness of medical services. Ethiopians also receive a higher proportion of their income from agriculture than elsewhere, so that it is not surprising that primary commodities are much more prominent exports than in other economies.

It may be seen from Table 1 that agriculture accounts for well over 40 per cent of Ethiopia's gross domestic product. It supports a significantly higher proportion — four-fifths — of the population, and it supplies 90 per cent by value of all exports. Of the agricultural GDP about one-fifth comes from livestock and the remainder from crops, with roughly one-half of the crop value added coming from coffee. Coffee, however, normally accounts for some two-thirds of export value. The weight of industry is much smaller than agriculture. It provides 18 per cent of GDP, with about two-thirds of its contribution coming from manufacturing; and industrial exports — which mainly comprise oil cake and lint, meat products, leather and leather products, and sugar and molasses — do not normally reach 10 per cent of total export values.
Manufacturing has always been dominated by consumer goods; and food processing, textiles, footwear and clothing account for most of the output and employment in factories employing ten or more persons. Food processing is even more important in small-scale production, where its share is little less than two-thirds of the total. Textiles, tailoring and (in the rural areas) ropemaking are the main handicraft activities. Overall industrial employment is small. The "modern" sector engages less than 1 per cent of the labour force and small-scale and handicraft operations perhaps about 4 per cent. Since 1974 medium and large-scale enterprises have been state run. Capacity utilisation has long been a problem, and there are grounds for suspecting that many enterprises are more capital intensive than efficient choice of technique would warrant. Without running ahead of the story, it may be said that industry has not been generally efficient.

By contrast with manufacturing, the service sector is relatively large and has provided one-third or more of the GDP in recent years. Something under one-half of this comes from distribution and communication. Among other services, public administration and defence are, taken together, by far the largest and they have grown markedly in recent years. The balance of payments is as expected. Exports, as has been seen, are dominated by primary commodities, and 60 per cent of imports by value takes the form of machinery, transport equipment and other manufactured goods — though the volume and value of food imports have been rising. The balance of trade is normally negative. The exchange rate is widely held to be over-valued. The birr has been pegged to the US dollar (at a rate of 2.07 birr = US$1) since early 1973. The World Bank has estimated that in 1985 the rate implied by border prices of imports and exports in relation to domestic prices for the same goods was birr 3.95 = US$1. Ethiopia has hitherto had a good reputation for monetary management. Inflation has been lower than in other developing countries. As measured by the implicit GDP deflator prices increased at an average annual rate of 2 per cent between 1965 and 1973; by 5.7 per cent in the balance of the 1970s; and then by between 2 and 3 per cent in the 1980s, except in 1985 when, because of famine, the rate was 7 per cent.

Some 50 years after Ethiopia regained its independence, agriculture is still the most important economic sector, as measured by its contribution to total output, employment and export earnings. As may be confirmed from Table 2, small-scale peasant farming is the predominant mode of cultivation. Thus of the area devoted to crops other than coffee some 95 per cent, on average, was worked by private peasants between 1979 and 1986. In that period the peasants were responsible for 94 per cent of total output. State and co-operative farms each used 2.6 per cent of the area under cultivation, and respectively contributed 3.7 per cent and 1.6 per cent of total production. The table also shows that cereals were the dominant crop — accounting for 83 per cent of the cultivated land and 87 per cent of output. This predominance prevails across the three modes of production, although there are significant differences in crop distribution. Overall the main food grains are teff,
barley, wheat, maize and sorghum. Of these wheat is the least prolific on the peasant farms, where it was responsible for one-tenth of all crop production between 1979/1980 and 1985/1986. Barley accounted for some 15 per cent, and teff, maize and sorghum each for 19 per cent of total output. On the state farms wheat (39.7 per cent) and maize (48.1 per cent) are the important crops and the amount of teff produced was negligible. The crop profile of the co-operative farms was closer to that of the peasants, but the quantity of sorghum produced was less than 10 per cent, with the weights of wheat (16.4 per cent), teff (21.6 per cent), and maize (25.1 per cent) being consequently higher than on the peasant farm.

Not too much is known of the economic efficiency of the three modes of production. The state farms and the co-operatives are, however, better supplied with capital services, fertilizers and improved seeds than the peasants, so that their yields should be higher also. On the evidence of Table 2 this expectation is met by the state farms for cereals and in total, but only for pulses by the co-operatives. The yield superiority of the large-scale farms over the peasant is 1.19:1 for wheat and 1.43:1 for maize. As will be seen, inputs per hectare on the typical peasant holding are extremely modest, so that it would be surprising if unit costs on the state farms were not significantly more than 19 to 43 per cent higher than those of the peasant. In fact data from various ministries — covering seeds and other inputs, capital services and labour (including management) — suggest that the on-farm costs of the state organisations are 4 times greater than those of the peasant for wheat and 5 times greater for maize. Such figures are, of course, to be used with caution. Moreover, the extension of the calculation to give a market rather than a farm-gate price would favour the large-scale operations, since the state farms have lower transport and insurance costs. Suppose, however, that allowance for these and other factors cut the cost discrepancies in half. It would then cost the state farm 100 per cent more than the peasant to produce a given quantity of wheat, and 150 per cent more to produce a given volume of maize. These differences are still much greater than the respective 19 per cent and 43 per cent advantage in yield, so that the state farms look less efficient than the private peasant. And so, according to a Swedish study, do the producer co-operatives. These use land less intensely and production inputs less efficiently than the peasant farmer.

The efficiency measures just invoked are less refined and precise than would be ideal. Still, though rough, they relate inputs to outputs and put a cost constraint on that relationship. And the relative allocative efficiency of the peasant farmer would be widely conceded. It has, however, been argued that rapid capital accumulation is more important to economic growth than effective but static use of resources, so that "if one mode of production is superior to all others in terms of its potential for sustained rapid growth, that mode should have a strong claim to being the preferred one". Thus the authors of this judgement would prefer the producer co-operatives. Since the individual peasant farmer is the centre piece of the present story, it is important to dwell at least briefly on this different view.
One problem is that this seems not to recognise any connection between static and dynamic efficiency. An improvement in static resource allocation will have, of course, but a once-and-for-all impact on economic growth, and the magnitude of such impact is likely to be small in relation to the increase of living standards that would come from such growth-boosting measures as continuously rising investment. But that begs the question of whether and how a mode of production that now makes less effective use of resources than another would still be able to generate a larger surplus.

This is perhaps why the alternative argument relates to potential rather than actual capacity for growth. Even then, however, it does not easily persuade. The ability of the private peasant to produce a sustained and rising surplus is not taken seriously on the ground that "it is hard to imagine how anyone could seriously believe that a half starved, impoverished peasant working on his own with almost no capital could be the vehicle for rapid development". The concomitant belief is that this weakness can be overcome through co-operation, so that — with "little more than their own organised labour power" — peasants could improve land, drain it, and irrigate it on a small scale. Moreover, draught animals could be efficiently shared and, as incomes rose, the peasants could simultaneously be rewarded with higher consumption and contribute to an accumulation fund. This could, where appropriate, finance the purchase of small tractors or cultivators and lead to the setting up of small workshops. Electric generators could also be installed. As the local economy flourished there would be scope for small-scale industry and for the growing enlargement of economic and social infrastructure.

If generous vision undoubtedly underlies this argument, so also, it is to be feared, does wishful thinking. The producer co-operatives become the chosen instrument without reference to previous experience with co-operation in Ethiopia and elsewhere, and in defiance of the poor performance of the (relatively speaking) capital-blessed existing co-operative farms. Moreover, these do well in the comparison because the private farmer figures as a straw man. Of course no one expects a cripple to run far or fast. The relevant question, however, is whether the cripple can be made well. And the private peasant is now fitter and thus nearer to good health than either the co-operative or the state farmer. Thus that the state farms provide a larger marketable surplus, and so a more secure source of food for the urban areas, than the private peasant is neither here nor there. If the resources invested in large-scale food production and invested in encouraging the co-operative farms had been used to improve peasant agriculture, the marketable surplus could have been higher still. It should be noted that these implied strictures on the state farms apply mainly to food production. As will be seen, large-scale production of cotton is relatively efficient, as indeed it was in the 1960s. This has to be kept in mind. It does not, however, challenge the central importance of small-scale food production.
The large majority of Ethiopian people and farmers are in the highlands. There, as noted, the predominant mode of cultivation is small-scale peasant farming, which mainly produces five cereals: teff, barley, wheat, maize and sorghum. The peasants use very little capital — sickles, hoes, wooden ploughs, and machetes — and virtually no skills that result from systematic training. Power comes from humans and scrawny draught animals. There is little scientific seed selection, and sowing practices have been unchanged since time immemorial. The harvest involves cutting the stalk by sickle, trampling the cut crop by oxen and winnowing by tossing into the wind. The average size of the household farm is small — not much above one hectare according to a survey undertaken by the Ministry of Agriculture. Other fragments of information from the same source provide a crude production function. Thus 16 quintals of crop output per annum come from combining one hectare of land with the labour of three persons, one ox, and implements to the value of US$13. Among the farmers surveyed, less than 14 per cent used fertilizer, no more than 2 per cent used improved seeds, less than 5 per cent used herbicides, fewer than 1 per cent used pesticides, and irrigation was available to less than 5 per cent of all farmers. More than half the farmers literally carried what little surplus they produced to their local market.

The major constraints on the improvement in the peasant level of living are lack of resources and — deserving of separate mention — lack of knowledge. Traditional techniques have not been completely static. Nor have peasants been completely unresponsive to emergent problems. In some heavily populated areas crop switches — from grains to enset (false banana) — and small irrigation works have enabled larger populations to be supported than would otherwise have been possible. Nevertheless, there has been no substantial and widespread increase in productivity within the limits of present techniques and knowledge. Thus tradition-constrained agriculture has not been well adapted to coping with population growth, which has been more than 2 per cent per annum for over 20 years.

Traditional cultural practices can, however, contribute to soil erosion and degradation, particularly under pressure from rising numbers. They can consequently seriously weaken the ability of the system to cope with drought, so that widespread famine may occur if climatic and other conditions are unfavourable. On one serious estimate, about one-half of the highland soils (270 000 square kilometres) has already been significantly eroded. About one-half of this again has been seriously eroded and left with relatively shallow soils; and some 20 000 square kilometres have been so adversely affected that it is thought unlikely that they can sustain farming in the future.

The highland soils have suffered from the removal of natural vegetation. Under pressure from population increase, more and more trees have been felled for fuel and building and to permit cropping and grazing. Once so exposed, the land has been more and more open to the erosive force of the short stormy rains (particularly as cultivation has taken place on progressively steeper slopes). It has, however, been
most seriously damaged by cropping patterns and practices. These have been and still are exploitative. Because the valleys are liable to become water-logged and their soils are too heavy for the traditional ox-plough, cultivation, as noted, is often undertaken on the slopes. There the criss-cross ploughing needed by small seed crops breaks up the soil aggregates and so increases susceptibility to erosion. So also does the fact that the soil is necessarily at its barest — at the time of ploughing and just after planting — during the heaviest rains. To these factors must be added the persistent overgrazing of land used for crops. And it also has to be remarked that the lost soil is normally the most fertile. Its absence, moreover, decreases the water holding capacity and the rooting anchorage of the ground.

As described, peasant agriculture could not be expected to be highly productive. It is constrained by relatively unsophisticated techniques, by rapid population growth, and by the deterioration of the soil. It is thus vulnerable to pest attack and inadequate and untimely rainfall. That the results of such vulnerability may be drastic is seen from the narrowness of the safety margin in a "normal" year — one in which there is adequate and timely rainfall, no shortage of seed or labour, and no serious pest damage. What would the food supply be in these conditions? The answer, in grams per person per day, is given for each of the fourteen regions of the country in column (1) of Table 3. The data there are to be compared to 500 grams per person per day, this being the standard relief ration. The difference between that and the figures of column (1) are multiplied by the population weight of column (2) to get those entered in columns (3) and (4). The algebraic sum of the last two columns is 1,760 grams, so that the weighted average food surplus per person in a "normal" year is some 18 grams per day. That is less than 4 per cent of the emergency allowance and so equivalent perhaps to a few tablespoonfuls of porridge. And the limitations of the foregoing notwithstanding, the main implication is robust enough. However it is sliced, the agricultural cake in Ethiopia is pretty small.

Food security, which has been defined as "access by all people at all times to enough food for an active, healthy life", cannot easily be given operational meaning 10. However, from the low average figures of Table 3, and the related low level of income per head, there must be many in Ethiopia who are chronically food insecure. In fact a recent World Bank study puts the energy content of the average diet in Ethiopia at 74 per cent of what the FAO/WHO regard as "adequate". And another Bank enquiry has Ethiopia as absolutely the most food insecure country in Africa and, with 46 per cent of the population in this category, as one of the most insecure in relation to population size. Thus, Ethiopia is not now food secure. Nor could it easily become so. If domestic production were to grow at an average annual rate of 3.3 per cent for a decade — and so well above the long-run trend — cereal imports would still need to rise by 30 per cent per annum if there were to be food security at the end of the period. If this staggering increase in food imports were achieved on commercial terms, the upshot would take 86 per cent of export earnings 11.
This puts food security in Ethiopia beyond the scope of any re-shuffling of entitlements. Amartya Sen, who pioneered the entitlement approach to famines, may be right that it is more illuminating than blinkered concentration on food availability 12. He was, however, misled when he applied his analytical technique to the Wollo famine of 1972-1973. Sen argued that the unit of analysis was Ethiopia as a whole, and that the shortfall in grain output in that year was no more than 6-7 per cent — "hardly," he judged, "a devastating food availability decline". Hunger in Wollo thus resulted from crop failure, a consequent collapse in related incomes, and a failure to divert enough of Ethiopia's overall grain supply to Wollo. Nor would Sen allow that transport and other difficulties were adequate explanation for that failure. It has since been argued that he misread some of the price signals, and that he underestimated the logistical problems 13. Here the point being made is that he was fundamentally wrong, at least in application and implication.

It is an important detail that a shortfall of 6-7 per cent would have more than eroded the margin of survival identified in Table 3, so that it must have been "devastating" after all. The general point is that famine comes to Ethiopia when the rains fail at critical times and there is no other source of water. Such failure need not be general and so need not lead to famine if two other conditions are met: that there are adequate surpluses in the areas not stricken by drought; and that the economy and polity is sufficiently integrated to permit smooth transfers of food from surplus to deficit regions. The size of the food surplus and the degree of integration are, however, themselves dependent on the level of economic development. And the truth is that the Ethiopian economy has been neither sufficiently productive nor sufficiently well-integrated to deal effectively with serious failure of the rains. If purchasing power had been restored to the victims of the Wollo famine and nothing else had changed, it is likely that they — or their compatriots elsewhere — would still have gone hungry. In Ethiopia famine is but an exaggeration of the normal circumstance in which domestic production and what can be had through external trade cannot provide all with enough to eat.

Measured by its contribution to the GDP, coffee is as important as cereal production, and, as has been seen, it is the principal earner of foreign exchange. It grows all over Ethiopia, but production is significant in eight regions and exports come mainly from five of these. Coffee, of which about 10 per cent is forest coffee, is grown on some 500 000 hectares. Annual production is about 2 million quintals, with almost 99 per cent of this coming from peasant holdings. The bulk of exports are normally under quota within the rubric of the International Coffee Agreement; and the main quota importers are Western Europe (with about 55 per cent of total consumption in the importing countries party to the Agreement), the United States (36 per cent) and Japan (about 8 per cent). Consumption in these countries has been growing very slowly, except in Japan — a relative newcomer — where it has risen by some 5 per cent per annum for much of the 1980s. The non-quota markets are in Eastern Europe and the Middle East. In recent years exports have been
disappointing. In 1984-1985 and 1985-1986, for example, quota and non-quota exports together were only 85 per cent of the Ethiopian entitlement under the Coffee Agreement.

Consistent and reliable data on coffee production are not available. Judging, however, from the coffee delivered to the terminal markets of Addis Ababa and Dire Dawa recent levels have been between 85 per cent and 95 per cent of those of the late 1960s and early 1970s. In addition to drought and other exogenous factors, the drop in production has reflected problems in husbandry, management, marketing and the spread of coffee berry disease. This has reached all of the coffee-growing areas, has been particularly serious for the high-yielding Haraghe trees, and has been causing losses of the order of 10 per cent per year.

Traditionally, Ethiopian coffee has been sun-dried and exported mainly to the United States, where, it is thought, consumers are less discerning than in Western Europe and Japan. Quality has not therefore been thought to be of prime importance in marketing. Under the Lomé Agreements, however, Ethiopian coffee enjoys considerable tariff advantage in the EEC, where moreover improved and more flexible roasting has been introduced in the last decade. As has been seen, these opportunities have changed the composition of exports such that the EEC has displaced the United States as the most important foreign outlet for Ethiopian coffee. More generally the importance of quality has increased, with perhaps some increase in the proportion of washed coffee in total exports. Unwashed coffee still accounts, however, for 90 per cent of what is sold abroad. And the peasant farm remains the backbone of what, in the light of differentiated markets, should be an increasingly sophisticated system.

The stock of trees comprises modified forest coffee, garden coffee, and Harerghe coffee. The first is grown under shade at densities around 4 000 trees per hectare and usually in a single stand. This is the typical coffee in Kaffa (whence perhaps came the name), Illubabor and Wellega. Yields vary from 350 kilogrammes to 500 kilogrammes per hectare, and this brand accounts for 55 per cent of total production. Its export share is normally somewhat higher. Garden coffee is planted at low densities of 1 000-1 800 trees per hectare and is sometimes inter-planted with food crops. It is common in Sidamo, parts of Shoa, and Gamu Goffa. The average yield is 450 kilogrammes and garden coffee provides 35 per cent of the total. Harerghe coffee is grown in marginal climatic conditions, with a density of 900-1 000 trees per hectare and a yield of about 400 kilogrammes. There is again inter-cropping, and this distinctive coffee commands a premium in specialist markets. In Illubabor, Wellega and Kaffa there are areas of wild coffee, but these are being settled.

Peasant husbandry does not normally go beyond slashing or hoeing weeds. Though they could be valuable in areas with high couch grass infestation, herbicides are not used. Nor are fertilizers. Labour supply is a problem, and other inputs are
Livestock and their products are important in the economy. Animals provide virtually all of the power used in agriculture and much of the transport for people and goods. Exports mainly take the form of hides and skins, although cattle and meat are sold in the Middle East. Most of the livestock is in the hands of the peasant. Throughout the highlands mixed farming prevails, with crop and animal husbandry typically practised within the same (very small) management unit. Thus more than 98 per cent of all cattle, sheep, goats, horses, asses, camels, mules and poultry were in private peasant ownership in 1985/1986. Of the 23.2 million cattle, all but 158 000 were on peasant farms, and of 16.9 million poultry the same was true of all but 200 000.

Even these graphic data do not fully capture the diffusion of animal ownership. Thus 70 per cent of the milk consumed in Addis Ababa is produced — that is, taken from the cow — within the city limits. Such an atomistic and varied industry is not easy to describe. In the round, however, animal husbandry in the highland farm facilitates crop production, provides the main fuel (manure), contributes to food supply (including in the provision of milk to children), and is a source of cash income and insurance. In normal times livestock provide more cash in the highlands than any other single item; and in emergencies animals are about the only salable assets that the peasants have.

The small-scale livestock industry is beset with problems. Grazing and fodder are scarce, and disease is omnipresent. Farmers sometimes cannot agree among themselves whether feed supply is worse in the dry season — when the acreage for grazing is higher, but poorer — or in the wet season, though in some areas plough oxen are too weak to break the soil at the beginning of the rains. Cattle breeding is natural and uncontrolled, and there is some evidence that in recent years the highland stocks have not been self-renewing, so that there has been a need to buy male animals from the pastoral lowlands. The range of disease is wide, and although veterinary services are expanding they still fail to reach most small farms. Thus in 1985/1986 there were 175 veterinary doctors to care for a cattle population of almost 22 million; and in the same year little more 17 000 cattle were vaccinated.

The modest state sector partakes marginally in dairying, with a daily capacity in pasteurised milk production of 80 000 litres. It also engages in cattle and pig fattening and slaughter, and runs three poultry farms. The state fish corporation at present supplies some 2 700 quintals of Red Sea and 25 000 quintals of fresh water fish.
There are 20,000 Peasant Associations with a total membership of upwards of 5.5 million households. These Associations emerged after the change of government in 1974. This was quickly followed by far-reaching land reform. All landowners were expropriated and ownership was vested in the state. No private title to land has since been permitted, but under the 1975 decree individual peasant households were given usufructuary tenancy of up to 10 hectares. Peasant farms were forbidden to hire labour, and land is no longer to be sold, leased or mortgaged. The Peasant Associations were charged with distributing the land for use within the areas of their respective jurisdictions. Each is responsible for a minimum of 800 hectares and comprises between 200 and 400 families. Since the land allocated to the Associations has tended to remain fixed, there has been a problem of growing fragmentation in the face of rapid population change. Between 3 and 8 Associations may combine to set up service co-operatives to market their surpluses, purchase and distribute inputs and run retail shops. By 1986 some 4000 such co-operatives were in being, with 4.5 million households in membership.

The few large-scale commercial farms in place before 1974 became the first state farms. The number of these was quickly expanded — mainly by bringing fallow land into cultivation — as a result of the sharp decline in grains supplied to the market that resulted from the disruption of distribution and the increase in peasant consumption with the disappearance of the landlords. Producer co-operatives have also been a peasant option since 1974, and their formation has been encouraged by the government. By 1986 there were 2300 of these, with less than 200,000 member households. Those who joined were normally the poorest farmers in their area.

To round off this account of the Ethiopian economy, it is appropriate to consider the agricultural surplus. How big is this, and how important is it in an economy in which capital, goods and factor markets have never been well developed or well integrated? The structure and this inarticulated nature of the economy mean that the system is largely driven by the peasants. As has been seen, they provide almost half of total output directly. And much of the other economic activity is peasant dependent or peasant related. Much manufacturing is agro-industrial; and that part of the large service sector that does not exist to move food is still there by dint of peasant effort. It is the surplus of the peasants — what is, or is constrained to be, over and above their own needs — that finances economic growth. This takes the form of the net benefits of production for sale and so is a function of, inter alia, the size of the grain markets. Though these do not exhaust the contact between the peasants and the rest of the economy, grain producers who are not active there are unlikely to make much use of other markets. Thus if the size of the grain trade were known and monitored through time, something would be known of the extent of the market economy and of the magnitude of the agricultural surplus.
There can thus be no doubting the importance of this surplus, even if it is difficult from the available information to get a satisfactory estimate of its size. Still, something can be done in this regard by measuring the markets in which the agricultural surplus is sold. Here the first step is to divide the population into urban and rural, and the latter into agricultural and non-agricultural. This division gives an estimate of the market-dependent and taken with figures on consumption per head, of the volume of food grains delivered to the market.

Consistently derived estimates for 1970/1971 and 1986/1987 are presented in Table 4. The data for the earlier year were taken from an old World Bank document and modified to make them comparable with new estimates for 1986/1987. In this regard a significant change was made in population figures. As data have improved, it has become clear that Ethiopia has more people than had earlier been thought. That this must have been true as far back as 1970 may be seen from what would otherwise be implied about the growth rate. The population was then believed to be 24.7 million, so that to have reached the actual 1986 level it would have to have grown at an average annual rate of 4 per cent. That is one-third higher than the present unprecedentedly high rate of 3 per cent, and so is incredibly high. Given this, the 1986 population was run backwards at an average annual rate of 2.6 per cent to give a 1970 figure of 30.4 million. This was then allocated across the different population categories in the same proportions as the original figures.

As noted, the next step calls for an up-dated estimate of the number of persons dependent, in whole or in part, on the market for their grain supply. As before, great accuracy is not to be expected. Even in Addis Ababa there are many who grow a significant part of what they eat, keep poultry and have a domestic source of milk, so that the urban-rural divide is blurred. Nevertheless, the relevant statistics for 1986/1987 were obtained as follows:

a. Total population 45.80 million

of which:

b. Urban 6.98 million
c. Rural 38.82 million
d. Rural non-farm 4.92 million
e. Market-dependent farm 2.51 million
f. Market-dependent (= b+d+e) 14.41 million

Gross production of cereals in 1986/1987 (a relatively good year) was diminished by 16.5 per cent to allow for seed needs and post-harvest losses. An addition of 3 per cent was then made to cover tubers, vegetables and fruit. And based on the average relationship over a number of years, 11 per cent of net cereal
output was also added to give the grain equivalent of enset. The resultant figure was divided by population to give a per capita consumption of 138 kilogrammes. The estimate of 19.9 million quintals for total consumption by the market-dependent assumes that average consumption in this group is the same as that for the population as a whole. The second estimate, of 22.4 million quintals, more realistically puts the consumption per head of the market-dependent above the general average. Here the subsistence average was taken as 130 kilogrammes, with per capita consumption among the market-dependent consequently being 155 kilogrammes.

What, then, does Table 4 show? First that in 1986/1987 just over 31 per cent of the population was dependent on the market for grain consumption. It cannot, however, be concluded that the remaining 69 per cent was completely tied to subsistence agriculture. Some enter the grain markets as suppliers rather than consumers, but are, of course, still part of the exchange economy. The location and distribution of the surplus grain areas, which are discussed more fully below, suggest that some 3.9 million people are in the business of meeting cash demands for cereals. Allowing for these, and taking account of the rural non-farm, means that 60 per cent of the population is still in the subsistence sector. It is important at this point not to exaggerate through over-simplification. Few, if any, spend all of their working time in attacking the soil with little more than their bare hands and living only on the meagre output thus won. The economy sustains a network and hierarchy of markets. True, some of these accommodate mainly barter transactions and serve social as much as economic purpose. Still, they give the lie to the overdrawn picture of the entirely food-bound peasant. Deep poverty limits opportunities more perhaps than appetites. Poor people do spend time and effort on, for example, housing, clothing, education and entertainment. The range and quality of these things are, however, also poor — being largely dependent on the limited division of labour that can be effected within the household.

Still, that 60 per cent of the Ethiopian people are not in contact with modern, continuous, markets is an important statistic. It confirms that there is little specialisation outwith the peasant household; that, ipso facto, market size is probably small; and that savings, and hence capital formation, must be low. The statistic is at once an eloquent measure of the economic challenge and a graphic indicator of the constraints that shackle response to that challenge. Of course, the severity of the challenge could be eased if the 40 per cent of the population that buys food in the market place were very much better placed than the subsistence peasant, though this is inherently unlikely. From data deployed thus far, the subsistence farmers may be credited with about 16 per cent of the gross domestic product. This puts income per head on the subsistence farm at US$35, as compared to the overall average of US$130. Those outwith the subsistence sector are thus clearly better off than those within it. The absolute differences are not, however, great. The ratio of superiority is almost 8:1, but the average non-subsistence income is still a mere US$273. At its
present economic size, if Ethiopia were peopled exclusively by those with annual incomes of US$1 million its population would be less than 6 000. Margins in the Ethiopian economy are nowhere very large.

This is worth stating explicitly in order to emphasize the most important implication of Table 4 — that the priority is to secure economic growth rather than distributive justice. This is not to say that the very poor should be deliberately or even inadvertently exploited. It is to say that when there is so little to distribute the first task is to expand the kitty. Does Table 4 offer any encouragement in this regard?

Between 1970/1971 and 1986/1987 the population dependent on the market grew at an average annual rate of 5.4 per cent, and so comfortably faster than population as a whole. The volume traded rose more slowly, but, since it grew by between 4 per cent and 5 per cent per year, still outpaced population change. Thus over the period the marketable surplus of food grains increased from 3.9 per cent to 6 per cent or more of the GDP. These are, of course, crude and incomplete measures of market size, only usable *faute de mieux*. Taken at face value, however, they indicate growth in markets and specialisation and so, other things equal, significant economic progress. Were other things equal? Not, is the disappointing answer, when it comes to consumption. In the subsistence sector this fell from 150 kilogrammes to 130 kilogrammes per head and, on the assumptions made, from 165 kilogrammes to 150 kilogrammes among the market-dependent. Too much should not be read into weak statistics, but these figures raise disturbing questions of efficiency and equity. They represent a decline in nutrition from a low base. Nor was there any evident switch in resource use on lines of comparative advantage that would have led to a compensating increase in imports.

How, it is tempting to ask, did the grain markets expand, against the background of a general fall in food supply? Though the information is again not available to return a full and economically rational answer to this question, the marginal utility of extra food to hungry peasants is such that a widespread choice in favour of more cash income is implausible, particularly in the absence of clear increase in incentive goods. Some peasants could, of course, have increased consumption and the amount supplied to the market. Their number, however, must have been very finite. If the requirement that the answer be economically rational is relaxed, explanation may be easier. Perhaps the marketing system was coercive rather than coaxing, so that peasants were forced to supply others, albeit inadequately, at the expense of their own consumption. That possibility is examined below. Here it serves, with the foregoing discussion, to warn against taking too much cheer from market expansion. Some part of this indeed could be attributed to the boost given to urban populations by those fleeing the countryside in desperation, rather than in the light of certain and improved economic prospects in the towns.
Forced or otherwise, the market expansion does represent an increase in the relative size of the surplus. And it is of interest to see whether this was matched in the rest of the agricultural sector. In this regard it is not easy to measure the size of livestock markets. Much of the animal husbandry is subsumed within peasant farming, and so within subsistence activities. Generally, peasants do not make a business of livestock, though exports should clearly be seen as part of the surplus. It may, however, be doubted if as much as 10 per cent of value added is traded. Coffee, by contrast, is a cash crop, so that virtually all of it is traded. But if own-food supply has to be met before commercial transactions can be regarded as surplus disposal, not all coffee sold can count. To allow for this the number of coffee farms and the population these support were estimated. An estimate was also made of food expenditure and the value added by coffee production in 1986/1987 was diminished by this amount. The continuing crudity of these calculations should be kept in mind. For present purposes, however, they provide adequate guidance. Thus the peasant surpluses of that year may be broadly comprised in the following way:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Food grains</td>
<td>6.0 per cent of GDP</td>
</tr>
<tr>
<td>Coffee</td>
<td>9.8 per cent of GDP</td>
</tr>
<tr>
<td>Livestock</td>
<td>0.1 per cent of GDP</td>
</tr>
<tr>
<td>Peasant Agriculture</td>
<td>15.9 per cent of GDP</td>
</tr>
</tbody>
</table>

What do these figures signify? If the peasants were the only source of surplus and, their basic need for food met, they were willing to commit their all, as it were, then 16 per cent of the GDP would be the maximum extent to which capital formation could be financed by domestic savings. But why should poor peasants be that frugal? For the cereal growers the surplus is but 20 per cent of what is needed to meet their basic food demand, so that the voluntary savings rate is unlikely to be very high. Coffee producers are perhaps better off, but they are not rich either and are unlikely to save more than 10 per cent of their surplus as a matter of free decision. Peasants are not, of course, the only source of savings. They are, however, the weightiest group and, as has been seen, account for almost half of the GDP. Others are on average richer than the peasants, and so may be expected to have a higher propensity to save. As has been seen, however, few can be rich in Ethiopia, so that average non-peasant savings cannot be great either. Thus if the peasants elected to save, say, 2 per cent of the GDP, total savings are unlikely to exceed 6 per cent of the total income.

To say that Ethiopia is capital short is to say nothing new. The foregoing does, however, emphasize the importance of peasant agriculture and of careful surplus extraction. Without a substantial contribution from the peasant sector the economy is likely to be stalled. Not excluding administration and defence, most of what happens in the economy is agriculture-driven. To repeat, much of the transport is of agricultural goods, and manufacturing largely comprises the transformation of
agricultural materials. Moreover, and to the present point, clumsy and mandatory methods of surplus extraction are liable to reduce its level and to leave the economy short of wage goods. Extraction must be such that the incentive to produce remains. Before 1974 more or less rapacious landlords were the instruments of extraction. Since then there has been direct taxation, a requirement to meet quotas at fixed prices, unfavourable domestic terms of trade, and a large gap between world and producer prices for coffee.

A peasant-dominated economy with most of the labour force in basic food production, little division of labour outside the farm household, and formidable natural barriers to transport and communication is unlikely to be well-integrated. As will be seen in more detail below, graphic evidence of the lack of articulation in Ethiopia may be found, for example, in the persistence across locations of grain price differences that are far in excess of the relevant transport and other costs. More generally, the market economy, in a broad sense, mainly comprises the three major industrial and administrative centres — Addis Ababa, Asmara and Dire Dawa — and their agricultural hinterlands. Thus although the country is divided into about 100 districts, most of the surplus-producing farms are found in 31 of these. Moreover, though they are spread over nine administrative regions, the surplus-producing farms are largely concentrated in Shoa (where Addis Ababa is), Gojam and Arssi (which are contiguous with Shoa) and Gondar. Some 20 per cent of the total population lives in the surplus-producing districts of these four regions. This plus the urban population must comprise most of those who deal in or depend on the market economy, so that the scope for expanding that must still be great. The spread of modern methods and markets is limited and the enclave population that has been reached is still only half the size of those that have not.
NOTES AND REFERENCES


3. For fuller discussion and detailed examination of textile investment, see G. Zawdie, Technology Choice, Economic Efficiency and Employment in Ethiopian Manufacturing Industry, Unpublished Ph.D., University of Strathclyde, Glasgow, 1985. This study confirms widespread inefficiency in Ethiopian industry.

4. It is worth recalling that inflation in Ethiopia is greatly influenced by changes in food prices.


7. Ibid.


14. Ethiopia's coffee economy is surprisingly under-discussed. The present discussion draws on a variety of official reports, development plans and World Bank documents.


16. Private communication from Stephen Sanford.


18. The population was estimated from farm size and numbers, and food expenditure per head was taken as the average for the market dependent population.
Chapter 3

ECONOMIC GROWTH IN A LOW-INCOME COUNTRY

Sensible people do not get involved in arguments about whether economic progress is due to government activity or to individual initiative; they know that it is due to both, and they concern themselves only with asking what is the proper contribution of each.

Sir Arthur Lewis

What economic arrangements, runs the central question of this chapter, are likely to lead to maximum and sustainable growth in a very poor country? As anticipated in Chapter 1, the emphasis is thus on the economic — in order to make the investigation manageable in short compass, and, more importantly, because that is how it ought to be. Economic change results from the actions of economic agents responding to economic signals. Extra-economic enquiry may illuminate economic behaviour and explain why economic signals are what they are rather than something different. Nevertheless, economic rationality is at the root of the matter. And if this is more difficult to define than may be thought, agents, at least in so far as they comprise households and firms, will normally do the best that they can for themselves in given circumstances. The trick, then, is to ensure that the social framework is such that individual agents in pursuing their own ends are possessed of what Sir Arthur Lewis has called the "will to economize" and so, for this and other reasons, together maximize the national economic surplus in any given period and through time.

This deceptively simple formulation hides many difficulties, and some of these are allowed to emerge below. In the meantime, it is acknowledged that — like Bruce’s journey to Lake Tana — the argument represents rediscovery rather than original find. It urges that a low-income country, in which poor peasants are the most numerous and important economic agents, is most likely to progress if sustained and substantial encouragement is given to agriculture, and if government works with
the grain of the market and leaves as much of direct production to this as possible. The market then would naturally look after agriculture. The argument is thus at least as old as Adam Smith. And, if not universally popular in the last 40 years, it has nevertheless had its modern exponents, among whom Sir Arthur Lewis may be counted on the strength of his (subsequently unheeded) advice on the industrialisation of the Gold Coast. In the light of these antecedents, ancient and modern, the remainder of the chapter mainly comprises the detail of the argument and consideration of its relevance to Ethiopia. From this treatment, it is hoped, a framework for policy scrutiny emerges. Such scrutiny is then the business of Chapter 4 and, it is also hoped, this leads naturally in turn to reasoned consideration of policy change in the last chapter.

Before setting off in these directions, it may be useful explicitly to consider the general propriety of deploying alien theory and experience in the analysis of Ethiopian conditions and performance. To allow for this, what follows is in four parts. The first briefly considers where ideas on growth are to come from in a country that has little experience of it; the second explores — mainly by recalling some venerable ideas — the role of industry and agriculture and gives some reasons for favouring the latter as the initial prime mover; to develop the argument of the second section and make it more detailed and more rigorous, the third deals with the market, the state and comparative advantage; and the fourth, in the light of what has gone before, focuses on sectoral resource allocation in Ethiopia.

1. Theory and experience

If poverty is to be reduced and then eradicated, it is imperative that there should be a high rate of growth of GDP and GDP per head. And in pondering how the requisite growth is to be achieved, it is natural to draw on theory and experience. Since Ethiopian exposure to growth has, however, been limited, else it would not be poor, it is equally natural that available theory was not formulated with Ethiopian conditions explicitly in mind; and that the contemporary and historical experience of sustained growth that may be studied is also alien. In considering how a given country or set of countries is to be developed, this absence of direct link is sometimes seen as vitiating attempts to transfer thought and the lessons of other people's economic history. Unless interpreted carefully, such caveats are naive. Nevertheless, consideration of them provides useful introduction to what follows.

Thus Hirschman, in noting the harm done by the application of the Harrod-Domar model to developing countries, felt impelled to warn:

in the social sciences we must be more than ordinarily suspicious of such short-cuts. The reason is that theories which, because of their high level of abstraction, look perfectly "neutral" as between one kind of economic system and another, often are primarily relevant to the conditions under which they were conceived. They
usually originate in attempts to illuminate possible solutions to particular problems encountered at a given time, and are sometimes directly designed to do so. If they are useful theories, they will have focused on variables that in a particular setting are both strategic and subject to change by policy-makers. Therefore, the more useful they are in the one setting, the less they are likely to be so in a completely different one... For, as we have become used to looking at reality through certain theoretical glasses, we may for a long time be unable to see it as it really is.

In the same vein, Guy Hunter has cautioned against expecting too much help from history in seeking to transform present-day peasant societies. Not only has the external environment greatly changed, but so has the extent to which the societies to be transformed are in touch with that environment. Thus:

The peasant societies of 15th-century Europe were surrounded by 15th-century Europe, with some marginal contacts with overseas societies not much more advanced than they... Africa today [is] surrounded, limited, inspired, almost conditioned by the influences of 20th-century industrial civilization.

Both quotations warn, as it were, of the importance of the location-specific. Even theory, argues Hirschman, has its origins in the (presumably real-life) problems of a particular time and place. And familiarity with the difficulty of stepping into the same river twice is very old. Less nihilistic than some, however, both Hirschman and Hunter stop well short of denying any utility to theory from other times and places and to other people's history.

This is presumably because, as Hicks pointed out, many theories and much experience have general as well as unique elements. A particular event — a given country, a given time and a given experience — will, beyond whatever it is that makes it unique, nearly always have "other aspects in which it is a member of a group, often of quite a large group". And it is the group behaviour, the general rather than the particular, that is the concern of theory. Thus, to quote Hicks directly,

we do not claim, in our demand theory for instance, to be able to say anything useful about the behaviour of a particular consumer, which may be dominated by motives quite peculiar to himself; but we do claim to be able to say something about the behaviour of the whole market.

This helpfully suggests that theory should look for general patterns of development just as it does for general patterns of consumer behaviour. The quotation may, however, seem to question the usefulness of such patterns in illuminating a particular situation. To repeat, however, this applies only to those parts of the situation that are not normal. And in this regard Hicks probably allows too
much to eccentricity. An economist would be surprised if a randomly questioned consumer would not value a little more of a given good the less the more he or she already had of it, or if — for most goods and most consumers — behaviour were not such that the higher the price the less that would be bought. Nor, of course, could there be many consumers whose behaviour was abnormal. Moreover in this context abnormality can only be identified and understood in relation to the normal.

Confirmation that the foregoing is correct, certainly with respect to theory, may be had from Hirschman himself. Though he warns the unwary of the dangers of misusing Harrod-Domar, he nevertheless concedes that with care the computation of capital-output ratios can be helpful. Somewhat more generally it has become increasingly clear that Keynes’s General Theory of Employment, Interest and Money is very time and circumstance bound. Yet, explicitly and implicitly, it contains ideas that are pertinent well beyond the depressed British economy of the 1930s. These include the marginal efficiency of capital, the capital-output ratio itself, and a great boost to national income accounting. Thus the warnings given are warnings against uncritical application of ideas and experience across time and place. Though one should always guard against complacency, for all but the most thoughtless the explicit question is not whether theory and history are relevant, but how far and in what ways particular theory and particular history may help illuminate the contemporary problems of poor countries such as Ethiopia.

If appeal cannot be made to organised thought and to anything beyond the history of the pre-modern society itself, how is the question of the modernisation of Ethiopia to be tackled? What, it may be asked in paraphrase of Kipling’s famous question, should they know of Ethiopia who only Ethiopia know? In the light of what has been said, these are rhetorical questions. Still it is worth noting that there have been those who have thought the answer to them to lie in the elaboration of development economics as a near separate discipline. Since this notion was first mooted much has been learned from the particular and intense study of poor countries. The idea that development economics could be a replacement for, rather than an extension to or application of, conventional theory has not, however, worn well. Policy makers in poor countries, it is arguable, have been most remiss in failing to grasp and keep steadily before them the concept of opportunity cost. And the importance of this is central to standard economics. Thus that relative scarcity in low-income countries should be associated with harrowing absolute poverty does not mean that analytical methods of handling the questions that arise when there is more to be done than there are resources to do it should vary across income levels. Indeed it now seems clear that belief to the contrary has retarded progress in the poorest countries. As Professor Schultz has put it,
...development economics has suffered from several intellectual mistakes. The major mistake has been the presumption that standard economic theory is inadequate for understanding low-income countries and that a separate economic theory is needed. Models for this purpose were widely acclaimed until it became evident that they were at best intellectual curiosities. The reaction of some economists was to turn to cultural and social explanations for the alleged poor economic performance of low-income countries. Quite understandably, cultural and behavioural scholars are uneasy about this use of their studies. Fortunately the intellectual tide has begun to turn. Increasing numbers of economists have come to realise that standard economic theory is just as applicable to scarcity problems that confront low-income countries as to the corresponding problems of high income countries.

And if it would difficult to argue that policy making has been based on close study of development theory, the influence of this has nevertheless been felt. Development economists did lend intellectual credibility to the widespread hostility to the market, and they encouraged the view that extensive market failures should be made good through state intervention — without, it has to be said, examining too closely government competence in this regard.

This condemnation leaves open the question of what is meant by standard theory. And, since theory and experience come in many forms, it may also seem a weakness that nothing has been said on how these are to be filtered. Since the proof of the pudding is in the eating, that may not matter. The sources of ideas on how to develop Ethiopia are less important than their pertinence and robustness. And perhaps the best way of ensuring a large pool of workable notions is to be catholic both in the selection of ideas and experience to be filtered, and in the design and use of the instruments of filtration. That still leaves, of course, standard theory. And to the question of what this means, may be added that of whether it has particular relevance. In this regard, the earlier reference to opportunity cost may stand, for the moment, as a broad enough hint. Nor in the present instance should one exaggerate the differences between the contemporary Ethiopian peasant and his insular counterpart in medieval Europe. It is, after all, hardly possible to read any World Bank report published on Ethiopia in the last thirty years — and there have been many — without learning of the large proportion of those in the rural areas, that is more than a day's walk from a road.

Thus those who would tackle Ethiopia's daunting economic problems should seek knowledge widely. They should also, however, remain aware of the low level of economic development from which any solution must proceed. Related to this, they should be conscious always of just how scarce resources are, and consequently how grave the effects of waste. More even than in richer countries, the need to
economise is paramount, so that the question of who should allocate resources is to be answered in the light of what is known or can be inferred about who is likely to be most economical in their use. Thus if, as is hoped, what follows is suitably wide-ranging, it is also pertinent in that it is focused on resource use in a poor society that is economically dominated by peasant activity. And if an open-minded willingness to learn from different theories and experiences is important, nothing in the present story gainsays the proposition that theory can be at its most helpful when it is applied to circumstances that are not too remote from those in relation to which it was originally formulated. It is in this spirit that Adam Smith is made to serve as a point of departure.

2. Industry and agriculture

From the earlier description of its economy few would expect Ethiopia to be an industrial power until after many years have passed. As things are, a large part of available resources are necessarily tied up in the production of food. Releasing these in substantial measure consequently means increasing agricultural productivity or finding alternative uses for them that would increase exports so that food imports could also rise. Resources can, of course, be augmented, but not independently of the level of development. The lower this is, the more inherently difficult it becomes to increase the supply of resources. Moreover, for reasons that go beyond, but still include, the intrinsic characteristics of poor countries, much of the growth that has been recorded has been of unskilled labour. And even when the capital stock has grown more rapidly than population, it has proved difficult to make the composition of this such as to secure widespread increases in the capital-labour ratio, let alone the full employment of the growing labour force. That capital-deepening may have (unjustifiably) taken place at the expense of capital-widening is perhaps a fault that can be laid at the door of policy. At least implicitly, more attention is given to this question below. For the moment, enough has been said to suggest that — particularly when it is remembered that growing labour forces have to be fed — it would be unrealistic to expect an increase in resources to make for early reduction in the need to assign a high proportion of available resources to the production of food.

More generally, the weight and low productivity of agriculture in low-income economies almost certainly means that there is no market for a wide range or large volume of manufactured goods. Moreover, scrutiny of the import list at an early stage of development merely confirms the size of the domestic market. It does not guarantee efficient local supply. At their best, the prospects for domestic production are bound to be limited. Total imports are unlikely to be much more than 20 per cent of GDP, which is, of course, itself relatively small. And much of the early import bill is likely to be for goods that could not readily be made in the home economy. Thus unless there are export possibilities, industry cannot efficiently grow beyond the pace of the domestic market. And that, as has been seen, is limited because so much of the purchasing power is in poor and relatively stagnant peasant households.
At the early stage of development manufactured exports normally comprise either the processing of minerals or agricultural goods previously exported raw, or light industrial goods. And whatever the composition of exports, the main difficulty is in being able to compete with established centres. Because of gaps or inefficiencies in the industrial infrastructure — everything from roads and transport to power supplies — and the relative inexperience of management and labour, unit costs are likely to be high unless these factors are offset by particular advantages. The most common offsets are weight loss in production, and so a reduction in transport costs, and a productivity-wage rate ratio that favours the newcomer. It should be emphasised that low wages are but part of the latter story. Productivity also counts. One study, for example, found that wages in Ethiopian textile manufacture were one-seventh of their UK level. But since British workers were seven times as productive as the Ethiopian ones, no advantage was thereby conferred.

The productivity constraint applies also to import-substituting industry, where competition against foreign goods is additionally handicapped if the domestic market cannot support at least one plant of minimum efficient size. Thus on the export side the prospects are not great in the absence of a natural supply of bulky materials that happen to be in international demand or of a well above average productivity spurt. And at home industrial expectations should be modest except where economies of scale are unimportant, production is labour-intensive, and profitability is not unduly sensitive to the availability of skills. It is thus normally difficult to regard manufacturing as a leading sector.

In spite of that rather obvious conclusion the promotion of manufacturing has had continuing appeal in Ethiopia and other poor countries. This persistence may be traced to the belief that productivity in industry is higher than in agriculture, and to the expectation that manufacturing will deliver dynamic benefits — learning-by-doing, the externalities that flow from complimentarity, economies of scale and quickened technical progress — that cannot be looked for in agriculture, or at least not to the same extent. Thus out of the seminal work of Rosenstein-Rodan there developed an argument for an extra-market "big push" that would force the pace of industrial growth and so the rate of structural transformation. Where a single factory could flop, an adequate number of factories and a sufficiently wide range of products could — inter alia through a variant of Say's law — succeed. The policy message was thus that industry should be favoured, indeed protected, and that public good provision should be made of the necessary economic and social infrastructure.

Even diluted, this was dubious medicine for a poorly-developed economy. The very circumstances that were thought to make a "big push" necessary, also made it perhaps impossible. Certainly the quantitative and qualitative resource requirements of establishing industry and of promoting its subsequent accelerated growth are formidable. How, it should have been asked, were these needs to be met in a
low-income country? And, to repeat, where were the markets to come from? Indeed, the advocacy of "big-push" type policies may be an example of the uncritical application of theory developed to illuminate one set of problems (those of post-war south-east Europe) to another and different set (those, say, of sub-Saharan Africa). Moreover, in so far as the advocacy was based on the experience of already industrialised countries, it turned \textit{ex post} conclusion into \textit{ex ante} proposal, and so risked confusing consequence with cause. The argument involved, in Viner's words, "the causal association of agriculture with poverty and industrialisation with prosperity". There is, however, no such inevitable connection. To act as if there were, and to put macroeconomic and other policies in place that discriminate in favour of industry and the towns and hence against agriculture for no better reason that this supposed association is more likely to retard than to promote economic progress. In this regard it would be difficult to better Viner's judgement that even though the rural population may have lower per capita incomes than the urban, it may nevertheless be the only economically healthy part of the population, the only part that gives good value to the community. Where the situation is one ... of urban exploitation of the rural population, to propose as a remedy the further subsidization of urban industry as a means of drawing rural workers to the city is equivalent to proposing to remedy the exploitation of worker bees by drones by transforming the worker bees also to drones. It is obvious that it can work at all only as long as there still remain worker bees in the fields to be exploited.

If, for some considerable time to come, industry cannot greatly move the economy forward, can agriculture? What indeed is the proper relationship of agriculture to industry? Before turning to these questions it is important to recall that there is in principle no particular merit in any sector independently of the criteria of resource allocation. From Adam Smith on, clear-headed economists have seen no special economic virtue in industry as such or in agriculture as such. And they have been suspicious of special pleading, of any measure designed to confer special advantage. Adam Smith himself saw clearly where the danger lay. Thus, having registered that high tariffs and prohibitions create monopoly, he granted that this monopoly of the home market frequently gives great encouragement to that particular species of industry which enjoys it, and frequently turns towards that employment a greater share of both labour and stock of the society than would otherwise have gone to it, cannot be doubted.
However,

the general industry of the society can never exceed what the capital of the society can employ. As the number of workmen that can be kept in employment by any particular person must bear a certain proportion to his capital, so the number of those that can be continually employed by all members of a great society, must bear a certain proportion to the whole capital of that society, and never can exceed that proportion. No regulation of commerce can increase the quantity of industry in any society beyond what its capital can maintain. It can only divert a part of it into a direction into which it might not otherwise have gone; and it is by no means certain that this artificial direction is likely to be more advantageous to the society than that into which it would have gone of its own accord.¹⁵

In saying that it was "by no means certain" that tariffs would be more beneficial to society than their absence, Adam Smith was either being ironic or, for him, unwontedly restrained. More straightforwardly and in character, he opined that

the industry of the society can augment only in proportion as its capital augments, and its capital can augment only in proportion to what can gradually be saved out of its revenue. But the immediate effect of every such [tariff] regulation is to diminish its revenue, and what diminishes its revenue is certainly not very likely to augment its capital faster than it would have augmented of its own accord, had both capital and industry been left to find out their natural employments.¹⁶

Here "natural" means that capital and other resources should flow in such directions as would cover the costs of their use, and so be allocated in economic fashion. This leaves no scope for a priori judgement on the relative desirability of industry or agriculture or any economic activity. Some nations had given "extraordinary encouragement to agriculture", and some had done the same for industry. "Scarce any nation" ran Adam Smith's complaint, however, "has dealt equally and impartially with every sort of industry."¹⁷ And on the economic side it was through just such impartial judgement that the economic system of natural liberty was to deliver its benefits.

Re-inforced by this even-handed approach to the investment decision, Adam Smith was sure that where a country lacked sufficient capital fully to exploit all opportunities in agriculture, industry and trade, it would progress in proportion to the share of investment in agriculture. In so far as his reasoning was based on his distinction between productive and unproductive labour, it may seem suspect to modern economists. Still his main point was that capital fixed in agriculture added
more "to the annual produce of the land and labour of society" than did equal capital invested in industry. And he saw a progression — his "natural progress of opulence" — from agriculture to industry to trade, though his justification for this may now seem uneven. It begins, securely enough, with the observation that as subsistence is, in the nature of things, prior to conveniency and luxury, so the industry which procures the former, must necessarily be prior to that which ministers to the latter. And it continues with rather mixed explanation of a general preference for investment in land. Thus, the man who employs his capital in land, has it more under his view and command, and his fortune is much less liable to accidents, than that of the trader, who is obliged frequently to commit it, not only to the wind and the waves, but to the more uncertain elements of human folly and injustice, by giving great credits in distant countries to men, with whose character and situation he can seldom be thoroughly acquainted. The capital of the landlord, on the contrary, which is fixed in the improvement of his land, seems to be as well secured as the nature of human affairs can admit of. The beauty of the country besides, the pleasures of a country life, the tranquillity of mind which it promises, and wherever the injustice of human laws does not disturb it, the independence which it really affords, have charms that more or less attract everybody; and as to cultivate the ground was the original destination of man, so in every stage of his existence he seems to retain a predilection for this primitive employment.

Having recently written off large sums as a result of imprudent third world lending, some commercial banks may now be more aware than hitherto of the hazards "of giving great credits in distant countries" without being "thoroughly acquainted" with the situation of those to whom these are granted. Some of the spirited passage that thus confirms the continued relevance of the Wealth of Nations may, however, seem more applicable to the gentleman farmer than the poor peasant, and thus further to emphasize perhaps the economic distance between Adam Smith’s Scotland and present-day Ethiopia. Be that as it may, there then follow passages of even more direct relevance to the matter in hand. These include an implicit account of the mechanism by which Smith’s natural order unfolds, and note that the land is cultivated "with great inconvenience and continual interruption" in the absence of the specialised services of "smiths, carpenters, wheelwrights, and ploughwrights, masons, and bricklayers, tanners, shoemakers, and tailors". These also have occasional need of each other’s services, and
as their residence is not, like that of the farmer, necessarily tied down to a precise spot, they naturally settle in the neighbourhood of one another, and thus form a small town or village. The butcher, the brewer, and the baker soon join them, together with many other artificers and retailers, necessary or useful for supplying their occasional wants, and who contribute still further to augment the town. The inhabitants of the town and those of the country are mutual servants of one another. The town is a continual fair or market, to which the inhabitants of the country resort, in order to exchange their rude for manufactured produce. It is this commerce that supplies the inhabitants of the town both the materials of their work, and the means of their subsistence. The quantity of finished work which they sell to the inhabitants of the country, necessarily regulates the quantity of the materials and provisions which they can buy. Neither their employment nor subsistence, therefore, can augment, but in proportion to the augmentation of the demand from the country for finished work; and this demand can augment only in proportion to the extension of improvement and cultivation. Had human institutions, therefore, never disturbed the natural course of things, the progressive wealth and increase of the towns would, in every political society, be consequential, and in proportion to the improvement and cultivation of the territory or country.

It is, of course, again to be noted that the origin of the village and, later, the town presupposes a degree of the division of labour that already calls for the services of specialised craftsmen beyond that to be observed in present-day poor countries.

For Adam Smith, human institutions had least "disturbed the natural course of things" in North America, so that it was there that progress was to be seen at its most striking. There, where uncultivated and fertile land was still to be had on easy terms, an artificer who accumulated more than was necessary for the conduct of his own business used his surplus to acquire land, since "neither the large wages nor the easy subsistence which that country affords to artificers, [could] bribe him rather to work for other people than for himself". The pleasures of the independent life were again thought to be part of the motivation. But the appeal of farming in comparison with industry or trade — which was heard by the well-paid agricultural labourers also — was clearly a largely economic one. Agriculture paid better.

It may be objected that thus far the argument — though it has robustly emphasized the limitations of industrial-led growth and given reason for believing that returns to agriculture are, on the whole, greater than to industry or trade — has not established agriculture as a dynamic leading sector, capable of initiating and sustaining rapid growth. This failure may be acknowledged, and the questions of whether and in what way agriculture could fulfil this exacting rule are taken up again.
later. In the meantime the importance of what has been said should not be underestimated. Whether circumstances permit rapid economic growth or not, agriculture is particularly important at low levels of development. In a delightful essay that considers how much of modern development theory was already available in 1776 — and that, not surprisingly, gives pride of place to Adam Smith — Sir Arthur Lewis speaks of "a good beginning, that gave us the constraints imposed on growth by the agricultural surplus" 22. Progress, that is, will normally result only if the constraints on agriculture are removed. And if this has for long seemed obvious, the extent to which it has been overlooked confirms that it can stand repeating.

Moreover the argument thus far also serves as a reminder that spontaneous growth is not only possible, but, in Adam Smith's view, the most rapid obtainable in particular circumstances. Frugal accumulation and the spontaneous and uninhibited application of the surplus by individual economic agents to the areas of highest return — that was his road to economic progress. As noted before, the skills and variety of Smith's craftsmen may be richer than are now to be found in poor countries such as Ethiopia, but the mechanism that he envisages is nevertheless — perhaps a fortiori — still applicable. In such countries most of the population is to be found in subsistence households. The division of labour is very limited, markets are small and primitive. In time, through luck or skill or both, some farmers improve their lot to the extent that they can afford to pay outsiders to provide some of the services that were previously performed within the household. Thereafter progress becomes more complex and is increasingly associated with shifts in the relative allocation of resources across sectors. Even after the process is well under way, however, returns to investment in agriculture remain high.

Historically much economic growth has been of the spontaneous, organic kind just described. It does not follow, however, that laissez-faire is now the best policy. Eighteenth-century Britain and contemporary Hong Kong constitute a small and unrepresentative sample. And even Adam Smith allowed scope for government in the conduct of economic affairs. Beyond the three main tasks — law and order, defence and the provision of public goods — he left to the sovereign in his state of natural liberty, he also entertained intervention to soften the shock attendant upon the introduction of competition. Moreover, at least until recently, the spirit of the age has been different from what it was at the time, say, of the British industrial revolution. More has been expected of the state as an economic agent. Nevertheless Adam Smith still has a point. If spontaneous growth can be so slow as to give rise to impatience, intervention is surely only justified if it improves on the natural order. To extract part of the peasant surplus to finance public economic acts is to constrain the natural advance that would result from the disposal of this surplus by the peasant himself. It may thus be justified only if its use results in a higher-than-otherwise level of living. There is, however, no economic justification in taxing the peasant if living standards fall over long periods of time, or if they grow more slowly than they
would have done spontaneously. And the peasant may, of course, be forgiven if he believes that state use of his surplus should deliver him higher returns than would accrue in its absence. Thus the question is whether some combination of the market and the state can be found that can better unfettered spontaneity.

3. The market, the state and comparative advantage

Many, perhaps most, believe that laissez-faire can be bettered — in practice as well as in principle. This belief survives the growing evidence that command economies are inherently inefficient, and it is not necessarily linked to any attachment to development planning. Alexander Gerschenkron, for example, developed a model that gave economic backwardness a powerful and positive role in inducing systematic government provision of the prerequisites for economic growth. The more backward the country, the more, in his view, the supply of capital and entrepreneurship came from the state, and the more coercive and comprehensive the measures to reduce domestic consumption. And if this appreciation of the role of the state may be too closely based on learned reading of European economic history to be generally applicable, government has also been thought prominent in the more recent Asian success stories of Japan, South Korea and Taiwan.

Yet neither the erudition of Professor Gerschenkron nor the apparent economic strength of government in East Asia is conclusive. That an active state has been associated with economic success proves only that such a state need not always be linked to failure. It cannot ipso facto be ruled out that even greater success would have attended more government reticence in the economic sphere. Opinion has been divided, for example, on the importance of the government contribution to East Asian growth, with some now believing that this importance has been exaggerated. Moreover the detail of government economic activity has to be carefully scrutinised in each case, since the character of this could bear crucially on its effectiveness and on its replicability. In this regard it has been argued that the East Asian "economic miracles" have been associated with directly productive public sectors of below average size; and that public expenditures have been aimed more at directly boosting productivity than at meeting basic needs or other social objectives. In addition, the instruments used to carry out government policy have been wide-ranging, subtle and — whether carrot or stick — designed to encourage efficient economic behaviour on the part of private firms. It is not immediately obvious that the composition, direction, range and subtlety of East Asian policy is within the general grasp of governments in low-income countries. But the characteristics just enumerated have certainly not been those of government policy in sub-Saharan Africa, where the majority of poor countries (including, of course, Ethiopia) is to be found. Nor is it so very difficult to explain why public policy in Africa has been less impressive.
These are critical considerations. Economic growth in poor countries such as Ethiopia has either to be left entirely to the market or it is to come from market-boosting policies that make government an efficient partner. How likely, in the specific circumstances of low-income economies, is it that such policies can be found? What are the main difficulties? And what implications do these have for the scope and character of intervention? To throw light on these questions, what follows is in four parts. The first briefly reviews public sector performance in sub-Saharan Africa since independence; the second considers the constraints on public economic efficiency in very poor countries; the third deals with the market, failures and all; and the fourth is concerned with comparative advantage.

The inefficient state

Sub-Saharan Africa comprises all the countries of the continent except South Africa and those with a Mediterranean coast. The countries included are thus many and varied in important aspects, so that they do not self-evidently constitute a homogeneous group. Yet for the most part they have comprehensive poverty in common, and this already well-known fact may be quickly confirmed from the World Bank data of Table 5. From this it may be seen that of the 34 African countries covered, 26 — well over two-thirds — were in the low-income category in 1987. Moreover, eleven of these were in the group of fifteen countries worldwide in which income per head was US$250 or less. More generally, the higher the income level the lower the African share, so that there were no sub-Saharan countries in which average income in 1987 was more than US$6000, and but one (Gabon) in which it was more than US$2000. Consistent with their low per capita income levels, most of the sub-Saharan countries were economically small — as may be confirmed from the second half of the table. Thus twenty of them each had aggregate production in 1987 of less than US$3000 million, which was about 8 per cent of Hong Kong's total output; and none of them had a gross domestic production in excess of US$25000 million. This means, of course, that there was no sub-Saharan economy as big as that of Hong Kong.

Table 6 starkly reveals just how poor Africa's economic performance has been — at least when this is measured by changes in income per head between 1965 and 1987. In that time total output in sub-Saharan Africa as a whole barely kept pace with population increase, so that average income was little higher towards the end of the 1980s than it had been twenty years earlier. And in the low-income economies even this modest progress was not matched. Thus, whether or not Nigeria is included, income per head in the poorest countries declined between 1965 and 1987. In these very poor societies, therefore, the attainment of modern economic growth was as remote as ever after more than two decades had been spent in ostensibly pursuing it — a gloomy conclusion that is supported by the data in Table 6 on
economic structure. As is well-known a distinctive pattern of change is normally associated with economic progress, with in particular the relative share of agriculture falling, and that of industry rising. No such trend is apparent in the African statistics.

Why did sub-Saharan Africa do so badly? It is, of course, necessary to acknowledge that, for whatever reason, many of the African economies were poorly prepared for modern economic growth as they came to independence in the early 1960s. Educational systems were small, infrastructure was limited, and specialisation had not gone very far. Nor were natural endowments generally impressive. Then, as indeed still, much of the African economy consisted of labour and land. And if the labour was largely unskilled, much of the land was difficult to farm and only grudgingly productive. Agriculture was, of course, rainfed and so sensitive to weather conditions. Thus those who would excuse African economic performance can point to inherited constraints and the above-average incidence of drought in the 1980s. They can also note the post-1973 deterioration in world economic performance, invoke the two oil-price shocks and the unexpectedly severe and prolonged 1980-1982 global recession, and make the most of fluctuations in Africa’s terms of trade. And the rising African debt may be seen as the almost inevitable consequence of having to defend poor people against the adverse consequences of these exogenous shocks.

Yet great caution is in order. The comparative data of Table 6 show that the poor African economies did much less well than other low-income countries. With or without the fast-growing Indian and Chinese economies, the non-African lower-income countries recorded much higher rates of growth between 1965 and 1987 than did their African counterparts. The non-African poor was indeed the fastest growing group of countries in the world economy in that period. And if disaggregation of the middle- and high-income groups would cause that statement to be qualified, the fact remains that a number of Asian economies clearly out-performed the poor African ones, though the Asian countries also began with low income levels, limited resource endowment, and small market size.

This makes it necessary to consider policy. And this, it may be stated baldly, was wrong-headed. It generally favoured industrial development and a state that was very active in economic matters. At independence, however, though the African economies were poor, they were not labour surplus. Nor, on the standards of living then prevailing, were they so resource constrained in agriculture that a large and desperate effort had to be made to export manufactures in order to eat. There was, in fact, no strong economic reason for favouring industry at the expense of agriculture. Nor was the economically active state ever likely to impress. The inherent limitations on the efficiency of the low-income state are explored more fully in the next section. Here the concern is with what African governments actually did in the period under examination.
In this regard there are two difficulties to be acknowledged. The first is that the forms taken by government intervention in the economy are many and varied, so that such intervention is never easy to describe or measure. Nor second, and related to this, is it easy to evaluate the impact of government economic activity. Still, to begin at the beginning, the views of those who allow no importance to externalities, "see no conceivable agenda for state or collective action emerging from public characteristics of any activities, [and] reject all attempts to derive an economic theory of government, an economic logic of collective action" have failed completely to persuade. The state is yet to be in which all economic activity is private. In the real world governments provide a legal and policy framework for the economy, and they use fiscal, monetary and trade instruments to pursue aims that normally include economic growth and income redistribution. Through laws and regulations, taxes and subsidies, lending and public services, government affects private production. It also engages directly in production of pure public goods (such as defence) for collective consumption, and, often, of what Stiglitz has called publicly provided private goods. These are goods, such as education and health care, that in principle could be — and indeed frequently are — produced privately. In addition to what it provides free to individuals, the government may also produce goods and services — electricity, transport and house room, for example — for sale to private individuals. The list of things that are the subject of public production and private purchase can, of course, be very long. In Ethiopia it now includes sugar, beer, footwear, clothing, cement and cigarettes, as well as the three examples just cited. And, reverting to the general case, school furniture and hospital equipment are among the things that government sometimes buys from the private sector for public consumption.

Thus in the modern economy, rich or poor, the government has a more or less explicit policy on the economy and it engages in the same economic activities as households and firms. It produces and consumes, saves and invests. As noted, the range and character of government intervention makes measurement difficult, analysis even more so. Part of the analytical difficulty is, of course, that measurement may be inaccurate or incomplete. Data on public investment, for example, are needed before government expenditure can be properly measured. Still, the greater difficulty for analysis is that of separating government impact from all the other factors that may explain economic growth or its absence. It has, after all, proved rather difficult even to establish a clear-cut correlation between the weight of government in total expenditure and the rate of growth in the GDP. Nor is this so puzzling. The extent to which government uses resources is not the whole story. Efficiency is also in question. And though that is also difficult to measure, it is clear that variations in the composition and — not necessarily an independent element — of the efficiency of government spending could be more important than variations in its size.
The foregoing notwithstanding, it is possible to indict government in sub-Saharan Africa. As claimed above, policy was wrong-headed, and, related to this, public expenditure was excessive and poorly composed. Thus, in the words of one sympathetic analyst, the policy shifts in the 1970s comprised "the rapid growth of public expenditure, the establishment of a large number of parastatals, and massive expansion of administrative intervention throughout the economy" 30. And the same author found evidence of policy and institutional distortions at the end of the 1970s in at least twenty-nine countries. Among these Malawi, Cameroon, Mauritius and Botswana were less distorted than the others, and it is hardly coincidence that these were among the better performers. More generally the least that can be said is that the distortions were not — whether contemporaneously or with a time-lag — associated with significant economic growth.

It was, of course, economic signals that were primarily distorted, so that the main consequence was inefficient resource allocation and use. And an important and particular result of this was that it discriminated against agriculture and exports. This discrimination was many-sided, but central to it were the — by now well-documented — flawed trade and exchange rate policies 31. Thus exchange rates were allowed to become and remain overvalued, so that in terms of the domestic currency exports earned less and imports cost less than they would have done at a more appropriate rate. This harmed agriculture by helping, as it were, to hold down the prices paid to the producers of agricultural exports, and by reducing the relative price of imported food. Nor was this all. The standard response to the growing foreign exchange scarcity was the imposition of tariffs, quotas, and bans on selected imports. Since this was linked to government-led import substitution, the overall policy often forced farmers to buy high-cost, locally produced farm implements and other inputs.

Like the other sectors, agriculture also suffered when the economy failed to grow. And one reason for this failure is to be found in yet another consequence of exchange rates that were chronically too high. The exchange rate is itself a price. Thus if the foreign price of the domestic currency is kept artificially low there will never be enough foreign currency. Parallel markets and corruption therefore flourish. Import licences become negotiable instruments, capable of being sold for more than the official rate equivalent of their title to foreign exchange. And in the environment in which such buying and selling takes place, the licences issued need bear no relation to any economic case for import priorities, nor need the licences be used for the purposes for which they were ostensibly granted. Indeed the aggregate claim on foreign exchange need not even be limited to the amount available. The energy that as a result goes into corrupt practices may be impressive, but it is hardly productive. It flows from a system in which the constraints on those who cannot — in one way or another — get foreign exchange can be absolute but, economically speaking, arbitrary.
As already noted, putting clumsy policy instruments in place by no means exhausted government economic activity. It was directly involved in the production of goods and services through the (in principle) business-like operations of state-owned enterprises and the operations of a wide range of government institutions whose business was the provision of public and other goods. The state-owned enterprises grew rapidly in most countries following independence. They were intended to fill the gaps in the market provision of entrepreneurship, and, the hope was, to be surplus-generating concerns that would provide cumulative on-the-job training for both management and the work force. The outcome was very different. With few exceptions, government enterprises became chronic loss makers, and the size of their losses became particularly striking when resources were costed at their economic prices. Far from contributing to the public purse, they became a major drain on it. And again their activities impinged on agriculture. Though state farms were not found everywhere, those that were set up were generally inefficient. So also were the state marketing bodies that collected and sold most of the agricultural exports and many of the food crops. These were over-manned, inordinately costly to run, and added their own squeeze to the prices paid to producers. The government monopolies that were prominent in the often subsidised supply of agricultural inputs such as fertilizers and seeds were no better. Their distribution system was often ramshackle and almost always uneconomic. And they did not often manage to deliver inputs at the right time, to the right place, and in the right amounts.

In addition to the activities already reviewed, African governments developed the human and physical infrastructure of their respective economies. Social provision has also been important, although much of this — of education and health, for example — at least overlaps with the economic. A full audit of these additional fields would perhaps be more than usually difficult to conduct. The gestation period for investment in physical infrastructure is long in general but varied in the particular. And if the impact of more education and better health is certainly positive, the extent to and ways in which this is so are less easy to capture. Still, the presumption is that the activities in question were larger and more rapidly growing than may have been expected, and less efficient than may have been hoped. Consistent and comprehensive data that would sustain international and interregional comparisons are not readily found. Some pertinent data assembled by the World Bank are, however, reproduced in Table 7. These confirm that — broadly comparing like with like — public investment projects are more costly to set up and run in poor African countries than in low-income Asian ones. Thus, capital costs are between 30 per cent and 240 per cent higher than in Asia, and operating costs are two to more than five times the Asian figures.

These comparative statistics do not per se make African projects inefficient. African costs, it could be argued, are relatively high because African conditions are particularly unfavourable. Difficult topography and scattered populations make roads and irrigation schemes more expensive than otherwise. And many of Africa's major
centres of population are inland, and so not cheaply reached from the coast. Yet the cost differentials remain disturbingly high, and there are reasons for thinking that this is due, at least in substantial part, to institutional inefficiency. First, rates of return on investment — albeit as measured crudely by output-capital ratios — have been much lower in the 1970s and 1980s than in the 1960s. This could, of course, be explained, by a decline in the marginal efficiency of capital and by such factors as changes in the composition of investment. The fall in the productivity of capital has, however, been sharp and progressive. The World Bank, for example, estimates the average annual rates of return on gross investment in the successive periods 1961-1973, 1973-1980 and 1980-1987 to have been 30.7 per cent, 13.1 per cent and 2.5 per cent respectively. By contrast the rates in South Asia were about 21 per cent in each of the first two periods, and more than 22 per cent in the third period. In the light of this evidence it is hard to deny the charge of inefficiency — particularly since to do so would perhaps suggest a time ordering of investment that was unusually efficient. And though the investment in question covers private as well as public projects, it is known that public investment has been particularly important in sub-Saharan Africa. It is also known in specific cases that public inefficiency has imposed otherwise avoidable costs on the private sector. In Nigeria, for example, the unreliability of publicly-provided electricity and water has caused many private firms to have their own generators and boreholes.

Second, much of the relatively higher cost in Africa is due to the wage level. This is high in relation to African productivity, and so, given the labour supply, reflective of poorly-functioning labour markets. Attempts are sometimes made to blame high wage rates on the colonial example and inheritance. Yet efficient markets would not have sustained unduly high wage levels, which owe their survival to the fact that wages in the public sector have been set by fiat and more generally in the formal sector by legislation setting minimum wage levels. After all Tanzania and Sri Lanka are both former British colonies, so that it is difficult to invoke that common experience as an explanation for the official wage level in the African country being more than twice that of the Asian one at the beginning of the 1980s.

The third reason for believing that relatively high costs reflect public inefficiency in sub-Saharan Africa is what is known directly of the state-owned enterprises and the public services, including what has been learned from the putting in place of measures designed to arrest economic decline. The inefficiency of the state-owned enterprises has already been noted. Confirmation of the more general malaise comes from recent audits of the civil service in countries such as the Central African Republic, the Gambia, Ghana and Guinea. These services had expanded greatly since independence and had been running in part as welfare programmes in the face of deteriorating economic conditions. All of them now stand in need of reform, on the eve of which "productivity was extremely low, discipline was largely lacking, and overall there was little accountability". Staff who had left were still on the payroll. And some who had not left should have — because, for example,
they were beyond the retirement age. There was little relation between the numbers of kinds of people employed and the tasks on hand. Indeed there was little clear understanding of what was to be done. And though overall numbers were greatly inflated, this, in the general chaos, was consistent with a marked shortage of particular and important skills.

As in the civil service, so in other areas of government inflated numbers or wages or both meant that much of the education, health and agricultural extension budgets (for example) went on wages. This gravely constrained the employment of complementary inputs, so that quantitative expansion was at the expense of quality. Thus, the proportions of the relevant age groups receiving primary, secondary and higher education have expanded impressively. Between 1965 and 1986 in sub-Saharan Africa as a whole the proportion in school or college rose from 41 per cent to 73 per cent in the primary sector; from 4 per cent to 20 per cent in the secondary schools; and from virtually zero per cent to 2 per cent in the universities. Yet, partly because of the growing number of emigrants, the quality of teaching declined at all levels and the supply of teaching materials dwindled.

This dismal story could be continued. Enough, however, has been said to convince all but the deaf. Government in sub-Saharan Africa has not been efficient. Strategy has been ill-conceived. And the public sector has been too big, confused in purpose, and disappointing in performance. These failings have, moreover, had cumulative effect. Though the counter-factual nature of the required proof makes it difficult, if not impossible, to produce, there is little reason to doubt that the imbalance between ambition and competence would have inflicted grave damage even had the post-1973 world economy provided a better environment than it did. As things were, the economically-pervasive state commanded resources that could have been more efficiently used. And, as has been seen, state inefficiency hampered the efficient use of resources elsewhere. Moreover the voracious economic appetite of government meant that taxes were higher than they would otherwise have been, with much of the burden, as usual, falling on agriculture.

It may, of course, be argued that the economic failings of the African state in the post-independence period do not conclusively show that governments should not be expected to play a major and substantial direct role in the economic development of poor countries. The weaknesses documented above would, on this view, merely record the deficiencies of particular governments. More determined and more competent administrations would do better. That, of course, is not to be doubted. Nor is it necessary to deny that actual improvement is possible. Yet it would be difficult to dismiss the post-independence experience as historical accident, to believe that different people in the same conditions could have pursued the same strategies with the same instruments to much greater effect. The major difficulty was not in the casting, but in the plot. It is consequently time to turn to the constraints that would generally impede state effort in poor countries.
There were no doubt several reasons for the (as it now seems) excessive economic activity of the state in post-independence sub-Saharan Africa. Even where these were political, however, they rested ultimately on the perceived weaknesses or repugnance of the market. Unspectacular, if steady, progress did not seem adequate to those who had won independence. And the market looked to be an unlikely instrument for the spectacular growth that was required if the gap between the new nations and their former colonial masters was to be seriously narrowed, if not actually closed. Capital markets were weak or non-existent, the supply of entrepreneurs was small, infrastructure was limited and largely designed to facilitate external trade, and much of the stock of the labour force and the small stock of capital was locked up in subsistence agriculture. Moreover, mobilisation, augmentation and reallocation of resources were thought to be necessary on a grand and growing scale that was well beyond the cautious, marginal and incremental judgements of the market. And the dirigiste instincts of African political leaders were boosted by the apparent success of the Soviet economic system, which enjoyed on balance a better press then than now, and by a body of Western economic thought that was still reeling from the experience of the depressed 1930s. As has been seen, this was also suspicious of the market and looked to the state to be the mainspring of growth and stability.

To say that, however understandable, this faith in the state was greviously misplaced is to risk the charge of using hindsight. Since there were some — Viner, for example — who dissented at the time, as it were, the accusation cannot be made to fit universally. Even if it could, however, there are worse things than taking advantage of hindsight, including not doing so — of being unwilling to learn from experience. Thus, hindsight or not, what is now important is a clear view of the economic limitations of the state in a low-income economy. Providing this is the avowed intention here.

In this regard it may be noted that the character of the state has itself been changing. As Professor North has reminded us, in most historical periods this has not been conducive to economic growth. Indeed, on the contrary

the Mafia would be a more accurate characterisation of the State in the past than an organisation concerned with the "public good". There were of course exceptions. We think of civilizations in Mesopotamia, Egypt, Greece, and Rhodes, and the Roman Republic and Empire. But they were exceptions, and a State that is self-consciously concerned with the performance of the economy is a relatively modern phenomenon, dating from the mercantilist era but probably more accurately associated with the rise of "representative" government.
In modern times this self-conscious concern has led to the economically active — indeed the sometimes economically omnipresent — state. And this development has been observed in developed and developing countries alike.

In the long sweep of history beyond the Mafia stage, however, the economic power of the state has fluctuated. At the time of Adam Smith "public attention", in the words of Hubert Henderson, "was much occupied with a subject, which indeed has not ceased to hold it: that of the failings of government". For economists, as for much of the public, "governments were doing immense mischief by meddling with a great many matters, which they would have done better to leave alone". The policy response was, of course, laissez-faire — summarised, not quite accurately, by Henderson as "let governments preserve law and order; and leave the economic sphere alone". The subsequent reign of laissez-faire was not indefinite. Again to quote Henderson:

it did good work for perhaps half a century; but then many crimes were committed in its name. The instrument which had been forged to clear away a noxious tariff jungle and the monstrous laws of Settlement, was turned against Lord Shaftesbury and the Factory Acts. Not only was inaction recommended to governments as the highest wisdom; other institutions, like trade unions, were warned off the economic grass. An ideal of perfect competition became an idol to which much [was] sacrificed.

A certain insularity in Henderson’s examples notwithstanding, the passage cited does graphically make the point that the pendulum swung. By the 1870s what has been called the "age of collectivism" had begun. Laissez-faire had left too many poor, had failed to compensate (innocent) victims of economic change, had regularly been associated with significant unemployment, had not risen to the challenge posed by the growth of monopoly, and had under provided such social goods as education and health care. And even where these alleged failings did not lead to the command economy, the economically enlarged state did run to public ownership of natural monopolies and sometimes other "key" industries. It was also associated with marked expansion in the public provision of education, health care, and housing. And with time macroeconomic policy became increasingly comprehensive and aggressive. Sectional views of the national interest were, for example, indulged through protection; and regulations and controls increased, including those that restricted the movement of capital internationally.

The development of the participatory state was, of course, more complex and uneven than would appear from the foregoing brief presentation. Moreover its extent and character varied across time and place. Still, what has been said serves to make the point. Between the publication of the Wealth of Nations and, say, the bicentenary of that historic event economic and public opinion had changed, as, more importantly,
had economic practice. Thus in 1976 Sir Alec Cairncross could say that "we are back to a managed economy in which the role of the state is steadily expanding while market forces operate within increasingly severe constraints and are viewed with growing distrust". Yet within a few years the pendulum had swung again. Market forces are now resurgent, and — though the share of public in total expenditure is still high on historical standards — the state finds its economic activities critically questioned and the subject of growing suspicion.

An obvious question is whether the pendulum will swing yet again, or whether the collectivist episode will prove to have been a decisive period of learning-by-doing that will leave market forces strongly dominant. Though fascinating speculation is now possible, that is, of course, a question for the future. In the meantime, it is worth noting how widespread the market resurgence has been. It has reached poor and rich countries, and mixed and hitherto centrally planned economies alike, so that it is natural to wonder whether recoil from the state has everywhere had common cause. Investigation would certainly show that there have been general and particular reasons for the disenchantment with the economically active state, and some attempt is made below to distinguish between these. Before doing so, however, it is worth first recalling — from the perspective of countries still at an early stage of development — what is at stake, and of establishing that though both now may be making common cause at least in part for shared reasons, the environments in developing and developed countries are very different.

Thus it should be remembered that how different societies historically worked out the principles and institutions that were to guide (or control) the relations between governments and private households and firms in the economy has had great influence on the pace and pattern of subsequent economic progress. In Spain, for example, the historical compromise between government and the rest has been judged particularly inefficient. Translated to Latin America, Spanish institutions appear as part of the explanation of the disappointing economic performance of that region. By contrast, the economic pre-eminence of North America owes much to inherited British institutions.

The contemporary uniqueness of the very low-income economies may be approached by recalling that the mercantilist forerunners of those who incurred the wrath of Adam Smith were much concerned with the military power of the state. Externally there were enemies who threatened, and internally unity had to be imposed. The Wealth of Nations was not, however, a military treatise, but, as its author himself put it, on reflecting on the furore caused by his famous obituary of his friend David Hume, a "very violent attack... upon the whole commercial system of Great Britain". By 1776 attention had shifted from the revenue needs of the warlike or unifying monarch to the income of the nation and how this was to be measured and promoted. Yet the days when financing military expenditure had been the central political issue were not remote. By noting that the military problems of medieval Europe find substantial echo in today's poor countries, support is therefore
provided for a recurrent theme of this essay — that Adam Smith is nearer to contemporary Ethiopia than Rosenstein-Rodan. Moreover, where the concern is with the Civil Vote, as it were, this support is strengthened since much of the argument about the size and the disposition of this is distinctly mercantilist. The low-income state, whose economic competence is now in question, is in important respects very different from that of late nineteenth and twentieth century Europe. It does not, of course, exactly match that of eighteenth century Europe either. But though the contemporary poor country is at once more advanced and more backward than the industrial pioneers, there is much in common in the present context.

In this regard, changes through time in Europe helped to explain the swing away from *laissez-faire*... The state that roused the ire of Adam Smith was not that to which Bismark and Lloyd George were to turn. Keynes has noted the contribution that the corruption and incompetence of eighteenth century government made to the onward march of the free market. "Above all", he wrote, "the ineptitude of public administrators strongly prejudiced the practical man in favour of *laissez-faire*... Almost everything which the State did in the eighteenth century in excess of its minimum functions was, or seemed, injurious or unsuccessful" 46. The state itself, however, was reformed. And by the time that the foundations were being laid for the German and British welfare states, entry to the Civil Service was on merit, and impartiality was a growing tradition. In addition, government had, with the rise of representative democracy, become more accountable for its actions. And the analytical and statistical foundations for understanding society had been strengthened.

The point of this comparison is, of course, that it suggests that the efficiency and integrity of poor country government at independence were also lower than those of the public service in the early days of the Western welfare state. Taking Western competence for granted, more detailed argument in support of this view is given below. What is now to be stressed is that the tasks placed upon the fledgling governments of the poor countries were arguably greater than those imposed on the more developed systems. Both medieval and modern problems had to be overcome. The state had to pursue unity and security at the same time as it caused the economy to grow at an unprecedentedly high rate. Small wonder that, in the light of the excessively ambitious attempts to meet this impossible challenge, one commentator has observed that "in essence, the super constraint on the relaxation of the other constraints [on economic development] is the inadequate quality of national economic management" 47. What else, it has to be asked, could have been expected?

As has been seen, the size and scope of state economic involvement in poor countries has been great; and this may of itself have contributed to inefficiency. When growth is at a premium economic arrangements have to promote allocative and adaptive efficiency, though the two are normally inter-related. A resource-poor government that designs policy and attempts to implement it over a wide field through direct action is unlikely to make good use of resources or induce productivity-enhancing innovations. At its best, moreover, much non-market activity
is based on a false premise — that imperfect governments are better than imperfect markets. "It does not follow", wrote Henry Sidgwick, "that whenever laissez-faire falls short government interference is expedient; since the inevitable drawbacks of the latter may, in any particular case, be worse than the shortcomings of private enterprise" 48. And this may be especially so if governments fail to be prudently selective in the shortcomings they attempt to meet.

Some of the specific constraints on the economic efficiency of the state are common to all governments, and some are particular to, or at least apply with unusual force in, the low-income country. Of the common constraints, the most potent is the impossibly exacting information needs of comprehensive government action. Control of the economy needs much information if decision-taking is to be efficient. Nor is this all. More information is then needed so that the efficiency with which decisions have been implemented may be monitored. The barrier thus erected is, of course, highest where the state’s economic ambition is greatest, so that it is particularly restraining in the command economy. It is present, however, whenever government engages widely in extra-market economic activity and seeks to direct the allocation of resources, even if this action and direction still leave much resource use in private hands.

For the knowledge constraint to become evident, it is enough that the state should — prudently — wish to anticipate the consequences of using this or that policy instrument, since to anticipate properly, as it were, requires at least the spirit of general equilibrium analysis, much data and knowledge of the pertinent behavioural relations. Moreover if, for example, monetary policy in developed market economies can be made difficult by the problems of defining and measuring the money supply, it is probable that extensive control of and participation in economic activity in poor countries will a fortiori be troubled by lack of knowledge and data. And if it be objected that such lack also constrains private activity, this misses an important point. The knowledge and data needed by the private agent are local, being confined to the partial equilibrium analogue of operating a single farm or factory. For the state to run or achieve substantial guidance of the economy, its knowledge, skill, and data needs are economy-wide. It has to co-ordinate as well as participate.

Among other things, the market imposes economic discipline by ensuring that costs cannot for long exceed benefits. Production costs are incurred by making competitive purchase of factor and other inputs. Survival requires that these be covered by sales revenues obtained in output markets in which buyers are free to decide whether and how much to buy. This relationship need not, of course, always be optimal. Market failures then arise when the cost-benefit mechanism works inefficiently, so that more or less of particular goods and services are supplied than is socially desirable. Still, the fact remains, over the range of its operations the market enforces discipline on resource use. And it is the absence of a clear and direct link between resource cost and product value that is at the heart of much non-market
failure, that makes government an intrinsically inefficient economic instrument. As will be seen, non-market failure is due not so much to occasional flaws in the mechanism that links costs to revenues, but to its character.

This is not to say that government economic activity is not subject to measurement, even when its scope is wide and varied. And it is true that in addition to directly productive state-owned enterprises, public action to make good market failures comprises regulation, such as food and drug control; the provision of "pure" public goods, such as defence; the supply of what are often called "quasi-public" goods, including education and health care; and the provision — that is, the administration — of transfer payments, such as sickness and unemployment benefits. Yet by convention, the contribution all of these activities make to the national income — their value added — is measured by the cost of the inputs used by them. But this measure clearly reveals nothing about the efficiency with which the relevant goods and services are provided, nor about how far the extent of their provision is in keeping with the social welfare function.

In this regard, the problem is not that of keeping the demand for and the supply of publicly provided goods and services in rough balance. The political process provides (a possibly weak) mechanism to this end, though since, inter alia, both demand and supply correlate positively with income the search for equilibrium is always likely to find multiple solutions. Given, however, that "non-market failures are embedded in the conditions determining the demand and supply of non-market activities, the failures themselves are likely to arise regardless of the point at which equilibrium between demand and supply is established". Demand is always likely to be inflated beyond what would be socially desirable because of what Feldstein has called "the inherent myopia of the political process". And among the reasons that make for inefficient supply is the oft-met difficulty of defining and measuring output itself. Much public production is, at best, of intermediate goods, and so in the national accounts stands as proxy for less tangible final output — such as education and defence.

However, though market failure is the widely-cited source of non-market economic activity, it is ironically market absence that, as anticipated above, gives rise to the most pervasive source of non-market inefficiency. As James Meade has pointed out, the competitive assumption that factor inputs are paid the value of their marginal products is the simplest special case of a relationship of great importance in the real world. Whatever may be the market forms, an entrepreneur in deciding whether to take on any more of an agent, or group of agents, of production will be influenced by the relationship between the cost to him of that agent or group of agents and the value to him of the change in his output.
In many non-market activities, however, this link is broken, so that there is a disjunction between costs and revenues in much of the public sector. Indeed even where public production is for the market, the link may be weak if open-ended subsidy is available. Either way, the costs of production are uncoupled from the revenue earned by it. The level of production is no longer determined by the volume of sales and the unit price at which these take place. Production is now financed from general taxation, and inefficiencies are thus encouraged. In the absence of market discipline more resources than technically needed can all too easily be used to produce a given quantity. And more of the output can be produced than is warranted by the original market failure that gave rise to public production in the first instance. Thus X-inefficiency is to be expected. If there is technological scope for increasing productivity or for exploiting economies of scale, this is less likely to be used than in the private sector. As Wolf has it, "change is troublesome, the costs of not changing are low, and the possible gains from change are uncertain [for those who take the decisions]". The divorce between revenue and costs affects both allocative and adaptive efficiency adversely.

It is evident that the disjunction between costs and revenues must often mean a divorce between burdens and benefits. Those who petition for and would benefit from a tariff or agricultural subsidy are smaller in number and clearer and more organised in purpose than the diffused consumers or taxpayers who bear the costs of the petitions being granted. As a result tariffs and subsidies can become continuing, but inefficient, features of the economy. In similar fashion, subsidised housing, "free" education and universal health care may reflect the demands of the majority with whom, in a democracy, political power rests. The supply of these publicly-provided goods, however, depends on taxes imposed on a relatively affluent minority. Whether they serve the needs of a majority or a minority, the demand for subsidies and welfare goods and services may easily be allowed to exceed the point at which costs begin to surpass benefits, so that again allocative inefficiency results. Moreover, adaptive efficiency may also be impaired if the necessary levels of taxation damage incentives to effort and innovation.

The damage done to allocative and adaptive efficiency when the competitive need to align costs and benefits is absent goes beyond what has just been discussed. Economic agents are likely to be more efficient and innovative if their performance is subjected to well-focused scrutiny, and if there are clear rewards for inventiveness. These problems are diminished in the market by the central preoccupation with profit-making. This provides a standard of performance and comparison, and it yields a natural basis for incentives. Those individuals and organisations that perform better can be better rewarded. And, as Stiglitz has noted, the profit-linked incentives of the market deliver quality characteristics that consumers value — including that of not having to stand in line for goods and services that interest them. Deprived of these market-driven measures of performance and efficiency, non-market organisations seldom place much value on the time of their
customers. Even more importantly, public bureaucracies tend to replace the missing organisational thrust that comes from the pursuit of profit with maximands of their own. Often these turn on size, with budget growth being a popular objective. Public agencies are notorious for their practice, as the fiscal year nears it end, of spending for spending’s sake to make sure that nothing is returned to the central purse.

As will be seen, property rights are an important part of the market incentive structure. Those responsible for public sector activities have, in general, no corresponding way in which they may appropriate the increase in value that arises from their efficient use of resources. Thus for several reasons, it is difficult to design optimal pay and incentive packages for public sector managers. And it is, of course, not possible to provide for capital gains. Stiglitz has argued that public enterprise managers have constrained property rights, since they decide on the disposition of resources. And these rights of decision may be turned into cash or favours. Thus, "customs officials have the ‘property right’ of allowing goods into the country. They can be (and in many cases are) richly rewarded for overlooking the importation of certain items which are either restricted or heavily taxed". Not everything with a cash value, however, conduces to efficiency. Where property rights are absent the incentive to be efficient and inventive is weakened, and where constrained property rights are found the incentive structure is deformed.

Government economic power is often invoked to redistribute income. And even where this is not the explicit aim of government policy, most public decisions have distributive consequences. Partly because of this, it is often difficult to determine the net distributive outcome of government. This may well, however, be inefficient — taking, for example, tax from a relatively poor urban household to increase the income of an already relatively comfortable farm family, or in low-income countries taxing the rural poor to benefit the better-off urban dwellers. Moreover, a system that allows of such outcomes encourages rent-seeking. Thus the misallocation of resources implied by the subsidy to the rich farmer is compounded by the resource waste represented by the farm lobby that put pressure on the government to make the already well-off even more comfortable.

The need for adaptive efficiency ensures that under market competition the inefficient do not survive. To put it bluntly, the system eliminates error. There is, however, no corresponding, systematic method for calling halt in the public sector. The bankruptcy courts are alien territory for those who run state-owned enterprises. Where these are weak recourse is more likely to be had to treasury subvention than to the liquidator. Moreover, where the sharp market focus on profit is absent, subsidy is not too difficult to justify. If employment is a merit good... why should it not be paid for by taxation?

This provocative remark may serve to link general doubts about state economic efficiency and those that may apply with particular force in low-income countries. Thus Professor Stolper, in defending economic profitability as the only valid
investment criterion in the context of such countries, resisted friendly suggestion that
his argument would be more persuasive if he had used some such synonym as "social
productivity". The resistance, he explained, was necessary "if only to make quite
plain that profits and losses are different, and because, in the reality which I know,
'social' considerations are all too often used to justify manifest economic
nonsense" 56. And however provocative that view may be in turn, it does reinforce
what has been said above. The mobilisation and increase of resources for economic
growth is not made easier by the absence of a clear and organising economic
purpose.

Professor Stolper has use, however, beyond lending support to what for some
may anyway be obvious. Surveying the prospects for the economic transformation of
Nigeria shortly after it had come to independence, he placed the lack of facts at the
centre of his analysis. And he made it clear that by lack of facts he meant more than
an absence of timely and relevant data, important though that was. He meant, for
example, the knowledge and detail that could give operational meaning to the desire
to increase the investment ratio. If this were to take the form of a steel mill, was ore
with suitable properties available? If it were to be directed at transforming
agriculture, it had to be realised that

this cannot be simply done by "investing" more in agriculture, by
buying tractors and fertilizers for example. We know that plants
need certain nutritional elements, but we do not always know
without substantial and time-consuming experimentation which
fertilizers will do what... We do not know enough about soil
qualities and composition. We often do not know of crop
rotations that work and are economically or socially feasible. In
the tropical rain forest, heavy tractors may destroy the light soil.
The creation of organic matter is difficult because of the heat and
speed of bacterial action, and no feasible crop rotation has been
found that does not involve grass as a cover crop. But with the
tse-tse fly, cattle have a difficult time, grass as a cover crop is
unknown, and its introduction difficult 57.

Moreover, in addition to this lack of scientific and technological insight
knowledge is also lacking in the domain of the social sciences.
What kind of education should a child have before he comes into
the labour market? How precisely does land tenure work? Is it
true that in Africa, in West Africa... land-holding patterns are an
impediment to development? How can the patterns be changed, if
necessary, with a minimum of destruction and so as to get
development on to a positive path 58?
Given the importance of knowledge and the dearth implied above, it follows that increasing it should be a priority. Nevertheless, it has to be realised that increasing and testing knowledge is a slow process, and that there are limits to what may prudently be done in ignorance. Thus

the very lack of detailed knowledge requires that decision making be decentralised and delegated... Because of lack of facts, only the man on the spot can make the best possible decision in detail. He knows the soil he has to deal with; he can adjust to the vagaries of the weather; he knows what problems of labour he runs into.

If the knowledge constraint is not different in kind in poor countries it is certainly — and importantly — different in degree. And failure to read this lesson has been central to the disappointing economic performance of sub-Saharan Africa. There haste and centralisation were the order of the day. Yet the need to work within the knowledge constraint is particularly great in poor countries. For in an economy at an early stage of development, not only is the supply of knowledge and information more than usually limited, so also is the supply of skilled and experienced people who can wrestle with the consequences of this shortage and take steps to reduce it. Where the challenge is greatest, the number of those equipped to meet it is smallest.

In this respect, Professor Harberger has drawn attention to "another attribute of small developing countries, namely their small endowment of people able to do a good job of setting government policy and staffing the agencies that carry it out". Less than one-fifth of the population in such countries is over 40, and less than one per cent of people in this age group would have received higher education. A country of 6 million people would thus have a trained cadre of less than 12,000. And from this educated elite... would come the ministers of state, the ambassadors, the generals and the colonels, the judges and the lawyers, the accountants and the auditors, and the tax collectors and the teachers plus, of course, the engineers, agronomists, technicians, and business people needed to help lead the country into the modern age. Viewed in this light, the responsibilities facing so small a band of people seem truly awesome.

Professor Harberger uses this insight first to underline the importance of cutting the public coat according to its limited cloth. In the logic of the case, faced with a dearth of trained talent, small developing countries should organise their governments so as to use talent as frugally as possible. Policies should take the form of simple, robust rules that are easy to apply and implement. The hand of government, as it impinges on people’s affairs, should be even, just, and impersonal.
In the realities of the case, runs Professor Harberger’s second point, however, the last thing to be expected is even-handed impartiality in public administration. The limited pool of administrators know each other too well for that. Where not linked by blood or marriage, the members of this small group were at school or university together. Favouritism and nepotism are the inevitable result. In such an environment dedicated reformers — who would, for example, base policy on impartial economic analysis — do not do well. Their failure to conform can easily cost them both their friends and their jobs.

The next part of Professor Harberger’s story dwells on the need to accept the thus corrupted official in the developing country as a fact of life. To do so, and to understand the circumstances that make it so, presents a challenge to the perception and sensitivity of those who would improve economic policy, without, it is claimed, changing the “fundamental nature of either the process of policy reform or the contribution that the economics profession can make to it” 63. Thus perhaps reassured, it is now convenient to recall that the main point of the argument here is that the smallness of the elite reinforces the limitations on the likely efficiency of state economic action. Consistent with his purpose, Professor Harberger focuses on the difficulty of securing impartiality. He has little to say about that of keeping government intervention modest, though he does, of course, urge strongly the importance of doing so.

In reintroducing the importance of the size of the public sector, opportunity may be taken to note that Professor Harberger’s population cut-off for the small developing country excludes Ethiopia. His point, however, almost certainly remains. The proportion of the relevant age group that has received higher education in that country is below even the low average for sub-Saharan Africa. And for this, and other reasons, there are no lack of tightly knit groups in Addis Ababa — Ethiopia’s relatively large total population notwithstanding. There has, however, probably been less overt corruption in the Ethiopian bureaucracy than elsewhere. Still, lack of knowledge and lack of skills have intertwined in Ethiopia to produce low, sometimes negative, returns to ambitious government effort.

In this regard it is clear that growth prospects are sensitive to the selection of those who manage capital and human resources. Market forces probably identify those with a comparative advantage in this respect. There is less reason to think that the electoral or other political processes, including that of self-selection by force, are likely to throw up those skilled at designing and offering incentives that will cause people to work hard to economic ends. On the contrary, where too few people attempt to run or steer the economy on the basis of very incomplete knowledge the requisite entrepreneurial talent, even if it is present, is likely to be misdirected.

The evidence and argument presented thus far suggest that government has been economically bigger in sub-Saharan Africa at least than would have been optimal. Rigorous testing of this proposition would, of course, be difficult. It would call
either for comparison between actual and counter-factual circumstances or would involve cross-section analysis in which it would be far from easy to isolate the impact of the degree of government intervention. Moreover, as has already been emphasized above, there are problems in defining and measuring government participation in the economy; and relevant data are anyway not robust. Attention has therefore been given to government performance in sub-Saharan Africa, which, albeit roughly speaking, was characterised as large and inefficient. In the circumstances of the time, the size of the government effort has been shown to be understandable. And the disappointing government-led performance has been found unsurprising. The strategy was wrong and the methods chosen for its implementation were inept. These things established, it is time to complete the earlier discussion of alternative strategy and so to consider the alternative form of organisation.

The resurgent market

It is, of course, normal to consider the market first. Failings in this are the point of departure for government intervention, even when, as in the command economy, the market is largely set to disappear. This conventional order has been reversed here, since the scale of, and problems with, the public sector have been seen as the major constraints on economic growth. Just, however, as government intervention based on market failure is not usually expected to eradicate the market entirely, so a reduction in public activities and an increased role for the market does not have to imply complete retrenchment in the public sector. The crucial question is still that of balance. Before this can be struck, however, it is necessary to look more closely at the market — and particularly as it may be expected to work in poor countries.

There is, to begin with the general, both a theoretical and practical case to be made for the market. In theory the prize is a Pareto-efficient distribution of goods and services. In the competitive economy, with perfect and complete markets, businessmen will maximise profits and consumers satisfaction (subject to an income constraint) and prices will be determined by supply and demand. In this economy all economic agents are price takers. And price signals lead consumers to act so that the marginal satisfaction from any pair of goods is proportional to their prices; and producers respond such that marginal costs are also in proportion to prices. Competition ensures that identical factors everywhere earn the same reward, and that factors are employed up to the point at which the marginal value product of a factor is equal to its reward. The marginal physical products in the production of any pair of goods is then in proportion to the inverse of the prices of these. The price proportions are also, however, those that determine the marginal rates of substitution and transformation between goods. Markets therefore clear, resources are fully employed, and production and consumption decisions are consistent, so that the amounts supplied are the amounts demanded.
Originally, it is to be supposed, a market was a place where buyers and sellers were in face-to-face contact at regular (or irregular) intervals to trade in a more or less narrow range of goods. By the late nineteenth century, however, Cournot could say that "economists understand by the term market, not any particular market place in which things are bought and sold, but the whole of any region in which buyers and sellers are in such free intercourse with one another that the prices of the same goods tend to equality easily and quickly". Marshall, who quoted Cournot, underlines the importance this definition gives to communication. Though he thought it often difficult in practice to be sure of how far the workings of supply in demand in one place were influenced by those in another, Marshall was clear that the general effect of the telegraph, the printing press and steam traffic was to extend the range of market forces. Thus even in 1890 the whole of the western world was to be taken as a single market for some stock exchange securities, the more valuable metals, and to a less extent wool, cotton and wheat.

On one perspective, therefore, market growth depends on communication, on the ability of buyers and sellers to be in bargaining contact. As this became easier, quicker and more efficient the number of world markets increased, as did the scope for inter-market linkages. What thus began as an isolated flair ended up as a comprehensive and interlocking system. The forces of supply and demand were expanded, and so also, therefore, was the continuing need to link costs to revenue. Economic activity became more and more subject to the discipline of the market. And as noted earlier, its discipline is certainly a singular market virtue. "The exertion", pronounced Adam Smith, "of the greater part of those who exercise it, is always in proportion to the necessity they are under of making that exertion". And he was acutely aware of the loss of effort — in higher education, for example — that could follow the failure to relate work directly to reward. The market, however, permits no such backsliding — or, when monopoly is present, at least no more than is consistent with economic survival.

Whether the market system is seen, as with Hayek, as a gradually but not intentionally-evolving social system, or, more prosaically, as in the textbooks, as an instrument of achieving optimal decisions on what, how and for whom to produce, two of its most striking characteristics are its ability to disseminate vast amounts of information among millions of individuals, and its related ability to co-ordinate the activities of millions without any elaborate mechanism for conscious decision-taking. These salient achievements of the price system never fail to amaze, not least because they rest on decentralised and seemingly unco-ordinated arrangements. These recognise that, as Adam Smith anticipated Stolper’s point, "what is the species of domestic industry his capital can employ, and of which the produce is likely to be of the greatest value, every individual, it is evident, in his local situation judges much better than any statesman or lawgiver can do for him." On this foundation, the price system induces people to work — not simply in general, but in the enormously varied ways and numbers that are necessary if the economy is to have all the skills...
that are required. It rations resources by enabling consumers to express their preferences in such a way that producers can set these against the costs of meeting them. Great variety is then accommodated, but goods and services are still produced in broad consistency with the structure of effective demand. As indicated by one of its several names, the whole mechanism works mainly through the determination and transmission of prices. It consequently works most characteristically when markets are flexible. As Samuel Brittan has pointed out, however, shortages and surpluses are also market signals — which emerge "where price changes are delayed by habit or law" 67. Moreover, whatever the problems its treatment poses for theory, the stimulation to find and introduce new techniques is also a market function.

Some weaknesses of the competitive model have long been known. Marshall, for example, noted that differences in wealth were ignored by the model; and he made much of the importance of increasing returns. Where there were economies of scale, the competitive equilibrium would not be Pareto-efficient, since subsidising resource use in industries that enjoyed increasing returns would improve upon the market outcome. Monopoly power is the natural result of scale economies, so that the existence of equilibrium prices becomes uncertain. Moreover, with market strategy no longer excluded, the information needed by economic agents now goes beyond that conveyed by price signals. The action and reaction of competitors has to be explicitly considered, and there is no reason to be sure that the outcome of the resultant interactions will be Pareto-efficient.

A frequent criticism of competitive theory is that it is static. Yet "there is", in Professor Meade's words, "no essential difficulty in setting a classical system to grow" 68. And if the light thrown on real-world change by a theory based on perfect competition and marginal cost pricing is not, as Meade himself has it, "dazzling", its user is certainly not left in the dark 69. To have some understanding of what happens in the competitive economy as the capital stock grows, the labour force increases, and technical progress takes place is not a bad preparation for wrestling with more complex reality.

Still, a sophisticated variant of the charge that neo-classical theory is concerned with stationary co-ordination, but not dynamic change, relates to the treatment of technical progress. Neo-classical growth models consider the impact of this on factor use and outputs, but are silent on the sources and causes of technical change. Indeed in new classical thinking part of the defence of general equilibrium theory is that its concern is with steady states, or at least regular, repetitive outcomes. Adaptive processes — those by means of which change comes — are complex, irregular and disturbed by a vast number of factors specific to individual agents, industries and whole economies. These are not the business of theory, it still being understood, however, that the rationality of economic agents and their expectations will overcome all this unhelpful noise and ensure that regular equilibrium choice will be made 70. Not surprisingly, this view has been challenged. Coricelli and Dosi, for example, claim that general equilibrium models with stable preferences and techniques do not
normally yield simple and regular outcomes. They also claim that rational expectations equilibria do not correspond to the stationary states of dynamic processes that arise from adaptive rules. These particular criticisms are part of a search for a more "realistic" theory that would do explicit justice to the role and character of technical change in economic progress, and would take "due" — and therefore more — account of institutional and historical factors. It may immediately be said that no such theory is yet on offer.

From the present standpoint, however, these matters are too arcane to be pursued. The theory of the competitive market has been invoked because it is sometimes thought — mistakenly — that this is the source of the market's appeal. Here, however, theory is best seen as little more than a systematically organised set of questions that can, as it were, be addressed to the empirical evidence and inform policy. Even then, however, though it may smack perhaps of overkill, a policy maker versed in competitive theory is unlikely to underestimate the importance of opportunity cost or forget to reckon with price and income elasticities. And if he or she is uncertain about the dynamic value of oligopoly and unsure of the origins of technical progress, nothing in a neo-classical training precludes additional study — provided that it pays for itself at the margin.

Perfect and complete markets are not pervasive features of actual economies, so that theory can be readily accused of lacking realism. A relatively recent variant of this charge relates to information. Among the assumptions that have to be met if market economies are to be Pareto-efficient is that of perfect information. Knowledge, however, can be costly to acquire, so that (for this and other reasons) economic agents do not become perfectly aware. And the theoretical result of imperfect information and incomplete markets is that the economy is always constrained Pareto-inefficient. A set of taxes and subsidies exist that could make everyone better off. This opens up, of course, a potential role for government. It does not follow that actual governments can better the Pareto-inefficient outcome. As with the general theory of the second best, the policy conclusion is not that the state should be summoned to remove the market inefficiencies, but, at most, that close study should be made of the conditions in which policy is to be applied. Nothing in imperfect information or second best environments needs cause general retraction of what has been said about the sub-Saharan Africa state.

It should be clear by now that if market use were to depend on theoretical support, it could be undermined. However, actual markets predated theories designed to explain their existence and functions. On the survival test, therefore, there must be a case for them that does not depend on highly restrictive assumptions. And it is possible, of course, to present a respectable intellectual and practical brief without deploying the mathematical rigour and careful, consistent, but constraining, assumptions of the competitive model. This brief turns on the virtues of the market as a decentralised and so relatively efficient co-ordinator of the millions of decisions that have to be taken all the time in an economy; on the stimulus it gives to growth
and technical change through incentives and flexibility; on the objectivity of

constrained to act as if in the interests of enhancing private property values. As already discussed, those in the public sector have generally no desirable way of doing so.

Enough has been said to show that there is more to the market than anarchy. Freedom of action is, of course, of at least constrained importance. Economic agents must be able to bargain, within the limits of the law. As has been seen, this already creates a need for property rights. Moreover, unless trade is to be confined to spot transactions, contracts are also required. And so, unless trade is to take the form of barter, is money. Contracts have, of course, to be enforceable, so that law has also to be available and enforceable. There is more, however, to the institutional framework required for efficient markets than money and legal safeguards for property and contracts. Weber and others have noticed that capitalism has tended to do least well in regions and countries where the pursuit of self-interest has been most naked and unscrupulous. Where general trust is absent and double-dealing the norm, nepotism is, if not justified, then at least understandable. And, more generally, a weak moral climate increases duplicity in the market place, and so adds to transaction costs and the need for institutional restraint. There are, however, limits to the extent to which legislation can do the work of moral sanction. And the greater the intrinsic lawlessness in society, the more difficult it must be to provide the vigilant, honest and continuous policing that law enforcement would require.

As its antiquity and changing forms make clear, the market did not suddenly emerge, wholly formed, in the developed market economies. Hicks, for example, places the origins of modern monetary and legal arrangements in the city states of ancient Greece and Rome. He then acknowledges, however, the amount of subsequent development that seemed necessary, notwithstanding the strength of the foundations. Given that the low-income countries are economically situated somewhere between the ancient world and the modern industrial society, the implications of this long gestation period may be less severe than they appear at first sight. Still the general question cannot be avoided. Are institutional weaknesses in contemporary poor economies not likely to impede the efficiency of market systems in such countries? In the early stages of modernisation what forms are property rights likely to take, and with what consequences for incentives? How are laws to be introduced and enforced if the logic of circumstances points to nepotism and corruption?

These are troublesome questions. Fortunately, however, it is not necessary here to beat about the bush. As already conceded, the wider conditions for efficiency do not emerge full-blown in the early stages of a market system. Wholly effective markets are therefore no more an instant possibility in, for example, sub-Saharan Africa than were efficient states. The institutional imperfections are many, so that the system is bound to be rudimentary, with a more than usually large number of important markets weak or missing. The system is, on the whole, almost certain to perform better than rudimentary planning, but it need not perform splendidly. Thus
the question of whether the state can redress the imperfections of the market is still on the agenda. It can, however, only be dealt with sensibly if realistic account is take of the frailties of government.

The knowledge, resources, and institutional constraints that afflict poor countries impede the market and the state — but not equally. Because of its — albeit perhaps crude — ability to enforce performance criteria and its decentralised structure, the market scores in imposing discipline and in economising on information flows. It thus remains highly important that the system be market-driven. And the argument has again been well put by Stolper. Having conceded that markets in poor countries are very imperfect, he continues but what are the realistic alternatives? Surely not to discard what little guidance is available. Rather it is of prime importance to create such a market, to start an enterprise that will monetise increasing portions of the economy, to create the incentives that will draw additional resources, human and physical, into the economic nexus, incentives that work at all levels. Only by decentralisation can low skills find their niche in the productive process. Central control is not likely to create a place for them. It is more likely to inhibit their emergence.

The lack of executive capacity and of knowledge in usable form requires that indirect methods of development be used to the utmost: incentives, policies, development of markets, of money markets, of tax policy, of training, and so forth. The call for government to do things is frequently not so much a political decision... as it is evidence of a serious lack of imagination and a serious misunderstanding of what an economy is and how it works. All of this is true even if government did not tend toward monopoly and restriction of production when expansion is what is required, subsidies when profits are called for. It is a waste of resources to use scarce administrative talent when less qualified people could do the job, to use specific means for a specific job when general policies could reach many more people and utilize more resources more effectively.

What then is left for the state? What economic role should it play? The general difficulties of dealing with these questions are compounded by the fact that answers can defensibly vary across countries. Still, beginning from the awareness that the state is not necessarily benevolent and is certainly not omniscient, some things can be said. And since the argument is still running very strongly in favour of the market, the first is that government should use its powers to promote the market, to expand the territory over which it holds sway. Among the issues thus raised are those of strengthening market intelligence, and of providing conducive micro- and macroeconomic frameworks. And those who object on the ground that "getting the prices right" is not enough miss the point about the superiority of even imperfect markets and beg the question as to what capability the state has. Though it is difficult to give content to, nothing is more important than the injunction that the government should provide an environment that encourages efficient and creative economic participation by all of the agents under its control.
Beyond that, it may be repeated, government should act in keeping with its comparative advantage. As Keynes once remarked, government should not attempt to do — perhaps badly — what private individuals can do satisfactorily. It should tackle what is desirable, but what, in the absence of its own effort, would remain undone. Here two points are relevant, one general and one particular. The general point is that what most distinguishes successful economies is their ability to handle technology — to choose, adapt and design productivity-enhancing techniques that are appropriate in given circumstances and so are profitably implemented. The particular point is that agriculture is the other key to success in low-income economies. Combining both could seem to justify priority for agricultural research and extension work, together with such improvement in the economic and institutional infrastructure as would facilitate such work. These are certainly areas that deserve serious scrutiny. Policy design has, however, to be location-specific.

Still, those, such as Stiglitz, who have taken the economic theory of the state seriously have rendered important service in seeking out its relative strengths in correcting market failures. True, to know that the state has powers to tax, proscribe and punish, and that it may afford some economies in transactions costs, may not seem to take policy prescription very far. It is, however, a start. And the insight that government intervention does not necessarily call for government production is worth remembering, particularly since delegation can be linked to decentralisation.

Adam Smith, it may again be recalled, looked to the state to ensure security for the citizen from internal and external attack, and to provide public goods. He was then confident that his system of natural liberty would conduce to economic progress, since the competitive framework would make of self-interest an instrument of individual and social betterment. It is, however, important to understand just how important competition was to this vision. In its absence sloth and corruption were likely outcomes. This matters, of course, because competition is now less automatic than it was in Adam Smith’s day. And it is particularly unlikely in, for example, the industrial sector of developing economies. This constitutes yet another argument for favouring agriculture, since small-scale production seems efficient and capable of supporting many producers. The argument may also lead to competition policy, which could take a number of forms. The simplest of these, however, is that which would have been closest to Adam Smith’s heart. Let resources be allocated in keeping with comparative advantage, as that is determined in free international trade.

**Comparative advantage**

Adam Smith’s proposition that, in poor economies, returns are higher in agriculture than in industry should be seen as an empirical one. If, for example, all projects that could be undertaken in, say, Ethiopia were to be rank ordered according to net present value, would agricultural activities dominate the list of those that could actually be financed? Given the low level of development, the answer could well be
yes. This does not, however, mean that economically desirable projects are likely to be confined to agriculture, since as soon as agricultural production for the market takes place there is almost certainly profitable demand for non-agricultural goods and services. Indeed, outwith the subsistence economy, the question never takes the form of all or nothing. And the allocation of resources is a matter of proportion — how much, as it were, to agriculture, and how much to industry?

The quite unoriginal suggestion of this essay is that the best answer to that question is to be found by allowing markets to do the allocating. Resources will then flow to where they can add most value. And the stimulus to technical change will also be high. In practice, of course, markets will fail to deliver Pareto-efficiency — because they can never be complete or perfectly informed, because there are externalities, and because public goods tend to be under-provided. And since incomplete and poorly informed markets are a particular characteristic of poor countries, so market inefficiency may be expected to be greatest there. As has been seen, however, where poor country governments have heavily intervened, the outcomes have been even less efficient than those that could have been expected from more laissez-faire policies.

Resource allocation should thus still largely be a question for markets, and so a matter for comparative advantage. In a primitive society, if one man is more efficient at making bows and arrows and at hunting than his friend, it needs only that his edge be somewhat greater in the one activity than in the other for specialisation to increase total output. And this simple principle can fruitfully inform the organisation of more complex societies. Indeed much of what has been said has sought to establish this point, particularly, it may have appeared (if only as a matter of emphasis), with respect to the domestic economy. But the principle is, of course, indivisible. It is not in the interest of the poor country in the allocation, use and augmentation of its resources to seek to do other than compete in the international economy.

In the light of this precept the purpose of the present section is to consider selected aspects of international trade in order to underline the conclusion that comparative advantage is the correct organising principle for a poor country wishing to develop as fast as possible. The gains that accrue from allowing markets to apply this principle are, of course, most famously those to which Ricardo drew attention and which show that both parties may benefit from specialisation and exchange. Among the more dynamic impacts of trade, Ricardo himself drew attention to the consequences for growth of the domestic distribution of the gains from trade. In his original example, cheaper food meant that, after trade, rents were lower and profits in manufacturing raised in the United Kingdom. Since landlords were conspicuous consumers and manufacturers were given to frugal accumulation, trade was therefore good for investment and hence growth. By the same token, however, Portugal did less well. Rents there were raised and profits lowered, so that this particular outcome of trade had a depressing effect on the growth of capital and therefore output.
Findlay has associated this differential impact consequentially with differences in social and political developments, finding these progressive in the centre and less so in the periphery. Thus while the United Kingdom got more political democracy, the American south had slavery and Latin America got the latifundia economy. But the impact on the periphery need not be uniform. What, as Findlay asked himself, of peasant agriculture for the market, such as we find in much of Africa? Surely here the conflict that we have noted in the Latin American context between efficiency and equity, between the dictates of comparative advantage and a representative polity, would disappear since the benefits of higher world prices would spread to the mass of the population or at least major segments of it.

This, it could be argued, is something like what happened when cocoa was introduced to Ghana at the turn of the century. More generally, as Findlay again has noted, the physical infrastructure and the commercial institutions in place at independence were such as to facilitate a happy juncture between comparative advantage and internal development and equity.

Thus as the sub-Saharan African countries came to independence they should have been poised to enjoy the static and at least one of the important dynamic gains from trade. In the event, of course, they did not. Instead, they followed policies that were suspicious of, where not downright hostile to, free trade. And as a result they largely missed out on one of the longest and highest trade booms in the history of the world economy. Far from encouraging peasant exports, most governments saw these simply as a source of revenue and so as a source of finance for public sector activities and private rents for those in power. Nor was the surplus extraction based on carefully calculated self-interest. Little heed was given to the prudent need to ensure the health of the goose that laid the golden eggs.

Though it is beyond the scope of this essay, it may be important that the consequences of the short-sighted policies that were followed have been disastrous. The resultant widespread anger and perception that failure is to be linked to policy may have had beneficial effect on the political economy of sub-Saharan Africa. Rational argument may have more chance of a hearing than it had thirty years ago.

In the meantime there are other questions to be asked, including those of why dirigiste policies were introduced and why they failed. Reasons for their introduction have, of course, already been scouted, and attention has been given to the general grounds that would explain failure. In the present context, however, the decisive failure has been that of neglecting comparative advantage. And the strongest ground for saying this lies, as already hinted, in the success of those who were not thus negligent. It is indeed ironic that market constraints in poor African countries were at their greatest at a time when uninterrupted market-led growth was being sustained for the longest period ever in world economic history.
As markets worked, the evidence that they were doing so stimulated theory and empirical enquiry. These in turn made it increasingly difficult to resist the evidence. Thus analytical distinction between domestic and trade distortions left little of the case for protecting manufactured industry on the ground that this would reduce or eradicate disguised unemployment. If this exists, it is to be explained by distortions in the domestic labour markets. It is consequently not to be "cured" by imposing a tariff — an act that simply adds distortions of its own.

Again, the development and use of the concept of effective protection helped show that the import-substitution policies could handicap exports. Where these called for imported inputs, tariffs on such inputs were equivalent to a tax on the exports that relied on them. As will be seen, the measurement of effective protection and related concepts did much to reveal the distortions that operated against exports in a general equilibrium framework. Empirical studies, following in the tradition of the pioneering effort by Little, Scitovsky and Scott did much to undermine the arguments for protection and import-substitution. By the same token they showed that, contrary to these doctrines, developing countries could expand their exports by attending to comparative advantage and pursuing policies that were consistent with exploiting it.

It is perhaps proper to acknowledge, yet again, that the theoretical advances just cited did not reflect deep thought about African experience. Nor indeed did that experience figure prominently in the empirical studies. It hardly follows, however, that the thought and the results of the empirical work are irrelevant to the African poor. As a minimum, they constitute a case to answer. Moreover, since the resurgence of neo-classical thought and the accumulation of supporting evidence for the soundness of this — at least in broad outline — has been proceeding for more than twenty years, much of the argument was on the books, as it were, very shortly after the majority of the African countries regained responsibility for their own economic and political affairs. They have thus been remarkably stubborn in resisting it. And if seeking to explain that would mean an extended excursion into political economy, it should certainly be noted that the persistence has had high cost.

The general measure of this is, of course, to be found in low or negative rates of growth of GDP and GDP per head. Behind these, however, lie a number of specific failures. Thus the modern industrial sector in many of the African economies is smaller than it would have been had markets been allowed to operate more freely than they were. Related to this, employment is lower than it had to be, as are the level and diffusion of skills in the labour force. And, most importantly, the peasantry — and hence the mass of the population — has been discouraged. The prices paid by marketing boards were lower than would have resulted from free access to domestic and world markets; but, abstracting from the exchange rate, the prices paid for manufactured goods were higher than world market prices — because
of tariffs if the goods were imported, and because of inefficient production if they were not. One consequence of this squeeze on the peasant was that government revenue itself fell below what it would have been if policy had been less distorting.

The resurgence of the market and the associated view that export orientation pays are sometimes seen as a vindication of neo-classical thought. Since the pure theory of international trade rests on assumptions that are no less restrictive than the parent general equilibrium theory, it is perhaps reassuring to know that one can believe that free markets and free trade are good policies without thinking that neo-classical theory is inviolate. After all, it could be argued that Adam Smith did. And Myint thinks that the theory does best in showing why those who persist in constraining markets continue to be laggards. In his search for a general explanation of success and of differences in performance across countries, he returns to Adam Smith's vent for surplus, notes the incentive effect of trade and the stimulation it gives to technical change, and puts great weight on a concept of dualism that stresses organisational weakness of a kind that is simply assumed away by neo-classical theory.25

It may have been noticed that, beyond offering one homely example, little has been said of the nature and even less of the sources of comparative advantage. This avoidance has been largely deliberate, reflecting the spirit of the essay. This does not go as far as asserting that "it is all in Adam Smith", but it does tend to imply that some simple, well-founded, ground rules are enough to be getting on with. And, perhaps more importantly, it holds strongly to the view that the constrained environments of poor countries puts decentralised, market-guided decision-taking at a premium. Thus for present purposes comparative costs need be measured by nothing more than the comparison of domestic transformation rates (reflecting domestic opportunity costs) and the external transformation rates in international exchange (however these are, as it were, delivered)56. The policy point is that, from the perspective of the poor country, the transformation rates should be market determined, with there being no stronger case for government interference in international than in domestic trade.

Perhaps the main caveat on using comparative cost as a guide to policy comes from concern with the distributional effects of so doing. The argument here is that the separation of income distribution from resource allocation is basic to the notion that free trade conduces to economic welfare. Where separation cannot be achieved, it is claimed, the dictates of comparative advantage should be resisted. An example given derives from a model in which workers in the advanced sector are unusually well paid, for political and other reasons. Maximising the value of domestic production at world price would thus lead to an unavoidable distortion of income distribution. Therefore, the argument continues, the transfer of labour to the modern sector should not go as far as comparative advantage would suggest. Leaving aside the fact that policies that defied comparative advantage were often intended to swell the industrial labour force, how seriously is the argument to be taken? On the
reasonable assumption that appeal to shadow pricing is not sufficient response, at
least two considerations remain perhaps to diminish it. The first and less important
point, is that role of the extended family in poor countries reduces the distributive
distortion. The second, more fundamental, consideration relates to the cost and
benefits of sacrificing Pareto-efficiency in poor countries 87.

Amartya Sen has remarked:

it is... worth bearing in mind that while Pareto optimality is some
achievement, it is not in itself a grand prize. All that Pareto
optimality implies is that there is no other feasible alternative that
is better for everyone without exception, or better for some and no
worse for anyone. A state in which some people are starving and
suffering from acute deprivation while others are tasting the good
life can still be Pareto optimal if the poor cannot be made better
off without cutting into the pleasures of the rich — no matter by
how small an amount. Pareto optimality is faint praise indeed 88.

Let it be granted that this point is well taken. Intervention that takes, say, a
little (as they see it) from the very rich and gives (what may seem like a lot) to the
poor could be justified. Even then, of course, it would be important to be satisfied
that the cost — in terms, for example, of reduced incentives for growth — of the
redistribution was reasonable. The more basic question, however, is whether the
redistribution that would come from tampering with resource allocation between
sectors in poor countries is of this kind or (implied) magnitude? Pervasive poverty is
the central feature of such countries. And it is not obvious that resource allocation
should be distorted in order to prevent some workers at the margin getting US$1 per
day rather than US$0.80 — or even US$0.50. That kind of equity may be no grand
prize either. It may, however, be an expensive one. Governments in poor countries
often fail to hit their targets, but are nevertheless prone to take one intervention as
encouragement to others. And the pursuit of elusive targets itself often distorts
resource use. The task is too difficult and administrative talent too limited to
encourage the view that government effort should be directed at second guessing
markets. Such effort is better aimed at improving market efficiency so that, for
example, labour markets deliver more economically meaningful wage rates in the
modern sector.

At this stage it would be easy to embark on a discussion of outward orientation.
This could include questions relating to the definition of policy neutrality between
exports and imports and the means of achieving this; examination of the link
between exports and growth; and consideration of how far findings from richer
countries apply to the poor economies of Africa. Much of the relevant literature is,
however, beside the present point. Heillener's argument that import instability could
be more important in sub-Saharan Africa than increasing the degree of outward
orientation could be important 89. In addition to the (acknowledged) methodological
difficulties that could vitiate his regression results, however, it has to be remembered that his overall sample of low-income countries is dominated by those from sub-Africa. It is, therefore, perhaps not surprising that exports do not correlate strongly with growth. There was little growth in the African economies. Nor was there much encouragement for exports. Thus the important question remains the counter-factual one: what would growth have been if comparative advantage had operated? And while the role of exports in market-led growth is not to be ignored, neither in the present approach is too much to be made of it. Here the argument is that a light use of theory and a proper reading of the lessons of experience combine to urge uninhibited following of market signals. Growth and whatever the level of exports turns out to be are determined by this. And if additional reason is sought for engaging in international trade, it is to be found in the boost to domestic economic discipline that follows from so doing.

4. Resource allocation in Ethiopia

The task of this chapter is to provide a framework for critical scrutiny of Ethiopian performance and subsequent suggestion as to how this can be improved. Thus far, the aim has been achieved by a reading of theory and experience that has come down heavily in favour of the market. The state has not been entirely excluded, and its detailed role in Ethiopia is something to which the story will return. Here, however, it is recalled that allowing resource allocation to be market-guided would, it is expected, see a larger share of investment go to agriculture in low-income economies than has hitherto been observed in post-independent sub-Saharan Africa. Though rigorous testing of this general proposition is not easy, it is nevertheless, important to what follows to see how far it seems justified in Ethiopia.

It may be assumed — from the earlier description of the Ethiopian economy and the earlier hints about the inefficiency of Ethiopian industry that the limitations on manufacturing in poor countries applies with particular force in Ethiopia. By contrast, though the evidence is more limited and less clear-cut than would be desirable, there does seem to be considerable and more or less immediate potential in agriculture. To begin with, it is claimed that some 65 per cent of the surface area is suitable for farming. At present, however, no more than 15 per cent of the land is cultivated; and little more than 3 per cent of the 3 million hectares that could be irrigated receives water in this way. Most of the major rivers have still to be put to agricultural use, and though the intense highland rains deliver significant volumes of surface water, these are not controlled or captured. Instead, as has been seen, they are allowed to erode the soil. As of now, conservation measures are possible and profitable, with high returns being claimed for bunding and terracing. And if, like reafforestation, these activities have to be undertaken to restore the status quo ante, to stop things becoming worse, measures that would actually boost output are not too difficult to identify. Thus modest increase in the use and efficiency of use of draught
animals, in the technical efficiency of farm implements, and in the use of natural fertilizer would pay dividends. So would an increase in the use of improved seeds, the introduction of manual threshers, and simple improvements in storage. Even when small-scale and farm-level, such improvements may not be seen as free goods. Some capital formation would be needed, as would better extension services and better roads. Still these obvious improvements attest to the prospects for early progress, even in advance of a determined drive to apply modern science and technology to the problems of agriculture.

That agriculture has potential does not mean, of course, that it all should be realised as a matter of priority. Resources should flow to agriculture only for as long as the returns there are higher than elsewhere. What, it is therefore pertinent to ask, is the evidence on the relative merits of agriculture and industry? And, if the frank answer is extremely limited, there nevertheless is some. To begin in the simplest possible way, Table 8 uses a Ricardian measure — labour productivity in agriculture and industry in Ethiopia and the United Kingdom respectively. These crude data show that productivity is much higher in Ethiopian manufacturing than it is in Ethiopian agriculture. This is also true of the United Kingdom, but the international productivity ratios seem to suggest that Ethiopia has a comparative advantage in industry, the United Kingdom in agriculture. These results are not inherently implausible and so should not be immediately dismissed. The climate and soils of the United Kingdom could be more suited to agriculture than those of Ethiopia, and the diffusion of technology and research results, for example, could be more difficult in agriculture than in industry. Agriculture, it may be argued, is a much more location-specific activity than manufacturing, so that — all due allowance made for the need to use appropriate techniques of production — it may be easier to replicate a British textile mill in Ethiopia than to apply British farming methods there. More generally developed country industrial methods may transfer more efficiently to developing countries than developed country agricultural technology and knowledge. And Arthur Lewis may yet be proved right in his prediction that the developed countries will come increasingly to specialise in agriculture.

If, however, Ethiopia (standing proxy here for the less developed) were to specialise in industry, then world efficiency would require the United Kingdom (in its representative role) to do likewise in agriculture. Such a radical and complete transformation of the world division of labour is not imminent, and may not in any event be desirable. It certainly should not be advocated on the basis of the labour theory of value. The data of Table 8 are incomplete, do not represent a wholly competitive outcome, and in Ethiopia are not robust. The higher productivity of industrial workers in both countries owes a lot to higher provision of capital per head. In Ethiopia an industrial worker has, on average, 30 times the equipment that is available to the peasant. Thus, if the average wage were US$100 and US$250 per annum in agriculture and industry respectively, capital per head US$3000 in industry, and the cost of capital services 10 per cent, then factor costs per US$1 million of
output would be 90 per cent in industry of what they would be in agriculture. Based on the number and wages of workers alone, the advantage of industry is much greater, since industrial wage costs per US$1 million of output are less than 45 per cent of those in agriculture.

In the United Kingdom agricultural wages are higher relative to industry than in Ethiopia, and the capital-labour ratio in agriculture is also closer to that in manufacturing. Data on the sectoral distribution of the British capital stock are not easily found. On any plausible figures, however, a more complete comparison between Ethiopian and British factor costs would greatly reduce Ethiopia's comparative advantage in industry from the level suggested by Table 8. It is, indeed, quite possible that full information would show that the finding of the table had been reversed. And if this provides another reason for treating the crude data of Table 8 cautiously, it also serves as a reminder that comparative advantage can only be discussed for a minimum of two commodities and two countries. Whether Ethiopian wheat may be grown more or less cheaply than British wheat is an incomplete question.

This observation is particularly pertinent since a single-period efficiency measure, domestic resource cost, is sometimes taken as an indicator of comparative advantage. And the claim has been made that comparative advantage exists if the economic opportunity cost of producing a commodity is less than its border price. That is not strictly so. The ratio of properly valued domestic costs to border price is a measure of competitive rather than comparative advantage. What is true, however, is that a country will have a comparative advantage in the production of those goods in which its absolute advantage is greatest. Therefore, if goods are ranked according to domestic resource cost, one would expect those at one end of the spectrum would be efficiently tradable, but that those at the other would not. It has also to be remembered that domestic resource costs are, as noted, estimated at a point in time. They can therefore be misleading if circumstances change significantly. It is, however, never easy to allow exhaustively for future change. All that can normally be done is to take account of obvious factors, and this much can be accommodated in calculating domestic resource costs. Thus subject to some usual caveats, the DRC measure can serve usual purpose. In consequence pertinent data for Ethiopia are deployed in Table 9. These refer to 1982/1983 and are so relatively recent, though there still could be some question about the representativeness of the year. Data are also available, however, for manufacturing in 1972. These confirm the broad thrust of the later figures as these relate to industry.

The data of Table 9 are generally favourable to agriculture. The ratios shown are measures of efficiency, with a coefficient of less than one indicating that the resources fixed in the activity in question are producing more value added (at world prices) than they would in alternative use. Conversely a coefficient of more than one indicates that resources could be better employed elsewhere. On this criterion all four commodities from the peasant sector are efficiently produced. Cotton is also
efficiently grown on state farms, and cement, leather and shoes, and sugar are viable manufacturing activities. On the other hand — confirming what could have been suspected from the earlier discussion — neither maize nor wheat pay their way in the state agricultural sector. And six of the nine manufactured products covered are being inefficiently produced. Pulp and paper and iron and steel are particularly inefficient, since, like state-produced wheat, their value added is negative.

The logic of the DRC measure is that foreign exchange is a critical constraint on investment, so that in effect it measures the returns per unit of foreign currency. It is thus analogous to the rule of thumb that makes net present value per unit of capital investment the criterion when capital rationing is thought to be necessary. Single-factor constraints and rules of thumb are not self-evidently justifiable. However, designating foreign exchange as the scarce factor may seem appropriate in consideration of export and import-substitution activities. Thus the presumption may be accepted that ranking commodities according to their domestic resource costs reveals the range of comparative advantage and disadvantage. And, in this regard, the peasant sector again performs well. Of the seven commodities in Table 9 that are efficient exports or import substitutes, four are peasant cereals. The a priori argument and the (admittedly limited) evidence used so far speak better, as it were, of agriculture than of industry. The minimum conclusion is that resources — including notably the peasant surplus — should be allowed in search of the highest return. If industry is mainly inefficient and services may be described as being only half economic (with that half heavily linked to agriculture), the scope for manoeuvre in the economy is that granted by the efficient peasant farms. And if consideration of comparative advantage underlines this view, there are other factors that bring out how very important the priority development of peasant farming could be. Thus, the rapid rate of population growth and the desperate poverty of most Ethiopians is a combination that is infused with disaster. On present trends the population will be 56 million by 2000. If every person were to consume a modest 185 kilogrammes of grain in the years in question, then Ethiopia would have to consume a total of 11 million and 15 million tons of grain respectively. These needs may be set against the 7.9 million tons that were available from all sources in 1986. If every person were to consume a total of 11 million and 15 million tons of grain respectively. These needs may be set against the 7.9 million tons that were available from all sources in 1986. This would have to grow at an average annual rate of 6.2 per cent in the period 1986-2000. On present indications that rate is beyond reach. Moreover, it is important to note that the minimum requirement is that the existing resource base be used efficiently. The allocation of agricultural resources between domestic and foreign demand, though not by itself a direct constraint on investment, may well determine the potential returns to investment.
depends on agriculture. In an impressive recent study of export prospects, the World Bank is clear that what matters is the potential of coffee, pulses and oilseeds, and livestock. Industrial goods find their place among "relatively minor" exports — and even then, at least in the short term, they are far from being highly rated. 

The economic outlook thus is sombre. It is not impossible that it could be transformed. More land could be brought into cultivation, and all land could be better watered. Cultural practices, transportation, marketing and the institutional environment could be improved. More drought-resistant and high-yielding crop varieties could be developed and introduced. And the quality and quantity of coffee and livestock could be increased. The means by which this transformation could be achieved are not, of course, free goods. Nor would their impact be instantaneous. Even the possibility of impact, however, depends largely on the generation of a growing agricultural surplus. It is therefore impossible to exaggerate the importance of the peasant to the Ethiopian economy. Much will depend on the incentives he is given and on the character and magnitude of his response. These considerations are central to the policies that now have to be fashioned round the other central perception that incentive and response are likely to be greatest if they are market-derived and market-directed. How these elements are to be fashioned into a coherent and effective whole is the question. And in approaching this it is useful first to examine Ethiopian economic performance from 1960 to date in the light of what has been learned about growth in poor countries in general and of resource allocation in Ethiopia in particular. Such examination provides the business of the next chapter.
NOTES AND REFERENCES

7. Ibid.
9. If it has achieved nothing else in Ethiopia, the Bank has reduced the walking time. A recent study of export prospects has this down to half a day!
13. Ibid. p. 51.
15. Ibid. p. 421.
17. Ibid.
18. Ibid. p. 357.
19. Ibid. p. 358.
20. Ibid. p. 628.
21. Smith distinguished from the foregoing the situation in which land was not readily available. There relatively affluent artificers were forced to turn to manufactures for more distant sale.
22. W.A. Lewis, "The Roots of Development Theory", in Chenery and T.N. Srinivasan, 

23. A. Gerschenkron, Economic Backwardness in Historical Perspective, Harvard University 


25. For a good account of the Korean mechanism, see Edward S. Mason, et. al., The 
Economic and Social Modernization of the Republic of Korea, Harvard University Press, 

26. For fuller comparison of Asian and African performance see J. Pickett, "Reflections on 
the Market and the State in Sub-Saharan Africa" in African Development Review, Vol. I, 
No. 1.

27. This formulation of an extreme position is to be found in James M. Buchanan, "Public 
Goods and Natural Liberty" in T. Wilson and S. Skinner (editors), The Market and the 


29. For a mildly sceptical discussion, see World Bank, World Development Report, 1988, 
Washington, 1989. See also, however, D. Landau, "Government Expenditure and 
between Taxes and Economic Growth, World Bank Working Paper No.605, Washington, 
1983. Both report negative correlations, which are discussed by Charles Wolf Jr. in 

30. R. Gulhati, Recent Economic Reforms in Africa: A Preliminary Political Economy 

31. See, for example, World Bank, Accelerated Development in Sub-Saharan Africa, 
Washington, 1981; Sub-Saharan Africa: Progress Report on Development Prospects, 

32. For a general discussion of government economic activity see Accelerated Development, 
op. cit. There are many grim country tales. For a particularly depressing example, see 
T. Killick, Development Economics in Action, St. Martin's Press, New York, 1978, 
which deals with Ghana.

33. World Bank, Sub-Saharan Africa: From Crisis to Sustainable Growth, Washington, 1989, 
Chapter 1.

34. Ibid.
35. Ibid.
36. See J. Viner, op. cit., Chapter III.
39. Ibid. p. 140.
40. Ibid.
41. Ibid. p. 143.
42. It will be recognized that this is a summary of arguments advanced at the time. They are 
not necessarily endorsed here. Nor is laissez-faire. The critical questions are more 
complex, however, than asking whether this was associated with unemployment.
44. For more discussion see North, *op. cit.*


49. For elaboration see, Charles Wolf Jr., *op. cit.*


53. Charles Wolf Jr., *op. cit.*


68. J. Meade, *op. cit.*


73. See C. Freeman, "Comments 4" in Heerje, *op. cit.*


76. Hicks, *op. cit.*

77. Stolper, *op. cit.*

78. Keynes, *op. cit.*

79. For more discussion see Stiglitz, *op. cit.*


84. It is important to realise that this is not a recipe for being stuck with a monoculture for ever.


89. G.K. Helleiner, "Comment" on Uma Lele "Africa’s Economic Development" in Ranis and Schultz, *op. cit.*

90. PMG, *op. cit.*

91. MOA/FAO, *op. cit.*

Chapter 4
ECONOMIC PERFORMANCE

Ye who...expect...that the deficiencies of the present day will be supplied by the morrow — attend to the history of Rasselas, Prince of Abyssinia.

Samuel Johnson

Making Development Plans is the most popular activity of the governments of underdeveloped countries since the war, and it is also nearly their biggest failure.

Sir Arthur Lewis

It is possible to regard 1973 as a watershed in the post-war history of the world economy. The supply shocks that helped make it so were also felt in Ethiopia, so that it is perhaps more than coincidence that this year marks a major turning point for the Ethiopian economy as well. Up to and including 1973 the country was an authoritarian monarchy. Much of its modern development dates from 1941, when it was liberated from a five-year Italian occupation. Ethiopia was federated with Eritrea in 1952 and became a unitary state by incorporating Eritrea in 1962. In the 1950s and the 1960s aid came largely from the West, notably from the United States. In the small but growing manufacturing sector private enterprise and foreign participation were encouraged. And foreigners were also encouraged to engage in large-scale commercial farming.

The radical political transformation that began in 1974 acquired an increasingly Marxist-Leninist character. Many of the means of production, distribution and exchange were taken into public ownership. And though private enterprise survived, it was limited to certain spheres and was otherwise constrained. Some of the
constraints were relaxed in the late 1980s, but the system remained in principle a centrally planned one. The new regime continued to draw on the World Bank, and it received aid from the EC and from some bilateral western donors. Ties with the Soviet Union and other eastern bloc countries were, however, greatly expanded; and those with the United States and the United Kingdom were much reduced, with official help from these two countries shrinking to next to nothing.

Given the radical shift in direction in 1974, it is tempting to make a before-and-after comparison in order to judge the impact of political change on economic prowess. Such judgement is, however, less easy to make than it may seem. External as well as domestic forces were in play, and the weather — still the great exogenous variable of the Ethiopian economy — was far from stable. Thus identifying, measuring and weighing the causes that underlay economic achievement or the lack of it before and after the early 1970s would be a formidable undertaking. Still, there can be no doubting the discontinuity. And the question of government impact on resource allocation and efficiency cannot be avoided entirely in a discussion that takes comparative advantage seriously. Thus the remainder of this chapter largely describes and discusses economic performance first in the period up to and including 1973 and second in the years from 1974 onwards. Attention is then paid to comparative aspects of performance, with particular reference to the question of how far discrepancies in these can be traced to policy differences.

First, however, it is relevant to ask, how is economic performance to be judged? Given the concern with poverty and its accelerated eradication, it could be argued that progress comprises a reduction in the number of the poor. This measure is, however, easier to applaud than to apply. Moreover, as things are such reduction (or even increase) as there has been could only have been marginal. As noted earlier, the productive capacity of the Ethiopian economy is so limited that no reshuffling of entitlements could deliver any large fall in poverty — whether the poor are measured absolutely or as a proportion of the total population. Whatever the merits of, say, a basic needs approach, it cannot sensibly be applied in Ethiopia if it hides the core fact that the prime requirement is a sustained increase in productive capacity. Food security, health and education are no more free goods than pork hams or flannel jackets. A rise in their provision can therefore come only if resource use elsewhere is squeezed or if the stock of resources is augmented. And in Ethiopia the scope for squeeze, relative to the extent of poverty, is depressingly small.

What progress, then, has been made in enlarging the capacity to produce? How, indeed, is this to be measured? The short but not wholly satisfactory answer to the measurement question is: by means of national income accounting. However a society chooses to compose its gross domestic product — whatever division it achieves between consumption and investment goods, between "luxuries" and "necessities" — that aggregate is a measure of its ability to produce goods and services. Continuing increase in real GDP can result only from growth in productive capacity.
National income accounting is, of course, everywhere troubled by conceptual and practical difficulties. These are increased in Ethiopia by, *inter alia*, the large proportion of total output that does not pass through a market, and so receives no explicit market valuation; by the imperfections of what markets there are; and, when it comes to international comparison, by the official over-valuation of the exchange rate. These defects argue prudence, however, not rejection. National income estimates are subject to margins of error. But they are not thereby hopelessly wrong. They result from effort to collect and collate data within a systematic framework; and — for all their faults — they are as comprehensive, meaningful, and consistent a way of monitoring the economy as is available. They are, therefore, used here without further qualification or defence. And the basic data that permits this use are given in Tables 10 and 11.

Like other modern techniques, national income accounting came relatively late to Ethiopia. Consequently the decision to use GDP as the main measure of productive capacity and changes in GDP as the measure of economic progress limits discussion within that framework to periods for which consistent estimates of GDP have been made. The story cannot therefore start much before, say, 1960. It is, however, unlikely that progress before then was very great. In 1960 GDP per head was less than US$60 at 1961 prices, and so less than US$400 at 1987 prices. Such low figures are not perhaps very meaningful. They do, however, show that aggregate productive capacity by 1960 was not such as to carry most Ethiopians clear of poverty. They thus also suggest that progress in, say, the 1940s and 1950s could not have been very marked — since it is difficult to believe that income per head in 1940 was much lower than it was to be in 1960. Growth could, of course, have been negative, but there is, however, no reason to believe that it was. On the contrary, such impressionistic evidence as there is suggests upward movement.

Moreover though the foregoing justifiably implies that economic progress requires that growth of productive capacity should outpace that of population, capacity growth that does little more than keep up with population change can also be important. Indeed such extensive growth may be a prerequisite of sustained increase in income per head — since the absolute increase in markets could, for example, lead to more specialisation and so to higher per capita growth. Not enough is known of the detail of economic change in the 20 years before 1960 to be sure, but it is possible that facilitating extensive growth was an important feature of that period.

1. Economic change before 1974

Reflecting then prevalent ideas, development planning was introduced towards the end of the pre-1960 period. This "progressive step with far-reaching consequences"
was based on the conviction that progress could be accelerated only by a proper selection of targets and rational utilisation of available resources. The old, spontaneous way of growth was not acceptable to Ethiopia, particularly in conditions of modern technology and contemporary life, and planning for economic and social development was considered the only scientific method of formulating policy, and the most efficient means of its implementation.

And in pursuit of modernisation three five-year plans were drawn up and more or less implemented, with a fourth being drafted but made redundant by radical political change before implementation. The first plan covered the period 1957-1961, the second 1963-1967, and the third 1968-1973. The gaps between the first and second period and between the second and the third already suggest that the planning process did not proceed smoothly.

In the round the implemented plans appear to have been reasonably successful. The target rate of growth of national income under the first plan was 3.7 per cent per year, and in the event income increased at an annual rate of 3.2 per cent. The second plan predicted that output would grow by 4.3 per cent per annum between 1963 and 1967, and the actual increase was not far from this. The third, and most ambitious and comprehensive, plan called for an average annual rate of growth of 6 per cent, which is to be compared with the 4.7 per cent actually achieved. Not too much should be read into the good fit between targets and outcomes. Closer inspection of sectoral targets and sectoral results, and comparison of government planned and achieved investment and the actual sources of growth, make it clear that economic progress in the years covered was not all that closely tied to government design. More is made of this below.

In the meantime it may be noted that planning was not ipso facto without benefit. The preparation and implementation of the plans resulted in much learning by doing among those responsible for economic policy. And the data base was greatly improved. It was, for example, the Planning Office which produced the first systematic estimates of national income. The boost these gave to Ethiopian economic statistics and to efforts to improve them should be recorded, since the ability to examine the relation between policy and performance was thereby increased. How far policy was responsible for what happened is considered below. Here, however, it is necessary to examine economic change in more detail.

It is clear from Tables 10 and 11 that the level and structure of economic activity in 1960 were those of a very poor society. Income per head was less than US$70 (in 1980 prices), and almost two-thirds of value added in production came from agriculture. This could only be because most of the output in that sector resulted from low-productivity techniques and was largely for own consumption. Efficient and developed agricultural societies soon cease to be largely agrarian. In
Denmark, for example, the 1960 share of agriculture in total output was about 10 per cent. Moreover, as has already been remarked, developed economies more generally are highly specialised and so are characterised by a high level of exchange. Transport, communications, trade and finance can therefore be expected to be prominent economic activities. Thus in the United Kingdom in 1960 these sectors accounted for some 30 per cent of GDP. The corresponding figure for Ethiopia was little more than 10 per cent, and that it should be so low is consistent with a largely subsistence, poorly integrated, economy.

The character of the economy in 1960 was the dominant constraint on the pace and pattern of economic change in the subsequent 13 years. Given that starting point no amount of policy competence or good fortune could have taken Ethiopia very far along the road of modern economic growth. No economic miracle was achieved or achievable. Some progress was, however, recorded. Productive capacity was expanded, specialisation was taken further than before and trade grew.

Thus, as may be calculated from Table 10, real gross domestic product increased at an average annual rate of 4.3 per cent between 1960 and 1973. In the same period population grew by 2.6 per cent per year, so that income per head rose at an average annual rate of 1.7 per cent. Ethiopia thus did better than the sub-Saharan, low-income, economies as a whole. Between 1960 and 1970 real GDP in the Ethiopian and low-income countries increased at average annual rates of 4.4 per cent and 3.7 per cent respectively. And from 1965 to 1973 real income per head rose at an average annual rate of 1.1 per cent in Ethiopia, and of 0.8 per cent in the poor economies (excluding Nigeria) as a group. Over the whole period agricultural output in Ethiopia grew by 2.3 per cent per annum, and so more slowly than total production and somewhat more slowly than population. Output in the trade and finance, transport and communication, and manufacturing sectors, however, outpaced both total output and population by growing at respective annual rates of 7.4 per cent, 9.9 per cent and 8.1 per cent.

Given the nature of the economy in 1960, it was to be expected that much subsequent development would be in infrastructure. Expanding this was, after all, a priority aim of the First Five-Year Development Plan. And if the emphasis in the next two plans shifted, at least in formulation, increasingly to agriculture, much infrastructure remained to be put in place after 1961 (the last year of the first plan). Readily available data do not permit the relevant expansion to be traced in detail. However, roads were built, education and health services grew — particularly in Addis Ababa, where new hospitals appeared and university education became possible for the first time in the country’s history — and power supplies increased. Indeed between 1960 and 1973 domestic energy production rose by a factor of six as hydro-electric generating capacity was installed and extended and as an oil refinery came on stream at Assab.
It is natural to find the main disappointment of economic performance in the 13 years under review in the relatively slow growth of agricultural production — the main worry being that, as noted above, this failed to keep pace with population increase. To worry thus, of course, implies inter alia a particular view of Ethiopia's comparative advantage. Whether this view is well-founded has already been considered in some detail. Here it may be noted that equanimity in the face of declining food production per head would at least have required exports to grow more rapidly than the gross domestic product.

As it happens, since exports rose at an average annual rate of 5.6 per cent, this condition was fulfilled. The growth in exports was, moreover, higher than the annual increase of 5 per cent recorded by imports. Much of the export gain came from higher foreign sales of coffee. If this were at the expense of domestic food production that would not necessarily have been unfortunate. Whether it was would have depended on the coffee-cereal terms of trade and on the opportunity cost of coffee in terms of domestic grains. Ethiopia had become a net importer of cereals in the late 1950s. And the post-1960 growth in coffee exports was associated with a steady increase in food imports. From first to last, however, the combination of domestic production and import of cereals was not sufficient to deliver food security. Nor is it clear that the growth in imports resulted from economic calculation that switched resources from domestic food to coffee production. Food supply therefore remains a cause for concern.

In this regard it is appropriate to begin with domestic output and to have a long-run series on food production per head. Relevant detail is provided in Table 12. From this it may be seen that output per head rose during the 1960s, but thereafter was never — 1979 apart — to be as high again as it was in 1970. And between 1960 and 1973 the rate of decline in per capita domestic supply was 0.3 per cent per annum.

Over the same period cereal imports rose sharply, from 50 000 tons in 1960 to 114 000 tons in 1973. That even the higher figure is of limited significance is evident since it represents less than 4 kilograms per head. In 1973 grain-rich Canada, where the population was about half that of Ethiopia, imported nine times more cereals than Ethiopia. Thus low-productivity and slow-growing agriculture at home and minimal trade and aid left Ethiopians on the average as hungry in 1973 as they had been in 1960. The extent of this hunger cannot be measured solely by statistics relating to the production of and trade in food grains. Ethiopians also draw sustenance from pulses, root crops, animal products and, in some areas, enset. Most of their nutrition comes, however, from cereals. And if what they get from these and the other non-animal sources is not sufficient to permit a healthy and active life, what is provided by animal products in a low-income economy will not make good the deficit.
The core data on the food supply situation are thus shown in Table 13. From this it is clear that the position has not been improving, and food supply per head in 1973 was three kilogrammes less than it had been thirteen years earlier.

Except perhaps when it comes to coffee exports, Ethiopia is a prime example of a small open economy. It cannot greatly influence its terms of trade, so that if these were to deteriorate its real income would — for reasons beyond its control — be lower than it otherwise would have been. It is, however, obvious from Table 10 that changes in the terms of trade did little damage in the period under review. There were fluctuations and on occasion sharp year-to-year changes, but the trend was upward as the terms of trade improved at an average annual rate of 1.3 per cent.

A continuing difficulty in appraising economic performance is that of deciding which criteria to use. An important question always is whether economic affairs could have been better ordered than they were. That question is considered more closely and at greater length below. For the moment, it may suffice to recall that the economic progress made between 1960 and 1973 was probably greater than it had been before that period; and it certainly was higher than in the years that followed. Impressively as this may or may not be, Ethiopia was — on, for example, the standard welfare measure of income per head — still a very poor country at the end of the period. Most of its output came from primitive agriculture, so that many were inadequately fed. And the range and quality of social services that could thus be afforded were not great. Modern economic growth had hardly begun.

2. Economic performance, 1974-1987

As already noted, political change in 1974 had far-reaching impact on the economy and on economic management. On the official view "the key sectors of the economy [were] brought under state control, enabling the state to utilize the surplus thus generated for the improvement of the quality of life of the working people". And central planning was adopted "as the main instrument in the management, guidance and acceleration of the socio-economic transformation of Ethiopia in line with the objectives of the programme of the National Democratic Revolution". The political commitment to planning was reflected in the establishment in 1978 of the Central Planning Supreme Council, under whose auspices six annual plans were prepared and, it is claimed, implemented.

It was thought that these made an important contribution to containing the economic crisis that developed in the aftermath of radical political change, so that they stabilised the economy and laid the foundations for its long-term development. Thus self-encouraged, the Council produced a ten-year perspective plan for the period 1984/1985-1993/1994. This spawned a three-year operational plan for the years 1986/1987-1988/1989, and a five-year plan for 1989/1990-1993/1994. First
among the many objectives of the perspective plan is the gradual improvement in the material and cultural well being of the people. And first among the strategies by which these objectives are to be reached is the attainment of food self-sufficiency.

The prime target of the ten-year plan is an average annual growth rate of 6.5 per cent in real GDP. Growth is not, however, expected to be uniform over the plan period. In the five years to 1989/1990 growth was expected to be below average since a need was perceived for improvements in management and organisation, in the availability of raw materials, and in capacity utilisation. After 1990, however, the annual increases in the gross domestic product are expected to accelerate as the economy benefits from earlier reform and improved project selection. Since the rate of growth of population is estimated at 2.9 per cent per annum, the planned increase in income per head is 3.5 per cent per year. Living standards should thus double in the term of the plan.

For this to happen, the plan is looking for an annual average increase in value added by agriculture of 4.3 per cent, and for the corresponding increases in industry and the service sector to be 10.8 and 6.9 per cent respectively. In this way 28.6 per cent of the ten-year increase in GDP would come from agriculture, and a respective 32.9 per cent and 38.5 per cent would originate in industry and services. The delivery of these contributions would need substantial investment, so that the investment ratio is expected to rise from 11.3 per cent of the GDP to 28.3 per cent.

Reviewing economic progress since 1974, the National Committee for Central Planning (as the Central Planning Supreme Council became) took comfort in the fact that between 1978/1979 and 1982/1983 real GDP rose at an average annual rate of 4.2 per cent. Understandably, the Committee tended to extenuate the subsequent drop in production by reference to the drought and so remained encouraged by an annual increase of 2.9 per cent between 1978/1979 and 1983/1984. Nevertheless, the priority of the three-year plan was to identify and see implemented measures that would relieve the food shortages afflicting the country at the time the plan was written. By these and other means real GDP was to increase at an average annual rate of 6.3 per cent per annum in the plan period, and so by little short of the ten-year target set in the perspective plan of which the shorter plan was an integral part. In the time covered by the operational plan income per head was planned to grow by 3.2 per cent annually.

How has the economy in fact performed? Is it, in the light of the answer to that question, still reasonable to hope that living standards a few years from now will be double what they were in the early 1980s? From Table 10 it may be calculated that real GDP grew at an annual rate of 1.3 per cent between 1974 and 1987, and that the corresponding population statistic was 2.6 per cent. Thus income per head fell by 1.3 per cent per year over the thirteen year period. Total output never rose in successive years for more than five years at a time. And in the one stretch — 1978
to 1983 — when this happened the average annual rate of growth was 4.2 per cent, while the annual increment to population was 2.8 per cent, so that income per head rose by 1.4 per cent per annum.

Given the performance of the economy up to 1987 a growth rate of almost 11 per cent per annum would be needed in the period 1987-1993 if the ten-year plan target were to be met. Even in the absence of detailed data, however, it is already clear that output has not risen since 1987 at anything like the required rate. Indeed performance since 1987 has not matched that of the period 1978-1983. The plan target consequently does not look remotely plausible, no doubt largely because it never was very realistic. Even if the economy had grown over the whole period (1974-1987) at the rate of its best period (1978-1983), and so by 4.2 per cent per annum, in the years following 1987 the average annual increase in GDP would have to be 7.5 per cent if living standards in 1993 were to be double those of ten years earlier.

In strong contrast to planning hopes for growth that was well above the long-run average, agriculture was virtually stagnant between 1974 and 1987, with the growth rate being less than one-tenth of 1 per cent per year. Since this sector accounted for about half of the total output at the beginning of the period, output in the other sectors of the economy would have to have increased at a correspondingly higher rate before the general rise in output could have significantly outpaced that of population. Unusually high growth in the face of a stagnant agriculture is in Ethiopia inherently unlikely. Too much of what happens elsewhere is conditioned by what happens in agriculture for it to be otherwise.

In the present case there was, of course, no unlikely outcome. An overall growth rate of 2.7 per cent per annum would have enabled the GDP to remain marginally ahead of population. Agricultural stagnation meant, however, that non-agricultural output would have to have risen by 4.7 per cent annually if this were to happen. In the event the non-agricultural growth rate was 2.5 per cent per annum, with manufacturing output rising at an average annual rate of 2.9 per cent and value added in service activities growing by 2.7 per cent per annum. Overall, therefore, the presumption must be that the decline in living standards between 1974 and 1987 was largely due to agricultural failure.

Little comfort is thus to be taken from the fall in the share of agriculture in total production recorded in Table 11. This is considered more fully below. Here it suffices to note that though such decline is a normal feature of economic progress, the mere fact that it happens does not guarantee advance. It does not take much effort to pass a runner who is standing still. And if he or she is holding the baton, team performance will not command much cheer. Thus the magnitude and immediate consequences of agricultural failure are to be seen in Table 12 and Table 13. From the former it may be calculated that food production per head in 1987 was almost 8 per cent less than in 1974, and more than 14 per cent less than in
1973. As a result food supply, according to Table 13, was 114 kilogrammes per head, and so one-third lower than in 1973. This is but 312 grammes per day per person, and is therefore lower than the minimum target set for food distribution in the relief camps.

Not surprisingly in the light of the importance of subsistence agriculture, the lack of food was accompanied by a more general squeeze on private consumption. Measured in 1980 prices, this fell from 177 birr in 1974 to 141 birr in 1987. And this decline — of 1.8 per cent per year — was reflected in a sharp drop in the savings rate. This had climbed erratically but steadily upwards in the 1960s and the early 1970s to stand at more than 13 per cent of the GDP in 1974. Thereafter it went down, was actually negative in 1985 and was but 3 per cent of total output in 1987. Such a low level of domestic accumulation meant that gross domestic investment had also to be low or to draw increasingly on foreign savings. In fact the investment rate in 1987 was, at 14 per cent, as high in 1987 as it had been 13 years before. Whereas, however, there had been a positive resource balance then of 3 per cent of the GDP, the corresponding ratio for 1987 was minus 10 per cent.

The squeeze on private consumption came not only from the fall in output relative to population growth, but also from a rise in the share of government in the economy. Thus government consumption, which had accounted for 11 per cent of the GDP in 1974, was almost one-fifth of total output in 1987. This reflected an average annual growth of 5.5 per cent over the period under review, and stands in stark contrast to the fall in average private income. Indeed had government consumption grown at no more than the rate at which the GDP increased, and had the resources thus freed been applied to the satisfaction of private demand, the private consumption per head would on the average have been 15 birr — or 10.6 per cent — higher than it was in 1987.

The effort to maintain the investment rate and to expand the government sector in the face of a sluggish rise in domestic income was reflected in a marked rise in external debt. This had already begun to increase before 1974, and by that year it was worth more than 5 per cent of the GDP. By 1987, however, it would have cost almost a quarter of the annual income to clear what the country owed to others. Put differently, the external debt in 1974 was 10.83 birr per person; by 1987 it had become 44.40 birr per head. Debt is, of course, not necessarily to be deprecated. The main economic consideration is of use. As will be seen, however, it is not clear that the increased Ethiopian debt took the form of investment finance. Moreover, even when it did the projects it made possible were not all economically viable.

Fairness requires that the distinction between private and public consumption should not be casually overdrawn. The provision and maintenance of public goods can be important elements in development, so that if increased government consumption arose because there were more public school teachers and more state-employed health workers than before judgement on that increase should not be
hasty. It is therefore at least necessary to ask what, if any, progress was recorded in education and health. From the very incomplete and superficial evidence available, the answer is mixed. In 1974 the proportion of the relevant age group in primary schools was less than 15 per cent, and by 1987 it had risen to 36 per cent. And the relative population in the secondary schools rose by a factor of three or more to reach 12 per cent by 1987. Against this, however, the supply of doctors relative to the population declined, so that whereas there had been one physician for 70,000 people in 1965, there were more than 77,000 patients per doctor in 1984.

Comparative economic performance before and after 1974 is examined below, and explanations for the generally poorer results of the later period are considered. Here it is acknowledged that some deterioration in the economy was to be expected in the years following the political changes that took place in that year. In addition to the external shocks that were then delivered, this change occasioned widespread dislocation in its immediate aftermath and saw a short-lived war with Somalia. It was also associated with an intensification of civil strife, which had a consequent and serious impact on resource allocation and use. Much of the commotion had, however, died down by the end of the 1970s, so that improved economic performance may have been expected in the 1980s. It was not achieved. Between 1974 and 1980 the average annual rate of growth of GDP was 2 per cent. But between 1980 and 1987 production rose by less than 1 per cent per year. In both periods real income per head fell, but the decline in the 1980s was much sharper.

Much of the proximate explanation for this is to be found in relative agricultural decline. Over the relevant years in the 1970s agricultural production rose, albeit by less than 1 per cent per year. In the period 1980-1987, however, it fell at an average annual rate of 2.1 per cent. And since the rate of population increase was 2.5 per cent, agricultural output per head went down by 4.6 per cent per year. More generally the fall in agricultural output (including that of coffee) affected — or at the least was associated with — prices, government finances, exports and hence the balance of payments. And the impact of the drop in agricultural production would have been greater but for a relatively rapid expansion in manufacturing. This came largely from the commissioning of 14 new factories, including a cement plant, a large textile mill and a tractor assembly plant. Overall, value added by manufacturing rose at an average annual rate of almost 4 per cent.

Some of the price inflation that came from food and other shortages was suppressed by price controls, the continued overvaluation of the exchange rate and a wage freeze. The results of such suppression were probably inequitable. In the urban areas all income classes perforce purchased food in the parallel markets, where prices more accurately reflected the balance of supply and demand than did those of the government (kebele) shops. Externally, as noted, the balance of payments deteriorated. Real exports fell between 1980 and 1987 at an average annual rate of 0.7 per cent, and imports rose by 7.6 per cent per year. Food accounted for a
growing proportion of imports, as the long-term trend accelerated. And as cereal imports rose from 118,000 tons in 1974 to 609,000 tons in 1987, the share of food aid went up from 0.46 to 0.94.

In 1987 the production of goods and services in the Ethiopian economy was almost 110 per cent higher than in 1960. Much of this increase was, however, consumed as it were by population growth, so that average real income in 1987 was less than 6 per cent more than its 1960 level. Over the same period, and in keeping with the biblical precept that unto him that hath shall be given, average real income in the United Kingdom — a middle-ranking developed market economy — increased such that its terminal level was more than 30 per cent that of the base year. Had these respective increases been reversed, so that the increment to the British standard of living had been less than 6 per cent of its 1960 level and Ethiopians had seen their incomes rise by 30 per cent, then in 1987 the average Briton would still have been more than 60 times better off than the average Ethiopian.

Thus whatever the economic and social progress of Ethiopia in the last thirty years, there is still a long way to go. Moreover, progress in Ethiopia in this time has — certainly as measured by changes in income per head — come largely in the period before 1974. As has been seen the expansion of productive capacity has signally failed to keep pace with population change. And though on a few social indicators the years since 1974 may seem more progressive than the earlier ones, little comfort may be taken from that. Growth without development may be possible. Sustained development without growth in poor countries is not.

3. Comparative performance

The task of this section is to make compare economic performance in the period 1960-1973 and that in the years 1974 to 1986. To these ends, it is convenient briefly to recall the salient features of the contrast and to place these in context. And in the latter regard it is particularly important to ask how far the weaker performance of the second period is to be explained on exogenous grounds. As will emerge, however, the view taken here is that complete extenuation is not possible. There were significant changes in the extent and character of economic management, and it cannot readily be accepted that these had no effect on the economic outcome. It is certainly necessary to consider them. In the light of the foregoing, what follows is in three parts. The first quickly and selectively reviews comparative performance and discusses the exogenous and other factors; the second is concerned with distortions and examines the operations of the Agricultural Marketing Corporation at some length in support of the view that these were sui generis greater in the second of the two periods; and the third deals with the international competitiveness of the economy over time.
The striking difference between economic progress before and after 1974 is well captured in Chart 1. This reproduces the changing levels of real income per head in the period 1960-1987 and shows clearly that 1973 was a turning point. As may be seen from the graph, average income rose sharply and more or less continuously until then. Thereafter the movement was more erratic, but the drift was unmistakably downward. As noted above, the contrast in performance before and after 1973 was not unique to Ethiopia. By then the Bretton Woods system had become too weak to stand speculative pressure, and so had collapsed. There then followed the two oil-price shocks and the unexpectedly deep and prolonged world recession of 1980-1982. It is therefore not surprising that the GDP of the OECD countries grew at an annual average rate of 4.9 per cent per year between 1950 and 1973, but at a rate of no more than 2.4 per cent from then until 1987. Some of the shocks related to the slowdown in the developed market economies were transmitted directly to those of sub-Saharan Africa. But these were additionally and adversely affected by the slowdown itself. How, it may thus be asked, did Ethiopia’s performance compare with that of like economies? And in this regard the most appropriate comparison is again with the other low-income countries of sub-Saharan Africa, excluding Nigeria. Relevant data in Table 14 show that Ethiopia did better than average in the period 1965-1973, but less well than the other countries in each of the two succeeding seven-year periods. Ethiopia was the best performer in none of the three periods, nor was it ever the worst. Its relative performance did, however, steadily deteriorate from one period to the next.

Were there, it is now appropriate to ask, circumstances peculiar to Ethiopia that would explain not merely the downturn after 1973, but also Ethiopia’s below average performance thereafter and the fact that growth was lowest in the period 1980-1987? For many the answer would, in a word, be drought. Mention has already been made of the Wollo famine of 1972-1973. This occurred just before the radical political change that has served as the before-and-after benchmark in this essay. Indeed that famine and the government’s handling of it have been widely seen as a major cause of the political turmoil. Here it is to be noted that the Wollo experience was not to be an isolated event.

Drought and famine reappeared. Between 1982 and 1985 these began in the northern regions of Eritrea, Tigre, and — again — Wollo. They then spread south. Great damage was done to crop production, seed supplies and livestock. And the minimum estimate of the number of people who died — the difference between "normal" and actual, famine-attended, deaths — is one million. At its worst, in 1984-1985, the famine was as intense as the so-called "Great Famine", which ravaged the country in the last decade of the nineteenth century, and it was more widespread. It reached areas that had not previously known drought. The gap between food
supply and the minimum need was, at its height, some 2 million tons of cereals, so that 8 million people were at risk. That more did not die was due, however belatedly, to international relief.

The magnitude and seriousness of this food crisis are telling comment on longer-run economic performance, and on the present characteristics of the economy. They are therefore worthy of study. Some pertinent information is presented in Table 15, where, as can be seen, output in 1981 is taken as the standard against which subsequent production is measured. It may be recalled that, as recorded in Table 3, six of the regions — Harerghe, Kaffa, Gamu Goffa, Tigre, Eritrea and Sidamo — are "normally" in deficit, and that the other regions "normally" produce a surplus. On the evidence now presented, the surpluses were not entirely wiped out. They were, however, significantly reduced; and the deficits generally widened. The usually slender margin of surplus over deficit was thus more than eradicated in the face of an average decline in production of 27 per cent between 1981 and 1984/1985. And the most striking feature of the table is the number of negative entries in its last column. Only Bale, Illubabor and Gojam had higher per capita production in 1984/1985 than in 1981. That Gondar, Shoa, Wellega and Arssi were thus among the areas in which average output fell, meant that these increases were swamped, so that once again no reshuffling of entitlements within the national economy would have averted the consequences of famine. In the mid-1980s the Ethiopian economy remained as vulnerable to these as it had been a decade and a century earlier. What had perhaps changed was the character and speed of external response. Even this, however, was constrained by the capacity of the Ethiopian economy. Pervasive poverty does not exempt port capacity and efficiency, nor does it deliver adequate transport and feeder roads. And the opportunity cost of the resultant airlifts is to be measured in food grain.

Drought and famine undoubtedly had great impact on economic performance in Ethiopia after 1974. This impact was sometimes offset and sometimes compounded by changes in the terms of trade. These were, however, generally less favourable after 1980 than they had been earlier. This, taken together with the intensification of drought and famine, meant that exogenous factors were unusually strong in the period 1980-1987. If allowance is then made for cumulative causation — or the fact, for example, that cultural practices were increasingly destructive of the productivity of the land — it is temptingly easy to take the view that the Ethiopian economy could not reasonably have been expected to do better than it did, particularly after 1980.

That much of the blame for Ethiopia's poor economic results may be put on external circumstance and obdurate nature should not, however, lead to complete — and certainly not uncritical — extenuation of policy makers. Drought led to famine, and famine caused such widespread damage, because circumstances permitted them to do so. But could these circumstances not have been modified? After all those who occasioned political change also enforced radical change in economic policy. Was this wise? Would greater policy continuity not have yielded
more progress? Would different policies not have seen the economy better prepared to withstand the shocks that were to afflict it? Indeed by the mid-1980s should Ethiopian agriculture not have escaped from the tyranny of unstable weather? These are, of course, counter-factual questions, so that they may seem fanciful.

Still, whether as a consequence of policy or not, Ethiopia has made little economic progress in 30 years. Productivity and hence incomes remain low. As a result much of the country's resource endowment is tied up in food production, but is even then unable to make most people food secure. Thus the transformation of the economy remains a critical and challenging issue. Therefore to argue that policy change could have made a difference, is to argue that it still could. By the same token, now to advocate policies that have been ignored or relatively neglected in the past is, *ipso facto*, to judge what was done. Difficult, even fanciful, questions are not to be avoided if the answers to them could be important. It is therefore now appropriate to turn to policy, to consider how far changes in this have facilitated or impeded the exploitation of Ethiopia's comparative advantage.

Before leaving this first and largely descriptive examination of economic performance, however, it is important to be sure as possible that the assessment has been sound. In this regard, it may be recalled, that intensive economic growth may be causally linked to preceding extensive expansion\(^{10}\). Thus the failure of output to grow more rapidly than population in a given period may hide important gestation that will bear later fruit. And since, to anticipate, performance in the years following 1974 will receive relatively harsh treatment in what follows, it is appropriate to be sure that there are no extenuating features that have been overlooked. It remains true, of course, that from the beginning of the 1960s to the end of the 1980s Ethiopia has made little economic progress. It consequently is still a very poor country. Through production and trade it has not been possible to provide all Ethiopians with enough to eat. Indeed the proportion of the population that has been and is now food secure is lower than in virtually any other country. Ethiopia is thus a poor country even by the standards of a poor continent.

That a country that was desperately poor 30 years ago is still poor is, realistically speaking, not surprising. What calls for explanation is the failure to make substantial progress. As has been seen, undue and unwise government intervention has a major role to play in this respect. And the Ethiopian detail of this is addressed at length below. Here the question is whether the failure has been perhaps exaggerated in the foregoing discussion. Has the failure of output to grow in relation to population taken the country further from modern economic growth than it was three decades ago? Or, did some aspects of the generally poor performance strengthen the economy permanently in ways that should facilitate future growth?

There are no easily won answers to these questions. Nonetheless, without anticipating too much of what follows, it may be doubted whether there is much to cheer. There has, for example, probably been little net improvement in infrastructure
or in the stock of human capital. Building has been offset by destruction and environmental degradation; and the expansion of education, even if it were secure and well-grounded, has to be set against a marked rise in out-migration of those with professional skills. Moreover, and more pertinent here, the food supply has not increased. Nor has there been evident, if lagged, growth in the capacity to produce food and other agricultural output. As it has always been, the Ethiopian economy is still dominated by low-productivity agriculture.

This, to repeat an earlier comment, may seem a strong statement in the light of statistics on GDP by industrial origin. These are represented graphically in Chart 2, from which it may be seen that the share of agriculture in total output fell from 65 per cent in 1960 to 50 per cent in 1973 and again to 42 per cent in 1987. On the perspective of the normal patterns of sectoral change associated with modern economic growth, this looks like a welcome development. And in the interests of fairness, it is important to be absolutely sure that it is not. Unfortunately, on closer examination, the most striking feature of the chart is not the relative decline of agriculture, but the more than proportionate rise in services. These accounted for 23 per cent of value added in 1960, but their share rose to 33 per cent and 40 per cent in 1973 and 1987 respectively. And this increase — of 17 percentage points in a 27-year period — does not sit well with the normal pattern.

In his pioneering work on the historical growth of the now-developed economies, Kuznets found that the trend decline in the relative share of agriculture was offset by the upward trend in that of industry, so that there was no marked trend in the relative standing of services 11. Why, then, did these grow so much more quickly than (the slow-growing) GDP in Ethiopia in the period under review? And what is the economic significance of the above-average expansion of services? Did this enhance the growth-creating capacity of the economy? Or was it at the unrequited cost of stagnation or worse in the directly productive sectors?

Though it has been conceded that the link between government expenditure and economic growth is not easily read, the burden of the argument in the previous chapter is that in poor countries the correlation is negative. And, without going very far, it may be doubted that the expansion of services in Ethiopia was all clear gain from the present standpoint. The growth of services could be considered positively if it reflected relative expansion of education and health facilities, which have instrumental as well as independent value, or if it were due to market-facilitating increase in trade, transport and communication. In addition to representing current value added flows that could well stand up to rigorous economic scrutiny, such resource use could raise future output. Thus higher expenditure on education and health could increase and improve the stock of human capital; and the higher relative importance of transport, communication, trade and finance could represent a continuing widening of markets.
Detailed, comprehensive and up-to-date data are not available, but the limited information of Table 16 throws useful light on the composition of the actual changes. From this it would seem that, though there was some increase in potentially growth-promoting services, much of the relative increase was not obviously of that kind. This was particularly so after 1970, when public administration and defence were the most rapidly rising service activities. And the defence burden on the economy did not lessen after 1981.

From the standpoint of this chapter therefore Chart 2 understates the relative importance of agriculture (and industry) because it overstates that of services. Had these increased in the period 1960-1987 at the same rate as GDP, the 1987 share of agriculture — on the assumption that it stood in the same relation to industry as that recorded in the chart — would have been more than 60 per cent. This estimate is no doubt too high, since some allowance has to be made for economically fruitful service expansion. There is, however, no reason to baulk at the proposition that Ethiopia at the end of the 1980s was a very poor country, and that the most obvious hallmark of its poverty was the low level of peasant agriculture, the still dominant economic activity. Easing that dominance — by increasing peasant productivity or finding alternative and more productive uses for the resources now tied up in that sector or some combination of both of these things — is the most important single economic challenge that now has to be faced.

**Distortions and the Agricultural Marketing Corporation (AMC)**

In the work from which one of the quotations that head this chapter is taken, Sir Arthur Lewis was in no doubt where the explanation for the failure of development planning to correlate with economic growth was to be found. "Rates of growth", he asserted, "have depended primarily on the private sector — on the farmers producing more, on businessmen building factories, and on the mines expanding their investments". If the conditions were not favourable to private sector expansion, no amount of government expenditure on public services could make the difference. An important test therefore of government plans and policy is whether they facilitate or impede private effort. And in this regard, the present work has found the governments of sub-Saharan Africa to be wanting. How closely, it should be asked, does this general condemnation fit Ethiopia? And are there differences in this respect before and after 1974?

On the whole, it cannot be said that Ethiopia has been the worst offender as far as policy-induced distortions in resource allocation are concerned. In a league of 31 countries compiled by the World Bank, Ethiopia ranked tenth on a composite index that captured biases in the exchange rate, industrial protection, agricultural taxation, and distortions in factor and product prices. It has, however, to be remembered that this is a relative judgement, that in the company of murderers, the non-violent thief may seem virtuous. And no absolute virtue is implied in the World Bank
judgement. Macroeconomic policy in Ethiopia has given (unwarranted) advantage to manufacturing. The exchange rate has been long over-valued, tariffs and other restrictions have caused distortions, and the taxation of agriculture has almost certainly been heavier than and differently composed from what would have been optimal. And if these features are to be found before and after 1974, it does not follow that the distorting impact of government has been uniform throughout the period under review.

As has been seen private enterprise was a prominent element in the economy up to 1974. It delivered much of the (unplanned) growth between 1960 and 1973. Private economic agents still worked, however, in a distorted price environment, so that less investment probably took place in agriculture than would have been associated with freer markets or even, perhaps, more determined effort on the part of government to increase the efficiency of the markets and to develop agriculture infrastructure. Thus it is possible that growth — including of food production — could have been higher than it was. Still, the economic environment was more encouraging in this period than it was to become. With the 1974 change in government, intervention was greatly expanded and public responsibility for the economy was greatly increased. This meant that an increasingly large proportion of Ethiopian skills were being directed to what was largely counter-productive use at a time when domestic and external conditions were becoming increasingly challenging. The nationalisation of manufacturing created, for example, a shortage of managerial talent and, land reform notwithstanding, the incentive for the peasant to produce was seriously weakened by attempts to control agricultural production and marketing. Some of the unfavourable consequences of such attempts have already been noted. However, since they show very clearly the defects of much government economic effort it is useful now to consider them at greater length.

Policies that would banish famine must deliver more food per head. Moreover the measures must recognise that much present agricultural production is for subsistence, so that an appropriate measure of economic progress would be the rate at which the exchange economy is growing. Among consequent growth imperatives is an increase in the marketable surplus, including that coming from farms with little previous experience of producing for sale. This calls for incentives. The most obvious of these is a farm-gate price that adequately covers production costs. Of itself, however, this is unlikely to be enough. Still, whatever their detail, the arrangements that link farm production to the rest of the economy have to deliver to the farmer output-boosting inputs and incentive goods and services that augment the welfare value of a growing real income by changing its composition. The presumption must also be that the farmer is sensitive to the terms on which he trades. These considerations give great importance to the marketing of food grains.

Before 1974 there had been a relatively free, but poorly integrated, system of marketing in which handsome monopoly rents accrued to some merchants. This could have been left in place, or it could have been supplanted by a full state
monopoly of the supply of agricultural inputs and the purchase and distribution of the marketable surplus. In the event, the government sought direct control of a substantial and growing part of marketed output. It recognised, however, that initially at least there were limits to what could be done, so that provision was made for private trading to continue. The main instrument of state intervention was the Agricultural Marketing Corporation. This was set up in 1976 to stabilise producer and consumer prices; to reduce marketing margins to the advantage of the producer; to ensure the timely and efficient supply of farm inputs; and to assure adequate supplies for the public distribution system (including that part of it responsible for feeding Addis Ababa). The Corporation was charged with covering its operational costs, including depreciation and interest on capital, from its own margins.

In its early years the Corporation’s operations were modest and the prices at which it purchased were rather arbitrary. Its major objectives were, however, restated in 1979/1980 and planned purchase and quota delivery, fixed and uniform producer prices, and the control of the private grain trade, with a corresponding increase in the role of the public sector became prominent. The state farms and the producer co-operatives delivered all of their marketed output to the AMC, at prices higher than those paid to the peasants. Purchases from the peasant sector were planned by the Planning Commission and the AMC. The first computation was of marketable surplus (although in practice the amounts taken were constrained by the capacity of the Corporation). Quotas were then allocated to the regions on the basis of the numbers of Peasant Associations and traders in each, and of the conventional categories of "grain surplus" and "grain deficit". The compulsory quota was seen as a way of eliminating price competition between the AMC and the private traders, and as an instrument for extracting sufficient grain from the producing areas to provide for urban and public consumption, flour processing, and buffer stocks.

The Ethiopian administrative structure is region-awraja-woreda. There were grain purchasing tasks forces at each of these levels. Once the quota allocation had been determined nationally each region received its allotment. This in turn was parcelled out to the awraja task forces, whence quotas were passed to the woreda. Thereon instructions were given to the service co-operatives, the Peasant Associations, and lastly to the peasant. The criteria used in the onward transmission of quotas varied across regions, awrajases and woredas. Within Peasant Associations some required identical deliveries from all households, and others discriminated in the light of such variables as income, wealth, size of farm and ownership of oxen.

The grain quota purchase prices were set essentially by an expert committee of the Ministries of Planning, Agriculture, Domestic Trade, and Foreign Trade. The cost of production and national average yields per crop (for fertilized and unfertilized land alike) were considered, mainly in the light of a 1978 Ministry of Agriculture survey. Fifteen per cent was added to the computed cost of production to allow for inflation, and another 10 per cent was put on cost plus inflation as an incentive to producers.
Before these prices became effective, however, they were reduced in order to keep down the retail price in the urban areas, particularly Addis Ababa. The upshot was a substantial subsidy from farmers to urban consumers of cereals. The prices set were uniform throughout the country and made no allowance for differences in quality. The retail prices of AMC-supplied grains were 50 per cent to 100 per cent greater than the farm-gate prices paid by the Corporation. The prices were set in 1980/1981 and remained virtually unchanged until January 1988.

Economic legislation in 1975 preserved the right of private merchants to engage in wholesale and retail grain trade. Then and subsequently, however, a licence was formally needed to trade; and merchants were required to deliver a stipulated share of their purchases from the peasants to the AMC. Licences were issued yearly and could be withdrawn for breach of market or price regulations. They were granted, renewed and withdrawn by the Ministry of Domestic Trade, but on the recommendation of the regions or the regional districts. All merchants were obliged to deliver at least 50 per cent of their purchases to the AMC. There were moreover restrictions on grain movements, so that merchants could sometimes not trade outside their own area. Control was particularly strict in Arssi and Gojam, and by the end of the period there was a virtual ban on private trading in these regions. The reduction in the number of merchants and the more or less effective controls on the activities of those that survived were reflected in growing purchases by the AMC. Between 1976 and 1986 these rose at an average annual rate of 15 per cent — from 0.9 to 3.8 million quintals. The latter figure is about 20 per cent of the marketable surplus for the year. This is lower than the share claimed by the Corporation, but there is reason to believe that it underestimates the volume of cereals moving through the different markets, so that, on the reasonable assumption that it can record its own purchases most accurately, it overestimates its own importance.

The experience of the AMC confirms that even honest bureaucracy is ill-fitted for the task of setting prices and finds it difficult to run commercial operations efficiently. Producer prices were relatively stable, but only because the normal economic forces were frozen. They consequently gave the farmers no incentive to increase production in the short or long run. Production could, paradoxically, have expanded if the profit in the parallel markets had been sufficiently high. This would have been so, however, only if such markets had been well-functioning and the peasants had had enough land and labour left to respond once they had met the AMC quota. The system was designed, however, to impede rather than facilitate the unofficial markets, which were strictly speaking illegal. No doubt peasants did try to sell as little to the AMC, and as much on the free markets as possible — with poorer quality grain being offered to the former. They thus did their best to maximise their returns. There is, however, no reason to think that production was as high as it would have been if all prices had been freely determined in the free market. The overall impact was one of discouragement.
More generally, the policy of which the AMC was the main instrument had four identifiable objectives, viz: the encouragement of efficient and growing production, including perhaps through price stability; efficient marketing — that is keeping margins as low as possible consistent with the supply of the relevant services; the pursuit of equity, so that the poorer member of society would have "reasonable" access to food; and ensuring that "adequate" supplies reached urban consumers. Appraising the efficiency with which these objectives were pursued is made difficult by the usual lack of data and the intertwining of exogenous and endogenous factors. It is, moreover, necessary to recognise that the AMC was not a free agent. It acted, as it were, on government orders, and it bought and sold at prices that it helped to set, but which were formally given to it by the Council of Ministers. For this and other reasons, the AMC could not be held wholly responsible for the performance of the agricultural sector. Still, that this was poor and largely responsible for the overall lack of growth suggests either that the AMC was not a success or that failure elsewhere more than offset its achievements. And if it may be difficult to pin blame definitely on the AMC, its performance in relation to its other objectives suggest strongly that agricultural stagnation resulted from inefficiencies elsewhere compounding those of the Corporation.

What, then, of the AMC's margins? About half of these go on transport costs and the rest on labour, bank interest, local taxes, storage, fumigation, stock insurance, weight loss and spillage, and a small mark-up. Transport costs naturally vary with distance. A rough average is struck, however, and a figure of 7.92 birr per quintal applied to all grain movements. This assumes that the grain supplied to Addis Ababa comes from with an area with a radius of 300 kilometres from the capital. This may not, however, be wholly so and the retail price may consequently not include enough for transport.

Actual margins in 1985/1986 may be tabulated as follows:

<table>
<thead>
<tr>
<th>Grain</th>
<th>AMC Buying Price</th>
<th>AMC Selling Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>100</td>
<td>179</td>
</tr>
<tr>
<td>Mixed sorghum</td>
<td>100</td>
<td>159</td>
</tr>
<tr>
<td>Mixed barley</td>
<td>100</td>
<td>154</td>
</tr>
<tr>
<td>Mixed wheat</td>
<td>100</td>
<td>148</td>
</tr>
<tr>
<td>Mixed teff</td>
<td>100</td>
<td>140</td>
</tr>
</tbody>
</table>
Since farm-gate prices vary but transport costs per quintal across cereals change little, it is not surprising that the margins should also vary. Thus in the year for which the data are given, the difference between the buying and the selling price of maize was almost twice as great as that for teff. Still the important question is whether margins of from 40 to 79 per cent represent efficient or inefficient operations. In this regard one would like to know what it would cost a private trader to move the same grain from the same sources to the same outlets as those served by the AMC. Unfortunately the necessary data are not available. What can be done, however, is to compare the AMC performance with what is known of private operations in the early 1970s.

Such comparison is bound to be rough since neither data set is robust. Moreover allowance should be made for changes in transport and other efficiencies, but these are ignored here. The figures used for the earlier period are taken from a World Bank study done in 1973. They cover the same cereals as those for which the AMC margins have already been given. They also relate to grain from the farm gate to Addis Ababa and allow for local trader and wholesale margins.

The margins for the early 1970s are then as follows:

<table>
<thead>
<tr>
<th>Grain</th>
<th>Buying Price</th>
<th>Selling Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>100</td>
<td>173</td>
</tr>
<tr>
<td>Sorghum</td>
<td>100</td>
<td>156</td>
</tr>
<tr>
<td>Barley</td>
<td>100</td>
<td>167</td>
</tr>
<tr>
<td>Wheat</td>
<td>100</td>
<td>149</td>
</tr>
<tr>
<td>Teff</td>
<td>100</td>
<td>146</td>
</tr>
</tbody>
</table>

As between 1973 and 1985 there was little change in the rank ordering of the margins. Moreover at first sight the size and range of the above margins are not greatly different from what they were 12 years later. Thus in so far as marketing was efficient in the earlier period, the figures seem favourable to the AMC. Marketing was not, however, evidently efficient in the early 1970s; there must be a presumption that efficiency should actually improve with time; and the profit margins turn out, on inspection, to have been quite different in the two periods. The last point is important, since it remains relevant even when attention is focused on relative rather than absolute efficiency.

As already noted, the AMC’s own margins were small -2.5 per cent of the wholesale price. This compares with a profit of 20 per cent for the private trader included in the figures just given, so that like has not been compared with like. With the profit margins removed, the adjusted figures are:
Grain | Margin in 1973 | Margin in 1985
--- | --- | ---
Maize | 53.0 | 76.5
Sorghum | 36.0 | 56.5
Barley | 47.0 | 52.5
Wheat | 29.0 | 45.5
Teff | 26.0 | 37.5

These data suggest that the AMC was less efficient at moving grain in the period under review than its private counterparts had been a decade before. It should be remembered that the AMC buying price may well have been lower in relation to production costs than that paid by the private merchant. Still, an increase of 10 per cent in the price paid by the AMC to the producer would still leave it trailing in the comparison for all of the cereals but barley. Thus the suspicion must be that the AMC was not efficient in the narrow sense that there was scope for reducing the costs of moving grain from the point of purchase to the point of sale.

Marketing inefficiency was also reflected in persistent price differentials. The restrictions on private traders weakened inter-regional grain flows and so dampened price change in surplus areas and boosted it where supplies were light. The result was price variations that were much too large to be explained by transport costs. In March 1985 the (market-determined) producer price for teff in Gojam was reported to be 60-70 birr per quintal. The parallel market selling price in Addis Ababa at the time was 200 birr per quintal, and the transport cost per quintal between Addis Ababa and Gojam was but 20 birr. In recent "normal" years the price difference between the two locations has averaged 55 birr, or more than twice the transport cost. Fragmentary data on monthly and annual prices for a number of crops and locations confirm widespread inter-regional variations in price, and suggest that inter-temporal movements were also marked.

Partly because the real costs of moving grain were roughly twice as great for the AMC as they had been for not overly-competitive merchants before the Corporation existed, the AMC’s accounts make sorry reading. Far from covering costs, losses and hence subsidy were normal. These subventions, however, did not enable the Corporation to meet its targets. It regularly failed to procure its quotas and its customers normally had to look elsewhere for the bulk of their needs. To be fair, it was never clear what the AMC’s share in provisioning selected groups was meant to be. It certainly, however, fell well short of 100 per cent. Between 1982 and 1986 it met less than half of the demand of the Addis Ababa population for cereals, with 51 per cent being the highest contribution in a year. In the regional towns it did less well with an average annual provision of 21 per cent of needs. And though it
found more than half of the supplies of the Food Corporation, it left the Ministry of Defence and the Ministry of the Interior — the army and the police — to look to other sources (including the state farms) for 86 per cent and 95 per cent of their respective needs.

It has been seen that the AMC has never had a monopoly of marketing food grains. Parallel markets also existed, and these have to be considered also. It has been argued that, where parallel markets exist, market controls may actually increase output. The corollary is that liberalisation of controlled markets may not increase output, even if it improves efficiency. That controlled prices could lead to higher-than-free-market output is easily seen. The official price normally results in excess demand, so that consumers have reason to look for supplies outside the controlled market and — given their dissatisfaction with this price — producers are equally encouraged to sell elsewhere if they can. What happens next depends on the supply and demand conditions in the formal and parallel markets respectively. If sellers can in effect discriminate in the former in favour of those for whom the marginal utility of grains is low, buyers forced to use the parallel markets are those keenest to have grain. In consequence, the price in this market is likely to be above that in the formal market and that which would result if there were only a free market. Other things equal, the higher price would induce more production — perhaps from marginal land and at the expense of other uses of the land that would be preferable in a competitive economy 15.

This is not a necessary outcome of segmented markets. It can be shown that if the government could effectively extract a fixed quota from production and ration this among all consumers in proportion to their purchases at any price, the price in the parallel market would be the same as in competitive equilibrium and the quantities produced and traded would also be the equilibrium ones. The impact of government intervention would then be to force the producers to subsidise part of consumption. Which outcome will result depends inter alia on income distribution, tastes, elasticities of supply and demand, the feasibility of extracting quotas and the risks associated with the parallel market. The data requirements for testing are therefore and as usual rather rich for Ethiopia. It is, however, possible to see how the peasant farmer fared under the dual system in Shoa. Even this, however, calls for an assumption that the conditions that prevailed in the region were those of Addis Ababa. Much of the marketable surplus in Shoa did go to supplying the capital, but no means all of it.

The question posed is: given production costs, and the need to meet AMC quotas, were these costs covered by the total sales of the farmer, including those made in the parallel market? The information on which the answer is based is summarised in Table 17. From this it may be seen that the calculation begins with the production costs used in determining the AMC 1980/1981 farm-gate prices. They thus are the mean average costs for the country as a whole. Costs in Shoa have, of course, their own average and distribution about this. Here, however, the national
data are taken as the point of departure, with an allowance subsequently being made for the possibility that Shoa costs are above the national average. This does not mean that the Shoa peasant is thereby thought to be less efficient. He does, however, use more fertilizer and pesticide than elsewhere.

The table is a mixture of "fact" and reasoned conjecture. Production costs were assumed to increase at an annual rate of 10 per cent. Wholesale prices are as published by the AMC, and farm-gate prices are these diminished by the relevant margins, which were take as relatively fixed over the period. Market shares for 1985/1986 were derived from the AMC shares already discussed, and those for 1981/1982 came from assumptions about the relative size of the marketable surplus and the distribution of AMC procurement and production costs for each cereal and weighted sales to the AMC and the parallel market respectively.

The figures given confirm the substantial stability of AMC prices and show marked increase in those on the free market. They also confirm that the free market prices were higher than AMC prices, with the margin growing over time and being greater in 1985/1986 than four years earlier. In the later year the premium attaching to each of the five cereals bought for parallel market sale was more than 100 per cent of the AMC farm-gate price. This notwithstanding farmer margins for wheat, sorghum and maize fell over the four years and were negative or less in 1985/1986. The margins on barley and teff rose by 50 per cent and 125 per cent respectively. Returns — margins divided by production costs — may be given as follows:

<table>
<thead>
<tr>
<th></th>
<th>Teff</th>
<th>Wheat</th>
<th>Barley</th>
<th>Sorghum</th>
<th>Maize</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981/82</td>
<td>54</td>
<td>27</td>
<td>27</td>
<td>35</td>
<td>26</td>
</tr>
<tr>
<td>1985/86</td>
<td>85</td>
<td>0</td>
<td>28</td>
<td>-3</td>
<td>-4</td>
</tr>
</tbody>
</table>

so that for 1981/1982 all look comfortable. In 1985/1986, however, the story changes such that the margins for wheat, sorghum and maize look discouraging, although those for teff and barley were better than before.

Some part of the changes in returns was due to the changing shares of the AMC and the traders in the total purchases of each cereal. The AMC increased its relative standing in four of the commodities, and the more it did so, the more the farmer margins deteriorated. The Corporation's relative purchases of teff went down and so helped to boost returns to its production and sale. The effect of changing market shares may be quickly seen by recalculating the 1985/1986 margins at the 1981/1982 proportions. The results are:
All of the cereals are now profitable, and the returns on wheat, sorghum and teff look acceptable. These calculations unreasonably assume that free market prices would not alter with the quantity delivered and probably exaggerate the influence of changing market shares on margins. If the 1981/1982 proportions had applied in 1985/1986, then other things equal the free market price of teff would have risen and that of the other cereals would have fallen.

Assuming that production costs were properly and fully calculated, peasant farming in Shoa would have been profitable in 1981/1982 with any combination of the five cereals. In 1985/1986, however, profitability would in principle have depended on the proportions in which the cereals were produced and marketed. In practice "reasonable" shares of teff and barley could have more than subsidised wheat, sorghum and maize production. For a farmer whose marketable surplus in 1981/1982 was in proportion to the production of the five cereals in the region as a whole, the average cost of production per quintal of grain would have been 27.82 birr, so that relative and absolute margins would have been 35 per cent and 9.76 birr respectively. In 1985/1986 the same farmer would have had a margin of 13.58 birr or 32 per cent of his unit cost.

Thus far the discussion confirms that free market prices were above those paid by the AMC and that for Shoa peasants with a surplus to sell farming may overall have been profitable. This is not evidence that the system or either of its component parts were well-functioning. On efficiency grounds the stiff test would come from comparison with prices set and quantities traded in competitive markets. This test is at once impossible fully to apply and unfair in that substantially competitive markets have never operated in Ethiopia. Still a little more may be gleaned from the existing data. These indicate that teff was the most profitable crop in both the years covered by Table 15, and that absolute and relative returns to its production rose sharply. The period covered by the table is, of course, relatively short. Nevertheless it may still be wondered if a smoothly-working market would have delivered this result.

In this regard, it is instructive to assume that the 1981/1982 relative margins were robust market signals and to ask how they would have guided the optimizing farmer. In that year the rank ordering according to profitability of total sales was teff, sorghum, wheat/barley and maize. For the free market alone, teff was still significantly more rewarding than the other crops. Sorghum was again the farmer's next best bet, but maize was more profitable than barley and wheat. Other things

<table>
<thead>
<tr>
<th></th>
<th>Teff</th>
<th>Wheat</th>
<th>Barley</th>
<th>Sorghum</th>
<th>Maize</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985/1986 shares</td>
<td>85</td>
<td>0</td>
<td>28</td>
<td>-3</td>
<td>-4</td>
</tr>
<tr>
<td>1981/1982</td>
<td>75</td>
<td>10</td>
<td>33</td>
<td>29</td>
<td>4</td>
</tr>
</tbody>
</table>
equal therefore an increase in teff production could have been expected, with slower growth being recorded for wheat, barley, maize and sorghum. In the event, production and margins changed as follows:

<table>
<thead>
<tr>
<th></th>
<th>Teff</th>
<th>Wheat</th>
<th>Barley</th>
<th>Sorghum</th>
<th>Maize</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in per cent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production increase</td>
<td>2.3</td>
<td>42.7</td>
<td>-19.5</td>
<td>-30.2</td>
<td>-118.9</td>
</tr>
<tr>
<td>AMC + Free market margins</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981/1982</td>
<td>54</td>
<td>27</td>
<td>27</td>
<td>35</td>
<td>26</td>
</tr>
<tr>
<td>1985/1986</td>
<td>85</td>
<td>0</td>
<td>28</td>
<td>-3</td>
<td>-4</td>
</tr>
<tr>
<td>Free market margins</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981/1982</td>
<td>77</td>
<td>35</td>
<td>37</td>
<td>70</td>
<td>53</td>
</tr>
<tr>
<td>1985/1986</td>
<td>117</td>
<td>22</td>
<td>54</td>
<td>91</td>
<td>56</td>
</tr>
</tbody>
</table>

The data thus confirm an increase in teff production. This took place, however, at a very much slower rate than that for wheat, so that market expectations were not fully realised. Moreover, although a drop in production was, as expected, associated with a rise in margins for barley and sorghum, the increase in teff output saw a much more than proportionate growth in the free market returns to its sale. Again the volume of maize sold on the open market in 1985/1986 was but one-third of the corresponding amount in 1981/1982, yet its price rose by less than 6 per cent.

Too much cannot be read into the foregoing. No account has been taken of shifts in demand or of changes in production conditions. Moreover, even if the parallel market were in equilibrium in, say, 1985/1986, the available hard evidence does nothing more than identify a single co-ordinate (price and quantity) that is common to the demand and supply schedules. No other co-ordinates are known, so that it is not rigorously possible to say what would happen if the AMC were to leave the buying and selling of cereals to the market. If all now supplied by the AMC had no demand beyond AMC prices the abolition of the Corporation would affect only the tail of the demand curve. Equilibrium would then likely result from a rightward shift in the parallel market supply curve. The new equilibrium price would be lower than the parallel market price and, depending on the elasticity of supply, the quantity traded could well be lower also. There is, however, no reason to suppose that current demand is so conveniently distributed. If it is not, the outcome of a wholly "free" market is indeterminate on what is now known.
There is no evidence that marketing was efficient in the period 1974-1987. AMC prices and quotas were not grounded in opportunity cost; and if the parallel markets — as judged by the behaviour of the most articulate of them, Addis Ababa — showed more movement in response to changes in supply and demand, it is still not possible to describe them as fully efficient. Thus, if the markets were not efficient did they conduce to equity?

In a country as poor as Ethiopia, equity is a marginal question. Income differences are largely to be measured by a few handfuls of grain. In Addis Ababa and other urban centres some are much better off than the poor peasant; but the number of the relatively rich is intrinsically limited, and the pressing problem is that of securing a general increase in the standard of living. Since the economy is mainly rural, agricultural and rain-fed, nature does, of course, impose its own inequalities. And in the period under review the vagaries of the weather probably widened these. Moreover, these natural differences have long been intensified by resource allocation. This has favoured the regions — Gojam, Gondar, Arssi and Shoa — with the greatest advantage in endowment. Such increase in the supply of yield-boosting inputs as there has been has gone overwhelmingly to these areas. Again, it is not surprising that these same regions have captured such industrial development as there is, with the concentration in Addis Ababa and hence Shoa being particularly marked. Indeed, in so far as Ethiopia has a market economy it mainly comprises the links between the capital city and these grain-producing provinces.

How, then, did the marketing arrangements affect the distribution of income? On the basis of a few aggregative data, some heroic assumptions, and not a little ingenuity, Saith has set out the conditions required for "egalitarian growth", and argued that these were not met in Ethiopia in the period 1974/1975-1979/1980. The rising price of food grains was an inequitable rationing device, so that there was a "massive redistribution as well as a wide impoverishing effect". The force of this was felt principally by the urban population — the rural sector being "largely insulated from the urban food market, since it has first claim to foodgrain consumption". Quick extension of Saith's calculations to 1985/1986 suggests that, if the logic of his argument is accepted, the results for the extended period were even worse than those that he presents.

Saith's analysis is not concerned only with marketing. The marketable agricultural surplus is, however, at the core of his argument. This financed what growth there was in the economy, and the way it was distributed determined who carried the burden of financing. In brief, extra output in the economy came from lowered consumption of the poor, particularly those in the urban areas. Lack of space and, probably, data preclude thorough probing of this claim here. It is, however, plausible that the marketing system had adverse distributional effects. It had something of a worst-of-both-worlds character. As has been seen, the AMC failed to meet the grain "requirements" of the urban areas. Thus many were forced to
trade in the parallel market, where the price was probably higher than it would have been in a completely free market; and that certainly would have discriminated against the poorer consumer.

The suggestion that the subsistence peasant was insulated from the traumas of the marketing system is questionable. Quotas were in place. And although their enforcement may have been tempered by inefficiency they did nevertheless threaten the consumption of poor farmers. Even more questionable is the suggestion by Saith that private merchants were greatly favoured by the system. The "abnormal" profits, he argued, of those dealing in Addis Ababa in 1981/1982 could have supported 225,000 families there at the food poverty line. This seems, however, to be based on the assumption that the merchants paid AMC prices to the farmers. But why, it may be asked, would farmers be that stupid? The tempting answer is that they lack economic power. The merchant buying prices given in Table 17 above, however, reflect the relative margins that prevailing in the imperfect markets before 1974. It is possible that increased risk and other factors have widened these since then in favour of the merchant, but hardly to the extent of giving them a 30 to 40 per cent advantage over the AMC. Some peasants did quite well in selling to merchants and this is something that would have also to be considered in a fuller analysis of changes in income distribution.

The present essay disagrees most, however, with Saith's conclusion that "the role of the AMC should be extended with great vigour" and that well-functioning state farms should also have a crucial role. The evidence mustered here does little to support a greater, as distinct from a different, part for the AMC. Nor is there reason to believe that the state farms could easily be made efficient in cereal production. Moreover, by the end of the period under review the government itself was having second thoughts.

From what has been said, there is little reason to believe that the AMC stimulated agricultural production or did anything to increase efficiency. The AMC's problems were manifest in the Corporation itself, in the strains it imposed on other bodies, and in a generally negative impact on the peasants. Setting and collecting quotas proved to be very demanding. Members of the grain task forces had all normally other and onerous duties, yet they had to spend much time between October and June allocating quotas, pursuing the people who were supposed to meet these, and writing reports to higher authority. At all levels they were prone to complain that the quotas imposed from above were too high, and that they had not been sufficiently consulted when targets were set. They also complained that they were given directives but not the means — travel allowances, vehicles and fuel, for example — to carry them out. Moreover, the expansion of grain deliveries from the service co-operatives strained the resources of the AMC. Its marketing facilities — such as manpower, trucks, stores and weighing scales — could not keep pace, and transport was a particular difficulty.
There was also widespread dissatisfaction among the peasantry. At farm level it was felt that the quotas set did not take sufficient account of the seed and consumption needs of the household. It was also thought that the demands imposed discouraged cash crop and non-cereal production. Persons engaged in this, together with part-time trading farmers and rural craftsmen were thought to be rich and were penalised through their quota allocation. More generally, compulsory procurement was believed to be based on unduly optimistic estimates of crop out-turn. Thus grain output fell between 1982/1983 and 1983/1984 by 15 per cent in Arssi and by 20 per cent in each of Shoa and Gojam. Yet in the following two years the quotas for each of these regions were increased at an average annual rate of 40 per cent.

The system was — and was even more perceived to be — coercive. Peasants had difficulty in meeting the quotas, and perhaps one-quarter of them bought grain in order to do so. This could have been optimising behaviour if it freed better quality grain for sale in the parallel market. At least some peasants, however, were forced to purchase because their own production and reserves were too low to meet the demands made on them. These market transactions were financed from cattle sales, credit from relatives, sale of non-cereal produce, cash reserves and the provision of wage labour to the state farms. The time taken to arrange this often led to late quota delivery. So also did lack of transport and a belief that officials would stop asking in the face of delay. Among the incentives for full and timely delivery was the right to buy subsidised goods from the service co-operative shop. Goods were, however, normally in short supply; and the combination of subsidy and shortage became part of the discipline. In 1985-1986 perhaps one-third of the peasants were punished for late or non-delivery by having the right to subsidised goods withdrawn.

There were complaints that the capacity of the service co-operatives to handle the collection of peasant deliveries was inadequate. There were long queues and, it was asserted, cheating took place at weighing. Inordinate delay in being paid for grain was another source of resentment, as, indeed, was not getting paid at all. Officials sometimes deducted taxes and other contributions from the amounts due against quota delivery.

In the light of the foregoing it would be impossible to argue that the marketing system was such that it stimulated production. Nor, as already noted, did it evidently serve the interest of greater equity. It is, therefore, not surprising that it has been modified in the direction of allowing more scope for market forces. Henceforth the operations of the AMC are to be more modest than hitherto and quotas are to be more carefully set. Quota prices have been increased and are to be subject to careful review. Peasants are free to dispose of their surplus beyond quota on the parallel markets, which have been legalised. And to facilitate the working of these, licensing of merchants has been restored in areas in which they had previously been banned.
Measures that produce neither more output nor more equity are not easy to justify, so that an obvious question is: why are such attempts made to by-pass the market? And this question may be thought to have greater point from the generality of administrative failure. Space has been given to the AMC because scrutiny of its operations provide a classic study of the difficulties that beset administrative economics in poor countries. Even the simple-seeming task of setting quotas was a major headache, which tied up administrative and managerial talent, generated friction, and resulted in targets that were never met. The attempt to set prices was cumbersome, inconsistent, and bedevilled by lack of information. Farm-gate prices may have long remained unchanged through inertia. It is, however, possible that rigidity was confused with stability. And it is important to appreciate that the difficulties encountered were not accidental, but intrinsic to the attempt to replace major markets with administrative fiat, and to do this in a way that impairs the efficiency of residual markets.

**Economic policy and international competitiveness**

Nothing is more important to economic growth in a low-income economy than the size of the agricultural surplus and the uses to which it is put. This central consideration alone would justify the attention given to the Agricultural Marketing Corporation. The AMC was at the centre of a system that determined the terms on which the peasant competed with the state farms and the producer cooperatives; set directly the quantities and prices of its own peasant purchases; and — through an arbitrary combination of neglect and malevolent prohibition — encouraged the emergence of inefficient parallel markets. These factors inhibited surplus generation, hence the importance of the question already posed: were the deficiencies of the AMC accidental or intrinsic? And hence the even greater importance of the finding that the defects were intrinsic. For, though the direct link between its operations and the surplus gave the AMC a special place, it was nevertheless part of a wider set of arrangements that aimed to make the economy increasingly planned. And there is no reason to believe that more general measures to this end should be free of the difficulties that inevitably beset the AMC. On the contrary, the greater the ambition to direct the economy centrally, the greater the problems — if only because scarce administrative talent would be more thinly spread than ever.

In the light of the earlier examination of the market and the state in poor countries, it would be difficult to argue that the attempt to promote a command economy in Ethiopian conditions was not misplaced. Certainly a 1985 review of these conditions had a team of Soviet experts reaching for their Lenin at his most accommodating. "First of all", they have him say, "we want urgent and serious measures for increasing the productive forces of the peasantry". And, he continues by asking
what is to be done, then? Either we try to completely prohibit, block up any development of private, non-public exchange, i.e. trade, i.e. capitalism, inevitable when millions of small producers exist. Such a policy would be stupid and suicidal for the party that were to try it. Stupid because the policy is economically impossible; suicidal because parties trying that kind of policy fail unavoidably. Or (the last possible and only sensible policy) we abandon forbidding or arresting the development of capitalism but instead try to direct it into the channel of state capitalism.  

Proper authority thus established, the report of the Soviet team is careful to locate its advice in the transition from (early stage) capitalism to mature socialism. Nevertheless, and notwithstanding an unwarranted fondness for machine tractor stations and an optimistic view of the future of state farms, the drift of the report is that central control had gone too far, or at least too fast.

Thus emphasis is placed on the fact that

in the transitional period, of great importance is a correct, flexible policy with respect to economic structures, which must, on the one hand, provide for a transformation of backward structures and forms of the economy into more up-to-date types of production and, on the other hand, ensure production development in all structures with a view to use the existing economic forms for expanding the intra-economic ties and exchange, for involving ever broader circles of the population into vigorous economic activities, and also to prevent a premature destruction of low-dynamic forms, as this under prevailing conditions can only result in reduction of production on a national scale.

Since the sting of this passage is largely in the tail, emphasis is also placed on support for "the individual sector" in agriculture, on the role of small business, and on the general importance of private economic activity — properly controlled and taxed for state purposes.

In another context it would be interesting to spend more time on the Soviet report. Here, however, it was introduced to make the point that an ambitious attempt to give Ethiopia a command economy was a mistake. Neither the knowledge nor the skills were available to plan and run the economy with much chance of success. Given external developments and the unfavourable weather pattern, it would never have been easy in the years following 1973 to secure as much growth as was recorded in the period 1960-1973. It would, however, have been possible. And with
better policies it may even have been possible to out-perform the earlier years. It is, therefore, convenient to round off this comparative discussion with a closer look at the policy environment in the two periods under examination.

To judge from the respective development plans the promotion of agriculture was a central feature of policy in both periods. And measures to this end were avowedly selective. In the earlier period the commitment to agriculture was most pronounced in the Third Five-Year Plan, which was intended to be implemented between 1968 and 1973. The First Plan had given prominence to infrastructure, the Second to manufacturing. In the judgement of the Third Plan the two previous programmes had given rise to satisfactory rates of growth of total output and spread of the market economy. But its authors warned that in the years ahead, it will prove increasingly difficult to maintain this high growth rate of the non-agricultural sectors if the growth of agriculture does not accelerate substantially. Adequate demand may not be generated within the monetized segment of the economy which covers only 4 to 5 million people. Income per head in this segment, although high compared to that prevailing in the agricultural sector, is still low, so that a major part of the increase in disposable incomes will still be devoted to satisfying the demand for basic essentials like food and housing.

In principle, growth in the incomes of the agricultural population of about 20 million should provide a major part of the market for non-agricultural commodities. Only if the mass of peasant farmers improve their productivity, will they produce enough for themselves and for the rest of the population in the years to come. The rapid increase of surplus production for the market implies an accelerated movement of the mass of peasant producers into the monetized sector of the economy; only thus can they hope to raise significantly their real standard of living, develop a small savings surplus, and thus begin collectively to provide the large purchasing power base necessary for a growing industrial economy.

There is not, it may be thought, much wrong with that as a diagnosis and a statement of intent.

An early hint, however, of the constraints that were nevertheless to be placed on the market comes in the discussion of coffee. The importance of this to export prospects acknowledged, and its real comparative cost advantage proclaimed, the key problem was seen as that of over-production. This problem arose because of the ease with which production could be expanded in combination with the need 'to limit coffee production to the quantities that can be sold at fair and remunerative prices
under the International Coffee Agreement”. It was, however, conceded that "production control will not be simple for Ethiopia, since much of the coffee grows wild and the extension of roads into such areas easily creates large surpluses for sale without additional plantings". In the late 1960s and early 1970s public effort to stimulate agriculture was concentrated on two main areas: the development of commercial farming, largely in the Awash Valley with the help of foreign capital and technology; and package programmes for peasant development in selected areas — Chilalo in Arssi and Welamo in Sidamo, for example — where it was thought the potential was high. The emphasis on commercial farming was a reflection of a realistic awareness of the difficulties of transforming the large and traditional peasant sector. Moreover the size of this, it was held, made concentration unavoidable — though it was hoped that successful package programmes would have a widespread demonstration effect.

The most ambitious of the package programmes was supported by Swedish aid. It covered the coordinated provision of transport, marketing services and credit, together with the provision of improved seeds, fertilizers, and information on improved agricultural practice. Not all of these elements were included in other packages, but common to all was public support, including through the provision of expert personnel and infrastructure. Significant World Bank help was obtained for the design and spread of minimum package programmes. Government also had a resettlement policy and moved cautiously and slowly to accelerate the shift in the agricultural population out of the over-crowded northern and central highlands. General recognition was given to the importance of research, and the Agricultural Research Institute was set up with help from the UNDP.

Presumably reflecting World Bank and government thinking, the Third Five-Year Development Plan looked to agriculture to provide 27 per cent of the growth in output in the plan period. This meant, of course, that 73 per cent of the increase was to be non-agricultural. And industry on its own was expected to account for almost 26 per cent of the additional output. The implied, relatively strong, emphasis on industry was justified in the plan in terms of the need for employment and demand for agricultural products. Wrapped up in the usual platitudes about infant industry, tariff protection was afforded to manufacturing. And the capacity to undertake project appraisal was also extended. This was, no doubt, honestly seen as an instrument for greater efficiency. It is doubtful, however, that it operated thus, any more than did the investment institutions that were established.

As has been seen, much of the Ethiopian economy was in private hands up until 1973. Government policy was to attract foreign capital through a range of inducements, tariff protection and an exchange rate that was tied to the US dollar. Foreign investment in commercial agriculture was also encouraged. On balance, however, there is little doubt that policy favoured manufacturing. Moreover, the provision of schools, hospitals, and roads was more favourable to urban than to rural development. And there is reason to believe that investment in agriculture was less
than its supposed priority status would have warranted. It is no doubt a crude measure, but it is nevertheless revealing that the Third Plan expected agriculture to deliver 27 per cent of total growth over five years on the basis of 11 per cent of total investment, whereas industry needed 20 per cent of the investment to provide just about the same share of the growth in output.

As has been seen, the political changes of 1974 led to radical land reform and dramatic changes in the institutional organisation of agriculture. These, it is frequently claimed in official publications, have transformed the prospects of the Ethiopian farmer. Freed from exploitation by more or less greedy landlords and secure in his or her tenure of allocated land, the peasant is in a position to prosper as never before. Moreover, the government is clear that the agricultural sector is the mainstay of the economy, with a key role to play for many years to come. To enable this role to be played, the government put in place minimum package programmes to deliver improved seeds, fertilizer, credit and extension services to the farmers. Yet the slow growth of agricultural output has been the most depressing feature of Ethiopian economic performance in the last 15 years.

It is true, as has already been recognised, that some part of the explanation may be found in a deterioration in external conditions and the weather. Extended hostilities have also played their part. Battlefields are rarely fertile. And peasant armies fight rather than farm. Still, all extenuation admitted, government policy must share the blame. Commitment to increasing public ownership, including in agriculture, has not helped; macroeconomic policy has been at fault; and agriculture specific policies have also been flawed. Though these factors are, of course, inter-related it is convenient to discuss them seriatim.

In recent years theory and experience have been increasingly telling against the command economy. This, for reasons rehearsed at length in the previous chapter, may be particularly inappropriate in very poor countries. There administrative and entrepreneurial talent is particularly limited. Thus, for example, to staff the Agricultural Marketing Corporation is to threaten the competence, as it were, of the Agricultural Research Institute; and to deploy skilled manpower in the preparation of an inherently unrealistic plan is to weaken the agricultural extension service. And both central marketing and central planning may reduce the supply of entrepreneurs — directly by tying up skilled manpower, and indirectly by the distortions they inflict on the economy. Moreover, what for Lenin was foresight should have been available to Ethiopian planners as hindsight. Repeatedly to threaten millions of private peasants with collectivisation is not the best way to promote efficiency.

The government drive to socialise the means of production and distribution after 1974 had adverse consequence for the manufacturing sector also. To put it plainly, much private enterprise was scared away — or, especially when it was a question of foreigners, never came. This constraint apart, however, the sectoral balance of macroeconomic policy still favoured industry. In large measure this was due to a
stubborn adherence to a fixed exchange rate. The consequences of maintaining an over-valued rate have been particularly adverse for agriculture, not least because of the discouragement of agricultural exports. Industry continues to enjoy protection, though average rates are probably lower than in many developing countries. The tariff level varies across industry, however, in a way that is not easy to relate to economic logic.

Manufacturing is largely in state hands, and, as part of the price controls that operate, uses cost-plus pricing. The margins are, however, determined by fiat and diverge increasingly from what they would be in market conditions. Determining profitability has consequently become problematic. Partly for this reason, investment decisions have been questionable, and there is no strong reason to think that the structure of industry is what it would be if it were demand-driven in a market economy. Nor is it possible to say much about the relative sizes of the manufacturing and agricultural sectors from an economic perspective. A more buoyant agriculture would certainly have given genuine economic stimulus to the growth of industry. As it is, agricultural stagnation has given rise to manufacturing problems through lack of inputs as well as lack of demand.

Much of the weakness of policies toward agriculture has already been captured in the discussion of the marketing of food grains. The basic problem has been in the discouragement and lack of incentive that have been associated with pricing and other policies. There have also been complaints that improved seeds have not worked well in many locations, and that post-1979 rises in fertilizer prices were not matched by any corresponding increase in the prices paid to producers for the grains they were compelled to sell to the AMC. Associated with the policy of keeping the producer prices down, has been that of promoting the state farms. These have been given preferential access to capital, credit and inputs, and they have received higher prices for their output. Thus the AMC for much of the period under review paid the state farms from 20 per cent to 50 per cent more for given cereals than was paid to the private peasant. And though the share of the state farms in total output has been less than 4 per cent, they have regularly received up to 15 per cent of government investment in agriculture.

This more than proportionate allocation could, of course, be justified if the state farms were correspondingly more efficient than the peasants. As noted above, however, the evidence is that they are not. Notwithstanding the better terms they get from the AMC, they make substantial losses on grain production, and there is no doubt that resources invested in the continuation of these loss-making activities are misdirected. Capital and other inputs would be better employed in the peasant sector.
Pricing and exchange rate policies have not encouraged the production of coffee, the export of which is relatively heavily taxed. As a consequence and reflecting the inability of some coffee producers to buy grain in the market, some switching of production between coffee and grains has been reported. Thus policy has again been working against the signals given by comparative advantage.

Government intervention has been a continuing feature of the Ethiopian economy for the last 30 years. So also has been government recognition of the importance of agriculture. This recognition has not, however, been reflected in the relative allocation of resources. And from first to last trade and exchange rate policies have discriminated against the key sector. Manufacturing has been encouraged more than it would have been by a policy that was neutral as between imports and exports and between sectors. It does not follow that it has grown more than it would have done in a competitive economy. Competition and neutrality would have promoted agriculture to a much greater extent than actually happened. And the growth of agriculture could have led to a bigger and economically healthier manufacturing sector. As things were, however, the development of industry has been artificial and so relatively inefficient.

Continuity in economic policy is interesting and important, especially if the features that make for it are wrong-headed. In the present instance, however, it cannot disguise the more important fact that there substantial changes in policy after 1973. And since these were intrinsically more hostile to the market than the policy elements they replaced, their introduction was a backward step. The quality of the signals that guided economic decisions deteriorated. Resource allocation consequently became increasingly distorted. A serious matter at any time in a poor country, this deterioration was particularly unfortunate in the light of developments in the world economy and of the increased and recurrent threat from drought. What others and nature made difficult, government policy made desperate.

Economic agents respond to the relative prices they observe, and to changes in these. Prices can be market-determined or set by administrative fiat or they can emerge from some combination of market operations and government imposition. Market prices can, for example, be modified by taxes or subsidies. Since the signals to which producers and consumers respond are distortion-inclusive, intervention-induced outcomes can differ substantially from those that result from the market. And the thrust of the argument so far is that in poor countries the outcome associated with widespread intervention is certain to be inferior to that which the market would deliver. In Ethiopia specifically, the agricultural surplus would have been greater had government been less active. Related to this, the surplus would also have been more efficiently used. As policy since 1974 has been much more interventionist than before, it is to be expected that economic loss — defined as feasible minus actual — has also been greater in the second period.
The raw data presented above are consistent with this expectation, though it has again to be conceded that it is difficult to isolate the impact of government action and policies from the other factors that could cause growth rates to alter. Still, the presumption that government did not help has been bolstered by a detailed examination of the marketing of food grains. Poor performance in this area is significant because of the intrinsic importance of the activity and because of what it reveals of the problems that attend more general attempts to run the economy on administrative lines. These problems are formidable anywhere and are particularly unlikely to be solved in a poor country like Ethiopia.

Support for this view comes from consideration of the international competitiveness of the economy. This may be expected to decline as government-induced distortions in resource allocation increase. Among the reasons why this would happen are the tendency for interventionist governments to run increasing deficits and the related tendency for higher-than-otherwise rates of inflation to be recorded. It is therefore appropriate to measure the capacity of the economy to compete internationally by changes in the real exchange rate. In its most general form this may be defined as:

$$ r = p_n / p_w \times r_n $$

where $r$ is the real exchange rate, $r_n$ is the nominal rate, and $p_n$ and $p_w$ are the domestic and world price levels respectively. If the real exchange rate is rising, the country is losing its competitive edge. Changes in the real exchange rate may be expected to alter the allocation of domestic resources as between tradable and non-tradable goods, and to alter the disposition of tradable goods as between home and foreign markets. Thus though movements in the exchange rate fall short of independent proof that government policies are responsible for changes in the growth rate, examination of the real exchange rate over time does throw light on the quality of economic management.

The Ethiopian real exchange rate over the period 1960-1988 is given in Table 18. The observations recorded there were obtained by using the Ethiopian retail price index and the US wholesale price index as deflators. The nominal rate was expressed in US cents to the Ethiopian birr. The data in the table show a trend increase, with the exchange rate for 1988 being more than 86 per cent higher than that for 1960. The decline in competitiveness has not, however, been steady. It was, however, sharper and more persistent after 1974 than it had been before. Thus the average annual rate of increase in the real exchange rate was 1.7 per cent between 1960 and 1973, but 2.7 per cent in the period 1973-1988. Therefore government has only to be stuck with a general responsibility for economic management to justify the claim that there was a falling-off in government economic competence between the first and the second periods under consideration.
As usual the data deployed above are more fragile than would be ideal. The Addis Ababa retail price index in particular is a limited device on which to hang an argument. Nevertheless the figures used are robust enough for broad purpose. And they do serve to indict the government management of the economy. Domestic prices are sensitive to government action, being put under pressure by things as diverse as growing budget deficits financed by the creation of money and economically inefficient import-substitution policy. And failure to adjust the exchange rate in the light of differential inflation is a clear government responsibility. In the Ethiopian case an immediate and substantial devaluation of the birr would bring the real exchange rate into line. Export and import prices (in birr) would both rise and the consequent impact on resource allocation would be beneficial. The effects of a devaluation could, of course, be offset by other factors — an increase in wage inflation, for example. This need not happen, however, if government policy is sufficiently firm and clear-headed. To say this, however, is to raise important questions about future policy, so that it is time to turn to consideration of that.
NOTES AND REFERENCES

1. One of Thomas Carlyle's complaints against the dismal science was that economists — instead of considering the sources of happiness, morality and religious belief — "tell us how flannel jackets are exchanged for pork hams".


4. IEG, op. cit., Chapter 1.

5. World Bank, op. cit., Table 8.


7. Ibid.

8. A fuller discussion of the comparative position would require attention to factors not discussed here. These could include per capita aid levels.

9. The 1984-1985 famine deserves more study than it has received. More light on cause and consequences would be useful. And domestic and international reaction could also stand more illumination.


16. In the circumstances, optimizing behaviour is, of course, a strong assumption.


19. Ibid., p. 7.
Chapter 5

AGRICULTURE, THE MARKET AND THE STATE:
THE WAY FORWARD

He saw the practical argument for laissez-faire no less clearly than did A. Smith, and his bureaucracy, while guiding and helping where necessary, was always ready to efface itself when no guidance or help seemed needed ... His laissez-faire was a laissez-faire plus watchfulness ... his vision of economic policy might look like laissez-faire with the nonsense left out.

J. A. Schumpeter (on von Justi)

Exports and imports amount respectively to about 10 per cent and 20 per cent of the Ethiopian gross domestic product. These are higher ratios than those for, say, the United States. It would, however, be misleading to describe the Ethiopian economy as being more open than those of the US and other developed countries. As revealed in the earlier description of the economy, about one-quarter of value added in Ethiopian production is not the subject of any market transaction, let alone those that link Ethiopia to the world economy. Moreover the proportion of the population that has little market contact is considerably higher than 25 per cent, and it is the weight of the rather insular peasant household that is the salient feature of the economy. Other things equal, the low productivity and hence the low incomes of the peasant sector keep savings and capital formation small. Yet even with virtually all of peasant income being spent, the market for consumer goods and services is extremely limited. With 80 per cent of the population living and working in the poor rural sector, human investment is, on the whole, meagre. The industrial sector is small, with manufacturing comprising less than 100 enterprises. It is true that the public service has been expanding, but it too is tiny in relation to the population, as are the numbers in the professions. Small wonder that the World Bank reports that, the last time it was measured — against a far from exacting standard, more than
60 per cent of the urban and rural population was below the absolute poverty line. And the main manifestation of this widespread poverty is, of course, that many are chronically without enough to eat.

How, it may well be asked, is such an economy to be developed? Its markets are small and poorly integrated; and its stocks of human capital and administrative skills are — certainly in relation to the size of the task — diminutive. Thus to rely on the market is to have faith in the very imperfect; and to turn to the state is to embrace the economically unlikely. It is emerging that the command economy is inherently incapable of producing sustainable, long-run growth. In Ethiopia, however, the trained talent, insights, information and all-round competence that would be the minimum requirements for any kind of effective, comprehensive, planned and government-led leap forward have been missing. In such conditions the state as an omnipresent economic agent is bound to carry little conviction. And in these matters ideology is no substitute for efficiency. No government, no state is obliged to pursue economic growth. Any that does in good faith, however, ipso facto constrains its choice of instruments.

The market and the state are not mutually exclusive institutions, nor need the correlation between them be strongly inverse. It can, however, be argued that their relative weights and roles should vary with the level of development, or at least that greater reliance on the market is more appropriate in the early stages of economic progress. Since they run through the pages of earlier chapters, the factors that support this view need not be rehearsed again here. Nor need the central importance of the size and rate of growth of the agricultural surplus be given more emphasis than it has already received. What does remain is to see how the market is to be encouraged, expanded, and improved. And to determine what residual, but nevertheless important, functions are then left for the self-effacing state. How, it should also be asked, would a shift in the balance between the market and the state impact on agriculture? What consequences would improved agricultural performance have on the economy and, indeed, on the sector itself? And what, if anything, can be done if Ethiopia's own most efficient effort would still leave much of the population food insecure?

In the present essay, the search for answers to these questions began with the salient characteristics of the Ethiopian economy. Examination of these highlighted the importance of small-scale peasant farming, particularly in the provision of food, exports, and an economic surplus. It was, however, made clear that the traditional peasant techniques and their limited productivity are consequence rather than cause of the widespread and continuing poverty that is the lot of present-day Ethiopia. Indeed, the essence of the perceived policy challenge has been found in making the transition to a modern economy when so much of the relatively large, mainly unskilled, and rapidly-growing labour force is engaged in technologically-primitive agriculture. And when, moreover, the pattern of and prospects for employment outside the agricultural sector largely depend on what happens within it.
The attempt to discern how such an economy may progress began here with Adam Smith. His natural progress of opulence, with its emphasis on agriculture and the agricultural surplus, was thought helpful. So also was his policy prescription, summarised by Professor Schumpeter as "free trade and laissez-faire". The summary exaggerates. As has been seen, even in a system of natural liberty, Smith allowed that there are important tasks for the sovereign. And, as Professor Rosenberg has reminded us, he did not underrate the importance of institutions. Still, he certainly did see limited scope for government, which he confined to certain categories of activity. Thus production and trade were best left in private hands and, what is not quite the same thing, free of policy impediment. Such freedom was desirable because it promoted the division of labour in keeping with Smith's analytical proposition that, again to quote Schumpeter, "free interaction of individuals produces not chaos but an orderly pattern that is logically determined". Individual virtue was, however, all the more prominent because of the incompetence and corruption of government. And it is an important consideration that — only because knowledge is limited and administrative talent scarce — the economic limits of Ethiopian administration are likely to be quickly reached.

Free trade and laissez-faire do not necessarily lead, of course, to strong emphasis on agriculture. That outcome, it has been suggested, is best seen as an empirical matter. Still Adam Smith has been used to sharpen the focus on agriculture, so that it may be useful to see why. Particularly perhaps, since so distinguished and sympathetic a critic as Professor Lionel Robbins found "very little analytical edge" in Adam Smith's trade theory — including for reasons that could bear on the natural progress of opulence. Thus Robbins complained that Adam Smith often speaks as if the purpose of foreign trade were merely to dispose of surplus produce and... his theories with regard to the relative importance of capital employed in the home trade and foreign trade were quite misleading. It is sometimes forgotten that even the famous passage about the invisible hand occurs in a context in which the benefits praised are those accruing from the disposition of every individual "as much as he can... to employ his capital in support of domestic industry".

It has earlier been acknowledged that part of Adam Smith's argument sounds strange perhaps to a modern ear. Agriculture is preferred to industry because it is more natural and congenial; and the appeal of domestic over foreign investment could almost be put down to a mercantilist-like patriotism. There is, however, more to the argument than that.

It should first be noted that all of Adam Smith's propositions of the kind quoted by Professor Robbins were subject to a most important caveat. Thus this or that particular use of capital should yield its owner "the ordinary, or not a great deal less
than the ordinary profits of stock". And the preference for the home-based industry — "upon equal or nearly equal profits" — could be seen, particularly in the circumstances of the time, to turn on relative risk. Moreover, nothing in all of this challenges the importance of the agricultural surplus in low-income economies. And, it has also to be recalled, Smith's context was a historical one. How, he was in effect asking, do subsistence economies grow? By first, runs the answer, developing their near-sole activity. More is made of this point below. Here it serves to note that the nearer the economy is to subsistence, the more it is right to emphasize agriculture. And it is in this that the relevance to Ethiopia lies.

The concern of Professor Robbins was with the classical theory of commercial policy. And there, of course, he was right. It is necessary to go beyond Adam Smith. In conceding, however, that it was left to Ricardo and others to give trade theory its analytical edge, it is relevant to remark that economics moved on partly because the economies had moved on. Like much of contemporary Ethiopia, the world of the Wealth of Nations was largely a pre-industrial one. To say this is not, of course, to suggest that later theory should not be applied to Ethiopia. On the contrary, earlier argument has found the theory of comparative costs highly pertinent to that and similar countries. More use could perhaps have been made of the theory. A model that explains the gains from trade can throw light on changing comparative advantage. And beginning with a two-sector model covering primary products and manufactured goods, three factors of production — natural resources, labour, and man-made capital — and the possibility of trade, it is possible to predict how resource allocation and trade patterns are likely to change as an economy grows. Some consequences associated with this extended Heckscher-Ohlin model are discussed below.

In the meantime, it may be recalled that the fact (and measurement) of comparative advantage have thus far been thought more important than explaining its source. And, in the light of what has just been said, one reason for continuing with this view is that the issue for Ethiopia is, up to a point, less what happens once growth gets going than how sustained growth is introduced in the first place. On this perspective the question is not so much whether Ethiopia will export or import food as it grows, but rather whether, given its present resource endowment, it should be growing more of its own food now.

That and similar questions are best answered by the market. In the constrained circumstances of Ethiopia decisions taken by individuals in the light of local conditions are likely to be more efficient than those taken by a central authority. The latter may, of course, take steps to improve the decision-taking environment. And that is another matter that receives more attention below. Here it is important to add that not only should decisions be left to individual economic agents, but these should as far as possible be free from central let or hindrance. These desiderata inform judgement on policies actually pursued, and throw light on the link between these and performance. Over the period 1960-1987, the best that can be said is that the
Ethiopian growth rate was somewhat above that of sub-Saharan Africa as a whole in the period up to 1973. It was not thereby spectacularly high. And between 1973 and 1987 the economy was largely stagnant and growth compared unfavourably with that of other African countries. In both periods food production failed to keep pace with population, though the gap widened more in the second period. From first to last there was no clear evidence that food production declined relative to population because resources were being directed into more efficient, including export, use.

On the contrary there are some signs — in domestic resource cost measures and capital-output ratios — that returns to agriculture have remained consistently higher than in industry, so that more resources should have gone in the former direction. Why did they not? In the earlier period the answer is to be found in trade and exchange rate policy and a system of land ownership that possibly made for inefficient surplus extraction and sub-optimal reinvestment. The trade and exchange rate policy favoured industry unduly and so also led to resource misallocation, as did the fact that the government was at least mildly over-extended. In the second period, though it was repeatedly claimed that the problem of land ownership had been solved, the flaws of the first period persisted and were made worse by the attempt to move toward a command economy. And this attempt greatly weakened the incentives available to the peasant, and saw considerable growth of hugely inefficient state farms. Most of manufacturing industry was also taken into public ownership, and for much of the time private enterprise was not encouraged.

The deterioration in the policy environment cannot, of course, be made to carry all the blame for poorer performance. The world economy grew more slowly after 1973 than before it; the weather in Ethiopia was worse; population pressure increased and was associated with growing environmental degradation; and the internal security situation worsened, so that defence commanded a growing share of the budget. These things do not, however, make comparative advantage irrelevant. Nor, by the same token, do they provide reason why a resource-poor country should hope to grow through the medium of a centrally planned economy. Comparative advantage is as important to making the best of a bad job as it is to squeezing the most out of favourable circumstances. And the flaunting, as it were, of allocative efficiency in Ethiopia after 1973 at the very least made matters worse than they had to be. Moreover, though political economy is on the whole outwith the scope of this study, this comment probably applies to the security situation as much as to anything else. Dissent may well rise as the economy declines.

Against this background, it is convenient to organise the remainder of the chapter in three sections. Recognising that the central challenge remains that of transforming traditional agriculture, the first deals with the critical issue — the role of that sector. How is it to be set in motion, as it were? And as it begins to experience sustained growth and change, can it move the whole economy? In the light of the answers to these questions, what — is the problem for the second
section — are the respective roles of the market and the state? And what of Ethiopia’s international economic relations? That question is tackled in the last section.

1. Agriculture as a leading sector

A clear and consistent shift in economic structure has been one of the features most regularly associated with the economic transformation. As income per head rises the share of the labour force engaged in agriculture and the proportion of the gross domestic product originating there fall. This is the evidence of cross section studies and of the historical experience of the now developed market economies. True the rates of decline have generally been greater with respect to labour, have varied across countries, and have so given rise to variations in the time taken to reach a given agricultural share in total output (from some more or less arbitrary starting point). Decline itself, however, has not been in doubt.

Nor is it difficult to explain this phenomenon. The demand for food is price and income inelastic, as is the demand for agricultural goods more generally. And if the demand for a sector’s output is income inelastic, the revenue it attracts in the market must grow more slowly than the gross domestic product. Thus its relative contribution to value added must fall. Moreover, if productivity increases more quickly in the sector in question than in the whole economy, the long-run terms of trade will turn against it. The failure to keep pace with general income growth and the adverse movements in the domestic terms of trade combine to induce resources to move from agriculture to the more rapidly growing sectors. Such at least has been the story in the now developed market economies.

In these, and in developing countries that have made substantial economic progress, marked agricultural growth has gone with, where it has not gone before, more general increase in output. Thus though the transition to modern economic growth is often taken as constituting an industrial revolution, the evidence is clear that it is more than that. And the importance of agricultural improvement is seen not only from the economic history of those countries that have made the transition, but from the no-longer-deniable fact that in those developing countries where agricultural output has stagnated there has been little overall economic progress. This would, of course, not have surprised Adam Smith, but it is awkward for those who would unduly — or, more precisely, unwisely — encourage industry in the early stages of development.

Superficially there may seem to be a contradiction between the insistence on the importance of agricultural progress and the evidence that the relative importance of the sector declines as the economy grows. The appearance of contradiction quickly disappears, however, on close examination. Indeed, merely to repeat that the decline is relative takes much of the sting out of any suggestion of paradox. The truth is that both the need for early growth and the relative fall are important. To some extent,
however, the difference between the two is that between the key and the open door that lead to freedom. Passing through the door may be the richer and more exhilarating experience, but finding and using the key is the necessary first step. To drop the metaphor, the difficulty hitherto with much theory and practice has been that the initial importance of agriculture has been overlooked or misunderstood. And policy conclusion has been drawn, as it were, only from the fact of relative decline.

As a result, the agricultural sector was seen as, at best, a passive participant in the growth process. *Faute de mieux,* it was an important source of early surplus. And it could provide labour and capital and perhaps even some demand to other, more dynamic sectors. In a word, however, agriculture was there to be squeezed. Yet it does not take much pressure before there is little left to exploit in a traditional and stagnant sector. Moreover, even where — as perhaps in Ethiopia — the sector is not quite squeezed dry, relative neglect and wrong-headed interference can still lead to disaster. Failure to recognise the full and crucial importance of agriculture in poor countries is unlikely to lead to rapid and sustained growth. And, as just hinted, there is a great difference between the contribution to general progress that may be expected from a dynamic agriculture and the dragging effect of limited increase or even decline in farm output.

Sounder insight on the part of governments and economists has brought more attention than hitherto to the process of agricultural transition itself, as well as leading to greater consideration of the interactions between agriculture and other sectors. In the beginning, agriculture is, of course, relatively large and primitive. For the sector and the whole economy, the question then is: how is sustained agricultural growth to get started? Leaving that question unanswered for the moment, it may be noted that once growth is underway links develop with the rest of the economy, normally through markets. Since, for example, the markets for labour, credit and capital are unlikely to be nationally integrated in the early years of modern economic growth, disequilibria are to be expected. Market imperfections will be reflected in large sectoral differences in such things as wage rates and the terms on which credits may be had. Thereafter, the story of agricultural transformation unfolds as one of decreasing market imperfections, and may be said to end when agriculture becomes but one industry among many. Except perhaps that this never quite seems to happen. The transfer of resources out of agriculture can be painful, and, as Adam Smith suspected, there is widespread nostalgia for farming as a way of life. Moreover, in the developed market economies the scattered nature of the rural populations defeats the claims of electoral equity to give them more than proportionate representation in the policy-making assemblies. And from these ingredients farm lobbies are born — to the great detriment of allocative efficiency.

This last chapter of the story is not without relevance to Ethiopia, and it will be necessary to return, if briefly, to the attempt to write an efficient if not generally happy ending to it. The main Ethiopian concern has, however, to be with the early pages of the book. How, is the immediate question, can a substantial increase in
agricultural productivity be obtained? And what would the consequences of such increase be? Related to this, what are the positive functions of agriculture in economic growth? The detail at least of the answer to the last question must vary according to particular circumstance. In general, however, a progressive agriculture may be expected to ensure that food supply keeps pace with population growth (and thus and from productivity-induced reduction in cost help control inflation); provide materials, labour and capital to other sectors; boost exports; and supply a growing market for wage goods and manufactured agricultural inputs. The weight attaching to these elements will vary with time and place, so that there could, for example, be some trade-off between domestic food production and agriculture's contribution to exports — either directly in primary form or through the manufacture and foreign sale of agro-industrial goods. In some circumstances, however, both contributions may be vigorously pursued.

The critical requirement is, of course, that of raising agricultural productivity. And the achievement of this in Ethiopia is a function of the conditions there and of the scope these offer to the market and the state respectively. For this reason much of the discussion is best deferred to the next section. Here it is convenient to recall some of the basic characteristics of the Ethiopian economy, and — it being assumed that sustained productivity increases in peasant agriculture are possible — to consider how more efficient agriculture could help transform the economic prospects of the country and its people.

In this regard, the central fact is that some 80 per cent of the population is to be found in widely-scattered, largely self-contained, and very poor rural households. Such livelihood as these provide comes from primitive agriculture, which owes little to modern science and technology. Nor could things easily be otherwise. The stock of man-made capital is extremely small, and human resources have been little shaped by education or training. They are not even physically well-nourished. And land — of varying fertility and mainly as nature and unscientific cultural practices have made it — is almost the only economically confirmed natural resource. For most, traditional, small-scale agriculture is the only possible occupation. And, as the prominence of coffee exports confirms, Ethiopia's comparative advantage can only lie in the combination of unskilled labour and unimproved land, with the effects of climate being embodied in the land.

In the circumstances described, the economy is certainly not in equilibrium. Differences in factor rewards that would not survive in an integrated economy are to be expected; and in the absence of truly national markets for consumer goods so are "abnormal" differences in selling prices, including those of food grains. The imperfections of the economy recalled, it is instructive to consider what would happen if, by some unexplained miracle, the economy were suddenly to become well-functioning — with, however, no change in the size and character of the resource endowment or in the state of technical knowledge. A reallocation of resources would ensue and continue until identical factors everywhere earn the same
reward, and factors are employed in the various lines of production up to the point at which the marginal value product of a factor is equal to its reward. What would this entail? The extinction, is the answer, of presently loss-making activities and the expansion of those that are profitable. From information now available, the present manufacturing and state farm sector would shrink, and output from the peasant sector would expand. Capital would be spread much more thinly than at present, but would command higher returns as its different use enabled peasants to improve their implements and their storage facilities, within the limits of now known technology, at the same time as they employed better seeds and fertilizers.

Output, the gross domestic product, would increase as a result of reallocation. Once the shift in resources was complete, however, growth would stop. Where, would be the question once more, is additional, continuing growth to come from? From — runs the broad answer — an increase in the capital stock, growth in the working population and technical progress. That begs, of course, the question of where these things are in turn to originate in a traditional society. Leaving that aside, more instruction may be had from dwelling briefly on the growth process in a competitive economy, where growth in income may be specified as

$$y = U_k + Q_l + r$$  \hspace{1cm} (1)$$

and so growth in income per head becomes

$$y - l = U_k - (1 - Q)_l + r$$  \hspace{1cm} (2)$$

with $y$, $l$ and $k$ being the growth rates of income, the working population and the capital stock respectively, $r$ the rate of technical progress, and $U$ and $Q$ the share of profits and wages respectively in the national income.

On this view, income per head is raised by the growth of the capital stock weighted by the share of capital in total output, and by technical progress. It is, however, depressed by the growth of the labour force multiplied by one minus the share of wages in the national product. Equation 2 thus gives expression to the familiar proposition that changes in the standard of living result from a conflict between more capital and better technology, on the one hand, and diminishing returns to labour as it is increasingly applied to fixed amounts of capital and land, on the other. It is, however, possible to go further if the implicit assumption of constant returns to scale is replaced by that of increasing returns. With technology constant and the marginal product of land positive, the growth of income is given by

$$y = U_k + Q_l + Z_n$$  \hspace{1cm} (3)$$

where $Z$ is share of the national income appropriated by land rent and $n$ the rate of growth of natural resources. If there are constant returns then, as is well known,

$$U + Q + Z = 1$$  \hspace{1cm} (4)$$
and, with $U$ and $Z$ or $U + Z$ positive, $Q < 1$ so that, as already seen, a high rate of population growth has a depressing effect on the growth of income per head. With increasing returns, however,

$$U + Q + Z > 1$$  \hspace{1cm} (5)

so that $Q$ may be greater than one. If it were the tendency to diminishing returns would be offset by scale economies. In given circumstances $Q$ is the more likely to exceed unity, the greater the economies and the smaller the relative shares of profits and rent. In the extreme, if capital and land were both free goods — and hence so greatly used that their marginal products were zero — a growing population (given increasing returns) would boost rather than depress income per head.

What light does all this throw on the rapid growth of population and labour force that now characterises Ethiopia? If the honest answer is not too much, nevertheless the presentation thus far points the argument in the right direction. What are the prospects for scale economies, and what is likely to happen to the share of profits and rent in national product? Strictly speaking, scale economies refer to output outcomes associated with identical and simultaneous proportionate increase in all inputs. If these are, say doubled, does output also double or does it multiply by more or less than a factor of two? This is difficult to answer because neat and exactly proportionate changes in input are rarely observed. The general belief, however, is that in agriculture returns to scale tend to be constant. And certainly in the Ethiopian case there is no evident reason to believe that doubling, as it were, the peasant production function of Chapter 2 above would do other than double output. Moreover, when farm size is substituted for scale — so that the effects of scale are not clearly separated from those of varying proportions — there seems to be an inverse relationship between size and productivity, at least over the relevant range of technology.

As the economy expands, of course, manufacturing will grow in relative importance. And scale economies are a significant feature of industry in general. Questions arise, however, about the timing and pattern of industrial development, so that, to anticipate, not too much hope should be pinned on manufacturing. Scale economies are not equally spread across industries, and those most suitable for Ethiopia as general development unfolds are not those in which increasing returns are most prominent.

Nor is there much prospect of capital becoming a free good in Ethiopia. Capital is now so scarce that efficient use of a growing stock should be associated with a significant marginal product for a considerable time. And it is possible that the share of profit in income could rise. Land is more complex. It is widely believed that there are many cultivable areas still to be brought into production. Leaving aside the cost of making this land available, the marginal product is low with present techniques and could decline with expansion. Of itself, however, this is hardly reason to expect population growth per se to boost output growth. On the contrary future living standards are best seen as depending on a grim race between the
progressive and related activities of increasing the capital stock and promoting technical progress and the depressingly high rate of population growth. If present techniques were simply applied until all suitable land had been brought into cultivation, diminishing returns would set in thereafter and living standards would fall. Moreover, as Adam Smith observed, productive employment — for most in Ethiopia the only claim on income — is a function of the capital stock. The high rate of population increase is a severe strain on the economy's ability to widen capital sufficiently to maintain present standards. And the real challenge is to deepen capital so that these miserable levels may be raised. The productive employment of Ethiopia's rapidly growing labour force is a major issue.

Before turning to this, it may be noted that the above analysis applies to a closed economy — or at least ignores international trade. Redressing that balance is largely a matter for the last section of the chapter. Here the important point is that the extended Heckscher-Ohlin theory does not challenge the presumption that, at its present stage of development, Ethiopia should have much of its resources in agriculture — even if it aspires to have some manufactured goods, since these are most efficiently obtained through primary exports. Nor does the theory counter the view that much of a growing capital stock would be most efficiently deployed in promoting agriculture, at least until all available land is under the plough. However it is explained in detail, trade depends on comparative costs of production. These depend on factor prices — the real wage rate and the real cost of capital services — and the choice of techniques. In Ethiopia the real wage rate is, however roughly, determined by rural labour productivity, and so is rather low. It has, however, been higher than it should have been in manufacturing. And since this has been capital-intensive and inefficient (and so using more capital and more labour than was technically efficient), unit costs have been high. Techniques of peasant production have been — and are — primitive. They have incorporated little scientific advance, and thus have been backward in comparison with those used elsewhere. They have not, thereby, been technically inefficient. In Ethiopian peasant production small amounts of capital are combined with relatively small plots of unimproved land and a few unskilled years of labour. The size of the output is not startling, but unit costs are strikingly low. Nor as has been seen, should it be difficult to improve productivity greatly at relatively little cost. There is much economic mileage yet to be had from Ethiopian agriculture.

Thus far the emphasis has been largely on supply. This is appropriate enough in a discussion of economic growth, but it is incomplete. Demand also matters, even abstracting from the problem of ensuring that aggregate demand is sufficient to employ the available resources fully. Thus changes in the composition of demand can make specific resources, previously sunk in particular lines of production, more or less obsolete. And they give rise to shifts in income elasticities. Thus if agriculture is to be the prime mover in a low-income society, the sequence has to be a demand-consistent increase in agricultural productivity and incomes leading to
further boosts in demand for agricultural and non-agricultural goods. Examination of the initial productivity increase is left to the next section, so that attention is concentrated here on what happens after this has been achieved.

If, then, it be accepted that ways can be found to stimulate peasant productivity, what follows? Professor Mellor has been one of the most prolific and persistent advocates of a positive role for agriculture. Even he has, however, cautioned against expecting too much in this regard. Since the maximum obtainable growth in agriculture — say 3 per cent to 5 per cent per year — must often seem modest in desperately poor countries, agriculture alone cannot meet high hopes. Rapid and sustained overall growth in output and employment calls for high rates of growth in non-agricultural output. Such certainly has been the experience of countries that have recorded high rates of increase in income per head over long periods of time. This experience does not, however, call in question agriculture’s role as a prime mover.

That the economic transformation needs first a marked growth in agricultural output and productivity, and that small farms are more efficient than large means that equity and efficiency can be served simultaneously. Since they are (or should be) the main instrument of agricultural increase, so the small farmers are the main beneficiaries. There is, of course, a snag. Higher output comes from increased investment and improved techniques of production. These need not preserve the labour-output ratio, particularly since much new technology has not been labour-intensive. Nor can all farms stand the pace. Those in unfavourable locations or inefficiently managed may go under. Thus the net consequence of change may be that, though agricultural incomes are rising, farming cannot even provide enough employment to absorb all of the population increase in farm households. The question that then arises is whether the boost that agricultural progress gives to the whole economy can efficiently fill this gap.

For this to happen, it has to be possible in Mellor’s view to answer yes to three questions. Can productivity be increased and so lead to higher output? Can effective demand for agricultural goods keep pace with the increase in output? And can a dynamic agricultural sector make a sufficient contribution to the growth in effective demand for the output of other sectors? The increase in productivity may, for the moment, continue to be taken for granted. What can be said of the other two questions in Ethiopian conditions?

If agriculture is to play the role described here, it must, beyond its direct contribution to output and employment, have a major indirect impact on non-farm growth and employment. And this must come from the pattern of expenditure associated with the rise in agricultural income. This has to lead to a growth in demand for non-farm outputs which is large in aggregate and efficiently satisfied by labour-intensive and geographically widespread production. In this regard it is an advantage that Ethiopian peasants are widely scattered, though as will be seen
significant growth in output is likely to be associated with an increase in the concentration of production. Still, getting more output will depend, *inter alia*, on how the peasants respond to incentives. It would consequently be useful to have robust estimates of the short-run and long-run price elasticities of supply for food and agricultural crops more generally. The best available are some World Bank calculations, which are perhaps vitiated by having to rely on consumer rather than producer prices. These put the short-run and long-run coefficients for cereals at 0.147 and 0.264 respectively, with the corresponding figures for pulses being 0.40 and 0.54. The data are thought to be broadly in line with those for other African countries, and they are not too discouraging, especially since they could be too low. The estimates were derived from figures for periods of stagnation in which there was little increase in yield.

How are peasants and others in the rural areas likely to spend their higher incomes? In the present state of knowledge, this is unfortunately not a question that can be answered precisely. Nevertheless, some guidance is available. And in this regard it is convenient to begin with the income elasticities of demand that are presented in Table 19. The information on which the table is based comes from a consumption and expenditure survey carried out in the rural areas (excepting those of Eritrea and Tigre) between May 1981 and April 1982. This covered 12,000 households, and the areas within the jurisdiction of 500 Peasant Associations were the primary sampling units. The coverage was thus wider than the peasant household, but this was nevertheless the main source of data. To derive the elasticities, the function

\[ X = a + bY \]

was first estimated, with \( X \) being the expenditure on the good in question and \( Y \) the household income. The estimation was done by regressing \( X \) on \( Y \) for a cross section of 22 household income classes. The coefficient, \( b \), was then multiplied by the mean of \( Y \) divided by the mean of \( X \).

As usual, the data are fragile. They reflect expenditure patterns in a much distorted economy, and it has to be remembered that income cannot be spent on goods that are not available. It has also to be remembered that even the better-off households were not that affluent: the annual income in the top class was U4500 for a five-person household. For what they are worth, the figures show that there would be no sharp decline in the demand for agricultural produce as incomes rose. Pulses and vegetables would, however, see their sales increase more slowly than cereals. And the growth in demand for meat and dairy products would be just about proportionate with that of income. Sales of ready-made clothing would also just about keep pace with income growth, and those of footwear would do even better than that.
These results are too limited in coverage and too fragile to sustain dogmatic argument. They refer mainly to peasant households, so that allowance has to be made for the possibility that the expenditure patterns in non-farm rural and urban households would be different. In particular the urban elasticity of demand for foodstuffs may be expected to be lower and that for dairy produce and manufactured goods higher than shown in Table 19. Against this, however, the urban elasticities will — on Mellor’s evidence for India — be the closer to those of rural people the lower the urban income 16. And in Ethiopia there are many urban poor. Thus, though it has again to be emphasized that the Ethiopian data derive from a period of stagnation and pre-date any major transformation of agriculture, the signs are encouraging. With growth securely underway, there could well be changes in the structure of Ethiopian agriculture — with dairy farming growing in relative importance after a (perhaps considerable) time, but the overall demand for farm output is likely to hold up; and the increasingly rich farmers are likely, through their expenditure patterns, to give substantial support to the growth of manufacturing.

Nor is this all. The present poverty of the rural household, and the reason for this, have also to be recalled. The low level of specialisation will disappear as incomes rise. Production that now, perforce, takes place within the household or not at all will become the subject of market transaction. As a result, the range and number of rural craftsmen will increase and so provide an example of the ways in which non-farm employment will grow with farm incomes. The demand for rural services will also rise with income, so that rural employment will be additionally boosted. Moreover, a substantial part of the growing demand for manufactured wage goods and farm inputs probably would, in the interest of economic efficiency, be satisfied by rural-located production.

In this regard, general and specific considerations combine to yield cautious optimism. An important general factor is that there is often a (profit-maximising) conflict between economies of scale in production and the rise in distribution costs associated with a central location for a single, relatively large factory serving a widespread market. And the distribution costs are likely to be especially high in Ethiopia. Moreover, even when attention is confined to production and the making of profit the dominant concern, there is encouraging evidence. Thus relevant studies of three industries that are likely to expand with income in Ethiopia suggest that such expansion could take place in rural areas. Making cotton cloth in Ethiopia is most profitably organised in a modern factory using labour-intensive techniques. There is, however, no irresistible reason why such a factory has to be in a large town. Economies of scale are not greatly important in shoemaking. Thus though the craftsman cannot compete with the factory, the demand for shoes in Ethiopia could be efficiently met by, say, a dozen widely-scattered factories, each located in a small town. And the small-scale, labour-intensive, open-pan sulphitation technique would be an economic way of meeting the growing demand for sugar, which is necessarily a rural industry 17.
The evidence is, of course, far from complete, but it is encouraging. Sustained increase in agricultural output, productivity and incomes would result in patterns of demand and could result in patterns of supply that would combine economic efficiency and, if not universal equity, the most sustained attack possible on poverty. Such an outcome clearly is to be prized. It has also, however, yet to be brought about, so that the question of how this is to be done remains. And in this respect the most important step is the first one — that of raising farm productivity. It is time to consider how this is to be done.

2. The market and the state

In a truly well-functioning economy the market would automatically solve many problems that are often seen as a challenge to public policy. Since this often fails, efficient markets would clearly be a boon. In Ethiopia, for example, these could decide on the sectoral allocation of resources, and so achieve an optimal distribution across the production of tradable and non-tradable goods. And, in doing this, markets would settle the question of the relative importance of domestic foodstuffs and of commodity exports respectively.

Yet there are at least two reasons to question a policy of complete reliance on markets. There are important tasks that even smoothly working markets are unlikely or unable to perform; and in Ethiopia markets are likely to be imperfect. The extra-market tasks are considered below. Here the likelihood of market imperfection may be illustrated by recalling that the pre-1974 market distribution of food grains was marred by monopoly. Thus Professor Maurice de Young offers data that suggest that an investment in grain trading of Eth. $2 300 in 1957 would have generated an income stream over the subsequent seven years with a net present value of Eth. $3 010, at a discount rate of 8 per cent. The associated internal rate of return would have been 40 per cent. A major source of these handsome profits was the ability of speculators and merchants to buy cheap and, by holding, sell dear. This ability in turn resulted from market imperfections — in the spread of information, the skewed availability of storage, and biased access to inadequate transport. These factors reduced the incentive offered to the peasant, and rural and urban consumers were "taxed" to the extent of the monopoly profit.18

For a time such monopoly profits can seriously distort resource allocation, to the detriment of the directly productive sectors. In a market economy, however, the "excess" profits will sooner or later be largely eroded. They do not, therefore, constitute a reason for eschewing the market — though if they look like being long-lasting they may give rise to questions about ways in which the market can be improved. Still, the fact remains, imperfection in the distribution of grains is not a reason for saying no to a market system — any more than are imperfections in the
factor and other commodity markets. Moreover, in addition to the reasons already rehearsed in favour of the market in Chapter 3, there are specific reasons for advocating widespread use of the market in Ethiopia.

The first of these takes the form of a spectacular example of market success. Some indication of the scope and character of this, and of the excitement it occasioned, is captured in the Third Five-Year Plan, which reported that spontaneous development has occurred during the last five years in the north-west corner of Begemdir province in the Setit Humera sub-district. This is the border lowland area below the Tekkeze (Setit) river. Cultivation of these flat, semi-arid plains (with about 500 to 700 millimeters of annual rainfall) has grown in the past five years from almost nothing to possibly 140,000 hectares. The cultivation is on dark cracking clay soils approximating the "black cotton" type, which are quite promising, though heretofore almost unused by the sparse population of semi-nomadic herdsmen. Dry farming is in large blocks of 400, and even 1,600 or more hectares. Wheels tractors are used with wide-level discs for land preparation. Tens of thousands of migratory workers, mostly from Tigre and Eritrea, are used for sowing, weeding, and harvesting of sesame, cotton, and sorghum. The significance of this spontaneous development for Ethiopian commercial farming enterprise can hardly be overstated... The area may well become a new and major support of the agricultural economy of Ethiopia. Capital investment costs... are far lower than for either major irrigation projects or large-scale government resettlement. Returns tend to be much higher and quicker... This development does not require truly intensive surveys, massive (public) investments, or intricate regional administrative arrangements. Supporting services by government agencies are the key to maintaining the expansion 19.

The development of Setit Humera was associated with a marked increase in Ethiopian exports in oilseeds in the early 1970s, when these were second only to coffee. Since then its fortunes have declined for reasons that include its location in an area riven with strife. Nevertheless, it attracted attention and development effort throughout the 1970s, and its day may come again. In the meantime it should be emphasized that its economic discovery and pioneering improvement were brought about spontaneously — that is by market forces. In the early 1970s agricultural entrepreneurs were recruiting their labour forces not only in Eritrea and Tigre, but in the streets of Addis Ababa. And, as just seen, even in the judgement of the planners these profit seekers needed no more than supporting services by way of help from the government.
One swallow does not, of course, make a summer. Nevertheless the opening up of Setit Humera was a major event. It showed that even the very imperfect market system of the day was capable of promoting growth by stimulating new ventures and the use of new techniques where these were thought profitable. Indeed in the relevant period large-scale commercial agriculture was generally expanding as a result of the private pursuit of profit, and hence in keeping with Ethiopia’s comparative advantage. Food grains, it is worth noting, were not produced on large-scale farms.

If the past, private and so market-driven expansion of large-scale agriculture is one reason for believing that a return to a market system would be advantageous, the continuing importance of the small-scale peasant farmer is another. The point here has been well prepared by Timmer. Thus

farming is an undertaking that involves many decisions. What crops to plant, what inputs to use, when to plow, to seed, to cultivate, to irrigate, to harvest... What is unique about agriculture is that literally millions of individuals and households are making these decisions themselves. Changing agricultural production decisions to increase food output is an entirely different process from changing decisions about how much steel or cement to produce. In most countries a dozen or so individuals could take direct action which would lead to a 10 per cent increase in steel output in a year, and their decisions would be decisive.

Nowhere, not even in socialist countries, can a similar small group ... raise food production by 10 per cent. A small group of planners, or the president and the cabinet, can decide they want food production to rise by 10 per cent. They can tell the food logistics agency, the ministry of agriculture, the newspapers and the agriculture extension agents they want food production to rise by 10 per cent. But they cannot increase food production by 10 per cent themselves. They must also convince the millions of farmers... to want to increase food production by 10 per cent and make it in their self-interest to do so. The vast number of agricultural decision-makers implies that there are simply too many to reach directly with either pleas for co-operation or police power. Farmers must see the benefits of higher output for themselves.

And, it may be asked, what better way than the market to allow the individual farmers to take their own decisions within a framework that nevertheless imposes an effective economic discipline on these decisions? Viewed in this way, the case for the market virtually makes itself.
It may be objected that the market is inequitable. But so, of course, is nature. Climate, topography and soil fertility are not uniform throughout the country, so that there is no natural basis for arranging that progress is equally shared. Detailed and comprehensive study has not been made of Ethiopian soils. Enough is known, however, from investigation and experience to confirm that, as of now, some farmers are naturally better placed than others. The efficient production of cereals, for example, is concentrated in relatively few areas — though population distribution has to some extent accommodated itself to this fact. Still, a resumption of market operations is likely to increase the concentration, which it should be noted central planning did little to diminish. If inputs are to be available on the basis of effective demand, those farmers who are already relatively efficient are bound to be well placed. And cumulative causation would augment their advantage and, other things equal, increased inequality could result. Would that matter?

Poverty in Ethiopia is now so deep and so widespread that it is not clear why much importance should attach to equity. What counts is not distribution, but growth — at least to the point where output shares are worth disputing. And it is difficult to see how things could be otherwise. As has been seen, state effort to improve distribution through control of marketing has served neither equity nor efficiency. Moreover, over the last 30 years intervention itself has had to be selective, whether the regime has been market-led or dirigiste. In relation to what has to be done, the size of the peasant surplus (together with any genuine augmentation from abroad) is still small. The argument for concentrating extra resources where they are most likely to be used well is irresistible. And the need for concentration has certainly been well reflected in the package programmes that have been at the heart of agricultural policy for much of the time since 1960. And this remains true even when it is acknowledged that part of the hope has been that success in package areas would have a demonstration effect and lead to emulation elsewhere. No-one, however, could have seriously believed that emulation would result in equality.

In Ethiopia if the market is good for growth, it should not be shunned in the interests of equity. The fragile indications of the previous section are that market-led growth based on a multitude of small farmers could result in a pattern of development that would take as much care of equality as anyone could reasonably hope to see. It is not necessary to go beyond that. And the risk that the actual market outcome may be less equitable than is hoped is to be taken, particularly since interventionist effort to improve equity is likely, to repeat, to fail and hence to limit growth to no avail. Some who would probably accept this still want to argue that the market — "getting the prices right" — is not of itself enough. In so far as this caveat is simply asserting that there is a role for the state in a market-led system, it is unexceptionable. It then still begs the question, of course, of what that role is to be. And there is a risk that what the caveat really means is that the state can tackle every market failure. Given this, it is useful to approach the role of the state through clarification of the origins and character of that role.
In this regard it may be helpful to rehearse for the last time in this study some of the reasons why the state cannot hope to supplant the market in Ethiopia. This may be done by considering briefly a recent neo-Ricardian analysis that recognises that greater food production is necessary not only because it would guard against famine, but because it is central to general economic growth. The analysis distinguishes between food surplus and food deficit areas; and it would encourage — by non-market means — increase in output in the former, and ration food in the latter. By rationing or otherwise, food prices would be kept within the reach of the rural and urban poor. These desiderata would call for a body to purchase and distribute food grains and a price board that would fix the structure of relative prices in surplus and deficit areas and so, inter alia, seek to move production in favour of "desirable" crops. Relative prices would not, however, be such as to punish the more productive areas and peasants. Nevertheless, they need not carry the incentive weight that they would in a market system. Higher production would be encouraged by increased price stability. It would also be stimulated through cost reduction resulting, for example, from input and storage sharing, more rational use of labour through land consolidation, and the elimination of consumption-debt cycles through monitored credit. Food supply would be spread as evenly as possible; and attempts would be made to steer rural industry toward the food deficit areas.

These reasonable-seeming aims would, of course, mean an expansion of the AMC or some replacement body with an enlarged remit and heightened powers. Yet the AMC has so far failed to meet its existing, more modest objectives. Its high-cost operations have offered little incentive to the peasant; have been marked by wide temporal and spatial variations in price; and have consistently been unable to meet procurement and supply targets. And these and other difficulties have not been accidental, but intrinsic to the attempt to replace markets with administrative fiat. Impersonal markets are more efficient than any committee in the co-ordination of the myriad of demand and supply decisions that have to be made if resource allocation itself is to be efficient. Even if the committee were unusually wise and sat in permanent session, it would be unable to command or comprehend the information flows that the market digests more or less effortlessly. Moreover, a talented committee in permanent session would have very high opportunity cost.

It is no answer to say that proposals to enlarge and strengthen the AMC are grounded in equity as much as in efficiency. As has been seen, these are not independent of each other. Equality of distribution only makes sense if there is something to distribute, so that efficiency remains the central issue. And there the trick lies not in rhetoric, but in achievement. Thus there is no reason to suppose that an enlarged and more ambitious AMC would succeed where a more modest body has failed. There may be grounds for improving the staff situation at the AMC. That depends on priorities, and on whether there is a role for the Corporation in the pursuit of market-led growth. If there is, that would be no reason to offset improved staffing by a self-defeating increase in the scope of the AMC's work.
Time has been spent on this issue in order to deal once more with the argument that market failure is so great that the spontaneous price system has to be superseded. Theory and experience, including that of Ethiopia since 1974, argue otherwise, so that this particular question is taken here as settled. It is, however, more difficult to deal with a different line of argument. This accepts that "getting the prices right" is necessary, but, as noted above, urges that it is not enough. Government action is also needed. Since Adam Smith accepted as much, what, it may be wondered, is the problem? The short answer is: obtaining a much-needed clarity on the role of the state, and avoiding the trap of believing that for every single market failure there is a government solution. Thus it is sometimes argued that if the price system is to deliver growth, stability, and equity in agriculture, then the role of government may be different from what it has been in the past in, say, sub-Saharan Africa, but it has also to be greater. More public attention and expenditure are required in relation to water and irrigation (and other inputs); research and innovation; information flows; productivity-boosting improvements in and extension of health and education provision in the rural areas; the improvement of access to credit and capital. This list can be extended. Nor need it be confined to agriculture. It certainly, however, should not be considered without reference to what the government is otherwise doing. If there are already state factories as well as state farms, if there are state agencies for distribution and the provision of inputs, and if the central bank is operating exchange controls and import licensing, where is the administrative talent to come from that will efficiently improve agriculture? Where indeed is the "right" attitude to be found? And this question remains even if the dirigiste structure is being dismantled as part of fundamental policy reform. To specify a list of desirable government actions may simply beg the question of whether the government can deliver on the list. Nor is this problem resolved simply by increasing the detail of the list — by specifying precisely the measures that should be taken to increase access to rural credit and showing how such increase is likely to lead to higher output.

In this regard, Streeten has an impressive catalogue of things that policy must do if people are to be properly fed. Market-determined prices have to be supported *inter alia* by insights into the household division of labour and a detailed knowledge of nutritional needs and processes. And he claims that raising prices will serve no purpose if the farmer is not guaranteed a range of inputs. Policy means, of course, intervention. The point here is not that such intervention is necessarily misplaced. Merely to call for it, however, is not to assure its delivery — not even when the call is supported by eloquent argument to establish the desirability of the call being answered. Nor do call and eloquence convince that the particular course favoured would represent the best use of scarce public resources. Policy should not be based on question-begging. Nor should the exploitation of the market be made conditional on the (possibly ineffective) pursuit of optimal support by the state.
These dangers can be avoided if it is accepted that economic growth is basically a task for markets. The scope for government is then largely to be found in impatience — in the suspicion that limited but appropriate state action may quicken the pace. The daunting challenge is then to determine what governments can best do and what steps they have to take in this regard. This is, of course, easier said than done. And it is tempting to take refuge in the notion of public goods. These are, however, not entirely easy to define and — even on Adam Smith’s relatively relaxed definition — are less easy to discern. At low levels of development small-scale farmers would not find it profitable to build modern roads or to engage in research and development. Nor would any private investor in an economy that is dominated by small farmers. In the absence of intervention, however, and as the economy grew, both road-building and research would at some stage become profitable. Hence perhaps the significance of impatience, and hence also the importance of not taking definitions too seriously. What matters is acceptance of the primacy of markets. Government does not boost these by acting on every demonstration of market failure or — related to that — every paper exercise that "proves" that more state-supplied this or that would help. Government should act in keeping with its comparative advantage and only when it is clear that action has a reasonable chance of being successful.

The market, then, is the main agent of economic growth. And in Ethiopian conditions reliance on this may well — because of the central importance of peasant agriculture — yield a generally acceptable pattern of income distribution and make a substantial contribution to the employment problem. To repeat, however, poverty is now deep and widespread, so that if there are government actions that can increase the rate of growth it is important that these be taken. What, the question becomes, can the government do within the exacting framework just described?

Give, is the first answer, more attention to agriculture than in the past. That much may be obvious. Less obvious perhaps and certainly even more important is the need to make that attention more careful than before. If it is to help rather than hinder, policy has to be based on a detailed understanding of the agricultural sector. What, is one question, makes the peasant tick? What conditions does he or she confront? What are the technical conditions of production? How do these vary across different areas? How can they be improved? What are the costs and benefits of alternative improvements? These are among the questions that need continuously revised answers. And the general importance of the atomistic structure of the industry in a profit-maximising context is again well captured by Timmer, who notes that

if agricultural decision-making is in fact based on rational assessments of highly heterogeneous environments, substantial knowledge of micro environments is necessary to understand the impact of policy interventions or technical change on the agriculture sector. Designing new technology and fostering its

163
widespread adoption is primarily a public sector activity because of the relatively small scale of individual farmers, but the success of any given technical innovation depends on the private decisions of those same multitudinous farmers. Understanding the source, dynamics, and impact of technical change in agriculture is thus a major part of understanding the agricultural transformation, a process vastly complicated by the smallness of scale, geographic dispersion, and heterogeneity of the environment, both economic and ecological, that is characteristic of agriculture.

This message surely enjoins caution. Whatever else, agricultural policy should be well-prepared. It should be based on a command of detail. In Ethiopia both the command and the detail are at present weaker than is desirable, so that improving them is an important and urgent task. In the meantime the weakness in these regards suggest that it is imprudent to go much beyond the broad lines of policy and moving in a relatively few obvious directions. Given this, what can be said about the role of the Ethiopian state?

If the government is to contribute to market-led development it is important that it should accept the pre-eminence of the market. It should also have an understanding of how markets work, including of their comparative advantages and disadvantages. Related to this, government should be objectively informed of its own strengths and weaknesses. Aware of general and specific resource limitations, the efficient state will appreciate the need to order its priorities, to do first those things that only it can do and to leave to the market matters that it efficiently handles.

From these seemingly trite observations a number of important conclusions follow. In order to free resources for its essential tasks (and for work in the private sector), the government has to surrender all that is inessential from its perspective. In Ethiopia this means that there should be a virtually complete retreat from direct production. Manufacturing industries should be sold to private interests or closed if their inefficiency and poor future prospects makes such sale impossible. Commercial, large-scale farming should be reintroduced; and state farms that cannot thus be sold should be broken up and returned to the peasants. Nor should the state continue to run the distribution system or be responsible for the direct provision of farm inputs on a large scale. Moreover, once it is accepted that the economy is to be market-driven, there is no need for a large planning staff; and employment can also shrink in such agencies as the Ministry of Industry.

Once the decks have been cleared in these and other ways, what are the positive task for government in the economy? In general terms three areas are important: macroeconomic policy, the promotion of agriculture, and the expansion and improvement of the economic and physical infrastructure. Of these the stimulation of agriculture is critical and should probably receive most attention — here and in practice. Thus the detail of macroeconomic policy will not be discussed, nor will
much attention be given to infrastructure. Macroeconomic policy should aim to be neutral as between sectors and as between exports and imports. And the development of infrastructure should be based on at least crude cost-benefit analysis.

Where do the agricultural priorities lie? The paramount need is that of increasing productivity on the peasant farms. More precisely, the immediate need is to increase output. And this can come from taking more land into cultivation. As the example of Setit Humera shows, this can to some extent be left to the market — as can questions relating to co-operatives and resettlement. Yet when potentially promising land is presently unoccupied and untilled there is often a reason for its virginity. It could, for example, be unhealthy for humans or animals or both. Is rendering such areas habitable a public good? And would doing so be profitable on a rigorous cost-benefit analysis? The prospects are thus scouted rather than defined to indicate that realism has to be the order of the day, to register scepticism, and to reflect the possibility that the public opening up of virgin areas may not be an immediate priority.

Abstracting from differences in soil fertility, whether traditional techniques are used on old or new land they are unlikely to be long associated with growing output per head. Progress in this respect has to come from technical change. This gives high priority to agricultural research and the dissemination of research results. Over many years and across many countries, the evidence is overwhelmingly that agricultural research pays handsomely. The evidence is also, however, that the scope for the direct transfer of newly developed technology across locations is more limited than had been hoped. Thus Ethiopia is doubly handicapped. Work done internationally on crops of interest to it has been relatively small; and the results of the pertinent, if limited, work are not immediately transferable. It should be noted that this does not imply — for Ethiopia or in general — that research at the international centres has been useless. On the contrary some of the basic work — on genetic traits, for example — is transferable. It has, however, to be used in location-specific ways.

Research to be effective has to be based on much local study, otherwise its results will not be widely applicable and it will fail to give rise to outcomes that can be disseminated at the point of production. Local study has, therefore, to do more than underline the obvious — the need, for example, for more infrastructure, improved rural credit, and increased supplies of improved or better farm inputs. Even when it is obvious that improved seeds are important, there are many matters that have to be settled. What are the soil conditions? How should various seeds be used in combination with fertilizer and water? What kinds of fertilizer should be used? What should the balance be between small-scale and large-scale irrigation? How much variation is needed across districts, crops and indeed individual farms? And how is investment in technical change to be financed?
As already noted, Ethiopia has had an agricultural research institute since the 1960s. Doubts have, however, been expressed about its productivity. And since 1974 it has had problems in retaining staff. Rebuilding, extending and improving the institute is of prime importance. Until there is a large set of soundly-based location-specific studies the policy base will remain weak. And until crop research is carried out within this detailed framework it will fall short of what is necessary. Moreover, until there is an efficient extension service even useful research will have limited impact.

If markets are imperfect, the first best policy for government is to seek to improve rather than supplant them. In this regard, fitful attempts have been made in the past to develop market and crop intelligence systems. Reviving and expanding these would be a more effective contribution to growth than efforts to determine or control prices or to aspire to a monopoly in the marketing of food grains. It has, of course, been recognised that there could well be elements in the market system also. These are, however, to be reduced by improved information flows and perhaps — for a time — by a reformed AMC that operates as competitor of last resort. If the AMC were to survive it would make sense to give it responsibility for improving market and crop intelligence.

The average size of farm in Ethiopia is small, even on the standards of sub-Saharan Africa. Moreover, as population has been growing against a background of fixed land supply (at least to the individual Peasant Association), the size of land holding has been declining, almost certainly to the point where productivity has been impaired. This problem is part of the more general one of land ownership. Title to the agricultural land is at present vested in the state. Where should it rest in a market system? This is an important question because it bears on the size of holding and because of the importance of property rights in stimulating effort and technical change. Resolving the various issues involved is clearly a matter for close and detailed study. It will be necessary to restore the right to hire labour, and it is desirable that farmers should be able to change the size of their farm as a result of a market transaction. Two solutions suggest themselves. Either the state can become landlord or it can give or sell the land to the peasant. In the former case farmers would be free to increase or decrease the area worked simply by paying or not paying rent. Some would find it profitable to farm more land, others to work for wages. Economically a market solution would argue in favour of renting or sale, with the price being of course determined by supply and demand. Much pride has, however, been invested in the achievements of land reform, and in the improvement this has brought to the peasant. It would therefore perhaps be appropriate if peasants were simply given title to the land they now farm and also granted the right to sell their titles.

Thus far, emphasis has been placed on the critical importance of agriculture to the prospect of economic transformation in Ethiopia. Nothing, it has been urged, is more important at present than increasing the agricultural surplus. This requires
increasing productivity and hence technical progress on the relatively efficient peasant farms. And this in turn largely dictates the role of government, given the pivotal importance of the market. In the light of the scarcity of administrative talent, government has been advised to leave direct production to the market, and to concentrate its efforts on research, extension and improving the quality of the market. This, it has been acknowledged, has its flaws. The factor and goods markets are imperfect, information flows are often weak, and the provision for risk taking leaves much to be desired. Is there, therefore, more that government should do? And what should its policy be on the extraction of the surplus?

Not, is the dogged answer to the first of these questions, at the expense of the tasks already identified. Moreover, meeting the need for more understanding should itself be regarded as a priority. Nor should the likely response of well-placed peasants to clear prospect of higher income be underestimated. African households in general are believed to respond speedily to economic incentives. And there is no reason to think that Ethiopian peasants would be laggards in this respect. On the contrary, given the opportunities for increasing production — through modest investment, improvement in cultural practices, and somewhat better inputs — inherent in the present situation, prices which reflected demand and supply could bring quick and significant output response. And Ethiopia could be particularly well-placed in other respects to bring such increase about. Thus there is no alien trading class in the country, and foreigners have not traditionally provided competition in organising primary exports, so that factors that have been thought troublesome in West Africa, for example, are absent. Moreover, given that land ownership rests with the government, it should be possible to begin with a clean slate in another area that has been held to cause trouble elsewhere.

It is important to note that, even if it were desirable, it would not be possible to re-introduce the market to Ethiopia simply by restoring the status quo ante. Too much has changed. Among the changes that could make a substantial difference is the fact that most peasant households are organised in Peasant Associations. These service co-operatives have been insufficiently studied. It is, however, possible that — at least in some areas — they could contribute to the provision of capital and credit and provide insurance against risk on commercial terms. At present the Peasant Associations levy and collect tax from their members. This seems to be done in such a way, however, that what is paid is a flat-fee, land-use tax. In future, however, it will be important that the tax levied on farmers varies with income. It will also be important that the proportion of the agricultural surplus siphoned off in taxation is not so high as to weaken the incentive to produce. Indeed taxation policy in general will be an important area of government concern, and among matters that require review are the heavy charges currently levied on coffee exports. The detail of tax policy is beyond the scope of the present study. It is nevertheless pertinent to recall that revenue can be increased by enlarging the tax base as well as by raising the rate of tax.
The policy advice given here to government requires it to respect the boundaries of the market and to set these as wide as possible. Making the market more efficient is one of the aims laid down for the state. And it is in consequence advised to concentrate much of its effort on measures designed to boost productivity in the market. Encourage the enterprising peasant, runs the message, and growth will be as rapid as can be obtained. Apart from the formulation and execution of sound macroeconomic policy, government resources should largely be invested in agricultural research and development, infrastructure, health and education. Against the background of a command economy, this may seem like a minimalist programme. It is in fact a substantial one. And more importantly, it is likely to be a much more efficient one than that that has been followed in the last 15 years or so. If it were important, it could be shown that such a policy set could be reconciled with socialism. Consideration of this can, however, reasonably be postponed. In the meantime, in acknowledging that political economy has been largely — and deliberately — ignored in this study, it may be said that this need not be as hostile to markets as is often thought. As Jeffrey Herbst has noted, governments can count on much support if they give agriculture a fair crack of the whip.

Much of the discussion in this chapter has treated Ethiopia as if it were a closed economy. And though it was justifiably remarked at the beginning that this is more nearly true than the weight of trade in the gross domestic product would suggest, it is nevertheless not literally so. Ethiopia does have international economic relations, and these do matter. It is, therefore, time to consider them.

3. International economic relations

Ethiopia's resource endowment dictates that its comparative advantage lies in goods that are intensive in their use of unskilled labour and land. The intriguing, but speculative, suggestion made in Chapter 3 that Ethiopia may have advantage in the production of manufactured goods is not to be taken very seriously. The rest of the world would be unlikely to be moved by the suggestion; and, as things are, Ethiopia does not export much in the way of industrial goods. Nor are future prospects dazzlingly bright.

In the meantime the economic interaction between Ethiopia and the rest of the world lacks symmetry. Not only does the value of Ethiopian imports regularly exceed the value of its exports, but, like other small economies, Ethiopia has to be more concerned with developments in the rest of the world than the world has to be concerned with what happens in Ethiopia. There is, of course, one qualification. In coffee production and trade Ethiopia is already an important player. And it is possible that if world markets became less regulated and more competitive than at present Ethiopia's share of world production and trade would rise.
There is little doubt that Ethiopia has a comparative advantage in the production of coffee. Its domestic resource cost ratio is well below one, and is smaller than those of the principal food grains produced on the peasant farms. How long is this pre-eminence likely to last? And how far should Ethiopia rely on coffee to provide the foreign exchange that it needs? These are difficult questions. The future of the international market and marketing arrangements is uncertain; and in Ethiopia there are no reliable data on production, yields, and domestic consumption. There is, however, some evidence that coffee farmers have been switching in some areas from coffee to cereals, particularly maize. Nevertheless the fundamentals, as it were, seem sound. World Bank data indicate that production costs must be low on any standard. One kilogramme of traditional coffee is produced with little more than the cost of 1.13 days of labour; and the labour required to produce a kilogramme of improved coffee is only fractionally more than that of one day. Non-labour costs are, of course, somewhat higher for improved coffee. The important fact, however, remains: Ethiopian coffee is cheap to produce.

The switches to other crops that have been reported are best seen as a reflection of the distortions that have been inflicted on agriculture. Farmers can only specialise in coffee if they are able to buy grain in the market. Moreover, their production decisions can only be expected to reflect comparative advantage if the price signals they confront are in keeping with this. And their willingness to produce cannot be independent of the prices they receive for their output. Thus the suspected fall in production, and the related supposed difficulty in supplying the domestic and export markets, may be largely corrected by the return to a market regime and the introduction of a trade-neutral macroeconomic policy. This will be the more so if it proves possible to trim the imposts on coffee exports — which currently account for about 37 per cent of the international price.

With its comparative advantage thus secure, coffee should receive as much encouragement from the government as the production of cereals. Since virtually all of the coffee output also comes from peasants, the arguments used above in connection with food grains repeat themselves. It should, however, explicitly be recalled that small peasant farmers cannot be expected to be directly in touch with distant markets. Other marketing arrangements are needed. These do not, however, have to be made by the state. Private merchants should be encouraged, and government intervention should be similar to that suggested for a revamped AMC in the field of food grains. What, the question then is, about the international market?

World prices are expected to fall. This is unfortunate, but not decisive. Prices could fall quite a long way and still leave production in Ethiopia profitable — absolutely and in relation to other domestic uses of resources. Coffee production should be encouraged. The recurrent question is whether, from Ethiopia's point of view, it should be the subject of international agreement and quota. And here consistency is required. The argument for the market does not stop at national boundaries. If Ethiopia has a comparative advantage in the production of coffee it
should exploit this without bureaucratic let or hindrance and so increase welfare at home and abroad. In the absence of such advantage, it would be wrong to support the resultant inefficient use of resources by international agreement.

The formula of a reinstated market plus improved macroeconomic policies (including notably a more realistic exchange rate than that which has prevailed for years) would do more than help restore the fortunes of coffee. Non-coffee exports should also benefit. In the early 1970s these accounted for more than half of total export earnings, but in the 1980s the share of coffee had risen to 60 per cent — mainly because of a largely policy-induced relative decline in the foreign sales of non-coffee products. The major exports other than coffee are pulses, oilseeds, and livestock, though agro-industrial products such as cotton and leather goods are important. Subject to the caveats introduced earlier, government policy should clearly encourage these where possible.

The future of Ethiopian exports depends not only on internal economic conditions and changes in these through time. It depends also on what is happening elsewhere. Industrialisation in Brazil could, by raising the real wage rate, make coffee production there more costly and so benefit Ethiopia. On the other hand, policy reforms that concentrated production on the market-efficient farms in the developed economies could significantly reduce costs and perhaps upset Ethiopia's present comparative advantage. The same result could come from foreign technical progress — particularly if this produced dirt cheap and acceptable substitutes for coffee from hitherto unlikely substances.

Poverty is Ethiopia's salient feature and its central problem. On any measure many people do not have nearly enough to eat. The market-directed attack on (rather than solution to) this problem would, as things are, encourage coffee and grain production on peasant farms. Growth would then be stimulated by the consequent increase in farm incomes and guided — it is to be hoped — in a labour-intensive way by the related income elasticities of demand. Is this strategy threatened by external policy reform and technical progress? Since the answer is literally in the future it must at least be hesitant. Sixty years ago Keynes had a vision that the grandchildren of his generation would live in a world in which the economic problem would be solved. Scarcity would no longer be the organising feature of life. And perhaps that day will yet be and even dawn in Ethiopia.

If, however, it is not easy to deny Keynes his vision, it is possible to fault his timing. Though many born in 1930 are now grandparents, the day of the universal free good is not yet. And the prosaic question that remains is whether Ethiopia will have to reallocate the resources that are now fixed in meagre production in agriculture. Moreover, though detail is superfluous to vision, it is the essence of the prosaic. Therein, of course, lies an important difficulty. Not too much is known. Policy reform may come in Western Europe and North America and deliver cost reduction. It is, however, doubtful if that alone would upset Ethiopia's
import-substituting comparative advantage in peasant grain production, or cause resources to be deflected from coffee production. The effects of technical progress are much less certain.

Innovations based on bio-technology research and green-revolution-type work could clearly influence production and costs in Ethiopia. The question, of course, is how such influence would compare with outcomes elsewhere. And that, in the present state of knowledge, is not answerable. Not enough is known of the detail of the likely inventions and of the diffusion process that moves from invention to innovation to the point of production. What skills, for example, would an Ethiopian farmer need before his cattle could benefit from the latest science? What is the cost of acquiring these? And what are the consequences of skill and science for the cow and for the market? In Ethiopian conditions these are imponderable questions. And so also therefore is the question about future comparative advantage. It is prudent to seek firmer ground.

This may be found in the plausible. One of the recurrent themes of this study has been that much of Ethiopia is less productive now than were the Scottish peasants in the 18th century. Thus if production is not to be based mainly on unskilled labour and land, what is the alternative? And if these resources are not to be fixed in the production of food — a basic condition of life — how are they to be used? It is inconceivable that Ethiopia could become a major and relatively efficient producer of manufactured goods before many years have passed. Or that it could excel in finance and other areas in the service sector that are capable of imparting dynamism to the economy. For years to come the best prospect for food security is likely to be found in the agriculture-based strategy described above.

This does not quite dispose of the external threat. Nor does it imply that it will be impossible for Ethiopia to benefit from technical progress beyond what is in the immediate pipe line as it were. If additional benefit comes, however, it may be regarded as a bonus. Given the pervasive poverty, the possibility of threat is more worrying. And in this regard two things may be said. The most promising markets for Ethiopian exports (other than coffee and leather goods) are in the Middle East. Increased international competition could threaten these markets, with something perhaps depending on transport costs. And cattle and meat exports may have to face increasing quality and safety standards. Other things equal, a loss of exports to the Middle East would free resources for home production, but would still result in some loss since the freed resources had previously been more valuable in the foreign market. And, as has been seen, the food margins in Ethiopia are perilously small.

The second thing to be said about changing competitive advantage is that there could be a more serious and more subtle effect. Until agricultural productivity has been dramatically increased, Ethiopia is virtually certain to look to the rest of the world from time to time to maintain the (relatively meagre) levels of food intake that its people have in good years. In recent times food aid has been large and growing.
And its provision no doubt reflected humanitarian concern. It probably helped, however, that the donor countries were afflicted with embarrassingly large surpluses at prevailing prices. If these were to disappear in the wake of policy reform, that reduction could threaten the ability and perhaps impede the willingness to give. Of course, if prices fell as stocks disappeared this would cheapen commercial imports. It is, however, possible that there would be times when Ethiopia could not maintain normal consumption on commercial terms, even when these were more favourable than at present.

If the maintenance of normal levels of consumption is a challenge, so a fortiori is that of achieving food security. It is unlikely that Ethiopia could achieve this within ten years, and it is possible that such achievement could be delayed well into the next century. Greater efficiency than has been shown in the past would, of course, greatly improve the standard of living. Such, however, is the depth of present poverty that even the most efficient organisation of domestic production and trade would still leave many without enough to eat. How does this impinge on Ethiopia’s international economic relations?

One reason why so many Ethiopians are so poor is that there are so many of them. This is not the place for an extended discussion of the economics of population. It can, however, be asserted that the rapid rate of population growth has hindered rather than promoted economic progress. How, the question then is, did the rapid population change come about? The short answer is that it came from the developed world through the subsidised transfer of medical technology. And this, it has been implied by no less a person than Professor Hayek, should constitute moral responsibility.

Having helped cause the problem, the developed countries should be obliged to help find a solution.

Whether for this or for other reasons, the rich countries may wish to help. What form should aid take? The most direct form is, of course, the supply of food. Food aid is not, however, without its problems and hence its critics. These cannot or at least should not be allowed to gainsay the importance of humanitarian relief. From granting this, however, to argument in favour of ensuring that peasants are supplied with means of permanent development is a short step. It is not, however, an evidently market-oriented one, so that it is better not taken. Oxfam and other charities should also stick to their lasts, since relief agencies have no more qualification than government to replace the market mechanism.

Professor Heilleiner has asked if African countries can do nothing better than return to primary commodities and hope for the best. And on this perspective the present study suggests that something better is possible. Faith in the market and efficient government support are elements in a positive policy that is not only better than passive — and probably somewhat fearful — expectation, but is better than other alternatives also. Thus those who would help should do so within this framework. What does this mean for foreign aid?
Not, it should be clear, that it should be anything less than generous. It is sometimes objected that the absorptive capacity of a poor country like Ethiopia is limited, and that aid should accordingly be constrained. But absorptive capacity itself may be raised, and aid may play an important part in doing so. The general principle on which generous giving should be based is that aid should be used in support of the market and of those government activities that are consistent with this. What these might be could only be seriously determined on the basis of detailed information and analysis. In the absence of these it may be suggested that much of what requires to be done — in agricultural research, in education, in health, for example — is suitably technocratic. And within broad limits, the more of these things the better. What is important is that the relevant effort be sufficient and long-term. The market mechanism is neither abstract nor unchanging. At a given time and in a given place, its quality depends on the strength of the social framework, on the size and calibre of the labour force and the capital stock, and on the amount and spread of knowledge. It should consequently be possible for rich foreigners to help through non-distorting augmentation of these determinants. And more rapid growth should result from their doing so.

Progress will no doubt continue to be slow in relation to the continuing trauma of searing poverty. Still it should be possible to move the economy forward at a more rapid pace than hitherto. And if achieving this must remain largely a matter for Ethiopians and Ethiopian institutions, the eradication of poverty can also be seen as a challenge to the international community. Aid can make a difference. And if poverty is the focus the challenge can nowhere be more appropriately taken up than in Ethiopia.
NOTES AND REFERENCES

1. World Bank, *Ethiopia: An Export Action Program*, Washington, 1987, 1986 Social Indicator Data Sheet. The data given are for 1973, and the poverty level is set at US$115 and US$65 for the urban and rural areas respectively. For 1981 the level is put at US$190. No figure is given for the share of the population that was below this. If, however, the rural level is taken as being in the same proportion as in 1973, then a uniform income per head of US$123 would put the entire population on the poverty line. Per capita income of US$150 would, on this standard, enable 35 per cent of the population to have an income of US$200 per head only if 65 per cent were kept at the poverty level.

2. Not least of the reasons that explain the success of the *Wealth of Nations*, urged Schumpeter, was the fact that "argument and material were enlivened by advocacy, everywhere, the professor turned his chair into a seat of judgement and bestowed praise and blame... where would the *Wealth of Nations* be without free trade and *laissez-faire*?" See J.A. Schumpeter, *History of Economic Analysis*, Oxford University Press, New York, 1956, pp. 85-186.


6. Ibid.


10. Much, of course, has been written on the contribution of agriculture to general economic development and on the agricultural transition itself. One work that deals mainly with the latter topic is: Y. Hayami and V.W. Ruttan, *Agricultural Development: An International Perspective*, Johns Hopkins, Baltimore, 1985. Chapters 2 and 3 of this respectively comprise useful reviews of agriculture's general role and its transition. Among those who have long advocated an important, indeed critical, role for agriculture in contemporary circumstances. See in particular his *The New Economics of Growth*, Cornell University Press, Ithaca, 1976. And two recent, useful survey articles are: C.P. Timmer, "The Agricultural Transformation", in H. Chenery and T.N. Srinivasan


14. For a useful discussion of this point, see, Robert Evenson, "Technology, Growth and Development" in Ranis and Schultz, op. cit.


18. The basic data used in the calculation are from Maurice de Young, "The International Marketing of Agricultural Products", *Ethiopian Observer*, Vol. XI, No. 1, 1967. The calculation itself is new.


20. Timmer, op. cit., p. 293


26. See Evenson, op. cit.

27. For a discussion relating to sub-Saharan African generally, see Uma Lele, "Comparative Advantage and Structural Transformation: A Review of Africa's Economic Development Experience", in Ranis and Schultz, op. cit.


32. See Streeten, *op. cit.*, Chapter 9 for relevant discussion.
33. In a comment on Uma Lele, *op. cit.*
<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SELECTED ECONOMIC AND SOCIAL INDICATORS FOR ETHIOPIA AND OTHER AREAS, 1987</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>1. Gross domestic product per head (US$)</td>
</tr>
<tr>
<td>2. Share of agriculture in GDP</td>
</tr>
<tr>
<td>3. Fertilizer consumption (000s of grains of plant nutrients per hectare)</td>
</tr>
<tr>
<td>4. Gross domestic savings (per cent of GDP)</td>
</tr>
<tr>
<td>5. Primary commodities* (per cent of total exports)</td>
</tr>
<tr>
<td>6. External public debt (per cent of GDP)</td>
</tr>
<tr>
<td>7. Life expectancy (years at birth)</td>
</tr>
<tr>
<td>8. Population per physician b</td>
</tr>
<tr>
<td>9. Daily calorie supply (per capita)</td>
</tr>
<tr>
<td>10. Nos. in primary school (per cent of age group)</td>
</tr>
</tbody>
</table>

a) Excluding fuels and minerals.
b) 1984.

## Table 2

**CROP PRODUCTION IN ETHIOPIA: AREA, OUTPUT AND YIELD BY CATEGORY AND MODE OF PRODUCTION, AVERAGE 1979/80-1985/86**

<table>
<thead>
<tr>
<th></th>
<th>All farms</th>
<th>Private holdings</th>
<th>State farms</th>
<th>Co-op farms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(1) Area (000 hectares)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cereals</td>
<td>4,845.0</td>
<td>4,586.3</td>
<td>137.4</td>
<td>121.3</td>
</tr>
<tr>
<td>Pulses</td>
<td>772.7</td>
<td>749.2</td>
<td>4.4</td>
<td>19.1</td>
</tr>
<tr>
<td>Others</td>
<td>247.8</td>
<td>224.6</td>
<td>13.6</td>
<td>9.6</td>
</tr>
<tr>
<td>All Crops</td>
<td>5,865.5</td>
<td>5,560.1</td>
<td>155.4</td>
<td>150.0</td>
</tr>
<tr>
<td><strong>(2) Output (000/quintals)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cereals</td>
<td>55,293.5</td>
<td>52,011.1</td>
<td>2,334.7</td>
<td>947.7</td>
</tr>
<tr>
<td>Pulses</td>
<td>7,641.7</td>
<td>7,522.2</td>
<td>15.3</td>
<td>104.2</td>
</tr>
<tr>
<td>Others</td>
<td>998.2</td>
<td>943.5</td>
<td>33.1</td>
<td>21.6</td>
</tr>
<tr>
<td>All Crops</td>
<td>63,933.3</td>
<td>60,476.8</td>
<td>2,383.1</td>
<td>1,073.5</td>
</tr>
<tr>
<td><strong>(3) Yield (quintal/hectare)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cereals</td>
<td>11.4</td>
<td>11.3</td>
<td>17.0</td>
<td>7.8</td>
</tr>
<tr>
<td>Pulses</td>
<td>9.8</td>
<td>10.0</td>
<td>3.5</td>
<td>5.5</td>
</tr>
<tr>
<td>Others</td>
<td>4.1</td>
<td>4.2</td>
<td>2.4</td>
<td>2.3</td>
</tr>
<tr>
<td>All Crops</td>
<td>10.9</td>
<td>10.9</td>
<td>15.3</td>
<td>7.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Output per person (grams per day)</th>
<th>Population weight (per cent)</th>
<th>Surplus (grams)</th>
<th>Deficit (grams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arssi</td>
<td>933</td>
<td>3.7</td>
<td>1 602</td>
<td></td>
</tr>
<tr>
<td>Gojam</td>
<td>740</td>
<td>6.6</td>
<td>1 584</td>
<td></td>
</tr>
<tr>
<td>Wellega</td>
<td>718</td>
<td>6.5</td>
<td>1 417</td>
<td></td>
</tr>
<tr>
<td>Shoa</td>
<td>666</td>
<td>20.5</td>
<td>3 403</td>
<td></td>
</tr>
<tr>
<td>Gondar</td>
<td>602</td>
<td>6.6</td>
<td>673</td>
<td></td>
</tr>
<tr>
<td>Illubabor</td>
<td>595</td>
<td>2.6</td>
<td>247</td>
<td></td>
</tr>
<tr>
<td>Bale</td>
<td>575</td>
<td>2.8</td>
<td>210</td>
<td></td>
</tr>
<tr>
<td>Wollo</td>
<td>555</td>
<td>8.4</td>
<td>462</td>
<td></td>
</tr>
<tr>
<td>Harerghe</td>
<td>438</td>
<td>10.1</td>
<td></td>
<td>626</td>
</tr>
<tr>
<td>Kaffa</td>
<td>428</td>
<td>5.2</td>
<td></td>
<td>374</td>
</tr>
<tr>
<td>Gamu Goffa</td>
<td>356</td>
<td>3.2</td>
<td></td>
<td>461</td>
</tr>
<tr>
<td>Tigre</td>
<td>287</td>
<td>6.9</td>
<td></td>
<td>1 470</td>
</tr>
<tr>
<td>Eritrea</td>
<td>247</td>
<td>7.8</td>
<td></td>
<td>1 973</td>
</tr>
<tr>
<td>Sidamo</td>
<td>174</td>
<td>9.0</td>
<td></td>
<td>2 934</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Crop year</th>
<th>Market-dependent population (mill.)</th>
<th>% of total</th>
<th>Per capita consumption (kilogramme)</th>
<th>(million quintals)</th>
<th>Market volume</th>
<th>% of gross output</th>
<th>% of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970/71</td>
<td>6.2</td>
<td>20.4</td>
<td>165.0</td>
<td>10.2</td>
<td>18.0</td>
<td>3.9</td>
<td></td>
</tr>
<tr>
<td>1986/87</td>
<td>14.4</td>
<td>31.4</td>
<td>138.0/155.0</td>
<td>19.9/22.4</td>
<td>30.7/34.6</td>
<td>5.9/6.6</td>
<td></td>
</tr>
</tbody>
</table>

Table 5

**ECONOMIC STANDING OF SELECTED ECONOMIES, 1987**

<table>
<thead>
<tr>
<th>No. of Countries</th>
<th>Sub-Saharan Africa</th>
<th>Asia</th>
<th>Latin America and Caribbean</th>
<th>Total*</th>
<th>SSA share of total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a) Income level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower-low income (Less than US$ 250/head)</td>
<td>11</td>
<td>4</td>
<td>0</td>
<td>15</td>
<td>73.3</td>
</tr>
<tr>
<td>Upper-low income (US$260-450)</td>
<td>15</td>
<td>5</td>
<td>1</td>
<td>22</td>
<td>68.2</td>
</tr>
<tr>
<td>Lower-middle income (US$451-2 000)</td>
<td>7</td>
<td>3</td>
<td>14</td>
<td>34</td>
<td>20.6</td>
</tr>
<tr>
<td>Upper-middle income (US$2 000-6 000)</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>15</td>
<td>6.7</td>
</tr>
<tr>
<td>High-income (US$6 000)</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>25</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>b) Market size</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross Domestic Product</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US$1 000 million</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>8</td>
<td>62.5</td>
</tr>
<tr>
<td>US$1 001-3 000 million</td>
<td>15</td>
<td>1</td>
<td>2</td>
<td>19</td>
<td>78.9</td>
</tr>
<tr>
<td>US$3 001-6 000 million</td>
<td>8</td>
<td>0</td>
<td>9</td>
<td>20</td>
<td>40.0</td>
</tr>
<tr>
<td>US$6 001-12 000 million</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>9</td>
<td>33.3</td>
</tr>
<tr>
<td>US$12 001-40 000 million</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>19</td>
<td>0.0</td>
</tr>
<tr>
<td>US$40 001-150 000 million</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>19</td>
<td>0.0</td>
</tr>
<tr>
<td>US$150 001-1 000 000 million</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>13</td>
<td>0.0</td>
</tr>
<tr>
<td>US$1 000 000+ million</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>0.0</td>
</tr>
</tbody>
</table>

---

a) Totals sometimes include non-Asian developed economies and Middle East economies.

## Table 6


<table>
<thead>
<tr>
<th></th>
<th>GNP per head (US$, 1987)</th>
<th>Average annual rate of growth, 1965-1987, GNP per head (%)</th>
<th>Distribution of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Saharan Africa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-income</td>
<td>316</td>
<td>330</td>
<td>0.2</td>
</tr>
<tr>
<td>Low-income excluding Nigeria</td>
<td>273</td>
<td>270</td>
<td>-0.1</td>
</tr>
<tr>
<td>Non-African Low-income</td>
<td>253</td>
<td>240</td>
<td>-0.2</td>
</tr>
<tr>
<td>Excluding China and India</td>
<td>130</td>
<td>295</td>
<td>3.8</td>
</tr>
<tr>
<td>Middle-income</td>
<td>1 050</td>
<td>1 810</td>
<td>2.5</td>
</tr>
<tr>
<td>High-income</td>
<td>8 750</td>
<td>14 430</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Table 7

COMPARISON OF AFRICAN AND ASIAN COSTS RELEVANT TO THE PUBLIC SECTOR IN THE 1980s

<table>
<thead>
<tr>
<th>Activity</th>
<th>Measurement</th>
<th>Sub-Saharan Africa</th>
<th>Low-income Asia</th>
<th>Africa relative to Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Investment and construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irrigation</td>
<td>US$ 000 per hectare</td>
<td>8.0</td>
<td>4.25</td>
<td>1.9</td>
</tr>
<tr>
<td>Urban water supply</td>
<td>US$ per unit</td>
<td>159</td>
<td>47.5</td>
<td>3.4</td>
</tr>
<tr>
<td>Vocational school</td>
<td>US$ 000 per place</td>
<td>5.0</td>
<td>3.0</td>
<td>1.7</td>
</tr>
<tr>
<td>Roads</td>
<td>US$ 000 per kilometre</td>
<td>250</td>
<td>190</td>
<td>1.3</td>
</tr>
<tr>
<td>b) Recurrent costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary education</td>
<td>US$ per pupil</td>
<td>92</td>
<td>17</td>
<td>5.4</td>
</tr>
<tr>
<td>Road maintenance</td>
<td>US$ 000 per kilometre</td>
<td>4.8</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Rolling stock</td>
<td>US$ per ton/per kilometre</td>
<td>0.09</td>
<td>0.04</td>
<td>2.3</td>
</tr>
<tr>
<td>Central Govt. wages</td>
<td>Median annual multiple of per capita income</td>
<td>5.5</td>
<td>2.0</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Source: World Bank, *Sub-Saharan Africa: From Crisis to Sustainable Growth*, Table 1.1.
<table>
<thead>
<tr>
<th>Country</th>
<th>Agriculture (Workers per US$ 1 million output)</th>
<th>Industry (Workers per US$ 1 million output)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>625</td>
<td>370</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>7400</td>
<td>1330</td>
</tr>
<tr>
<td>United Kingdom/Ethiopia</td>
<td>0.08</td>
<td>0.28</td>
</tr>
</tbody>
</table>

### Table 9
DOMESTIC RESOURCE COST RATIOS, SELECTED PRODUCTS

<table>
<thead>
<tr>
<th>Commodity</th>
<th>DRC ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agriculture</strong></td>
<td></td>
</tr>
<tr>
<td>Peasant sector</td>
<td></td>
</tr>
<tr>
<td>Coffee</td>
<td>0.31</td>
</tr>
<tr>
<td>Maize</td>
<td>0.41</td>
</tr>
<tr>
<td>Sorghum</td>
<td>0.50</td>
</tr>
<tr>
<td>Wheat</td>
<td>0.61</td>
</tr>
<tr>
<td>State farms</td>
<td></td>
</tr>
<tr>
<td>Cotton</td>
<td>0.78</td>
</tr>
<tr>
<td>Maize</td>
<td>1.78</td>
</tr>
<tr>
<td>Wheat</td>
<td>-6.93</td>
</tr>
<tr>
<td><strong>Manufacturing</strong></td>
<td></td>
</tr>
<tr>
<td>Cement</td>
<td>0.41</td>
</tr>
<tr>
<td>Leather and shoes</td>
<td>0.45</td>
</tr>
<tr>
<td>Sugar</td>
<td>0.74</td>
</tr>
<tr>
<td>Flour</td>
<td>1.02</td>
</tr>
<tr>
<td>Chemicals</td>
<td>1.16</td>
</tr>
<tr>
<td>Meat</td>
<td>1.52</td>
</tr>
<tr>
<td>Textiles</td>
<td>1.70</td>
</tr>
<tr>
<td>Iron and steel</td>
<td>7.53</td>
</tr>
<tr>
<td>Pulp and paper</td>
<td>-4.34</td>
</tr>
<tr>
<td>Total</td>
<td>1.09</td>
</tr>
</tbody>
</table>

*Source: World Bank, various reports.*
## Table 10  
**LEADING ECONOMIC INDICATORS, 1960-1987**

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP* (1980 birr mill.)</th>
<th>Population (mill.)</th>
<th>GDP/P (birr)</th>
<th>Resource balance % of GDP</th>
<th>External debt % of GDP</th>
<th>Domestic savings % of GDP</th>
<th>Terms of trade (1980=100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>3 900</td>
<td>22.5</td>
<td>173</td>
<td>0.2</td>
<td>--</td>
<td>11.0</td>
<td>117.8</td>
</tr>
<tr>
<td>1965</td>
<td>4 987</td>
<td>25.4</td>
<td>196</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1966</td>
<td>5 183</td>
<td>26.1</td>
<td>199</td>
<td>-3.5</td>
<td>--</td>
<td>10.6</td>
<td>129.8</td>
</tr>
<tr>
<td>1967</td>
<td>5 402</td>
<td>26.8</td>
<td>202</td>
<td>-2.6</td>
<td>--</td>
<td>11.7</td>
<td>129.5</td>
</tr>
<tr>
<td>1968</td>
<td>5 493</td>
<td>27.5</td>
<td>200</td>
<td>-1.9</td>
<td>--</td>
<td>12.1</td>
<td>113.5</td>
</tr>
<tr>
<td>1969</td>
<td>5 697</td>
<td>28.2</td>
<td>202</td>
<td>-2.1</td>
<td>--</td>
<td>11.3</td>
<td>118.3</td>
</tr>
<tr>
<td>1970</td>
<td>6 022</td>
<td>28.9</td>
<td>208</td>
<td>-0.3</td>
<td>3.7</td>
<td>11.2</td>
<td>141.8</td>
</tr>
<tr>
<td>1971</td>
<td>6 275</td>
<td>29.7</td>
<td>211</td>
<td>-1.9</td>
<td>4.3</td>
<td>9.9</td>
<td>120.2</td>
</tr>
<tr>
<td>1972</td>
<td>6 556</td>
<td>30.5</td>
<td>215</td>
<td>-2.0</td>
<td>4.8</td>
<td>10.8</td>
<td>126.2</td>
</tr>
<tr>
<td>1973</td>
<td>6 719</td>
<td>31.3</td>
<td>215</td>
<td>2.0</td>
<td>5.2</td>
<td>13.4</td>
<td>139.8</td>
</tr>
<tr>
<td>1974</td>
<td>6 814</td>
<td>32.1</td>
<td>212</td>
<td>3.4</td>
<td>5.1</td>
<td>13.3</td>
<td>87.5</td>
</tr>
<tr>
<td>1975</td>
<td>6 807</td>
<td>33.0</td>
<td>206</td>
<td>-3.0</td>
<td>6.2</td>
<td>7.5</td>
<td>82.4</td>
</tr>
<tr>
<td>1976</td>
<td>6 969</td>
<td>33.9</td>
<td>206</td>
<td>-0.9</td>
<td>6.7</td>
<td>8.7</td>
<td>142.2</td>
</tr>
<tr>
<td>1977</td>
<td>6 984</td>
<td>34.8</td>
<td>201</td>
<td>-3.2</td>
<td>6.5</td>
<td>5.7</td>
<td>198.0</td>
</tr>
<tr>
<td>1978</td>
<td>6 891</td>
<td>35.7</td>
<td>193</td>
<td>-5.6</td>
<td>7.0</td>
<td>1.9</td>
<td>131.8</td>
</tr>
<tr>
<td>1979</td>
<td>7 280</td>
<td>36.7</td>
<td>198</td>
<td>-5.8</td>
<td>7.7</td>
<td>3.4</td>
<td>132.2</td>
</tr>
<tr>
<td>1980</td>
<td>7 689</td>
<td>37.7</td>
<td>204</td>
<td>-6.3</td>
<td>8.2</td>
<td>3.7</td>
<td>100.0</td>
</tr>
<tr>
<td>1981</td>
<td>7 928</td>
<td>38.8</td>
<td>204</td>
<td>-7.3</td>
<td>10.8</td>
<td>3.1</td>
<td>84.0</td>
</tr>
<tr>
<td>1982</td>
<td>8 018</td>
<td>39.9</td>
<td>200</td>
<td>-9.6</td>
<td>11.3</td>
<td>2.2</td>
<td>89.6</td>
</tr>
<tr>
<td>1983</td>
<td>8 445</td>
<td>41.0</td>
<td>206</td>
<td>-8.5</td>
<td>12.2</td>
<td>2.7</td>
<td>91.6</td>
</tr>
<tr>
<td>1984</td>
<td>8 134</td>
<td>42.2</td>
<td>193</td>
<td>-10.4</td>
<td>14.0</td>
<td>2.4</td>
<td>102.1</td>
</tr>
<tr>
<td>1985</td>
<td>7 605</td>
<td>42.3</td>
<td>180</td>
<td>-12.4</td>
<td>17.6</td>
<td>-1.8</td>
<td>99.7</td>
</tr>
<tr>
<td>1986</td>
<td>8 314</td>
<td>43.5</td>
<td>191</td>
<td>-6.7</td>
<td>17.6</td>
<td>2.7</td>
<td>127.2</td>
</tr>
<tr>
<td>1987</td>
<td>8 186</td>
<td>44.8</td>
<td>183</td>
<td>-10.1</td>
<td>24.3</td>
<td>3.0</td>
<td>83.0</td>
</tr>
</tbody>
</table>

*a* Factor cost.

**Source:**  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>65.0</td>
<td>58.8</td>
<td>53.2</td>
<td>50.3</td>
<td>50.1</td>
<td>42.0</td>
</tr>
<tr>
<td>Mining</td>
<td>0.1</td>
<td>0.3</td>
<td>0.3</td>
<td>0.2</td>
<td>0.1</td>
<td>(a)</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>6.0</td>
<td>7.0</td>
<td>9.0</td>
<td>9.5</td>
<td>10.9</td>
<td>12.0</td>
</tr>
<tr>
<td>Construction</td>
<td>5.6</td>
<td>5.9</td>
<td>5.5</td>
<td>5.6</td>
<td>3.9</td>
<td>(a)</td>
</tr>
<tr>
<td>Electricity, Gas and Water</td>
<td>0.4</td>
<td>0.7</td>
<td>0.9</td>
<td>1.1</td>
<td>0.7</td>
<td>(a)</td>
</tr>
<tr>
<td>Transport and communication</td>
<td>3.3</td>
<td>4.5</td>
<td>5.7</td>
<td>6.5</td>
<td>4.7</td>
<td>(b)</td>
</tr>
<tr>
<td>Trade and finance</td>
<td>6.8</td>
<td>8.5</td>
<td>9.7</td>
<td>9.9</td>
<td>13.9</td>
<td>(b)</td>
</tr>
<tr>
<td>Public administration and defence</td>
<td>3.8</td>
<td>4.9</td>
<td>5.2</td>
<td>5.8</td>
<td>6.7</td>
<td>(b)</td>
</tr>
<tr>
<td>Other services</td>
<td>9.2</td>
<td>9.4</td>
<td>10.5</td>
<td>11.0</td>
<td>8.4</td>
<td>(b)</td>
</tr>
</tbody>
</table>

a) 6 per cent in total.
b) 40 per cent in total.


187
### Table 12

**FOOD PRODUCTION PER HEAD, 1960-1987**

1979-1981 = 100

<table>
<thead>
<tr>
<th>Year</th>
<th>Index</th>
<th>Year</th>
<th>Index</th>
<th>Year</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>104.6</td>
<td>1973</td>
<td>101.1</td>
<td>1981</td>
<td>98.9</td>
</tr>
<tr>
<td>1966</td>
<td>110.6</td>
<td>1974</td>
<td>94.1</td>
<td>1982</td>
<td>101.9</td>
</tr>
<tr>
<td>1967</td>
<td>107.3</td>
<td>1975</td>
<td>96.8</td>
<td>1983</td>
<td>93.0</td>
</tr>
<tr>
<td>1968</td>
<td>108.8</td>
<td>1976</td>
<td>94.5</td>
<td>1984</td>
<td>82.0</td>
</tr>
<tr>
<td>1969</td>
<td>108.1</td>
<td>1977</td>
<td>90.0</td>
<td>1985</td>
<td>89.5</td>
</tr>
<tr>
<td>1970</td>
<td>108.9</td>
<td>1978</td>
<td>97.6</td>
<td>1986</td>
<td>90.7</td>
</tr>
<tr>
<td>1971</td>
<td>103.5</td>
<td>1979</td>
<td>105.6</td>
<td>1987</td>
<td>86.8</td>
</tr>
<tr>
<td>1972</td>
<td>102.3</td>
<td>1980</td>
<td>98.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sources:**  
### Table 13

**FOOD SUPPLY IN ETHIOPIA IN SELECTED YEARS**

<table>
<thead>
<tr>
<th></th>
<th>1960</th>
<th>1973</th>
<th>1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross grain production (mill. tons)</td>
<td>4.5</td>
<td>6.03</td>
<td>5.16</td>
</tr>
<tr>
<td>Cereal imports (mill. tons)</td>
<td>0.05</td>
<td>0.11</td>
<td>0.61</td>
</tr>
<tr>
<td>Pulses and root crops (mill. tons grain equivalent)</td>
<td>0.13</td>
<td>0.18</td>
<td>0.15</td>
</tr>
<tr>
<td>Post-harvest losses and seed needs (mill. tons)</td>
<td>0.69</td>
<td>0.93</td>
<td>0.80</td>
</tr>
<tr>
<td>Available supply (mill. tons)</td>
<td>3.94</td>
<td>5.39</td>
<td>5.12</td>
</tr>
<tr>
<td>Available supply per head (kilogrammes)</td>
<td>175</td>
<td>172</td>
<td>114</td>
</tr>
</tbody>
</table>

*Sources: Second Five-Year Development Plan; World Bank, Sub-Saharan Africa: From Crisis to Sustainable Growth, and World Development Report, 1989.*
Table 14

RATES OF GROWTH OF REAL GDP IN ETHIOPIA AND OTHER LOW-INCOME ECONOMIES OF SUB-SAHARAN AFRICA, 1960-1987

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>3.9</td>
<td>1.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Other SSA</td>
<td>3.3</td>
<td>1.9</td>
<td>1.4</td>
</tr>
<tr>
<td>Fastest growing</td>
<td>7.9</td>
<td>7.8</td>
<td>5.6</td>
</tr>
<tr>
<td>Slowest growing</td>
<td>-1.2</td>
<td>-2.7</td>
<td>-2.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Production relative</th>
<th>Production index</th>
<th>Weighted-average shortfall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wollo</td>
<td>0.076</td>
<td>46</td>
<td>14</td>
</tr>
<tr>
<td>Tigre</td>
<td>0.039</td>
<td>46</td>
<td>14</td>
</tr>
<tr>
<td>Eritrea</td>
<td>0.034</td>
<td>46</td>
<td>14</td>
</tr>
<tr>
<td>Gamu Goffa</td>
<td>0.049</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>Harerghe</td>
<td>0.060</td>
<td>100</td>
<td>52</td>
</tr>
<tr>
<td>Bale</td>
<td>0.079</td>
<td>146</td>
<td>62</td>
</tr>
<tr>
<td>Kaffa</td>
<td>0.059</td>
<td>105</td>
<td>65</td>
</tr>
<tr>
<td>Sidamo</td>
<td>0.024</td>
<td>93</td>
<td>60</td>
</tr>
<tr>
<td>Illubabor</td>
<td>0.081</td>
<td>213</td>
<td>100</td>
</tr>
<tr>
<td>Gondar</td>
<td>0.082</td>
<td>96</td>
<td>80</td>
</tr>
<tr>
<td>Shoa</td>
<td>0.091</td>
<td>84</td>
<td>59</td>
</tr>
<tr>
<td>Wellega</td>
<td>0.098</td>
<td>112</td>
<td>63</td>
</tr>
<tr>
<td>Gojam</td>
<td>0.101</td>
<td>103</td>
<td>117</td>
</tr>
<tr>
<td>Arsii</td>
<td>0.130</td>
<td>85</td>
<td>64</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td><strong>1.000</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: G. Kumar, *Ethiopian Famines*, Table 6.
Table 16

per cent

<table>
<thead>
<tr>
<th>Share of GDP</th>
<th>Average annual rate of growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>100.0</td>
</tr>
<tr>
<td>Transport &amp; communication</td>
<td>3.4</td>
</tr>
<tr>
<td>Trade &amp; finance</td>
<td>6.6</td>
</tr>
<tr>
<td>Public administration &amp; Defence</td>
<td>3.8</td>
</tr>
<tr>
<td>Other</td>
<td>8.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Mixed teff</th>
<th>Mixed wheat</th>
<th>Mixed barley</th>
<th>Sorghum</th>
<th>Maize</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980/1981</td>
<td>32</td>
<td>31</td>
<td>27</td>
<td>21</td>
<td>17</td>
</tr>
<tr>
<td>1981/1982</td>
<td>35</td>
<td>34</td>
<td>30</td>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td>1985/1986</td>
<td>52</td>
<td>50</td>
<td>43</td>
<td>34</td>
<td>27</td>
</tr>
<tr>
<td><strong>Wholesale prices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981/1982</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMC</td>
<td>57</td>
<td>52</td>
<td>46</td>
<td>48</td>
<td>44</td>
</tr>
<tr>
<td>Free market</td>
<td>88</td>
<td>72</td>
<td>65</td>
<td>67</td>
<td>55</td>
</tr>
<tr>
<td>1985/1986</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMC</td>
<td>60</td>
<td>52</td>
<td>46</td>
<td>54</td>
<td>43</td>
</tr>
<tr>
<td>Free market</td>
<td>161</td>
<td>95</td>
<td>106</td>
<td>110</td>
<td>81</td>
</tr>
<tr>
<td><strong>Farm-gate prices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981/1982</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMC</td>
<td>36</td>
<td>30</td>
<td>26</td>
<td>26</td>
<td>21</td>
</tr>
<tr>
<td>Free market</td>
<td>62</td>
<td>46</td>
<td>41</td>
<td>39</td>
<td>29</td>
</tr>
<tr>
<td>1985/1986</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMC</td>
<td>38</td>
<td>30</td>
<td>26</td>
<td>29</td>
<td>20</td>
</tr>
<tr>
<td>Free market</td>
<td>113</td>
<td>61</td>
<td>66</td>
<td>65</td>
<td>42</td>
</tr>
<tr>
<td><strong>Market shares</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981/1982</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMC</td>
<td>0.30</td>
<td>0.20</td>
<td>0.22</td>
<td>0.58</td>
<td>0.66</td>
</tr>
<tr>
<td>Free market</td>
<td>0.70</td>
<td>0.80</td>
<td>0.78</td>
<td>0.42</td>
<td>0.34</td>
</tr>
<tr>
<td>1985/1986</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMC</td>
<td>0.23</td>
<td>0.37</td>
<td>0.28</td>
<td>0.90</td>
<td>0.72</td>
</tr>
<tr>
<td>Free market</td>
<td>0.77</td>
<td>0.63</td>
<td>0.72</td>
<td>0.10</td>
<td>0.28</td>
</tr>
<tr>
<td><strong>Farmers’ margins</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981/1982</td>
<td>19(15)</td>
<td>9(6)</td>
<td>8(5)</td>
<td>8(6)</td>
<td>5(3)</td>
</tr>
<tr>
<td>1985/1986</td>
<td>44(39)</td>
<td>0(-5)</td>
<td>12(8)</td>
<td>-1(-4)</td>
<td>-1(-4)</td>
</tr>
</tbody>
</table>

**Sources:** AMC, and Time Series, *op. cit.*
<table>
<thead>
<tr>
<th>Year</th>
<th>Exchange rate (US$/birr)</th>
<th>Index (1960=100)</th>
<th>Year</th>
<th>Exchange rate (US$/birr)</th>
<th>Index (1960=100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>0.318</td>
<td>100.0</td>
<td>1974</td>
<td>0.369</td>
<td>116.1</td>
</tr>
<tr>
<td>1961</td>
<td>0.337</td>
<td>106.0</td>
<td>1975</td>
<td>0.357</td>
<td>112.3</td>
</tr>
<tr>
<td>1962</td>
<td>0.351</td>
<td>110.5</td>
<td>1976</td>
<td>0.439</td>
<td>138.1</td>
</tr>
<tr>
<td>1963</td>
<td>0.360</td>
<td>113.2</td>
<td>1977</td>
<td>0.482</td>
<td>151.7</td>
</tr>
<tr>
<td>1964</td>
<td>0.378</td>
<td>119.0</td>
<td>1978</td>
<td>0.512</td>
<td>161.1</td>
</tr>
<tr>
<td>1965</td>
<td>0.405</td>
<td>127.5</td>
<td>1979</td>
<td>0.528</td>
<td>166.1</td>
</tr>
<tr>
<td>1966</td>
<td>0.387</td>
<td>121.7</td>
<td>1980</td>
<td>0.483</td>
<td>151.9</td>
</tr>
<tr>
<td>1967</td>
<td>0.389</td>
<td>122.7</td>
<td>1981</td>
<td>0.470</td>
<td>147.9</td>
</tr>
<tr>
<td>1968</td>
<td>0.379</td>
<td>119.3</td>
<td>1982</td>
<td>0.481</td>
<td>151.4</td>
</tr>
<tr>
<td>1969</td>
<td>0.371</td>
<td>116.7</td>
<td>1983</td>
<td>0.478</td>
<td>150.4</td>
</tr>
<tr>
<td>1970</td>
<td>0.394</td>
<td>124.0</td>
<td>1984</td>
<td>0.507</td>
<td>159.6</td>
</tr>
<tr>
<td>1971</td>
<td>0.384</td>
<td>120.8</td>
<td>1985</td>
<td>0.606</td>
<td>190.7</td>
</tr>
<tr>
<td>1972</td>
<td>0.374</td>
<td>117.6</td>
<td>1986</td>
<td>0.563</td>
<td>177.2</td>
</tr>
<tr>
<td>1973</td>
<td>0.395</td>
<td>124.3</td>
<td>1987</td>
<td>0.535</td>
<td>168.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1988</td>
<td>0.591</td>
<td>186.1</td>
</tr>
</tbody>
</table>

Table 19

INCOME ELASTICITY OF DEMAND, SELECTED PRODUCTS

<table>
<thead>
<tr>
<th>Product</th>
<th>Elasticity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>0.8</td>
</tr>
<tr>
<td>Unmilled cereal</td>
<td>0.9</td>
</tr>
<tr>
<td>Milled cereal</td>
<td>0.9</td>
</tr>
<tr>
<td>Unmilled pulses</td>
<td>0.6</td>
</tr>
<tr>
<td>Milled pulses</td>
<td>0.6</td>
</tr>
<tr>
<td>Vegetables</td>
<td>0.5</td>
</tr>
<tr>
<td>Meat</td>
<td>1.0</td>
</tr>
<tr>
<td>Dairy products</td>
<td>1.1</td>
</tr>
<tr>
<td>Clothing and footwear</td>
<td>0.9</td>
</tr>
<tr>
<td>Ready-made clothes</td>
<td>0.9</td>
</tr>
<tr>
<td>Footwear</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Chart 1. Real Income Per Head in Ethiopian Birr, 1960-1987
Chart 2. Distribution of GDP by Industrial origin

1960

- Agriculture: 23.00%
- Industry: 12.00%
- Services: 65.00%

1973

- Agriculture: 33.33%
- Industry: 50.51%
- Services: 16.16%

1987

- Agriculture: 18.00%
- Industry: 42.00%
- Services: 40.00%
<table>
<thead>
<tr>
<th>DUE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 MAY 1997</td>
</tr>
<tr>
<td>30 NOV 1997</td>
</tr>
<tr>
<td>08 FEB 1998</td>
</tr>
<tr>
<td>17 SEP 2000</td>
</tr>
<tr>
<td>01 OCT 2000</td>
</tr>
<tr>
<td>27 FEB 2001</td>
</tr>
<tr>
<td>05 APR 2002</td>
</tr>
<tr>
<td>31 JUL 2002</td>
</tr>
<tr>
<td>04 JUN 2003</td>
</tr>
<tr>
<td>01 MAY 2003</td>
</tr>
</tbody>
</table>
ECONOMIC DEVELOPMENT IN ETHIOPIA: AGRICULTURE, THE MARKET AND THE STATE

Extreme poverty, a soaring population, war and climatic disaster have combined to block social and economic progress in Ethiopia. Inappropriate government intervention, based on the command economy model, has particularly handicapped the performance of agriculture, which the author argues must be the key to economic progress. Based on a penetrating review of development theory and practice, this study examines Ethiopia’s economic situation and prospects and suggests policies that would free the market to drive agricultural and wider development in Ethiopia.