EMPLOYMENT IN A LIBERATED SOUTH AFRICA:
Some Issues and Reflections

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We must seek our reward in the shining faces of our children, the flowers that do not wither.

- President Samora Moises Machel

**Introduction**

Any useful strategic input into pre-liberation dialogue, decision and planning on employment in a liberated (post apartheid) South Africa needs to be more - and for that matter less - than an exercise in numbers crunching and technically proficient programme and project formulation and costing. At present these would be exceedingly imprecise at best because of gaps in available data, the imponderability of the employment/overall economic position at liberation and the process and sequence of the post liberation transition to empowering black South Africans. Reducing the degree of imprecision depends more on overall strategy, police and sequence decisions, analysis of their effects and the run-up to implementation than on econometric exercises let alone detailed employment need/personnel (manpower) requirement calculations of the standard variety. This is not to denigrate either exercise but to suggest that either may well prove to be premature or, at the least, to be paralleled by a more reflective, issue posing and broader approach.

A series of questions need to be posed - the answers to which are both problematic in themselves and important as well as problematic in their implications:

1. how is employment to be defined? i.e., how are part time, small scale ("informal"), household agricultural producer ("petty commodity" plus self provisioning or "peasant") and similar employment/self employment to be treated and what importance is to be given to them?
2. What is the operational definition of "workers" and "the working class"? If "democratic trade unions" is the answer, their membership to date is about 1,000,000 out of a would-be economically active black population of about 15,000,000 and is dominantly located in the top quarter of that group in terms of income distribution. How can their breadth as well as numbers be expanded? If not, then questions as to how to organise and support those - possibly a majority - of the 10,000,000 who are unlikely to be organised by traditional trade union approaches or to benefit from traditional labour oriented (socialist or social democratic) policies arise.

3. Is unemployment - however defined - or poverty seen as central? If there is a tradeoff between relatively high formal sector wages and numbers of households remaining in poverty what then? A right to meaningful employment or self employment could - if given top priority - be made operational; one to employment at the present average black industrial wage could not.

4. What weight is to be given to overall expansion of economic resources? Expansion in particular sectors - and if so which? The implications on the required levels of savings (non-consumption) are substantial.

5. How can the requirements of rapid empowerment of black South Africans through building up professional and managerial cadres be melded with moving rapidly toward universal access to continuing as well as child education? What, if any, are the overall likely cost constraints on education and what implications do they have for priorities, sequences and balances (e.g. against universal academic matric programming)?

6. Are universal access to basic services, adequate nutrition and housing overriding goals? Is this the case if they conflict with employment expansion or total output growth?

7. Is distributional change to imply major reductions in white wage salary and professional earnings? If so, what are the training, growth and employment implications? If not, how is the remaining level of inequality to be made acceptable? As in Zimbabwe by opening "white" scales to blacks; raising the bottom a bit; letting inflation erode the top
(salaries) more than the bottom (minimum wages and smallholder purchase prices)?

8. How are the rural (access to production) and urban (access to housing) land questions to be defined and programmed? Is the interim re-creation of a black household agricultural producer sub-class desirable and/or feasible?

9. Can employment (or other liberation issues) be dealt with adequately in the absence of specific attention to gender divisions of labour, of access and of inequality?

10. What is the policy toward black workers from neighbouring states - especially Lesotho and Mozambique - to be?

Most of these questions will be explored - directly or implicitly - in the following sections. They will not be answered because in a very real sense the answers are political, not technical, albeit there are technical considerations of political relevance in respect to ranges of practicability and of costs.

Any paper on South Africa after Liberation must make explicit or implicit assumptions on when and how. Those of this exercise include:

a. liberation in or later than 1990 following a period of intensified struggle (but not a war a l'outrance);

b. a genuine transfer of political power (i.e. a Lancaster House plus type 'settlement') but one involving some compromises and limitations;

c. a ruling coalition broadly similar in outlook and goals to the positions represented by the Freedom Charter and by the ANC, UDF and COSATU among present organisational foci - but including some more conservative and some more ethnically exclusivist elements (which may often be the same, e.g. AZAPO, Inkatha, any political group largely grounded on the white fraction of the electorate);

d. an economy debilitated by a continuation of the post 1981 slump with very
substantial (and substantially above 1986 levels) unemployment, poverty and excess capacity; but

e. one in which actual destruction of productive and infrastructural assets during the freedom struggle has been fairly (or even very) limited; and

f. with a majority of the white community remaining - at least initially - but with both a substantial initial white departure level and a continuing outflow (e.g. a Zimbabwean but not a Mozambican or Algerian pattern).

Initial basic economic structure - of ownership and control - strategy and practice is discussed explicitly. No single clearly plausible assumption can be made, but what is done in this field will have major implications in respect to employment, poverty, distribution, growth and power. That statement should not be read as advising marginal or minimal changes - the issues are more complex and problematic than that and a decision for minimal change is hardly likely to be feasible either technically or politically.

Population, Employment, Categorisation and Poverty

South Africa's population (evidently including that in purportedly 'independent homelands') in 1980 was 28.7 million growing somewhat under 3% a year. Its 1987 level is of the order of 35 million of whom about 5 million are white and 30 million black (African 26, Coloured 3, Indian 1).

The official economically active population estimates for 1980 - including 4% unemployment - totalled 9,635,000 or 34% of the population. Applied to 1987 this would give about 12,000,000. That is an incredibly low rate especially for a country 80% of whose population has a lower middle income country income pattern. The 43% economically active ratio for whites is plausible, the 32% overall for blacks is not. Unemployment, part time employment and "informal" sector employment are clearly seriously underestimated. A more plausible economically active population (including unemployed) estimate would be of the order of 14,000,000 to 15,750,000 (40 to 45%). The additional 2,000,000 to 3,750,000 are almost all either unemployed or - more typically - receiving very low incomes from casual, "informal" and
other part time employment.

Unemployment estimates have limited meaning - except for the white community. The official one of about 500,000 (5% of re-estimated and 8% of officially estimated economically active population) for black South Africans is too low unless any person with any employment or self employment income at all is excluded - which is not what the official data purport to do. On the other hand estimates such as Professor Keenan's of 6,000,000 black unemployed are palpably too high unless they are read as lack of employment or self employment yielding an income at or above the poverty line. 40 to 50% of South Africa's black economically active population cannot possibly be totally unemployed - they cannot afford that luxury. A better estimate might be of the order of 1,500,000 to 2,000,000 (10% to 15%) excluding those with significant incomes from employment or self employment of any kind but including those who, while partially employed or self employed, have negligible earnings. A significant proportion of this total consists of black urban youth - for whom 25 to 40% unemployment estimates are plausible. The estimate of perhaps 2,000,000 destitute (1,500,000 in 'reserves') is not quite the same thing as it includes dependent household members and "unemployable" (age, illness) persons as well as unemployed. If 2,000,000 are unemployed, then five destitute numbers are likely to be of the order of 5,000,000 to 6,000,000. The pattern of employment has steadily shifted from rural to urban. The African population distribution trend since 1960 masks this. African urban population stayed in the low 30% range while the 'reserve' population share rose from 37% to 53%. However, this is the result of forced removals not of employment shifts - indeed almost all near poverty line or higher level income for 'reserve' residents is earned in urban or quasi urban areas. While variations among 'reserves' are substantial, rarely is over 20% of household income earned in them and in some cases 10% or less. A clearer picture is given by the decline of the proportion of Africans in 'white' rural areas from 37% in 1946 to 13% in 1980.

Occupational distribution has also changed significantly. Agriculture's share fell from 30% in 1960 to 21% in 1980. Non-agricultural employment on average appears to have become more skilled (higher proportions in professional, managerial and clerical and a higher skilled proportion within production) and more clerical/sales oriented. The black share of jobs in the higher - and especially middle - skill and training level categories rose from 1960 to 1980.
but quite slowly and to levels rarely above half the black population proportion, e.g. 40% in professional and technical (dominated by black health and education) versus 85% of population. This glacial movement is the result of legislation and white labour resistance not of demand - South Africa's economy has been agreed fairly generally to be constrained by shortages of skilled, professional and managerial personnel except in prolonged slump periods (as at present).

Real wage movements in recorded employment over the past 70 years have very slightly narrowed white/black differentials entirely since 1970. Over 1915-1970 the trend was in the other direction especially in mining (the classic external labour reserve sector). Mining and manufacturing/construction wages have now come to be roughly comparable for each ethnic group (adjusting for the higher "fringe benefit" and "income in kind" component of black mining incomes). This represents a sharp shift from the past. White mining incomes were over double those in manufacturing in 1916, a differential that has been fairly steadily eroded since. Black were comparable in 1915 but declined in real terms to 1970 when they were only one third of those in manufacturing with a very rapid subsequent convergence led by higher increases in mining (virtual quadrupling in real terms over 1970-82).

These movements of wages in the secondary production sector are by no means necessarily representative of the incomes of economically active black persons or of black households. Unemployment has risen and real incomes from non-recorded employment/self employment have probably declined significantly in real terms in rural areas and perhaps in urban.

As already noted, the 6,000,000 black "unemployment" estimate really appears to be an estimate of distinctly sub-poverty line incomes. Extrapolating to household level it implies that 15 million black South Africans - 50% - are at or below the absolute poverty line. With at least a third literally destitute.

There has been a growth in black share of personal incomes from 25% in 1924 to 40% in 1980 but this needs to be qualified. The black proportion of total population has also risen and 40% of personal income for 85% of population divided on ethnic lines shows very marked institutional (state and other) inequality and inequity in distribution of income. Most of the rise came
after 1970 and appears to be related to very substantial real income increases for black formal (including public as well as private) sector employees (partly but not fully) relating to skilling to accommodate changing production structures and employment requirements.

Therefore, the overall improvement has been accompanied by sharply increased intra-black income differentials and quite probably (judging by the Namibian parallel) by rising levels of and proportion in absolute poverty. This is borne out by the official black economically active population estimates which show a decline from 36% in 1951 to 32% in 1980. Given the unlikelihood that true economically active proportions fell (they rose for whites and "Indians" and were basically constant for "coloureds"), this strongly implies a greater proportion in dominantly low income "casual", "informal" and/or part time occupations - particularly among 'reserve' residents.

Output, Growth, Investment and Consumption

South Africa has had a very uneven growth record. Over 1911-1985 it averaged 3.8%, but that growth came largely in spurts. In the 1960s and early 1970s a rate of about 6% was achieved, falling to under 3% over 1974-1980 and under 1% since 1980. Indeed the 2.9% 1970-85 growth record (like the negligible 1981-85 one) is distinctly Sub-Saharan African and not at all typical of the upper middle income group of countries to which South Africa (with a 1982 GDP per capita of $2,670) formally belongs. This relates in part to the fact that South Africa has remained a primary exporter while the more successful members of this statistical category have moved to dominantly manufactured exports (e.g. South Korea, Brazil).

Growth of employment has averaged about one half that of GDP with a gross capital output ratio - except during slumps - of 3.0 or less. The latter does not suggest that the economy in general (contrary to popular impression) is radically over capital intensive. The black labour force (would be economically active population) is likely to grow 3% a year in the medium term. Therefore to prevent a worsening of the present unemployment and absolute poverty rates would require growth of 6% a year. On more optimistic assumptions of the underlying Employment/GDP ratio and of future infrastructural investment needs, 5%. If in addition it is proposed...
It is arguable that a 3.5 ratio of GFCF to additional output is too high. This is true for a few years while excess capacity is restored to use. More generally, the argument rests on the contentions that 1970's GFCF/additional output ratios in South Africa were needlessly high for three reasons:

a. Some investment - eg Orange River basin - was uneconomic;

b. Other - eg Sasols, Armaxcor - was economic only in the context of a potential siege economy and had very high capital/output ratios;

c. Still more - eg electricity, ports - had relatively long gestation periods with direct and indirect output gains largely lagged by 5 or more years.

At the level of specifics, these contentions are valid. Whether it is
safe to conclude that a 3.0 or 2.5- underlying capital/output ratio will be attainable is at least problematic:

a. Investment in land reclamation and protection (e.g. in ex-"reserves" and on margins of Karoo) may well not be economic on normal short run cost/benefit criteria but is a priority for (self) employment and ecological reasons;

b. Water collection, transport and distribution investment on a very large scale is and will continue to be crucial and has notoriously high capital/output ratios and long gestation periods;

c. To create universal access to basic services (including transport access as well as health, education, water
proper) and to housing will tend to raise incremental capital/output ratios and/or to lengthen gestation periods.
absolute poverty within two decades an 8% a year GDP growth rate is needed even if a substantial reduction in absolute poverty can be achieved during transition (recreating an economically viable black household farming sub-class, substituting small black capitalists - or cooperatives - for departing white ones, providing removal of discrimination against and provision of extension services to the "informal" sector especially in urban services and housing construction). If not, 10% would be required.

Assuming a 3.5 capital/output ratio after the transition half decade - when a lower ratio may be attainable from utilisation of excess and rehabilitation of semi deteriorated capacity built up since 1981 - an 8% growth rate would require fixed investment of 28% of GDP and a 10% one of 35%. As South African domestic savings have rarely exceeded 18% for any sustained period and prospects for massive net resource inflows in excess of interest and repayments are poor (except perhaps for official flows immediately after the liberation transition) even a 28% rate would imply a major boost in savings primarily from higher enterprise (especially public enterprise) retained earnings from and enhanced government revenue in excess of recurrent spending growth (i.e. increased state saving).

Universal access to basic services plus some transfer payment increases to households otherwise in absolute poverty will require substantial increases in public consumption (and to a lesser extent capital) expenditure. However, the 'security', administrative, subsidy and amenity white service costs of the apartheid regime may allow savings on recurrent expenditure of up to 5% of GDP. In that case public consumption might account for 15% of GDP (which implies a recurrent budget of the order of 25% to 30% of GDP). Taken together with investment that leaves 57% for private consumption expenditure.

57% is below the historic South African - or indeed upper middle income country - private consumption share. For it to be consistent with a 20 year target date for absolute poverty eradication will require very careful attention to avoiding substantial real increases not only to upper income group members but also to those with 1.5 to 2.0 times the poverty datum line (household) income. As will be sketched later, this will result in substantial tensions at best and may be unattainable.

The balance of payments constraint - which has clearly held back South African
growth in most years since 1973 will not be examined in any detail here. However, given non-precious metal and coal prospects and the uncertainty of the gold price, restoration of a 5% to 8% export growth rate (to balance an 8% GDP growth rate) would appear to require a breakthrough into manufactured exports on a broad front probably initially targetted primarily on SSA and Indian Ocean markets.

There are good reasons to assume that such a breakthrough may be possible. First, South Africa - like South Korea at the beginning and Brazil by the middle of the 1960s - has built up a broadly based manufacturing sector behind protective barriers, whose incremental costs are not self-evidently vastly above globally competitive levels. At - and after - the initial manufactured export breakthroughs, analysts of South Korea and Brazil for several years concentrated on proving why such a breakthrough could not take place. Second, apartheid raises unit labour costs in manufacturing despite holding black wages down - i.e. it is economically inefficient especially in respect to exports of manufactures. Third, liberation should significantly improve South African access to African and Asian markets.

These reasons do not guarantee a breakthrough. They do indicate why a selective state export strategy combining domestic market broadening and protection (to lower unit costs and to provide a strong surplus base respectively) with export promotion and support would have a substantial chance of success.

Taking all these factors into account, it is therefore unlikely that universal access to employment/self employment generating incomes equal to or above the poverty line at household level can be achieved in under two decades, although substantial progress can and should be made much sooner. That goal may well require a longer period. The children of the adults who make the liberation are likely to be the first generation to be able to enjoy the full fruits of even efficient implementation of well selected programmes for meeting this goal. This reality has several implications:

a. unfulfillable expectations of immediate, universal escape from poverty (or white wage and salary scales for black workers) should not be built up and, indeed, should be demobilised to the greatest extent possible.
b. the transition period - including the probable departure of many white workers and petty capitalists and the possibility of land reforms - should be utilised to achieve a substantial initial reduction in poverty;

c. building up higher and less unequally distributed present and future productivity through universal access to basic health, education, water and extension services should have top priority;

d. progress toward raising employment levels (and at least for black workers average incomes) and reducing numbers in absolute poverty should be sustained - not highly cyclical - and therefore should be targeted at attainable rates. This point of targeting for sustainable levels and growth rates applies to public sector employment in support of providing universal access to education, health, water, extension services and (in this case complementary to other sectors, e.g. small scale private or co-op builders') housing. Both in respect to operating personnel and to construction (public works) employees they can and should be employment growth poles, but cannot and should not seek to be "employers of last resort" to reduce open unemployment whatever the cost in terms of directly productive investment foregone or inflation;

e. while certain policies and investments whose direct effect is inequality sustaining may be necessary (e.g. limiting falls in real incomes of some categories of white personnel), the burden of proof that they really do enhance employment growth and absolute poverty reduction indirectly more than they limit them directly should rest on their proponents and should require concrete evidence (not generalised claims) to discharge that burden and justify that policy or investment.

Distribution and Redistribution

Redistribution can be divided into primary (redistribution of assets and other means of access to income generation - notably employment); secondary (human investment particularly via education, health and extension services) and tertiary (consumption transfer payments). From the perspective of employment growth and sustainable absolute poverty reduction, the second is probably the most important and efficient in the long term with the first ranking next (and central in certain contexts).
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with access to adequate income earning opportunities, but is usually
technically inferior generating present or future production and employment as well as in building up participation and a
broadening democratic power base.

Redistribution can be out of flows - i.e. growth - or existing stocks - i.e. assets. The second is clearly crucial to transition periods, and
historically attaining greater income equality based on land reform appears to have been a sound basis for subsequent rapid growth without high levels of absolute poverty in several Asian countries especially when universal access to training and education was given priority. Asset redistribution can also be central to providing an economic substructure for an earlier infrastructural transfer of political power.

Redistribution primarily out of growth has the advantage of limiting the number of absolute (as opposed to relative) losers and the extent of their loss. It therefore tends to reduce overt opposition, passive obstruction and departure.

However, in the South African context there is a severe limit on its applicability. Relatively rapid progress toward equal pay for equal work is needed, and elimination in a finite time period of purely racial inequalities in income. If this is not achieved, at present real white wage and salary rates, two major problems will arise. The degree of inequality between presently "white" and presently "black" jobs will be very high and intra black income inequality raised to normatively unacceptable levels. Further, the cost of high level personnel will slow expansion of their employment - and indirectly of employment more generally. Unfortunately rapid erosion of real white incomes by reducing inequality by levelling upper wages and salaries down and lower up (or by reducing upper to increase investible surplus) will lead to premature departure of a large proportion of present white high and middle level personpower, whose objection is not to altered political power or relative income equalisation per se but to sharp losses in their present (and by projection their children's future) real incomes. If too rapid such an exodus can have damaging results on growth of production and employment and on reduction of absolute poverty.

The point made above that in more technologically advanced sectors and
enterprises apartheid raises unit labour cost despite lowering black wages because it reduces average labour productivity more than average pay, is relevant. On the one hand it suggests that reorganisation after apartheid can generate substantial additional labour productivity to validate - or at least make viable - higher wages. However, it may also mean that for some years the ratio of output growth to that of employment is above its long term trend level of about 2 to 1 thus raising the rate of GDP growth needed to make significant inroads into either open unemployment or sub-poverty line - i.e. very low productivity, unemployment/self employment.

Redistribution of employment is relevant largely at middle and higher levels as lower and lower middle are already predominantly black. Except in the initial phases of transition it will be largely out of flows - i.e. increases in employment. As the white population of a liberated South Africa is likely to decline gradually for at least two decades following a sharp transitional fall, this redistribution is inevitable.

Income redistribution will arise largely from redistribution of access to employment and self employment. However, initially a significant proportion may arise from reduction of inequality in present wage and salary scales and moving to a non-ethnic "equal pay for equal work" position.

Redistribution of access to skills and to health (human capital) basically turns on achieving universal access and integrating the present ethnic systems of education/training, health and extension. The latter will pose problems as the white system has unit cost levels which cannot be generalised to the entire population so that a lower cost approach must be formulated, adopted and implemented.

Housing redistribution is of necessity primarily an issue of constructing (including occupier constructing) more and more adequate black housing in urban and in rural areas. The chief problem is that low income housing in South Africa (as in most other countries) is almost impossible to make economically attractive, within the paying power of the occupiers and meeting minimum human standards of livability at the same time. Because of the foreseeable tight limits on the public purse, government construction and/or rent subsidies for all appear impracticable except at a high cost to employment growth outside construction and building materials. Site and
needs of those who cannot for individual or macro economic reasons be provided with access to adequate income earning opportunities, but is usually technically inferior in generating present or future production and employment, as well as in building up participation and a broadening democratic power base. Similarly, redistribution can be out of flows - i.e. growth - or existing stocks - i.e. assets. The second is clearly crucial to transition periods, and historically attaining greater income equality based on land reform appears to have been a sound basis for subsequent rapid growth without high levels of absolute poverty in several Asian countries especially when universal access to training and education was given priority. Asset redistribution can also be central to providing an economic substructure for an earlier infrastructural transfer of political power.

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service schemes combined with occupier hiring of "informal" sector building teams and credit (financed perhaps by a payroll tax) scheme for urban and rural workers might be more practicable. Detailed analysis and, preferably, some experiments are needed before it will be safe to assert an articulateable strategy exists.

Redistribution of other assets - excluding state acquisition - relates primarily to small black capitalists, cooperatives and autogestion groups. The assets (businesses) they acquire are likely to have been rundown or abandoned, which will increase their need for improved access to (not necessarily lower interest on) credit and for extension and training service support.

Land redistribution may be crucial if it can be used to recreate a viable black household farming sector (small and middle peasantry in Chinese and small individual farmer in Yugoslav socialist terminology in which these sub-classes are viewed positively for the foreseeable future). This would be a relatively labour intensive approach to generating up to 2,000,000 household incomes at or above the poverty lines by take-over and reallocation of the white kulak or large peasant/petty capitalist farms and development of 'reserve' land to increase productivity (preferably with some consolidation if this can be achieved without radically increasing 'reserve' income inequality). The peripheral white farmers - probably two thirds - are heavily in debt and clearing little net income on their operations. If experience elsewhere in SSA is any guide, small or medium scale black household producers could achieve living incomes from these lands if they were taken over and parcelled out in 5 to 10 ha holdings (larger for extensive herding land). If 1,500,000 households could be relocated (at their own request) - basically from the 'reserves' - and 500,000 'reserve' households assisted in achieving viable incomes then the total of 6,000,000 black households in absolute poverty could be reduced by a third during the transitional period. Zimbabwe experience suggests that this is not a pipe-dream. However, beyond a few localised pockets South Africa has not had an economically viable black household agricultural sub-class (peasantry) for at least three decades, the problem of retraining farmers as well as extension workers and of designing appropriate supporting services may be harder and require a longer time period to achieve major results than was the case in Zimbabwe.

It would be quite unsafe to speculate on how many African farming households
would wish to stay (and increase output) in present 'reserves', how many would wish to move to former 'white' farms and how many would seek to combine an urban wage job with a rural production (at least for household self provisioning) and retirement base. The last pattern has been unexpectedly common in Zimbabwe (and is common in Yugoslavia where small family farm household incomes are often substantially from non agricultural wage employment of one or more household members). This may prove to be the case in a liberated South Africa as well. What is now known is that:

a. many black South Africans have clearly stated a desire to secure land to farm;

b. there is ample evidence that - especially with government extension, input and infrastructural support - African family farmers (middle and small peasants) can both generate household incomes near to or above the poverty line and produce efficiently in terms of costs and use of scarce resources;

c. the majority of 'white' farms are marginally viable (if that) now and would be totally unviable if they paid black employees wages at or above the poverty line;

d. abandonment of these farms (which is already taking place in some districts) will significantly reduce agricultural output and employment;

e. therefore, a research and policy priority is seeing how the expressed black South African land hunger and potential ability to generate acceptable incomes from farming can be supported by allocation of the much of the presented 'white' farmland backed by state services to contribute both to agricultural output and - even more crucial - to reducing rapidly the number of black households below the poverty line.

Economic Organisation

The basic goals of structural reorganisation of economic organisation (including mode of production and production relations) in a liberated South
Africa will presumably be to achieve people's control (in many but not all respects via the state as their representative) over production, distribution and accumulation. Even putting to one side what constraints will be imposed by the initial liberation coalition - which may well include some fractions of white and of black capital - that goal does not answer questions as to instruments, priorities and sequences, nor say much about the appropriate initial degree of state (and/or decentralised public sector) ownership.

Certain implications of the strategy presented in this paper are fairly straightforward:

a. government recurrent expenditure is likely to be of the order of 25 to 30% of GDP;

b. because private investment is hardly likely to exceed 10% of GDP (whatever may or may not be desired), government and public enterprise investment will need to be of the order of 15 to 20% of GDP;

c. existing parastatal enterprises plus major finance external trade, units, agricultural marketing (currently quasi statal) and 'abandoned' large or medium enterprises would be likely to be of the order of 40% of non-government output and to give very substantial leverage (and via the life assurance sector in some cases effective ownership control) over another 20 to 30% of the majority of directly productive sector output;

d. universal access to basic services, employment expansion, income management, person power planning and export promotion strategies sketched (as well as the land reform) all require substantial state control and action at micro as well as macro level and through state institutions and direct (e.g. through the 50% of GDP accounted for by "a" and "b" above) resource allocation as well as through regulation and market management.

Therefore, the implicit post apartheid liberation period political economic strategy can be described as one managing a mixed economy but a mixed economy with a dominant public sector utilizing state ownership, expenditure policy, regulation and key (e.g. finance, external trade) dominance to determine the course and organisation of economic activity. If combined with a democratic government dominated by the ANC plus COSATU and UDF and a substantial degree
of worker co-determination at enterprise level, this would appear both to be consistent with implementing the Freedom Charter and with the beginning of a transition to socialism. It would not guarantee either and especially not the latter.

The issues or questions which are much more problematic do not relate to broad directions but to timing, sequences, relative worker and state roles in production relations/workplace co-determination. One evident case is the pace and means of exerting effective control (beyond that given by financial and external trade sector dominance and the weight of the budgetary and public enterprise sectors) over the major mining and other conglomerate capitalist groups. This is not at all self evidently an area in which immediate broad front State acquisition of ownership would maximise effective state control, levels of output and employment or effective worker co-determination. To review that and other issues requires a more disaggregated approach.

"Monopoly capital" - both domestic and external TNC - poses special problems and potentials. In general it is capable of substantial production and accumulation, relatively efficient, with access to knowledge to carry out economic structure transformations and the best potential for achieving a breakthrough into non-primary product exports. In addition it and its senior employees are often relatively flexible and prepared to live with higher wages and taxes (especially if they lead to rapid growth in demand and in worker productivity), as well as with greater - or different - economic intervention by the State, so long as they see the gains from accommodation as greater than those from non-cooperation or withdrawal. Their centralised, hierarchical structures and information systems make them relatively easy to control (at least in principle) and also cause them to respond in predictable ways to macro economic instruments.

However, these corporations (especially the domestic ones) do represent the apex of capitalism and of inequality in South Africa and have been the largest and most visible (if in many cases far from the most vicious) exploiters in the technical or the colloquial sense. Further their size, structure and levels of skills make control easier on paper than in practice and the danger of being used by (rather than using) them substantial. Further acquisition of ownership (perhaps especially of majority but not 100% ownership) until adequate state monitoring capacity is built up and substantial liberation committed and technically competent management cadres emplaced in the
enterprises may be even less effective than control from outside compulsory board membership augmented by strengthened trade unions. Decisions may well vary from sector to sector. Finance and external trade are both the traditional and the logical sectors for an early dominant state ownership presence because of their roles in mobilising and allocating (or dissipating) investible surpluses and foreign exchange.

Middle sized capital has both less potential for good and for resisting change. Historically (indeed to date) its owners and managers have been significantly more pro apartheid (often for sound economic reasons) and more antagonistic to liberation than large (high or monopoly) capital. The case for supportive takeovers of firms being run down or abandoned is strong, but for deliberate nationalisation is weaker than for monopoly capital. At this level of enterprise even a large number of such takeovers will not alter the dominant mode of production. However, they will eat up disproportionate amounts of government monitoring and public enterprise management capacity.

The land question - i.e. large white family (kulak or large peasant) and small white capitalist agricultural capital has been discussed above. Small capital generally poses severe problems. In general it is among the sub-classes most opposed to liberation and most tied to apartheid. Individually insignificant, in sum small capitalist enterprises are of central importance to several sectors e.g. retail trade, local rural transport. Rapid disintegration of the sector by a mass exodus of white petty capitalists would require rapid replacement or severe direct and indirect damage would result - as in Mozambique.

On the other hand neither buying off the small capitalists nor direct state ownership is a very attractive option. The former would be very expensive - economically and politically. The latter would dissipate state personnel and institutional resources to a degree inconsistent with achieving overall economic control and selective large scale takeovers. On the record elsewhere - would be unlikely to produce very good production, surplus generation or employment results.

However, South Africa is not Mozambique. Black skills, entrepreneurial capacity and business experience are qualitatively greater. Therefore, the optimal gap filling would probably be by black private, co-operative and autogestion units with state technical and financial backup.
Production relations are hard to shift from the top down. They are more likely to be alterable from the shop floor up, i.e. by trade unions effective both at negotiating with owners/managers on behalf of workers and at winning (and using) worker participation in all basic enterprise practices and decisions. South African democratic trade unions appear to be committed to these objectives and should (on liberation) receive state support (but not smother love) and be encouraged to assist the state in monitoring private enterprise activity. Arguably achieving both decentralised worker and centralised state national planning power argues in favour of building up the former before, not after, any massive state project for the takeover of enterprises, main external trade and financial enterprises, existing parastatals and large or medium scale enterprises abandoned by capitalists are the sectors in respect to which strategic considerations require earlier public sector acquisition.

The employment implications of economic organisation include productivity (including worker productivity), efficiency of allocation of potential surplus as perceived by the state, workers and household (peasant) farmers - and generation of substantial and rising investible surpluses. These all have a very direct impact on levels of present employment and remuneration levels and on investment to increase the future employment growth rate. The greatest dangers have little to do with the most familiar forms of the capitalist market/socialist planning debate. They include:

a. premature departure of managerial and skilled personnel (even more than of owners as such) before adequate replacement personnel and structures are to hand;

b. dissipation of state control capacity in ways which neither change the dominant mode of ownership nor improve efficiency of allocation but do reduce productivity and surplus generation;

c. loss of access to knowledge and to external markets.

None of these results is inevitable. All are only too easy to "achieve" and each one can have damaging direct and indirect effects on employment levels and remuneration patterns and - even more serious - on their future growth.
Training, Educating, Upgrading

One key to achieving enhanced black employment levels, average remuneration and growth rates is training-education-upgrading. The reasons are straightforward:

a. South African growth has - especially during sustained expansion periods - been constrained by shortages of middle and high level personnel;

b. replacements will be needed for the not insignificant proportion of present trained white personnel who are already leaving, will do so before or on liberation and will trickle (or flood); out over the first ten years after liberation (unless politically unacceptable and employment, as well as output, growth constraining levels of inequality are retained);

c. growth and structural transformation tend to increase the proportion as well as the absolute numbers of skilled - including managerial and professional - personnel required;

d. improvement of productivity and incomes in the household agricultural and "informal" sectors requires specialised training - albeit of a different type from mainline, large employer oriented training - for both workers and supporting extension workers.

South Africa has many of the components for a sound education and training system. There is no inherent reason - except in relation to "d" above - why the development of such a system on a non-racial, employment growth oriented basis should pose major conceptual or particularly (relative to other policies) implementation problems.

However, it is necessary to note the substantial gaps in the present system:

a. like almost everything else in South Africa it is racially divided in ways not conducive to efficient attainment of economic or employment generation goals;

b. the white sub-system cannot be generalised to the entire population on
its present cost structure, because the resulting resource requirement could not be made available except at the cost of crippling other priority public expenditure (notably housing, pure water, health);

c. the black sub-system is plagued by deliberately warped content and ideology, inadequate financial and physical resources and a majority of underqualified staff;

d. the interaction between education and training and between both and in service upgrading is inadequately conceptualised and articulated;

e. the "liberation now, education later" approach later than liberation would reverse the broadening of the black educational base and erode the skills of those participating in it. If repression by the South African state wrecks education during the last several years prior to the transition this could have a similar result.

投影的技能需求是有效教育和培训的基础。20世纪60年代和70年代的非洲经验认为，通过人力资源规划进行预计划的培训以满足预估计的需求是不可行的。这是一个过于严厉的判断。

几个项目在一定程度上取得了成功。它们的通用弱点可以被识别和防止。这些包括：

a. 资料的过分具体化，以特定职位而不是技能为依据;

b. 中等水平（如出纳员、工匠）培训的不足以及对“主学术类”教育的过分强调（国际劳工组织目前流行的“技能模块”方法似乎是对这种弱点的过度反应）;
c. negligible attention to in-service, released time and other employer
to in-service, released time and other employer-related programmes as well as to their interaction with more formal
related programmes as well as to their interaction with more formal education/training institution based programmes;
education/training institution based programmes;

d. failure to tackle the relevance of universal access primary and
continuing education to productivity - a weakness related to overemphasis
on the "formal" sector and within it on large employment units.

Each can be guarded against in restructuring the South African training and
education system. Demand projection improvement may be more difficult. A
start would involve re-analysis and re-classification of official RSA manpower
statistics which are in an obscure and operationally exceedingly inconvenient
form quite apart from questions of accuracy and coverage. Knowing the present
situation and trends better would be a significant first step toward being
able to estimate alternative future requirement, stock and flow projections.
However, in the first decade after liberation the overriding problem is likely
to be one of inadequate supply linked to time, physical resource and personnel
constraints. In that context even moderately large projection errors are
unlikely to result in heavy investment in what prove to be relatively unusable
skills and time to work out better projections and adjust relative programme
(skill) sizes can be anticipated to be available.

Tensions and Contradictions

To pretend that tensions and contradictions - both between black workers and
family farmers and other sub-classes and among black workers and family
farmers can be avoided or fully harmoniously resolved would be naive and would
exacerbate rather than avoiding the tensions. Some have been sketched
earlier.

One clear conflict is likely to be that between wages and agricultural prices
especially if investible surplus and consumption tax receipts are priority
targets, which would increase the attractiveness to workers (and economic
decision takers wanting a quiet life) of a cheap food policy. Such a policy -
if based on low grower prices - could limit agricultural output growth and the
restablishment of viable black household farming. It would reduce the
attainability of household incomes (including self provisioning) above the
This statement is not to be read as arguing against strong, politically oriented unions still less as refurbishing the "labour aristocracy" argument in a reductionist form. Several points are relevant:

a. COSATU and most of its member unions are active on community issues. Success, by the nature of these issues, will benefit self employed, informal sector employees and non-unionised formal sector wage earners.

b. COSATU and its member unions are likely to support narrowing of wage differentials so long as this is by levelling up and does not require an extended real wage freeze.
for significant number of their members. (The NUM, in a parallel instance, defended Mozambican mineworkers threatened with repatriation even though their departure would serve the immediate interests of some of its members and potential members).

c. Therefore, it is reasonable to assume COSATU will favour enhanced employment opportunities, universal access to basic services, broad front housing programmes, narrowing of differentials by raising the incomes of the poorest fastest.

d. But if national objectives require near standstills
On real wages and salaries for many black workers and/or higher taxes paid by them in order to maximize income gains for the poorest (who are not union members) and/or extension of access to basic services, tension or conflict is likely. COSATU represents a sub-class with specific material interests not all of which are fully congruent with those of any other sub-class - including other worker sub-classes. It is COSATU's business to stand up for its members' interests and quite unreasonable to expect it to argue the cases of others in preference to its own.
poverty line in rural areas, thus leading to urban drift and to continuation of sharp rural/urban income inequality.

Another tension is between organised - and in general above average skill and present income level - and less or unorganised - and in general below average skill and present income level. The former can make a rational productivity case for favoured treatment and will have not only the professional and public relations capacity to see that it is heard but also the political clout (especially if proletariat is translated "union leadership" and allocated a leading role in the governing sub-class coalition) to ensure that it is taken into account. The problem is that given fairly tight constraints on total resources, such gains will mean less available for even lower income worker (including peasant) sub-classes and/or curtailment of investment and therefore of the attainable employment growth and absolute poverty reduction rates. The logical - and perhaps attainable - route toward interim resolutions of this tension would appear to lie not in seeking to impose state control on COSATU but rather in broadening trade union membership, creating parallel small farmer - and probably both small scale self employed and unemployed - unions so that their members' cases are equally cogently put and have comparable political weight behind them.

Gender tensions will probably not turn on formal rights of equal access for women nor on comparable pay for comparable work but on rendering these rights effective. Outside the "caring" (education, health) professions and secretarial employment, women (including - relative to white men - white women) are objectively discriminated against. Very substantial changes in consciousness will be needed (especially, but not only, by men) to overcome that situation whatever the legal position. So will consideration of and action to alleviate certain obstacles to effective equality, e.g. availability of affordable child care facilities and lack of specific attention to issues relating to part time and broken period (e.g. with late entry and or "times out" related to infant and young child care reproductive responsibilities) employment and promotion patterns. These tensions are unlikely to be uniform across occupations or between contexts. Rapid growth of employment in a particular line or area and shortages of qualified black male entrants (as well as high overall employment growth) are likely to reduce them (and to make interim resolution more easily attainable) and vice versa.
The question of the future of temporary (or long term) immigrant workers from neighbouring states - about 350,000 on contract (dominantly in mining) and up to 1,500,000 overall - will be a difficult one - unless a purely chauvinist answer is perceived to be acceptable. Because of the warping of their own economies (and the South African) to serve a regional sub-system of white power, privilege and profit, they have little present or short term access to above poverty line incomes if repatriated. That they - and their ancestors - have been exploited to build the South African productive and infrastructural capacity is a fact. However, demand for formal wage employment will exceed supply in post liberation South Africa; the black South Africans (at least to date) have lost by the importation of foreign labour; any state owes a primary and overriding duty to its own citizens. Therefore, an open door for new foreign Africans labour or even permanent maintenance of present levels is likely to be outside the parameters of feasible solutions. Lesotho is a special case (as is Southern Mozambique albeit to a lesser and more alterable degree). Wage employment of Basotho in South Africa is of the order of 10 to 12 times that in Lesotho. Indeed Lesotho is more accurately perceived as a long distance bed-sitting room for the Free State and Rand than as an actually, or even potentially, integrated national or territorial economy. Normative considerations apart, rapid repatriation would leave South Africa with a bankrupt, unstable neighbour filled with bitter and virtually literally starving people. One solution might be to agree to an economic confederation with Lesotho including free movement of labour. Arguably Lesotho and a post apartheid South Africa should consider union; Lesotho's history and the legacy of apartheid suggest that (even if feasible over a 20 to 30 year perspective) there is no through road in the short run. More generally, long term (say five years work or longer in South Africa within the last ten years) foreign workers might be offered the right of citizenship by registration (as applied by Zimbabwe which also had a high "foreign African" share in employment at independence).

**Conclusion**

Technical and technological problems (at least taken in combination with available knowledge and financial resources) will pose severe obstacles to attaining full employment/self employment at or above the poverty line in a liberated South Africa. The underlying incremental formal employment/output
poverty line in rural areas, thus leading to urban drift and to continuation of sharp rural/urban income inequality.

Another tension is between organised - in general, above average skill and present income level - and less or unorganised - and in general below average skill and present income level. The former can make a rational productivity case for favoured treatment and will have not only the professional and public relations capacity to see that it is heard but also the political clout (especially if proletariat is translated "union leadership" and allocated a leading role in the governing sub-class coalition) to ensure that it is taken into account. The problem is that given fairly tight constraints on total resources, such gains will mean less available for even lower income worker (including peasant) sub-classes and/or curtailment of investment and therefore of the attainable employment growth and absolute poverty reduction rates. The logical - and perhaps attainable - route toward interim resolutions of this tension would appear to lie not in seeking to impose state control on COSATU but rather in broadening trade union membership, creating parallel small farmer - and probably both small scale self employed and unemployed - unions so that their members' cases are equally cogently put and have comparable political weight behind them.

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The question of the future of temporary (or long term) immigrant workers from neighbouring states - about 350,000 on contract (dominantly in mining) and up to 1,500,000 overall - will be a difficult one - unless a purely chauvinist answer is perceived to be acceptable. Because of the warping of their own economies (and the South African) to serve a regional sub-system of white power, privilege and profit, they have little present or short term access to above poverty line incomes if repatriated. That they - and their ancestors - have been exploited to build the South African productive and infrastructural capacity is a fact. However, demand for formal wage employment will exceed supply in post liberation South Africa; the black South Africans (at least to date) have lost by the importation of foreign labour; any state owes a primary and overriding duty to its own citizens. Therefore, an open door for new foreign African labour or even permanent maintenance of present levels is likely to be outside the parameters of present reality. Lesotho is a special case (as is Southern Mozambique albeit to a lesser and more alterable degree). Wage employment of Basotho in South Africa is of the order of 10 to 12 times that in Lesotho. Indeed Lesotho is more accurately perceived as a long distance bed-sitting room for the Free State and Rand than as an actually, or even potentially, integrated national or territorial economy. Normative considerations apart, rapid repatriation would leave South Africa with a bankrupt, unstable neighbour filled with bitter and virtually literally starving people. One solution might be to agree to an economic confederation with Lesotho including free movement of labour. Arguably Lesotho and a post apartheid South Africa should consider union; Lesotho's history and the legacy of apartheid suggest that (even if feasible over a 20 to 30 year perspective) there is no through road in the short run. More generally, long term (say five years work or longer in South Africa within the last ten years) foreign workers might be offered the right of citizenship by registration (as applied by Zimbabwe which also had a high "foreign African" share in employment at independence).

In summation

Technical and technological problems (at least taken in combination with available knowledge and financial resources) will pose severe obstacles to attaining full employment/self employment at or above the poverty line in a liberated South Africa. The underlying incremental formal employment/output
The macro economic arithmetic of the preceding paragraphs may not be possible. Some increases in the real incomes of black organised workers and small businesspersons will prove essential for political and productivity reasons. While freezing of most white real incomes—and redirecting a portion of enterprise profits—should be possible, the line between impoverishing even if inequality reducing mass exodus of key personnel and avoiding too rapid an exodus by maintaining overall and increasing intra-black inequality is a narrow one. Mozambique exhibits the pitfalls of going too far in one direction and—arguably much less seriously—Zimbabwe of too much caution.
If either the incremental capital output ratio can be pushed down to 3 to 1 after 6% growth of domestic product accepted, the share of gross fixed capital formation in resource use can be cut to 18 to 24% allowing 60% to 67% personal consumption. If external finance (including transitional soft finance) can be raised at net level to 8% of gross domestic output then domestic consumption could be 64% to 70% of output.

70% - or even 61% - is a more comfortable level than 57% for personal consumption. That range would allow moderate increases in real incomes of present middle and lower upper income personnel (black and white). To be consistent with the overall strategy outlined, however, such
rates would require holding
down the capital/output
ratio and securing sig-
nificant net external finance.
In that context 65% personal
consumption might be consis-
tent with 8% growth.

The assumption that not over
40% of fixed capital formation
(say up to 10% of gross domestic
product) is likely to be private
is not primarily an ideological
one. About 40% of fixed capital
formation is likely to be infra-
structural (including human infra-
structure), 10 to 15% housing and
45 to 50% directly productive.
Given probable public enter-
prise share in directly prod-
uctive activity, and the need
for some public investment
injections into housing the needed
public sector total is likely to

be about 60 to 65% (37.5% infrastructure; 5% housing; 17.5% to 22.5% directly productive) and the private 35 to 40% (2.5% infrastructure; 5% to 10% housing; 37.5% directly productive). These are not impossibly high public investment levels relative to GDP or to total investment if the public enterprise sector is seen to be a necessary surplus generator and if cuts in administration, defense and other apartheid-linked costs are carried out parallel to basic service expansion to avoid a recurrent budget deficit and ensure at least some government savings available to meet its capital budget financing requirements.
growth ratio is probably of the order of 0.5 to 0.6 so that at least 5 to 6% growth would be required to hold the formal employment proportion constant and 10% to reduce the 50% below the absolute poverty line to 0% in 20 years. Even allowing for once for all redistributive shifts - including recreating a viable black household (or co-operative farming) sub-class - which halved the initial 50% below the poverty line in the transitional period, 8% annual growth would seem to be needed to achieve the target in under two decades.

That set of ratios poses the personal consumption/public services/investment tradeoff starkly. 8% growth (validated by market broadening through poverty reduction) would probably require a gross investment to output ratio of 28%. Even assuming savings of 5% of GDP on security, administration and subsidy expenditure from scrapping apartheid, total recurrent public spending, universal basic public service access (including production oriented extension services as well as health, education and water) is unlikely to require less than 15% of GDP (in resource used terms implying a recurrent budget of 25% plus of GDP). 57% for personal consumption will not allow substantial real increases to black workers presently above the poverty line unless white incomes are cut drastically in real terms. While nominally possible, cuts large enough to have that effect would lead to an exodus of precisely those white workers and managers whose skills are scarcest and most needed (and who are, therefore, most globally mobile), greatly exacerbating training requirements and the risk of failing to achieve a once for all capacity utilisation and rehabilitation recovery in output after liberation. (Zimbabwe's initial economic recovery was over 25% from an economy whose degree of rundownness and undercapacity use may turn out to be comparable to South Africa's at liberation). It would also prejudice - albeit decreasingly over time - the achievement of the 6% growth target which would otherwise appear perfectly plausible, let alone the 8% one which is problematic albeit not necessarily impossible.

The implicit constraint on personal consumption if employment self/employment targets are defined as including rapid reduction of absolute poverty flowing from lack of adequate access to adequately productive and remunerated self employment/employment and its elimination in two decades will lead to other tensions. One is between more productive (i.e. skilled and scarce) and other workers. An overlapping but not identical one will be between well organised (basically unionised) and less well or unorganised (probably including both
peasants and the urban "informal" sector) workers. A third will be on gender lines - increased and increasingly equal access to all branches of employment will face much stiffer opposition in a context of low real income rises (and a fortiori of low formally recorded wage and salary employment growth). Another is urban/rural because with limited personal consumption capacity the tendency to an urban bias in its distribution (and in that of public services) will increase with the parallel trend to rising rural to urban migration, greater continuity of the present divided family/poverty reserve pattern and failure to recreate a viable black agricultural sub-sector. A final tension would relate to workers from neighbouring African states (especially to those in mining). Under conditions of low personal consumption growth, pressure for their repatriation would be heightened. All of these tensions would be exacerbated further were low achieved growth to reduce the rate of growth of employment significantly below 4% which would be a likely result of reconciling their initial manifestations by more generous wage increases at the expense of investible surplus and/or of loss of internal and/or external balance with rising payments deficits and inflation rates (as evidenced by Zimbabwe's 1980-1984 experience).

Personpower or personnel planning/forecasting and training to meet the requirements identified are not exact sciences. However, once feasible growth rates and desired patterns of structural change have been identified workable estimates of requirements and at least broadly relevant training programmes should be identifiable and implementable. The most uncertain element is likely to be the rate of white exodus which, if high, will both increase requirements and (by removing skilled personnel) weaken the training capacity to meet them.

The economic organisation/mode of production choices and sequences are likely to affect achieved employment growth but not on any crude public/private efficiency line of argument (in either direction). The three basic factors will be degree of worker participation and commitment and their effect on productivity and investible surplus; achievement of effective state power (direct or indirect) over macro, sectoral and major enterprise economic decisions; phasing an adequate buildup of black senior personnel with competence, training and experience rapidly enough to avert major loss of efficiency from the attrition of existing - largely white - high level personnel stocks. The loss by departure of small scale capitalists - especially in commerce and agriculture - is likely under any plausible
economic restructuring and may - depending on the vitality of the black private and cooperative sectors - have a positive effect on black employment and - after a brief transition - a neutral one on overall output.

Clearly, post-apartheid South Africa will have high ratios of public expenditure to GDP; of public investment to total investment and of public to total directly productive activity. Equally it is virtually certain to have a highly interventionist state whose economic instruments range well beyond macro level (as do those of Brazil and South Korea just as much as those of Nicaragua or Algeria) even if they may well focus on market management and decentralisation of public sector decision taking rather more than on comprehensive material balances planning and centralisation of micro level economic decisions. What the scope of initial additions to the public sector will be or what the sequencing of subsequent expansion cannot be prognosticated with any pretence at accuracy nor can the balance among macro (via the state) and enterprise level (via organised enterprise workers) contributions to co-management of major enterprises. Both technical and political contexts and balances of power at the point of liberation which cannot now be forecast will significantly affect the choices made both directly and (e.g. by adopting policies leading to a high proportion of abandoned ex-capitalist enterprises, the largest single source of the Mozambican public sector) indirectly. So will subsequent evolution (or revolution) within the dominant sub-class coalition.

The foregoing issues are primarily political economic. Further research on their probable parameters and the probable effects of alternative approaches to resolving them would certainly be desirable and help to inform dialogue and decision taking. However, the basic requirement is dialogue leading to decision taking by the liberation movement presumably with broader subsequent consultation with workers and peasants in South Africa in the later stages of the liberation struggle or immediately upon liberation. Political decisions neither are, can be, nor should be taken either by researchers on purely technical (economic or other) considerations. Researchers and intellectual supporters - no matter how committed - have no business seeking to achieve a role as Platonic guardians with the liberation movement cast as warriors. To do that is just as much a treason of the intellectuals as it would be to remain silent rather than calling attention to, and providing information on political economic issues on which choices do need to be made and acted upon.
Tables

1. South Africa: Population
2. Urbanisation: Numbers and Proportions
4. Economically Active Population Distribution
5. GDP: Growth and Composition
6. Occupational Distribution: Category and Ethnic Group
7. Real Wages In 1970 Prices: Selected Sectoral and Ethnic Trends
8. Ethnic Group Shares of Total Personal Income

A Note on Table Sources

These tables are derived largely from official sources and selected academic analyses. A number have been adapted from M. Lipton, Capitalism And Apartheid, South Africa 1910-1986, Wildwood (Gower), London, 1986.
### TABLE 1

**SOUTH AFRICA: POPULATION**

(Number = %)

<table>
<thead>
<tr>
<th>Census Year</th>
<th>1911</th>
<th>1936</th>
<th>1960</th>
<th>1980</th>
</tr>
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<tbody>
<tr>
<td>Whites</td>
<td>1.3(21)</td>
<td>2.0(21)</td>
<td>3.1(19)</td>
<td>4.5(16)</td>
</tr>
<tr>
<td>Africans</td>
<td>4.0(67)</td>
<td>6.6(69)</td>
<td>10.9(68)</td>
<td>20.8(72)*</td>
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<tr>
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<td>0.8(8)</td>
<td>1.5(9)</td>
<td>2.6(9)</td>
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<tr>
<td>Indians</td>
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<td>9.6(100)</td>
<td>16.0(100)</td>
<td>28.7(100)</td>
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* Including 3.9 in 'independent homelands'

### TABLE 2

**URBANISATION: NUMBERS AND PROPORTIONS**

(Number in 000,000)

<table>
<thead>
<tr>
<th>Census Year</th>
<th>1911</th>
<th>1936</th>
<th>1951</th>
<th>1960</th>
<th>1970</th>
<th>1980</th>
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<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>Whites</td>
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<td>65.2</td>
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<td>78.4</td>
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<tr>
<td>Africans</td>
<td>0.5</td>
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<td>1.1</td>
<td>17.3</td>
<td>2.3</td>
<td>27.2</td>
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<tr>
<td>Coloureds</td>
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<td>0.4</td>
<td>53.9</td>
<td>0.7</td>
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<tr>
<td>Indians</td>
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<td>0.2</td>
<td>66.3</td>
<td>0.3</td>
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<tr>
<td>Total</td>
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<td>24.7</td>
<td>3.0</td>
<td>31.4</td>
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</tbody>
</table>
### TABLE 3

AFRICAN POPULATION DISTRIBUTION 1946-80  
(Number in 000,000)

<table>
<thead>
<tr>
<th>Location</th>
<th>1946</th>
<th></th>
<th>1960</th>
<th></th>
<th>1970</th>
<th></th>
<th>1980</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>'Reserves'</td>
<td>3.1</td>
<td>40</td>
<td>4.0</td>
<td>37</td>
<td>7.4</td>
<td>47</td>
<td>10.7</td>
<td>53</td>
</tr>
<tr>
<td>'White' Rural Areas</td>
<td>2.8</td>
<td>37</td>
<td>3.3</td>
<td>32</td>
<td>3.4</td>
<td>22</td>
<td>2.6</td>
<td>13</td>
</tr>
<tr>
<td>Urban</td>
<td>1.9</td>
<td>23</td>
<td>3.5</td>
<td>31</td>
<td>5.1</td>
<td>32</td>
<td>6.9</td>
<td>33</td>
</tr>
</tbody>
</table>

### TABLE 4

ECONOMICALLY ACTIVE POPULATION DISTRIBUTION  
(Thousands, figures in ( ) = % of group economically active)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Year</th>
<th>Whites</th>
<th>Africans</th>
<th>Coloureds</th>
<th>Indians</th>
<th>Total</th>
<th>% active in sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>1951</td>
<td>145</td>
<td>1,252</td>
<td>98</td>
<td>13</td>
<td>1,509</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>1980</td>
<td>102</td>
<td>1,673</td>
<td>149</td>
<td>7</td>
<td>1,931</td>
<td>20</td>
</tr>
<tr>
<td>Mining</td>
<td>1951</td>
<td>57</td>
<td>449</td>
<td>4</td>
<td>1</td>
<td>510</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>1980</td>
<td>90</td>
<td>768</td>
<td>13</td>
<td>2</td>
<td>873</td>
<td>9</td>
</tr>
<tr>
<td>Manufacturing &amp;</td>
<td>1980</td>
<td>463</td>
<td>1,103</td>
<td>307</td>
<td>108</td>
<td>2,011</td>
<td>21</td>
</tr>
<tr>
<td>Construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>1951</td>
<td>503</td>
<td>932</td>
<td>152</td>
<td>44</td>
<td>1,629</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>1980</td>
<td>1,202</td>
<td>2,229</td>
<td>375</td>
<td>124</td>
<td>3,930</td>
<td>41</td>
</tr>
<tr>
<td>Unemployed &amp;</td>
<td>1951</td>
<td>28</td>
<td>118</td>
<td>42</td>
<td>14</td>
<td>202</td>
<td>6</td>
</tr>
<tr>
<td>Unspecified</td>
<td>1980</td>
<td>41</td>
<td>735</td>
<td>84</td>
<td>15</td>
<td>291</td>
<td>9</td>
</tr>
<tr>
<td>Total Economically</td>
<td>1951</td>
<td>984(37)</td>
<td>3,111(37)</td>
<td>404(37)</td>
<td>94(26)</td>
<td>4,592(36)</td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>1980</td>
<td>1,928(43)</td>
<td>6,523(31)</td>
<td>928(36)</td>
<td>256(32)</td>
<td>9,635(34)</td>
<td></td>
</tr>
</tbody>
</table>

Note: The % economically active appears so low as to suggest serious underestimation of self employment, 'informal' employment and unemployment notably among the black groups as well as by women and in rural areas.
### TABLE 5

#### A. AVERAGE GROWTH OF GDP IN THE SOUTH AFRICAN ECONOMY, 1960-85

<table>
<thead>
<tr>
<th>Period</th>
<th>Annual Percentage Growth</th>
<th>GDP</th>
<th>Population</th>
<th>Per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960-65</td>
<td>6.1</td>
<td>(2.4)</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>1965-70</td>
<td>5.5</td>
<td>(2.4)</td>
<td>3.1</td>
<td></td>
</tr>
<tr>
<td>1970-75</td>
<td>4.0</td>
<td>(2.8)</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>1975-80</td>
<td>2.7</td>
<td>(2.8)</td>
<td>-0.1</td>
<td></td>
</tr>
<tr>
<td>1980-85</td>
<td>1.1</td>
<td>(2.8)</td>
<td>-1.7</td>
<td></td>
</tr>
</tbody>
</table>

#### B. SECTORAL MAKEUP OF GDP *

<table>
<thead>
<tr>
<th>Year</th>
<th>Agriculture</th>
<th>Mining</th>
<th>Manufacturing, Construction, Power and Water</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>1911</td>
<td>21</td>
<td>28</td>
<td>5</td>
<td>46</td>
</tr>
<tr>
<td>1936</td>
<td>15</td>
<td>19</td>
<td>13</td>
<td>53</td>
</tr>
<tr>
<td>1951</td>
<td>19</td>
<td>13</td>
<td>22</td>
<td>46</td>
</tr>
<tr>
<td>1960</td>
<td>11</td>
<td>14</td>
<td>24</td>
<td>51</td>
</tr>
<tr>
<td>1970</td>
<td>8</td>
<td>10</td>
<td>27</td>
<td>55</td>
</tr>
<tr>
<td>1980</td>
<td>7</td>
<td>23</td>
<td>26</td>
<td>44</td>
</tr>
</tbody>
</table>

* GDP at factor cost, current prices.
** Usually about 80% - 85% manufacturing proper.
*** The relative constancy of the share is somewhat deceptive as the makeup has altered substantially.
## Table 6
### Occupational Distribution: Category and Ethnic Group

(No. = 000)

<table>
<thead>
<tr>
<th>Category</th>
<th>Whites</th>
<th>Africans</th>
<th>Coloured</th>
<th>Indians</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. %</td>
<td>No. %</td>
<td>No. %</td>
<td>No. %</td>
<td>No. %</td>
</tr>
<tr>
<td><strong>1960</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional/Technical</td>
<td>138 67</td>
<td>48 23</td>
<td>14 7</td>
<td>5 2</td>
<td>206 3.6</td>
</tr>
<tr>
<td>Administrative/Managerial</td>
<td>59 87</td>
<td>6 9</td>
<td>1 1</td>
<td>2 3</td>
<td>68 1.2</td>
</tr>
<tr>
<td>Clerical</td>
<td>276 88</td>
<td>19 6</td>
<td>9 3</td>
<td>8 3</td>
<td>313 5.5</td>
</tr>
<tr>
<td>Sales</td>
<td>97 61</td>
<td>29 18</td>
<td>10 6</td>
<td>23 14</td>
<td>160 2.8</td>
</tr>
<tr>
<td>Service</td>
<td>59 11</td>
<td>711 78</td>
<td>118 13</td>
<td>15 2</td>
<td>902 15.8</td>
</tr>
<tr>
<td>Production/Labourer</td>
<td>376 19</td>
<td>1,316 68</td>
<td>214 11</td>
<td>43 2</td>
<td>1,949 34.1</td>
</tr>
<tr>
<td>Agricultural</td>
<td>117 7</td>
<td>1,475 85</td>
<td>128 7</td>
<td>12 1</td>
<td>1,731 30.3</td>
</tr>
<tr>
<td>Unclassified/Unemployed</td>
<td>28 7</td>
<td>286 73</td>
<td>59 15</td>
<td>17 4</td>
<td>391 6.8</td>
</tr>
<tr>
<td><strong>1980</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional/Technical</td>
<td>371 57</td>
<td>205 31</td>
<td>51 8</td>
<td>23 4</td>
<td>650 6.8</td>
</tr>
<tr>
<td>Administrative/Managerial</td>
<td>126 91</td>
<td>5 4</td>
<td>3 2</td>
<td>4 3</td>
<td>138 1.4</td>
</tr>
<tr>
<td>Clerical</td>
<td>505 60</td>
<td>211 25</td>
<td>70 8</td>
<td>53 6</td>
<td>839 8.7</td>
</tr>
<tr>
<td>Sales</td>
<td>196 44</td>
<td>180 40</td>
<td>38 8</td>
<td>37 8</td>
<td>451 4.7</td>
</tr>
<tr>
<td>Service</td>
<td>156 11</td>
<td>1,174 78</td>
<td>153 10</td>
<td>17 1</td>
<td>1,499 15.6</td>
</tr>
<tr>
<td>Production/Labourer</td>
<td>434 16</td>
<td>2,304 69</td>
<td>387 13</td>
<td>104 3</td>
<td>3,230 33.6</td>
</tr>
<tr>
<td>Agricultural</td>
<td>89 5</td>
<td>1,734 87</td>
<td>155 8</td>
<td>6 1</td>
<td>1,992 20.7</td>
</tr>
<tr>
<td>Unclassified/Unemployed</td>
<td>28 3</td>
<td>702 86</td>
<td>71 9</td>
<td>12 1</td>
<td>813 8.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,150 20</td>
<td>3,890 68</td>
<td>554 10</td>
<td>126 2</td>
<td>5,720 100</td>
</tr>
<tr>
<td></td>
<td>1,905 20</td>
<td>6,524 68</td>
<td>928 10</td>
<td>226 2</td>
<td>9,613 100</td>
</tr>
</tbody>
</table>

* of category
** of all economically active
*** seriously underestimated
TABLE 7

REAL WAGES IN 1970 PRICES: SELECTED SECTORAL AND ETHNIC TRENDS
(In Rand per Month)

<table>
<thead>
<tr>
<th>Year</th>
<th>Manufacturing/Construction</th>
<th>Gold Mining*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>White</td>
<td>African</td>
</tr>
<tr>
<td>1915/16 (1911)</td>
<td>1,168</td>
<td>223</td>
</tr>
<tr>
<td>1929/30 (1931)</td>
<td>1,258</td>
<td>247</td>
</tr>
<tr>
<td>1939/40 (1941)</td>
<td>1,418</td>
<td>278</td>
</tr>
<tr>
<td>1944/45 -</td>
<td>1,726</td>
<td>414</td>
</tr>
<tr>
<td>1952/53 (1951)</td>
<td>2,106</td>
<td>416</td>
</tr>
<tr>
<td>1959/60 (1961)</td>
<td>2,463</td>
<td>458</td>
</tr>
<tr>
<td>1965 -</td>
<td>2,735</td>
<td>514</td>
</tr>
<tr>
<td>1975 (1975)</td>
<td>3,893</td>
<td>805</td>
</tr>
<tr>
<td>1980 -</td>
<td>3,514</td>
<td>773</td>
</tr>
</tbody>
</table>

* Cash wages only. To the extent African non cash wages plus fringe benefits are a higher proportion of total income than fringe benefits are of white, the ratio will be overstated.

** (1911) etc. are nearest available years for mining.

TABLE 8

ETHNIC GROUP SHARES OF TOTAL* PERSONAL INCOME

<table>
<thead>
<tr>
<th></th>
<th>1924/5</th>
<th>1946/7</th>
<th>1960</th>
<th>1970</th>
<th>1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whites</td>
<td>75</td>
<td>71.3</td>
<td>71.2</td>
<td>71.9</td>
<td>59.9</td>
</tr>
<tr>
<td>Africans</td>
<td>18</td>
<td>22.2</td>
<td>21.4</td>
<td>19.3</td>
<td>29.1</td>
</tr>
<tr>
<td>Coloureds</td>
<td>5</td>
<td>4.5</td>
<td>5.5</td>
<td>6.5</td>
<td>7.6</td>
</tr>
<tr>
<td>Indians</td>
<td>2</td>
<td>2</td>
<td>1.9</td>
<td>2.3</td>
<td>3.4</td>
</tr>
</tbody>
</table>

* Probably serious underestimation of self provisioning (subsistence), small scale ("informal") and other part time self employment incomes. These are probably a higher % of black than of white incomes, but not to a degree likely to alter the income distribution estimates substantially.
Author Note

Reg Green has been a student of African political economy since 1960. He has worked, taught, researched and/or advised in over 20 African countries - not including The Republic of South Africa. He has studied employment issues in respect to Kenya, Uganda, Tanzania, Zimbabwe, Namibia, the SADCC region and (with the ILO) Sub-Saharan Africa in general. His main manpower (manpower) development work has been in respect of Namibia. Since 1974 he has been a professorial fellow of the Institute of Development Studies (Sussex) and is a trustee of the South Africa Economic Research and Training Project and of the International Center on Law in Development, rapporteur of the Advisory Group on Economic Matters of the World Council of Churches, and a member of SADCC's London Liaison Committee and of the Catholic Institute for International Affairs' Education Committee.