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# EDUCATION POLICIES AND ECONOMIC DEVELOPMENT IN ZIMBABWE

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## ABSTRACT

*Since Independence in 1980 there has been a massive expansion at all levels of the education system in Zimbabwe; the objective of universal primary education has already been achieved but critics have questioned the efficiency of the system. Although Zimbabwe has an outstanding record of cost-sharing in Education, the State's recurrent expenditure for the sector has been increasing.*

*Since 1982 the slowdown in economic growth in Zimbabwe, the burden of foreign debt servicing, and an escalating budget deficit have overshadowed the exceptional industrial structure of the country.*

*This paper attempts to trace the relation between the rapid expansion of the education system and economic development in Zimbabwe. We find that the Zimbabwean context warns against the danger of World Bank generalisations. It also cautions against the complacency that arises from the favourable comparison of Zimbabwe's management of the education sector with that of other African countries.*

## INTRODUCTION

Since Zimbabwe's Independence in 1980, the rapid expansion in all levels of education has resulted in an escalating recurrent educational expenditure in the State budget. Moreover about 24% of expenditure goes to about 6% of the school population who are in the tertiary sector. A related statistic reveals that the per capita expenditures for primary, secondary and tertiary education is Z \$181, Z \$269, and Z \$5940 respectively. (Ministry of Education, 1985), compared to the national average per capita income of Z \$818. When these figures are plugged into a rate of return formula the results indicate that resources are not being efficiently allocated. With the growing numbers of school leavers unable to find employment, Zimbabwe, like most Third World countries cannot escape the criticism that education is failing to reduce income inequalities.

### **Economic Structure**

Independent Zimbabwe inherited an industrial structure which is exceptional among sub-Saharan countries as Table 1 indicates. However, a negative element in this set-up was the labour-reserve which was an integral part of the settler-colonial development strategy. The independent State's objective of correcting the inherited economic dualism while maintaining growth placed severe demands for manpower development through the restructured education system. A second dilemma at independence is of particular significance for the education system. With the advent of UDI the economy had experienced a major technological reversal. While most accounts of the period have emphasised the extensive import-substitution during this period the unusual structural shift in the economy has been over-looked. In the decade 1965-75 in the siege economy, industrial development became a major focus of State control. Foreign exchange and price controls were introduced by the State and by all accounts were effectively implemented (Sadie Report 1975, Coopers and Lybrand, 1982). With Independence the State retained the controls, but the more open

conditions and the international recession of the 1980s have contributed to a de-industrialisation process (Ndlela, 1985).

**Table 1**  
Selected Economic Indicators of Selected African Countries at Independence

	Popu- lation	GDP Gross Domestic Production (\$m.)	PerCapita Income\$ (\$m.)	Manu- facturing produ- ction(\$m.)	Share of manufac- turing in GDP(%)
Benin	2.4	175	744.6	2.6	
Cameroon	4.7	511	109	30.6	6
Coted'Ivoire	3.2	584	181	31	5.3
Ethiopia	20.7	1021	49	61.3	6
Gabon	0.4	131	294	8	6.1
Ghana	6.8	1503	222	94.7	6.3
Kenya	8.1	641	79	60.9	9.5
Nigeria	40.0	3500	88	157.5	4.5
Senegal	3.1	678	218	64.4	9.5
SierraLeone	2.3	316	133	19.9	6.3
Sudan	11.8	909	77	43.6	4.8
Tanzania	9.6	671	67	20.1	3
Togo	1.6	150	92	6.2	4.1
Uganda	6.7	583	87	7.9	6.5
Zaire	14.1	910	58	127.4	14
Zambia	3.2	511	155	28.1	5.5
Zimbabwe	3.6	715	206	120.2	25

Source: P. Kilby, "Manufacturing in Colonial Africa" in Duigan and L. M. Gann *Colonialism in Africa Vol. 4., The economics of Colonialism* (Cambridge, 1975) p. 472

State Planning, however, is targeted to achieve a structural change which envisages an integrated industrial economy. The State funded education expansion and manpower development are seen as critical inputs in this strategy.

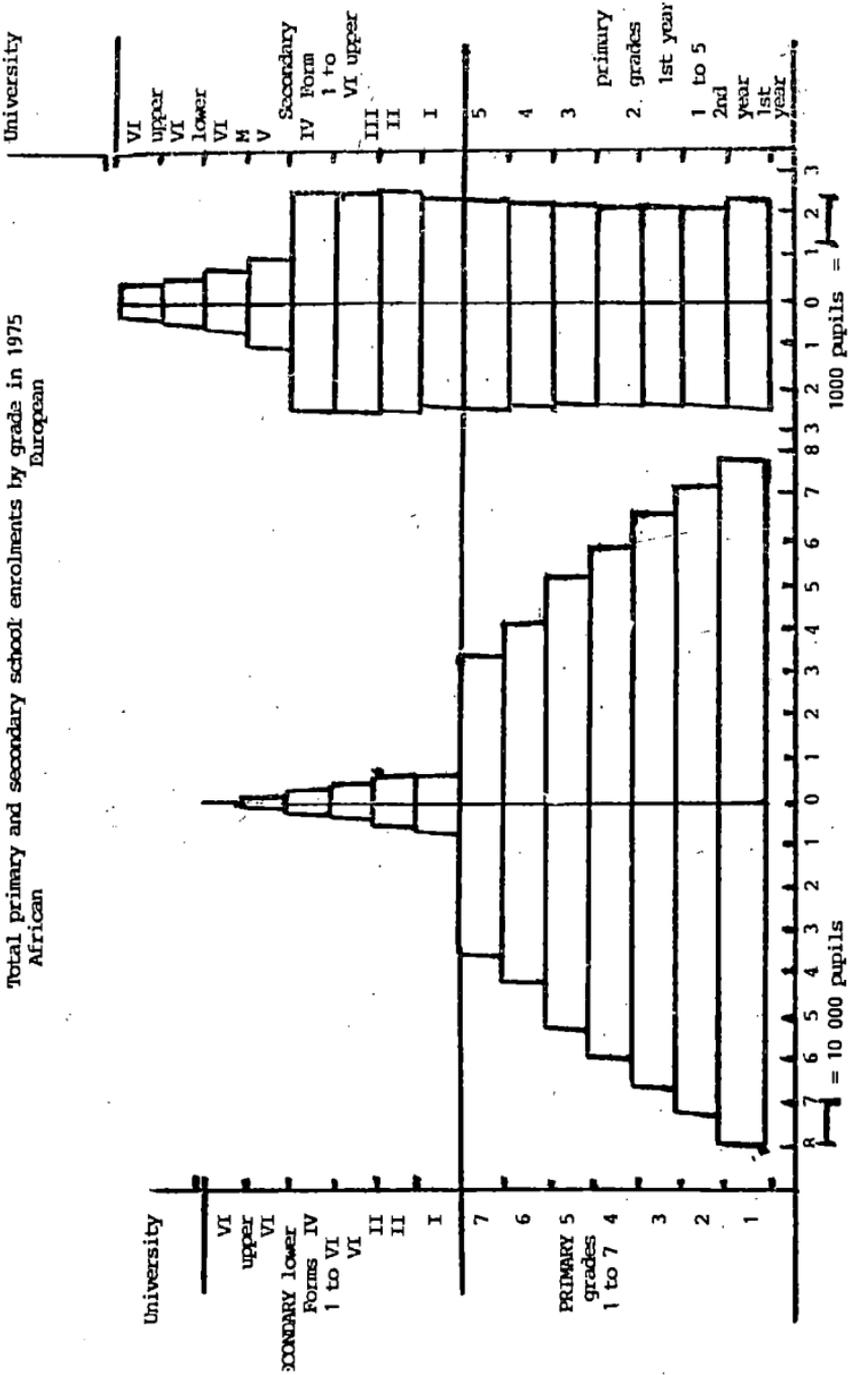
The first section that follows analyses development of the education sector since independence. We find that there are compelling equity arguments that support the rapid expansion of the education system. Apart from equity considerations Zimbabwe's education expansion is found to be closely related to the State's economic objectives and this linkage is then explored in the analysis of the major productive sectors in the section that follows. In the relatively more open conditions of the post-independence period Zimbabwe has experienced growth followed by economic stagnation and is facing a debt-burden which is widely regarded to be the result of policies adopted by the Developed countries in their adjustment to the world economic crisis of the 1980s.

The World Bank/I.M.F. policy prescriptions need to be assessed in this wider context. The final section then reviews some theoretical and empirical evidence in evaluating the Bank's prescriptions for Zimbabwe and concludes with an analysis of the relation between Zimbabwe's educational expansion and the structural transformation of the productive sectors of the economy.

### **The Education Sector**

A number of factors contributed to the Education sector becoming a critical area in the State's planned approach to development at Independence. Since the 1930s when the Settler State legislated its land alienation policies the dispossessed Blacks regarded investment in education as a long-term strategy for economic advancement (Arrighi, 1967). The Settler-State however, sponsored a racially discriminatory dual education system. In his pre-independence survey Dr Chidzero drew explicit attention to the "two pyramids" in the inherited structure.

The diagram highlights the inequitable provision of education facilities.



Source : Education and the challenge of independence, (Chidzero) (1977)

Regional imbalance in educational provision was a second problem for the new state policies for national integration. The table below indicates that there was an inequitable distribution of educational facilities and a bias in favour of the regions with a higher urbanisation, and a greater concentration of whites.

**Table 2**  
**Secondary School Age Population, Enrolment Ratios, and Representative Indices for the Provinces of Zimbabwe, 1980**

Province	Secondary School Population	Enrolment	Share of Age Population %	Share of Enrolment %	R.I.
Harare	*84682	19231	8.9	25.9	2.90
Manicaland	137267	9196	14.5	12.4	.85
Mashonaland	285527	12362	30.2	16.6	.55
Matabeleland	202052	17347	18.5	23.3	1.26
Midlands	136613	10250	14.4	13.8	.96
Masvingo	128837	5935	13.6	8.0	.59
<b>TOTAL</b>	<b>104 1978</b>	<b>74321</b>	<b>100.1</b>	<b>100.0</b>	

*SOURCE: MINISTRY OF EDUCATION 1985*

*\*Estimated from Population Census Preliminary Report (1982)*

$$\text{R.I.} = \frac{\text{Participation Ratio of Region}}{\text{National Participation Ratio}}$$

Both equity considerations and the post-independence commitment to rapid economic growth and hence manpower development appear as the main reasons for the state-funded education expan-

sion programme (Growth With Equity and the TNDP). The World Bank approach to the expansion however, is based on efficiency criteria in which the "rate of return" to primary, secondary and tertiary education are highlighted.

### **Primary Education**

The State policy was for the provision of "free and compulsory universal primary education". The Bank gives two related reasons for its approval of State expenditure for this level of education:

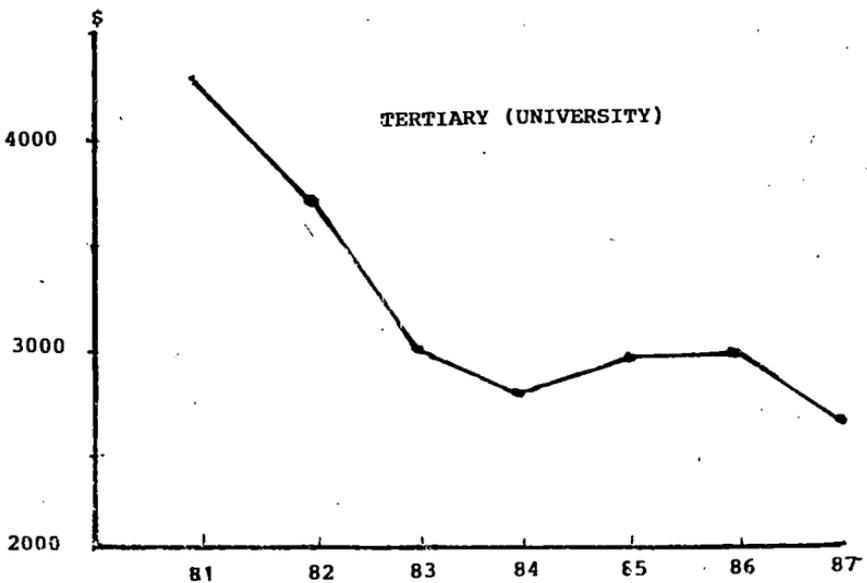
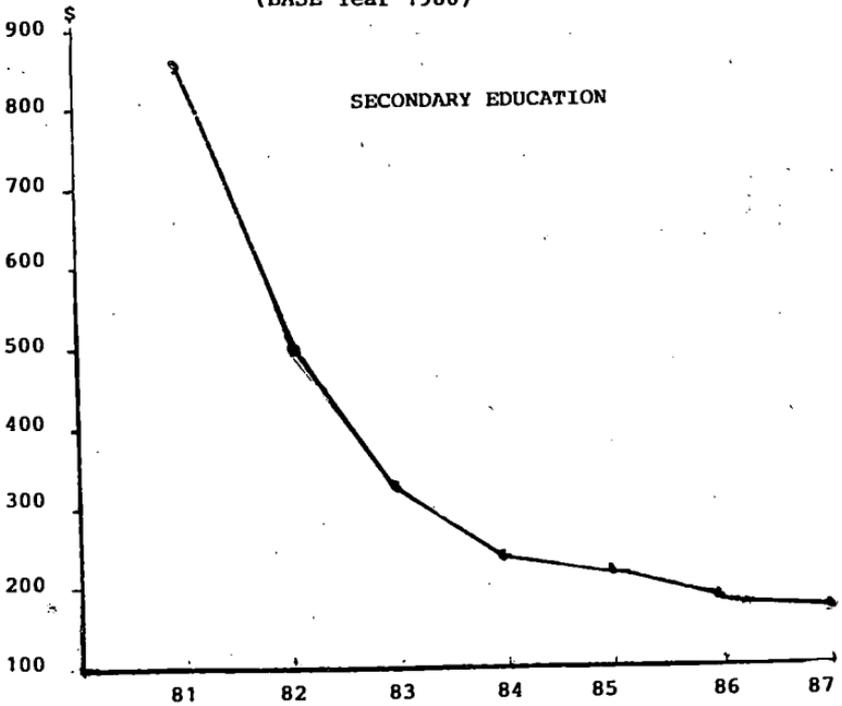
- state subsidisation will ensure access for the economically deprived and
- the Bank finds compelling evidence that the rate of return for this level of education is high.

Notwithstanding these benefits, State expenditure on teacher training and the higher salaries for trained teachers would have to be severely pruned if World Bank cost prescriptions are applied.

### **Secondary and Tertiary Education**

At this level facilities for White education were designed to compare favourably with the highest British standards (Taylor, 1964). When compared to White education the absolute number of Blacks in education indicated in the pre-independence chart has to be weighted by the significantly lower per capita expenditure viz. \$40 for Blacks against \$450 for Whites. Integration of the two systems after Independence resulted in an escalation of the average cost. Per capita expenditure on secondary and tertiary education are twice and over forty times the primary education costs. However, as the table below indicates, with further expansion in the eight years since independence the decline in average costs of the secondary and tertiary sectors has been significant.

Cost per student in Real Terms 1981-87  
(BASE Year 1980)



Critics have drawn attention to the high costs relative to the per capita income (Pscharopoulos, 1980). On the diverse efficiency criteria set out by the Bank e.g. decentralized controls and management and the assessment by formal examinations, Zimbabwe gets a high ranking. Yet the rate of return calculations indicate that this experiment in mass education is inefficient. Although this simple calculation can be easily rejected for a number of reasons there are two features of the rapidly expanding system which are cause for concern. First there has been a very high drop-out rate especially at the primary level as indicated by the tables 4a and 4b.

TABLE 4a: 1980 - 1984 COHORT FLOW (GIRLS)

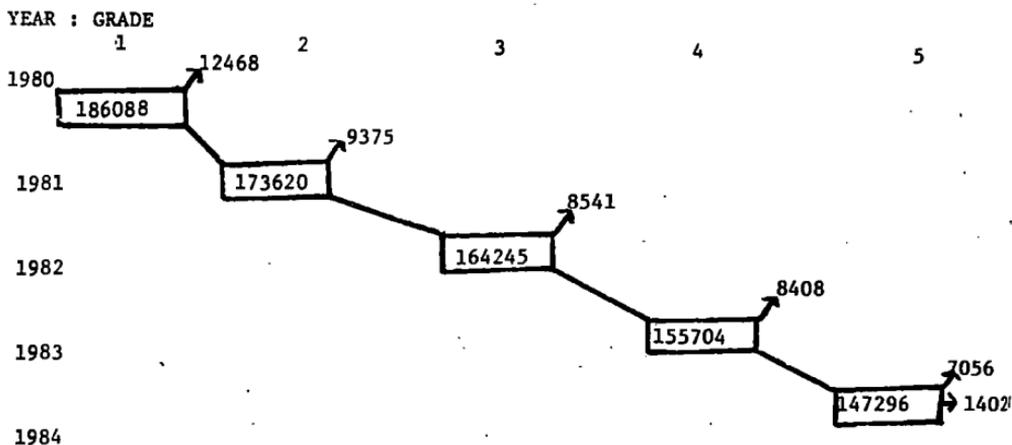
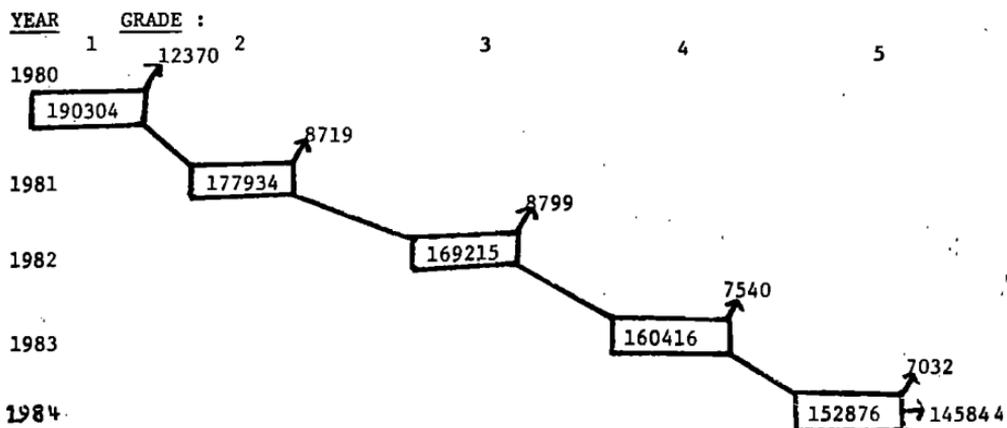


TABLE 4b : 1980 - 1984 COHORT FLOW (BOYS)



It is significant that in the Ministry of Education Report *economic* factors feature prominently as the major cause of the high drop-out rate. Secondly the absorption of school leavers into paid employment commensurate with their educational attainment is generally recognized as a major problem. Concern over these structural problems has been expressed by the State (FFYNDP 1986-90) and by the World Bank (World Bank Report, 1987).

### Education and Economic Growth

Analysis of growth in the developed countries (DCs) shows that there is a close link between economic growth and manpower development. In the aggregate growth model increases in the factors of production (capital and labour) account for only about 50 per cent of the overall growth in the economy. Increased labour productivity is seen as the major cause of the additional gain. The economic benefits of investment in education have been widely recognized and has influenced both Development Plans and Aid programmes for the developing countries (LDCs).

In the pre-oil crisis (1973) era the World Bank's programmes for development were consistent with this approach to growth. In the 1980s however, the Bank's approach to development issues has moved closer to that of the I.M.F. whose short-run stabilisation prescriptions have been supplemented by structural adjustment and liberalisation policies in which the main focus is *BOP* Crisis management.

By early 1982 Zimbabwe joined the host of sub-Saharan African countries (SSA) with a debt-crisis for which the international financial institutions have adopted a common approach in prescribing the wide ranging policy package for economic reform.

A spirited defence by the SSA countries has highlighted "exogenous shocks" to their economies resulting from the Developed Countries' economic policies viz. the LDCs declining terms of trade, the sharp increase in the cost of borrowing, imported in-

flation, and the perverse situation in which decline in the growth of the DC economies since the mid- 1970s had brought a more than proportionate fall in the demand for LDC exports while the DC recovery (circa 1985) has not seen a corresponding improvement in the LDCs trade with DCs.

The Bank acknowledges these "external shocks", but its policy prescriptions e.g. a combination of expenditure-reduction-switching are seen to adequately address these problems in the LDCs (Krugman, 1986). The Bank's supporting theoretical models for these prescriptions however, have been criticised for being too mechanical and general. Countries with long experience of these recovery programmes e.g. the Ivory Coast, provide further confirmation that the Bank's prescription for curing the debt-crisis "may be worse than the ailment" (Kanbur, 1988). In many LDCs faithful implementation of the Bank/I.M.F. programmes has failed to produce the anticipated recovery and sustained growth.

Recent research has also indicated that economic policies based on the Bank's market-oriented model and centred on price adjustments may not alleviate the structural problems in the LDCs. One approach has been to test the growth effects of transferring resources from the non-industrial to the industrial sector and from the non-export to the export sectors. This research shows that the simple resource re-allocation approach does not explain economic growth in a number of industrialising LDCs (Feder, 1983).

A second development has been the use of models which incorporate both supply and demand in analysing the sources of growth. These models have shown that structural transformation at the *sectoral* level provide valuable clues to understanding the growth process in the industrialising LDCs (Chenery et.al. 1986).

The application of these models in analysing the growth performance of a large sample of LDCs has re-enforced the need for a more cautious approach to the Bank's structural adjustment

policies in which patterns of resource transfer which result in economic growth are *assumed*.

Zimbabwe has a diversified economy with an exceptional industrial sector and a large rural population engaged almost exclusively in agriculture. The industrial sector grew rapidly in the post WW11 period when there was a large inflow of foreign investment capital and skilled labour, and a substantial expansion of trade in manufactured goods was realised (Stoneman, 1982). In the UDI period (1963-75) the productive sectors experienced a significant structural change when the country had to cope with international sanctions. Widespread State intervention was extended to incorporate a tightly controlled forex allocation system in which private sector know-how was enlisted by the State (Pakkiri, 1985 Riddell, 1988). Under this system the manufacturing sector increased its share of GDP from 16% to over 25% in 1975 and has maintained this level.

The UNIDO (1985) analysis of the economy soon after Independence researched the sources of the manufacturing sector's growth.

The main findings of the study were that:

i. the extensive interlinkages and intralinkages in the domestic economy were critical factors in explaining the expansion of the manufacturing sector. The Metals and Metal Goods sector was found to have the highest backward and forward linkages and was at the centre of the re-structured industrial development. The sector accounted for about a quarter of the expanded manufacturing output and employment. Table 5 summarises the quantitative side of the extra-ordinary industrial linkages in the economy.

ii. A high proportion of industrial output was custom work undertaken by relatively small firms using labour

intensive technology. Again the Metals and Metal Good sector made an outstanding contribution through custom work for the mining, agriculture, and most manufacturing sub-sectors.

During the UDI period the inefficiencies of small-scale production were compensated by the advent of the *multi-product* firm. Employment in the manufacturing sector increased from 80,900 to 156,800 between 1965 and 1975. This deepening of the industrialisation process reveals a significant structural transformation in the economy which the Bank's aggregate analysis has failed to detect. Multi-sectoral analysis using disaggregated data reveals that more than 50% of the growth in the manufacturing sector is the result of an increase in domestic demand for intermediate goods (Riddell, 1988). This is in sharp contrast to the popular belief that import-substitution was the dominant factor. The detailed UNIDO study also assessed the *export* potential of the manufacturing sector. It was found that firms across sub-sectors had a capability of exporting to countries within the SSA region. But profitable exports to markets outside Africa was only feasible with extensive use of imported machinery and equipment. This is critical on account of the sharp decline in the overall trade with South Africa. Trade with that country accounted for 93% of exports in 1965 and has fallen to 43% in 1988.

The World Bank and others have commented on the "perverse" performance of the manufacturing sector in the post-independence period. It was found that as the sectors' output increased, the proportion exported has declined.

However, a combination of the loss of dubious markets and the expansion of domestic intermediate demand in the industrialisation process are plausible explanations and suggests the need for greater attention to the sectoral linkages in the economy. It also casts serious doubt on the economic growth effects of the Bank inspired export strategy that the State is promoting. We return to the link between the industrial strategy and educational reform

after analysing the productivity changes in Zimbabwe's agricultural sector.

**Table 5**  
**Inputs into Manufacturing obtained from Within the Manufacturing Sector, 1975 and 1981/82**

Sub-Sector	Total Inputs \$mn.	of which imported \$mn	%	Total from Manufacturing	%	% of Manufacturing s/sector9
1	214.0	19.2	9	52.9	25	12.8
2	40.5	4.1	10	17.5	43	11.7
3	92.0	32.2	35	46.9	51	10.4
4	52.5	13.1	25	33.7	64	4.2
5	20.8	8.3	40	9.4	45	18.8
6	37.9	19.7	52	14.2	38	10.4
7	102.7	60.9	59	27.5	27	16.9
8	23.5	7.0	30	7.8	33	57.3
9	183.4	86.3	47	57.1	31	82.3
10	32.2	26.4	82	5.3	16	48.5
11	6.3	3.8	60	0.5	8	51.4
Total	805.8	281.0	35	272.8	34	31.0

Notes: 1. All data are for 1975 except the last column which are for 1981/82

Source: UNCTAD (1980:354-355) and UNIDO (1986B:153).

### Agriculture

Over 57% of Zimbabwe's population is in the rural areas, while Industrial production is confined almost entirely to the urban centres Harare (50%) and Bulawayo (25%). Farm income is the

sole source for the livelihood of the majority of rural dwellers. The agricultural sector itself is divided into a historically contrived dualism which is dominated by the settler large-scale Commercial Farms (LSCF) and the Communal Areas (CA). The Table below gives some indication of the disparities between the two major sub-sectors at Independence.

**Table 6**  
**Input/Output Account - Commercial and**  
**Communal Farm**  
**Sub-sectors 1974 - 1980**  
**(Z\$ Million)**

Commercial				Communal		
Year	output	input	Value added	output	input	added
1979	369	145	224	108	7	101
1975	385	165	220	106	8	98
1976	415	178	237	107	8	99
1977	404	192	207	108	9	99
1978	430	210	220	75	8	67
1979	452	231	221	104	8	96
1980	607	298	309	147	11	136
Mean	437	203	234	108	8	99

*Source: Ministry of Agriculture whose estimates output include own account capital formation, which is excluded in CSO estimates published in the Monthly Digest of Statistics.*

The LSCF sector produced 75% of the total agricultural output in 1981 and over 90% of the marketed output. Since the two sectors occupied approximately the same land area of about 17 million hectares each and although the sectors utilised a significantly different proportion of the land allocated to them comparative

studies focused on the disparity in the *mean* output in the two sectors.

LSCF output was 4,726 kg/ha and only 695 kg/ha in the CAs. Expert analysis from influential local research organisations used this statistic as indicative of the long-term trends in the two sectors and concluded that there was an intrinsic gap in the levels of *productivity* between the two sectors. Agriculturally derived income in the LSCF sector and CAs also varied greatly. The average net income of LSCF farms (after depreciation and interest) in 1979 was Z \$12,250. Average net income in the CA in 1978 has been estimated by one source as Z \$250 (this includes remittances from migrant labour). Taking only the value added figures into account would imply even lower incomes than this. The CA provides four to five times more employment since residual unemployment is a problem that reverts to the Communal areas. Agricultural economists in the settler Govt. had interpreted this structural characteristic, in the light of the chronic shortage of farm labour up to 1975, as an indication that a large proportion of the Black population was economically inactive. A study undertaken by the World Bank in 1983, however, gave a slightly different evaluation of the productivity levels of the two sectors. Using mean outputs for the period 1974-80 it is shown that LSCF outperformed the CAs by 4.0:1 on a gross basis but by only 2.4:1 on a net basis i.e. after netting out all inputs except land and labour. The Report adds, "adjustments for the slightly different quantities, but considerable difference in qualities, of land employed diminish the superior performance of the LSCF still further".

A detailed and thorough field study carried out from 1982 - 84 by the Beijer Institute (1984) produced data, again on a comparative basis, indicating that LSCF productivity:

- i. varied significantly from one area to another; and

ii. CA and LSCF productivity in the same agro-ecological Region showed an even smaller difference than the 2.4:1 overall average given by the World Bank study, for example, the table below shows comparable yields in the Intensive cultivation areas.

iii. In some areas such as Wedza and the Umfudzi scheme recently resettled peasant farmers were getting higher yields than their LSCF neighbours (Beijer, 1984).

Looking at the overall performance of the LSCF sector in the changed circumstances since Independence shows that the sector has had a steady increase in productivity. Output has increased by roughly 19% in volume terms with less land being cultivated. There has, however, been a sharp decline in employment in the sector and a corresponding increase in mechanisation. Agricultural employment has fallen by over 1/3.

Since the bulk of the farm equipment is imported and forex is scarce and is rationed by Government the cost of this productivity increase appears to be excessive for several reasons:

i. LSCF farms have a large proportion of their land under or unutilised. The estimates vary between 85% (Riddell, 1978) and 95% (World Bank, 1983). A more conservative estimate is derived by taking into account only arable land. On this basis the proportion is 75% (Beijer, 1984). The State-aided supply of machinery was to enable the LSCF to *extend* the area under the cultivation.

**Table 7**  
**Communal Area maize yields by**  
**site and natural region**

Natural Region	Average yield (kg/ha)	Crop Year	Communal Area	Source
IIA	2590-4250	1981-2	Guruve	1
IIA/IIB	4400	1981-2	Mangwende	2
IIB/III	2050-5380	1983-4	Wedza	3
III	1656-3312	1980-1	Magoni/Umfuli	4
III	828-1288	1981-2	Magoni/Umfuli	4
IV	1152	1980-1	Sabi	5
IV	442	1981-2	Sabi	5
IV/V	930-1900	1980-1	Chibi	6

*Sources: 1. Bratton (1986, note 6); 2. J. de Jong, 'Extension techniques in farm management' (Harare: Agritex Branch of Ministry of Agriculture, 1983); 3. Bratton and Truscott (1985, not 14); 4. Gobbins and Pankerd (1983, note 23); 5. Agritex (1983, note 24); 6. M. Rukuni, 'Implications of intra-household dynamics for agricultural research policy and training of national field staff in research policy and training of national field in Zimbabwe' (Paper presented at the Joint Rockefeller Ford Foundation Conference on Intra-Household Processes and Farming Systems Analysis, Bellagio, Italy, March 5-9, 1984).*

The World Bank appears to have given its unqualified support to this strategy:

In 1982 there were an estimated 17,000 tractors in operation in the agricultural sector, and the average of the fleet was more than ten years.

Hence there is an urgent need for replacement of this and other capital equipment for LSC farms to make up the substantial backlog in demand for new equipment for LSC farms .... Such changes could offer potential for significant savings of fuel and for significantly increased managerial capacity to handle greater areas of crop, with consequent increases in demand for labour.

Yet, there has been a 35% *reduction* in the area under cultivation in the sector since independence.

ii. The sector occupies over 3/4 of the prime farming land in Region II while there is over-crowding in the CAs.

iii. The Beijer and other studies calculate that small-scale farming methods enable farmers to utilise large stretches of land in Region II which on account of the topology are considered by the LSCF farmer to be unsuitable for cultivation. When this is taken into account together with the improved performance of the resettled Communal farmers in this region the Beijer study indicates that peasant productivity has been seriously underestimated.

### **Education and the Economy - An Integrated Approach**

As we have seen Zimbabwe inherited an elitist and racially and regionally inequitable education system. The new government's commitment was to a State-sponsored racially integrated system. In Zimbabwe both historically and currently the common perception is that education is a key factor in social mobility and consequently the demand for education is a priority even amongst the lower socio-economic groups. The State's objective of restructuring the economy has also been a major determinant of the commitment to mass education.

The implementation of "universal and free primary education", and rapid expansion of secondary and tertiary education has been a high-cost innovation, especially the latter. Although the per capita costs have fallen in the eight years since Independence the State budget for Education is excessive by World Bank standards. The Bank itself has focussed on the high proportion of recurrent expenditure, around 70%, that is taken up by teachers' salaries. The Bank's recommendation is for cost-sharing, in Zimbabwe where there is already a sizeable input from the public. Zimbabwe has an outstanding record of private inputs into education both in the colonial period and in the post-independence era. Hence the World Bank's emphasis on cost-sharing is not news to most people in Zimbabwe, least of all to the lower income groups who are in the majority of the population.

Since 1982 Zimbabwe like most SSA countries has had to cope with a debt-burden. The import constrained economy has resorted to a combination of three policies. *Fiscal policy* for a reduction in consumption is restricted by the high population growth rate and slow economic growth. The Bank's most optimistic forecast for the next five years is for a 1% increase in per capita consumption (WB 1987a) Under the system of State administered controls *import compression* has been the second option. Import rationing however, has had a negative impact on growth since the economy is import-constrained (Stoneman and Robinson, 1985 KG 1984). Investment in particular requires over 50% direct and indirect forex input and the shortage of forex has been a major cause of a sharp decline in investment since 1982 (KG 1984). Consequently, the third option, the utilisation of the roughly 50% *spare capacity in manufacturing*, for export has become the preferred option. The State has mounted an elaborate system of subsidies and has utilised tied-aid programmes e.g. the Commodity Import Programmes, to secure essential imports to boost production of manufactured goods for export. The State-subsidised export expansion has brought some relief to the Balance of Payments. The debt-service ratio has been reduced from its peak of 30% in 1985 to 20% in 1989. The employment-creating record of this strategy has, however, been poor. Even the optimistic FFYNDP targets employment to increase by an average of 22,000 new

jobs per year over the Plan period 1986-90. Overall increase in employment for the first three years of the Plan has averaged about 8,000.

The growth effects of this export-push strategy are even less certain. Export-led growth was achieved by a group of New Industrialising Countries (NICs) in the period 1965-73. The performance of the group led by South Korea is often cited as a blueprint for the World Bank's market-oriented policies. Analysis of government policies in South Korea, the country with the highest growth rate among the NICs however, reveals extreme labour repression, and extensive State intervention against foreign direct investment and in favour of domestic capital interests. Land reform was a necessary pre-condition of the strategy. These restrictive conditions and the more protectionist policies of the DCs in the 1980s appear to rule out the export-led option for Zimbabwe. Research evidence from the sources of growth analysis for a group of countries at Zimbabwe's level of industrialisation does not appear to support an export-led growth strategy (Feder, 1986).

The sectoral analysis of the economic growth in the UDI period together with the empirical evidence of the post-independence export performance of the manufacturing sector cited in this paper suggest that Zimbabwe has undergone a structural transformation which could serve as the basis for further industrialisation. The production response of the Communal and small scale agriculture sector in particular indicates that this sector could provide the additional "domestic demand" for Zimbabwe's small scale industrial sector. Since independence this linkage has grown substantially as the table below shows. The Communal sector's share of purchased inputs has increased from 3% to 13% indicating a potential for further growth.

**Table 8**  
**Purchase of Material Inputs by the**  
**Agricultural Sector 1984 \$000s**

Item	Commer- cial	% Total	Communal & Small scale	% Total	Total all agric.	% each input
Fertilizers	107,916	72	42,420	28	150,336	46
Crop Chemicals	30,043	97	682	3	30,725	10
Packaging Materials	8,760	57	6,532	43	15,292	5
Stockfeeds /folder	121,568	96	4,755	4	126,323	39
Totals	268,287	83	54,389	17	322,676	100

*Source: Central Statistical Office, Zimbabwe: Production Account of Agriculture, Forestry and Fishing, 1976-84, Harare, Agricultural Statistics CSO 1987 and Unpublished data from CSO*

Inter-sectoral and intra-sectoral linkages which were established through State intervention in the past could be promoted and extended in the State's new strategy for structural transformation. Further research into the dynamics of the structural transformation which is already underway, is however, necessary for a reliable evaluation of the efficiency of Zimbabwe's State-sponsored mass education programme. The standard cost-benefit analysis and in particular the rate of return calculation are of little operational value in the analysis of integrated economic growth.

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