

**ECONOMIC REFORM AND ECONOMIC
PERFORMANCE:
EVIDENCE FROM 20 DEVELOPING COUNTRIES***

IDS DISCUSSION PAPER 376

Howard White and Jennifer Leavy

SUMMARY

Do adjustment policies assist or retard growth? This paper presents data on economic performance (aggregate and sectoral growth, inflation, investment and external account) for 20 countries. The data are classified on an annual basis according to the country's policy stance in that year: controlled economy, partially or fully liberalised. This approach allows both control-group and before-versus-after analyses which are combined with a review of growth regressions and an analysis of case study material on adjustment. The evidence suggests three hypotheses. First, countries with controlled economies have performed badly compared with those which have moved towards greater market orientation. Second, economic performance does not differ greatly between fully-fledged market economies and partially liberalised ones: partly because several countries have pursued liberalisation with no improvement in performance. Third, given that there is little difference in manufacturing and agricultural growth between full and partial liberalisers yet overall growth is more rapid for the former, the additional growth must be in the service sector. These hypotheses suggest that the balance between state and market should be tilted more toward the state than is currently supported by international development agencies.

* This paper is based on a background report on the impact of adjustment (White and Leavy 1999) for the global evaluation of Swedish Programme Aid. Thanks to SIDA for their support during the evaluation, to the other team members, notably Geske Dijkstra and Jan Kees van Donge for advice, support and comments, and others who have offered comments on various aspects of the work. The work in this paper is solely that of the authors and cannot be taken to represent the views of SIDA or of anyone else involved in the evaluation.

Copyright © Institute of Development Studies, 2000

ISBN 1 85864 329 5

CONTENTS

1	INTRODUCTION	5
2	POLICY REFORM IN DEVELOPING COUNTRIES: AN OVERVIEW	6
3	ECONOMIC IMPACT OF ADJUSTMENT POLICIES	8
	3.1 Overview	8
	3.2 Growth	10
	3.3 Inflation	14
	3.4 Investment	15
	3.5 External account and debt	16
	3.6 Agricultural supply response	18
	3.7 De-industrialisation? Manufacturing performance under adjustment	23
4	LESSONS FOR THE DESIGN OF ADJUSTMENT POLICIES	27
	REFERENCES	29

TABLES AND FIGURES

Figure 1	Average policy score for 20 countries	7
Table 1	Aid per capita (\$ per person) by policy score	8
Table 2	Summary of control group analysis (median scores)	9
Table 3	Control group analysis of real GDP growth	10
Table 4	Before-versus-after growth performance (growth of real GDP per annum)	11
Table 5	Recent regression results for determinants of growth of GDP per capita	13
Table 6	Simple control group comparisons for investment rate (per cent of GNP)	15
Table 7	Before-versus-after comparisons of investment rate (per cent of GNP)	16
Table 8	Control group comparisons of current account deficit (as a per cent of GNP)	17
Table 9	Before-versus-after real export growth under different policy stances	17
Table 10	Total long-term debt (period average, US\$ billions)	19
Table 11	Average growth of real agricultural value added	19
Table 12	Before-versus-after comparisons of growth of real agricultural value added under different policy stances	21
Table 13	Agricultural supply response	22
Table 14	Control group comparison of policy impact on manufacturing growth	24
Table 15	Before-versus-after comparisons of manufacturing growth under different policy scores	25
Table 16	Index of manufacturing production by branch in Uganda (including coffee and cotton processing), 1987=100, and share of branch in total	26

1 INTRODUCTION

Over the last two decades adjustment policies - that is a move toward a more market-based development strategy - have been implemented in virtually all developing countries.¹ Yet the debate has continued as to the economic impact of these policies: do they assist or retard growth? Part of the reason for the failure to resolve the debate has been methodological. In particular, many studies have defined 'adjustment' as having an adjustment loan from the World Bank. Of course, what really matters is policy stance; many countries which have followed broadly market-based development strategies for many years (such as Botswana and Mauritius) have had no need of adjustment lending. Other countries, most notably Vietnam but also Nicaragua in the late 1980s, have introduced reform policies but been denied access to World Bank finance for political reasons. Meaningful analysis of the impact of economic reform policies must be based on a country's policy-orientation rather than its sources of external finance.

A second methodological problem has been the difficulty of establishing the counterfactual. Four approaches are available: before-versus-after, control group, modelling (including regression analysis) and case studies. All of these approaches have shortcomings² so that the best that can be done is to combine the different approaches to examine if they give similar messages.

This paper thus presents evidence from 20 developing countries.³ The material presented here is drawn from the recently completed evaluation of Swedish support for economic reform, being based mainly on the background paper on the impact of adjustment (White and Leavy 1999), which is in turn based on the eight country studies⁴ and additional data gathered on all Swedish programme countries⁵ (i.e. those on which Swedish aid is concentrated). This sample has some bias toward Africa, but also a reasonable cross-section of Asian countries. As explained in the next section, data were collected on macro-economic variables for all 20 countries and classified on an annual basis according to the country's policy stance in that year.⁶ These data were used for control-group and before-versus-after analysis. These results are supplemented by a review of growth regressions and analysis of case study material on adjustment for each of the 20 countries.

¹ There are many works plotting the course of adjustment. The general reader is referred to the excellent introductory text by Lensink (1996). Other recent reviews include Engberg-Pedersen (1996) and Harvey (1996).

² The definitive discussion of the first two being Goldstein and Montiel (1986), but see also more accessible treatments in Mosley *et al.* (1991) and White (1998).

³ Angola, Bangladesh, Botswana, Cape Verde, Eritrea, Ethiopia, Guinea-Bissau, India, Kenya, Lao PDR, Mozambique, Namibia, Nicaragua, South Africa, Sri Lanka, Tanzania, Uganda, Vietnam, Zambia, Zimbabwe.

⁴ These are Bangladesh (van Donge and Dijkstra 1999), Cape Verde (White and Leefmans 1999), Mozambique (White 1999b), Nicaragua (Dijkstra 1999a), Tanzania (van Donge and White 1999), Uganda (Ddumba-Ssentamu *et al.* 1999), Vietnam (van Donge *et al.* 1999) and Zambia (White 1999c). The main report is White (1999a) and there is also a background paper on conditionality (Dijkstra 1999b). All reports can be accessed through www.sida.se/programaidevaluation. These reports are not acknowledged throughout the paper although they are drawn on frequently. Other useful sources of background information have been the country reports of the Economist Intelligence Unit.

⁵ These data are mostly taken from the World Bank's **World Development Indicators** CD-Rom.

⁶ The focus of this paper is on the economic impact of economic reform. There has been a concern with the social impact of adjustment (i.e. the impact on the poor) for almost as long as there has been adjustment, and these concerns have been increasingly reflected in the design of adjustment policies (although whether satisfactorily so remains open to debate). For reviews see Killick (1995 and 1999) and White (1997). Especially in the 1990s there has been increased political liberalisation along with economic liberalisation, but the former is beyond the scope of this paper.

Section 2 begins with an overview of policy reform in developing countries before moving in Section 3 to a presentation of the results dealing with overall growth, inflation, investment and sectoral growth in agriculture and manufacturing. Section 4 concludes on the appropriate design of adjustment.

2 POLICY REFORM IN DEVELOPING COUNTRIES: AN OVERVIEW

Adjustment can mean many things⁷ but in the discourse of international development agencies it means economic reform toward a market-based development strategy. During the last two decades all developing countries, with the exceptions of Cuba, Myanmar and North Korea, have taken steps toward economic liberalisation. But these changes have begun at different times and resulted in a variety of results and reactions. Nonetheless, based on an analysis of six African countries, Engberg-Pedersen *et al.* (1996) distinguish three stages of adjustment: (1) stabilisation, agricultural price reform and some trade liberalisation; (2) internal trade liberalisation, investment promotion and social dimensions of adjustment; and (3) public sector reform, beginning with the banking sector and civil service, and social expenditure rationalisation.

The experience of the 20 countries analysed in this paper bears out the comments in the last paragraph. Whilst there is quite a diversity of experience of economic policy reforms, and the main thrust of reform has begun at different times, all countries have undertaken market-based reform during the last two decades. Reform has been least in those countries, such as Botswana and Namibia, which already had relatively non-interventionist policies. Moreover, the sequencing suggested by Engberg-Pedersen *et al.* (1996) has been roughly followed, though with some departures. It is certainly the case that tariff reform and agricultural price liberalisation have led the reforms, along with some change in exchange rate policy (devaluation and the opening of some market-oriented forex windows). Stabilisation is not so straightforward; it has been attempted at the outset of adjustment but not always successfully, or has been established and then lost. It is certainly the case that privatisation and public sector reform come at the tail end of the reforms and have not been carried out in all countries (especially public sector reform).

As for the timing of reform there is something of a regional pattern, albeit with significant exceptions. Asian countries have begun reform earlier (Sri Lanka in 1977 and Vietnam two years later; both Bangladesh and India relaxed controls somewhat in the 1980s, although in both cases more intensive reform began in 1991). Many African countries have begun serious reform only in the 1990s, but again there are many exceptions (Kenya, Mozambique, Tanzania and Uganda, plus the aborted reform attempted by Zambia in the mid-1980s). A point which has perhaps received insufficient attention is that many countries began reforms under their own initiative prior to the involvement (certainly prior to the formal involvement) of the international development community. Part of the importance of this point is that it highlights the centrality of domestic political forces to policy dynamics. Of the eight countries studied in more detail this was the case in six: Bangladesh has received little formal adjustment lending during much of its period of reform; in both Cape Verde and Nicaragua a formerly-socialist government began the move to the market which was

⁷ See Toye (1994) and White (1996a).

later intensified after a change in government (the shift was in response to crisis in Nicaragua, but in Cape Verde it was motivated by both domestic political pressures and those from the substantial Cape Verdian diaspora); in Mozambique, Tanzania and Vietnam formerly socialist governments began liberalisation and have continued with it when external support was finally received. The exceptions are Uganda and Zambia (though the former is often noted for the extent of domestic political commitment to reform). Although these early programmes are sometimes characterised as half-hearted or failed reform (e.g. Tanzania 1984-86), they did undertake the early stages of reform such as agricultural liberalisation, which can be argued to have laid the basis for later efforts.

Policy scores have been devised based on the degree of reform of the exchange rate, trade, price policy, finance, fiscal policy, private sector development, privatisation and public sector: 0 corresponding to no reform (controlled economies), 1 to weak reform (partially liberalised) and 2 to strong reform (more market-based, though not in all respects a fully-fledged market economy) for each country. Whilst there will be some element of arbitrariness in any such scoring system the use of a small number of categories reduces this problem. Figure 1 shows the average score across the 20 countries since 1981, giving a strong pictorial confirmation of the trend toward reform. There has been a continuous increase in the average policy score, with a sharp incline in 1990 and 1991, when several countries intensified their reform efforts. We are not implying that a higher score is 'better' - that is subject for analysis in this paper - only that countries have become more market oriented.

Figure 1 Average policy score for 20 countries

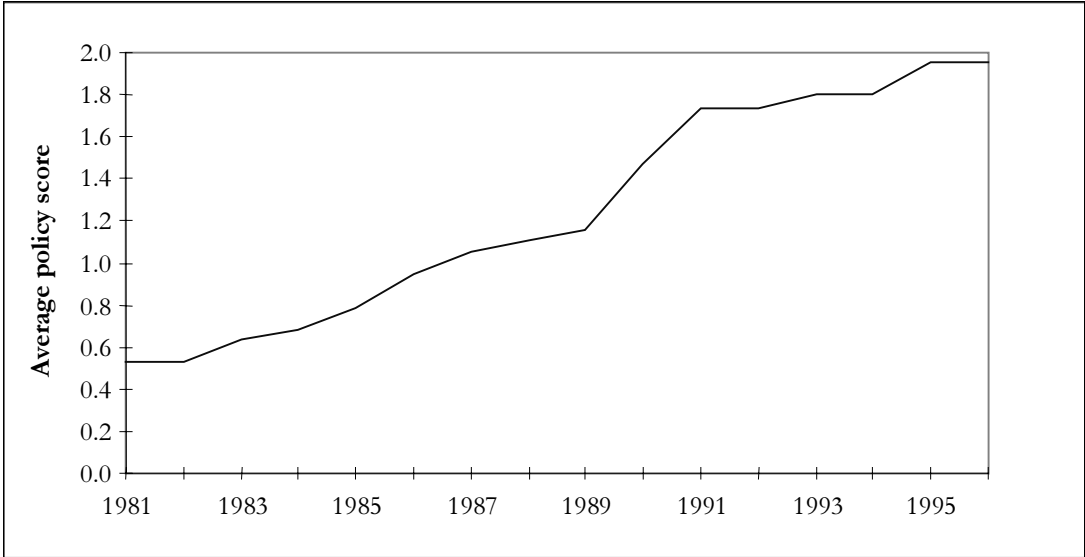


Table 1 Aid per capita (\$ per person) by policy score

	Policy score		
	0	1	2
<i>Mean</i>			
Full sample	14.6	10.0	19.5
Standard deviation	18.3	9.5	24.8
Number of observations	51	85	118
Excluding Cape Verde	8.3	9.0	19.3
Standard deviation	4.9	7.1	25.4
Number of observations	45	77	109
<i>Median</i>			
Full sample	8.2	7.8	9.3
Excluding Cape Verde	7.3	7.8	8.7

This paper will often compare indicators for countries with different policy scores. Table 1 provides the example of aid per capita. The averages (both mean and median) shown here are calculated across all available observations, so a country can enter the data set up to 16 times (the data cover 1981–96) though, of course, it will appear in a different column depending on its policy score for that year. Where the mean and median differ too greatly then the median is the better measure, alternatively influential points may be dropped from the data, as is also done in the case of Cape Verde here. Given the higher aid per capita of Cape Verde it is perhaps best to focus on the mean aid excluding that country. It can be seen that countries with a policy score of 2 receive on average over twice as much aid as those with policy scores of 0 or 1, though the median shows a much lower progression. It may be surprising that average aid is higher for 0 than for 1. This result is partly explained by the fact that bilateral conditionality came in during the 1980s, so that poor performers could still get high aid in the early part of the decade. But once conditionality started, many of the home grown reform efforts (e.g. Cape Verde 1987–91, Mozambique 1983–86, Tanzania 1984–86 and Nicaragua 1988–89, which all receive a policy score of 1) were not rewarded by the international community. Aid flows only resumed once an International Financial Institution (IFI)-backed programme was started.

3 ECONOMIC IMPACT OF ADJUSTMENT POLICIES

3.1 Overview

Table 2 presents a summary of the main results from the control groups analysis, which are explored in more detail below. Three hypotheses suggest themselves from these data. First, countries with controlled economies have performed badly in comparison with those that have moved to greater market orientation. Countries ranked with a policy score of 0 perform worse on all indicators, other than agricultural growth,

than those with scores of 1 or 2.⁸ Second, economic performance does not differ greatly between fully-fledged market economies and partially liberalised ones. With the exception of exports and, to a lesser extent, overall growth, there is no difference in performance between countries ranked with policy scores of 1 and 2. This finding is partly explained by the fact, documented below, that some countries which have carried out quite far-reaching reforms have seen little impact on their growth rates. The third hypothesis follows from noting that there is little difference in agricultural or manufacturing growth between group 1 and group 2. Since overall growth has been more rapid under policy score 2, this additional growth must have come from the service sector. Analysis of the contribution to growth of the different sectors in liberalising economies bears this out: Sowa and White (1996) show that half of Ghana's growth in the decade from 1983 was attributable to the service sector.

Table 2 Summary of control group analysis (median scores)

	Policy score		
	0	1	2
Growth	1.7	3.8	4.9
Inflation	30.2	13.0	11.8
Investment rate	15.3	21.8	21.4
Export growth	-1.1	4.9	7.8
Agricultural growth	3.4	3.1	2.9
Manufacturing growth	0.0	4.5	4.7

Surprisingly little attention has been paid to whether this dominance of the service sector is a 'good thing' or not. Following liberalisation, growth in services follows on naturally from, and is a reflection of, development of the retail sector. A growth in market-based services such as trading networks is a necessary part of the establishment of a liberalised economy. But it may be a cause for concern for two reasons. One is that economies at this level of development need growth from the productive sectors. If an economy is only trading and not producing, then such growth is not likely to be sustainable. Second, the pattern of growth matters greatly for the distribution of the benefits of that growth. In most developing countries the majority of the poor live in rural areas⁹ so it may well be thought that agricultural growth is a necessary component of poverty reduction. On the other hand, Bryceson (1999) argues there has been a de-agrarianisation of rural areas,¹⁰ so that the growth of services may well be a good thing.

⁸ Interpretation of these results cannot extract the role of external factors. World market conditions, when more economies had a score of 0, were less beneficial for growth than in the 1990s, when more countries had policies rating 1 and 2.

⁹ See Hanmer *et al.*(1999) for evidence on Africa.

¹⁰ See also Bryceson *et al.* (1999).

3.2 Growth

The data presented in Table 3 show that growth performance has been stronger the greater the degree of reform in the programme countries. This result holds for both the full sample of 20 countries (or, more precisely, all countries for which data are available) and once the ‘conflict countries’ - Angola and Mozambique - are dropped from the sample. Moreover, the result is found whether the mean or the median is used as the measure of average performance. Moreover, countries with policy score 2 perform significantly better than non-reformers: the t-statistic for the difference in means between 2 and 1 is 3.31 and that for 2 and 0 is 2.88. Non-reforming countries grew at around 2 per cent, i.e. close to, but for most countries just below, population growth, thus indicating declining per capita income. By contrast strong reformers grew at 5 per cent.

Table 3 Control group analysis of real GDP growth

	Policy score		
	0	1	2
<i>Mean</i>			
Full sample	2.3	2.8	5.0
Standard deviation	4.7	5.2	4.3
Number of observations	30	89	130
Excluding Angola and Mozambique	2.0	3.3	4.7
Standard deviation	4.9	3.9	3.9
Number of observations	26	78	120
<i>Median</i>			
Full sample	1.7	3.8	4.9
Excluding Angola and Mozambique	0.4	3.8	4.8

A related issue is the employment effects of reform: the UNDP has raised the question of ‘jobless growth’. Whilst such growth is just another way of stating higher productivity some authors have raised concerns at how little employment is being generated. Krishnan *et al.* (1998) argue that the labour market in Ethiopia has been unresponsive to reforms despite impressive GDP growth and that there are queues of educated unemployed. South Africa has been experiencing **negative** employment elasticities as employment has fallen, despite rising output.¹¹

The data in Tables 2 and 3 are simple control group comparisons; we are comparing adjustment with non-adjustment (between different countries and different periods for the same country) without any reference to other factors. Table 4 presents a before-versus-after analysis, which does control for country specific, but not other, factors. Here a less strong picture emerges, though there are several countries - Mozambique, Uganda, Vietnam - which are experiencing stronger growth with reform (add to this list Botswana, which has had sustained high growth having maintained relatively liberal policies throughout). But

the South Asian countries - Bangladesh, India and Sri Lanka - have all maintained comparable growth rates regardless of policy stance, indeed they are lower in the case of Bangladesh and India¹² (the same is true of Lao PDR). Nicaragua has experienced only modest recovery (compared to the 1980s as a whole, not the crisis at the end of the decade), Cape Verde and Zimbabwe show little change in performance and Zambia has declined (relatively and absolutely). Thus it seems that some countries have experienced growth with reform, whereas others have not. The regression literature offers some explanation as to why this may be so.

Table 4 Before-versus-after growth performance (growth of real GDP per annum)

	Policy score		
	0	1	2
Angola	4.2	0.7	...
Bangladesh	5.3	4.1	4.3
Botswana	...	...	8.1
Cape Verde	...	4.9	4.6
Eritrea	...	...	...
Ethiopia	...	...	7.6
India	6.6	3.9	4.2
Guinea-Bissau	...	5.9	5.5
Kenya	...	3.5	2.9
Lao PDR	...	5.0	5.5
Mozambique	...	-4.0	8.0
Namibia	...	0.9	3.7
Nicaragua	0.0	-6.5	1.8
South Africa	...	1.7	1.0
Sri Lanka	...	4.5	4.3
Tanzania	...	...	...
Uganda	-1.1	6.1	7.1
Vietnam	...	3.8	6.8
Zambia	1.1	...	-0.2
Zimbabwe	...	2.9	2.8

Studies broadly confirm the view that policy reforms are beneficial to growth (see Table 5). However, so are other factors such as human capital. Moreover, as elaborated in Lensink and White (1999a), some reservations must be made with respect to such studies. One of these is that there are reasons for thinking

¹¹ Some of the observed adverse trends in employment may be the result of the switch to the informal sector, which was one of the main conclusions of the review of labour markets and adjustment by Horton *et al.* (1994).

¹² Guhan and Nagaraj (1995) examine the employment impact of stabilisation by looking at sectoral or GDP growth rates and assumed employment elasticities, suggesting that over the years 1992–93 the unemployment increase of 8 million was double that than if the pre-stabilisation growth rate had continued (1995: 10).

that inflation has a non-linear relationship with growth:¹³ whilst high inflation **is** bad for growth, it is likely that once it reaches a certain level then further reductions in inflation may even be bad for growth. Empirical support for this view depends on how ‘a certain level’ is defined:¹⁴ Levine and Zervos (1993) find this effect with a cut off of 40 per cent (but the opposite if it is put at 80 per cent). The mechanisms by which excessive stabilisation damages growth are quite clear: deflation drives down demand for domestic output¹⁵ and lack of investment in human and physical capital undermines the supply response. Some countries that have enjoyed a good response (Ghana and Sri Lanka) have done so by expanding spending at the same time as liberalisation, whereas in several countries (Zambia and Mozambique in the first part of the 1990s) it has been argued that spending limits have constrained growth. Uganda has recently persuaded the IMF to relax its spending limits, which many would agree is a necessary step to sustaining that country’s growth.

However, these findings do not lead us to an unambiguous support for adjustment policies for four reasons. First, ‘good policies’ are being measured largely by stabilisation rather than adjustment (i.e. market-based reforms). The sustained adjuster dummy used by Calamitsis *et al.* (1999) represents staying on track with an IMF programme. Openness is shown to be a good thing, but openness is not equivalent to market liberalisation, as the experience of the East Asian economies shows. Second, the expanded regression equations illustrate the importance of human capital and the relationship between adjustment policies and human capital is contentious. Similarly, all studies which include it find investment to be important, but as the World Bank has admitted in several places and is discussed below, there is no positive impact from adjustment on investment. Third, the use of period averages does not help get at the issue of whether the observed growth is short or long run. The examination of the latter using growth regressions would require a model which utilised long lags, whilst controlling for short run determinants of current growth. Alternatively, the impact of adjustment on variables considered crucial for long run growth may be examined. Of these factors stabilisation and investment are considered below. Finally, there has been a long-standing critique of cross-country regression, based on problems of simultaneity (e.g. inflation may depend on growth), lack of robustness and structural instability. Hence, whilst the results may be of some interest, they should not be the sole source of guidance on policy issues.

¹³ See Roemer (1996: 432–43).

¹⁴ But the evidence for non-linearity is strong, Sala-i-Martin (1997) definitive ‘two million regressions’ paper finds no significant effect from inflation on growth using a linear specification.

¹⁵ This lack of demand may be exacerbated if a reform-related aid boom leads to a surge in imports (Bhaduri and Skarstein 1996).

Table 5 Recent regression results for determinants of growth of GDP per capita

	World Bank	Mosley <i>et al.</i>	White	Savvides	Ojo and Oshikoya	Easterly and Levine	Lensink and White	Easterly and Rebelo	Barro	Otani and Villanueva	Calamitsis <i>et al.</i>
Lagged growth/GDP	-ve	-ve	-ve	-ve	-ve	...	-ve	-ve	-ve	...	...
Investment	...	...	...	+ve	+ve	...	+ve	...	...	...	+ve ^d
Population growth	...	...	...	-ve	-ve	...	...	...	-ve	-	-ve
Human capital ^a	...	...	+ve	-	+ve	...	...	...	...	-	+ve
Inflation	-	-	-	-	-ve	...	...	...	-ve	...	- ^e
Growth of exports/trade ratio	...	...	...	+ve	...	...	...	...	...	+ve	+ve
Growth in govt. consumption	...	...	...	-	...	...	...	...	-ve	...	...
Fiscal policy ^b	+ve	-	+ve	...	...	+ve	...	...	...	...	+ve
Financial development ^c	...	...	...	-	...	...	...	...	...	...	...
Real exchange rate	+ve	+ve	-	...	+ve	...	...	...	...	...	+ve
External debt	...	...	...	...	-ve	...	-ve	...	...	-	...
External transfers	-	-	+ve	...	...	...	+ve	...	...	...	...
Terms of trade	-	-	+ve	...	...	...	...	...	+ve	...	+ve
Political freedom	...	...	...	+ve	...	...	...	...	+ve	...	+ve
Conflict	...	...	...	...	...	...	...	-ve	...	...	-ve
Education	...	...	...	...	...	+ve	+ve	+ve	+ve	...	
Political instability	...	...	...	...	...	-ve	...	-ve	...	...
Domestic Savings Ratio	...	...	...	...	...	...	...	...	...	-
Health	...	...	...	...	...	...	...	...	+ve	...	
Sustained adjuster dummy	...	...	...	...	...	...	...	...	...	...	+ve

Key: +ve significant positive effect; -ve significant negative effect; - insignificant; ... not included in regression.

Notes: Dependent variable is growth turnaround for first three studies and growth for the remainder; ^(a) see papers for definitions of variables; ^(b) measure of fiscal balance and revenue collection, +ve indicates deficit is harmful for growth; ^(c) Ratio of quasi liquid liabilities of the financial system to GDP; ^(d) public and private investment included separately and both significant; ^(e) regression also includes standard deviation of inflation, which is also insignificant.

Sources: Barro (1997), Calamitsis *et al.* (1999), Easterly and Levine (1997), Easterly and Rebelo (1993), Lensink and White (1999b), Mosley *et al.* (1995), Ojo and Oshikoya (1995), Otani and Villanueva (1990), Savvides (1995), White (1997), World Bank (1994).

3.3 Inflation

Stabilisation is considered a pre-requisite for growth, as high levels of inflation create uncertainty by confusing price signals; the negative impact of inflation on growth is borne out by the regression results (though as noted above it is almost certainly non-linear). Most studies find that inflation has been brought down when stabilisation has been pursued. As shown in Table 2, this view is supported by the experience of our sample of 20 countries. Median inflation in reforming countries is half that in non-reforming ones¹⁶ though with little difference between strong and weak reformers.

In interpreting these results it should be remembered that high aid inflows can either be inflationary or deflationary and have in several countries (such as Nicaragua, Tanzania and Uganda) played an important part in bringing about stabilisation; in the Kenyan case Levin (1994: 33–34) argues that stabilisation was undermined by the donors withholding aid. More generally the case study evidence is more mixed with regards to the aid–inflation relationship.

Large aid inflows to Mozambique led to an appreciation of the exchange rate and an exacerbation of inflation. Despite a fall in aid during the 1990s, inflation in Bangladesh dropped from double to single digits because of a reduction in the budget deficit resulting from a rise in tax revenue and increased foreign financing. The introduction of a cash budget in Tanzania in 1995 meant that government finances were brought more firmly under control. Inflows of aid led to the budget deficit becoming a surplus thus contributing to macro-economic stabilisation, and the availability of forex resulted in exchange rate stabilisation. In Zambia a tight fiscal policy reined in monetary growth and reduced inflation, which was further reinforced by the introduction of a cash budget in 1993 - made possible as aid covered external debt payments. Nicaragua has maintained control of inflation since March 1991 through the use of the exchange rate as a nominal anchor, which was underpinned by substantial aid inflows. First, there was a devaluation of the exchange rate, which was then fixed, and wage and price controls were maintained in order to 'break inflationary expectations'. Increases in some prices however, led to a gradual appreciation and overvaluation. In the wake of further devaluation in 1993 inflation increased and can be seen to have followed closely the rate of nominal devaluation.

But, as already indicated, what is not often discussed is the trade-off between stabilisation and restoring long-run growth (which has its strongest effect through the squeeze on government capital budgets), when the policy emphasis should shift from stabilisation to growth (when inflation is 40 per cent, 10 per cent, zero?) and the possibility that growth is in fact necessary to maintain a stable economy. Clearly, the relationship between stabilisation and growth depends at least in part on whether the budget is balanced by increasing revenue or reducing expenditure. In many countries the latter has been the case; for example, in India 'fiscal contraction ... has been achieved almost wholly through expenditure curtailment without any improvement at all in revenue mobilisation' (Guhan and Nagaraj 1995: 5). However, during the 1990s a

¹⁶ Only the median is presented since there is great variation in the data and there is a large positive skew. The coefficient of variation exceeded one for all calculated means, being over five in one case. Inflation in Nicaragua reached over 10,000 per cent in the late 1980s, giving a positive skew that renders the mean an inappropriate measure.

number of African countries (e.g. Tanzania, Uganda and Zambia) have instituted revenue authorities which have had success in increasing revenue collection in Tanzania and Zambia, although not in Uganda.

3.4 Investment

The link between investment and growth is well established.¹⁷ The failure of adjustment policies to revive investment is acknowledged in **Adjustment in Africa** ('no quick response in investment or savings', World Bank 1994: 153), which is an unsurprising result because governments have cut back on public investment (even where overall expenditure levels have been maintained) and private investment has not risen.¹⁸

In fact the data from the countries studied present a slightly different picture, showing that the investment rate is significantly higher in reforming countries than non-reforming ones, although with no difference between strong and weak reformers. (Table 6 suggests a slightly higher rate amongst the former, but this difference disappears once Angola and Mozambique are excluded, and Table 7 confirms that Mozambique accounts for much of the difference between the two sets of results.) Based on both the mean and the median, the investment rate appears to be about 15 per cent in non-reformers and a little over 20 per cent in reformers, and this difference is significant.¹⁹ Table 7 shows a really very mixed picture comparing policy scores 1 to 0 and 2 to 1, although most of these can be explained (e.g. Nicaragua's was high under policy score 1, which was when the government of the late 1980s undertook some reform but also fiscal expansion, and Mozambique fell from 0 to 1 as the latter was the period during which the war intensified): but all the 2 to 0 comparisons are positive.

Table 6 Simple control group comparisons for investment rate (per cent of GNP)

	Policy score		
	0	1	2
<i>Mean</i>			
Full sample	15.3	21.1	23.3
Standard deviation	5.1	7.0	9.7
Number of observations	33	98	118
Excluding Angola and Mozambique	14.5	21.6	21.2
Standard deviation	5.1	7.2	6.9
Number of observations	26	87	108
<i>Median</i>			
Full sample	15.3	21.8	21.4
Excluding Angola and Mozambique	14.2	22.6	20.5

¹⁷ Though few if any would accept the 1960s view of capital as the bottleneck so that higher investment is both necessary and sufficient for higher growth. The 1970s witnessed enough inefficient investment to put paid to such a view.

¹⁸ Matin and Wasow (1992) argue that failure to implement adjustment in Kenya greatly reduced private investment, but this argument ignores the fact that it has not risen in many countries which **have** implemented adjustment.

¹⁹ The t-stat comparing policy regimes 0 and 1 for the restricted sample is 5.68.

Table 7 Before-versus-after comparisons of investment rate (per cent of GNP)

	Policy score		
	0	1	2
Angola	16.3	15.5	...
Bangladesh	13.9	12.7	14.5
Botswana	...	...	28.0
Cape Verde	...	40.4	35.3
Eritrea	...	12.5	23.5
Ethiopia	...	...	16.7
Guinea-Bissau	...	23.2	24.2
Kenya	...	23.0	20.5
Lao PDR	...	6.6	17.4
Mozambique	22.8	18.9	46.4
Namibia	...	15.1	20.6
Nicaragua	20.4	28.5	21.6
South Africa	...	23.4	16.4
Sri Lanka	...	25.7	24.3
Tanzania	...	23.2	20.0
Uganda	7.9	10.5	15.2
Vietnam	...	...	19.1
Zambia	14.5	...	14.9
Zimbabwe	...	22.1	17.7

... Data not available.

Thus, using more recent data than in previous studies, we get something of a positive picture, though since the results do not distinguish between strong and weak reformers the evidence is in favour of reforming away from a control-based regime, rather than indicating precisely the extent to which reforms should be fully market based. Moreover, concerns remain over the lack of a private sector response and the extent to which this may require public sector inputs.

3.5 External Account and Debt

Trade liberalisation measures encompass exchange rate liberalisation (usually devaluation), reform of the system of distributing foreign exchange, liberalisation of domestic factor markets, import liberalisation and moves from non-tariff restrictions towards tariffs. All these are designed to create incentives by improving the profitability of tradeables relative to non-tradeables, thus rewarding exporters and some measures penalising importers. Analysis of the external account is made difficult by the fact that reform efforts are often accompanied by an aid inflow, which necessarily worsens the current account. Nonetheless, we find a significant **improvement** in the current accounts of reforming countries compared to non-reformers

(Table 8).²⁰ These results suggest that there may have been some improvement in exports and this is indeed shown by data on export performance (Tables 2 and 9).

Table 8 Control group comparisons of current account deficit (as a per cent of GNP)

	Policy score		
	0	1	2
<i>Mean</i>			
Full sample	-12.6	-7.7	-8.8
Standard deviation	12.1	10.1	13.3
Number of observations	34	90	120
Excluding Angola and Mozambique	-14.0	-6.9	-7.0
Standard deviation	12.1	10.2	12.3
Number of observations	27	81	111
<i>Median</i>			
Full sample	-7.9	-5.5	-5.9
Excluding Angola and Mozambique	-8.8	-4.5	-4.6

Table 9 Before-versus-after real export growth under different policy stances

	Policy score		
	0	1	2
Angola	9.0	5.7	...
Bangladesh	11.8	16.8	14.2
Botswana	7.0	...	7.0
Cape Verde	7.0	2.1	9.4
Eritrea	...	...	...
Ethiopia	5.1	7.6	7.5
Guinea-Bissau	7.1	-6.7	18.0
India	8.6	6.1	13.0
Kenya	5.9	4.0	11.7
Lao PDR	...	...	...
Mozambique	5.1	-4.1	10.9
Namibia	3.0	2.2	3.8
Nicaragua	5.1	14.0	13.1
South Africa	2.6	1.6	3.9
Sri Lanka	8.0	6.5	8.7
Tanzania	...	...	...
Uganda	8.2	3.3	9.7
Vietnam	...	...	...
Zambia	-0.9	...	3.0
Zimbabwe	5.2	3.6	7.9
<i>All countries:</i>			
Mean	-0.6	4.6	9.2

... Data not available.

²⁰ The t-stat for comparing 1 to 0 is 2.00.

Analysis of average real export growth across the 20 countries since 1981 given in Table 9 shows that export growth performance is significantly stronger the greater the degree of reform across the sample as a whole. The t-statistic for the difference in means between 0 and 1 is 1.88 and that for 1 and 2 is 2.06. The country-specific comparisons of export growth in periods of non-reform with weak and strong reform, gives a slightly conflicting picture. For 10 of the countries (Cape Verde, Guinea-Bissau, India, Kenya, Mozambique, Namibia, South Africa, Sri Lanka, Uganda and Zimbabwe), export growth appears to be greater during periods of no reform than during weak reform, and strongest during strong implementation of reform (partly as scores of 1 often correspond to periods of crisis). Only Nicaragua and Ethiopia exhibit stronger export growth rates during periods of weak reform than when reform is absent, with growth rates between weak and strong reform periods remaining fairly even. Use of the exchange rate as a nominal anchor in Nicaragua from 1991 almost certainly led to overvaluation and subsequently hampered exports.

A main argument of this review is that the control regime resulted in bad performance, but while the evidence that market-based reform is the best alternative is scanty, this is not so in relation to export performance. Control group analyses - e.g. **Adjustment in Africa** (World Bank 1994) and Kirkpatrick and Weiss (1995) - find that countries engaging in macro-economic policy reform, and in particular trade liberalisation, experience faster growth in real exports. But these simple control-group analyses cannot in fact adequately control for other factors, and so the results cannot clearly demonstrate the positive impact of reforms. However, case studies also find positive effects. Husain and Faruqee (1994) report strong export growth in several case studies, despite declining terms of trade, and all but Burundi have achieved some success in diversification (Husain and Faruqee 1994: 5–6). On the other hand, Sahn *et al.* (1994: 375-6) find mixed results from case studies where reforms have been implemented; Ghana and Guinea are cited as successes, but Tanzania as less so.

On the other hand the picture is far less positive with respect to debt, the debt burden having increased in most countries. Large aid inflows have tended to increase the debt burden rather than reduce it; although bilateral aid is virtually all grant aid, the substantial inflows from the IFIs are not. Table 10 shows that the total debt burden has risen in all countries, except Nicaragua where very substantial debt relief has resulted in some reduction. Ddumba-Ssentamu *et al.*'s (1999: 35) study of the impact of Sida programme aid on Uganda argues that 'the conclusion of structural adjustment programmes with the IFIs led to a huge increase in external debt outstanding. It increased from US\$ 209 million in 1975 to US\$ 1,232 million in 1985, and then to US\$ 2,868 million in 1991. More than three quarters of current (1996) debt of Uganda is multilateral debt, to World Bank (IDA), IMF and other multilateral institutions, in particular, African Development Bank'.

3.6 Agricultural Supply Response

Economic performance at the sectoral level, particularly in agriculture and industry, is crucial to success of the economy in coping with changing economic circumstances brought about by macro-economic reform. There is also a gender aspect to this analysis since in many low-income countries, particularly in sub-Saharan Africa and parts of South Asia, women are responsible for the vast majority of agricultural labour. The

impact of adjustment policies on agriculture is therefore an issue of great importance for gender relations and a proper analysis and appreciation of gender relations should inform the design of agricultural policy.

Table 10 Total long-term debt (period average, US\$ billions)

	1980–84	1985–89	1990–94	1995–96
Angola	0.5	4.7	8.3	9.5
Bangladesh	4.4	8.6	13.3	15.4
Botswana	0.2	0.5	0.6	0.6
Cape Verde	0.1	0.1	0.1	0.2
Ethiopia	2.6	6.7	9.0	9.6
India	21.8	46.8	81.3	84.4
Kenya	2.6	4.3	5.9	6.2
Lao PDR	0.4	1.1	1.9	2.1
Mozambique	0.4	3.5	4.7	5.4
Nicaragua	2.8	6.3	9.2	6.8
Sri Lanka	1.8	3.9	5.9	7.0
Tanzania	2.5	4.5	5.9	6.2
Uganda	0.6	1.4	2.5	3.1
Vietnam	0.0	4.0	21.7	22.2
Zambia	2.4	4.0	4.9	5.2
Zimbabwe	1.2	2.2	3.2	3.8

Source: World Development Indicators

Historically, developing countries have tended to tax their agricultural sectors through trade and pricing policies, often to keep food prices low for the benefit of the urban population and to generate export tax revenue. Schiff and Valdes (1992) have shown that these policies resulted in a slowdown in agricultural sector growth and in overall economic growth, with industrial and macro-economic policies often having a greater impact than more direct, sector-specific measures.

Table 11 Average growth of real agricultural value added

	Policy score		
	0	1	2
Mean	2.8	2.7	3.0
Standard deviation	8.6	10.7	13.6
Number of observations	46	92	122
Median	3.4	3.1	2.9

One of the objectives behind adjustment is to reduce the level of indirect taxation of agriculture through trade liberalisation and removing price controls. The success or failure of orthodox adjustment programmes

could be said to hinge on the supply response of agriculture to adjustment measures given the significance of agriculture in these economies for exports, domestic food supply and hence for inflation. Measures such as currency devaluation, reduced export taxes and lower input prices (through reduced domestic industrial protection, although a countervailing effect can come from the removal of subsidies) have attempted to increase the relative prices and profitability of agricultural and other tradable goods.

Table 11 gives an analysis of average growth of real agricultural value added across the countries. From the results shown, it is evident that there is no significant difference in growth rates between non-reform, weak and strong reform periods. Looking at the country specific results in Table 12, Sri Lanka, South Africa, Mozambique, Kenya, India, Guinea Bissau and Cape Verde all exhibit strongest growth rates in real agricultural value added during periods of reform which are classified as weak. For Ethiopia, Uganda and Zambia, the stronger the reform implementation the greater the rate of growth. Zimbabwe, Vietnam and Namibia also have stronger growth with stronger reform but growth in agricultural value added is least during periods of weak reform. Table 13 classifies the countries according to the degree of agricultural supply response in the production of both export crops and those for domestic consumption.

With few exceptions, the supply responses of agriculture in the economies concerned appear to have been weak or limited to certain sub-sectors. An analysis of production and export figures suggests that there have been no significant across-the-board increases in agricultural production following periods of reform that can be attributed directly to the liberalisation process. There have been large increases in output in Uganda and Vietnam, though in the former case the extent to which this is policy related (rather than peace and weather related) is disputed. This does not suggest however, that there has been no improvement whatsoever in agricultural production since reform processes began.

Of the countries featured in the table, only Guinea-Bissau and Vietnam seem to have increased agricultural production in all their main crops. In the former case, self-sufficiency in food is one of the government's top priorities and over the last five years there have been modest increases in cereal and food production. There has been no increase in agricultural exports, however, and food imports more than doubled in value between 1995 and 1996 (EIU 1999a). Poor infrastructure and equipment have been identified as obstacles to increased productivity.

Supply response to reform in the remainder appears to be concentrated solely in the production of export crops, with varying degrees of success. Substantial increases in the production of export crops in some cases go hand-in-hand with complementary, sector-specific policies.

Ethiopia, for example, has had near-total deregulation of agricultural marketing and increased competition has improved farm-gate prices for grains and coffee. Nevertheless, revival of commercial agriculture, with the exception of coffee exports, has been slow and food insecurity is persistent. For Angola, however, where agricultural production had been devastated by war, even agricultural production in coffee, their main export crop, has seen little increase over the last 10 years despite price liberalisation, though rural access to credit is poor. Export earnings from agriculture also remain low in Eritrea even though the sector is the main source of income and employment for 70 per cent of the population. Production of the main food crops has been increasing: wheat and millet production has doubled between 1993 and 1997, barley

production has tripled over the same period (EIU 1999b). There has also been direct investment in horticultural projects.

Table 12 Before-versus-after comparisons of growth of real agricultural value added under different policy stances

	Policy score		
	0	1	2
Angola	-1.0	-1.9	...
Bangladesh	2.5	2.4	1.4
Botswana	1.8	...	1.8
Cape Verde	-4.7	2.0	-8.0
Eritrea	...	...	...
Ethiopia	1.8	1.8	9.0
Guinea-Bissau	5.6	6.0	3.9
India	3.4	3.6	2.9
Kenya	2.6	2.7	2.3
Lao PDR	...	...	...
Mozambique	4.1	6.1	3.1
Namibia	1.1	0.6	3.0
Nicaragua	1.2	-0.5	3.3
South Africa	3.1	3.7	2.4
Sri Lanka	2.3	2.7	1.8
Tanzania	...	...	...
Uganda	2.9	2.9	4.2
Vietnam	4.7	3.8	4.8
Zambia	4.1	...	6.3
Zimbabwe	5.3	3.2	8.7

... Data not available.

Expansion in cash crop production is most evident for Sri Lanka, Kenya and Zimbabwe although external factors above and beyond domestic economic reform have clearly been influential. Sri Lanka's tea output has increased and doubled in value since 1993 (EIU 1999c). Whilst this coincides with private management of the tea industry, world market conditions have been more favourable with increased demand from the Soviet market and overall a global fall in supplies. By contrast Sri Lanka's domestic agriculture is generally lacklustre, and inconsistent trade and pricing policies hamper growth. The value of tea production has also increased in Kenya, although production volume has actually fallen. Production fell from 257,000 tonnes in 1996 to 222,000 tonnes in 1997 yet the value of production in K£ actually increased from K£1m to K£1.18m. Horticulture is the best performer, with the liberalised trade regime making it possible to benefit from the high world price (EIU 1999d).

Table 13 Agricultural supply response

Country	Response
<i>Africa</i>	
Angola	None
Botswana	Weak, none in food crops but some in export crops (meat products, food and tobacco)
Cape Verde	Very weak
Eritrea	Weak, some in food crops
Ethiopia	Moderate to strong, with growth in coffee production
Guinea-Bissau	Weak, uneven in export crops
Kenya	Moderate to strong, notably tea and horticultural products
Mozambique	Moderate to strong response across range of crops (especially since end of war)
Namibia	Weak, none in cereals and uneven in livestock
South Africa	Weak, mainly in maize
Tanzania	Strong in food and some export crops (but not others)
Uganda	Strong, particularly in export crops (coffee, cotton, tobacco and horticultural) and less so for food crops
Zambia	None in main crop (maize), but some in tobacco and horticultural products
<i>Asia</i>	
Bangladesh	Moderate, becoming strong for some export crops in 1990s
India	None
Laos	Weak, none in main crop (rice), some in cotton and coffee
Sri Lanka	Mostly weak though improved in tea in 1990s
Vietnam	Strong across all regions and most crops
<i>Latin America</i>	
Nicaragua	Strong since 1993, particularly in export crops

Exchange rate devaluation coupled with improved research and development, extension services and marketing structures has increased the competitiveness of Zimbabwe's cotton sector, although the government protects the market for processors through price and market guarantees and tariff barriers. As trade is still not fully liberalised, especially for key agricultural products, expansion in tobacco, the most valuable crop and leading export, can largely be put down to increased land area in cultivation.

Women play a significant role in the agricultural sector in developing economies, particularly in African countries (Lensink 1996), where they tend to make up the majority in rural areas. Furthermore, female-headed households, which are more likely to occur in rural areas and which tend to be low-income, are often hit hardest by negative impacts of reform programmes (Rippenburg 1997; Kanji 1995). In the rural household, women generally have responsibility for the production of food crops, food processing and, to a lesser extent, cash crop production, as well as domestic chores such as cooking and childcare. Adjustment-led price reform and other liberalisation measures tend to lead to major changes in relative prices in favour

of export crops. They can also cause a shift in the amount of time spent by men and women in cultivating different types of crops, possibly increasing time spent overall on farming activities to the detriment of family responsibilities with knock-on effects on family health and nutrition (Beinefeld in Jamal 1995). Furthermore, gender divisions of labour can impede supply response to improved price signals.

3.7 De-Industrialisation? Manufacturing Performance under Adjustment

Pre-adjustment policies gave support to a heavily protected manufacturing sector, much of which was in state hands, through heavy tariffs, sometimes so high as to allow the firm a domestic monopoly, and both direct and implicit subsidies, such as receiving foreign exchange allocations at overvalued exchange rates. In general, state-owned firms faced a soft budget constraint.²¹

As adjustment is about achieving a more efficient allocation of resources, the process should entail moving resources out of such activities, i.e. a reduction of output and employment. So when is a contraction in manufacturing output ‘de-industrialisation’²² (which sounds like a bad thing) and when is it part of an efficient resource reallocation? For the purposes of this review, we analyse trends in manufacturing performance, though it will remain difficult from these results to say much about de-industrialisation as properly defined.

The results of the analysis are presented in Tables 14 and 15. Table 14 reports the simple mean and median values of manufacturing growth in the countries for which data are available using the classification by policy episodes described earlier. At first glance these results appear to lend support for the view that market-based reform in fact has a positive impact on manufacturing growth: for both the full sample and that excluding the conflict countries of Angola and Mozambique, both the mean and median increase the higher the policy score. Hence it would seem that any concerns about de-industrialisation are in fact ill grounded. In fact the picture is a bit more complicated than that, since there is no significant difference in mean growth comparing the means for 1 and 0, or comparing those for 2 and 1.²³ In the case of the median (which is the better measure for these data) then the values for policy scores 1 and 2 are virtually identical. On the other hand there is a significant difference in mean manufacturing growth comparing 2 with 0.

²¹ See, for example, Eriksson Skoog (1998) on Tanzania.

²² A number of authors have touched on the topic of de-industrialisation. Those finding it to exist including Lall (1995) and Stewart (1994) and those who do not, including Williams (1994) and the World Bank (1994) report **Adjustment in Africa**. Supporters of the de-industrialisation hypothesis identify the phenomenon simply with a fall in manufacturing output, whereas the World Bank (1995: 150) struggles for a more elaborate definition, which may be summarised as follows: a significant, non-temporary decline in output and employment which is not consistent with the efficient reallocation of resources, and thereby places the economy on a lower growth trajectory. Following the list of data requirements that come from this definition, **Adjustment in Africa** concludes that: ‘Time series for most of these indicators are not available, making it impossible to resolve the debate about de-industrialisation conclusively. But the data we have assembled from national accounts and from surveys of manufacturing firms do not support the hypothesis that structural adjustment programs have led to de-industrialisation in Africa’. (World Bank, 1994: 150).

²³ The t-stats for the full sample are 1.28 and 1.19, respectively, and those for the restricted sample 1.02 and 1.19.

Table 14 Control group comparison of policy impact on manufacturing growth

	Policy score		
	0	1	2
<i>Simple mean</i>			
Full sample	-0.1	2.5	4.4
Standard deviation	9.1	12.5	8.8
Number of observations	35	89	96
Excluding Angola and Mozambique	1.8	3.4	5.0
Standard deviation	5.9	8.9	8.7
Number of observations	29	78	86
<i>Median</i>			
Full sample	0.0	4.5	4.7
Excluding Angola and Mozambique	0.3	4.5	4.9

A more mixed picture emerges from the country-level before-versus-after analysis in Table 15:

- Countries with a positive message: Bangladesh (where growth has come from liberalisation permitting rapid growth in textiles, rather than successful restructuring of the old state-owned sector), Botswana (which has had a fairly liberal regime throughout the period and enjoyed sustained high growth), and Uganda (where there has been high growth across most of the sector, including clearly import-substituting ones). Sri Lanka may perhaps be added to this list, having had high growth throughout the period, which may be characterised by an increasingly liberal regime.
- Countries with a seemingly positive message, though care should be exercised in interpretation: there has also been growth in Mozambique, though this must also be attributed to the end of the war, and the high growth for Ethiopia is based on only two years. India has experienced good growth, but also did so before the 1991 liberalisation.²⁴
- Countries with no improvement or a worsening performance: in the case of Nicaragua there seems to be a large turnaround between 2 and 1 policy scores, but the former refers only to a couple of years during a deep economic crisis at the end of the 1980s. The poorest picture emerges from Zambia and Zimbabwe, which have seen very poor performance, with Cape Verde and Kenya being milder versions of this story.

²⁴ During the early years of reform, stabilisation brought recession, so that after a decade of rapid growth 1991–92 saw zero growth. This was particularly acute in manufacturing, which fell 1.8 per cent in 1991–92 and rose only 1 per cent in each of two following years (Guhan and Nagaraj 1995: 4).

Table 15 Before-versus-after comparisons of manufacturing growth under different policy scores

	Policy score			Change between regimes	
	0	1	2	2-1	2-0
Angola	-9.2	3.1	...	...	...
Bangladesh	1.0	4.2	6.8	2.5	5.8
Botswana	...	...	8.3	...	...
Cape Verde	...	3.8	1.5	-2.4	...
Ethiopia	1.9	-1.4	8.3	9.7	6.4
India	...	7.6	6.8	-0.8	...
Kenya	...	4.4	2.8	-1.6	...
Mozambique	-10.7	-16.1	-1.0	15.1	9.7
Namibia	...	3.2	3.5	0.3	...
Nicaragua	0.7	-13.6	0.8	14.4	0.1
South Africa	...	0.6	0.0	-0.6	...
Sri Lanka	...	6.0	8.1	2.1	...
Uganda	-1.1	9.6	12.7	3.1	13.8
Zambia	4.4	...	0.7	...	-3.7
Zimbabwe	...	2.2	-5.9	-8.1	...

Notes: Data for Mozambique refers to growth in industry; ... indicates not available or not applicable (no years for that country under that policy regime).

From this analysis we can conclude that it is clearly not the case that the domestic manufacturing sector collapses in the face of liberalisation. But we can also conclude that there is no necessary increase in manufacturing output. In several countries (Bangladesh, Botswana and Sri Lanka) growth has been partly based on the creation of new enterprises in more labour-intensive sectors rather than successful restructuring of existing enterprises, though there has been some of that in the Sri Lankan case. African countries seem not to have been able to follow the low-cost export route, given infrastructural constraints and the fact that labour is not that cheap (especially allowing for skill levels). But the Ugandan case shows that growth can continue, even in import-substituting sectors. Table 16 indicates that between 1987 and 1997 the index of total manufacturing production has increased by 63 per cent, with all branches reported showing increases of over 60 per cent with the exception of textiles and clothing, where production has fallen substantially.

This mixed picture is confirmed by the review of adjustment in Africa by Engberg-Pedersen *et al.* (1996), who also do not find a uniform picture of a sector in decline. They argue that impact has differed by branches, those with a local resource base doing better (which is hardly surprising given the impact of devaluation on cost structures), though there are exceptions (notably leather and textiles). They also point out that issues of concern to small enterprises have not generally been addressed in reform programmes, however the informal sector appears to be doing well.

Table 16 Index of manufacturing production by branch in Uganda (including coffee and cotton processing), 1987=100, and share of branch in total

	Share (%)	1989	1990	1991	1992	1993	1994	1995	1996
Food processing	21	154	175	227	246	246	310	362	414
Tobacco and beverages	26	144	155	176	155	171	228	309	371
Textiles and clothing	16	133	116	111	112	93	68	63	48
Leather and footwear	2	63	75	60	80	68	97	164	288
Timber and paper	9	169	184	198	221	251	300	383	563
Chemicals	12	163	184	193	252	340	383	512	510
Bricks and cement	4	109	154	163	203	261	249	367	640
Steel and products	5	99	108	149	191	259	390	491	481
Miscellaneous	4	204	181	251	272	381	487	599	628
Total	100	145	156	178	191	216	260	331	387

Source: Taken from Ddumba-Ssentamu *et al.* (1999).

The question is thus why some countries have been successful and others have not.

There are two views here. The first argues that success depends upon having a government that can restore investor confidence by being firmly committed to reform, establishing macro-economic stabilisation and carrying through liberalisation. Analysing the success of some liberalising countries suggests that the role of programme aid cannot be ignored, which has clearly been one factor in the Ugandan case. Access to these funds (which has, at least in the days of allocative schemes, benefited larger firms) will have raised capacity utilisation, although the evidence here is mixed.

But others, drawing on the East Asian experience, argue that an industrial strategy is required. They point to the potential efficiency from small-scale production and the need to develop technical capability; their argument is that policies should allow for a smoother transition from one structure to another by, for example, selective rather than blanket trade liberalisation and by a phased transition²⁵. In the Indian context, Guhan and Nagaraj (1995) argue that, whilst deregulation is to be welcomed, industrial controls had several objectives, such as regionally balanced development, that should not be wholly discarded.

Closer examination shows that countries such as Botswana and Sri Lanka have indeed had some semblance of an industrial strategy, and paid careful attention to issues such as effective protection and the use of protection as a tool for promoting industry.

²⁵ See Lall (1995).

4 LESSONS FOR THE DESIGN OF ADJUSTMENT POLICIES

Market-oriented policy reform has undoubtedly taken place in the 20 countries under consideration. Have these changes had beneficial effects on economic performance? For a very large number of indicators reviewed, performance has been better in reforming economies than non-reforming ones. Although there are shortcomings in both control-group and before-versus-after analysis, these results are both strong and consistent, suggesting that there is something going on here. But care must be exercised in deciding what that something is. In nearly all cases the improvement is found when comparing reformers with non-reformers, with no significant difference in the performance of weak and strong reformers. This finding is consistent with the view that there is a need to move away from excessive government control of the economy, but that once that has been done then full-scale liberalisation may not yield further benefits, or may not be the best way to promote long-run growth (about which we can still say little). The fastest growing economy in our sample, Vietnam, is probably the least liberalised in many respects. There are some grounds for thinking that some form of intervention may still be desirable. One reason is to ensure a good distribution of the benefits of growth. Another is the importance of market failures, which have been mentioned only in passing in this largely empirical review.

These findings are consistent with the newly emerging ‘post-Washington consensus’ and with the views recently expressed by two of the currently most influential economists writing on development issues. Rodrik has stated that:

Countries that have done well in the post-war period are those that have been able to formulate a domestic investment strategy to kick-start growth and those that have had the appropriate institutions to handle adverse external shocks, not those that have relied on reduced barriers to trade and capital flow. The evidence from the last two decades is quite clear: the countries that have grown the most rapidly since the mid-1970s are those that have invested a high share of GDP and maintained macro-economic stability ... Policy makers therefore have to focus on fundamentals of economic growth - investment, macro-economic stability, human resources and good governance - and not let international economic integration dominate their thinking on development (1999: 4).

Stiglitz has argued that:

... many of the most successful countries (representing the largest part of growth within the low income countries) have not actually followed the ‘recommended’ policies ... the Washington consensus failed (owing to) a failure to understand the subtleties of the market economy, to understand that private property and ‘getting the prices right’ (that is, liberalisation) are not sufficient to make a market work. An economy needs institutional structure ... Perhaps had (the East Asian) countries followed all the dictums of liberalisation and privatisation, they would have grown faster, but there is little evidence for that proposition (1998: 5, 9 and 10).

Our findings thus come in support of the view of two prominent development economists. It would be immodest of us to suggest these authors need our intellectual support. But at the policy level there has been at best slow movement in the direction they suggest. The argument continues over the appropriate balance between state and market, with the international community continuing to support a stronger orientation to the market alone than the evidence presented here suggests is desirable.

REFERENCES

- Barro R. J., 1997, **Determinants of Economic Growth: a cross-country empirical study**, Lionel Robbins Memorial Lecture, Cambridge, Mass: MIT Press
- Beinefeld, M., 1995, **Structural Adjustment and Tanzania's Peasantry: assessing the likely long-term impact**, pp88-130 in Jamal 1995
- Bhaduri, A. and Skarstein R., 1996, 'Short-Period Macro-economic Aspects of Foreign Aid', **Cambridge Journal of Economics**, Vol 20 No 2: 195-206
- Bryceson, D., 1999, 'African Rural Labour, Income Diversification and Livelihood Approaches: a long term development perspective', **Review of African Political Economy**, Vol 80: 171-89
- Bryceson, D., Kaye, C. and Mooij, J. (eds), 1999, **Disappearing Peasantries? Rural Labour in Africa, Asia and Latin America**, London: Intermediate Technology Publications
- Calamitsis, E., Basu, A. and Ghura, D., 1999, 'Adjustment and Growth in sub-Saharan Africa', **IMF Working Paper** WP/99/51, Washington DC: IMF
- Cornia, G. A and Helleiner, G. K., 1994, **Adjustment to Development in Africa: conflict, controversy, convergence, consensus?** United Nations Children's Fund
- Ddumba-Ssentamu, J., Dijkstra, G. and Donge, J. K. van, 1999, 'Swedish Programme Aid to Uganda; An Evaluation', **Global Evaluation of Swedish Programme Aid, Working Paper** No 5, Kampala: Makerere University / The Hague: ISS
- Dijkstra, A. G., 1999a, 'Debt, Dependence and Fragile Development. Programme Aid to Nicaragua', **Sida Evaluation** 99/17: 4, Stockholm: SIDA
- 1999b, 'Programme Aid, Policies and Politics: Programme Aid and Conditionality', **SIDA Evaluation** 99/17: 10, Stockholm: SIDA
- Easterly, W. and Levine, R., 1997, 'Africa's Growth Tragedy: Policies and Ethnic Divisions', **Quarterly Journal of Economics**, Vol CXII No 4: 1,203-50
- Easterly, W. and Rebelo, S., 1993, 'Fiscal Policy and Economic Growth: An Empirical Investigation', **Journal of Monetary Economics**, Vol 32 No 3: 417-58
- Economist Intelligence Unit, 1999a, **Country Profile Guinea-Bissau 1998/1999**, London: EIU
- 1999b, **Country Profile Eritrea, Somalia, Djibouti 1998/1999**, London: EIU
- 1999c, **Country Profile Sri Lanka 1998/1999**, London: EIU
- 1999d, **Country Profile Kenya 1998/1999**, London: EIU
- Engberg-Pedersen, P., Gibbon, P., Raikes, P. and Udholt, L. (eds), 1996, **Limits of Adjustment in Africa**, Oxford: James Currey / Portsmouth: Heinemann: 141-214
- Eriksson Skoog, G., 1998, **The Soft Budget Constraint: the emergence, persistence and logic of an institution. The case of Tanzania 1967-1992**, Stockholm: the Economic Research Institute, Stockholm School of Economics
- Goldstein, M. and Montiel, P., 1986, 'Evaluating Fund Stabilisation Programmes with multi-country data: some methodological pitfalls', **IMF Staff Papers**, Vol 32 No 2: 304-44

- Guhan, S. and Nagaraj, K., 1995, 'Adjustment, Employment and Equity in India', **Employment Papers** 4, Geneva: International Labour Office Employment Department
- Hanmer, L., Pyatt, G. and White, H., 1999, 'What do the World Bank's Poverty Assessments teach us about poverty in sub-Saharan Africa?', **Development and Change**, Vol 30 No 4: 795-823
- Harvey, C. (ed), 1996, **Constraints on the Success of Structural Adjustment Programmes in Africa**, Basingstoke: Macmillan
- Horton, S., Kanbur, R. and Mazumdar, D., 1994, **Labor markets in an Era of Adjustment**, Washington, D.C.: Economic Development Institute
- Husain, I. and Faruquee, R., 1994, 'Adjustment in Seven African countries', in I. Husain and R. Faruquee (eds), 1994, **Adjustment in Africa: lessons from country case studies**, Washington, D.C.: World Bank: 1-10
- Jamal, V., 1995, **Structural Adjustment and Rural Labour Markets in Africa**, London: Macmillan Press
- Kanji, N., 1995, 'Gender, Poverty and Economic Adjustment in Harare, Zimbabwe', **Environment and Urbanisation**, Vol 7 No 1: 37-54
- Killick, T., 1995, 'Structural Adjustment and Poverty Alleviation: an interpretative survey', **Development and Change**, Vol 26 No 2: 305-31
- 1999, 'Making Adjustment Work for the Poor', **ODI Poverty Briefing** No 5 May 1999, London: Overseas Development Institute
- Kirkpatrick, C. and Weiss, J., 1995, 'Trade Policy Reforms and Performance in Africa in the 1980s', **Journal of Modern African Studies**, Vol 33 No 2: 285-98
- Krishnan P., Selassie, T.G. and Dercon, S., 1998, **The Urban Labour Market During Structural Adjustment: Ethiopia 1990–1997**, DPS 98.17, Université Catholique de Louvain: Center for Economic Studies
- Lall, S., 1995, 'Structural Adjustment and African Industry', **World Development**, Vol 23 No 12: 2,019–31
- Lensink, R., 1996, **Structural Adjustment in Sub-Saharan Africa**, London: Longman
- Lensink, R. and White, H., 1999a, 'Assessing Aid: a manifesto for aid in the 21st Century', **Global Evaluation of Swedish Programme Aid Working Paper** No 15, Stockholm: SIDA
- 1999b, 'Is there an Aid Laffer Curve?', **CREDIT Research Paper** No 99/6, Nottingham: Centre for Research in Economic Development and International Trade, University of Nottingham
- Levin J., 1994, 'Kenya: two steps backwards and one step forward', **Swedish International Development Authority Planning Secretariat Macro-economic Studies** 47/94, Stockholm: SIDA
- Levine, R. and Zervos, S., 1993, 'What Have We Learned about Policy and Growth from Cross-Country Regressions?', **American Economic Review Papers and Proceedings**, Vol 83 No 2: 426-30
- Matin, K. and Wasow, B., 1992, 'Adjustment and Private Investment in Kenya', **IBRD Policy Research Working Papers** No 878, Washington DC: World Bank
- Mosley, P., Harrigan, J. and Toye, J., 1991, **Aid and Power: the World Bank and policy-based lending**, Vol I, London: Routledge
- Mosley, P., Subasat, T. and Weeks, J., 1995, 'Assessing Adjustment in Africa', **World Development**, Vol 23 No 9: 1,459-73

- Ojo, O. and Oshikoya, T., 1995, 'Determinants of Long-Run Growth: some African results', **Journal of African Economies**, Vol 4 No 2: 163-91
- Otani, I. and Villanueva, D., 1990, 'Long Term Growth in Developing Countries and its Determinants: an empirical analysis', **World Development**, Vol 18 No 6: 769-83
- Rippenburg, C., 1997, 'Women's Status and Cultural Expression: changing gender relations and structural adjustment in Zimbabwe', **Africa Today**, Vol 44 No 1: 33-50
- Rodrik D., 1999, 'The New Global Economy and Developing Countries: making openness work', **Overseas Development Council Policy Essay** No 24, Washington, D.C.: Johns Hopkins University Press for the Overseas Development Council
- Roemer, D., 1996, **Advanced Macro-economics**, New York: McGraw Hill
- Sahn, D., Dorosh, P. and Younger, S., 1994, 'Economic Reform in Africa: a foundation for poverty alleviation', **Cornell Food and Nutrition Policy Program Working Paper** No 72, Ithaca: Cornell Food and Nutrition Policy Program
- Sala-i-Martin, X., 1997, 'I Just Ran Two Million Regressions', **American Economic Review Papers and Proceedings**, Vol 87 No 2: 178-83
- Savvides, A., 1995, 'Economic Growth in Africa', **World Development**, Vol 23 No 3: 449-58
- Schiff, M. and Valdes, A., 1992, **The political economy of agricultural price intervention in Latin America**, San Francisco: International Center for Economic Growth ICS Press
- Sowa, N. and White, H., 1996, **An Evaluation of Netherlands Co-financing of World Bank Activities in Ghana 1983–1996**, The Hague: ISS / Accra: CEPA
- Stewart, F., 1994, 'Are Short-term Policies Consistent with Long-term Development Needs in Africa?' in Cornia and Helleiner (1994): 98-128
- Stiglitz, J., 1998, **Towards a New Paradigm for Development: strategies, policies and processes**, 1998 Prebisch Lecture, mimeo
- Toye, J., 1994, 'Structural Adjustment: context, assumptions, origin and diversity' in R. van der Hoeven and F. van der Kraaij, **Structural Adjustment and Beyond in sub-Saharan Africa**, London: James Currey Ltd
- van Donge, J. K. and Dijkstra, G., 1999, 'Development by Default: programme aid to Bangladesh', **SIDA Evaluation** 99/17: 1, Stockholm: SIDA
- van Donge, J. K. and White, H., 1999, 'Counting the Donors' Blessings: programme aid to Tanzania', **SIDA Evaluation** 99/17: 5, Stockholm: SIDA
- van Donge, J. K., White, H. and Le Xuan Nghia, 1999, 'Fostering High Income Growth: programme aid to Vietnam', **SIDA Evaluation** 99/17: 7, Stockholm: SIDA
- White, H., 1996a, 'The economic and social impact of adjustment in Africa: further empirical analysis', **ISS Working Paper**, The Hague: ISS
- 1996b, 'Adjustment in Africa - Review Article', **Development and Change**, Vol 27 No 4: 785-815
- 1997, 'Poverty and Adjustment in Sub-Saharan Africa: a review of the literature', report prepared for the evaluation of SPA, The Hague: ISS

- 1999a, 'Dollars, Dialogue and Development: an evaluation of Swedish programme aid', **SIDA Evaluation** 99/17, Stockholm: SIDA
- 1999b, 'Reform, Rehabilitation and Recovery: programme aid to Mozambique', **SIDA Evaluation** 99/17: 3, Stockholm: SIDA
- 1999c, 'A Black Sheep Among the Reformers: programme aid to Zambia', **SIDA Evaluation** 99/17: 8, Stockholm: SIDA
- 1998, **Aid and Macro-economic Performance: theory, empirical evidence and four country case studies**, Basingstoke: Macmillan
- White, H. and Leavy, J., 1999, 'The Impact of Adjustment Policies: programme aid and reforms', **SIDA Evaluation** 99/17: 11, Stockholm: SIDA
- White, H. and Leefmans, N., 1999, 'Supporting Success: programme aid to Cape Verde', **SIDA Evaluation** 99/17: 2, Stockholm: SIDA
- Williams, G., 1994, 'Why Structural Adjustment is Necessary and Why Doesn't it Work?', **Review of African Political Economy**, Vol 60 No 21: 214-25
- World Bank, 1994, **Adjustment in Africa: reforms, results and the road ahead**, Oxford: Oxford University Press, for the World Bank
- 1995, **Strengthening the Effectiveness of Aid: lessons for donors**, Washington, D.C.: World Bank
- World Bank World Development Indicators, 1999, CD-Rom, Washington, D.C.: World Bank