

Economic Integration in Southern Africa – a Risk of Strong Polarisation Effects or a Chance for Joint Development?

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Abstract

Despite negative experiences with regional integration in sub-Saharan Africa the SADC members announced in August 1996 to make the entire region a free trade area in the next eight years. This article evaluates the opportunity and threats of SADC in order to answer the question whether this integration will lead to strong polarisation effects or an opportunity for joint development in the region. It becomes clear that neither generalisations on welfare gains of regional integration nor generalisations on the distribution of the gains from integration are possible. However a clear tendency for mutual economic benefits of SADC can be deduced. (JEL Classifications: F15, O14)

I. Introduction

In 1992 a new attempt at a regional integration in Southern Africa was started with the foundation of the Southern African Development *Community* (SADC) by Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia,

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Swaziland, Tanzania, Zambia and Zimbabwe evolving from the former Southern African Development Coordination *Conference* (SADCC). South Africa and Mauritius joined the SADC later, now making it a twelve member community. Major objectives are to achieve development and economic growth, alleviate poverty, enhance the standard of living and quality of life of the peoples of Southern Africa, evolve common political values; systems and institutions and achieve complementarity between national and regional strategies and programmes (Madonsela [1996]). A stated aim of SADC, affirmed in August 1996, is to make the entire region a free trade area in the next eight years. It is generally expected that this regional integration will enhance economic welfare due to gains from trade (Leistner [1995]).

The aim of this article is to evaluate the opportunities and threats of SADC in order to answer the question whether this integration will lead to strong polarisation effects or an opportunity for joint development.

Section II will discuss the influences impeding the effects of regional integration. Section III then analyses into more detail the distribution of gains from trade. A conclusion is given in Section IV.

II. Influences Impeding the Effects of Regional Integration

According to many economists the successful implementation of a regional integration may be disturbed by four main obstacles:

(1) unfavourable trade patterns of the member countries mainly based on raw material exports, which allow only limited room for gains from regional integration,

(2) high percentage of government revenue out of customs duties in many member countries makes tariffs reduction difficult,

(3) a country's unwillingness to sacrifice sovereignty as a precondition for any multilateral agreement, combined with wide ideological disagreement on economic policy and

(4) strong inequality in the level of development within the region, which tends to bias the distribution of the gains from trade towards the bigger partner.

What is the significance of these obstacles within SADC?

(1) All countries of the SADC-region are producing and exporting raw

materials that are not mostly traded among each other but are exported to the developed economies, where they seldom face tariff problems. Almost 80% of intraregional trade is already free but the remaining 20% includes "sensible" products which are of major interests to the countries, like textiles, sugar or automotives. In these fields there is still a large potential for trade creation through tariffs reduction – there is room for gains from a SADC.

(2) A major problem within regional integrations among developing countries is the loss in government revenues from import duties. Customs duties generally account for 20-30% of government revenue in the SADC countries (Leistner [1996]). This is especially important inside the Southern African Customs Union (SACU) founded by South Africa, Lesotho, Swaziland, Botswana and Namibia in 1969 with antecedents going back to the nineteenth century. Goods move freely between members with a common tariff on goods imported from outside. The duties are paid into a common pool administered by the South African Reserve Bank. Revenues are paid out annually in proportion to the value of members' imports and their production and consumption of dutiable goods. As the budgets of several member countries rely heavily on their share of customs income, any significant cuts in import duties would have to be factored into a new agreement (McCarthy [1994b]).

Even if there is a low level of intraregional trade in SADC (5% of recorded trade, Leistner [1996]) a high share of total customs duties on government revenues make the individual country very inflexible in trade negotiations. There is especially the danger of a purely inward oriented regional integration with high external tariffs towards non-SADC countries. Inward-orientation is a major reason for the failure of many regional agreements in Africa or South America. Only if regionalisation is conducted with an orientation towards world markets in the form of an attempt to agree on trade-policy measures with both developing policy and world-market oriented objectives simultaneously, can regional integration agreements be expected to contribute towards an expansion of the industrial production and industrial exports in the countries involved. Therefore a reform of the taxation system to generate revenues is a major prerequisite for regional integration in Southern Africa. In this area tremendous structure and institution building

in every SADC member country is necessary as well as realistic phase-in periods to enable the governments to gradually change their public finance system. This effort however is quite independent of the SADC because it is one main target of the structural adjustment programmes of the IMF and the World Bank in sub-Saharan Africa (The World Bank [1994]). It should be clear that adjustment programmes are the alternative to the SADC.

(3) Regionalisation trends since the beginning of the nineties have been or soon will be directed towards a greater participation in the world market, by means of the creation of an attractive internal market, no longer cut off from events on the world market (Rubio [1991]). The globalisation of markets and the internationalisation of production have further led to a transition from national to „international economies“ whose behaviour influences other countries and which are themselves influenced by other countries, so that national arguments become increasingly irrelevant. Nevertheless – like anywhere else in the world – there is a big problem due to countries' unwillingness to sacrifice policy sovereignty to a regional institution.

The problem is twofold. For RSA as the dominating economy in the region the formation of SADC will reduce its sovereignty in exchange for economic progress, *e.g.* industry exports or the medium to long term reduction of illegal migration. Here RSA will have to take a political decision based on a value judgement of long term regional perspectives and short term national interests (Odén [1996b]). For the other SADC states the opposite is true. With regional integration the degree of responsibility for their own respective country will be enhanced because the alternative – constantly relying on IMF and World Bank and others' donor capital with their conditionality – can be reduced.

(4) Generally regional integration concentrates on the creation of trade. The trade-creation effect is one of the non-monetary effects of regional integration and leads to increased trade between the participating countries, due to the reduction of customs duties. As a result the economies of these countries will be stimulated and hence their economic growth. This positive integration effect, which is based on the most efficient utilisation of the resources available in the participating countries, stands in contrast to the trade diversion effect. This arises because competitive products from third countries, which are not party to the regional integration, are replaced by

less competitive products (mean the *same* products at higher prices) from the participating countries, which are cheaper because of the reduction in tariffs. From a purely theoretical point of view, therefore the whole theory of regional integration belongs to the theory of *second best*. Thus, a movement towards one condition for Pareto optimality by reducing tariffs on imports from one source *may* not be welfare improving unless other conditions are fulfilled, which they are not when tariffs remain on non-preferred (third-countries) imports (Lipsey and Lancaster [1956/57]). This is the reason why generalisations on welfare gains from regional integration are hard to make thus opening up the field on non-economic motivation for or against regional integration (Pomfret [1986]).

The traditional argumentation indicates that the liberalisation of trade tends to polarise regional development in the more advanced partner countries (Leistner [1996]). Initial regional disparities are thus perpetuated by a cumulative process and industrial growth tends to gravitate towards the economically more advanced countries (McCarthy [1994a]).

Section III will therefore further analyse the distribution of gains from trade as an issue of paramount importance for the implementation of the regional trade agreement.

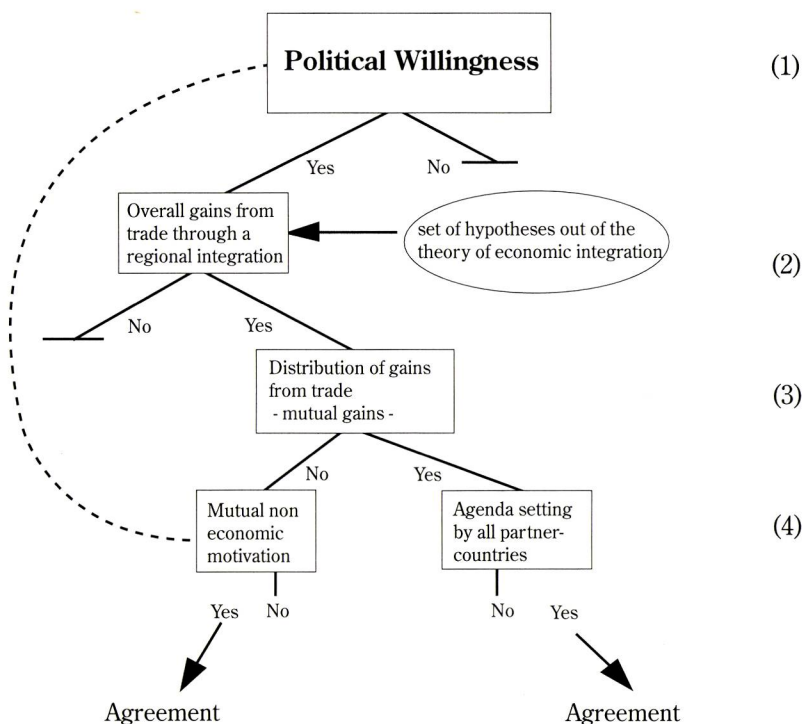
III. Distribution of Gains from Trade

As Krugman has noted a full analysis of the costs and benefits of regional trade agreements requires not only a strong theoretical base but also an analysis of the bargaining process in the trade negotiations (Krugman [1991]). A decision tree of a bargaining process in trade negotiation contains 4 steps (Figure 1). The first decision is centered around the political will towards substantial regional integration. If this hurdle is taken, the question then arises of the overall gains from trade through regional integration. After a positive answer the distribution of the gains among the partner countries is the next issue to negotiate. If mutual gains can be expected the agenda setting is the last decision to take.

The distribution of gains from trade is in the center of the SADC discussion therefore this paper concentrates on the step (3) in Figure 1.

The analysis of the distribution of the gains from trade is easiest done in a

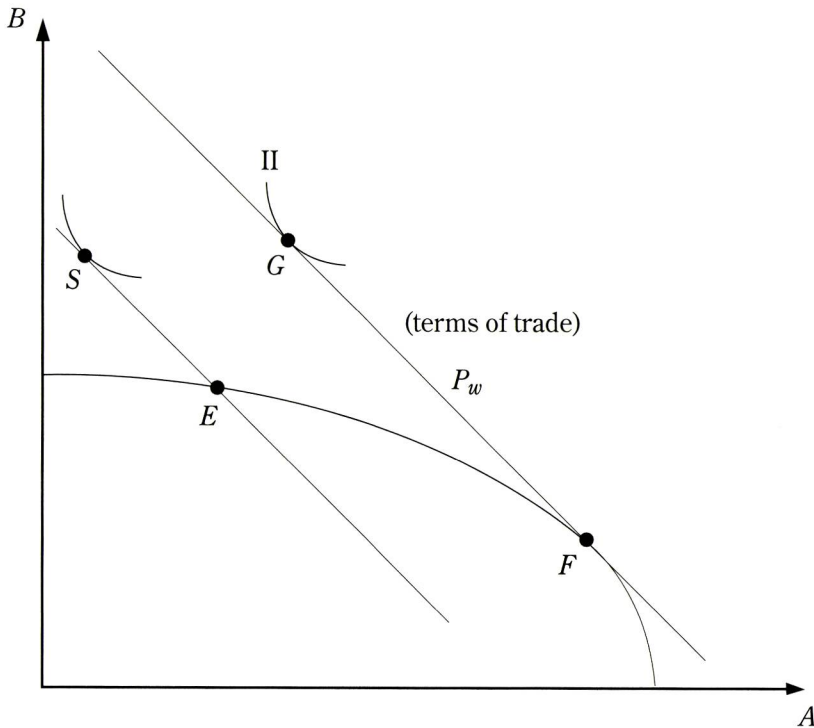
Figure 1
Bargaining Process in Trade Negotiations



simple trade model (Figure 2). The starting point is the equilibrium E in isolation. As nation 1 specialises in the production of commodity A and moves down its production frontier, it incurs increasing opportunity costs in the production of A as is reflected in the increasing slope of its production frontier. For nation 2 the same effect will take place with commodity B . The process of specialisation in production continues until relative commodity prices P_A and P_B become equal in the two nations. The gains from trade can be broken down into two components: the gains from exchange and the gains from specialisation, which is shown for nation 1 in Figure 2.

On the assumption that nation 1 could not specialise in the production of A with the opening of trade but continues to produce at point E , nation 1 could export commodity A and import commodity B at the prevailing relative world price of P_W , which leads to a consumption at point S on indifference curve I . The movement from point E to point S in consumption mea-

Figure 2
Gains from Trade in the Traditional Static Model



Source: Salvatore, 1995.

asures the *gains from exchange*. If subsequently nation 1 also specialises in the production of A and produces at point F , it could then trade and consume at point G on indifference curve II . The movement from S to G in consumption measures the *gains from specialisation* in production.

The common price P_w (line $G-F$) defines the *terms of trade* between the two economies. They indicate the terms on which each economy can acquire imports from the other. In Figure 2, an increase in the relative price of commodity A , making GF steeper, would improve the terms of trade of nation 1 and worsen the terms of trade of nation 2. As the terms of trade determine the distribution of the gains from trade (Kenen [1989]), the consumer in both nations would still gain from trade, but the consumer of nation 1 would gain more than the consumer of nation 2. This leads to the conclusion that the gains from trade are divided according to the relation of the terms of trade. Assuming a persistence of a negative terms of trade evo-

lution for developing countries according the Prebisch-Singer thesis and extending this thesis to all unequal economic environments, a bias of the gains from trade towards the more developed countries can be expected.

To evaluate the distribution of gains from trade in SADC in this statical model only intraregional trade is relevant which is low, accounting for less than 5% of recorded trade (Leistner [1996]).

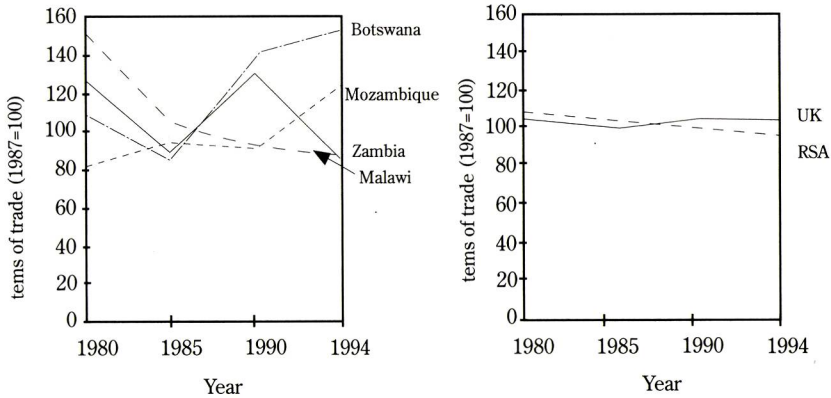
Figure 3 shows the development of the terms of trade of selected smaller SADC members in comparison to the terms of trade of South Africa and the United Kingdom as a reference group.

There is no clear trend in the development of the terms of trade over time. While the smaller SADC countries demonstrate a rather erratic development, the United Kingdom shows a rather stagnant development and South Africa's terms of trade are falling slightly. In a broad survey of the adjustment efforts in sub-Saharan Africa for 27 countries an average annualised change in external income due to changes in the terms of trade of -0.4% was detected for the 1981-1991 period (The World Bank [1994]).

Whereas the trade structure of the smaller SADC members is more or less similar in their total trade and their intraregional trade, South Africa has the traditional trade structure of a developing country in its total trade but in intraregional trade it is similar to a developed country. Inside SADC South Africa runs a high trade surplus based on the exports of industrialized goods. But altogether there is no clear indication of the relevance of the argumentation of a bias in the distribution of the gains from trade due to negative terms of trade effects – especially not with a constant deterioration of the South African Rand, which negatively affects the quality of the indicator terms of trade.

Additionally, a statical indicator – only appropriate to characterize comparative statical situations – does not seem to be methodologically adequate to assess a dynamic development process. Another way to analyse the distribution of gains from trade is the more dynamically oriented cumulative causation model. The argumentation is mainly based on core-periphery models, which were developed to explain the economic transactions between the northern hemisphere as the core and the southern hemisphere as the periphery (Myrdal [1957]: chap. 3). The mechanism of differences in size between economies and level of development can also be used within a

Figure 3
Development of the Terms of Trade in Selected Countries



Source: Statistisches Bundesamt, 1993; Weltbank, 1996.

region (*e.g.* SADC) as well as within a country (Eastern Cape – Witwatersrand). These models suggest that within a region the growth inducing trickle-down effects of trade are small compared with the negative “backwash effects” for the less developed countries. The economically more developed countries will attract industry because of increasing returns to scale, the better availability of a trained workforce and the existence of necessary industrial services like finance, transport and lawyers (McCarthy [1994a]). As a consequence, labour-intensive craft industries in the less developed countries decline due to the inability to compete with cheap imported mass produced goods from economically more developed countries within the region. As an extension of Myrdal’s thoughts Kaldor [1970] and Dixon and Thirwall [1975] developed a formal model of cumulative causation which consists of four equations based on four assumptions:

- (1) The higher the returns to scale, the higher growth rates in productivity (p) leading to a higher growth rate of output (g)
 $p = f^1(g)$, where f^1 is rising and > 0 .
- (2) The higher the productivity the lower the efficiency wages (w_e) (money wage index w_m divided by a productivity index)
 $w_e = f^2(p)$, where f^2 is falling and < 0 .
- (3) The higher the growth rate of output, the lower the efficiency wages

$g = f^3 (w_e)$, where f^3 is falling and < 0 .

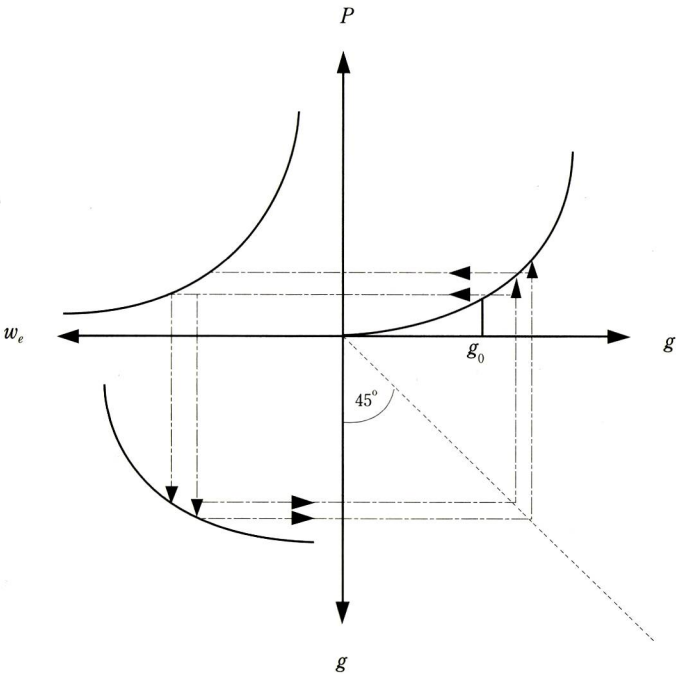
(4) The money wages and their rate of increase will be similar in all countries

$w_m = \underline{W}$.

If the four equations are put together (Figure 4) the cumulative causation becomes evident. Rising growth rates in output induce higher productivity which reduces efficiency wages, and in turn the fall in efficiency wages leads to a higher growth rate in output and so on.

The economically more developed countries at a starting point g_0 will benefit from higher output and productivity growth so that this cumulative causation model supports the argumentation that a regional integration between unequal partners tends to bias the distribution of gains towards the more advanced partner because the benefits vary according to the type of

Figure 4
Gains from Trade in the Theoretical Cumulative Causation Model for a More Advanced Country



Source: Kaldor [1970].

productive activity in which a region specialises. Some sectors are more susceptible to productivity gains than others. In particular, the manufacturing sector is able to reap substantially greater benefits from growth than are land-based activities such as mining and agriculture. The consequence of this bias in the potential for exploiting the benefits from greater specialisation due to regional integration leads to the prediction that countries specialising in land-base activities are likely to grow slower than those specialising in manufacturing activities.

Krugman and Venables [1995] deduce a similar cumulative causation process by analysing regional differentiation (core-periphery) driven by the interaction of scale economies and transport costs.

The Kaldor model leads to two main hypotheses: (a) the money wages and their rates of increase are approximately the same in all countries and (b) a region's rate of productivity growth is an increasing function of its rate of growth of output (Richardson [1977]). A look at the AFTA, MERCOSUR or NAFTA rapidly indicates that there is no similar money wage in the respective regions *e.g.* because of restrictions in labour mobility or different economic institutions in the countries. The hypotheses might be true in a very distant future but this is not the problem today and tomorrow. The remaining money wage gap between different countries involved in a regional integration will nevertheless aggravate the problems of (illegal) migration in the short run. The illegal inflow of labour to the more developed countries generates social and political pressure within the countries but also between them. The experiences of the border region between the United States and Mexico, where there is a worldwide unique situation of a 3000 km common border between an industrialized and a developing country, show that even with the extremely resource intensive U.S. border patrol system, the illegal inflow of Mexicans cannot be stopped. This insight was one main reason for the wish of the U.S. to establish a NAFTA. The integration in North America is leading to strong economic interdependence. The positive economic development of Mexico must therefore be in the interests of the U.S. because the migration of Mexico's poor can only be effectively reduced by improving living conditions in Mexico itself (Proff [1993]).

Illegal immigration to South Africa is also a growing concern among economists and politicians in South Africa. The prevailing money wage gap inside

the region is therefore not hindering but favouring regional integration.

The second hypotheses is not that easy to reject. It is basically true for the developed countries in the EU. For the Asian economies there is an intensive debate around the future sustainability of the tremendous growth rates these countries have been experiencing for at least 10 years. Kaldor assumed a high correlation between productivity growth and growth of output. A look at the contribution to growth for the high growth countries Singapore, South Korea or Taiwan shows a different picture. In growth theory the GDP growth rate is explained by:

$$\Delta GDP = \Delta \text{Capital Contribution} + \Delta \text{Labour Contribution} \\ + \Delta \text{Total Factor Productivity.}$$

Due to a strongly rising investment rate and labour-force participation rate the "residual" total factor productivity accounts for only 10-15% of growth in the three high-growth Asian countries (Behraves [1996]). So, factor accumulation not productivity progress is the explanation for growth, with the consequence that the second hypothesis of Kaldor is not relevant either.

But neither the traditional static model explaining the distribution of gains from trade according to the terms of trade nor the cumulative causation model of Myrdal and Kaldor are able to prove a bias in the distribution of gains from trade for SADC. This result contrasts on a first glance the results of Krugman and Venables [1995]. Their model predicts a first stage of growing inequality (in the real wages) due to falling transport cost leading to a core periphery situation. Assuming transportation cost keeps falling the lower wage rates in the periphery will offset the agglomeration advantages of the core in a second stage (Krugman and Venables [1995]). This will lead to a reduction of the inequality. Transport costs in SADC outside RSA are extremely high due to the poor infrastructure with the consequence that an uneven distribution of gains from trade for SADC might be expected. However the impact of regional integration on infrastructure is certainly positive. Infrastructure needs a critical mass like any public or semi-public good. Infrastructural improvements will reduce transaction costs, which are prohibitively high in many SADC members. Infrastructural improvements are very sensitive to regional integration if a multispeed approach through cooperation among different infrastructure provider is

possible (Odén [1996a]). Looking at the restrictive assumptions of the Krugman and Venables model (*e.g.* no labour and capital mobility) it also becomes evident that this model is not able to prove an uneven distribution of gains from trade for SADC.

Furthermore the discussion of inequality must always take into account the fact that in an international comparison with comparable middle income countries "South Africa has one of the worst records in terms of social indicators (...) and of income inequality" (Ministry in the Office of the President [1995]). The homogeneity of the SADC region becomes clearer if the income bias of the white population in South Africa is taken into account. While the black population has a poverty rate of nearly 65%, Indians have a poverty rate of only 2.5% and Whites only 0.7% (Ministry in the Office of the President [1995]). Gini coefficients demonstrate that the inequality in the SADC countries is generally higher than for example, in the AFTA countries. While Zimbabwe and Lesotho have an Gini coefficient of 57%, Indonesia and the Philippines have 32% and 41%. If the dualism of the economic structures is taken into account, *i.e.* the considerable differences in income and development between the highly developed conurbations *e.g.* Witwatersrand in South Africa – which themselves show immense income disparities – and the extremely underdeveloped rural areas, the classification of different development levels proves to be highly problematical. South Africa indeed economically dominates the SADC for, its GNP of 125.2 billion US-\$ [1994] is almost four times the 33.1 billion US-\$ of its eleven SADC partners together (Leistner [1996]) but the majority of the South African population suffers massive development problems. Therefore the inequality between different SADC countries must always be seen in the context of inequality inside a particular SADC country.

IV. Conclusion

Bringing all the arguments together it becomes clear that neither generalisations on welfare gains of regional integration nor generalisations on the distribution of the gains from trade are possible. The different argumentations given in section 2 and 3 nevertheless indicate a clear tendency for mutual economic benefits of SADC. The opening up of the South African

market for the smaller SADC-members, the better market access for industrialized products from South Africa in the region, first steps to tackle the illegal migration issues and other effects lead to this consequence. This means that negotiations of a real SADC becomes possible because without mutual gains there is no reason to start substantial negotiations. These negotiations will finally determine the distribution of the gains from trade in SADC and the better each member state can define its goals the better will be the overall negotiation result. It goes without saying that in a complex economic decision not every detail can be assessed due to limited resources. But between repeating general economic principles and assessing an infinite number of aspect is a lot of room for manoeuvre.

References

- Behraves, N. [1996], "Asia: Can the Miracle Be Sustained," in: *DRI – World Markets Executive Overview*, New York: McGraw-Hill; pp. 7-14.
- Dixon, R. J. and Thirwall, A.P. [1975], "A Model of Regional Growth Rate Differentials along Kaldorian Lines," *Oxford Economic Papers*, Oxford.
- Kaldor, N. [1970], "The Case for Regional Policies," *Scottish Journal of Political Economy* 17; pp. 337-347.
- Kenen, P. B. [1989], *The International Economy*, London: Prentice Hall.
- Krugman, P. R. [1991], "Is Bilateralism bad?" in E. Helpman and A. Razin (eds.), *International Trade and Trade Policy*, Cambridge/Mass.; pp. 9-23.
- Krugman, P. R. and Venables A.J. [1995], "Globalization and the Inequalities of Nations," *Quarterly Journal of Economics* 60(4); pp. 857-880.
- Leistner, E. [1995], "South Africa as a Regional Economic and Political Power," in: Hirscher, G. and Lange, K. (eds.) *The new South Africa – Hopes and Challenges*, München: Akademischer Verlag, pp. 29-47.
- Leistner, E. [1996]. "The Current State of Regional Cooperation in Sub-Saharan Africa, with Special Reference to Southern Africa," *Paper presented at SADC Induction and Refresher Course, Department of Foreign Affairs*, Pretoria.
- Lipsey, R. G. and Lancaster, K. [1956/57], "The General Theory of Second Best," *Review of Economic Studies* 24(1); pp. 11-32.

- Madonsela, M. Z. [1996], "Regional Initiatives for Economic Cooperation and Development: The Case of the Southern African Development Community (SADC)," *Paper Presented at the International Conference on Understanding Contemporary Africa: India and South-south Cooperation*, New Dehli.
- McCarthy, C. L. [1994a], "Regional Integration of Developing Countries at Different Levels of Economic Development – Problems and Prospects," *Transnational Law & Contemporary Problems* 4: pp. 1-20.
- McCarthy, C. L. [1994b], "Revenue Distribution and Economic Development in the Southern African Customs Union," *South African Journal of Economics* 62(3); pp. 167-187.
- Ministry in the Office of the President [1995], *A Poverty Profile of South Africa*, Pretoria.
- Myrdal, G. [1957], *Economic Theory and Under-developed Regions*, London: Allen & Unwell.
- Oden, B. [1996a], *Regionalization in Southern Africa*, Helsinki.
- Oden, B. [1996b], *Southern African Futures*, Uppsala.
- Pomfret, R. [1986], "The Theory of Preferential Trading Arrangements," *Weltwirtschaftliches Archiv* 72; pp. 439-465.
- Proff, H. V. [1993], "The North American Trade Region," *Intereconomics* 28; pp. 279-284.
- Richardson, H. W. [1977], *Regional Growth Theory*, London: Macmillan.
- Rubio, L. [1991], "La Globalización de la Economía," in Puche, S. (ed.) *Hacia un tratado de libero comercio en América del Norte*, Mexico D.F.
- Salvatore, D. [1995], *International Economics*, Englewood Cliffs: Prentice Hall.
- Statistisches Bundesamt [1993], *Länderbericht SADC*, Stuttgart.
- Weltbank [1996], *Weltentwicklungsbericht*, Washington D.C.
- The World Bank [1994], *Adjustment in Africa*, Washington D.C.