INTERNATIONAL TRADE DEVELOPMENTS

Assessing the Desirability of a Free-Trade Area in Southern Africa

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The theory of economic integration can be used to assess the desirability of forming a free-trade area. However, the traditional theory deals almost exclusively with industrial economies. For developing regions, the importance of dynamic factors in explaining the effects of integration must also be considered. This article examines the static and dynamic effects of further integration in southern Africa.

Introduction

The fourteen countries in southern Africa–Angola, Botswana, Democratic Republic of Congo (DROC), Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe–are the beneficiaries of a regional trade agreement,[2] the Southern Africa Development Community (SADC). On September 1, 2000, the SADC launched the SADC Trade Protocol. The objectives of the SADC Trade Protocol are to enhance the economic development, diversification and industrialization of the region and to establish a free-trade area (FTA) in southern Africa by 2012.[3]

The objective of forming a FTA is to reduce or eliminate trade barriers between member countries, while maintaining some degree of protection against third countries not signatory to the FTA. Is a free-trade area in southern Africa desirable? What are the implications of total economic integration in southern Africa for world welfare? The theory of integration can be used to assess the desirability of forming a free-trade area. According to the traditional theory of integration, a FTA raises world welfare if its trade creation effect outweighs its trade diversion effect. However, the traditional theory deals almost exclusively with industrial economies, where the process is one of relatively marginal adjustments in production and consumption patterns and not primarily one of eco-

[1] The views and conclusions expressed in this article are those of the author. They are not necessarily the views of the U.S. International Trade Commission as a whole or of any individual Commissioner.

[2] Various terms are used, sometimes interchangeably but sometimes with distinct meanings, for these trading blocs. Distinct from a "multilateral system," where essentially all countries are members–for example the multilateral trading system governed by the World Trade Organization–regional trade agreements typically group together a number of geographically proximate countries to share common economic benefits not granted to non-member countries. These regional trade agreements are sometimes called free-trade agreements (FTAs), plurilateral trade agreements, preferential trade agreements, customs unions, trading blocs, and so on. Distinctions may or may not be important concerning whether member countries are geographically proximate–e.g. a regional trade agreement–or a free-trade area where some members are not contiguous–e.g. were Chile to join the North American Free-Trade area–or true preferential agreements whereby some countries confer nonreciprocal preferences on another group of countries–e.g. the European Union confering trade preferences on the African, Caribbean, and Pacific countries under the Lomé Convention–or when a free-trade area (where countries lower tariffs be-

[2]—*Continued*
tween one another, but maintain their own separate and varying tariffs toward third countries, such as the North American Free-Trade area) extends its economic integration to a customs union (where all member countries adopt a common external tariff, such as the European Union).

[3] See *The SADC Free-Trade area* found at Internet address *http://www.sadcreview.com*.

nomic development. Thus, while the traditional theory offers some useful guidelines on the effects of integration on production inside and outside the integration area, it is less clear judging the overall desirability of an integration scheme for a developing region like southern Africa. For developing regions, the importance of dynamic factors in explaining the effects of integration must also be considered. As part of a continuing examination of various facets regarding regional trade agreements, this article will discuss the static and dynamic effects of further economic integration in southern Africa.[4]

The Static Effects of Economic Integration[5]

Five basic principles of the theory of integration can be used to assess the static effects of forming an effective FTA in southern Africa: the level of competition among participating member countries prior to forming a FTA; the economic size of the integrated area; transportation costs within the area; the degree of economic interdependence among participating countries prior to integration; and the level of tariffs before and after the trade area is established.

Complementary versus Competitive Economies

The static effect of economic integration depends on the competitiveness or complementarity of the products produced by countries in the region. In order for competitiveness to exist, there must be a considerable degree of overlap in the range of commodities produced by member countries to be protected from third-country competitors outside the regional bloc. A considerable degree of overlapping competitiveness operating within a FTA, with large differences in production costs, can lead to large trade gains after integration as resources are allocated more efficiently among member countries. A reallocation of resources within a free-trade area provides welfare gains for the FTA members commensurate with the extent of initial differences in production costs between member countries. On the other hand, complementarity exists when member countries produce a different range of commodities protected from third-country competitors. In a two-good model, economic integration has the usual trade creation[6] and trade diversion[7] effects when prospective trading partners in a FTA each have a comparative advantage in the production and export of a different good while both goods are consumed by all countries.

In southern Africa, the SADC countries with the exception of South Africa export primary commodities by and large to South Africa and to countries outside the trade bloc, and import mostly manufactured goods from South Africa and from outside the trade area. These countries have not developed the capacity to export to the region the types of goods that are of primary importance in regional imports. However, there is a significant overlap between products currently manufactured and exported by South Africa and the imports of other SADC countries. Therefore, a more integrated southern Africa region in which South Africa's markets are opened up to other countries in the region will facilitate a significant reallocation of production and trade patterns, in which South Africa's goods will compete with goods imported from outside the region. It is also possible that a range of producers in the other SADC member countries will find niche markets in a broader regional market–such as, components manufacture with firms producing in several regional locations component parts for finished products destined for export markets. A more integrated southern Africa region can have such trade creating and trade diverting effects to a major degree.

Economic Size

A second factor to consider is the economic size of the integrated area. One proposal is that the larger the economic size of the FTA, the greater the potential scope for the division of labor within the area. The division of labor gives rise to improving the skill levels

[4] Previous articles in the *International Economic Review* on regional trade agreements include Soamiely Andriamananjara, "Preferential Trade Agreements and the Multilateral Trading System," *IER*, January/February 2001, USITC Publication 3402 and Michael Anderson, "Preferential Trade Agreements: Trade Diversion and other Worries," *IER*, May/June 2001, USITC Publication 3435.

[5] Sources consulted for this article include B. Balassa, 1961, *The Theory of Economic Integration*, Richard D. Irwin, Inc. Homewood; B. Balassa, 1965, *Economic Development and Integration*, Centro de Estudios Monetarios Latinoamericanos, Mexico; F. Foroutan, 1992, *Regional Integration in Sub-Saharan Africa: Experience and Prospects*, World Bank Policy Research Working Paper 992; J. Frankel, E. Stein and S. Wei, 1995, "Trading blocs and the Americas: The Natural, the Unnatural, and the Super-Natural," *Journal of Development Economics*, 47, pp.61-95; M. Holden, 1996, *Economic Integration and Trade Liberalization in Southern Africa: Is there a Role for South Africa?* World Bank Discussion Paper 342; F. Ng and A. Yeats, 1996, *Open Economies Work Better! Did Africa's Protectionist Policies Cause Its Marginalization in World Trade?* World Bank Policy Working Paper 1636; A.Yeats, 1998, *What Can Be Expected from African Regional Trade Arrangements? Some Empirical Evidence*, World Bank Policy Research Working Paper 2004.

[6] Trade creation refers to the expansion of trade that results when a preferential trading bloc is formed so that consumers pay a lower price for imports.

[7] Trade diversion refers to the shift in the source of trade from the lowest-cost world producer to the lowest cost member within a preferential trading bloc once formed.

of workers, greater time efficiencies with less time lost by workers moving between tasks, as well as increased scope for the application of more capital. A smaller FTA may result in useful shifts in some lines of production, but the probability of the reallocation of production increases with the expansion of the area. For a FTA of a given size, the greater the increase in the size of the market, the larger the gains from economic integration. A second proposition is that successive increments in the size of a FTA reduce the possibility of trade diversion. This corollary suggests that a union of a large number of countries–even with small economies–will result in greater net gains than a union of a few countries–even if they are larger economies.

A counter argument to these proposals is that the larger the union, the greater its bargaining power, therefore, the more susceptible it is to domestic firms pressing for protectionist policies. However, the assertion of protectionist tendencies is open to debate. If comparison is made to a hypothetical free-trade situation, then protectionist tendencies will have adverse consequences on trade. However, if one considers that in developing regions most countries already engage in some form of protectionism behind national boundaries, then the degree and costs of protection may actually diminish as smaller markets are superseded by a larger integrated area.

The preceding debate raises the important question of how to measure the economic size of an integrated area. In practice, such measurement is difficult. Economic size measured by population or geographical area can lead to different conclusions. In addition, if one considers a given amount of marketable output, then the higher the transportation costs and the more divergent the tastes of the population, the smaller the economic size of the market.[8] Therefore, in order to determine the economic size of an area, the adopted measure must reflect differences in tastes and transportation costs.

In practice, a number of measures have been developed. The commonly used measure is the GDP excluding the contribution of the subsistence sector. For the SADC member countries, excluding Mauritius, South Africa, Swaziland, Zambia, and Zimbabwe, a significant proportion of GDP is produced in the subsistence sector. Therefore, the adoption of this measure of economic size suggests comparatively moderate gains of integration for southern Africa through resource reallocation. On the other hand, the large subsistence sectors are largely attributable to low levels of economic development, which suggests that economic integration with development can actually enlarge the market size of these economies in southern Africa.

[8] While differences in tastes are important prior to the formation of the union, integration could change consumption patterns and with economic development, tastes are likely to converge to some degree.

Transportation Costs

A third factor to consider is transportation costs within the integrated area. High transportation costs add to risk and reduce the economic size of the market area. High transportation costs can therefore be used as an argument against economic integration in the southern Africa region. In southern Africa, poor facilities for land transport and inland waterways substantially raise the cost of transportation between countries in the region.[9] Poor transportation facilities can therefore decrease trade and lead to a vicious cycle of inadequate transportation and diminished trade. On the other hand, one can make the argument that poor market integration has diminished the volume of trade. As trade volumes increase, the need for improved transportation will lead to the subsequent establishment of improved transportation facilities. Improving transportation facilities will reinforce trade and lead to a positive cycle of increasing trade leading to further improvements in transport systems and so on. To begin such a positive cycle, appropriate arrangements must be made to improve transportation facilities, unify transport regulations, and equalize transportation costs.

Economic Interdependence

A fourth factor to be considered is the degree of economic interdependence in the region. The possibilities for specialization and exchange depend on the degree of economic interdependence among prospective union members. The existence of intensive trade relationships among prospective member countries indicates the possibilities for further specialization after integration. In southern Africa, most countries are dependent on South Africa for imports, whereas South Africa's major trading partners are outside the region. This low degree of economic interdependence suggests less favorable prospects for trade creation and a high probability for trade diversion. On the other hand, in southern Africa, a number of factors such as the inadequacy of transportation facilities augmented by the absence of market information and distribution channels, import quotas, and multiple exchange rates, have hindered the

[9] The geographic pattern of trade routes established under colonial rule is also a factor. Trade routes may tie one or more African countries predominantly or exclusively to a metropolitan center, a situation that can make intra-regional trade very costly and complicated. In southern Africa, for goods that cannot be shipped by air freight, the intra-regional trade of countries may involve shipment to a metropolitan center, for example Johannesburg, where the goods are then "off-loaded" and then re-exported back to the final destination within the region. Inappropriate anti-competitive transport policies adopted by many countries in the region have inflated their transportation costs that have, in turn, adversely influenced export prospects.

expansion of intra-regional trade. Economic cooperation to reduce these discriminatory factors will create possibilities for the expansion of intra-regional trade.

Level of Tariffs

A fifth factor to consider is the level of tariffs before and after integration. The higher the tariff levels among participating countries before the trade area is formed the larger the creation of trade after the trade area is formed. The higher the tariffs levied on commodities originating from non-member countries, the greater the trade diversion effects of forming the trade area. The high level of tariffs in southern Africa suggests a high degree of both trade creation and trade diversion as tariff rates between SADC member countries are eliminated.

The static analysis in this section aids the understanding of the effects of further integration in southern Africa. However, the dynamic effects of economic integration, rather than the static effects, are believed to be of major significance for developing countries. Therefore, to assess the desirability of further integration in southern Africa, one needs to go beyond the static analysis of gains and losses to an analysis of the dynamic gains.

The Dynamic Effects of Further Integration

Economic integration can be viewed as a fusion of national markets. In this view, the hypothesis proposed is that economic integration allows the exploitation of internal scale economies because of an enlarged market. These gains will not be realized if the national economies had been large enough to exploit all sources of scale economies prior to integration. The implication for southern Africa is that economic integration will improve the growth prospects of participating countries. Considering that fragmented markets and the limited size of national markets are several of the main obstacles to the development of manufacturing industries in southern Africa, the dynamic effects of economic integration are likely to be significant. An increase in market size through economic integration will increase demand and the expansion of production will make possible the use of more efficient methods of production. As a result of expected increases in income, demand and efficiency, and the lower levels of risk and uncertainty associated with larger markets, regional investment will be stimulated. If factor mobility is permitted under the new arrangement, capital and labor will move from surplus areas to areas of scarcity, therefore increasing economic efficiency and factor incomes. According to neoclassical theory, competitive forces will eliminate intra-regional differences in income.

However, a counter-argument is that without government intervention, intra-regional disparities in income can actually increase with integration. The result depends on the "spread" and "backwash" effects from more developed areas to less developed areas. The "spread" effect refers to the increased demand for products from less developed regions and the transmission of technological knowledge from more developed areas to less developed areas as a result of integration. The "backwash" effect refers to the movement of capital and skilled labor from the less developed areas to the more developed areas, and to changes in the location pattern of industries to the detriment of the less developed areas as a result of integration.

With a free-trade area in southern Africa, the industrial development of South Africa may benefit the less developed countries in the region through increased demand for their products and this, in turn, may allow for improvements of production methods, and may also permit the establishment of processing facilities. However, in evaluating the importance of these "spread" effects, a very important consideration must be the supply of capital that is required for improving production processes and establishing processing plants. In southern Africa, there is a limited supply of capital. This limitation may cause new capital to move to regions favored by agglomeration economies,[10] and unfavorable "backwash" effects may reduce the benefits from dynamic external economies of a larger market.

Conclusions

In southern Africa, exports consist mainly of agricultural and mineral products; transaction costs are relatively high; market size is small in relation to the minimum market size for many industrial products; large disparities exist between the levels of income and economic development of countries in the region; informal trade is significant in many countries; and major distortions impede the functioning of the market system. A conclusion drawn from traditional integration theory is that countries with these characteristics cannot form "optimal" trading blocs. Under static assumptions, the integration of national economies lowers the welfare of third countries through trade diversion and the deterioration of their terms of trade. However, the establishment of a free-trade area can lower the risk an uncertainty associated with foreign trade. Risk and uncertainty due to trade restrictions and changes in tariffs and other forms of trade impediments. The reduction of uncertainty can also influence investment in export industries and foreign investment

[10] Agglomeration economies refers to increasing returns from concentrating the production of a particular industry in a particular location.

flows. Increased investment will lead to a reallocation of resources and changes in production methods. In sum, the dynamic effects of integration are the increase in economic efficiency and income that result from the economic integration of the region. If the dynamic factors of economic integration are large enough to counteract the negative static consequences, third countries will also benefit in the long run. The dynamic effects of economic integration will benefit third countries as increasing incomes in the FTA result in increased imports from outside the FTA. As a consequence, SADC should proceed with further economic integration in an effort to realize these some of these dynamic gains and increase welfare within the region.