

PARAMETERS, PERMUTATIONS AND POLITICAL

ECONOMY: ZIMBABWE 1973/83 - 1986/96

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Even the longest journey begins with the first step.

- Confucian Proverb

Government has produced this short-term plan designed to provide perspective and serve as a guidepost during the transition period.... An average real economic growth rate of 8 percent....target... based on an assessment of the economy's past performance, existing productive capacity and anticipated deliberate action by government....

- Minister B. T. G. Chidzero
Transitional National Development Plan 1982/83 - 1984/85,
November 1982

Freedom is the right understanding of necessity.

- Karl Marx

Weak world economic performance since 1979 and successive droughts in Southern Africa since 1980 have sharply reduced the rate of Zimbabwe's growth.... The world economy, however, turned sharply upwards in 1983.... Growth prospects for Zimbabwe's foreign trade sector - and through it for the entire economy - are thus likely to be enhanced... But the ability to capitalize upon them depends crucially upon the extent to which output surplus to domestic requirements can be generated for export...

- Zimbank, Economic Review,
March 1984

Strategy and Structure

Parameters - that is ratios representing basic economic structural relationships - are critical to economic strategy. They set bounds both on what is necessary and on what strategies a state can adopt with any chance of achieving the intended objectives.

Failure to address parametric relationships adequately has had particularly serious consequences in Sub-Saharan Africa - in some cases (e.g. Ghana) for a

quarter of a century - and in all but a handful of countries since 1979. It is not the only factor. Corruption, waste, technical mistakes, political goals which placed little stock in economic development, civil and external wars, drought and external economic shocks have all been relevant. However, the failure to analyse and to act on the complex, objective nature of economic necessity and of the actual (or reasonably projectable) degrees of freedom available has been an important element and is within the power of SSA states - including Zimbabwe - to transform.² The reasons for failing to recognise and act within parametric constraints has become more widespread and appear to be threefold:

1. key resources - absolutely and relative to demands - have become scarcer;
2. the nature (and tightness) of constraints within existing parametric ratios has been significantly altered (in general for the worse) by changes in the world economy since the late 1960s and, especially, since 1979, notably in respect to foreign exchange constraints.
3. internal political economic constraint alterations - especially in economic progress of previously excluded groups - have in some cases substantially increased the economic results which appear to be necessary and have been attempted - exactly when the constraints on achieving even past results have tightened.

Using Parameters: No Go Signs And Priorities

There are two applied uses of parametric analysis. The first is to identify what is not possible. e.g. if the ratio of imports to GDP in a small economy has been reduced to 20-30% overall and 50% for Gross Fixed Capital Formation and been relatively stable for some years the viability of a short term strategy of a rate of GDP growth twice that of imports and a rate of growth of investment twice that of consumption is virtually nil.

Economic strategy and policy are ultimately about who gets what, where, when, why and how (e.g. small peasant farmers; incomes - food - basic services; on present holdings - after resettlement - as wage earners outside agriculture; over what time frame; in what production relation's structure or sub-mode; via market prices, administered prices, wages, profit sharing, public input and

services supply). In order to pursue them even moderately efficiently two sets of information are needed: First, how much is available (at any point in time and over time) to be allocated and second, what priorities for allocation are.

Neither by itself is sufficient. Priorities without ceilings on total allocations result in resolving contradictions by adding additional resource uses; data on what is available without priorities for allocation may help avoid gross imbalances but to lead to ad hoc first come, first served solutions far from the best attainable.

Technical analysis is quite inadequate as a social or political decision making tool while social and political decision taking unconstrained by what is not, and what is, possible is likely to attempt the former and thereby fail to achieve the latter.

However, the relationship is not simple: Resources and resource constraints are not - especially in the short and medium term - fully homogenous and interchangeable. How much there is/can be to be allocated is in part dependent on specific questions of what (e.g. more staple food or more wine, more basic education or more postdoctoral science research), where (housing in Harare or in isolated rural areas), who (large commercial or small peasant farmer), etc. Answers to who, what, why, when and how do affect present and future totals available to be allocated negatively and/or positively. The most well known case in point is that more GFCF (and less consumption) now will - ceteris paribus - allow more production (however allocated) later.³ The relationships are in fact inter-relationships and the practical way of taking both the availability and priority aspects into a decision taking process is an iterative not unidirectional.

Using Parameters: Relaxing Constraints

Examining permutations within parameters can make increased production, and production patterns more attuned to allocation priorities possible. In an economy in which production is held to 75% of capacity by foreign exchange constraints and GFCF has an import content double GDP as a whole, generalised attempts either to raise either GFCF or the ratio of savings to GDP are likely to prove counterproductive.

In the short term parametric constraint based analysis can be seen as making the best of what is. In the context of SSA the implications over time of what is for what will be are unacceptable. On the 1979-85 record, present structural relationships and ratios in a majority of SSA economies permit an overall rate of growth of GDP less than that of population.⁴ Therefore for medium and long term, a critical role of parametric analysis is identifying which ratios need to be altered if constraints are to be relaxed. If the primary constraints are external balance related then either lower import to GDP ratios or higher export to GDP ratios (or both) are critical to higher capacity utilisation, growth rates (of overall output, basic services and/or enterprise surpluses) and employment. If the overall import/GDP ratio is low and the economy small the main thrust may well need to be on the export side and may well actually raise the import/GDP ratio.

Macro - Sectoral - Micro

Basic parameters are at macro or sectoral level, and can, strictu sensu, provide answers only to macro questions. In respect to determining what is possible/impossible at any one time and what routes forward within or by altering parameters are possible, the macro level is critical. It is in that sense that the World Bank is quite correct in arguing that SSA has been hampered by inadequate applied macro economic analysis informing political economic strategy and policy and that real and structural (as well as monetary and pure) analysis needs greater attention within macro analysis and policy (a view which the IMF does not share).⁵

However, in proceeding from macro strategy and policy to particular decisions it is not possible to operate solely on the basis of macro or even broad sectoral relationships. These are critical to identifying where to look, e.g. if the overall import/GDP ratio is 25% but the direct plus indirect import/GFCF ratio is 50% then inputs into GFCF (from building and heavy maintenance materials through structural steel and machines to design and contracting are flagged as sub-sectors for examination in seeking to relax foreign exchange constraints. Beyond that point the follow up probably needs to be less formal - at least at present.

Parameters And Political Economy

From a political economic perspective two broad criticisms of a parametric approach arise: First, that it does not take into account political economic reality either in a static or a dynamic sense; and second, that it is inherently status quo oriented - echoing the IMF in one variant of this line of criticism.

The first criticism is partly false and partly based on a misunderstanding of what parameter based analysis can be expected to achieve. Such analysis does focus on aspects of political economic reality. The need for interaction between allocation priorities (basically outside, albeit interacting with, parametric constraint based approaches) has already been discussed. To change reality one first needs to understand it - political economy is one of the arts of the possible and neither will, perspective nor altered class relations can either totally or instantly alter underlying structural ratios. But some aspects of political economy do not lend themselves to this analytical approach and may have an impact on the ratios, e.g. a personal income ceiling of \$2,000 per household would have a marked effect on demand patterns, useable capacity (capital stock), import/GDP and export/GDP ratios. Use of parameters to identify the limits of the possible and of how they can be changed over time is a partial, analytical or technical approach, it is neither an ideology, a paradigm nor total economic theory.

Like input-output analysis (which in one sense is a sub-category of parametric analysis), this approach's only internalised normative values are orderliness and avoidance of waste. Arguably waste is a greater political economic evil in a socialist paradigm for the development of a poor country than in a capitalist one - certainly President Nyerere's branding it as a sin suggests that interpretation.

Concentration on limitations can lead to such great caution as to fail to attempt what is possible. However, a more common problem in SSA today is to attempt the impossible because its impossibility is not perceived.

To claim that parametric analysis is a version of the IMF's analytical and modelling approach is false. The IMF's basic model operates in monetary not real parametric relations. A parametric approach based on real structural relationship ratios is very near to being the opposite of the IMF's. Indeed

one limitation of the approach is that it does not specify when price alterations would be appropriate and have a significant impact on output and its allocation (and therefore gives little or no evidence on the costs of not making them if they conflict with specific political economic priorities). Therefore, it would be a more valid criticism to argue that at all levels (macro, sectoral, sub-sectoral and micro) this approach needs to be complemented by analysis of the probable directional and quantitative impact of specified monetary and price changes.⁶

Key Constraints: External Balance, Employment, Food

For most SSA economies external balance, employment and food supply are the key constraints.

The traditional analysis of the road to current external account imbalance starts by positing unsustainable increases in domestic consumption (and/or of augmented investment not balanced by reduced domestic consumption spending and/or by increased net term capital inflows) and in imports. However, even gross external and internal imbalances can come wholly or dominantly from other causes: a fall in the terms of trade reducing earned import capacity and real national command over resources; a rise in the real cost of external capital with similar consequences; real export declines or stagnation relating to sluggish growth of world trade; sectoral or micro shocks, especially weather, which sharply reduce production; shifts from consumption to investment if the latter has a higher import content than the former and/or if attempts to compress consumption are strongly resisted and result in higher prices rather than a shift in actual resource allocation between consumption and investment; structural characteristics of the economy which - taken together with world economic structures and trends - result in a low incremental export to GDP ratio and thereby cause even modest GDP growth to become unsustainable.

It remains true that compression of GDP will reduce external Current Account Deficits and, perhaps, alleviate some aspects of the consequential internal imbalance. It is however much less obvious that:

1. such a restoration of external balance can achieve a socio politically viable macro economic or distributional position, the lack of which are

likely to prevent restoration of internal balance;

2. reducing consumption in favour of investment affects primarily achievable future GDP growth rather than present output levels; or
3. contraction is economically efficient in terms of future GDP growth and of exports for the economy pr for growth of world trade and the global economy.

Zimbabwe - while clearly showing some signs of conventional overheating in 1981/1982 (as in 1973/74) - would appear to fit the case of imbalances whose causes do not lie basically in rapid demand expansion. In 1981 real output per capita stood at 94% of its 1974 peak. Over 1973-1984 real GDP growth averaged 1.5% versus about 6% over 1965-1973 and lagged a population growth rate of the order of 3.5%⁶ with capacity utilisation in the opening year 97%, in the closing one 84% and 85% for the twelve year average. These performances hardly suggest sustained overheating or a dash for growth nor do they offer any very unambiguous evidence that more fixed investment leading to higher output potential would have raised the actual growth rate as opposed to reducing capacity utilisation, consumption and achieved output still further.

Employment: Real and Definitional Problems

Employment growth rates in SSA have tended to be substantially below those of GDP if measured by recorded wage employment. When measured by economically active proportion of population the results are less clear.⁷ Data on self employment of all kinds are fragmentary, discontinuous and of low reliability. Open unemployment has increased but is limited by the fact that in SSA the very poor cannot afford to be unemployed.

The apparent ability of the small scale agricultural and non-agricultural "informal" sectors to act as sponges to sustain the ratio of economically active persons to population is not as reassuring as it may seem. The land constraint on small scale agriculture in many SSA economies is such that the marginal productivity of new entrants - whether by overcrowding or by entry onto submarginal land - is often below the absolute poverty line. The result of more intensive use can be severe ecological damage as in the Sahel,

Ethiopia and the western Sudan. "Informal" sector self employment is unlikely to be very productive in the context of a stagnating or slowly growing economy - in the services sector it may well exhibit properties analogous to small scale agriculture (e.g. dividing up an only marginally increased volume of retail business and 'expanding' into providing services saleable only at very low prices and worker incomes prices). The priority for expanding employment - defined as wage employment plus self employment productive enough and fairly remunerated enough to meet basic household consumption needs - is a very real one.

Again the Zimbabwe research⁸ suggests that the employment constraint in Zimbabwe is a severe one. Real per capita consumption of Africans fell steadily (more rapidly than GDP per capita) from the early 1970's through 1978, and after a brief sprint over 1979-81 it fell again to about 1970-73 levels. Wage employment has over 1973-84 exhibited three characteristics: a 1% a year decline related to growing labour displacing increases in capital intensity and/or to improved quality of the labour force; a change equal to about one half of the previous year's change in GDP and a downward shift in the absolute level related to sharp wage and salary increases over 1979-81 concentrated in large scale agriculture with a partial reaction in 1984 when employment stagnated rather than falling as would have been expected.

Genuinely productive self employment data are non-existent. However, until 1980 (though not over 1980-85) average per person output in small scale agriculture was falling rapidly while the "informal" sector's real output can hardly have been growing at the over 5% a year apparent increase in persons dependent on it.

For average employment to grow as rapidly as population would apparently require a 9% annual rate of growth of real GDP (.5 times 9% minus 1%). No such rate can be sustained in the foreseeable future. Increasing labour intensity in the medium and large scale portion of the economy does not seem likely to raise wage employment growth more than - say - 1% a year. Therefore, attention needs to be directed to how reasonably productive "informal" and, especially, small scale agricultural productivity could be raised.

Food Availability: Trends And Crises

SSA suffers from declining availability of food per capita. Food output per capita has been on a declining trend for at least a quarter of a century in the region as a whole and in a majority of countries.⁹ The ubiquitous post 1979 declines do not represent something new - as they do for GDP per capita - but a continuation of an existing trend.

To date food supply has not been a constraint on the Zimbabwe economy. However, that fact should not give rise to complacency about the future. Over 1965-1980 the growth of agricultural production was about 2% a year, i.e. well below the rate of growth of population. The reason this did not result in a food supply crisis in the late UDI period was that the balance between export/industrial and food crops shifted in favour of the latter (in part because of sanctions). The unsatisfactory trend has been obscured by 1980-81 experience. 1981 was a record crop year for four reasons: price incentives; relaxation of constraints on imported input and equipment supply; initial extension of access to support, infrastructural and commercial services to African farmers; abnormally favourable weather. The realisation that medium term food supply problems existed - especially if livestock became more grain intensive - grew over 1982-84. Hopefully it will not again be lost to sight because 1985 was a record harvest - and one of above average weather.

Projection of the pre-Zimbabwe relationships on either the production or demand side is risky: the extension of access to support services, infrastructure and commercial services to African farmers has changed the output capacity of those farmers dramatically and is continuing to do so and if that Africans have higher real cash incomes and/or ability to grow food, a higher rate of growth of demand for food is likely.¹⁰

The balance of this presentation will consist of a brief review of the Zimbabwe economy since UDI and especially over 1974-83; a more detailed analysis of that period and a consideration of the parametric relationships/constraints revealed and some of their strategy/policy implications.

1965-1973: The UDI Boom Years

In 1965 the Rhodesian Front regime in Southern Rhodesia entered into rebellion with a Unilateral Declaration of Independence to preserve settler political power and settler/company economic dominance. The initial result was international trade sanctions imposed, and to a degree enforced,¹¹ exacerbating the export marketing problems already created by the loss of fully tariff and quota free access to the Botswana, Malawi and Zambia markets. As a result in 1966 GDP fell.

Reorganizing the economy to regain a viable external balance - in the absence of significant access to external financial flows which were even more inhibited by sanctions than was trade - and to sustain the "Rhodesian way of life" combined with the presence of substantial surplus capacity to allow growth, led to a much more targeted strategy of state interventionism resulting both in structural change and relatively rapid GDP growth over 1966-1973.

Agricultural balance was shifted toward maize, sugar, cotton, tea and coffee as well as meat and away from tobacco (the crop whose market access was most affected by sanctions) as a result of a combination of passing on part of border price changes and of protection pricing for domestic food and raw materials backed by access to credit and some export subsidies.¹²

Highly favourable treatment was provided for mining leading to substantial expansion by foreign firms especially in respect to nickel, ferrochrome, asbestos and steel. Exchange control/import licensing provided incentives to manufacturing and especially to intermediate goods, metal products and engineering. They allowed a shift in the domestic terms of trade in favour of manufacturing which did not raise sectoral surplus or real wages and represented the real cost of import substitution in manufacturing. Prior to this period however, the internal terms of trade were 'biased' in favour of agriculture so that there was no general "allocation efficiency" case against the changes.

The central economic policy issue was perceived as achieving a financeable CAD with a trade surplus, limited factor payments and remittances and moderate external borrowing by using:

- a. detailed BOP projections linked to macro-economic forecasts to identify potential CAD levels;
- b. detailed foreign exchange allocation to compress imports;
- c. fiscal, credit and wage policies designed to back up the forex allocation system by avoiding upsurges in demand;
- d. increasingly sophisticated parallel marketing (sanctions busting) to preserve intermediarised global market access through albeit at a substantial cost - perhaps 15% on imports and 20% on exports by the late 1970s);¹³
- e. severe constraints on factor payment and remittance outflows which built up blocked balances (forced foreign reinvestment at - then - low interest rates) and induced existing foreign firms to engage in substantial reinvestment based on low opportunity cost of such programmes out of non-remittable¹⁴ funds combined with domestic growth and parallel marketing of exports providing prospects for profits on these investments;
- f. increases of the power of the Reserve Bank and the Treasury to control forex use, government recurrent account balance and specific price - tax - financing - ownership interventions in directly productive sectors.

Ironically, sanctions provided incentives for systematic import substitution and gave access to foreign funding to carry out manufacturing, mineral and to a lesser extent agricultural expansion. The restriction on external factor payments was critical because, even including non-remitted foreign factor earnings domestic savings hovered between 15 and 20% of GDP or slightly below the not very high GFCF rate. The 4% growth of capacity a year was consistent with about 6% GDP growth rate because of the initial 20-25% surplus capacity which fell to 2-3% by 1973-75. In manufacturing the surplus was in capacity initially designed to serve the Federation market while in agriculture it was partially in un or underutilized land whose more intensive cultivation became viable at post-JDI price ratios.

Late in this period serious attempts were made to step up investment partly to avert the danger of hitting the capacity ceiling, partly to raise exports

(particularly of steel and ferrochrome) and partly to reduce import dependence further. These led to overheating and with the 1973-74 petroleum price changes and 1974-75 collapse of metal prices resulted in an unmanageable CAD.

1974-1979: Recession and the End of Rhodesia

1974-79 strategy was to regain external balance. Reduction of inflation, limitation of consumer subsidies and maintenance of government recurrent account balance or surplus were targeted, all aspects of macro-economic policy were primarily tools for reducing the current account deficit which ballooned from \$ USA 5 million in 1973 to \$ 165 million in 1974 and \$ 230 million in 1975 (see Table 9). Their success in their own terms is indicated by an average 1976-78 Current Account Surplus of \$ 13 million despite steady erosion in the terms of trade from 107.5 in 1973 to 100 in 1975 to 81.4 in 1978.

Their price is visible in the performance of GDP, GFCF, savings and factor shares (see Tables 1, 2, 6, 7). From a 1974 high of \$ USA 3,331 million GDP in 1975 prices fell to \$ 3,010 in 1978. Per capita the decline was over 20%. GFCF in constant prices fell about 50% from its 1974-75 peak to 1978-79 from 25% of GDP to 14%. As a result potential output growth which had risen to about 5% over 1973-76¹⁵ fell to under 1% between 1978 and 1979 while capacity utilisation fell from 97.5% over 1973-74 to 75% over 1978-79.

Employment growth, moderately buoyant through 1975, turned negative. With a 3.5% annual growth of population this meant very substantial increases in unemployment and in very low income "informal" sector self employment. 1974-1979 exacerbated this problem rather than creating it since, as noted above, a 9% GDP growth trend would be necessary to maintain the ratio of wage and salary earners to population.

Within the consumption total the settler share rose. Africans were the sufferers from real wage and employment falls and those most affected by the under 2% agricultural output growth. Over 1973-78 CAD reduction was bought at the price of falling output, investment, savings and African consumption but not total or even per capita European consumption. This result was consistent with the regime's priorities and its supporters' demands - growth could be postponed, Africans could be marginalized, the "Rhodesian way of consumption"

was crucial to survival as its erosion would cause rapid contraction of the European skilled personnel and military manpower reservoir.

The tools used by the RBR and Treasury included neither an active interest nor exchange rate policy. The bank rate was constant at 4.5% from 1965 through 1979 while the Treasury bill rate fell from 3.83% to 3.57%. The exchange rate was devalued by about 16% relative to the USA\$ from 1973-74 through 1978-79 but the 10% odd changes in 1976 and 1978 were not central to policy or performance. Limits on enterprise sector credit expansion were rarely binding - with few exceptions the period was characterized by excess financial institution liquidity.

Forex allocation and government recurrent account surpluses were the principal control instruments. The former limited output as well as skewing the latter toward buildings and construction and away from plant and machinery. It limited purchasing power through its impact on employment and profits while maintenance of government recurrent account surpluses also depressed effective demand. As a result low growth in personal real incomes (declines for Africans) held demand for consumer goods down¹⁶ in parallel with exchange control constraints on supply. Similarly declining profit rates paralleled by rising excess capacity lowered the animal spirits of entrepreneurs reducing investment decisions as well as funds for carrying them out thus reducing pressure on the limited forex allocations for non-strategic capital goods imports (which in turn limited enterprise demand for bank credit and made the falling domestic savings rate consistent with low interest rates and high financial institution liquidity).

Over 1973-78 the chimurenga (liberation) war had limited macro-economic impact. Some farmers were driven out, military service reduced availability of skilled - professional - managerial personnel, military spending held down that available for infrastructure. But the main cause of the recession was the import and spending constraints imposed to regain and maintain current external account balance. In that sense the impact of sanctions on access to external finance, export volume and the terms of trade did have a serious economic impact. Unfortunately the greatest cost was in reducing capacity growth and postponing import intensive maintenance and replacement paid by independent Zimbabwe since 1979.

In 1979 - ironically - the war produced a mild (1.4% on GDP) recovery despite

becoming more damaging physically. Increased military spending resulting in a large recurrent deficit which reflatated demand. European and selective African salary and wage were made intended to reinforce and broaden the regime's support base. Profits rose, GFCF did not, savings fell.

Independence, Transition and Boom 1980-82

Zimbabwe became independent in April 1980 after a brief formal return to crown colony status. Initially the changes in economic policy amounted to less restraint - on imports, incomes, borrowing - more than changes of direction. In government spending they were concentrated on extending public services to Africans not changing the structure of government activities.

With independence there was a once for all terms of trade recovery (with the end of sanctions) plus access to external finance and 24% unused capacity plus low external debt (a heritage of Rhodesia's lack of access). GDP grew over 11% in 1980 and over 15% in 1981 taking capacity utilisation back to 95%. Gross fixed capital formation - made possible by greater capital goods imports, domestic and external credit and higher profits and encouraged by rising profits and buoyant market - recovered from 13.7% of GDP in 1979 to peaking at 17.5% in 1982. In constant price terms it rose 60% albeit but was barely over 80% of its 1974-75 level. Capacity rose 1% in 1980, 1.5% in 1981, and just under 3% in 1982 and 1983.

Wages and salaries for Africans were sharply increased by scale changes and by removal of de facto job access restrictions while grower prices were raised sharply for the 1981 harvest year to provide incentives. While taxes were raised and recurrent revenue rose rapidly, expenditure on health, education, demobilisation and security and on increased wages grew so rapidly that - despite an unchanged stated policy of achieving recurrent balance or surplus - the government recurrent deficit tended to widen.

Employment, which had fallen from 1.05 million in 1974 (40% up on its 1965 level) to 985 thousand in 1979, grew just 7% over 1979-82. This low rate is probably explained by major minimum and low income wage increases - especially in agriculture where 1982 employment was 18% below 1979 versus a 19% increase in non-agricultural employment.

Inflation as measured by the implicit GDP deflator was 6% in 1977, 16% in 1979, 13% in 1980, 9% in 1981 and 11% in 1982. The Zimbabwe dollar appreciated against the USA dollar in 1980, and was substantially devalued only in 1982. Overvaluation built up threatening the viability of much of the mining sector, deterring growth in manufactured exports and raising export subsidy costs to steel and agricultural exports.

With 1982-84 devaluations, on a 1975-1984 purchasing power parity ratio the Zimbabwe \$ was by 1984, 15-20% undervalued vis a vis the USA \$ (see Table 5). As the USA \$ is overvalued and the USA is not a leading trade partner, the Z\$ is not self evidently either over or undervalued. The 1983-5 collapse of the RSA Rand (now clearly undervalued on a purchasing power parity basis), has created problems in respect to that currency. RSA is a secondary export market and a direct competitor with Zimbabwe in Zimbabwe and key regional export markets.

Net factor payments and remittances ballooned steeply from Z\$ 114 million in 1979 and \$ 269 million in 1982. Increased emigrant and pension remittances which more than offset grant aid. Dominantly the rise was in increased interest and dividend payments, the former from rising interest rates and debt levels and the latter from reducing limitations on dividend remittances.

The cumulative impact of this independence relaxation boom was to turn a 1978 current account surplus of Z\$ 46 million and 1979 current account deficit of \$ 88 million to 1980-81-82 CAD's of \$ 198, \$ 575 and \$ 719 million. The immediate post independence growth rate was unsustainable on government and external balance accounts, and capacity expansion. However, it is critical to realize that these increases came after a period in which GDP per capita and total GFCF had declined steadily since 1974 and in neither case even restored 1974 levels and on the accession to power of a government committed to improving African incomes and access to services but constrained not to reduce real European consumption rapidly because their skills and enterprises were still crucial to production.

Government economic strategy was not consolidated until the November 1982 Transitional Plan.¹⁷ The Plan represents the broad strategy partially outlined before independence and refined and consolidated during 1980-81. This strategy represents a clear break with that of the previous regime. While it affected sectoral and spending policy over 1980-1982, it did not have

comparable influence on macroeconomic - especially fiscal and monetary - policy. Planning was at that time a separate Ministry and neither the Treasury nor the RBZ took the new strategy seriously, nor related their macro policy to it. The Transitional Plan's long term commitment was to equity, socialism and increased living standards. The short run macro economic targets were: 8% GDP annual growth with goods production to rise faster than that of services; raising GFCF from 19% in 1981/82 to 23% in 1984/85 and of domestic savings (net of stock changes) from 11% in 1981/82 to 17% in 1984/85; raising wage employment 3% a year; increasing the share of imports in GDP to 26% and of exports to 23% implying a 10.4% annual turnover growth and a slight trade deficit reduction over 1981/82 - 1984/85; financing about 37½% of 1981/82 - 1984/85 gross capital formation from net external borrowing, grants and investment; an average inflation rate of 15% a year.

These projections were broadly internally consistent. The Plan envisaged over 5% real annual consumption growth (5% per capita increases for Africans with no significant falls in European real incomes), a sharp increase over 1974-1979 growth but only a moderate one over 1965-1973 backed by very high levels of GFCF and savings with a high ratio of net capital inflow to GFCF. The employment target - was below the population growth rate. The external finance target seems to have been influenced by the level of Zimcord pledges on the mistaken belief that these represented bankable, rapidly disbursable commitments of concessional funds to which export credits and commercial finance would be additional.

The targeted rates were not incredibly high technically with one exception - export growth. The expectation was to break from approximate stagnation to over 10% annual real growth - a target suggesting that this figure was a residual after computing all other targets needed to sustain 8% growth. No serious attention as to how such a shift in the balance of production and in market penetration could be achieved was attempted. Articulated policies and resource allocations for doing so are notably absent from the plan. The creeping reduction of export prices from overvaluation over 1980-82 was very inconsistent indeed with attaining this target.

1982-1984: From the Macro Economics of Relaxation to the Macro-Economics
of Crisis Management

Zimbabwean policy response to the 1982-1984 CAD crisis was initially similar to Rhodesian over 1974-75 at the macro-economic level. In respect to distribution there have been significant differences with real wages cut less famine relief a priority and education, health and African agricultural service provision continuing to expand.

At macro level there are two differences: the use from late 1982 of an active exchange rate policy taking the Z\$/USA\$ rate from 1.3 at the beginning of November 1982 to about 0.85 by the middle of 1984 and 0.65 by mid-1985 and an active interest rate policy. Bank rate rose from 4.5% to 9% during 1981, the Treasury bill rate from 3.3% to over 8% and bank minimum overdraft rates from 7.5% to 13% during 1981.

However, the basic instruments have once more been forex allocation and attempts to restore the recurrent government budget to balance. The former has been bolstered by preferential credit and foreign exchange allocations to exporters and by greater government and business awareness of the need to bolster non-traditional exports to Zimbabwe's two regional markets (South Africa and SADCC/PTA) and globally. This more balanced approach to forex allocation to bolster exports as well as to constrain imports reflects in part the absence of the particular constraints confronting the illegal regime but also reflects a greater Treasury commitment to trying to restore balance by increasing supply not just by cutting demand. Recurrent budgetary balance has not been regained - even in constant price terms it has widened with the 1985/86 Budget showing no reversal - despite serious attempts. This is partly because drought, externally backed insurgency in Zimbabwe and Mozambique (where Zimbabwe troops are deployed for transport protection), the momentum of basic service expansion and subsidies to railways, steel and agricultural marketing have raised nominal recurrent spending while recurrent revenue has been hit by the erosion of its import, manufacturing and profits bases. However, there has also been a judgement that draconic revenue increasing measures (or more draconic subsidy cuts) would decrease production (and achieved revenue) and savings unacceptably.

In terms of balance restoration 1982-84 efforts were less successful than those of 1974-76. Real imports were cut perhaps 10% in 1982 and again in 1983

and 1984 but the apparent CAD in current Zimbabwe dollars rose from \$ 439 million to \$ 535 million over 1981-83. Adjusting for Reserve Bank gold stocks the pattern becomes \$398 to \$446 million. Converting this to current USA\$ the resultant CAD is \$ 575 million in 1981, \$ 719 million in 1982 and \$ 439 million in 1983, an indication that the 1982 restrictions did not bite fully until 1983 but then did have a significant impact reducing the CAD by over 40% in USA\$ terms. 1984 data show a stepping up of this trend.

The output cost has been similar to the previous retrenchment with a 2% real decline in 1982, 3.5% decline in 1983 and perhaps 1% growth in 1984. However, in part this relates to 1982-84's three consecutive droughts. Employment fell by perhaps 2.5% in 1983 and stagnated in 1984. Savings recovered slightly from a 1981 low of low of 9% of GDP to 11-12% in 1984 but GFCF fell from 17.5% in 1982 (up on 1981's 15.5%) to under 15% in 1984.

1984 saw draconic limitations on remittance of dividends, branch profits and rents, forced investment of blocked balances in low income government paper and a 6 to 10 year lag before phased repayment of principal over 6 to 10 years and compulsory acquisition for Zimbabwe \$ of the local trustee held external securities pool, designed to avert or limit further reductions in visible imports, other than grain, cover emergency grain imports and fill the gap caused by breakdown of the IMF standby. They have provided substantial interim savings on invisible account. In respect to blocked balances they have permanently reduced servicing cost and provided a low cost, medium term phasing out of the principle. The tightened dividend and remittance regulations taking effect in 1986 will also yield continuing gains.

Current Account Deficit Evolution 1978/80 - 1981/83: An Analysis of Causation

Zimbabwe's current account deficit ballooned from 1.3% of potential output over 1978-80¹⁸ to 8.1% in 1981, 10.1% in 1982 and 6.5% in 1983 (Table 7). This record radically understates the true deterioration because a 4% gain could reasonably have been expected from reversal of the negative impact of sanctions/intermediation on the terms of trade. That gain was submerged in negative developments so that the overall ratios to be explained are 12.1%, 14.1% and 10.5% respectively (Table 8).

External shock - initially dominated by global and regional recession impact

on trade growth but with terms of trade losses rising to equal importance in 1982 and larger in 1983 and the impact of interest rates significant and rising - account for 28%, 38% and 59% respectively of the annual deteriorations. Debt burden was relatively insignificant until 1983 and even then accounted for under 8% of the widened gap. Indeed relaxation of profit remittances (a domestic policy measure) was much more significant in 1981 and 1982 and of about the same magnitude in 1983.

Domestic policy changes (including profit remittances) accounted for 57%, 30% and 18% of the annual deteriorations. The main element was the attempt to operate the economy nearer to capacity - a not unreasonable goal since the base period utilisation rate was about 75% (See Table 6). The rise in the share of GFCF - again the result of a deliberate policy to raise very low rates in the base period (see Table 6) - had only a slight effect. In 1981 general import control relaxation accounted for 14% of the increase in CAD/Potential Output ratio but in 1982 and 1983 import controls were if anything, tighter than in the base period. Similarly while allowing the real purchasing power parity of Z\$ to float up while its inflation was above the global average accounted for 4 to 5% of the 1981 and 1982 deterioration by 1983 the Z\$ had been adjusted downward enough to increase tradeability marginally vis a vis the base period.

A special factor in Zimbabwean experience was the capital rehabilitation shock. At independence much of the plant, machinery and transport equipment portion of the capital stock was obsolete and/or life expired and another substantial portion had deferred maintenance to make good. The direct capital goods import share in GFCF rose from 31.7% in the base period to 47.2%, 59.3% and 51.0% in 1981, 1982 and 1983 respectively accounting for 18%, 27% and 16% of the CAD/potential output ratio increases.

This decomposition suggests that regaining the CAD ratios of 1978-80 without significant global economic changes would require not merely a once for all reduction in GDP but also quite possibly negative "equilibrium" rates of growth of capacity and of achieved GDP. Assuming no further terms of trade deterioration or interest rate rises; elimination of the negative recession impact; continued exchange rate adjustments to sustain tradeability; total reversal of the profit remittance relaxation and return of the capital goods imports/GFCF ratio to 45%; then capacity utilisation and investment share trends would have to be negative (i.e. lower capacity utilisation and a lower

share of GFCF) by about 5% (of potential output). This would imply 60% capacity utilisation and 8-10% GFCF. As GFCF of 11-15% of GDP in constant prices is needed to maintain capacity this implies steady decline in potential output.

Such a scenario is not viable in political economic terms. Medium term real income increases for the African majority are socio-politically imperative. Accelerated decline in the white minority's real income will lead to a rate of exodus causing severe output losses because of the Rhodesian heritage of inadequate training and experience for African managers, professionals, large scale farmers and skilled workers.¹⁹

1984's CAD was about half 1983's. External factors and GFCF import content increase cover virtually all of the increase over the base period since capacity utilisation is down to 84% and the policy changes increasing invisible outflows have been reversed. The better 1984 (and probable 1985) outturn is not evidence basic constraints have been relaxed. Export volume probably rose in 1984 by 6 to 8%; but this is still an average of -0.5% a year since 1974 or +0.5% since 1979. There is no evidence as yet of a sustainable 4-6% growth trend of exports.

Key Parameters and Constraints

Five key constraints can be identified from the parametric relationships in the Zimbabwean economy: the ratio of imports to GDP, the growth of exports, level of net capital inflows, employment and growth of GDP. A potential sixth is rate of growth of food production relative to that of population.

Zimbabwe - like most other SSA economies²⁰ - shows a significant correlation between real import growth and fluctuations and real GDP growth. The ratio of non-capital goods imports to GDP is about 21% while that of direct capital goods imports (50%) and indirect import content of domestic inputs (20% times 50% = 10%) to GFCF is about 60% (see Table 8). The former is relatively stable and relatively low. There would appear to be limited scope for reducing it further. Some reduction in the ratio of operating imports to total imports can be achieved in power (via coal fired thermal plants) and fuel (via hydrocarbon distillation from sugarcane, molasses and/or coal) but at a high and highly import intensive capital cost and with consequential

power and fuel price increases negatively affecting exports via increased costs of production (e.g. in mining and ferrochrome smelting) and transport.

The capital goods imports/GFCF ratio has been more volatile and is higher than that for the economy as a whole. Given the desirability of reducing the external balance constraint on production and on restoring GFCF to levels consistent with 5-6% growth of capacity, this would appear to be the medium term priority sector for import substitution.

Export Growth is critical to raise earned import capacity. At least since 1965 Zimbabwe has not been an export growth led economy in the sense that the export sector grew faster than and pulled along the rest of the economy. Restoration of real export growth is a priority to allow higher imports. Even assuming return to a sustained 6% growth in world trade sectoral analysis of Zimbabwe's exports raises doubts about its ability to achieve that level.

Traditional agricultural exports are hampered by sluggish world demand growth. They are also likely to prove supply constrained because the 1973-1984 trend rate of agricultural production growth is barely over 2%. To reverse, this supply constraint significant changes in the trend agricultural growth rate are needed.

Unless and until significant world demand recovery is achieved, the mining sector - excluding gold and ferrochrome - will stagnate or decline. The import value of gold exports (and probably their quantitative growth) depends on the world gold price which would appear unlikely to rise significantly until real interest rates decline.

Ferrochrome and steel face particularly unfavourable world market conditions. However, they can be expanded and diversified and over the longer term would appear to face at least moderately favourable market prospects justifying interim support and capital injections for modernisation and restructuring.

Zimbabwe's geographic position gives it a natural advantage vis a vis non-Southern African economies on exports to South Africa, Botswana, Zambia, Malawi, Mozambique, (probably) Swaziland, and - given restoration or rehabilitation of rail links at least no disadvantage in respect to Angola, Tanzania and (perhaps) Kenya.

In respect to its eight partners in the Southern African Development Coordination Conference (and to Kenya) much of Zimbabwe's manufacturing sector either produces goods not produced in potential regional markets or has cost advantages.

Increased exports to most of these markets would seem to depend on formal or de facto countertrade agreements; only Botswana is in a position to expand imports paid for in hard currency on a significant, sustained basis.²¹ The basic external constraint is capacity to import. If regional imports by Zimbabwe from SADCC (or PTA) members can be substituted for those from third parties (including South African transport services) and/or can significantly reduce capital goods import requirements otherwise needed for local production (e.g. electricity from Mozambique, ammonia and urea from Tanzania) and are paid for by net increases in Zimbabwe's exports to them, balanced buildup in intra-regional trade can make a significant contribution to loosening the limits imposed on total import capacity - and thus on production - by slow growth of traditional exports.

The primary function of additional exports is to reduce the import constraints on GDP and GFCF. While easier if payment is in convertible currency, countertrade agreements which allow substitution of regional imports paid for by regional exports for extraregional imports in excess of extraregional exports have the same effect. As most of Zimbabwe's regional trading partners are similarly placed regional trade expansion strategy needs to concentrate on import sources as much as export markets and on frame /countertrade agreements more than preferential tariffs and convertible currency clearing.

Exports to the Republic of South Africa are problematic. South Africa is undergoing a severe depression and is protectionist in orientation and can substitute domestic for Zimbabwean production. Political relations and strategy operate against such trade both in Zimbabwe and in RSA.

Manufactured exports to destinations beyond Southern Africa face cost of transport and speed of delivery barriers (plus high production costs in many cases). These partly relate to geography, to lack of maintenance of the direct rail routes to the sea via Mozambique and to South African sabotage/destabilisation against these routes - which has to a degree been contained (not least by use of Zimbabwe military protection) but far from reduced to tolerable levels. Development of export orientation, backed by

export incentives, should make possible significant percentage increases in global manufactured exports. However, the base - beyond steel and ferrochrome - is so small that priority action is needed now to lay a base for 1990's rewards more than for short term results.

The sustainable trade deficit depends on the level of net factor payments and remittances and on gross external borrowing plus equity investment minus principal repayments. Factor payments plus remittances exploded over 1980-83 (see Table 9). Measures culminating in the April 1984 package have reduced equity investment payments, interest on blocked balances and remittances. Further significant savings would appear to be achievable only on pensions. Relatively high net factor payments are inevitable so long as external investment and external debt (see Tables 3, 4) are high. A major decline in world real interest rates would clearly ease the problem but is not within Zimbabwe's power to influence.

External borrowing policy shifted at independence and in 1982. The first shift was to a "more the better" stance with relatively little attention to interest rates or maturity/repayment schedules. The bulk of the borrowing was at best quasi concessional and at least a third floating rate while average grace and maturity periods seem to have been at or below 3 and 7 years. In reaction to this Zimbabwe has swung to a policy of accepting very few loans with interest rates above 10%, grace of less than 5 years or repayment more rapid than 10 years - with the ironic and major exception until 1984 of Reserve Bank lines of credit at libor plus. As its chances of getting concessional finance are limited and export credits (except for very long gestation projects) rarely meet the repayment standards set, the only way of sustaining this policy is rapid reduction of the CAD. Elimination of the CAD has been canvassed seriously without a clear realisation of the initial resultant severe GDP fall, a real danger of subsequent negative capacity growth and of output growth permanently below that of population. However, with debt service approaching 30% of export earnings, reversion to unselective borrowing is patently untenable.

The question of whether and how net external finance of - say - USA \$400 million a year at 8-10% average interest can be raised is a real one. With a per capita GDP of the order of USA \$550 and a severe forex constraint Zimbabwe should be able to secure more concessional or semi-concessional finance than it has to date. Larger projects in the enterprise and government action lists

should be able to obtain official export credit finance at about 10% repayable over 8 years following construction. In principle World Bank sectoral funding should be negotiable in respect to production substantially or wholly directed to export and for medium term export finance. But it is not clear that these sources could be counted on for USA \$400 million net a year.

Foreign Equity investment since independence has been minimal. Initially the reasons may have related to doubts as to the new government's general political economic policy. At present they appear to relate largely to probable profitability and to remittability of profits if earned. Special case investments are likely to turn on specific export opportunities - e.g. in the Renco Gold Mine, Dandy Chewing Gum and Heinz (bean) investments - or to use of blocked or other domestic (Zimbabwean) excess liquidity (e.g. Dalgety, Holiday Inn). The former are not generalisable; the latter do little for the external balance. The prospects for substantial external equity investment - despite the fact that dividends on such investment when made after late 1979 have always remained remittable up to 50% of profits - are poor. Underlying economic realities not government policy are the key barriers.²² Special cases should be pursued (and where possible identified and presented to potentially interested investors). General legislative incentives will rarely meet investors' particular concerns in some respects and may be too generous in others so that case by case negotiation would seem appropriate.

The fourth priority is expansion of wage and adequately productive self employment. Given the nature of the foreign exchange constraint and the higher import content of GFCF this priority is directly relevant to the previous three. Given the low rate of growth of agricultural output it is also relevant to removing an impending food availability constraint. It is a political economic constraint because secular increases in open unemployment and "informal" non-agricultural or peasant self-employment which does not meet basic household consumption needs have serious distribution implications. Apart from equity considerations, they are inconsistent with continued mass support for the government or for avoiding damaging the economic welfare of the white minority so much as to ensure exodus of its productive members before they can be replaced.

Wage Sector employment policy selection suffers from negative degrees of freedom. Reducing real wages by holding increases below COL rises may be inevitable but imposes great political strain and human hardship. Further,

cuts capacity for increasing employment during a period of slack demand is probably negligible. Unless and until the economy can be made more labour intensive (or real GDP growth restored to 9%) there seems no way to prevent a continued erosion of the ratio of wage employment to would be economically active population.

Non-agricultural "informal" self employment providing minimum socially acceptable incomes can not be expected to rise significantly more rapidly than GDP. Removal of petty licensing and other restrictions has allowed a once for all increase in this sector. How much further it can go without rising real wage and small scale agricultural incomes is more doubtful. In construction, repairs and some simple forms of processing and manufacturing there is space for increases - especially if effective teaching/training and initial capital advance programmes are developed. However, with an increase of over 100,000 a year in would be economically active population, to seek even the majority of meaningful job creation burden in this sector would be unrealistic.

Small scale agriculture ("communal area" and resettlement) would seem to afford the best prospects. Post independence improvement of market access, procurement, extension, input supply, productive infrastructure and basic services to this sector has met with a significant response. The trend output increase is at least 5-6% a year (much higher for marketed production). For this to continue three conditions must be met. Greater access to land needs to be made possible by lower cost acquisition of under or unutilised land on large farms and lower cost (less infrastructure intensive) settlement/settler support schemes. More effective incentives are needed to convince perhaps two thirds of present communal area households (in many cases part households with the man in wage employment at a distance and the woman and children on the plot) to move either into consolidated wage earning (and/or non-agricultural "informal" sector employment) or into resettlement schemes. Also needed is greater speed in both of the above programmes.

Fifth, GDP and consumption growth at least equal to population growth is a priority. Low GDP growth will thwart productive employment growth and is likely to go hand in hand with dangerously low agricultural output growth. In political economic terms, it is critical that African real incomes do not erode further and dangerous to output - at least in the short term - to go much further with eroding white professional, artisanal, managerial and farming incomes.

Two constraints which are often canvassed are GFCF and domestic savings (with special emphasis on the recurrent budget deficit). It seems doubtful that these constraints are binding until the first five are relaxed. Zimbabwe is, and until 1990 is almost certain to remain, foreign exchange (or import capacity) not output capacity constrained. Prolonged adjustment to forex constraints including low capacity growth would lead to both GDP growth and export responses to increased export growth and/or improved terms of trade being crippled by hitting low capacity ceilings, a cycle repeating 1974/5 and 1981/2. That is not an immediate nor (unfortunately) a likely pre 1990 constraint overall as opposed to sectoral bottlenecks.

Raising GFCF would increase capacity growth but diminish GDP growth. The explanation lies not in the standard Keynesian thrift paradox but in the fact that GFCF's direct and indirect import coefficient is at least .56 and probably .6 while that for operation of existing capacity (consumption) is under .21. As a result every Z\$ diverted from consumption to savings can - without worsening the CAD - increase GFCF by only \$0.375 with the other \$0.625 aborted GDP and increase in stocks of non-exportables. The potential future GDP multiplier of domestic savings is about .275 but its immediate achieved GDP multiplier is -2.7.

In the longer term, it is quite true 5 to 6% GDP growth cannot be sustained without 5 to 6% capacity growth. That implies (at 90% capacity utilisation and a 2.5 to 1 constant price incremental capital output ratio) a 22.5 to 25% ratio of GFCF to output versus a present level of between 15 and 17.5% (see Table 7). Even in the short term, reducing the incremental GFCF to capacity ration - by raising productivity of all factors (e.g. utilising the presently un or underutilised five sixth of large farm land more productively) or by increasing labour intensity would reduce import requirements for any given level of GDP or increase the level of GDP consistent with any level of import capacity.

A worrying element in the incremental GFCF/Output ratio is that in current price terms it has been rising. GFCF prices have been rising about 1.4 times as fast as the implicit GDP deflator or about 1.5 times as fast as those of private and public consumption. This means a need for a rising level of savings to GDP for any given rate of growth of capacity. The causes relate to a more rapid rise in import than in domestic and, within domestic prices,

above average increases for construction, manufacturing and transport.

Savings in Zimbabwe fell steeply from over 20% in 1973 to barely above 10% for the average of 1980-1983. As the true domestic content of GFCF is 40 to 45%, these rates already imply that earned import capacity (export earnings) financing part of GFCF import content. Given clearly inadequate operating inputs levels and the higher M/GFCF than M/Other ratio, an increase in the savings ratio before either a substantial increase in exports or in import substitution would, reduce current output possible at any given CAD level.

Reduction of the Zimbabwe government borrowing requirement by eliminating the recurrent deficit has been advocated as a way to increase savings, to reallocate investment from the public to the private sector, to reduce the disincentive effects of taxation and (assuming tax increases rather than basic service or food subsidy cuts) to make after tax income distribution more equitable. Raising savings by balancing the recurrent budget would have the same impact on output as any other method of raising s. Enterprise investment has not been squeezed out by public and is less import intensive. Recurrent budget balancing will require tax increases, food and enterprise subsidy reductions and limiting the growth of public services especially secondary education. The case for it is reduction of inflationary pressure, income distribution gains (assuming income tax and amenity consumer goods are the main sources of additional revenue and that food subsidy reductions are offset by income increases for lower income households) and avoiding imbalance between significantly rising real public services and significantly falling real disposable income. In practice the likely macro economic impact of that approach would be low with private savings falling by most of the decrease in government dis-saving.

The recurrent deficit, wage and employment and savings problems are interlinked. The Rhodesian rundown of output, savings and African consumption over 1975-1978 was reversed as to consumption by the massive Muzorewa wage-salary increases, followed by another round of Zimbabwean increases. Taken together with rapid advance of high level cadres Africans in the civil service, private employment and business, the rapid expansion of basic services and continued high war costs, reduced the ratio of surplus to capital stock and of saving to income, sharply increased inequality of income distribution among Africans; generated increases in output (over 1980-81), CAD and government recurrent deficit adding demand pull to cost push inflation;

caused a once for all reduction in the wage employment base; contributed to forcing stringent budgetary and forex policy stringency beginning in 1982 because no margin to accommodate negative external economic and weather shocks remained.

The short run case for recurrent budget deficit elimination is one of reducing pressure on domestic prices (and therefore the exchange rate and/or exports) and secondarily and of improved income distribution. The long term implications are different. If real GDP were to rise at 5 to 6% a year, real revenue would rise at least as fast and, with moderate recurrent expenditure growth constraint, wipe out the recurrent deficit in three to five years.

Short Term Strategic and Policy Priorities

The implications of the external balance constraint on GFCF, the perverse short and medium term GFCF/Output tradeoff and the employment and growth constraints for strategy and policy appear to be:

- a. priority to GDP growth higher than population growth (i.e. at least 4%);
- b. subject to GFCF level adequate to sustain positive capacity growth;
- c. GFCF concentrated on bottleneck breaking sectors, e.g. export production land reform/resettlement regional transport and energy links;
- d. while restructuring toward less capital intensive approaches, e.g. in agriculture and in energy;
- e. reduction of import content of GFCF by selecting technology and construction patterns with lower forex content (e.g. small scale labour intensive construction) and avoiding very import intensive high Fixed Capital/Output ratio ones (e.g. mechanised/diesel pump irrigated agriculture) and by altering production mix to import substitute in plant and equipment (e.g. altering Zisco output to create an interface with structural steel and engineering);
- f. agricultural reform to increase small farmer access to un or underutilised land to raise the growth of productive employment, avert a food crisis, strengthen export earnings, and reduce incremental GFCF/Output;
- g. regional economic coordination expanded as a source of imports otherwise obtainable only for hard currency, a means to reduce import intensive

capital expenditure (e.g. in electricity and fertiliser), to reduce transport costs for exports and to increase capacity utilisation to reduce unit costs and make possible economies of scale and product specialisation through comparable increased exports to the SADCC/PTA region;

- h. maintaining tight restrictions on imports of consumer goods and services, remittances and on external factor payments;
- i. securing adequate external finance to sustain the Current Account Deficit (or more accurately the import levels it allows) near its 1983 nominal USA \$ level on terms which do not cause either an insupportable interest/export ratio (e.g. one of over 15-20%) nor lead to implausible future gross borrowing requirements because of short duration and/or bunching of maturities. This target implies phasing down net external finance relative to GFCF and thus requires export raising/import substituting targets.

Assuming a 6% average 1984-1990 annual rate of growth of world trade and of Zimbabwe exports, the above priorities are mutually consistent. The scenario would yield:²³ 4 to 5% average annual GDP growth (5 to 6% from 1985 on) with about 2.5% Production Capacity growth and a capacity utilisation ratio of 85 to 87.5% in 1990;²⁴ GFCF averaging 18% of GDP and savings averaging 12% and wage employment growth averaging 2% a year.

Current Account Deficit Elimination: High Cost, High Risk, Low Potential

Elimination of the 1983 CAD of \$ USA 440 million by 1986 would have substantial costs and high risks and no net gains. It would probably reduce 1990 actual output by about 4% and 1984-1990 cumulative output by the order of 10-12%. More critically it would entail very sharp real consumption reductions over 1985-86, over a third before allowing for cyclical trade and/or weather offsets and draconic reduction of GFCF in 1985-88 with 1990 levels still likely to be up to 35% below those of the basic strategic scenario. Projected capacity growth is negative until 1988 and under 0.5% a year over 1988-90. Therefore the projected capacity utilisation rate passes 90% in 1989 and approaches 97% in 1990. Any attempt to restore GDP growth would face immediate capacity constraints and 'overheating' would emerge faster and more severely than in 1974-75 or 1981-82.

In fact the outturn would probably be worse than the scenario suggests. Sharp real per capita consumption falls in 1985-86 would be socially and politically unsustainable and attempts to enforce them would lead to results (including personnel exodus and strikes) highly damaging to production. Falls in GFCF of over 25% are virtually technically impossible and if attained would imply substantial shortfalls in maintenance and asset renewal. Subsequent GFCF level levels would be too low to allow both maintenance and selective bottleneck breaking thus preventing 6% export growth. At capacity utilisation of over 90% - overheating would emerge and at 97% be explosive. The Recurrent Budget deficit would become totally unmanageable because of falling real sales, income and company tax.

A modified scenario with 10% a year nominal USA \$ CAD reduction would hold the need for falls in consumption to under 10% per capita in any year and would allow higher GFCF levels giving some room to debottleneck and restructure so that the 90% capacity utilisation rate would not be reached before 1990. However, in no respect would results appear to be superior to those of the initial scenario. Therefore, the only case in which it is desirable is that of failure to devise and achieve financing of a deficit of the order of \$ USA 400 million on bearable terms. In that case a strategy to finance a gradually falling CAD becomes essential.

Medium and Long Term Constraint Relaxation

Most short term strategic priorities remain valid over the medium to long term, e.g. to 2000. However, over that time span substantially more progress can be made toward loosening the import capacity/import content constraint. The capacity (GFCF) and savings constraints will thus become more important. Specific areas are:

- a. reducing the capital goods imports/GFCF ratio from 50% to 30%. This would involve broadening and deepening the engineering, transport equipment and spares/machinery sectors and their interface with basic metal production. Approaching this challenge on a combined import substitution/export promotion (especially but not exclusively to SADCC/PTA area markets) basis might help significantly in achieving economies of scale and of sustainable high capacity utilisation rates;

- b. increasing export diversification with particular reference to regional markets, selected world market manufactures, coal (and/or coal based chemicals) and - if agricultural growth can be raised to over 4% - food;
- c. raising agricultural output growth to a trend level of 5% a year significantly higher for its small and medium scale sub-sectors. This would allow a growth of employment/self employment opportunities at or above poverty line of at least 5 to 6%, avert the danger of food and agro industrial input (or agricultural export) constraints and create a basis for substantial, sustained increases in food exports;
- d. raising GFCF to 25% of GDP (allowing a 6 to 7.5% rate of Productive Capacity growth and of GDP);
- e. a parallel increase in domestic savings to 20 to 22.5% of GDP reducing the current account deficit to 2.5% to 5.0% of GDP;
- f. turning the 1979-85 recurrent budget deficit into a 2.0 to 2.5% (of GDP) government gross saving toward financing the Capital Budget to raise overall savings and to increase price stability and have some leeway for countercyclical measures;
- g. expanding reasonably productive employment/self employment at least 4% a year in terms of new opportunities and an additional 1 to 2% in existing self employment whose productivity/remuneration has been raised above the poverty threshold;
- h. increasing construction capacity - to contribute to employment/self employment, lower incremental GFCF/Productive Capacity ratios and halting the escalation of construction costs relative to the general price levels.

Evidently, these guidelines require more exploration, analysis and technical studies to articulate a viable policy - programme - project package. They do go some way toward identifying where strategy components should be sought.

Agricultural Production, Gainful Employment, Food Security And Land Reform

Agriculture has usually been seen as Zimbabwe's most promising sector. This view has prevailed despite a 1970-1980 (or 1970-1984) agricultural output growth trend of about 2%. Unless the output growth trend can be raised to at least 4 to 4.5%, industrial input and export oriented production will be squeezed by growing food demand.

Agriculture is the only sector with the medium term potential to alleviate substantially the employment/productive self employment conundrum. It is not doing it: wage employment in the large scale farming sector fell from a 1975 peak of 365,000 to about 260,000 in 1983 and 266,000 in June 1984, while of the 350,000 odd African peasant households not more than a tenth had incomes (including production for own use) comparable to lower wage earners as of 1982-84. Output growth in the 1970's was capital and energy intensive which raised capital and operating import content and reduced labour intensity. Independent Zimbabwe has extended services, markets and credits to small farmers with very substantial 1980-85 gains. In parallel it has embarked on a strategic programme to resettle half the peasant households but progress to date - while real and surprising given the short time span and absence of experience - is limited.

The key to sectoral progress appears to be the five sixths of large scale arable (and some portion of large scale ranching) land which almost all studies report as un or underutilised. In general this represents a portion of virtually all large farms not five sixth of all units. Therefore, buying whole farms is cost inefficient (forcing immediate buyout of well utilised, acreage and of assets unsuitable for small scale sector use) but also maximises output risk (other large farmers leaving, lower transitional output). What is needed is a means to encourage large scale farmers to sell their extra land at low prices. Combined with a low initial capital input, labour intensive resettlement strategy this could achieve the aims of creating viable incomes for most peasant households and 5% overall and 8% small farmer annual output growth.

One incentive to such sales would be a tax on gross rated potential output assessed by grade of land and offsettable against income tax. If net output on reasonably well used acreage is 40% of gross and the average effective income tax rate on large farm sub-sector net output 25% (both of which appear

to be plausible orders of magnitude) then a 10% gross output tax would be fully offsettable against income tax on the fully used portion of landholdings but on under or unutilised land would cause a substantial - increase in tax liability. Large farmers could, develop the land - probably not an option for most farmers given capital and managerial constraints (and certainly not practicable nationally given the implicit construction and import requirements) or get rid of the un and most of the underutilised land - by sale at any price or even by giving it away.

On fully utilised land there would be no tax loss and no pressure to sell. The more efficient a farmer, the less he would be affected. Therefore the danger of panic departure by efficient farmers should be lower. Their remaining in place would limit downside production risk. By definition the un and underutilised land has low output per hectare so that even in its early years the settlers/settlement schemes could exceed previous production levels. Settlement costs per household could be reduced substantially by pushing down the per hectare cost of land and by avoiding purchase of productive assets appropriate only for large scale farming units.

As the 32% fall from 1981's peak (good weather) output by 1983 (second drought year) and the probable recovery to a new peak in 1985 (good weather) show, Zimbabwe's agriculture has very high weather risks which normally bear down most heavily on small peasants (without reserves to ride out bad years) and on food crops. A strategic approach may need to follow three lines: fuller and more effective water use; larger national grain reserves to allow domestic food and regional export security; shifting cropping patterns in the most vulnerable areas which are largely in the small scale sub-sector (e.g. perhaps to millet and sorghum to replace maize as cattlefood?).

Concluding Note

The constraints on Zimbabwe's economic growth and development are such as to indicate that neither 1980-1981 rates of change nor the targets of the Transitional Plan are sustainably attainable. In the absence of a general worsening of the external economic context after 1980, the readjustment from 1980-1981's dash for recovery could have been more gradual. If the recovery had been less frenetic it is theoretically possible that a steady 5% growth rate might have been achieved over 1980-1985. Such a strategy would have

averted combining an approach to capacity utilisation and consequential overheating with the basic external constraint and also roller-coaster course of 1980-85. It would not, however, have altered radically the set of parametric problems confronting Zimbabwe.

While these do appear daunting they do not rule out sustained economic progress. Nor are they by any means unusual in the SSA context. Zimbabwe has greater degrees of freedom and more readily identifiable avenues for constraint relaxation than many SSA economies. Its capital stock - as a result of 1980-83 replacement and reduction of maintenance backlog - is relatively undebilitated and not in such urgent need of general radical rehabilitation. Zimbabwe's export base - especially in manufacturing - is both more diversified and has more evident future lines of diversification than economies with narrow, primary product export bases. The same holds true of production for domestic use especially in respect to construction materials and capital goods (plant and machinery). Zimbabwe's overall (and especially non-GFCF import ratios) are lower than the SSA average, albeit this means that declines in import capacity have a much larger negative GDP multiplier than in economies with higher ratios. Southern (and Eastern) Africa appear to have more promising regional economic coordination groupings than other SSA sub-regions and Zimbabwe already has substantial trade bases with 6 of its sub-regional neighbours on the export and with 4 on the import side.

The policy implications (and probable results) flowing from the foregoing analysis while hardly totally different from other sets of proposals are not self evident nor do they correspond either to standard Bank (much less Fund) nor standard 'radical conventional' wisdom. Short run CAD closing is likely to reduce not simply current consumption but also current and medium term investment and future potential for moderate growth (i.e. to lock the economy into an extended stagnation/transitory boom cycle). Raising GFCF - unless the incremental 'propensity to export' is sharply increased thereby - would be expensive in terms of GDP (not just consumption) foregone, unless coupled with a substantial increase in external finance on at least semi-concessional terms. For the same reasons raising the domestic rate of savings (s) is logically a consequence of CAD narrowing or concessional finance inflow broadening rather than a plausible first step. Thus the case for reducing the government recurrent budget deficit is basically one of domestic allocation and inflation control. Foreign exchange pricing (exchange rate policy) and export finance are likely to be significant in sustaining traditional mineral

and manufactured exports and - perhaps - in stimulating growth of non-traditional manufactured exports. Zimbabwe's economy - for GFCF - has a low import to output ratio so neither standard import substitution approaches nor altered income distribution's impact on the makeup of demand are likely to offer more than marginal reductions.²⁵ Efforts to increase freedom of manoeuvre must concentrate on raising the export/GDP ratio (in the GFCF sector as a complement to raising the domestic component of GFCF).

Employment/productive self employment growth comparable to that of population can only be achieved if incremental employment/output ratios are significantly altered; the most promising sector for such alteration is agriculture, to be more exact small scale agriculture given access to more land via fairly thoroughgoing land reform. That approach would also relax the potential food (and/or propensity to export) constraint arising from the low agricultural output growth trend.

One political economic implication is that radical reform in respect to land is not simply not vetoed by external balance, employment and potential food supply constraints; it is, rather a precondition for relaxing and averting them. Similarly the implications in respect to the external sector are by no means totally conservative. While indicating the probable high cost of severe overvaluation of the Z\$ (and giving little support to the contention that devaluation need affect the poor particularly severely²⁶) they indicate free remittance of factor payments and import "liberalisation" (allowing more final consumer goods in via the "market mechanism"²⁷ would be expensive in respect to both GDP and GFCF. Similarly while it cautions against high, import intensive GFCF based import substitution (by no means necessarily a socialist or even populist cause in any event, vide Hwange) it is supportive of the case for two way (countertrade) regional trade promotion rather than of a free trade area/convertible currency approach.

The analytical approach used here neither claims to nor can answer certain basic political economic questions. It cannot legitimately be used to argue for or against a larger public enterprise sector. It does indicate that higher costs - or insistence on high, short term profit rates - in respect to export or joint domestic/export units would tighten the external balance constraint. That is a guideline for public enterprise goal setting or a criteria for ranking sectors in terms of suitability for public sector acquisition/expansion not for or against public enterprise. The implications

are negative both for general delinking and for unselective 'integration' into global trade based on domestic consumption cuts and TNC investment (with high initial GFCF and continuing external factor payment) import costs. It is broadly supportive of planned, regional integration/co-ordination.²⁸

One implication of the preliminary and once off work done to date is that a more in-depth and ongoing exercise based in Zimbabwean institutions (e.g. Finance, Reserve Bank, University) would be valuable. Medium term parametric constraint relaxation and ratio altering require ongoing monitoring of constraints and of results as well as more systematic and rigorous application of macro relationship frame data to sectors, sub-sectors and products/enterprises.

Notes

1. This study is based on a 1983-84 research project carried out jointly by X. M. Kadhani, then Under Secretary for Policy, Ministry of Finance, Economic Planning and Development and R. H. Green, IDS (Sussex). However, the policy analysis and conclusions of the present study are solely by R. H. Green and are not necessarily those of X. M. Kadhani.
2. Admittedly the constraints imposed by necessity may be very restrictive and the degrees of freedom very limited.
3. c.f. R. H. Green, "IMF Stabilisation And Structural Adjustment In Sub-Saharan Africa: Are They Technically Compatible?", Sub-Saharan Africa: Getting The Facts Straight (C. Allison and R. H. Green, editors), IDS (Sussex) Bulletin, July 1985.
4. See Toward Sustained Development In Subsaharan Africa: A Joint Programme, World Bank, Washington, 1984 whose 'optimistic' case projection is for no recovery of GDP per capita over 1985-1995.
5. In theory no conflict arises if one assumes no state intervention, perfect competition, perfect knowledge and equality of power and knowledge among all economic actors. That, however, is to assume away the real world and many of its problems- an approach which has certain pedagogical uses but is highly dangerous as a basis for applied policy analysis or selection.
6. The current Central Statistics estimate of 2.9% growth rate appears to be likely to prove to be an underestimate. In particular the 1982-1984 fall in birth rate estimate from 54 to 39.5 per thousand seems unlikely as is the decline from an actual 1960-1980 trend population growth rate of well over 3%.
7. In effect all household members aged 15 or more are counted as economically active.
8. Derived from analysis of recorded employment, small scale agricultural sector output and population data.
9. c.f. World Bank, op cit; JDP, op cit; "Famine In Africa", House of Commons, Second Report from The Foreign Affairs Committee, Session 1984-85, pp 133 ff - especially 149-154, Government Printer, London, 1985.
10. A shift from industrial/export crops to domestic food crops (or halting exports of crops such as maize and sugar) would of course ease the food supply constraint but at the price of tightening the earned import capacity constraint.
11. Several independent African countries were unable to impose full sanctions against Rhodesia while South Africa and (until after independence) Mozambique did not do so.

12. Tobacco production was quota limited and both holding costs and export losses were partially met by the Treasury.
13. For many products - especially fuel - South Africa was a high cost source.
14. Remittances to South Africa were largely free because Rhodesia had direct access to the South African capital market.
15. 1976 capacity levels result from 1975 GFCF.
16. As a result basic consumer goods production - especially food - was less affected than other subsectors of manufacturing.
17. Harare, 1982.
18. No truly satisfactory base period exists. 1971-73 might be least bad but is too far in the past. 1976-78 is clearly unsuitable. 1978-80 on average can be viewed as normal involving as it does one slump, one bottoming out and one recovery year.
19. The dangers of this pattern were luridly - if accidentally - underlined when the loss of foremen, fitters, engineers and artisans at Air Zimbabwe was described as necessitating a "crash training programme".
20. As demonstrated in ongoing work of G. K. Helleiner of the University of Toronto.
21. In respect to Botswana, Swaziland, Lesotho, Malawi, Zambia and Mozambique an alternative, at least in principle, would be to take markets away from South Africa. To do so, however, Zimbabwe would need to meet substantial export subsidies and extended payment facilities (given partly to "beat the competition" and partly for political reasons) and to develop a network of contacts and external branches of producers and wholesalers comparable to South Africa's. These would appear to be very serious obstacles - in most cases more severe than matching South African (pre subsidy) export costs.
22. This section draws heavily on discussions with Roger Riddell of the Overseas Development Institute (and formerly of the Zimbabwe Confederation of Industries) who has conducted extensive research in this field. The conclusions, however, are those of the present author and are not necessarily the same as his.
23. These projections are derived from computer runs done in the course of the UNCTAD project cited at note 9. They do not allow for any fall in incremental GFCF/Productive Capacity ratios or any reduction of overall or GFCF import content and to that extent may be seen as conservative or as having a built in safety margin. On the other hand their constant terms of trade assumption may prove optimistic unless external transport costs to the sea can be reduced in real terms.

24. On the 1973-83 record it would appear that general overheating does not occur at capacity utilisation levels of 90% or below but does at 95% or above. There appears to be an endemic imbalance sectorally in respect to construction which has had consistently above average implicit price deflators except in years of extreme depression (during which capacity declines lead to a new constraint on its ability to re-expand and to rapid price escalation on any recovery of GFCF).
25. This is not to advise that no import substitution is both possible and economically attractive - e.g. phosphorous free coal production for ferralloy production - au contraire.
26. It would do so if parallel (or consequential) domestic price increases were used to reduce real wages and/or real basic service expenditure.
27. This is not intended as a blanket endorsement of the present foreign exchange allocation mechanisms and processes. Micro and institutional observation (quite separate from the present parametric exercise) suggests the following weaknesses:
 - a. a bias toward import houses and against user enterprises in respect to intermediate goods;
 - b. an apparent overriding priority to keeping all enterprises going and only then applying strict product priority criteria to allocating the balance, e.g. imports of tennis balls and inputs into chocolate manufacturing in 1984-85 in parallel with acute imported input related shortages of tyres, tubes and gunny bags;
 - c. an inadequate - or at the least overly opaque - procedure for articulating cuts balancing demand claims with supply projections;
 - d. separation of visible import and insurance/freight licensing in a way hardly likely to minimise overall cif unit costs and (inadvertently) highly biased in favour of South African suppliers;
 - e. relative slowness and procedural cumbersomeness not counterbalanced by any flexible, speedy 'emergency allocation' account and procedure to handle small, urgent, genuinely unforeseeable breakdowns and/or spares and operating inputs/packing materials for additional exports made possible by unforeseen improvements in domestic input or external market conditions.
28. That is, the technical economic considerations addressed by the model complement the political, security, stability and 'insurance' cases (external to the model) usually made for regional solidarity, self reliance and economic co-ordination.

Tables

1. Gross Domestic Product, Capital Stock, Potential Output, Capacity Utilisation (Current Prices), 1973-83
2. Factor Shares In GDP, 1973-82
3. External Debt, 1979-83
4. 1983 Fixed Capital Stock: Sectoral and Ownership Breakdown
5. GDP Implicit Price Deflator, 1973-83
6. GDP, Capital Stock, Potential Output, Fixed Investment (Constant Price), 1973-84
7. Savings, Consumption and Gross Fixed Capital Formation Shares in GDP, 1973-83
8. Imports, Import Ratios, Exports, 1977-83
9. Balance of Payments, 1977-83
10. Ratio of Current Account Deficit to Potential Output, 1973-83
11. Causation 1981-83 Increase CAD/PO Ratio

These tables are based primarily on published Zimbabwe National Accounts and Balance of Payments data, as well as supplementary data and estimates provided by the Central Statistical Office and the Economic Development and Policy Division of the Zimbabwe Ministry of Finance Economic Development and Planning. The authors wish to acknowledge their debt to Godfrey Mandivheyi for his help in collecting the material for this section.

Table 1.

Gross Domestic Product, Capital Stock, Potential Output,
Capacity Utilisation (000,000 Current Zi \$)

	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u> ³
Gross Domestic Product	1450	1790	1900	2060	2070	2170	2535	3205	3995	4465	4900
Capital Stock	3720	4335	5175	6175	7020	8160	9580	10705	13050	15000	18815
Potential Output ^{1,2}	1510	1835	2070	2400	2675	2885	3370	3835	4215	4810	5740
Capacity Utilisation ²	97%	98%	92%	86%	77%	75%	76%	83%	95%	91%	85%

1. Capital/Output Ratio rises in current \$ because GFCF deflator has risen 1.4 times as rapidly as GDP deflator and incremental C/O ratio has been held constant at 2.5 in 1975 \$.
2. Based on 1974 direct estimate, for other years 1973 potential output adjusted for change in fixed capital stock. Overheating present in 1973, 1974, 1981.
3. Estimate.

Table 2. Factor Shares In GDP (000,000 Current Zimbabwe \$)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	
1. Labour											
Wages and Salaries	781	904	1050	1154	1248	1333	1502	1881	2395	2916	
+ Communal Areas Agri-cultural Output	63	111	95	108½	106	74	102	146	265	271	
+ 20% Salary Element In Other Unincorporated Business Surplus	19	25	26	27½	27	10	15	24	17	16	
Total	863	1040	1171	1290	1381	1417	1619	2051	2677	3203	
%	59.5	58.6	61.6	62.5	66.7	65.4	63.6	64.0	67.5	71.7	
2. Land											
Rent	56	60	61	65	68	62	62	61	70	71	
- Improvement Element	-38	-40	-40	-43	-45	-41	-40	-40	-47	-47	
+ 20% Value Added Mining	21	27	26	30	30	31	45	57	50	49	
+ 10% Gross Output Commercial Agriculture	25	36	37	40	39	42	44	59	78	84	
Total	64	83	84	92	92	94	101	137	151	157	
%	4.4	4.1	4.4	4.5	4.6	4.3	4.3	4.2	3.3	3.5	
3. Capital											
Gross Surpluses	613	827	791	845	753	773	983	1264	1530	1478	
- Adjustments	-90	-159	-143	-165	-157	-116	-166	-246	-363	-373	
Total	523	668	647	680	596	657	817	1018	1167	1105	
%	36.1	37.3	34.0	33.0	28.7	30.3	32.1	31.8	29.2	24.8	
<u>Gross Surplus</u> K Stock	%	14.1	15.4	12.5	11.0	8.5	8.1	8.5	9.5	8.9	7.4

Notes

1. Labour includes implicit working proprietor wage/salary income; rent is defined in Ricardian terms excluding "rent" on buildings and improvements.
2. Adjustments based on National Accounts data.
3. Gross Surplus/Capital Stock ratio computed on basis of K Stock in Table 1.

Table 3.

External Debt 1979/83 (000,000 Current Z\$)

	31-XII 1979	Net Additions	Devaluation Uplift	31-XII 1983
Blocked Balances	450	50	-	500
Zimbabwe Govt.	350	550	200	1100
Reserve Bank	-	350	50	400
IMF	-	160	15	175
Enterprise	50	455	155	660
<hr/>				
of which:				
(Parastatal	25	395	130	550)
(Private	25	60	25	110)
<hr/>				
Total	850	1565	420	2835
<hr/>				

Current Account Deficit	1980-83	1665
Plus Blocked Balances Growth		50
Less Net Errors and Omissions (Inflow)		- 250
To be Financed Externally		<u>1465</u>
Finance Identified		<u>1565</u>
Unexplained		- 100

Table 4.

1983 Capital Stock: Sectoral and Ownership Breakdown (000,000 1983 Z\$)

<u>Sectoral Breakdown</u>		<u>Ownership Breakdown</u>			
<u>Total</u>		<u>Government</u>	<u>Individual/ Enterprise</u>	<u>Of which Domestic</u>	<u>Foreign or Foreign Controlled</u>
2600	Agriculture/Forestry	350	2250	1750	500
1250	Mining	-	1250	125	1125
2600	Industry	100	2500	1000	1500
1600	Power/Water ¹	100	1500	1500	-
300	Construction	50	250	50	200
2500	Transport/Communications	150	2350	2100	250
2500	Other Services	200	2300	1500	800
2500	Housing	200	2300	2000	300
3350	Public Administration/In- frastructure	3350	-	-	-
<u>19200</u> ²		<u>4500</u>	<u>14700</u>	<u>10025</u>	<u>4675 (3000)</u> ³

1 Basic water control works other than commercial power or water projects under infrastructure; roads/bridges are also included in infrastructure.

2 Fixed Assets Only (excludes inventories/net financial assets). 1983 Z\$ value at 31-XII-83.

3 Foreign owned equity and proprietorial capital adjusted for domestic and external borrowing (\$350), domestic minority interests (\$1000), enterprises foreign managed but domestically owned (\$325).

Table 5.

Gross Domestic Product Implicit Price Deflator, Z\$/USA\$ Exchange Rate (Base 1975 = 100)¹

	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u> ²
GDP Price Deflator	.81	.94	1.00	1.10	1.19	1.26	1.46	1.65	1.79	1.99	2.31	2.45
USA \$/Z \$	1.02	1.01	1.00	1.09	1.10	1.18	1.19	1.12	1.21	1.34	1.77	2.20

Notes:

1. This does not measure comparative purchasing power changes as to do that one would need to adjust the first line for US GDP deflator increases which total on the order of 75% since 1973. This suggests that the stable comparative purchasing power parity rate index for mid 1984 would have been of the order of 1.40 to 1.50 not 2.20.
2. Mid 1984.

Table 6.

GDP, Capital Stock, Potential Output, Fixed Investment, 1973-

	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
Gross Domestic Product	1796	1912	1901	1876	1733
Index (1973 = 100)	100	106.5	105.8	104.5	96.5
Index Population	100	103.6	107.3	111.2	115.2
Index Per Capita	100	102.8	98.6	94.0	83.8
Capital Stock	4360	4875	5175	5460	5625
Potential Output	1850	1950	2070	2185	2250
Index (1973 = 100)	100	105.3	111.8	117.7	121.5
Capacity Utilisation	97%	98%	92%	86%	77%
Gross Fixed Capital Formation	410	471	467	353	300
Depreciation ²	162	171	181	191	197
Net Fixed Capital Formation	248	300	286	162	103
Index (1973 = 100)	100	121.0	115.3	65.3	41.5

Notes:

1. Estimated on basis of 3.6% annual population growth.
2. Estimated at 3.5% opening fixed capital stock for year.
3. Estimate.

-84 (000,000 1975 Zi \$)

<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u> ³	<u>1984</u> ³
1718	1743	1936	2231	2189	2112	2133
95.7	97.0	107.8	124.2	121.8	117.6	118.0
119.3	123.7	128.2	132.8	137.6	142.5	147.5
80.2	78.4	84.1	94.3	88.5	82.5	80.0
5725	5770	5810	5890	6040	6210	6340
2290	2310	2325	2355	2415	2485	2540
123.7	124.7	125.5	127.3	130.5	134.4	137.5
75%	76%	83%	95%	91%	85%	84%
245	239	285	355	383	347	330
200	202	203	206	211	217	222
45	37	82	149	172	130	108
18.5	14.9	33.1	60.1	69.3	52.4	39.5

Table 7.

Savings, Consumption and Gross Capital Formation Shares in GDP (%)

	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u> *	<u>1984</u> *
Consumption	75.3	78.0	78.2	75.7	78.7	78.7	82.6	84.9	87.3	84.2	80.7	81
Domestic Savings	21.6	18.7	18.4	20.7	17.7	17.2	12.7	11.5	9.0	9.6	10.5	13
Net External Factor Payments/Remittances	3.1	3.3	3.4	3.6	3.6	4.1	4.7	3.6	3.7	6.2	8.8	6
GFCF	22.8	24.6	4.6	18.8	17.3	14.3	13.7	14.8	15.5	17.5	16.4	16

* Estimate.

Table 8.

Imports, Import Ratios, Exports (000,000 Zi \$)

		<u>1977</u>	<u>1978</u>
Imports Goods and Non Factor Services			
Total	Current Zi \$	559	594
	1975 Zi \$	448	419
% GDP		26.5	25.1
Capital Goods Current Zi \$ ¹			
	1975 Zi \$	112	100
		90	70
% Gross Fixed Capital Formation		30.0	28.7
Exports Goods and Non Factor Services			
	Current Zi \$	624	687
	1975 Zi \$	575	595
Price Indices (1975 = 100) ²			
	Imports	124.6	141.9
	Exports	108.6	115.5

Notes:

1. Non Factor services allocated to capital goods and
2. Price data available visible imports/exports only.
price movement of services.
3. Estimate.

<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u> ³
776	1106	1419	1434	1475
420	521	679	663	610
30.5	34.5	35.5	33.1	30.2
116	205	347	482	442
81	98	168	223	177
33.8	32.5	47.2	59.3	51.0
816	1062	1126	1169	1300
615	604	581	619	648
194.3	208.2	207.1	216.4	238.3
132.7	175.9	193.9	188.8	200.7

other imports in same proportion as visible imports.
 Deflation based on assumption parallel

Table 9.

Balance of Payments (000,000 Current Zimbabwe \$)

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u> ²
<u>Exports</u>	+624.1	+687.1	+816.3	+1062.1	+1125.5	+1169.3	+1300
Visible	520.3	579.2	667.5	813.7	925.6	857.7	1025
Gold	45.7	46.1	66.6	115.2	76.3	140.5	100
Invisible	58.1	61.8	82.2	133.2	133.6	171.1	175
<u>Imports</u>	-558.6	-594.0	-775.8	-1106.0	-1419.1	-1434.2	-1475
Visible	421.7	443.1	594.9	860.5	1059.4	1114.3	1130
Invisible	136.9	150.9	180.9	245.5	359.7	319.9	345
<u>Factor Payments (Net)</u>	-64.7	-76.1	-76.3	-72.4	-122.7	-206.4	-285
<u>Transfers/Remittances (Net)</u>	-9.6	-12.0	-38.0	-40.4	-23.0	-62.3	-75
<u>Deficit (A)</u> ¹	8.8	(25.2)	73.9	156.7	439.2	532.8	535
<u>Gold Stock Change</u> ³	-8.5	+5.8	+14.3	+29.7	+41.7	-17.7	-88.7
<u>Deficit (B)</u> ⁴	17.3	(31)	59.6	127.0	397.5	550.5	446.3

Notes:

1. () = Current Account Surplus
2. Estimate.
3. Change in Reserve Bank holdings of domestic production to be exported. Changes largely represent short term external asset/liability preferences and therefore arguably distort underlying Current Account Deficit.
4. Adjusted for Reserve Bank gold stock change.

Table 10.

Ratio of Current Account Deficit to Potential Output (000,000 Current Z\$)

	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u> ³	<u>1977</u>	<u>1978</u> ³	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u> ⁴	<u>1984</u>
CAD	2.6	95.5	131.3	(13.2)	17.3	(31)	59.6	127.0	397.5	550.5	446.3	300
PO	1509	1833	2070	2402	2676	2885	3370	3833	4217	4808	5738	6500
CAD/PO	0.2	5.2	6.3	(0.5)	0.7	(1.1)	1.8	3.3	9.4	11.4	7.8	4.6
Capacity Utilisation (%)	97	98	92	86	77	75	76	83	95	91	85	84

Notes:

1. 1976-78 Average 1.3%
2. Deterioration: 1981 - 8.1%; 1982 - 10.1%; 1983 - 6.5%.
3. () = Current Account Surplus.
4. Estimate.

Table 11.

Causation 1981-83 Increase Current Account Deficit/Potential Output Ratio

Decomposition of Increase In Current Account Deficit as % Potential Output:
1981-1982-1983 Compared with 1978-80 Base

CAD/PO 1978-80 = 1.3%			
1. Increase CAD/PO	1981 8.1%	1982 10.1%	1983 6.5%
2. Expected Terms of Trade Gain From Reversal of Sanctions ⁽¹⁾	4.0%	4.0%	4.0%
3. Total Deterioration To Be Explained	<u>12.1%</u>	<u>14.1%</u>	<u>10.5%</u>
<hr/>			
I. <u>External Shock</u>	3.39%	5.40%	6.20%
Terms of Trade ⁽¹⁾	.82	2.45	2.55
Interest Rate	.58	1.28	1.30
Recession ⁽²⁾	1.40	1.88	2.36
Weather ⁽³⁾	-	(-.41)	(-.09)
Transport ⁽³⁾	.58	.21	.09
II. <u>Debt Burden</u>	0.02%	0.19%	0.80%
III. <u>Domestic Policy</u>	6.93%	4.16%	1.92%
Output	3.61	2.73	1.48
Investment	.11	.29	.20
Tradeability ⁽⁴⁾	.58	.62	(-.36)
Import Re- laxation ⁽⁵⁾	1.75	(-.41)	(-.18)
Profit Remittance Relaxation ⁽⁶⁾	.88	.92	.77
IV. <u>Capital Rehabilitation Shock</u> (Increase M/GFCF Ratio ⁽⁷⁾)	2.22%	3.74%	1.68%
V. <u>Total Calculated</u>	<u>12.6%</u>	<u>13.5%</u>	<u>10.6%</u>
VI. <u>Total 'Observed'⁽⁸⁾</u>	<u>12.1%</u>	<u>14.1%</u>	<u>10.5%</u>
Interaction Effects/Errors/ Omissions ⁽⁹⁾	(-0.5)%	0.6%	(-0.1)%

Notes Table 11.

1. Removal of sanctions allowed ending intermediation which had raised import prices perhaps 15% and reduced export prices 20% on average. In 1980 about 60% of this gain was achieved but in 1981-1983 it was rapidly offset by terms of trade deterioration. These calculations compute the counterfactual 1981-83 terms of trade adjusted for sanctions reversal and take terms of trade loss from these levels.
2. The 1981 weather boosted harvest had a positive (deficit decreasing) impact in 1982-1983. The 1982-84 weather stricken harvests will have severe negative impact in 1984 and 1985.
3. In 1981 and to a lesser extent 1982 and 1983 some potential exports (particularly steel) could not be exported because no transport to ports was available. Rough estimates of amount from Treasury sources.
4. Estimated sector by sector effect of real exchange rate appreciation (depreciation) from base period level.
5. Change in ratio of non-capital imports to GDP from base period.
6. Change in ratio of profit remittances allowed to GDP.
7. Change resulting from increased ratio of capital imports to GFCF. This was caused by making good deferred maintenance and restoring a more normal makeup of GFCF after 1976-1979 import constraints which had altered its composition as well as reducing its overall magnitude.
8. 'Observed' including adjustment for 'lost' terms of trade improvement explained at note 1.
9. The sectoral computations in respect to loss of exports due to tradeability and impact of recession in certain cases probably posit exports beyond sub-sectoral capacity limits.