CATCH-UP A

Regional Integration in Southern Africa

BY CAROLYN JENKINS

Southern African countries are trying to create a free trade area by 2012 that could untie about 90 per cent of intra-regional trade. Such regional trade agreements may be fashionable, but how well do they work in promoting multi-country development, and especially in helping poorer countries 'catch up' with richer members of the group? A review of this experience is provided by Carolyn Jenkins of the Centre for the Study of African Economies, Oxford University.

REGIONALISM is not a new phenomenon in Africa. Indeed, the world's oldest customs union exists in Southern Africa, and the continent's list of both past and present multilateral economic agreements is probably longer than that of any other. Africa's record of creating and sustaining regional frameworks is generally poor, although some successful examples of regional cooperation do exist. Examples are the Southern African Customs Union (SACU), the Common (Rand) Monetary Area (CMA), and the CFA Franc Zone. It is interesting to note that each of these relatively successful initiatives

involves links with a more developed partner. In SACU and the CMA, the partner is South Africa, and the CFA franc was previously linked to the French franc and is now linked to the euro.

The presence of a more developed 'North' element in regional integration initiatives among developing countries should, in theory, trigger convergence processes, accelerating economic growth in poorer members. There are, however, political problems with the inevitable asymmetric pattern of trade. Moreover, the more developed members might require a different trade strategy from

those countries with which they are economically linked.

The focus of this article is the process of intra-regional trade liberalization in the Southern African Development Community (SADC). Some of the implications of a free trade area (FTA) are highlighted by comparing the extent of convergence within pre-FTA SADC with that which has occurred after many years of free trade within SACU. This gives an indication of the potential importance of this initiative. In addition, some of the possible barriers to continued economic cooperation are highlighted.

It is argued that, historically in Southern Africa, more rapid economic growth

bers' incentives to comply; implementation sometimes has not been feasible, as countries have overlapping and incompatible membership of different regional arrangements; and members have frequently substituted non-tariff barriers for tariffs against each other. Domestic economic policies have also undermined the effectiveness of African trade integration schemes. Moreover, the structure of demand and production is too similar across African countries to generate substantial trade creation.

Nevertheless, African policy makers continue to pursue broader economic cooperation as a potential solution to small markets and generally weak

Almost all regional trade initiatives in Africa have achieved very little, in spite of their political appeal.

has occurred in groups involving South Africa. For this reason, the creation of a FTA could be important for all members of SADC. However, it is not sufficient as a trade strategy, and should complement and not replace more general liberalization of trade with extra-regional partners.

REGIONALISM IN SOUTHERN AFRICA

Overlapping commitments

Almost all regional trade initiatives in Africa have achieved very little, in spite of their political appeal. Many schemes were designed without regard for memeconomies. Political interest in regionalism has received added impetus in recent years as a result of growing fears of African marginalization. The expansion of the EU to encompass Eastern European states and the increasing integration of the Americas, for example, have created the perception that Africa risks being left behind in the formation of regional economic blocs, with adverse consequences for trade and investment.

In Southern Africa, a range of integration initiatives are being pursued simultaneously. Fourteen countries are involved in SADC. In mid-1996 the (then twelve) members signed a trade protocol, which

SADC	COMESA	SACU	CMA	CBI
Angola	•			
Botswa	na			
DR Con	go ■			
Lesotho)		•	
Malawi =				
Mauritius ■				
Mozam	bique			
Namibi	a ■			
South Africa			•	observe
Swazila	nd =	•	•	
Tanzan	ia ∎			
Zambia				
Zimbak	owe			
Note:	SADC Counth are African Develor			
	SADC: Southern African Development Community COMESA: Community of Eastern and Southern Africa			
	SACU: Southern African Customs Union			
	CMA: Common (Rand) Monetary Area			
	CBI: Cross-Border Initiative			

committed them to phase out customs duties and other equivalent measures in the process of establishing a free trade area. In the end, two offers were tabled one relating to South Africa, and one 'differentiated' programme relating to all other members. Eleven signatories have been working towards implementation by 2012. The establishment of the free trade area is expected to mean the freeing of about 90 per cent of intra-regional trade, in line with the rules of the World Trade Organization, which state that 'free

trade' should cover 'substantially all' trade. SADC is not the only regional integration initiative in which Southern African countries currently participate (table 1). Many are members of the Community of Eastern and Southern Africa (COMESA); others are involved in the Cross-Border Initiative (CBI), a low-key cooperation effort. A small subset are involved in the long-standing SACU and the CMA. Tanzania belongs to the East African Community. Overlapping memberships of regional initiatives are common across Africa and provide a confusing picture of priorities. This is another reason why many of these initiatives have not been sustainable.

A process of realignment of trade initiatives has been underway for the past decade. In parallel with the SADC negotiations, the members of SACU were involved in sensitive renegotiation of the Customs Union agreement. South Africa signed a trade, development and cooperation agreement with the European Union, the climax of talks that commenced in 1995. All other members of SADC have non-reciprocal preferential access to the EU under the Lomé Convention, and are concerned about the trade-diverting effects of the agreement between South Africa-SACU and the EU. At the same time, a reappraisal of Lomé is prompting a general review of the trade relationships between the EU and its developing Lomé partners. In addition, SADC countries also have to think through their response to the new round of World Trade Organization-led negotiations, which commenced with the Doha meeting in 2001, to the offers made for US-SADC cooperation under the American-led African Growth and Opportunity Act, and to developments within Africa involving the Community of Eastern and Southern African States, the revived East African Community and the Cross-Border Initiative. (Fourteen countries participate in the intiative, which aims to facilitate cross-border activity by eliminating barriers to cross-border flows of goods, services, labour, and capital, as well as to integrate markets, without creating a new institution.)

The 'problem' of South Africa

SADC is, arguably, more likely than some other initiatives to provide the basis for successful economic cooperation due to the participation of South Africa, the continent's largest economy, which accounts for nearly one quarter of total African GDP. Part of the problem facing most African regional groupings is the lack of a large, more developed partner to provide both a significant regional market and a source of external capital and expertise, particularly in regionally integrated production processes. The involvement of South Africa — representing around 70 per cent of SADC's GDP — in SADC has alleviated this constraint to some extent by improving the potential for cross-border trade and investment with a relatively large and more developed neighbour. (It is not suggested that the relief of this constraint necessarily confers success: SADC is currently divided politically, as discussed below, while other regional groupings, notably COMESA and the new East African Community, are showing considerable political commitment to closer integration.)

South Africa's size relative to its neighbours has several important implications for regional trade. First, the relationship is asymmetric in that South

Africa is much more important to the region than the reverse. Second, South Africa runs, and will continue to run, a substantial trade surplus with its regional trading partners individually as well as collectively. The imbalance has widened considerably as South African penetration of the region has increased over the past decade, and the trend will continue regardless of whether a free trade area is established or not. Unilateral trade liberalization has given all exporters greater access to SADC markets. The reconstruction of Mozambique, funded by aid, creates opportunities that South Africa is well placed to meet. South Africa's semi-Lomé status means that inputs from South Africa now count as 'local content' in SADC exports to the EU. And South Africa's reintegration into Africa has improved its ability to receive and send trade delegations. The formation of a SADC free trade area will only magnify these trends.

Intra-regional trade (with the exception of mineral exports) is heavily oriented towards South Africa. With the exception of Botswana, the smaller members of the SADC trade very little in comparison with each other, but substantially with South Africa. Intra-SADC trade, excluding South Africa, is about 4 per cent of total SADC trade, while trade with South Africa is 25 per cent of total SADC trade. Even these proportions are understated, because they do not take into account informal trade.

South Africa's trade regime has exacerbated the difficulties faced by its neigh-

bours in gaining access to its significantly larger market. Although South African rates of effective protection are not particularly high for many goods, selectivity created a tariff structure characterized by large differences in tariff levels among and within sectors. Consequently, the moderate average level of protection in South Africa does not necessarily imply that the countries of the region have not faced a high tariff wall. Effective rates of protection have in fact been highest for those products that are or could be produced in the region (like earthenware, clothing, footwear, textiles, foodstuffs and wood products). In some of these industries, protection made penetration of the South African market without preferential access impossible. Moreover, South Africa has not hesitated to erect tariff barriers against neighbouring countries when their exports are seen to threaten South Africa's interests, even against countries within the SACU (car imports from Botswana in 1995) or in violation of a trade agreement (textile imports from Zimbabwe in 1992). These problems are now, in the main, being addressed, as South Africa has virtually eliminated quantitative restrictions and is reducing tariffs. Nervousness and suspicion are, however, harder to dispel.

Moreover, the trend of increasing South African penetration of the region does pose a threat to South Africa's competitors in Southern Africa, particularly Zimbabwe. Even during the sanctions era, South Africa's trade in the region grew faster than that of Zimbabwe. With the end of sanctions, South Africa's aggressive marketing in the rest of Africa means that regional competitors will have to better South African producers in terms of price, quality and reliability in order to win markets that may have been easier to gain during the 1980s.

It does not follow that South Africa will swamp regional markets. Regional competitors have some cost advantages over South Africa: cheaper labour; lower transport costs to countries to the north; and a better knowledge of local conditions, which reduces information costs. Obviously South African competition will most affect uncompetitive, inefficient or backward sectors, but some exporters in Botswana and Zimbabwe are competing effectively in SACU countries, where South Africa holds the advantage of proximity and an integrated goods market. Moreover, low investment ratios for an extended period mean that South Africa is hitting capacity constraints. Therefore, there are limits to the expansion of South African exports in the short to medium term.

Moreover, the asymmetry of the trade relationship between South Africa and its neighbours does not mean that the region is of no significance to South Africa. It is particularly important as a market for manufactured exports, which may be less competitive in European, American or Asian markets. These exports can compete in Africa because of proximity, which reduces delivery

times, and better access to parts and servicing technicians. Almost two-thirds of South Africa's manufactured exports are sold to other African countries, the range of exports being virtually as wide as the range of South African products. (The most important are invisibles [services], food, steel, domestic appliances, building materials and paper products.) For this reason, South African exporters are interested in the maintenance of trade links with the region, and South African policymakers are anxious that the FTA 'works.'

REGIONAL INTEGRATION AND ECONOMIC CONVERGENCE

The extent of convergence in Southern Africa

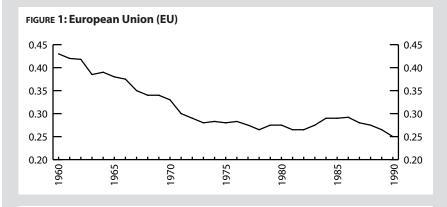
Regional trade liberalization enables members — especially the poorer ones — to reap some of the gains from trade via larger markets and improved efficiency, without exposure to non-regional competition. There is evidence that the poorer countries in regional trade groups catch up with (converge on) richer ones through the process of trade. The countries start with per capita income levels that vary widely from the average for the group, but this difference diminishes over time.

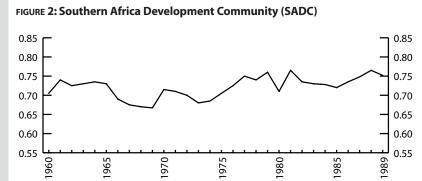
Consider the European Union for comparison purposes. Since the formation of the Common Market in the 1950s, the *per capita* incomes of EU members have come closer to each other; there is now more convergence and less divergence

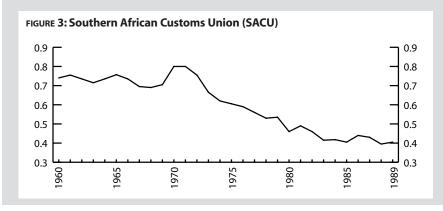
BOX 1: CONVERGENCE AMONG COUNTRIES IN REGIONAL GROUPS, 1960-1990

FIGURES 1 to 3: Convergence in per capita income

Downward sloping lines show that the economic divergence among member states decreases over time in EU and SACU (as measured by the standard deviation of the log of their per capita incomes).



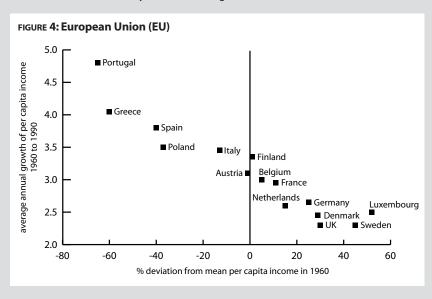


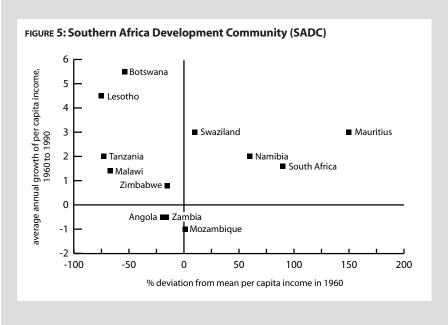


BOX 1: continued

FIGURES 4 and 5: Relationship between per capita income in 1960 and subsequent growth to 1990

When countries that are initially poorest grow faster than the richer ones, 'catching up' with richer economies, they stand closer together on the chart.





among them. As shown by the downward sloping line in figure 1, the difference between them almost halved between 1960 and 1990. There was some interruption to this trend in 1982-83, when a degree of divergence occurred, but it was subsequently reversed.

The calculations for SADC members are plotted in figure 2. In contrast to the convergence evident in the data for EU the 1960s, it dropped steadily in the 1970s and 1980s. The result of this downward trend was that the dispersion at the end of the period was little more than half what it had been at the beginning - a degree of convergence that slightly exceeds that evident in the EU countries over the same period. Note that neither the oil price shocks of the 1970s nor the gold price shock of 1980 — both of which

Poorer countries in regional trade groups tend to catch up with richer ones through the process of trade.

countries, as shown by reduced divergence in their per capita incomes, the pattern for SADC countries is essentially flat, indicating that no convergence in per capita incomes has occurred over the 30-year period. Indeed, the degree of dispersion was marginally higher at the end of the period than at the beginning, suggesting that the countries have, if anything, diverged slightly. The absence of convergence among the SADC countries may be due to several factors, including different responses to the oil and exchange-rate shocks of the 1970s, different problems with indebtedness, and the uniquely domestic policy issues that have promoted or slowed growth.

If, however, the sub-sample of five SACU member countries is examined separately, as shown in Figure 3, a strikingly different pattern emerges. Although the intra-SACU dispersion of per capita incomes held roughly constant through would have had asymmetric effects on the SACU countries — caused any significant interruption to this pattern.

Another measure of convergence charts the average growth rate of each country's GDP over a period and plots where the resulting per capita income of each country stands in relation to the mean per capita income of all members of the group. When countries that are initially poorest grow faster than the richer ones, 'catching up' with richer economies, they stand closer together on the chart.

Time-averaged growth rates for the period 1960-1990 for members of the EU (figure 4) and SADC (figure 5) are plotted against initial (1960) GDP per capita relative to the regional average. Again as a point of comparison, in 1960, the poorest country in Europe in per capita income terms was Portugal, whose income per head was 64 per cent below the European average in 1960. During the next 30 years, it grew by an average of 4.8 per cent in real terms annually — the highest rate for all EU countries. By 1990, Portugal was still the poorest country, but its per capita income was only 50 per cent lower than the European average. On the other hand, Britain and Sweden, with per capita incomes of 30 and 45 per cent above the average respectively in 1960, grew most slowly over the decade.

Figure 5 shows that, using this second measure, there is no pattern of convergence among Southern African economies over the period. Almost all of the below-average economies in per capita income terms had below-average growth rates over the period, while Mauritius began best-off in 1960 and experienced growth in real per capita income of, on average, 3 per cent each year for 30 years.

However, if one looks at the subset of SACU countries, there is again a very clear trend of convergence, with initially low-income Botswana and Lesotho converging on Swaziland, Namibia and South Africa, but diverging from Malawi and Tanzania, which began with similar levels of per capita income.

Both measures of convergence demonstrate that SADC countries have, if anything, diverged over the 30 years between 1960 and 1990. This implies that the relatively rich have been getting richer, while the poor have been getting poorer. It should be noted that there is *no reason* to expect that the SADC countries should have converged, as free trade in the com-

munity is a very recent ideal. However, within the customs union, movements of goods have been free for most of the century and smaller members have grown rapidly, particularly since the early 1970s.

The possible reasons for convergence in SACU include (i) free trade between members, (ii) transfers from South Africa to other members under an enhanced customs revenue formula, (iii) the existence of a currency union (Botswana is not a member of the Common Monetary Area, but the pula tracks the rand), (iv) similar (comparatively conservative) macroeconomic policies; or (v) countryspecific factors that have little to do with regional arrangements. These explanations are not mutually exclusive: cases (ii) to (v) do not rule out the importance of international trade in driving convergence in SACU. Although this evidence is not conclusive, it seems likely that access to the South African market has allowed smaller members to escape the limitations imposed by small domestic markets, and this trend is at least consistent with that of other regions, both developed and developing.

The potential benefits of the foreign trade area

The existence of one convergence club in Southern Africa provides some grounds for optimism that 'catch-up' convergence could also occur in a more closely integrated SADC. Smaller members of SADC stand to gain from regional integration in a variety of ways.

- South Africa is more than three times the size of the *sum* of the economies of the other SADC members, each of which therefore stands to increase their export markets substantially, with the potential for reaping economies of scale in domestic production.
- While exposure to South African competition will inevitably eliminate some production, more efficient firms will improve productivity and output, and diversification into products for the comparatively large South African market can be expected.
- Exposure to South African competition will help prepare smaller countries for greater integration into the world economy, by enhancing both quality and productivity and thereby competitiveness.
- Countries undergoing donor-funded structural adjustment programmes will find the credibility of their trade liberalization enhanced, because the policy lock-in mechanism of a regional FTA should be more effective than liberalization under structural adjustment has proved to be. If SADC develops an effective enforcement procedure, the costs of reversal of the SADC process could be high for a defaulting member, making it more likely that policy changes will be sustained.
- Outward investment from South

- Africa will both increase resources (access to savings and foreign exchange) and provide opportunities for technology transfers and better integration with South Africa's more sophisticated financial markets.
- Greater two-way trade together with foreign (mainly South African) investment should generate industrial development and help diversify production into non-traditional exports.

South Africa also stands to benefit from the regional free trade area:

- There should be some market expansion, particularly for manufactured output, with two caveats: First, in aggregate the SADC market is considerably smaller than South Africa's total (formal) domestic market; and second, market penetration by South African exporters will probably occur anyway, even without a SADC FTA.
- The FTA will increase opportunities for profitable cross-border investment, not least by improving the flow of information.
- South African investment in the region will generate additional demand for South African goods, with second-round growth effects for existing firms.
- Slower inward cross-border migration should occur if the neighbours are expanding their economic and especially industrial

— capacity. Higher rates of economic growth from increased trade and greater investment should create jobs in the smaller countries, some of which are exporting labour both legally and illegally to South Africa.

Regional trade liberalization is not in itself a solution to creating economic growth in the region. There are three important points that need to be considered. The first is that South Africa should not be tied to the region at the expense of pursuing wider economic opportunities; second, that regional integration should be viewed as a first step in the process of wider trade integration; and finally, SADC governments need to adopt macro and microeconomic policies that are consistent with promoting trade and investment.

Regional integration will not be enough for South Africa

One of the implications of the notion of convergence clubs is that there may be limits on how much growth performance can be enhanced via regional arrangements. 'Catch-up' implies that the benefits in terms of economic growth are greater the lower the initial level of income. In other words, the richest member is constrained in the extent to which economic growth can be accelerated by the forces driving catch-up. This suggests that, if South Africa is to improve its own growth performance, it will need to look beyond the region.

Securing higher future rates of economic growth in South Africa and in the region as a whole requires that South Africa expand its trade agreements beyond that with SADC. There are three reasons for this.

First, South Africa does not reap significant dynamic gains from regional trade. On average, it has superior technology, is the source of most of the region's investment, gains no enhanced credibility, and has limited opportunities to reap economies of scale.

Second, many of the non-SACU members of SADC are instinctively protectionist, and regional integration is seen by some of them as an *alternative* to unilateral liberalization. A frequently raised motivation for regional integration in Africa is a lowering of dependence on OECD economies. In this way, their agenda is different from that of South Africa (and the other SACU members), which has embarked on a process of closer integration into the world economy via unilateral liberalization under its WTO agreement.

Finally, South Africa needs to be in a position where it will have the opportunity to converge on both high-income and fast-growing economies, and it should look to establish a network of reciprocal free trade agreements with partners such as the EU, NAFTA, East Asia and possibly Australasia. It is in the interests of SADC as a whole for the dominant partner to accelerate its growth through expanding trade with the rest of the world.

BARRIERS TO REGIONAL INTEGRATION

In spite of the potential benefits, there are several reasons why regional integration may not be sustainable in Southern Africa.

First, there are considerable political tensions in SADC. Domestic conflicts may undermine progress towards the formation of the free trade agreement. For example, hostilities in Angola and the Democratic Republic of Congo, as well as Zimbabwe's economic decline, have disrupted their compliance with the free trade agreement. Foreign-policy tensions surfaced during 1998 following the intervention by some member states in the war in the Democratic Republic of Congo, and there is internal friction over the crisis in Zimbabwe. Underlying many of these tensions in Southern Africa is a fear of the dominance of South Africa. There is a clear need for South Africa to be seen to be taking the concerns of its smaller neighbours seriously. South Africa has shown some willingness to make concessions — such as opening its markets to regional partners more rapidly than called for as part of the proposed SADC free trade agreement and accepting in principle a SACU secretariat. But South Africa does still demonstrate a tendency to assume regional leadership. It has yet to be seen whether the asymmetric phasein of the SADC free trade agreement. will be enough to allay fears of polarization of industry in South Africa as a result of integration. If it is not, and if the current climate of suspicion of South African intentions is not improved, then the development of regionalism may not be sustainable in Southern Africa.

Second, there are economic obstacles to regional trade integration. International experience shows that inconsistencies between the macroeconomic policy package and the trade regime tend to undermine trade liberalization, whether regional or unilateral. In at least half of SADC members, the macroeconomic position is incompatible with freeing trade. For example, if the government deficit is large, investment in export capacity is restricted, either because the private sector is crowded out of access to domestic savings or because higher interest rates raise both the direct cost and the risk of investment. To avoid this, governments may borrow offshore, but this adds to the external debt burden. Moreover, an appropriate exchange rate policy is of crucial importance in supporting trade liberalization initiatives. Any removal of trade restrictions must be accompanied by currency depreciation to provide some protection for domestic producers. If the domestic exchange rate is overvalued either because the government has large international debt obligations and will not devalue, or because price inflation is higher than the rate of currency depreciation — then there will be a reluctance to invest in the production of processed exports. Large budget deficits and/or an overvalued currency are therefore incompatible with trade liberalization.

Third, there are structural impediments to regional integration. The most serious of these is the transport network. Since its inception SADC has given priority to investment in transport and communications, recognizing that the efficient movement of people, goods and services is the key to successful regional cooperation and integration. Despite its efforts, however, transport and communications problems still represent a major non-tariff barrier affecting in particular the competitive position of the smaller landlocked countries.

CONCLUSION

Regional trade agreements are fashionable. Although many developing countries are, or are likely to become, involved in negotiating such arrangements, it is still not clear whether they advance or retard multilateralist and developmental objectives. Economic analysis cannot supply a definitive answer, partly because of the great variety of trade agreements,

Even if Southern African countries succeed in reaching an agreement that contains all of these ideals, there is a possibility that regional integration could still founder on political conflict — a point that has been repeated at several points in this article. There is potential for the meaningful cooperation that currently exists in SACU/CMA to be extended to other countries in the region. The question is whether such cooperation can be made sustainable. It is important that the underlying political tensions in the region are addressed so that they do not become a destabilizing factor in the process of integration.

The SADC community as a whole needs to adopt an outward-looking focus rather than a narrow regional view. For South Africa, this is particularly important for accelerating its own economic growth. Regionalism in Southern Africa should be seen as a step towards increased participation in the global economy. In particular, the SADC free trade agree-

Regionalism in Southern Africa should be seen as a step towards increased participation in the global economy.

but it can identify the key questions to be asked of any proposal. Agreements that liberalize a high proportion of participants' trade, extend the boundaries of trade policy in ways that are compatible with multilateral accords, and ease barriers vis á vis nonmembers are generally to be preferred to those that do not.

ment could become a means for pursuing trade agreements with a range of developed and developing regions.

Finally, coordination of supplementary activities, many of which are within existing institutional divisions of SADC, will be of increasing importance as the region becomes more integrated. Regional

cooperation across a wide range of sectors, like transport and communications, macroeconomic policy and extra-regional trade negotiations, could contribute to creating consistent policy frameworks for increasing trade and cross-border investment. South Africa's role is important, but much of the responsibility in this area will ultimately lie in the hands of the domestic governments themselves.

REFERENCES

- The section on convergence measures draws on Jenkins, C. and L. Thomas (1997), 'Is Southern African ready for regional monetary integration: convergence, divergence and macroeconomic policy in SADC', Research Paper No.10, Centre for Research into Economics and Finance in Southern Africa, London School of Economics. Data are from the Penn World Tables, Mark 5.6.
- Discussion of reasons for the failure of African regional integration initiatives draws on: Berg, E. (1988), Regionalism and Economic Development in Sub-Saharan Africa, USAID. Collier, P. and J. Gunning (1996), 'Trade liberalisation and the composition of investment: Theory and an African application', WPS/96-4, Centre for the Study of African Economies, University of Oxford. Decaluwé, B., D. Njinkey and L. Bela (1995), 'UDEAC case study', presented at the AERC workshop on Regional Integration

and Trade Liberalisation, Harare. De Melo, J. A. Panagariya and D. Rodrik

- (1993), 'The new regionalism: a country perspective', in J. de Melo and A. Panagariya (eds), New Dimensions in Regional Integration, Cambridge University Press.
- Dowrick, S. and D. Nguyen (1989), 'OECD comparative economic growth 1950-1985: Catch-up and convergence', American Economic Review, 79(5), pp.1010-1030.
- El Badawi, I. (1995), 'The impact of regional trade/monetary integration schemes on intra-sub-Saharan African trade', presented at the AERC workshop on Regional Integration and Trade Liberalisation, Harare.
- Fine, I. and S. Yeo (1994), 'Regional integration in Sub-Saharan Africa: Dead end or fresh start?' mimeo, African Economic Research Consortium.
- Evidence for 'convergence clubs' is found, for example, by:
 - Barro, R. and X. Sala-I-Martin (1991), 'Convergence across states and regions', Brookings Papers on Economic Activity, 1:1991, The Brookings Institution, pp.107-158.
 - Ben-David, D. (1995), 'Trade and convergence among countries', CEPR Discussion Paper Series 1126, February.
 - Dowrick, S.and D. Nguyen (1989), 'OECD comparative economic growth 1950-1985: Catch-up and convergence', American Economic Review, 79(5), pp.1010-1030.