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*Did the Apartheid Economy 'Fail' ?**

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It is often claimed — by analysts right across the political spectrum — that the apartheid economy grew 'exceptionally rapidly' until the early 1970s. Rarely, however, is evidence provided to back up this claim, which forms the focus of this article. Four practical growth criteria are proposed by which to evaluate whether the post-war South African economy grew as fast as its considerable potential would suggest. It is found that the apartheid economy did not surge forward after 1948, as did other developing economies, its comparative output and productivity growth record is poor according to a range of measures, and its share of world and developing country manufactured exports fell steadily from 1955 to 1985, suggesting that such exports were not used to stimulate economic growth. It thus seems that the apartheid economy grew curiously slowly and can be said to have 'failed' — partly because the apartheid superstructure impeded economic development, and partly because of the constraining effects of a range of short-sighted and ill-directed state economic policies. More careful and systematic state economic interventions may be required to help the economy grow more rapidly and efficiently in the future, implying an urgent need for empirical research on state economic policies and their effects in South Africa.

Introduction

Researchers of various political persuasions tend to regard the apartheid economy as an economic growth success story until the 1970s. From the government side, Steyn has high words of praise for South Africa's 'exceptionally rapid economic expansion' at over 5 per cent per annum between 1946 and 1968, while the South African Reserve Bank also refers to South Africa's 'relatively high' growth-rate over this period.¹ Likewise, referring to the 1960s, Hobart Houghton puts forward the vigorous claim that: 'The South African economy with that of Japan probably

* I would like to thank — though not implicate — the people who have commented on versions of this paper, including Libby Ardington, Robin Matthews, Aaditya Mattoo, Nicoli Nattrass, Joe Runde, John Sender and Charles van Onselen, and referees of this Journal.

¹ G.J.J.F. Steyn, 'Some aspects of the development of the domestic and foreign trade of the Republic of South Africa during the post-war period', *South African Statistics 1970* (Pretoria, 1970), p. 8; South African Reserve Bank, 'Post-war growth and structural changes in the South African economy: an analysis of national accounts and balance of payments data', *South African Reserve Bank Quarterly Bulletin* (September 1971), p. 29.

had the highest growth-rate in the world at that time'.² Such observers ascribe South Africa's alleged economic success to able white entrepreneurship and sound state economic policies, while sometimes noting that the political situation may not have been entirely conducive to economic growth.³

On the left, the story is much the same, though the interpretation differs. According to Gervasi, 'During the post World War II period, economic growth in South Africa was more rapid than in almost any other country', while Innes is typical of many authors in describing South Africa's growth during the 1960s as 'exceptionally high by international standards'.⁴ Such claims were used to support the contention that apartheid was a unique system of social control designed to boost economic growth and industrialisation in South Africa, thus facilitating what has been termed a post-1948 'apartheid boom'.⁵

The general picture, then, is of an economy growing relatively efficiently over a long period. This question of the aggregate efficiency of the economic growth-process has important implications for the aims and effectiveness of state economic and social policies. There is abundant research on growing economies suggesting that state policies make a central contribution to economic prosperity or economic failure.⁶ In South Africa, such policies can be evaluated to help clarify the historical relation between the political system and processes of economic development, and to provide directions for economic policy in the post-apartheid period.

Yet the above-mentioned analyses of South Africa's post-war economic record are plagued by several weaknesses. First, they are critically vague. It is not always stated on what grounds the 'rapid growth' conclusions are reached; the few authors

² Desmond Hobart Houghton, *The South African Economy*, 5th impression (Cape Town, 1978), p. 213. Similar quotes appear in John Lonsdale, 'From colony to industrial state: South African historiography as seen from England', *Social Dynamics*, 9, 1 (1983), p. 69; Christie Davies, 'Apartheid versus capitalism: the South African contradiction' (Reading, *Discussion Paper in European and International Social Science Research* 23, Graduate School of European and International Studies, University of Reading, 1988), p. 23.

³ See Hobart Houghton, *South African Economy*, chapters 9 and 12.

⁴ Sean Gervasi, *Industrialisation, Foreign Capital and Forced Labour in South Africa* (New York, 1970), p. 1; Duncan Innes, *Anglo American and the Rise of Modern South Africa* (London, 1984), p. 188. Other observations about South African growth in the 1960s include Martin Legassick, 'Legislation, ideology and economy in post-1948 South Africa', *Journal of Southern African Studies*, 1, 1 (1974), p. 6; and Alec Erwin, 'Towards a planned economy', *South African Labour Bulletin*, 14, 1 (1989), p. 83.

⁵ The phrase is from John S. Saul and Stephen Gelb, *The Crisis in South Africa: Class Defense, Class Revolution*, revised edition (London and New York, 1986), p. 77. Arguments about the relation between capitalism, apartheid and growth are put forward by Legassick, 'Legislation'; Robert H. Davies, Dan O'Meara and Siphon Dlamini, *The Struggle for South Africa*, Volume 1 (London, 1984), pp. 20-22; Ahmad M. Khalifa, *Adverse Consequences for the Enjoyment of Human Rights of Political, Military, Economic and other forms of Assistance given to the Racist and Colonialist Regime of South Africa* (New York, United Nations, Report E/CN.4/Sub. 2/1987/8), pp. 7-10.

⁶ See Lloyd Reynolds, *Economic Growth in the Third World, 1950-1980* (New Haven, 1985), chapter 16; Gordon White and Robert Wade, 'Developmental states and markets in East Asia: an introduction', in G. White (ed.), *Developmental States in East Asia* (Basingstoke and London, 1988), pp. 1-29.

who make explicit comparisons between South Africa and other countries fail to present statistics to back up their arguments.⁷ In some cases, the evidence simply does not exist; as shown in Table 2, for example, many large developing economies grew faster than South Africa in the 1960s, contrary to a widespread belief. The South African national accounts are not critically scrutinised to find out how appropriate the output figures are, and alternative assumptions about what should be measured are not considered.

The final important weakness of the above studies is their broadness. Countries have different sets of resources available for growth, they begin from different initial situations, and simple output-based comparisons may have little meaning. It would be uninteresting to discover, say, that Kuwait grew faster than South Africa in the 1960s, or Ethiopia more slowly, as such economies faced fundamentally different growth opportunities and constraints. Likewise, comparisons of South Africa with the United Kingdom or USA are dubious. Post-war South Africa was ideally placed to import high-productivity capital goods and technology from the developed countries, and grow far more rapidly than them.⁸ In any event, output growth is not the whole story; it is useful to consider also whether a country made the best use of available resources for growth. Any international comparisons, then, should take country resources, sizes and growth-opportunities into account.

In this article the question is posed whether the South African economy succeeded or failed — where ‘failure’ is defined as a situation in which an economy grows somewhat more slowly than its potential would suggest.⁹ This approach requires some down-to-earth conception of the potential growth-rate of South Africa in the post-war period. It would not be enlightening, for example, to argue that the post-war economy failed because South Africans did not enjoy incomes of US \$20,000 per caput in 1980. Such a target was absurdly unattainable. Any chosen targets should be realistic, both in terms of the state of the economy in the mid-1940s, and in terms of what happened in the world economy in the post-war period. Unfortunately, we lack a satisfactory general theory of economic growth by which to advance rigorous counterfactual models of what economies can achieve, given the efficient usage of resources. Instead, several aggregate criteria will be proposed,

⁷ No statistics or references are provided by the authors above who refer to South Africa’s allegedly impressive growth-rate during the 1960s. They may have been comparing South Africa only with (some) developed Western economies, as is done by Innes who claims that over the 1950-66 period South Africa grew faster than ‘all other’ industrial countries except for Japan (*Anglo American*, p. 222 note 2); a similar observation is made by Martin Fransman, ‘Capital accumulation in South Africa’, in M. Fransman (ed.), *Industry and Accumulation in Africa* (London, 1982), p. 243. Such claims are theoretically weak and empirically dubious. For if South Africa is regarded as ‘industrial’, the same must apply to Greece and Spain, which both grew faster than South Africa in the 1950s and 1960s, as did Austria and Italy in the 1950s (Table 2 sources).

⁸ Such issues are stressed by Alice H. Amsden, *Asia’s Next Giant: South Korea and Late Industrialisation* (Oxford, 1989), chapter 1.

⁹ It might be preferable to include social measures in this definition of growth-potential, thereby accepting the possibility of a growth-welfare trade-off. South Africa’s poor social record, however, does not suggest that growth could have been much more rapid had fewer resources been devoted to social welfare.

based on the historical experience of the developing countries, to help evaluate the economic performance of post-war South Africa.

The discussion begins in 1948, by which time the South African economy had adjusted to peacetime conditions and the National Party began to implement its policies of apartheid. If the apartheid economy grew in a satisfactory fashion, making the best use of available resources, the following four propositions might be expected to hold:¹⁰

- (a) the growth rate of the South African economy should have been more rapid after 1948 than before, allowing for changes in world economic conditions;
- (b) the South African economy should have a fair output growth rate after 1948, compared to the records of similar developing countries;
- (c) the South African economy should have responded efficiently to changes in the growth and pattern of world demand for its products;
- (d) productivity growth and technological development in South Africa should have been respectable, compared to the records of similar developing countries.

Any one of these propositions might be misleading, due to theoretical problems and statistical weaknesses, thus it is useful to consider each in turn.¹¹ The evidence presented implies that South Africa's growth-record meets none of these criteria.

Economic Growth in South Africa Before and After 1948

The first test of whether the post-war economy performed well is whether the South African economy grew faster after 1948 than before, allowing for developments in the world economic system. It is simplest to compare growth rates between peak years of business cycles, when resources were roughly fully employed, for three pre-1948 and post-1948 periods.¹² Comparative rates of growth of real GDP are shown in Table 1.

Two indicators are provided in the table. The first is the conventional national-income accounting measure of real GDP. The second measure allows for the fact that the official real output figures for South Africa are misleading because the real

¹⁰ Similar criteria are proposed in debates about the economic performance of Victorian Britain: cf. Roderick Floud, 'Britain 1860-1914: A Survey', in Floud and Donald McCloskey (eds), *The Economic History of Britain Since 1700*, Vol. 2 (Cambridge, 1981), pp. 1-26. The title of this paper derives from D.N. McCloskey, 'Did Victorian Britain fail?' *Economic History Review*, 23, 4 (December), pp. 446-459.

¹¹ Much of the statistical work below is a drastic summary of parts of Terence Moll, 'Output and Productivity Trends in South Africa: Apartheid and Economic Growth' (Ph.D. thesis, Cambridge, 1990), chapters 4-6. Exponential growth-rates are used throughout. Space does not permit full presentation of material, but methodological details and statistics will be provided on request.

¹² This method is discussed in Moll, 'Output and Productivity Trends', pp. 7-8.

output indicator in gold mining (ounces of fine gold produced) is partly a policy variable, linked to the gold price.¹³ A better way of investigating how the productive capacity of the gold sector has grown is to use tons of gold-bearing ore milled as the indicator of real output for this subsector. Using the 'gold-recalculated' method of estimating real economic activity, real GDP growth-rates fall slightly — compared to the conventional figures — between 1949 and 1970 (when the real gold price was falling, and richer ore was being mined), and rise after the 1932 devaluation of the South African pound, and after 1970.

Table 1: *Economic growth-rates in South Africa before and after 1948*

	Real GDP growth rates (% p.a.)	
	Conventional	Recalculated
1920-29	4.3	4.2
1929-36	3.7	4.6
1936-48	4.0	3.8
1948-54	4.7	4.4
1954-63	4.4	3.9
1963-74	5.1	4.6

Note:

Growth-rates are calculated between weighted averages of numbers for end-years, such that the geometric means of numbers for adjacent years have one half of the weight.

Sources: i) 1920-48, at 1958 prices: C.J. Du Piesanie, 'Die Bepaling en die Gebruik van Kapitaalopbrengsverhoudings' (M.A. thesis, Pretoria, 1968), chapter 4; ii) 1948-69, at 1963 prices: *South African Statistics 1976* (Pretoria, 1976), p. 21.7; iii) 1969-74, at 1975 prices: *South African Statistics 1982* (Pretoria, 1982), p. 21.7; iv) recalculated indicator: gold-bearing ore milled series taken from Chamber of Mines of South Africa, 1988 Statistical Tables (Johannesburg, 1989), p. 12S.

Using the conventional GDP indicator, the picture is of steady long-term growth before 1948, a slight rise in average growth-rates to 1963, and something of an acceleration thereafter. By contrast, according to the recalculated indicator of GDP there is virtually no difference in average growth-rates between the periods before and after 1948. The table should, however, be understood in the light of two factors. Firstly, the numbers are questionable. Those for the post-war period have been collected with some thoroughness, though for the 1950s and 1960s are still rather shaky. Figures on the 1930s and 1940s have been put together in this form more recently, and are estimates rather than measures. They seem reasonably

¹³ See Moll, 'Output and Productivity Trends', chapter 3; and Georgina Ann Boyle, *The Theory of Wasting Assets with Reference to the Regulation and Pricing of Gold in the South African Gold Mining Industry* (M.A. thesis, Cape Town, 1982), chapter 6.

consistent, however, and the use of alternative sources and data series has little effect on the results.¹⁴

The more important issue of interpretation concerns the state of the world economy. Between 1913 and 1945 the international economic system suffered what W.A. Lewis terms the 'Greatest Depression', a period characterised by wars, a post-war recession in the early 1920s, and the world-wide economic decline of the 1930s.¹⁵ By contrast, between 1950 and 1973 the world economy enjoyed its greatest-ever boom, and external economic conditions were ideal for economic growth in peripheral economies like South Africa.¹⁶ Under these circumstances, using the recalculated indicator, the 4.1 per cent per annum GDP growth rate over the early periods seems far more impressive than the 4.1 per cent recorded during the 1950s decade of world economic prosperity. Allowing for exogenous factors, then, there is certainly no sign of an economic surge after 1948 — if anything, quite the contrary.

Economic Growth Since 1948: South Africa and Other Developing Countries¹⁷

The world economy grew after 1945 at an historically unprecedented pace, with almost all countries growing far faster than ever before.¹⁸ External conditions for rapid economic growth in peripheral developing countries were highly favourable, industrialisation and urbanisation proceeded apace, technological development was steady, and a few newly-industrialising countries came to be important exporters of manufactured goods.¹⁹

The second proposition advanced earlier concerns how South Africa grew compared to other developing economies in this 'Golden Age' of capitalist development. First, a group of countries with which South Africa can be compared

¹⁴ See Moll, 'Output and Productivity Trends', pp. 194-196.

¹⁵ The phrase is from W.A. Lewis, *Growth and Fluctuations 1870-1913* (London, 1978), p. 225.

¹⁶ The reverse is often argued in variants of the 'dependency' paradigm — that closer links with the advanced capitalist countries through trade and investment flows might actually impede growth in the periphery. Apart from theoretical weaknesses, this approach is undermined by empirical evidence suggesting that almost all developing countries have grown far faster since 1945 than ever before, during a period when the world economy was opening up. On the other hand, it is clear that the role of the state in facilitating rapid growth is crucial, many states lacking the 'capabilities' to develop their economies for reasons associated with their external links, while it may be becoming increasingly difficult for 'late-developing' states to catch up with richer countries, as suggested by David Landes, 'Why are we so rich and they so poor?' *American Economic Review, Papers and Proceedings*, 80, 2 (May 1990), pp. 1-13.

¹⁷ Material in this section is covered in detail in Terence Moll, 'From booster to brake? Apartheid and economic growth in comparative perspective', in Nicoli Nattrass and Elizabeth Ardington (eds.), *The Political Economy of South Africa* (Cape Town, 1990), pp. 73-88.

¹⁸ See Angus Maddison, *Phases of Capitalist Development* (Oxford, 1982), pp. 85-95; Maddison, *The World Economy in the 20th Century* (Paris, 1989), chapter 3.

¹⁹ See Hollis Chenery, *Structural Change and Development Policy* (Oxford, 1979), chapter 1; C.H. Kirkpatrick and F.I. Nixon, 'Introduction: The industrialisation of the less developed countries', in Kirkpatrick and Nixon (eds.), *The Industrialisation of the Less Developed Countries* (Manchester, 1983), pp. 1-80.

must be selected. It is often argued that groups of countries with similar economic characteristics experience similar economic forces and constraints in the development process. Chenery suggests that these characteristics include wealth, market structure and size, and the availability of natural resources, with population and per caput GDP usually taken as indices of the former factors.²⁰ Following this approach, a sample of (basically capitalist) countries which were roughly comparable to post-war South Africa was chosen. 1960 was taken as base year since it is early in the period, well past the post-war 'catch-up' phase, and is the first year for which a full range of statistics is available. Statistics on population and real per caput income were drawn from the results of the UN International Comparison Project to ensure that real purchasing power was being compared, thereby avoiding having to use dubious exchange rates.²¹

By using country-selection criteria based on 1960 figures of (a) population greater than 5 million (SA = 17.3 million), and (b) per caput real GDP, at 1975 international prices (similar to US dollar prices), of between \$800 and \$2,900 (SA = \$1,595), we end up with the 20 medium-sized and large middle-income developing countries²² listed in the notes to Table 2. Their 1960 populations ranged from 94.1 million (Japan) to 6.8 million (Ghana), and 1960 GDPs per caput at 1975 international prices ranged from \$2,839 (Venezuela) to \$856 (Nigeria). South Africa was positioned 10th in terms of population and eighth in terms of income per caput. These countries were approximately comparable in terms of population and their low initial productivity levels, though they differed in terms of the availability of natural and human resources, economic structure, and their diverse politico-economic systems.

The comparative South African economic growth performance will be inspected using the GDP growth indicator. Although it is hazardous to rely too heavily on statistics of this kind, three sources investigated yielded reassuringly similar results. Growth-rates calculated from World Bank numbers — based on country national accounts output data, adjusted in some cases to be made internationally comparable — are shown in Table 2, over decade periods beginning in 1950. Again, both the conventional and recalculated activity measures of GDP are provided for South Africa.

²⁰ Chenery, *Structural Change*, chapter 1. He also stresses capital inflows and state economic policy (for example inward- versus outward-orientation); for present purposes they can be regarded as endogenous variables.

²¹ Real incomes in poor countries are usually higher than comparisons using exchange rates suggest, as prices are lower than in rich countries. Purchasing power parity comparisons are based on the buying-power of income in each country. Basic data are from Robert Summers and Alan Heston, 'Improved international comparisons of real product and its composition: 1950-1980', *Review of Income and Wealth*, Series 30, 2 (June 1984), pp. 207-262.

²² This term is used to group the countries by size and income as of 1960. Some of the better-performers had moved up and out of this group by the 1980s (aided by low population growth rates), while two — Ghana and Sri Lanka — are now low-income countries. Three countries were excluded from the original sample of 23, Angola due to exceptional political conditions, and Iran and Iraq which were 'capital-surplus oil exporters' enjoying especially favourable economic circumstances, according to the World Bank, *World Development Report 1980* (Washington, 1980), p. 111.

Table 2: *Economic Growth-rates in Developed and Middle-income Developing Countries, 1950-1985*

Countries and indicator	Real GDP growth (% p.a.)				
	1950-60	1960-70	1970-80	1980-85	1950-85
Median, 10 developed countries	3.8	4.2	2.9	1.6	3.3
Median, 20 developing countries	4.6	5.3	4.4	1.3	4.4
South Africa:					
Conventional GDP ranking	4.1 14	5.8 8 tie	3.9 13	1.0 12	4.1 13 tie
Recalculated GDP ranking	3.8 15	5.3 11	4.5 11	1.7 7	4.1 12

Notes:

1. Corresponding to the above definition of medium-sized developing countries, developed countries are defined as OECD members which in 1960 had populations of greater than 5 million and per caput incomes at 1975 international prices of greater than \$2,900.
2. The 20 developing countries ranked by descending 1960 GDP per caput are: 1. Austria; 2. Venezuela; 3. Italy; 4. Argentina; 5. Spain; 6. Japan; 7. Chile; 8. SOUTH AFRICA; 9. Greece; 10. Mexico; 11. Portugal; 12. Peru; 13. Sri Lanka; 14. Colombia; 15. Turkey; 16. Malaysia; 17. Ghana; 18. Algeria; 19. Brazil; 20. Nigeria.
3. The median growth-rate for developing countries uses the conventional GDP measure for South Africa. Different base years may be used for each country over periods, thus crudely chain-linking indexes. The recalculated South African figures were derived by subtracting the difference between conventional South African growth-estimates and recalculated ones, at the base-years used by the World Bank, from the World Bank estimates. Basic numbers for these calculations were drawn from the most recent issues of *South African Statistics* (Pretoria). The World Bank base-years for South Africa are: 1950-70: 1963; 1970-80: 1975; 1980-85: 1980.

Sources: i) Country-selection: figures from Robert Summers and Alan Heston, 'Improved international comparisons of real product and its composition: 1950-1980', *Review of Income and Wealth*, Series 30, 2 (June 1984), pp. 207-262; ii) World Bank output figures: 1950-70: World Bank, *World Tables 1976* (Baltimore and London, 1976), Economic Data Sheet 1; 1970-80: World Bank, *World Tables 1983* (Baltimore and London, 1983), Economic Data Sheet 1; 1980-85: World Bank, *World Tables 1987* (Baltimore and London, 1987), country tables.

As can be seen in table 2, the 20 middle-income developing countries grew rapidly after 1950, with a median growth rate over decade periods of 4.5 to 5.0 per cent per annum until 1980. Over this period they grew faster on the whole than the

ten developed countries for which figures are also shown. Many developing countries slid into generalised recession after 1980 and the developed countries moved slightly ahead over the 1980-85 period, though this tendency may have reversed more recently.

South Africa's overall performance is not impressive within the developing country group, and the growth-differentials are large enough to discount the possibility that the numbers might be grossly misleading. According to the conventional GDP growth measure, South Africa performed moderately well in the 1960s — tie eighth in the growth rankings — and rather poorly in the 1950s and since 1970. Its overall 1950-85 ranking is tie 13th. Use of the more realistic activity indicator raises South Africa's overall growth ranking by a place to 12th, its rankings before 1970 fall somewhat, but for the 1980-85 period South Africa jumps from 12th to 7th place. The latter result is partly a statistical aberration, however, due to gold's large share of nominal GDP in 1980 and because eight average growth-rate figures for the period cluster between 0.8 and 1.7 per cent per annum. On the other hand, the World Bank use of the 1980 base-year over the 1980-85 period biases the South African totals downwards, due to the large weight given to the slow-growing gold sector as a result of the 1980-81 gold boom. A more realistic weighting method based on 1975 or 1985 prices raises the 1980-85 growth-rates for South Africa by around 0.6 per cent per annum, and its growth-ranking rises still further. An investigation of South Africa's position in each period using GDP per caput figures produced similar results, which are not shown.

It can thus be concluded that South Africa's overall growth-record is consistently mediocre within this group of countries. Even the boom of the 1960s produced growth-rates well below those of the fastest-growing developing countries. South Africa's 5-6 per cent per annum growth rate during the 1960s cannot compare, for example, to the average of 7.6 per cent per annum achieved by four large newly-industrialising countries (Brazil, Mexico, South Korea and Taiwan). The contrast is even greater during the 1970s, when these countries grew at around 8 per cent per annum, compared to South Africa at 4 to 4.5 per cent per annum.²³

The crucial background to these comparisons, however, is that in terms of the resources and conditions associated with capitalist economic growth potential, South Africa was remarkably well-placed after 1945.²⁴ First, South Africa had a tense but stable political system, for a developing country: the political protests of the 1950s can hardly be compared to the Algerian and Nigerian civil wars and violent political fluctuations in countries such as Argentina, Brazil, Chile, Ghana, Peru and Turkey. Further, South Africa had a (seemingly) competent government administration, a firmly suppressed working class and ruling groups which claimed

²³ Figures calculated from Chung-In Moon, 'The future of the Newly Industrialising Countries: An "uncertain promise"?' in Dennis C. Pirages and Christine Sylvester (eds), *Transformations in the Global Political Economy* (Basingstoke and London, 1990), Table 7.2.

²⁴ Such resources and conditions are discussed by Moses Abramovitz, 'Catching up, forging ahead, and falling behind', *Journal of Economic History*, 46, 2 (1985), pp. 385-406; also Amsden, *Asia's Next Giant*, chapter 1.

to favour economic growth. Investors could thus anticipate a stable long-term social situation and favourable investment climate.

Second, South Africa had what was in many ways an advanced socio-economic environment for capitalist development. South Africa had some skilled white managers and technicians, a basis of technological knowledge and innovative ability (which developed especially rapidly during the Second World War), and a state capable of administering investment stimuli.²⁵ While largely by-passing the black homelands, the trade, transport and communications systems were among the best in the Third World, and contacts with Britain had led to the early establishment of a modern financial and monetary system. South Africa thus had the structures and institutions necessary for productivity gains to be made and transmitted across the economy.²⁶ Likewise, as part of the British Empire/Commonwealth, South Africa shared the world economic language and had easy access to foreign markets, capital and skilled immigrants. A large supply of low-wage black labour was available, much of which was trained for semi-skilled work. These factors should have encouraged the growth of labour-intensive manufacturing exports, as stressed in the following section.

Finally, in terms of physical resources, South Africa was particularly fortunate. The mining sector earned foreign exchange and eased the kind of balance of payments constraints faced by many developing countries, as well as providing a stable counter-cyclical source of demand for other sectors. South Africa also had cheap coal for power and enough good land to be self-sufficient in food and export agricultural products. Given such a range of economic advantages, one would expect that economic growth in South Africa would have been far faster than in countries lacking such advantages, like most of the above group. In this light, South Africa's indifferent comparative performance seems decidedly poor. It might, of course, be argued that the 20 developing countries had little in common after the Second World War, apart from approximate real income levels. In actual fact, South Africa's comparative growth-position over decades is hardly affected if the selection criteria are varied; these were kept broad to reduce ideological bias.

External Demand and Growth

World trade volumes grew unprecedentedly rapidly after 1945, with the demand for raw materials, consumer goods and machinery growing and changing extraordinarily quickly. For any small capitalist economy to grow rapidly, it would need to fit in with changing patterns of world demand and trade, making sure it exported those things in which it had a comparative advantage, importing things it could not produce easily, while trying to industrialise the economy and improve future production opportunities.²⁷ The relation between exports and economic growth has,

²⁵ Hobart Houghton, *South African Economy*, chapter 9.

²⁶ A.J. Norval, *A Quarter of a Century of Industrial Progress in South Africa* (Cape Town, 1962), chapters 2-4.

²⁷ See Sheila Page, *Trade, Finance and Developing Countries. Strategies and Constraints in the 1990s* (Hemel Hempstead, 1990), chapter 13, especially pp. 284-288.

of course, been widely debated. While aspects of the problem are disputed, the general links appear to be close. The evidence to this effect is not only (doubtful) statistical correlations, but cross-country studies of the role of exports in controlling domestic monopolies, enabling economies of scale to be reaped, providing foreign exchange with which to purchase high-productivity capital goods, encouraging technological development, and so on.²⁸ Manufactured exports are particularly important to economic growth, as they can enable poorer countries to make full use of their labour resources, and encourage the diffusion of technical progress across the economy. This was the strategy most vigorously followed by countries such as Japan, South Korea and Taiwan, through focussing on producing and exporting manufactured products in which they could compete with the developed countries, and facilitated remarkable growth rates there of 7-11 per cent per annum for many years.²⁹

The third test of South Africa's post-war economic performance is whether foreign demand was utilised to encourage rapid growth.³⁰ In other words, did export levels grow quickly, thus demonstrating an ability to produce efficiently in areas where South Africa had an advantage, respond to changes in world demand, and develop the capacity to produce new and more sophisticated products? Consider two indicators of relative export performance: South Africa's share of world manufactured exports, and South Africa's share of developing country manufactured exports, as shown in Table 3. A rising share in each case would imply that South Africa's exports were growing more rapidly than those for the group as a whole, a falling share would suggest that South Africa was lagging behind. South Africa's share of world manufactured exports fell by more than half between 1955 and 1985, from 0.8 per cent to 0.3 per cent. Over the period, world dollar manufacturing exports grew by 11.3 per cent per annum, while the corresponding growth rate for South Africa was below 8 per cent, suggesting that the post-war world exports boom did not extend to South Africa.

²⁸ Correlations between exports and economic growth are discussed in David Greenaway and Chong Hyun Nam, 'Industrialisation and macroeconomic performance in developing countries under alternative trade strategies', *Kyklos*, 41, 3 (1988), pp. 419-435; the general case for developing country exports is covered in G.M. Meier, 'Trade policy and development', in Maurice Scott and Deepak Lal (eds), *Public Policy and Economic Development. Essays in Honour of Ian Little* (Oxford, 1990), pp. 155-169; and a critical view is provided by H.D. Evans, *Comparative Advantage and Growth. Trade and Development in Theory and Practice* (Hemel Hempstead, 1989), pp. 278-283, 196-299.

²⁹ See Amsden, *Asia's Next Giant*, chapter 3; Chung H. Lee and Seiji Naya, 'Trade in East Asian development with comparative reference to Southeast Asian experiences', *Economic Development and Cultural Change*, 36, 3, Supplement (1988), pp. 123-152.

³⁰ It is sometimes also argued that the highly unequal distribution of income in South Africa limited the growth of demand for manufactures, particularly demand for essential goods, which are seen as being labour-intensive, having low import-propensities, and subject to large scale economies in production; see Anthony Black and John Stanwix, 'Manufacturing development and the economic crisis: Restructuring in the Eighties', *Social Dynamics*, 13, 1 (1987), pp. 49-50; Lipton, *Capitalism and Apartheid*, pp. 163-4. The limited internal market, however, was primarily the inevitable corollary of a poor export policy. In any event, research on similarly-unequal Latin American countries implies such demand-constraining effects are small; see Nora Lustig, 'Underconsumption in Latin American economic thought: some considerations', *Review of Radical Political Economics*, 12, 1 (1980), pp. 35-43.

Table 3: *South Africa and World Manufactured Exports: 1955-1985*

Year	South Africa's (%) share of:	
	World manufactured exports	Developing country manufactured exports
1955	0.78	12.61
1960	0.59	10.33
1965	0.44	7.85
1970	0.39	6.47
1975	0.33	4.30
1980	0.45	4.21
1985	0.27	1.92

Notes:

Manufactures are defined as Standard International Trade Classification groups 6 to 9, less 67 and 68. Developing countries are defined as in the UNCTAD source, with South Africa added; coverage of socialist countries in the 'world' total is incomplete. South African export statistics are complicated by a large 'Unclassifiabiles' item (SITC group 9) which suddenly appeared in 1974. It presumably includes some manufactured military or other exports, and the manufacturing numbers were raised according to the share of unclassifiabiles in non-gold merchandise exports after 1975.

Sources: UNCTAD, *Handbook of International Trade and Development Statistics 1976* (New York, 1976), *Handbook 1983* (1984), *Handbook 1988* (1989), Tables 4.1, A6, A9 and A10.

The more appropriate comparison, however, is with total developing country exports of manufactures. In this case, South Africa's share plummets from a highly respectable 12.6 per cent in 1955 to under 2 per cent in 1985. In US dollar terms, developing country manufactured exports grew at an average of 13.9 per cent over the period. Admittedly, much of the increase in the developing country share came from the fast-growing East Asian countries. While it would perhaps not be reasonable to expect South Africa to match South Korea's manufactured dollar export growth rate of 25 per cent between 1970 and 1985, it is intriguing to find that Brazil, a country with a roughly similar resource position to South Africa, achieved a growth-rate of 24 per cent per annum. The corresponding figure for South Africa is a mere 10 per cent.³¹

There was ample space for an exporting strategy by a developing country in the post-war period, with trade in manufactures proving particularly promising. When the relevant elasticities, market shares and other technical conditions are taken into account, it seems likely that South Africa's export position deteriorated after 1950, not for reasons related to external demand, but for reasons related to domestic

³¹ Figures calculated from sources for Table 3. It is noteworthy that a large share of South Africa's manufactured exports, as defined in the table, consisted of processed primary products (for example cut industrial diamonds), suggesting that South Africa's record in entering new industrial export markets associated with labour-intensive production or standardised technologies is also poor.

supply, as in many other developing countries.³² South Africa was well placed to raise export levels — especially of labour-intensive manufactures — for the kinds of reasons noted in the previous section, and trade sanctions only became a problem in the late 1970s. But economic policy in South Africa was directed instead towards an inefficient import-substitution industrial model in the 1950s and 1960s, with local touches due to the apartheid system.

Manufacturers were protected from some import-competition by a variety of direct controls and tariffs, and had access to cheap capital good imports. Not being encouraged to compete internationally via exports, they settled down to enjoy internal markets and in some cases returns to scale could not be achieved. Many 'infant' industries seem never to have grown up and required tariffs and protection decades after being started. The 'easy' stage of import substitution in light final and intermediate goods industries ended in the early 1960s, but possible shifts towards exporting light manufactures and the efficient production and export of capital goods (for example mining machinery) did not take place. Meanwhile, there is abundant evidence that many state industrialisation initiatives were inefficient (for example Sasol) or misguided (the industrial decentralisation policy).³³

It thus appears that South African manufactured export levels grew sluggishly in the post-war period, and that export opportunities and markets were not exploited to encourage rapid economic growth.³⁴ Slow-growing export levels were a problem in another way, too. Many studies conclude that a continual constraint on economic growth in South Africa in the 1950s and 1960s was a shortage of foreign exchange. As the Reynders Commission put it, 'the economy appears to be confronted with a fundamental choice: A lower rate of economic growth or more intensive efforts to increase exports'.³⁵ In practice, economic booms were terminated by rapidly rising import levels and balance of payments problems.³⁶ After 1948, import quotas came to complement tariffs as a major means of controlling the balance of payments and later encouraging industrialisation. As in other countries, there is evidence that the use of quotas permitted inefficiencies and rent-seeking of various kinds, which

³² The conditions necessary for this argument to hold are discussed in Moll, 'Output and Productivity Trends', pp. 138-140. In particular, long-run import price-elasticities for manufacturing appear to have been greater than unity, while export price-elasticities were even higher. A general case along these lines for developing countries is argued by James Riedel, *Myths and Reality of External Constraints on Development* (Aldershot, Hants, 1987), chapter 3.

³³ This paragraph draws on Fransman, 'Capital accumulation', pp. 243 ff; Colin McCarthy, 'Structural development of South African manufacturing industry — a policy perspective', *South African Journal of Economics*, 56, 1 (1988), pp. 1-23; Moll, 'Output and Productivity Trends', pp. 130 ff.

³⁴ Similar results for total exports are provided by P.D.F. Strydom, 'South Africa in world trade', *South African Journal of Economics*, 55, 3 (1987), pp. 204-205.

³⁵ See the *Report of the Commission of Enquiry into the Export Trade of the Republic of South Africa* (Chair: Dr. H.J.J. Reynders, RP69/72, Pretoria), p. 18 (emphasis removed from original), also pp. 623-624; and S.S. Brand, 'Alternative patterns of industrial development in South Africa', in M.L. Truu (ed.), *Public Policy and the South African Economy* (Cape Town, 1976), pp. 165-177.

³⁶ See Gerhard De Kock, 'The business cycle in South Africa: recent tendencies', *South African Journal of Economics*, 43, 1 (1975), p. 4.

could have been reduced with a better balance of payments policy.³⁷ It is not fanciful to suspect that policy-induced recessions to ease balance of payments pressures would not have been as necessary with more successful export policies, since recessions were sometimes imposed before the capacity growth rate of the economy was reached (measured in terms of manufacturing capacity utilisation, inflationary pressures, interest rates, etc.), thereby curtailing demand and discouraging investment.

A vigorous exporting strategy in South Africa, involving currency devaluation and selective export encouragement, would probably have had three important effects; rises in export volumes and foreign currency earnings; the making profitable of large new gold fields; and the encouragement of the more efficient usage of resources in exporting sectors (including more labour-intensive production methods). In the long run, structural change and productivity growth would have accelerated (for example the shift of workers from low-productivity agriculture to higher-productivity manufacturing), thus further improving South Africa's competitive position. Some import-substituting sectors would have suffered, of course, but it is clear in retrospect — and was observed by some commentators at the time — that the manufacturing structure in South Africa was growing plump and inefficient, and that the sooner it was rationalised and at least partly opened to the outside world, the better.³⁸

Why was such a seemingly growth-maximising strategy not followed by policy-makers in post-war South Africa? To some degree, factors of ignorance, short-sightedness and pride explain policy weaknesses after 1945. It was not generally realised how important manufacturing exports were, or that manufacturing growth based on substituting for consumer goods and capital good imports would eventually slow down. The stability of the rand was maintained due to a curious desire to conform to international financial and monetary standards,³⁹ while it was also felt — probably wrongly — that devaluation would be inflationary and ineffective.⁴⁰ Within the Afrikaner Nationalist alliance of the 1940s and 1950s, the

³⁷ These issues are covered by Desmond Lachman, 'Import restrictions and exchange rates', *South African Journal of Economics*, 42, 1 (1974), pp. 25-42; D.J.J. Botha, 'Balance of payments', in Alan O. Wright (ed.), *South Africa — The Free World's Treasure House* (Johannesburg, 1977), pp. 273 ff. Direct controls, however, need not lead to major inefficiencies when administered by efficient and foresighted state bureaucracies, as suggested by Richard Luedde-Neurath, 'State intervention and export-oriented development in South Korea', in Gordon White (ed.), *Developmental States in East Asia* (Basingstoke and London, 1988), pp. 68-112.

³⁸ Cf. Harry Zarenda, 'The Policy of State Intervention in the Establishment and Development of Manufacturing Industry in South Africa' (Johannesburg, M.A. thesis, 1977), chapter 7.

³⁹ Roger Gidlow, 'An Analysis of Exchange Rate Policies in the Republic of South Africa 1971-1977' (Johannesburg, PhD thesis, 1978), pp. 39-40.

⁴⁰ See, for example, Social and Economic Planning Council, *Economic Aspects of the Gold Mining Industry* (Report 11, UG32/48, Pretoria), p. 51. The problem would have been wage-pressure from white workers, having tricky political implications. White worker bargaining-power due to their skills monopoly could, however, have been reduced by the rapid deracialisation of skilled work (as occurred in the 1940s and began again in the late 1960s) and improving black education.

need for 'national self-sufficiency' and some delinking from the British economy was stressed.⁴¹ Perhaps more importantly, strong interest-groups emerged around the strategy of import-substitution. Manufacturing firms benefiting from protection and tariffs were quite happy not to be exposed to the cold winds of international competition, and appear to have been powerful within the state.⁴²

At a general level, two political-economic forces may have been important. Devaluation and export encouragement would have shifted income towards the goods-producing sectors of the formal economy, which were relatively labour-intensive and increasingly dominated by black workers in the post-war period. In 1950, some 61 per cent of white workers were employed in services, a figure rising to over 70 per cent by 1970.⁴³ By contrast, about 42 per cent of black workers were found in services in 1950, while even in 1970, fewer than half of all African workers were located there. Devaluation, shifting income from the services to goods-producing sectors, would have harmed many white workers in the former in the short run — at a time when the maintenance of high white wages was a deliberate object of state policy.⁴⁴ In the longer-term, an export strategy would have encouraged rapid industrial growth, with the likely by-products of black proletarianisation, urbanisation and increased political resistance. It is not impossible to suspect that such a spectre discouraged active industrial exports policies in South Africa.⁴⁵

The Efficiency of the South African Economy

A final growth-criterion concerns South Africa's productivity growth record, compared to productivity growth in other developing countries. In the long-run, virtually all economic growth can be ascribed to productivity growth, which can be understood as the development and application of new and more economical ways of producing things, thereby enabling an economy to expand its output by more than the increase in resources at its disposal. The total factor productivity (TFP) indicator will be used here. This indicator compares changes in the output of an economy with an average of changes in the inputs or resources employed in

⁴¹ M. van den Berg, 'The objectives of post-war economic policy in the Union', *Finance and Trade Review*, 1, 8 (1956), p. 28.

⁴² S.J. Terreblanche, 'Is the free-market rhetoric functional for the South African situation? No!' (unpublished paper, University of Stellenbosch, 1980), p. 11; Stuart Jones, 'Introduction', in Jones (ed.), *Banking and Business in South Africa* (Basingstoke and London, 1988), pp. 16-17.

⁴³ Calculated using figures described in Moll, 'Output and Productivity Trends', pp. 196-199.

⁴⁴ Merle Lipton, *Capitalism and Apartheid. South Africa, 1910-1960* (Aldershot, Hants, 1986), chapter 6.

⁴⁵ This paragraph draws on the Stolper-Samuelson theorem, by which, in the neoclassical economics model, the liberalisation of foreign trade increases the income of the factor of production which is relatively intensively used in the exporting sector. Various extensions of the model, applicable to developing countries, are described in François Bourguignon and Christian Morrisson, *External Trade and Income Distribution* (Paris, 1989), chapter 1. In the South African context, given some labour market competition, it is clear that unskilled black workers would have benefited from some trade liberalisation.

production, the average weighted according to the contribution to output of each input (usually taken as shares of total income received by labour, capital and other inputs; results are not sensitive to the exact weights used). TFP thus estimates the growth in output which — given many neoclassical economics assumptions — cannot be ascribed to the growth of capital and labour, and is usually associated with technical progress, the social organisation of production, economies of scale, and so on.

The problem of low TFP growth is one of loss of potential human welfare. Consider an economy with no international trade: in such an economy, the growth of TFP indicates the rate at which total real (inflation-adjusted) wages and profits can grow, leaving their shares of total income unchanged. In an economy with moderate levels of international trade, a country with lagging TFP growth in exporting industries will not be able to maintain competitiveness and raise real wages and profits at a rate equal to TFP growth; the growth of real earnings will lag in some proportion to the TFP growth-differential. The TFP approach is dubious for all sorts of methodological and other reasons, but nonetheless produces intriguing results, in combination with other forms of economic research.⁴⁶

Several sets of comparative TFP studies were inspected for the post-1950 'Golden Age' of world economic growth, when productivity conditions were most favourable for developing countries. Figures for South Africa, using the recalculated GDP activity indicator, were calculated following the economy-wide format used in these studies, and middle-income developing countries were chosen for comparison. Two sets of comparisons were made, but since results were essentially the same, only the second will be discussed.

Table 4 provides figures on TFP growth in various developing countries for the 1950-73 and 1973-84 periods.⁴⁷ It is clear that South Africa fails to excel in the productivity growth stakes. In the earlier period, South Africa's near-zero productivity growth is the lowest shown, and comfortably below productivity growth-rates in Latin American countries with which South Africa is best compared. Note, however, that the relative growth rate of South Africa's real

⁴⁶ A beginner's guide to TFP measurement appears in Floud, 'Britain 1860-1914', pp. 20-25. The approach is attacked by Stephen Nicholas, 'Total factor productivity growth and the revision of post-1870 British economic history', *Economic History Review*, 35, 1 (1982), pp. 83-98; and defended by Mark Thomas, 'Accounting for growth, 1870-1940: Stephen Nicholas and total factor productivity measurements', *Economic History Review*, 38, 4 (1985), pp. 569-577. Productivity issues are vigorously critiqued by Richard R. Nelson, 'Research on productivity growth and productivity differences: dead ends and new departures', *Journal of Economic Literature*, 19, 3 (1981), pp. 1029-1064; a pragmatic position is proposed in R.C.O. Matthews, C.H. Feinstein and J.C. Odling-Smee, *British Economic Growth 1856-1973* (Oxford, 1982), chapter 7 and Appendix I.

⁴⁷ Figures on educational achievement in South Africa in a form exactly comparable to those of Maddison could not be located; they appear not to have been acquired for blacks in the 1951 Population Census, and there are problems with the homelands in the 1980s figures. The methodology used was based on real educational spending levels; it was assumed labour quality rose by 0.25 per cent for each 1 per cent rise in educational spending. Comparisons with available educational stock numbers for the 1960-85 period, modified from Population Censuses, produced similar results.

Table 4: *TFP Growth Before and After 1973: South Africa and Other Countries*

	Growth rates (% per annum)				TFP
	GDP	Empl' ment	Labour quality	Capital stock	
1950-73					
Korea	7.5	3.1	1.6	5.9	2.8
Taiwan	9.3	4.3	1.6	7.7	3.5
Japan	9.3	1.6	0.6	8.0	5.5
Argentina	3.8	1.4	0.8	3.5	1.4
Brazil	6.8	2.8	1.3	6.2	2.1
Chile	3.7	1.1	0.6	3.1	1.6
Mexico	6.4	2.5	1.5	6.1	1.9
South Africa	4.6	2.4	1.4	5.5	0.2
1973-84					
Korea	7.4	2.5	2.4	10.8	1.4
Taiwan	7.6	3.4	2.5	10.0	1.2
Japan	3.7	0.6	0.5	3.4	2.0
Argentina	0.7	0.9	1.3	3.2	-1.6
Brazil	4.3	3.9	1.8	8.4	-2.0
Chile	1.2	1.7	1.0	1.7	-0.9
Mexico	4.6	3.5	1.4	6.8	-0.6
South Africa	3.3	1.5	1.6	4.9	-0.5

Note:

Changing land-areas in use indicators from Maddison and for South Africa were accounted for but not shown due to their low weighting.

Sources: i) South Africa: modified from Terence Moll, 'Output and Productivity Trends in South Africa: Apartheid and Economic Growth' (Phd thesis, Cambridge, 1990), pp. 110-114; ii) other countries: Angus Maddison, *The World Economy in the 20th Century* (Paris, 1989), pp. 81, 91.

capital stock was respectable, implying that South Africa should have been able to achieve a fair degree of technical change associated with the use of new and better (often imported) machinery. In all countries, TFP growth-rates slowed down after 1973. In South Africa's case, the slow-down was more modest than in many other countries, at -0.7 per cent per annum. Even in this period, however, the Asian

countries achieved positive TFP growth-rates, and the stricken Latin American countries were not far behind South Africa.⁴⁸

These comparisons are intrinsically dubious. However, over such a spread of countries and lengthy periods, the growth-rate rankings should be reasonably sound, since there seems no reason to believe that inputs were systematically overestimated or output underestimated in South Africa. Given South Africa's initial technological and social advantages compared to other developing countries and its rapid growth-rates of capital stock, it could have been expected to have achieved somewhat more rapid comparative TFP growth. Inputs into production rose rapidly after 1945, then, but the resulting output grew curiously sluggishly. Had South Africa achieved the same — unexceptional — rate of TFP growth as Brazil over the 1950-73 period, for example, its GDP growth-rate would have been 1.9 per cent per annum higher, and by 1973 the economy would have been 50 per cent larger.

In the neoclassical economic model, under certain strict assumptions, TFP growth is a measure of advances in technology — the efficiency with which resources are used to produce a certain output. Given problems with the approach, the assumptions and the statistics, it is in fact highly uncertain what this indicator is measuring. An alternative measure of whether productivity growth in post-war South Africa was satisfactory concerns technological development. Were high-productivity foreign technology and capital goods being acquired by South African firms? Were firms using such technology efficiently?

There is abundant evidence that foreign technology certainly was put to use by South African firms. Capital goods were being imported from the developed countries, especially by manufacturing firms, multinational corporations were supplying local branches with advanced factories and machinery, the state was leading the way with technological development in some industries, and South Africans were acquiring technical training overseas in fair numbers. The problem is the extent to which such technology was being efficiently adapted to local uses. Machines made abroad, for example, might need to be modified to fit in with local production conditions, for example the fact that skilled workers are paid relatively higher wages in South Africa than in the developed countries. One indicator of the extent to which South African firms were efficiently adopting and adapting foreign technology, and generating their own technology, concerns the technology-intensive capital goods sector. If South African firms were successful technology-wise, we would expect to find the capital goods (machinery-producing) sector growing steadily, with rising levels of capital goods exports to other countries.

⁴⁸ For some Latin American countries Maddison uses the labour force as proxy for employment: this practice is misleading during some slump periods when formal employment is growing more slowly than the labour force. The levels of labour input since 1973 are thus overestimated, due to the recessions and rising urban unemployment rates Latin American countries suffered during the early 1980s, and their TFP figures in the final column of Table 4 should be raised by an average of perhaps half of a per cent. Details on these issues are provided by Alejandro Portes, 'Latin American urbanisation in the years of the crisis', *Latin American Research Review*, 24, 3 (September 1989), Table 5.

One study examines South Africa's capital goods sector, seen as potentially crucial in generating and diffusing technical change throughout the economy. It concludes that the export performance of the capital goods sector was poor, compared to other newly industrialised countries, that technological capabilities were surprisingly low and (in the 1980s) actually declining in some areas, with a reliance on foreign technology and little local innovation and research and development.⁴⁹ The latter weakness has been found in other studies; its causes include low export levels, shortages of skills, and the inadequate developmental role of government.⁵⁰

Negative TFP-growth figures notwithstanding, levels of technology in South Africa clearly did not deteriorate over the post-war period. This may be the general case for growing economies; Maddison's Latin American countries which apparently suffered negative TFP growth after 1973 (Table 4) probably did not experience technological deterioration either. The most likely explanation for this apparent anomaly is that South Africa's industrialisation programme was inefficient and sub-optimal: perhaps new technology was not fully exploited, so that the total resources required to produce a unit of output did not in fact fall. Several explanations could be advanced as to why the acceptance and application of new technologies was sluggish. Apart from the general factors inhibiting industrial growth described earlier, these include slow innovation and inadequate local technological research, firm-level rigidities due to racial and other restrictions on labour mobility, insufficient levels of technical training and the lack of skilled and semi-skilled workers, and so on. Unfortunately, there seems little detailed micro-economic research available on South Africa which could help to distinguish between these factors.

Conclusion

The post-war South African economy enjoyed many features which suggest that its growth-potential was high. Measured by a range of indicators, however, it seems the apartheid economy failed to achieve its growth-potential. Economic growth after 1948 was only fractionally faster than before, despite highly favourable external economic conditions. South Africa's comparative output-growth record is poor, and its record in terms of the growth of manufactured exports and total factor productivity verges on the disastrous. Any one of these indicators would not be decisive, but taken together, they make a powerful case. It is tempting to conclude,

⁴⁹ See David Kaplan, 'The South African capital goods sector: prospects for development in the post-apartheid era', paper presented at a Colloquium on the future of the South African economy, held in Lausanne under the auspices of the Institut De Hautes Etudes en Administration Publique, University of Lausanne (1989), pp. 1-6; also Kaplan, 'The limited development of the South African machine tool industry: causes and consequences', *Social Dynamics*, 13, 1 (1987), pp. 64-65.

⁵⁰ Jill Natrass and R.P.C. Brown, 'Capital intensity in South African manufacturing', Black/White Income Gap Project, Interim Research Report 4, Department of Economics, University of Natal (1977), pp. 28-31; Kaplan, 'Capital goods sector', pp. 7-9; 'Limited development', pp. 62-65.

in fact, that rather than moving into a slump or crisis in the 1980s, as is often argued, the South African economy has suffered from a prolonged economic slump since the 1940s — a fact concealed until the 1970s by its incredibly favourable resource position. In short, contrary to the views summarised at the beginning of this paper, it seems the apartheid economy did in fact fail.

A modern economy with great potential which fails to grow rapidly is a curious thing, well worthy of attention. Why did South Africa grow below its potential? One approach stresses the relation between capitalism and apartheid. Writers in the liberal tradition have argued that apartheid restricted capitalist firms in important ways, while radicals claim that state interventions lowered labour costs for firms, thus raising profits. While both groups have produced some micro-level or sectoral research to support their views, the overall picture produced is vague and difficult to evaluate.

The aggregate evidence discussed above appears to support the liberal critique of apartheid, implying that the finding by various researchers that the apartheid system hampered efficient resource allocation and prevented firms from making full use of black workers should be taken seriously. Indeed, certain weaknesses in the radical 'cheap labour' case deserve critical attention. Direct controls over black workers tended to benefit inefficient low-productivity sectors and firms reliant on cheap labour,⁵¹ while little effort was made to encourage them to raise productivity levels and become more efficient. A corollary effect is that assisting low-productivity firms and sectors penalised high-productivity firms not reliant on cheap labour, which should have taken the lead in acquiring new technology and training black workers for skilled positions. Factors such as the skills shortages which emerged as far back as the 1950s, large-scale black unemployment in the 1970s, and the fact that it was worthwhile for many firms and workers to reach employment contracts outside of the labour allocation system, all suggest that the apartheid system implied a seriously inefficient usage of black workers.⁵²

But labour issues are only one factor in the economic growth-process. Economic growth is a complex phenomenon, and a concentration on state labour policy by many researchers has diverted attention away from other links between state policies and economic growth. It is clear, for example, that poor state industrialisation and trade policies nullified an important potential link between industrial exports and economic growth in South Africa. Some of the reasons for such poor policies are directly linked to apartheid, others are not, and research on these kinds of issues could be fruitful. What impact, for example, did state fiscal policies, the financial system, the pattern of educational spending, state technology policy, or the crushing of the black informal sector, have on economic growth in South Africa?

⁵¹ As noted by Lipton, *Capitalism and Apartheid*, pp. 161-162, and hinted at by David Kaplan, 'Class Conflict, Capital Accumulation and the State: An Historical Materialist Analysis of the State in 20th Century South Africa' (D.Phil. thesis, Brighton, 1977), chapter 8.

⁵² See Moll, 'Output and Productivity Trends', pp. 144-159.

Such issues have vital implications for policy options after apartheid. The ideologues of apartheid could indulge in poor policies or expensive political disasters such as the black homelands, simply because South Africa's abundant economic and social resources would ensure some economic growth, regardless. The conditions for post-apartheid growth, however, are somewhat less promising. The world economy is growing more slowly and erratically than before, the demand for many of South Africa's major agricultural and mineral exports is sagging, and the newly-industrialising countries will provide stiff competition in export markets. South Africa's industrial structure has been run down over the past decade, and there are weaknesses in areas such as the provision of education and skills, technological development, access to foreign capital, and rebuilding world trade links. Meanwhile, problems of economic restructuring, income redistribution and the elimination of poverty must be faced.

South Africa still has many resources suitable for economic development, while the complete eradication of apartheid should allow a dividend from the ending of costly sanctions, lower security spending and an elimination of many of the obvious inefficiencies associated with apartheid.⁵³ But economic policy-makers in South Africa in the 1990s have little room to make mistakes: poor state economic and social policies over the next decade or two could both perpetuate poverty and slow growth and reduce the chances of South Africa catching up towards the developed countries in the foreseeable future.

In these circumstances, it is vitally important that debates on economic policy should not be vulgarised. The critique of the constraints and failures of apartheid advanced above, for example, does not necessarily imply that a free market outcome was, or is, preferable. The experience of the fastest-growing developing countries, led by the newly-industrialising countries of East Asia, suggests that systematic and directed state economic interventions are essential to help economies achieve their potential — Amsden describes such cases as the 'late industrialisation' paradigm of economic development.⁵⁴ In other words, it is not simply the fact of state intervention in South Africa, but its quality and intentions, that should be questioned. In this process, ideological issues should be firmly subordinated to rigorous empirical research.

⁵³ The promising factors are stressed — perhaps to excess — by Stephen Lewis, 'After apartheid: why South Africa can expect an economic boom', *Washington Post*, 18 February 1990.

⁵⁴ Amsden, *Asia's Next Giant*, chapters 1 and 13; also White and Wade, 'Developmental states and markets'.