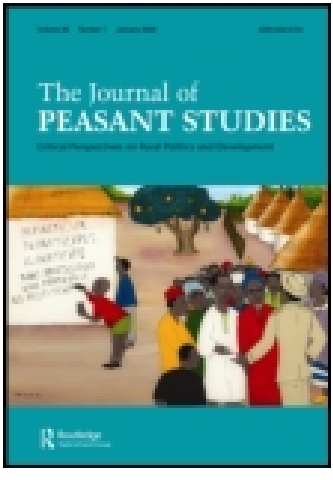

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Accumulation, Industrialisation and the peasantry: A reinterpretation of the Tanzanian experience

Marc Wuyts [a]

[a] Institute of Social Studies , PO Box 29776, The Hague, 2502 LT, The Netherlands

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Accumulation, Industrialisation and the Peasantry: A Reinterpretation of the Tanzanian Experience

MARC WUYTS

Tanzania's development policy during the 1970s aimed to develop production for the home market through a state-led aid-driven investment strategy in import-substituting industrialisation, but ended up by eroding its most critical component – the exchange with the peasantry. This article argues that the failure of this investment strategy can only be understood by looking at the mechanisms through which investment shaped domestic demand patterns in general, and food demand in particular, which in turn, through its effects on the production of export crops, affected the foreign exchange constraints in the economy. The analysis in this article, therefore, seeks to establish a missing *link between two old debates in the Tanzanian context: the industrialisation debate, on the one hand, and the debate on food versus cash crops, on the other.*

INTRODUCTION

This article investigates the link between an aid-driven state-led investment strategy of import substituting industrialisation and the dynamics of agricultural production in terms of the changing balance between export (cash) and food crops in Tanzania. My aim is to take a fresh look at the processes of accumulation which characterised the post Arusha declaration era from the late 1960s to the severe economic crisis of the early 1980s. In many ways, Tanzania's economic policy during this period was built around an investment strategy which aimed to force the pace of

Marc Wuyts, Institute of Social Studies, PO Box 29776, 2502 LT The Hague, The Netherlands. Many thanks to Amit Badhuri, Joshua Doriye, Charles Kimei, Bridget O'Laughlin, Ashwani Saith and Howard White for invaluable and incisive discussions and comments which greatly contributed to the final outcome.

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economic development with little concern for its *recurring* implications. Furthermore, while the objective was to construct a self-reliant industrialising economy, the major means to achieve this aim was to rely on foreign aid to step up the rate of investment in the economy. This article argues that the failure to take account of the recurrent implications of this aid-driven state-led investment strategy in the context of an open and structurally fairly inflexible economy which largely depended on a small number of export crops to earn foreign exchange, effectively eroded the growth momentum it sought to achieve and ended up by making the economy aid dependent – not only, to finance its investments, but also to supply it with the required recurrent imports of raw materials and consumer goods. Agriculture, while not being a major beneficiary of this investment drive, nevertheless played a key role in determining its adverse outcome. This article seeks to explore the mechanisms through which this happened.

My aim, therefore, is to explain the nature of the economic crisis in the early 1980s, not just as the result of a series of adverse 'external shocks' (such as, for example, the steep increases in the price of oil, falling prices of export crops, the war with Uganda, drought, etc.), but also, and more importantly, as the unintended outcome of an investment strategy which eroded its own momentum. These external shocks[1] matter a great deal, but their impact can only be understood in the light of the inherent weaknesses of the processes of accumulation in Tanzania which rendered the economy extremely vulnerable to adverse developments in world markets. For example, the steep increases in the price of oil in the 1970s and early 1980s were undoubtedly important *both* as a trigger which exposed the vulnerability of the economy as well as a factor which influenced the depth of the crisis, but the sharp fluctuations in the price of oil during this period cannot explain the nature of the crisis itself.

This article does not aim to present a comprehensive economic history of Tanzania in the post-Arusha era. On the contrary, my purpose is to make a rough *sketch* of some basic macroeconomic and intersectoral mechanisms which captures the key dynamic features of the processes of accumulation, economic growth and crisis which characterised this period. The approach used here, therefore, is more akin to economic *modelling* than an historical narrative without, however, engaging in an exercise of formal modelling using a language of equations.

The key question I seek to explore is how the reciprocal demand patterns between agriculture and industry, fuelled by an aid-driven investment boom, effectively undermined the production of export crops and, hence, led to a collapse in export earnings which, consequently, tightened the supply constraint on the country's *recurrent* imports.

Hence, this article investigates the interplay between effective demand patterns fuelled by a high and rising rate of investment, on the one hand, and its implications for the evolution of supply constraints on imports, on the other. Clearly, the analytical framework in this article has a distinct Kaleckian flavour inasmuch as it tries to come to grips with the *real* limits to financing investment.[2] My aim is to look at the mechanisms through which aid-driven investment generates domestic demand and savings in a context where the economy depends on agriculture to supply it with food and provide it with foreign exchange earnings, while both investment and industrial output depend heavily on imports. Not surprisingly, in this context, the process of investing in industrialisation is intimately linked with the question of the balance between food and cash crops in agricultural production.

In fact, the 1970s witnessed quite extensive debates on both these issues by policy-makers and scholars alike: the industrialisation debate,[3] on the one hand, and the debate on agricultural pricing,[4] on the other. The interesting aspect to these debates, however, was that they addressed each other only marginally; most linkages between them were left rather vague and, at times, unarticulated. Perhaps, the reason was that both debates operated at quite distinct levels: one concerned long run industrial strategy and ranged widely in scope and coverage; the other was more narrowly focused on official pricing policies. Little or nothing was said about their interlinkages in the process of financing investment.

The industrialisation debate gave rise to the formulation of the basic industry strategy finalised in the mid 1970s. Under this strategy, industrialisation was to be guided by the development of the *domestic* market, producing for local needs with local resources, with exports developing as an extension of the home market. Hence, this strategy viewed exports as a means to an end, rather than an end in themselves. At the theoretical level, the main preoccupations of this debate were akin to those raised by Raj and Sen [1961] in their planning model for achieving industrialisation with stagnant exports.[5] Similarly, in the Tanzanian context, planners and scholars alike did not expect that exports would grow significantly, at least not initially, during the process of industrialisation, but they certainly did not expect export production to collapse either. In practice, as foreign exchange became increasingly more scarce, export processing of primary products was again added as an integral priority of the strategy.

Given the basic tenor of this industrialisation strategy, it is not surprising that stepping up the production of food crops was seen as an integral part of the strategy of import substitution [*Bank of Tanzania*, 1981?: 112; *Rwegasira*, 1987: 1324]. Hence, on this issue, the industrialisation debate

took a clear stand on the question of food versus cash crops inasmuch as it favoured the production of food crops.

While the industrialisation debate ranged widely in scope and coverage, the debate on food versus cash crops centred on an analysis of official pricing policies. There were essentially two issues in this debate. One concerned the question of the relative price of food versus cash crops which was largely seen as a matter of *official* price setting. The other had to do with government policy on the internal terms of trade confronting the cash or food crop producing peasantry as a mechanism for transfering surplus from peasants to the state. Neither of these elements in the debate, however, paid any attention to how the pace of investment in import substituting industrialisation might affect both the *internal* terms of trade confronting the peasantry and the *relative* price of food vis a vis cash crops (in official markets but also, more importantly, in the rapidly developing parallel markets).[6]

In this article, I intend to show the connection between the industrialisation debate and the debate on agricultural pricing. To do so requires an analysis from a macroeconomic perspective that questions how a high and rising rate of investment can exert pressure on the dynamics of agricultural production by raising the relative prices of food *vis-à-vis* cash crops, and, consequently alter the nature of the supply constraints operative on the economy as export production reacts adversely. This, in a nutshell, is the main argument which, I believe, establishes the *missing* link between investment and industrialisation question, on the one hand, and the problem of balancing food versus cash crops, on the other.

Section I starts with the macro context and discusses the role of aid in relation to the evolution of the accumulation balance in the Tanzanian economy. Section II then puts forward the main analytical argument as to the interplay between investment, food demand and the evolution of the foreign exchange constraint. In two subsequent sections, the article investigates this hypothesis in the light of a brief literature study. First, section III looks at the dynamics of agricultural production and investigates how macro policies fuelled food demand such that the balance in agricultural production between food and cash crops shifted in favour of the former as a result of the rise in the relative price of food. Secondly, section IV looks at the interaction between the supply of manufactured goods, on the one hand, and the internal terms of trade confronting cash and food crop producers, on the other. It argues that the supply of manufactured goods was conditioned by the tension which developed over time between capacity creation in industry and services and its utilisation.

I. AID, INVESTMENT AND SAVINGS

The accumulation balance for an economy as a whole sets out how aggregate domestic investment is financed in *real* terms by domestic savings on the one hand, and by the net inflow of foreign savings as measured by the trade gap on the other:

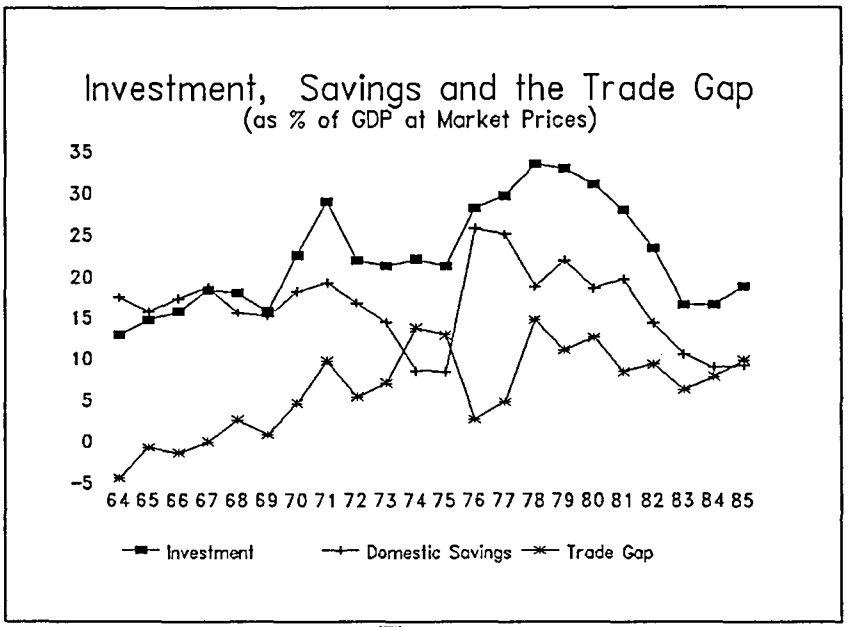
$$\text{INVESTMENT} = \text{SAVINGS} + (\text{IMPORTS} - \text{EXPORTS})$$

Hence, given an increase in the level of aggregate investment in the economy, one or more of the variables on the right hand side of the equation will adjust to finance it. Traditionally, foreign aid was and continues to be an important source of finance for investment in developing economies such as that of Tanzania. In fact, during most of the 1960s and the 1970s, foreign aid, with the notable exceptions of food aid and technical expertise, consisted largely of investment finance in the context of project aid. This was very much in line with current economic thinking at that time as exemplified by the familiar 'two-gap' model [*Chenery and Bruno*, 1982] in which foreign capital was seen to complement domestic savings and, hence, to allow for higher investment, more imports (particularly, of capital goods) and a faster growth rate of the economy [*FitzGerald*, 1993: 28]. In sharp contrast, Griffin [1970] argued that the inflow of foreign capital may also be used to finance consumption so that savings adjust downwards as the inflow of foreign capital increases, leaving investment largely unchanged. Adjustment mechanisms, therefore, can be complex and clearly depend on the concrete context in question. My interest here is to investigate how aid (as the major component of the inflow of foreign capital) affected investment and, consequently, savings and the trade gap in the Tanzanian experience.

Figure 1 shows the evolution of the components of the accumulation balance in Tanzania over the period 1964 to 1985.[7] All variables are expressed as shares of the gross domestic product (at market prices). As far as investment is concerned, Figure 1 reveals that the investment ratio was, on average, significantly higher in the 1970s as compared to the 1960s. Furthermore, it appears that investment boomed in the second half of the 1970s.[8]

There are various reasons which might explain why the investment ratio was high and rising during the 1970s. First, the Arusha declaration of 1967 set the scene for a more interventionist state committed to stepping up the pace of development in the country [*van Arkadie*, 1973]. Almost inevitably, this greater emphasis on growth and development also led to efforts to raise the rate of investment of the economy. Secondly, the basic industrialisation strategy formulated in the Third Five Year Plan

FIGURE 1

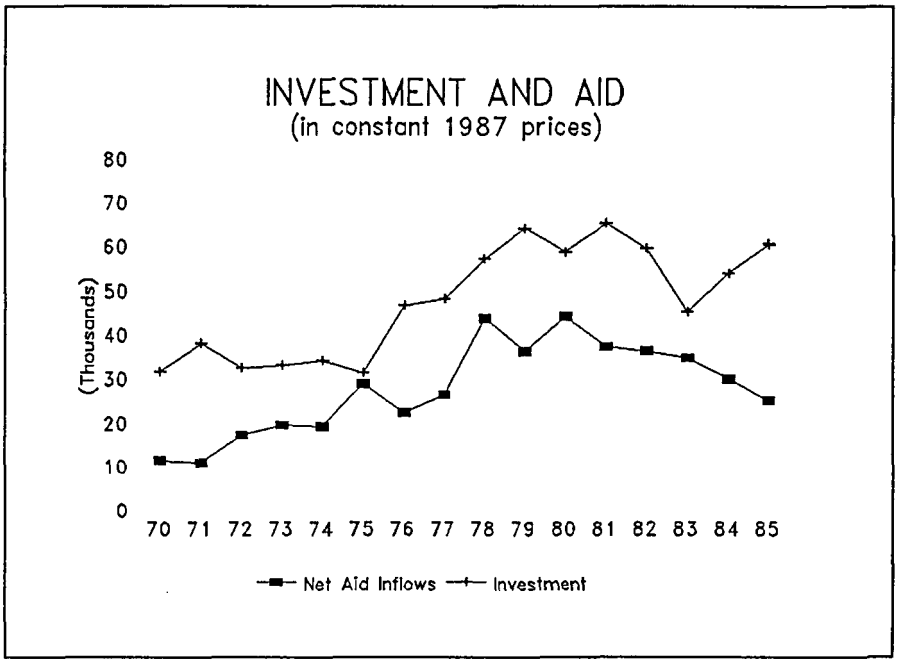


Source: National Income Accounts: 1964–70; 1970–82; 1976–85 (revised series).

implied massive investments in import substituting industrialisation. Finally, as shown in Figure 2, the 1970s also witnessed an aid boom which peaked in the late 1970s. It is reasonable to assume that greater access to, or reliance on, foreign aid gave added impetus to the country's investment strategy [*Bank of Tanzania*, 1981?: 51–2; *Wangwe*, 1983: 490–91].[9] In sum, it seems fair to conclude that, in this period, the country wanted to invest as much as it could and foreign aid made it possible to do so, at least up to the end of the 1970s.

While a strong positive association manifestly existed between investment and aid, both in real terms, the same cannot be said, at least at first sight, of the relation between imports and aid inflows. As shown in Figure 3, notwithstanding the aid boom of the 1970s, real imports virtually stagnated throughout the 1970s, and subsequently fell significantly in the crisis years of the early 1980s. This may appear strange. Indeed, in the absence of a significant capital goods sector, an increase in the rate of investment financed by additional aid would normally imply increased

FIGURE 2

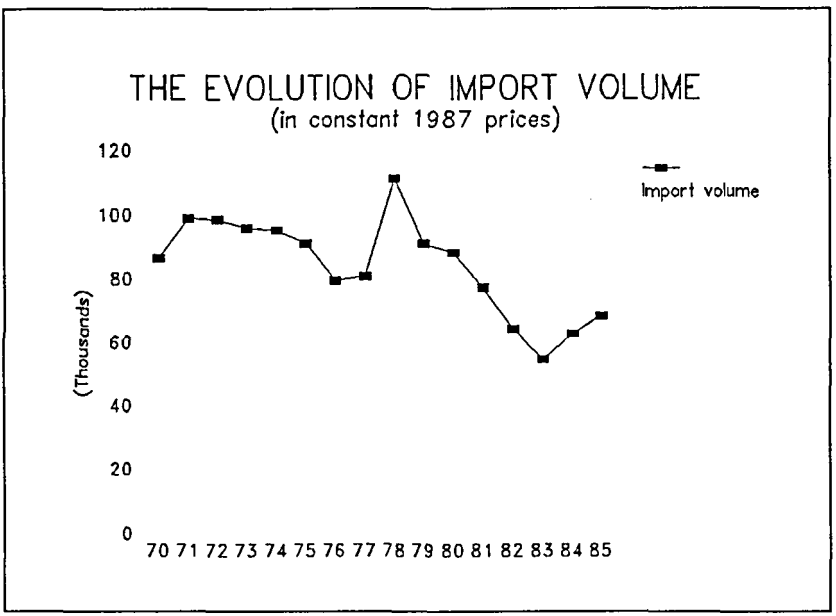


Source: National Income Accounts and World Debt Tables, diskette, 1992.

imports of capital goods as well, since investment depends largely on imported capital goods but for using local labour in construction and installation [*FitzGerald*, 1993: 51].[10] In fact, what happened was that the *composition* of imports shifted significantly in favour of capital goods in the late 1970s while import *volume* remained largely stagnant.[11] Why, then, did import volume stagnate in a situation where foreign aid expanded considerably along with domestic investment?

The answer lies in the evolution of exports. In this respect, a distinction needs to be made between the volume of exports (that is, a quantity index of the country's supply of export commodities) and the volume of imports which can be obtained with that volume of exports. The former measure is the *export volume*; the latter is the *import capacity* of a given export volume.[12] The import capacity of exports, therefore, tells us the quantity of imports that can be bought with export earnings given the prevailing terms of trade. In fact, import capacity of exports equals the product of

FIGURE 3



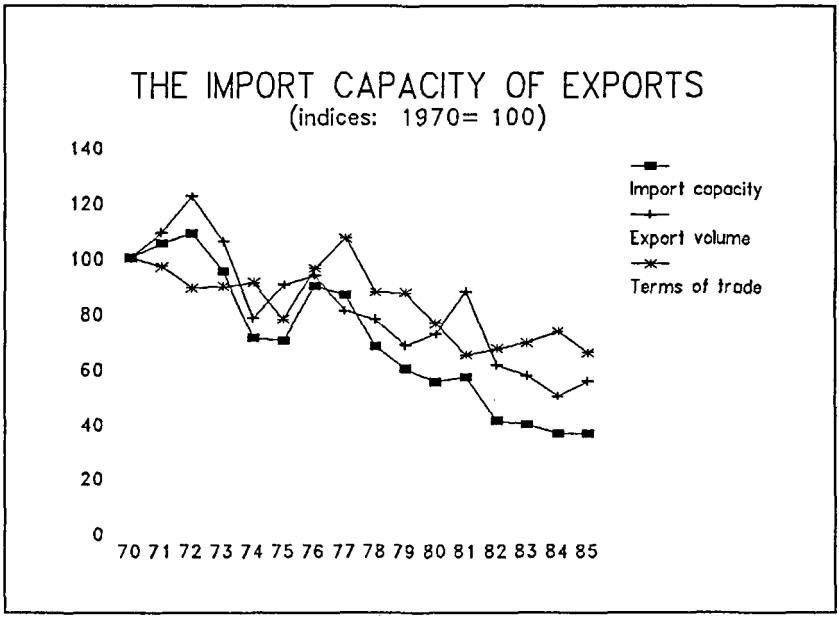
Source: World Tables and IMF.

export volume and the terms of trade. It is the evolution of the import capacity of exports which matters in assessing the evolution of the accumulation balance and its components in *real* terms. Figure 4 shows the evolution of import capacity of exports, export volume and the external terms of trade in Tanzania for the period 1970–85.[13]

As can be seen from the graph, the import capacity declined steadily except during the years of the coffee boom (1976 and 1977). The main contributing factor, however, to this steady decline was the fall in export volume, particularly from the mid-1970s onwards. The question then arises of to what extent the fall in export volumes was in any way *endogenous* to the investment drive which fuelled economic development in this period. This is the question I shall deal with in subsequent sections of this article.[14]

What remains to be done, however, is to look at the last component in the accumulation balance: namely, savings. Figure 1 above shows that the savings ratio appears to have risen slightly, but significantly, from the

FIGURE 4



Source: Bureau of Statistics, IMF and World Tables.

1960s to the 1970s. The evidence for this rising trend springs from more recent reassessments of the national accounts data since earlier series recorded a falling savings ratio towards the end of the 1970s.[15] These revisions of the data, therefore, suggest that, contrary to Griffin's hypothesis, the inflow of aid may well have gone hand in hand with a higher savings ratio.

This is not as implausible as it may look at first sight. In fact, it appears to have been a common practice for aid donors only to finance the foreign exchange costs of aid-assisted investment projects, leaving the domestic counterpart (the state or parastatal) to meet local resource costs with local funds.[19] Similarly, parastatal or private enterprises might have used suppliers' credits to finance imports of capital goods while raising local finance to meet local resource costs. In such cases, the greater availability of foreign capital would also mean a greater need for local finance and, hence, one would expect the savings ratio to rise, not decline. The higher level of investment, made possible by the availability of foreign capital

(aid and/or commercial credits), would then create its own savings in the domestic economy as well.

II. INVESTMENT DRIVE, FOOD DEMAND AND FOREIGN EXCHANGE CONSTRAINT

This section investigates the consequences of a high and rising rate of investment for the dynamics of agricultural marketed output in terms of the changing balance between food and cash crops and of the evolution of the internal terms of trade confronted by the peasantry. This, I argue, is the key question to address to come to grips with the inherent weaknesses of Tanzania's aid-driven state-led investment strategy in import substituting industrialisation. More specifically, my argument puts the emphasis squarely on the question of the *rhythm* of accumulation and its implications for the patterns of effective demand it creates and their effects on the changing nature of the supply constraints in the economy. Consequently, I tend to see the question of agricultural pricing policies and of the evolution of the internal terms of trade as being largely *endogenously* determined by the process of accumulation at work. Relative prices matter a great deal in this analysis but I do not see their evolution as determined solely, or principally, by exogenous policy decisions of the government. Hence, it is an analysis of the process of accumulation which enables us to pinpoint the role played by the movements in relative prices in producing imbalances and tightening supply constraints in the economy.

Investment creates a demand for consumption. Consequently, as Kalecki [1976: 44] argued, the problem of investment is whether or not its financing creates inflationary pressures on prices of basic necessities. Whether this happens or not depends on the short run supply elasticities in the sectors producing consumer goods; particularly, food, on the one hand, and industrial consumer goods, on the other. In fact, Kalecki [1976: 46] argued that, in many developing countries, the supply of industrial consumer goods would be reasonably elastic given the prevalence of excess capacity in industry, while the supply of food may be fairly rigid. In industry, therefore, quantity adjusts; in agriculture, prices adjust. Consequently, the terms of trade of the food producing peasantry will improve with higher investment while, in contrast, real wages in industry decline [*Wuyts*, 1988; *FitzGerald*, 1993: 50].

In the Tanzanian context, however, the situation is more complex in nature. More specifically, to see how the economy can adjust to a state-led investment strategy in import substituting industrialisation, we need to take account of the nature of the foreign exchange constraints on both

investment and on current output (particularly, in industry). The state only has, at best, very limited control over these constraints. Much depends on the actual policies pursued by aid donors, the external terms of trade, and the output responsiveness of the peasantry to movements in relative prices between alternative crops and in the internal terms of trade.

First, if, by design, foreign aid mostly consists of investment support, it follows that imports of capital goods are *not* primarily constrained by export earnings. Consequently, as long as aid donors are prepared to finance additional imports of capital goods in the context of project aid, domestic investment can go on unabatedly, never mind what happens to output and export volumes. However, by the same token, imports of consumer goods and raw materials can only be paid for by foreign exchange earnings obtained through exports. Hence, in this case, aid policies ease the foreign exchange constraint on investment, but not the constraint on current output.

Secondly, adverse movements in the external terms of trade will affect the overall foreign exchange constraint in general, and the foreign exchange constraint on current output in particular. Indeed, falling export prices or sharp rises in the prices of key imported commodities (such as, for example, oil) will adversely affect the country's import capacity of a given export volume. If aid is only available to finance imports of capital goods, a fall in the external terms of trade will put the burden of adjustment more on the level of current output than on investment.

Thirdly, a further constraint on state action emanates from the peasant economy. Indeed, the peasantry supplies both marketed surpluses of food and cash crops for exports, while industry relies in part on imported raw materials to produce consumer goods and a limited range of intermediate products and capital goods. Agriculture and industry, therefore, interact through two main mechanisms. First, on the *home* market, both sectors exercise reciprocal demands for each others goods: mainly, food in exchange for manufactured consumer goods (also called, incentive goods). Secondly, agriculture supplies cash crops for exports which, among other uses, enable the country to buy raw materials and intermediate inputs to keep industry running. Manufacturing output, therefore, depends not only on available capacity, but also on the supply of imported inputs bought with export earnings derived from peasant production.[17] In this context, we cannot simply assume that the supply of industrial goods is reasonably elastic merely because excess capacity prevails in this sector [*Lipumba et al.*, 1988; *Wangwe*, 1983]. Indeed, industrial output also depends on the import capacity of exports.

Similarly, we cannot just assume that the food supply is fairly rigid in the short run because peasants may choose to switch from cash to food crops in response to a rise in the price of food relatively to the price of cash crops. Hence, even if aggregate agricultural output is fairly rigid in the short run, its *composition* between food and cash crop production may well be more flexible in response to movements in relative prices [*FitzGerald*, 1993: 51,189]. Furthermore, the peasantry's supply of agricultural crops may well be responsive to changes in the internal terms of trade: that is, to changes in real producer prices of alternative crops.

Hence, a feasible pattern of planning and accumulation should take account of the fact that state action with respect to the scope of accumulation in industry and services in general, and within the state sector in particular, is limited by aid policy, by the conditions of world trade and by the need to maintain a meaningful and balanced exchange with the peasantry which concerns both the evolution of the internal terms of trade as well as of the relative prices of food and export crops [*FitzGerald and Wuyts*, 1988a; *FitzGerald*, 1988].

If, for example, aggregate demand pressures on the marketed output of food go at the expense of the production of export crops, industrial output may no longer be able to expand as demand increases and, consequently, the existence of excess capacity of industrial plant is of no avail. In this case, therefore, the higher rate of investment may initially improve the terms of trade of food producers while urban real wages decline. If, however, industrial prices also adjust upwards because of industry's inability to expand output due to the tightening of the foreign exchange constraint as a result of falling export volumes, real wages will deteriorate further, while the internal terms of trade now move in the opposite direction.[18] Hence, wage workers lose out as both food prices and the prices of industrial goods increase. Food crop producers who, at first, benefit from favourable terms of trade now see their gains eroded as industrial prices pick up momentum. Cash crop producers confront worsening terms of trade as industrial prices increase and witness the progressive deterioration of the relative price of their crops in relation to food crops. Consequently, an investment strategy designed to build the *home* market may thus end up by destabilising any meaningful exchange between industry and agriculture at the expense of both wage earners (industrial workers and bureaucrats alike) and the peasantry.

The argument developed in this section is no more than an analytical sketch of a plausible explanation of the key mechanisms which led to the demise of Tanzania's development strategy. This sketch abstracted from a variety of factors, structural or contingent, which affected the rhythm of accumulation as well as the timing of the crisis. The drought years of 1974

and 1975, the coffee boom of 1976 and 1977 with its concurrent wind fall gains and the rises in the price of oil from 1973 onwards, and particularly in the late 1970s and early 1980s, all were important in various ways. Similarly, the character of marketing institutions and the nature of government intervention which led to the conflicting coexistence of official and parallel markets undoubtedly played their role. Finally, the complex patterns of peasant differentiation and regional diversity conditioned, and were conditioned by, the overall development strategy which placed the emphasis squarely on an aid-financed investment boom.

These factors would need to be taken into account in a more realistic treatment of the concrete processes at work in the Tanzanian experience. However, notwithstanding these very real limitations to this rough sketch, I believe that it captures the key mechanisms at work and the consequent inherent weaknesses of Tanzania's development strategy. The next two sections evaluate the hypothesis developed here in the light of a brief literature study on Tanzania.

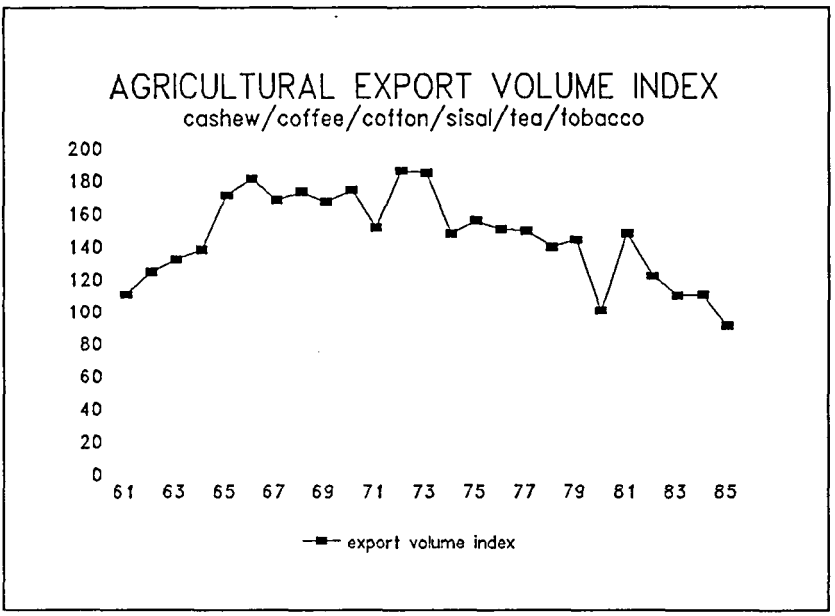
III. AGRICULTURAL DYNAMICS: FOOD VERSUS CASH CROPS

In Tanzania, export crop production fell dramatically from the mid-1970s up to 1985. Ellis [1984b: 47], for example, estimated the fall in marketed output of major cash crops to be 23 per cent from 1973/74 to 1978/79. Figure 5 shows the evolution of the export volume index for major cash crops over the period 1965–85. Clearly, the fall in export crop production was significant and sustained: a fact agreed upon by all commentators. Where opinions differ is with respect to the causes of this decline.

Perhaps not surprisingly, the equally dramatic shift in official pricing policy in the mid-1970s in favour of food crops as against cash crops is often seen as a major cause of falling cash crop production. Relative prices of food *vis-à-vis* cash crops rose markedly on official markets and, furthermore, official real producer prices of cash crops fell dramatically in the late 1970s and early 1980s. Ellis [1983], for example, interprets these trends as resulting from a state-initiated squeeze on the peasantry (particularly, the cash crop producing peasantry) so as to transfer the agrarian surplus from the peasantry to the state. I shall return to this point in the next section. In this section, however, my focus is on the proposition that the demise of export crops was due to the fact that government policies *initiated* the downward trend in the production of export crops by changing official relative prices in favour of food crops.

In my judgement, government policy *responded* to aggregate demand pressures on the price of food rather than being the major *cause* of a change in relative prices. Raikes [1986: 122] makes a similar point in the context of a different argument:

FIGURE 5



Source: Bank of Tanzania, 1981?; Economic and Operations Reports, various issues.

> Official price policy is said to have favoured food crops since the mid-1970s and this has been held responsible for falling export crop production. But the real incentive to substitute food for export crops is more likely to have been the difference between the official price for export crops and the *unofficial* price of food crops. This has more to do with their respective markets than with government policy.

This last sentence is particularly incisive and illuminating. Raikes' subsequent argument is that food producers have more options than export crop producers. The latter can do little more with their coffee, cotton, cashew nuts or tea but sell it through official channels or, perhaps, smuggle it abroad. Food producers, in contrast, have various options: selling to official marketing agencies, using parallel circuits of trade, or disposing of their produce in local markets for local use. Consequently, Raikes concludes, the degree to which government can in fact keep food

prices down is severely limited if official agencies wish to purchase any food at all. Tanzania's state-owned National Milling Corperation was to learn this lesson in the early 1980s at considerable cost; in actual fact, it ended up by controlling food imports rather than food marketing. Raikes's point is undoubtedly important and highly relevant.

I would add, however, that it is then also crucial to take account explicitly of the macroeconomic determinants of the demand for food.[19] Hence, what matters is not just the structure of markets and the options they leave to peasant producers, but also the factors which propel demand within these markets. In other words, the upward pressures on the relative prices of food crops *vis-à-vis* cash crops, first in the parallel markets and subsequently in official markets, were effectively *endogenous* to the state-led investment drive. In my opinion, therefore, from the mid-1970s onwards, government pricing policies basically *responded* to demand pressures which were gathering momentum in the economy as a result of the aid-assisted investment strategy of the government.[20] Put differently, the *making* of rural markets (including the emergence of parallel markets) and the dynamics of relative prices therein were essentially the product of the state's investment strategy.

To what extent, then, did cash crop producers shift away from the production of cash crops as the prices of food crops rose relatively to those of cash crops? Ellis [1984b: 48], after a careful assessment of trends in agricultural production, concluded that one matter which the trends seem to settle beyond any doubt is the sensitivity of Tanzanian peasants to changes in the relative producer prices of alternative crops. Raikes, quoted above, holds a similar view, although he stresses the importance of the price of food on the parallel markets rather than on the official markets.

Furthermore, Lipumba and Ndulu [1989: 15] provide some interesting econometric evidence to support this view. At the aggregate level, they show that Tanzania's export quantity index varies positively with the real exchange rate and *negatively* with the real price of food crops. In fact, the cross-elasticity of export volume with respect to changes in real food prices equals –1.35 which indicate a high responsiveness to relative price changes. More detailed crop by crop estimations show that this relative price responsiveness is highest in the case of annual crops, cotton and tobacco, and lowest for the slow responding perennial crops, coffee, tea and sisal [*Lipumba and Ndulu*, 1989: 20]. Dercon [1993], in a more detailed study on cotton, obtained similar results. His findings suggest that the supply responsiveness of cotton growers is more a relative price response than an aggregate supply response. What this means is that peasants are more prone to switch between crops than to increase the aggregate supply of all crops.[21]

Hence, in sum, it seems fair to conclude that the supply of export crops reacted significantly to changes in the relative prices of food crops vis a vis cash crops. But what about the marketed output of food itself? How responsive was it to changes in relative prices between food and cash crops? Did the marketed output of food rise significantly in response to the change in relative prices?

The answer to these questions is by no means straightforward and, in fact, opinions differ markedly on this issue. This is not least because data on marketed output of food are often poor in quality, if not, in certain cases, non-existent. The reason is, as Raikes explained, that food producers have several options as to what to do with their marketed output. Data on officially marketed output at least exist; data on the quantity of food which passed though parallel markets are, at best, sketchy or totally non-existent.

One hypothesis, put forward by Skarstein [1986: 95–100], states that the agrarian marketed surplus, food and cash crops alike, entered into a secular decline from the mid-1970s onwards. His argument is based on two pieces of evidence: the fall in the production of export crops, on the one hand, and the economy's increased reliance on food imports, on the other. Skarstein, whose main concern is to explain the malaise of industrial development in Tanzania since the late 1970s, identifies this declining trend in the agricultural surplus as the major cause of industrial decline, a point to which I shall return in the next section. The evidence on the secular decline in the production of cash crops is beyond dispute. But what about the evolution of the marketed surplus of food crops? And, furthermore, what role did food imports play? Indeed, it is perfectly possible that the increased demand for food is largely met through imports.

As far as official marketing of food is concerned, assessment of trends is often hard to do since food production in general, and marketed production in particular, varied considerably due to weather conditions.[22] However, broadly speaking, it appears that officially marketed output at first expanded significantly from the mid-1970s to the late-1970s and, subsequently, fell equally significantly during the crisis years of the early 1980s [*Ellis*, 1988; *Raikes*, 1986]. The officially marketed output of staple grains (maize, paddy and wheat) rose by 27 per cent from 1973 to 1979 while the marketed output of drought crops (sorghum, millet and cassava) increased dramatically by 793 per cent [*Ellis*, 1988: 100–101]. The reason for this steep increase in drought crops is that the 'food first' policy of the mid-1970s put much greater emphasis on integrating these crops into the official marketing system regulated through pan-territorial prices. Subsequently, however, from 1979 to 1983, the officially

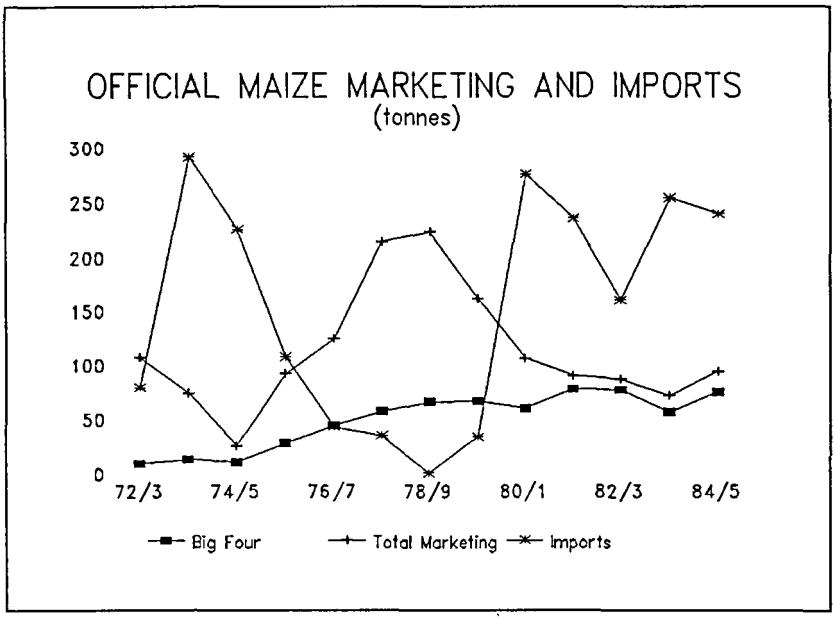
marketed output of staple grains fell by 50 per cent and that of drought crops by 83 per cent [*Ellis*, 1988: 100–101]. Hence, in sum, Skarstein's proposition that the marketed output of food crops went into secular decline from the mid-1970s is questionable. The supply of food on *official* markets initially rose considerably and only subsequently fell equally markedly. The point is to explain both the upward trend during the second half of the 1970s as well as its marked reversal from the end of the 1970s.

What about food imports? Here, the available data confirm the growing importance of food imports from the early 1970s onwards. Before 1972/73, food imports of maize had been small and those of rice negligible, while, after that, the import coefficient for food imports rose markedly, on average [*Raikes*, 1986: 119]. Hence, it appears that the marketed output could not keep up with the expansion in demand. This, in itself, may be the outcome of the process of stepping up the investment rate in import substituting industrialisation. Indeed, in so far as the domestic supply of food is unable to expand sufficiently to meet the rising demand, food imports would tend to increase. In the Tanzanian context, during this period, the growth of non-agricultural employment was exceptionally high: 8.2 per cent per annum in the period from 1969 to 1978 [*ILO/JASPA*, 1982: 66]. With the emphasis on import substituting industrialisation, urban incomes and employment, therefore, fuelled food demand in the country. Hence, it is not surprising that the expansion of the demand for marketed food surpluses exerted pressures on food imports.

However, the evolution of food imports is nevertheless a mixed story which mirrors the evolution of officially marketed surpluses of food. Figure 6 shows the picture with respect to maize, the major marketed food crop in Tanzania. Clearly, food imports rose steeply during the drought years of 1973–75. Subsequently, food imports declined markedly up to the early 1980s when they rose anew to levels similar to those of the mid-1970s.

But there is a further trend revealed by this graph. Figure 6 also records the officially marketed output of the 'Big Four': the major maize delivering regions (Iringa, Mbeya, Ruvuma and Rukwa) during the 1980s. However, until the early 1970s, only Iringa ranked among major surplus regions along with Arusha, Kilimanjaro, Morogoro and Dodoma [*Raikes*, 1986: 118]. Since the mid-1970s, however, the 'Big Four' gained in importance and, subsequently, became the major surplus regions of officially marketed output. The latter regions are all distant (particularly, Mbeya, Rukwa and Ruvuma) from the major urban centres and, hence, transport costs of maize marketing are high.

FIGURE 6



Source: Raikes [1986, Tables 5.2 and 5.3: 118–19].

It was the introduction of pan-territorial pricing in the mid-1970s which enabled these regions to become major suppliers of marketed food surpluses, at the expense, of course, of subsidized transport costs. As Raikes [1986: 123] put it succintly: 'where most of the other policies ... have been expensive failures, pan-territorial pricing has been an expensive success'. Conversely, however, given the structure of transport costs, there is little incentive, except in years of bumper harvests, for producers in the regions near to urban centres to sell their marketed output through official channels [*Raikes*, 1986: 119]. Consequently, one would expect the supply of maize in the latter regions to find its way on to the more profitable parallel markets. Hence, the observed narrowing of the gap between total officially marketed output and the marketed output of the 'Big Four' does not necessarely imply that the marketed maize output in the better situated regions fell dramatically. Rather, it is more likely that maize marketing in these regions moved into parallel markets

[*Raikes*, 1986: 119]. Hence, the fall in official marketing of maize may not reflect what happens to maize marketing in general.

Hence, the proposition put forward here is that the reversal in the trend in officially marketed output of food since the late 1970s may not wholly reflect the evolution of total food marketing in the country. To the extent that food producers shifted progressively towards parallel markets, the trend in officially marketed food output is not a good indicator for what happens to the total domestic marketed supply of food. Neither are food imports necessarely an appropriate measure of the shortfalls in domestic food supplies. The reason is that increased food imports may in part be a reflection of the state's loss of control over domestic food purchases. It is not my intention, however, to suggest that the marketed output of food did not decline in the early 1980s. There are good reasons to believe that it may well have done so: weather conditions, among others, but also, as I shall discuss in the next section, the adverse movements in the internal terms of trade as a result of falling industrial output. In so far as marketed output of food responded to real producer prices, the total supply may well have been affected adversely. My point here, however, is that it would be incorrect to equate the fall in the total marketed output of food with the observed decline in the officially marketed output. Doing so would lead to a neglect of the growing influence of parallel food markets.

What remains to be explained, however, is why parallel markets gained dominance in food marketing? Obviously, the direct impetus came from the growing discrepancy between food prices on official and parallel markets. But this calls for a further explanation. In my opinion, it was the state's inability to sustain official real producer prices of food crops from the early 1980s onwards which explain the dramatic fall in official food marketing. The reason why real producer prices could no longer be maintained had to do with the sudden and severe contraction in the supply of manufactured goods from 1979 onwards. Why this happened I shall deal with in the next section.

Before doing so, however, I shall briefly discuss an alternative explanation of the decline in the marketed output in agriculture in the late 1970s and early 1980s. This concerns the *'implosion thesis'* as put by Bevan *et al.* [1987; 1989; 1990]. The basic idea of this work is to study peasants' behaviour under shortages resulting from government price controls and rationing. The model is presented with considerable mathematical refinements but, in essence, the central argument is easy to grasp.

Consider a cash crop producing peasantry which sells its marketed output of export crops in order to buy manufactured consumer goods. Peasants hold cash balances in order to bridge the gap between selling their crops at harvest time and buying consumer goods at regular intervals

throughout the year. Suppose next that, through price controls and rationing of the supply of consumer goods imposed by the state, the peasantry confronts goods shortages as supplies of consumer goods fall short of demand and, moreover, arrive irregularly and unpredictably. Consequently, the authors argue, peasants, at first, may even try to build up their cash balances by selling export crops so as to make sure they have sufficient ready cash available when consumer goods happen to be available. But soon, in the face of persistent shortages, peasants will cut back on export production to avoid merely accumulating more cash. The fall in export volumes will constrain the import capacity of the economy and, consequently, reduce the supply of consumer goods to rural areas even further, since either imports of consumer goods decline or manufacturing output falls for lack of imported raw materials. Facing renewed and aggravated shortages, peasants react by cutting back export production even further. This leads to a vicious circle in which export volume and the domestic supply of consumer goods *implode* in an interactive process which grinds the economy to a halt.[23]

Hence, in this view, rationing coupled with price controls lie at the origin of the decline in the agricultural marketed surplus. In my opinion, this explanation fails to capture some key aspects of the Tanzanian experience.

First, when applying this theory to the Tanzanian context, these authors completely discount the whole question of the relative price of food versus cash crops. In fact, this issue, which enlisted considerable debate in Tanzania, is more or less put aside by assumption:

> ... the aggregate structure of the model is kept extremely simple: the alternatives to the production of cash crops, namely leisure or the production of food, are treated as a single aggregate. We assume that food is produced only for own consumption. In Tanzania during our period this is not such an unrealistic assumption as might first appear. Dar Es Salaam, the major urban centre, was largely fed by means of food imports rather than purchases from peasants. Hence net sales of food by peasants in exchange for urban-supplied consumer goods were probably modest relative to non-food cash crops [*Bevan et al.*, 1989: 157].

Above, I have tried to show that the assumption that marketed surpluses of food are negligible in the Tanzanian context, even as far as the 1980s are concerned, is highly questionable. Furthermore, available analysis, discussed earlier, shows that cash crop producers responded strongly to movements in the relative prices of food versus cash crops.

Secondly, export production fell long before shortages became a major problem in rural areas.[24] In my opinion, the causal sequence ran the other way around: shortages accompanied by official rationing were the outcome of the collapse in import capacity which was principally induced by falling export volumes as well as by adverse movements in the external terms of trade.

Finally, the authors' proposition that the basic problem is that peasants, on average, find themselves with a surplus of cash and short of commodities is highly questionable. It is more likely that the operation of parallel markets centralised cash balances in the hands of private traders, transporters and larger food surplus producers in the better regions, while a significant majority of the peasantry probably found themselves with little cash or commodities, having to survive in a situation of rampant inflation in the parallel markets.

IV. THE SUPPLY OF MANUFACTURED GOODS AND THE INTERNAL TERMS OF TRADE

Industrial development in Tanzania during the 1970s was characterised by a mounting tension between capacity creation and its utilisation [*Wangwe*, 1983; *Lipumba et al.*, 1988]. On the one hand, the policy of investing in import substituting industrialisation led to the rapid expansion of available installed capacity in industry. But, on the other hand, the growth in manufacturing output in particular, and of industry in general, required increased imports of raw materials. Since investment in industry also has a high import intensity, capacity creation and its utilisation in industry may well end up competing for scarce foreign exchange.

However, as Wangwe [1983: 490–91] pointed out, the balance between both competing uses of foreign exchange was heavily tilted in favour of investment. Wangwe lists the following reasons. First, it was definitely easier for importers to obtain suppliers' credits with long repayment periods (as preferred by the Ministry of Finance and the Central Bank) for capital goods imports rather than for intermediate good imports. Second, foreign aid consisted mainly of project aid and, hence, had an in-built bias towards investment. As foreign exchange became tighter, approval of investment projects increasingly depended on the availability of such foreign finance. Finally, this bias towards investment was deeply ingrained in overall state planning, in sectoral ministries and in public sector enterprises. In actual practice, micro-level investment appraisal and planning took little or no account of whether such micro investments were consistent with overall macro level resource availability.

Lipumba *et al.* [1988] tackled the same issue from a perspective of econometric modelling. In their model, consumer imports and intermediate imports are constrained by 'the supply of foreign exchange obtained from the previous year's exports, and (for intermediate imports only) also foreign transfers' [*Lipumba et al.*, 1988: 360].[25] In contrast, imports of capital good were less constrained since these depend on last year's export earnings as well as on available foreign capital (particularly, on foreign aid). Thus, it is possible for domestic investment to continue unabatedly, even if export earnings are falling. In contrast, in their model, capacity utilisation in manufacturing critically depends on imports of intermediate inputs. It is this process, they argue, which led to the paradoxical situation that 'capital stock continued to grow, but its utilization rate dropped dramatically (from 100 per cent in 1973 to 27 per cent in 1984) so that the elasticity of output of intermediate inputs became very large' [*Lipumba et al.*, 1988: 356].

It is interesting, however, that neither Wangwe [1983] nor Lipumba *et al.* [1988], while both recognising the tension between capacity creation and its utilisation in industry as competing users of scarce foreign exchange, seek to investigate whether or not a further link exists between investment in industrial capacity creation and the foreign exchange constraint itself. Lipumba *et al.* come close to doing so since their supply functions for export crops feature the real producer prices of food crops as key variables, but they do not investigate how domestic investment can affect the price of food. The reason, as they [1988: 360] readily admit, is that food production does not feature at all in their model since 'so little production is marketed and the data are very weak'. However, the authors make the implicit assumption that increases in export production replace food crop production one for one in value terms. In view of this assumption, however, it is surprising that they did not pay more attention to the mechanisms through which capacity creation could affect food prices and, hence, export volumes and, consequently, manufacturing output.

Manufacturing output also depended critically on the evolution of the price of oil. Under conditions where export earnings were gradually squeezed as export volumes declined, the steep rises in the price of oil (particularly, in the late 1970s and early 1980s) fully exposed the inherent weaknesses of Tanzania's development strategy. Oil is an intermediate good which is so basic to the day to day running of the economy that it imposes, like food, a first claim on the available foreign exchange obtained from export earnings so that the amount available for other (recurrent) imports such as industrial raw materials is a residual [*Doriye and Wuyts*, 1992: 28]. Hence, on the one hand, the fall in export earnings

affected the imports of consumer goods and of intermediate goods more than the imports of capital goods which depended largely on foreign capital inflow. Consequently, towards the late 1970s and in the early 1980s, the share of recurrent imports in total imports fell significantly. On the other hand, the increases in the price of oil coupled with its inelastic demand led to significant increases in the share of oil in imports. Squeezed in the middle, the share of non-oil intermediate imports dropped from 35–40 per cent in 1971/73 to 13–15 per cent in the early 1980s. Oil, therefore, crowded out industrial raw materials and, consequently, constrained manufacturing growth.[26]

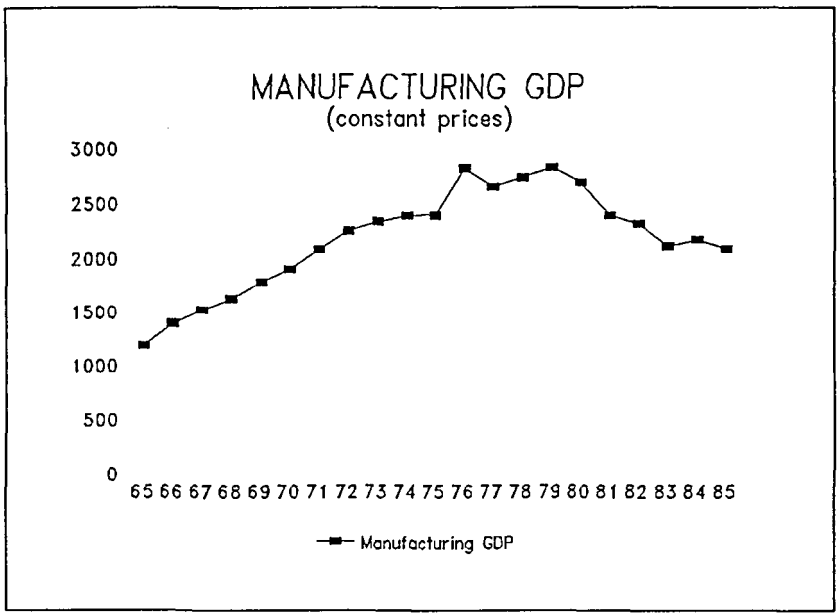
Hence, falling export volumes jointly with the steep rises in the price of oil negatively affected the growth of manufacturing output as shown in Figure 7. This brings us back to the question, raised in section II, as to the capacity of industry to respond to increased demand resulting from the multiplier effects of increased investment. As is clear from the graph, manufacturing growth initially allowed for a certain response capacity but, progressively, manufacturing output at first stagnated and subsequently fell steeply. It appears, therefore, that, by the late 1970s and, particularly, in the early 1980s, industry's capacity to respond to growing demand pressures was nil at first, and negative afterwards.

In view of the discussion in section II on the analytical framework, it would appear, therefore, that, at least from the late 1970s onwards, the attempt to maintain a high rate of investment met with an inelastic, and subsequently falling, industrial output. The supply of so-called 'incentive goods' (both locally produced manufactured goods as well as imports of consumer goods) became increasingly constrained. Rationing of this supply in official circuits often limited the actual supply to rural areas even further, and, increasingly, the peasantry's access to such goods effectively depended on parallel market trade.

This question of the tension between capacity creation and its utilisation did not only apply to industry, but also to public provisioning. Here, as Doriye [1992] argues, the process was somewhat different. The emphasis on the quantitative expansion of public provisioning of services went at the expense of its quality. For example, while new health facilities, primary schools or water supplies were being built, the subsequent capacity to supply these new facilities with needed material inputs was seriously lacking. This, in part, was due to the foreign exchange constraint on recurrent imports as well as to the limits imposed by the growth in recurrent revenue of the government budget on recurrent expenditures [*Doriye and Wuyts*, 1992].[27] Apart from this growth in public provisioning, government administration also grew rapidly, particularly as a result of its decentralisation towards the regions.

The net result was the rapid expansion of employment in industry and

FIGURE 7



Source: National Accounts of Tanzania: 1964–70; 1970–82; 1876–85.

in services (particularly, public administration and public provisioning). Indeed, in industry, employment grew as new plant was installed. Each time a new factory came on stream, employment would expand accordingly. In contrast, declining capacity utilisation in manufacturing did not lead to a fall in employment because of explicit government policies against lay-offs of workers. Similarly, in services, employment expanded notwithstanding falling quality and growing ineffectiveness in service provisioning. Hence, for example, in the period from 1969 to 1979, formal sector wage employment expanded by 6.34 per cent per annum for all non-agricultural sectors and by 7.15 per cent per annum for public services; in this period, GDP growth averaged 4.5 per cent for all non-agricultural sectors and 12.4 per cent for public administration. Subsequently, from 1979 to 1984, the period of economic crisis, employment continued to expand by 2.2 per cent per annum in all non-agricultural sectors while its GDP declined by 0.7 per cent per annum; in public services, employment expanded by 4.5 per cent per annum with its

contribution to GDP growing at 1.7 per cent per annum [*Bureau of Statistics*, 1993.]

While the processes at work were very similar in industry and in services, the impact on *measured* growth in GDP (gross domestic product) was markedly different. In industry, GDP growth is measured by the growth of value added at constant prices. Falling capacity utilisation accompanied by falling levels of output led to a fall in manufacturing GDP. In public services, however, GDP growth is measured by the wage bill at constant prices and, hence, reflects the evolution of employment. This explains why, unlike in manufacturing, measured GDP growth in public services still expanded along with employment, notwithstanding falling productivity and quality decline in service delivery [*Doriye*, 1992].

Kimei *et al.* [1990] noted that Tanzania's GDP growth had two distinctive characteristics in the post-Arusha era: its deceleration over time, on the one hand, and the increasing dominance of services in the structure of growth, on the other. By the late 1970s, they argue, output growth was virtually wholly accounted for by the growth in services. Technically speaking, given the way GDP is measured, this statement is correct. But it hides the reality of the underlying process: stagnation or even decline in output with growing employment levels. Hence, it was not the output of public services which was growing; rather, the growth factor was wage employment in public provisioning.

This point is important in view of the emphasis put in this article on the analysis of the dynamics of the demand for food in Tanzania's economic development. The growth in the demand for food does not only depend on population growth and on the growth in average urban income per capita, but also on the extent to which non-agricultural GDP growth is reflected in the growth of wage employment. In conditions of output stagnation or decline, given Engel's law, employment growth at the expense of falling real wages is more likely to sustain food demand in the economy at large [*Wuyts*, 1988]. In this respect, Doriye [*1990*: 8] points out that the weight of food in total household expenditures used for computing the National Consumer Price Index (NCPI) which reflects consumption patterns of urban dwellers, was adjusted from 45.4 per cent in the 1970s to 65.8 per cent in the 1980s. Doriye ventures that one explanation why this adjustment was made is '... because standards of living have deteriorated so much that an average household has gone back to basics implying a reconstitution of the basket over time?' [1990: 8]. There is some evidence which supports this hypothesis. Bryceson's [1987: 174–5] survey of various estimates of the share of food expenditures in total households expenditures of urban households over the period 1939–80 shows a higher estimate for 1980 than was prevalent

during the 1960s. According to Bryceson's information: the share of food in total expenditures of low income households was 85 per cent in 1980 as against 56 per cent in the late 1960s; for high incomes, the respective values were 40 per cent in 1980 as against 31 per cent in the late 1960s.

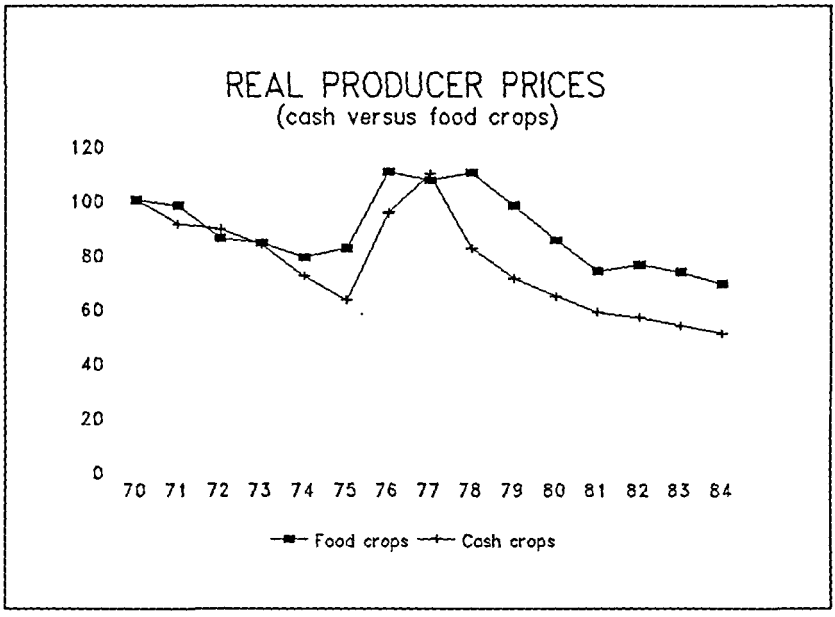
Hence, as the tension between capacity creation and its utilisation became more acute towards the end of the 1970s, it was not employment which adjusted, but rather real wages. The investment drive, therefore, went at the expense of falling real wages as government policy sought to maintain, or even increase, employment levels in the public sector despite slow growth or even declines in sectoral output [*Lipumba et al.*, 1988: 358; *Doriye*, 1992]. The process through which this happened reveals the limits to state action in the Tanzanian context. State planning propelled employment expansion in the public sector and determined nominal wages but it could not control the evolution of real wages since these depended in part on the exchange with the peasantry. Furthermore, the state found itself increasingly incapable of sustaining a meaningful exchange with the peasantry.

Indeed, it was precisely at the time that manufacturing output collapsed, that the government's agricultural pricing policy which sought to increase, or at least maintain, *real* producer prices of food crops also broke down. Figure 8 shows this quite vividly.[28] Hence, during the period 1973–78, the index of real producer prices (with 1970 as base year) rose from 84 in 1973 to 110 in 1979, and, subsequently, declined down to 69 in 1984 [*Ellis*, 1988: 74]. In contrast, the real producer prices of cash crops had been declining since the mid-1970s and continued to do so, notwithstanding the government's avowed attempt, from 1980 onwards, to increase producer prices of cash crops in line with inflation: real producer prices fell by 29% from 1979 to 1984 [*Ellis*, 1988: 73–4].

Ellis [1983] saw this secular decline in the internal terms of trade confronting cash crop producers as resulting from deliberate government policies to effect net resource transfers from the peasantry to the state. He locates this analysis in a broader macroeconomic framework to show how the 1970s were characterised by 'the existence of progressively increasing transfers of resources out of the peasant economy' [1983: 227]. The main mechanism to effect such resource transfers, he argued, involved turning the internal terms of trade against the peasantry (particularly, against cash crop producers). Obviously, in time, this process is bound to be self defeating since it will lead to the progressive decline in the (officially) marketed output of the peasantry. Furthermore, this process is 'potentially contradictory since it may involve the appropriation of agricultural surplus for the maintenance of an unproductive bureaucracy rather than for productive accumulation' [1983: 215].

To substantiate this proposition, Ellis points to the rapid growth of

FIGURE 8



Source: Ellic [1988, Table 1: 74].

administrative and service sectors in the economy [1983: 216] throughout the 1970s, a feature which was indeed very characteristic of Tanzania's economic development. However, this shift towards services cannot just be interpreted as a reflection of a single minded expansion of an unproductive bureaucracy at the expense of productive accumulation. Instead, employment expanded strongly both in industry and in services, a process which was driven by a state-led initiative in capacity creation in these sectors. However, as explained above, the acute tension which developed between capacity creation and its utilisation in industry and in public provisioning was reflected differently in GDP growth because of the way it is measured. In my opinion, the argument that Tanzanian development experience essentially can be reduced to the growth of a bureaucracy with a strong bias towards unproductive consumption and, hence, against productive accumulation, is questionable. I would argue that the 1970s were characterised by an economic policy which essentially boiled down to an accelerated investment strategy which took little or no

account of its recurrent implications [*Doriye and Wuyts*, 1992]. In this sense, the accumulation effort was extremely wasteful in its expansion drive. Furthermore, it was precisely this single-minded emphasis on capacity creation in industry and in public provisioning which put a heavy burden on the peasantry as well as on workers. In fact, throughout the period, real wages of workers and bureaucrats alike declined steeply [*Doriye*, 1992; *Lipumba et al.*, 1988].

The analytical framework developed in section II provides a plausible explanation as to why the state could no longer sustain official real producer prices of food and why the state's attempt to halt the fall in real producer prices of cash crops (particularly, also, in the light of falling external terms of trade) was rendered ineffective as a result of the state's own investment policy. Indeed, if demand expansion resulting from the investment drive meets with supply contraction in industry, it follows that, in industry, prices, rather than quantity, will adjust. Consequently, food producing peasants now will witness the erosion of the earlier gains obtained from a favourable evolution of the internal terms of trade as industrial prices rise. This deterioration of the internal terms of trade, therefore, is a logical consequence of the supply contraction in industry as well as of the reduction in imports of consumer goods. This is a process which affects both official and parallel markets.

However, due to the manner in which nominal producer prices were determined, this erosion of the internal terms of trade is likely to have been considerably more pronounced in official markets. The reason is that the state can determine the official *nominal* producer prices of crops but not the *real* producer prices as these depend on the rate of inflation in both official and parallel markets. Ellis [1988] argued that the state's attempt to support real producer prices failed because the rate of inflation was consistently *underestimated* when setting official nominal producer prices. In my opinion, this is not a mere coincidence. The point is to understand why this was the case. Official pricing policies sought to achieve the aim of maintaining real producer prices, an objective which proved no longer feasible given the supply contraction in industry. The state, therefore, could not ensure that the supply of manufactured goods to rural areas would match the demand originating from the peasantry. Even if the state had incalculated a higher expected rate of inflation in setting producer prices, the net outcome would probably have been to fuel inflation even more given that industrial output was falling as a result of the tightening of the foreign exchange constraint. Official pricing policies, therefore, were out of line with the real dynamics of markets which, in essence, depended on the state's investment policy. Not surprisingly, it was at this point that the state agency in charge of

marketing food crops, the National Milling Corporation, effectively lost control over domestic food marketing as officially marketed output fell dramatically [*Raikes*, 1986].

CONCLUSION

In this article, I have argued that a policy which aimed to develop the home market through investing in import substituting industrialisation ended up by eroding the most critical component of the home market: the exchange with the peasantry. The main mechanism through which this happened was a high and rising rate of investment which exerted upward pressure on the relative prices of food *vis-à-vis* cash crops and, consequently, led to the decline in export volumes which, in turn, negatively affected industrial output and the supply of manufactured goods in the countryside.

In this process, the state's investment policy was *delinked* from its agricultural pricing policies by the dynamics of the market propelled by the investment drive. The industrialisation debate proceeded side by side with the discussions on agricultural pricing as if each had its own degrees of freedom rather than the former constraining the scope of the latter. Instead, I have argued that the movements in relative prices were essentially *endogenous* to the investment strategy and, hence, played an important role in determining its adverse outcome.

At first, official pricing policies *reacted* to the changing demand pressures propelled by the investment drive and, hence, appeared successful in terms of its immediate aim – raising the officially marketed output of food. Not surprisingly, therefore, the change in official price policies was seen as the *cause*, and not the *consequence*, of the changing pattern of agricultural production in terms of the balance between food and cash crops.

When the crisis deepened, however, official pricing policies sought to achieve an aim, sustaining real producer prices, without taking account of the effects of the tightening foreign exchange constraints on the supply of manufactured goods. As a result, the state lost control over rural markets. Consequently, state planning now became crisis management in a situation where the state had effectively lost control over the mechanisms by which it could determine the terms of exchange with the peasantry.

NOTES

1. For an interesting analysis of external shocks in the Tanzanian economy during the 1970s, see Van Arkadie *et al.* [1980].
2. See Kalecki [1976]. A more recent reformulation can be found in FitzGerald [1993].
3. The main academic contributions to this debate can be found in Rweyemamu [1973] and Thomas [1973]. At the policy level, the debate gave rise to the Basic Industrialisation Strategy of the Third Five Year Plan which, after some delay, started in 1976. Brief discussions of the plan and its strategy can be found in Coulson [1982: 311–13]; Bank of Tanzania [1981?: 111–23] and ILO/JASPA [1982: 212–14].
4. This debate was more dispersed: both over time as well as in emphasis. Earlier contributions tended to question the prior emphasis on cash crops at the expense of food crops. See, for example, Loxley [1972] and Matango [1976]. Later in the decade, under the impulse of the work of Ellis [1982; 1983; 1984a; 1984b; 1988], the emphasis shifted towards an analysis of the evolution of the internal terms of trade confronting cash and food crop producers. For a policy review, see Ministry of Agriculture [1982].
5. See also Cooper [1983] and Stewart [1991].
6. This was particularly characteristic of the important contributions made by Ellis. Ellis' work, however, says little about the intersectoral reciprocal demand patterns between agriculture and industry but focuses almost exclusively on the question of net resource transfers from the peasant economy to the state. The demand side does not feature is this type of analysis. An interesting discussion of both these aspects, reciprocal demand patterns and net resource transfers, can be found in Mundle [1985: 49–80]. However, Mundle's emphasis is different from mine. In this paper, my aim is to situate the reciprocal demand patterns between industry and agriculture in the context of a macroeconomic framework which links Keynesian aggregate demand analysis with foreign exchange supply constraints.
7. Reporting time series data on the evolution of macro aggregates in Tanzania is a problematic exercise. Different sets of accounts by no means always tell the same story and, hence, it is difficult to decide which data are to be used when splicing time series. National account data exist respectively for the periods 1964–70; 1970–82; 1976–91 (ongoing). Furthermore, recently, a *revised* national accounts series was published which covered the period 1976–85 and is to be updated for subsequent years at some future date. As to the choice between the 1970–82 series and the 1976–91 data, as far as overlapping years are concerned, I preferred to use the latter. The reason is that the 1970–82 series does not take account of the statistical data which became available in the mid-1970s from household budget survey, input–output table, etc. For a more elaborate discussion, see Doriye [1986]. As to the choice between the 1976–91 series and its revised series covering the period 1976–85, I choose the latter because its construction used a broader set of data sources and employed a complete commodity flow method which ensured greater consistency between data sources with respect to the sources and uses of commodity flows [*Bureau of Statistics et al.*, 1992: 21–2]. Notwithstanding these arguments in favour of splicing the time series as indicated, below I shall report significant differences between the data sources insofar as they relate to my analysis.
8. All data sources confirm that the investment ratio rose from the 1960s to the 1970s. The national accounts data for 1970–82, however, do not show any investment boom during the second half of the 1970s. This is odd given that the basic industrial strategy, which started from the mid-1970s, required considerable investments and that the second half of the 1970s witnessed an aid boom (as shown later in the text). In contrast, both the 1976–91 and the revised 1975–85 series show that the investment ratio peaked in the late 1970s, although the peak is much higher in the revised series: over 30 per cent as against 26 per cent.
9. The macroeconometric model developed by Lipumba *et al.* [1988: 368] supports this view. In the model, the net inflow of real foreign transfers, presumably used as a proxy for foreign aid, features as an explanatory variable in the equation which seeks to

explain the evolution of investment. Not surprisingly, its elasticity coefficient (equal to 0.25) is positive and significantly different from zero. In contrast, their variable on real exports (= the volume of imports which can be bought by export earnings) shows to be insignificant, a point to which I return below.

10. Ndulu and Hyuha [1984: 54] estimated the import content of investment to fluctuate between 45 and 60 per cent of total investment in the late 1970s.
11. The share of capital goods in total imports rose from a level between 25 per cent and 30 per cent in the early 1970s to a level of between 35 per cent and 50 per cent in the late 1970s and early 1980s.
12. More technically, export volume is obtained by deflating export earnings by the index of *export* prices. The import capacity of exports is arrived at by deflating export earnings by the index of *import* prices. It follows, therefore, that the import capacity equals the product of export volume and the country's external *terms of trade* (measured as the ratio of the export price index over the import price index).
13. The graph was taken from White and Wuyts [1993].
14. The point can be shown as follows, using regression analysis. Regressing import volume (M) on aid (A) yields the following results:

$$\begin{array}{lll} M = & 91578 - & 0.29A \\ & [8.08] & [-0.76] \qquad \text{(t-statistics)} \\ R^2 = & 0.04 & \\ DW = & 0.75 & \\ \text{Period:} & 1970\text{–}85 & \end{array}$$

a regression which shows no association of any significance. If, however, we control for the influence of import capacity of exports (Xm), lagged by one period since last year's exports normally pay for this year's imports, we get the following results:

$$\begin{array}{lll} M = & 19770 + 0.56\,A + 0.83\,Xm & \\ & [1.37]\ [1.99] \qquad [5.8] & \\ R^2 = & 0.75 & \\ DW = & 1.59 & \\ \text{Period:} & 1971\text{–}85 & \end{array}$$

which confirms that aid has a positive influence on import volume once we control for the influence of import capacity of exports.

15. As to the evolution of the savings ratio, different data sources conflict quite markedly. The 1970–82 national accounts show a *falling* trend in the savings ratio. Similarly, the 1976–91 accounts record a falling savings ratio with the exception of the years of the coffee boom. The revised national accounts which aimed to forge greater consistency in the data by comparing both *sources* and *uses* of commodity flows suggests that the savings ratio was in fact considerably underestimated and, hence, needed to be revised upwards, Below I give some plausible reasons why the savings ratio might have been higher than earlier national income accounts would suggest.
16. For example, Doriye and Wuyts [1992] showed that a positive relationship exists between the government's budget deficit in real terms, financed through domestic bank borrowing (which effectively boiled down to printing money), and the inflow of external loans and grants (foreign aid) to the development budget. We argued that it appears to have been government policy to seek as much foreign assistance for its development budget as possible and, in the absence of a recurrent budget surplus, to seek domestic funding for local costs through inflationary money creation.
17. In recent years, during the 1980s, foreign aid also paid for recurrent imports (in particular, industrial raw materials). This practice, however, hardly existed during the 1960s, 1970s and early 1980s. Consequently, recurrent imports depended on export earnings for their financing.
18. In this case, therefore, industrial prices rise relatively to industrial wages and, hence, the mark-up increases. This way of financing investment is referred to as 'forced savings' in economic literature [*Kalecki*, 1976: 44; FitzGerald, 1993: 50]. Note that, in

this section, I have assumed that peasants benefit from the full increase in agricultural prices. In practice, however, the rise in the price of food may well principally benefit traders rather than food producers, leading to increased profit margins in agricultural markets (particularly, in parallel markets).

19. It is therefore not sufficient to argue, as some do, that food demand in urban areas increased merely because the urban population expanded rapidly in this period. The demand for marketed surpluses of food has to be backed by cash, not just by numbers of persons. For this reason it is important to analyse the patterns of employment and income generation and the effective demand for commodities to which they give rise. Processes involving forced savings can only be understood in this context.
20. The drought years of 1974 and 1975 brought home the message in the most forceful way, necessitating the imports of large quantities of food. In my view, however, what mattered most were the long-run pressures building up in the economy as a result of its investment strategy.
21. More technically, Dercon's supply function features the logarithm of cotton output as dependent on the logarithms of respectively the real producer price of rice and the lagged real producer prices of maize and of cotton. He then tests whether the *sum* of price elasticities in the supply function equals zero, since, in that case, only relative prices matter. He finds that this restriction cannot be rejected by the data. This does indeed provide some evidence that cotton production reacted mainly to relative price changes. His conclusion, however, that 'price increases of all crops do not result in the farmers increasing their total labour input into crop agriculture as a substitute for tenure (or non-agricultural activities)' does not follow necessarily. This would require investigating the actual evolution of food production in cotton growing areas.
22. Here, again, the interplay between official and parallel markets influences the outcome. As Raikes [1986: 119] convincingly argued, official markets may well pick up a greater share of the marketed output in years of bumper harvest since the official price acted as a *floor-price* in agricultural markets. Consequently, officially marketed output of food may show itself to be much more *volatile* than total marketed output (which itself is also more volatile than total output of food crops).
23. Interestingly, in a different country but a similar context, the Mozambican authorities precisely held this view on the nature of the decline in the (officially) marketed output in agriculture [*Wuyts*, 1989].
24. Bevan *et al.* computed an availability index for the supply of consumer goods, quoted in Dercon [1993: 180], which shows that shortages started becoming more serious from 1978 onwards and hit particularly hard during the 1979–84 period. The dramatic decline in the marketed output of cash crops started well before this as explained above.
25. Foreign transfers consist of import support and own-funded imports, both of which only became important since 1984. Hence, for the period of the 1970s and early 1980s, manufacturing output was effectively constrained by export earnings.
26. In fact, Doriye and Wuyts [1992: 11–13] show that the share of oil in imports, lagged by one year, O_1, is a surprisingly good predictor of manufacturing output growth, M_1 over the period 1968 to 1990. The resulting regression yielded:

$$\begin{aligned} M &= 0.14 - 0.77.O_1 \\ &\quad [4.6]\ [-4.13] \quad \text{(t - statistics)} \\ R^2 &= 0.44 \\ DW &= 2.07 \end{aligned}$$

This regression predicts the crisis of the early 1980s as well as the subsequent recovery since the mid-1980s.

27. State revenue derived principally from taxation. Direct taxes derived mainly from formal sector incomes with the exception of export taxes which were abolished when export volumes started declining dramatically. Indirect taxes, the major source of taxation, depended largely on the import substituting sectors of the economy: on manufacturing output and on the volume of recurrent imports (since capital imports were mostly exempted from import duties). Consequently, falling volumes of imports

of consumer goods and raw materials and, consequently, falling output in manufacturing undermined the regular expansion of tax revenue.

28. The steep rise in real producer prices of cash crops in 1976/77 was due to the coffee boom (which affected both coffee and tea prices).

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