# Making Industrialisation Work for Socio-Economic Transformation: The Relevance of Old Ideas for Present-Day Debates in Tanzania

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***Day 1 Paper*** ***S2A***

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*Industrialisation was expected to change the social order*
*and all it did was to supply manufactures*
(Albert Hirschman,1968)

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*The Relevance of Old Ideas for Present-Day Debates in Tanzania*

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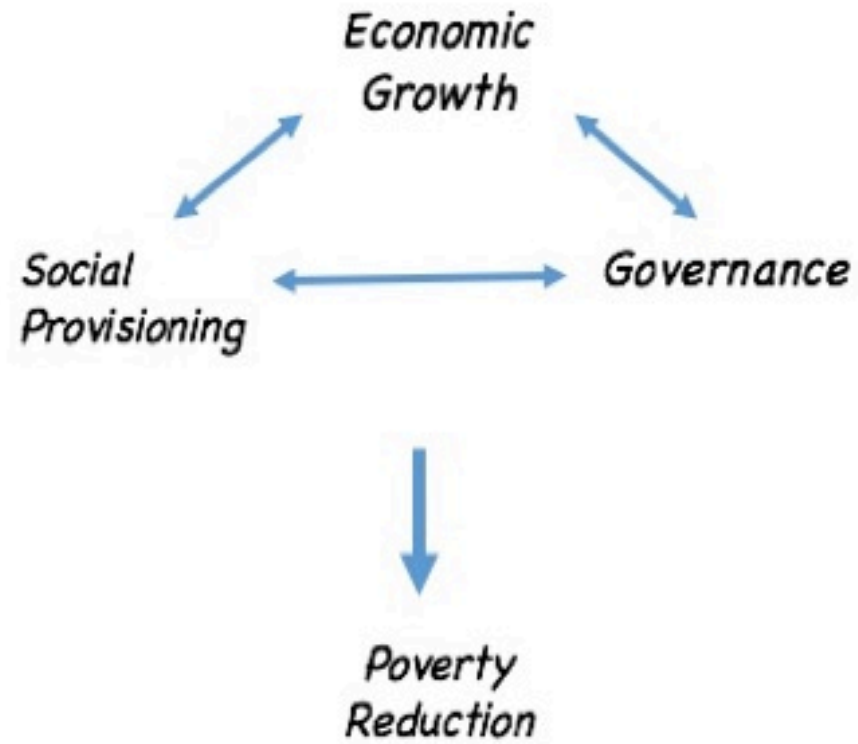
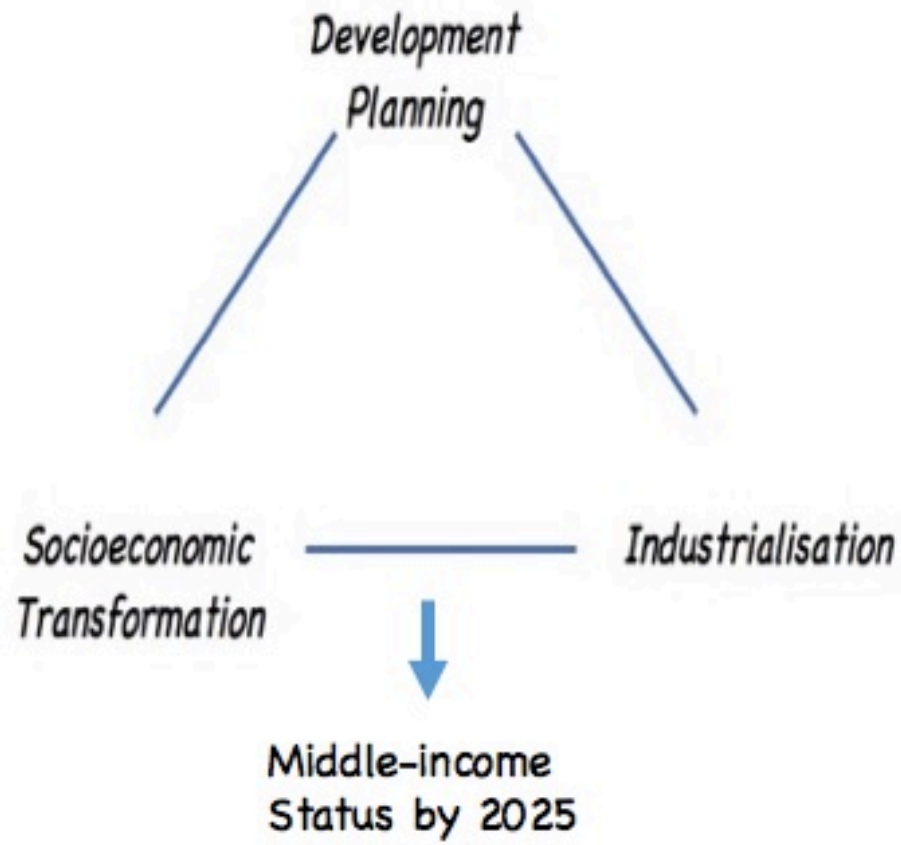
*6 April 2016*

*Repoa Annual Research Workshop*

**MKUKUTA** → **FYDP**



*In this presentation,*

*I intend to focus on some misconceptions, held today,*

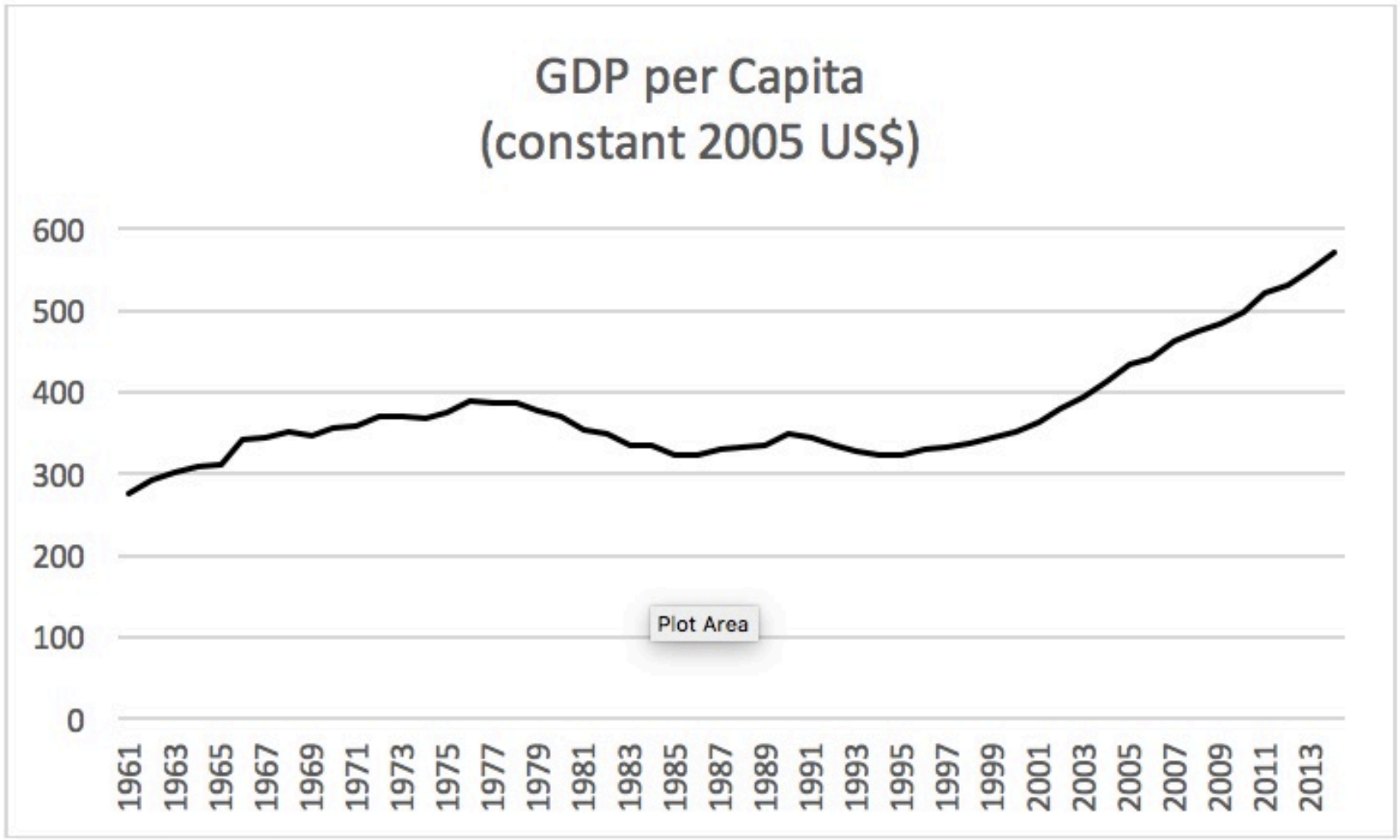
*about the debates on and experiences of industrialisation in the 1970s*

These concern the twin premises that:

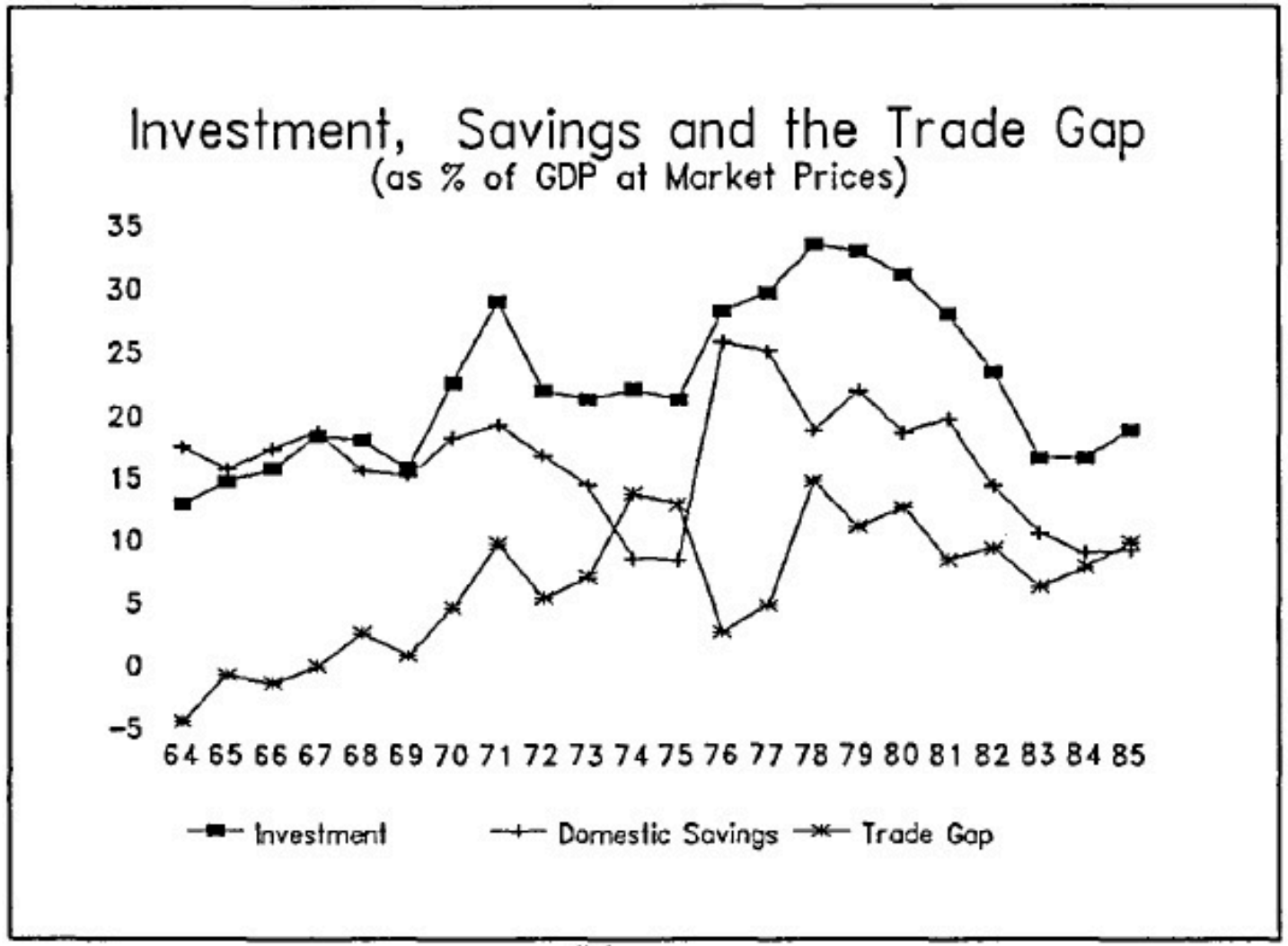
1. Policies in the 1970s overemphasized the social to the neglect of the economic.

2. Premature attention to social concerns posed a serious stumbling block for economic development.

# *Neglecting the economic: a story in pictures and tables*




*Source: H. Gray, draft chapter 1, p. 10, mimeo.*




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

| At current market prices | 1976 | % GDP | 1980 | % GDP | 1983 | % GDP | 1985 | % GDP | 1987 | % GDP |
|---|---|---|---|---|---|---|---|---|---|---|
| GDP | 24,876 | | 42,228 | | 69,522 | | 112,213 | | 203,901 | |
| *1- Final consumption* | 18,495 | *74.3* | 34,427 | *81.5* | 62,417 | *89.8* | 102,595 | *91.4* | 200,930 | *98.5* |
| *Households* | *14,506* | *58.3* | 28,933 | *68.5* | 52,974 | *76.2* | *84,040* | *74.9* | *175,497* | *86.1* |
| *Government* | *3,989* | *16.0* | 5,494 | *13.0* | 9,443 | *13.6* | *18,555* | *16.5* | *25,433* | *12.5* |
| *2- Gross capital formation* | 7,011 | *28.2* | 13,017 | *30.8* | 11,344 | *16.3* | 20,867 | *18.6* | 56,415 | *27.7* |
| *Fixed* | *6,404* | *25.7* | 12,433 | *29.4* | 11,903 | *17.1* | *18,966* | *16.9* | *72,152* | *35.4* |
| *Change inventories* | *607* | *2.4* | 584 | *1.4* | -559 | *-0.8* | *1,901* | *1.7* | *-15,737* | *-7.7* |
| *3- Exports* | 5,343 | *21.5* | 6,129 | *14.5* | 5,455 | *7.8* | 7,585 | *6.8* | 25,267 | *12.4* |
| *4- Imports* | -5,973 | *-24.0* | -11,345 | *-26.9* | -9,694 | *-13.9* | -18,834 | *-16.8* | -78,711 | *-38.6* |
| ***Memorandum*** | | | | | | | | | | |
| *Accumulation balance:* | | | | | | | | | | |
| *- Investment* | 7,011 | *28.2* | 13,017 | *30.8* | 11,344 | *16.3* | 20,867 | *18.6* | 56,415 | *27.7* |
| *- Gross domestic savings* | 6,381 | *25.7* | 7,801 | *18.5* | 7,105 | *10.2* | 9,618 | *8.6* | 2,971 | *1.5* |
| *- Import gap* | 630 | *2.5* | 5,216 | *12.4* | 4,239 | *6.1* | 11,249 | *10.0* | 53,444 | *26.2* |
| *Gross Domestic Absorption* | 25,506 | *102.5* | 47,444 | *112.4* | 73,761 | *106.1* | 123,462 | *110.0* | 257,345 | *126.2* |

Source: National Bureau of Statistics, 1995c: Table 5.

| At current market prices | 2001 | % GDP | 2005 | % GDP | 2010 | % GDP |
|---|---|---|---|---|---|---|
| GDP | 9,100,274 | | 15,965,296 | | 32,293,479 | |
| *1- Final consumption* | 7,901,761 | *86.8* | 13,386,429 | *83.8* | 25,417,627 | *78.7* |
| *Households* | *6,822,466* | *75.0* | 10,581,908 | *66.3* | 20,209,449 | *62.6* |
| *Government* | *1,079,295* | *11.9* | 2,804,521 | *17.6* | 5,208,178 | *16.1* |
| *2- Gross capital formation* | 1,587,743 | *17.4* | 4,001,088 | *25.1* | 10,342,536 | *32.0* |
| *Fixed* | *1,547,100* | *17.0* | 3,936,683 | *24.7* | 10,177,693 | *31.5* |
| *Change inventories* | *40,643* | *0.4* | 64,405 | *0.4* | 164,843 | *0.5* |
| *3- Exports* | 1,547,644 | *17.0* | 3,324,425 | *20.8* | 8,988,306 | *27.8* |
| *4- Imports* | -1,936,874 | *-21.3* | -4,746,646 | *-29.7* | -12,454,990 | *-38.6* |
| ***Memorandum*** | | | | | | |
| Accumulation balance | | | | | | |
| *- Investment* | 1,587,743 | *17.4* | 4,001,088 | *25.1* | 10,342,536 | *32.0* |
| *- Gross domestic savings* | 1,198,513 | *13.2* | 2,578,867 | *16.2* | 6,875,852 | 21.3 |
| *- Import gap: imports - exports* | 389,230 | *4.3* | 1,422,221 | *8.9* | 3,466,684 | *10.7* |
| Gross domestic absorption | 9,489,504 | *104.3* | 17,387,517 | *108.9* | 35,760,163 | *110.7* |

Source: National Bureau of Statistics, 2011: Table 14.

| YEAR | ABSORPTION (% GDP) | IMPORT GAP (% GDP) | HH CONSUMPTION (% GDP) | HH CONSUMPTION (% ABSORPTION) |
|---|---|---|---|---|
| 1976 | 102.5 | 2.5 | 58.3 | 56.9 |
| 1980 | 112.4 | 12.4 | 68.5 | 61.0 |
| 1983 | 106.1 | 6.1 | 76.2 | 71.8 |
| 1985 | 110.0 | 10.0 | 74.9 | 68.1 |
| 1987 | 126.2 | 26.2 | 86.1 | 68.2 |
| 1987 | 120.7 | 17.3 | 81.7 | 67.7 |
| 1992 | 129.6 | 26.9 | 82.7 | 63.8 |
| 1996 | 111.3 | 12.0 | 83.1 | 74.7 |
| 2001 | 106.8 | 7.9 | 83.6 | 78.3 |
| 2001 | 104.3 | 4.3 | 75.0 | 71.9 |
| 2005 | 108.9 | 8.9 | 66.3 | 60.9 |
| 2010 | 110.7 | 10.7 | 62.3 | 56.5 |

The 1970s, therefore, were characterised by a veritable state-led investment drive, backed by foreign aid which nearly exclusively focused on investment support with domestic costs of investments being financed by forced savings.

*This was also reflected in the rapid expansion (admittedly from a very low starting point) of industrial productive capacity:*

> *"While industrial investment nearly quadrupled over the 1968-79 period, period value added nearly doubled over the same period".*
>
> *Moreover, and interestingly, employment in industry increased nearly threefold during the same period.*

BOT (1982?) *Tanzania: Twenty Years of Independence (1961-1981). A Review of Political and Economic Performance*. Chapter 9: Industrial Development, p. 114).

*Premature attention to social concerns?*

*Wealth creation should take precedence over its expenditure on welfare, and investment should take precedence over consumption, including public consumption expenditures.*

*Two caveats:*

1. *This premise assumes that industrialisation is neutral in content, while, in fact, it is inevitably shaped by the existing patterns of effective demand to which it responds.*

2. *The premise that investment should take precedence over consumption ignores that investment creates a demand for consumption through multiplier effects.*

The first caveat can be rephrased as follows:

> *'The emphasis has been on building technological capabilities through satisfaction of demand, without much probing of the choice of demand to satisfy' (Smita Srintvas, 2015).*

*A strong feature of the debates on industrialisation in the 1970s was the recognition that it cannot just be assumed that social development follows necessarily from the economic development.*

- *And, hence, a capacity for problem solving is required on the part of the state to reconcile industrial and social goals as an essential part of development plans;*

- *Indeed, as Srintvas further argued, no explanation of this interrelation would be complete unless 'we attend to why a state so capable along one dimension, can be so wanting in another'.*

# The making of “The *Big Four*”

*“Where most of the other policies considered here have been expensive failures, pan-territorial pricing has been an expensive success.“*

…

*“Pan-territorial pricing clearly involved major costs. But one encounters a major inconsistency in the thinking of critics like the World Bank.*

*On the one hand, they are highly critical of the policy and have pressed for its repeal.*

*On the other hand, they accept the new spatial structure which it has generated, and implement policies in its support.”*

→ [Raikes, P., 1986, 'Eating the Carrot and Wielding the Stick: The Agricultural Sector in Tanzania', in Boesen, J., Havnevik, K., Koponen, J. and R. Odgaard, 1986, Tanzania: Crisis and Struggle for Survival, Upsala: Scandinavian Institute of African Studies.]

The second caveat concern the neglect of the demand side.

*Indeed, the debates on the ongoing industrialisation process during the 1970s and the early 1980s focused on the supply side (supply-side constraints, in particular).*

- Wangwe (1983) and Lipumba *et al.* (1988) both argued that Industrial development in Tanzania during the 1970s was characterized by a mounting tension between capacity creation and its utilisation.

- 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' [p.360]. In contrast, imports of capital good were less constrained since these depended 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'.

To bring the demand side into play, however, required linking the industrialisation debate with the debate on agricultural pricing.

- Lipumba et al. came close to doing so since their supply functions for export crops feature the real producer prices of food crops as key variables, but they did not investigate how domestic investment itself 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.

- Ellis [1984: 48] 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 (1986) held 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.

*What is interesting, however, is that none of these authors, while recognising the tension between capacity creation and its utilisation in industry as competing users of scarce foreign exchange, sought to investigate whether or not a further link exists between investment in industrial capacity creation and the foreign exchange constraint itself.*

*The main mechanism through which this happened was a high and rising rate of investment the multiplier effects of which exerted upward pressure on the relative prices of food vis-a-vis cash crops and, consequently, led to the decline in export volumes which, in turn, negatively affected industrial output (but not investment) and the supply of manufactured goods in the countryside.*

*In the process, the state's investment policy became delinked from its agricultural pricing policies by the dynamics of the market propelled by the investment drive.*