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Reasons for Regional Integration Agreements

Regional integration agreements are commonplace in the world today. In 1996 there were 88 such agreements worldwide, covering a variety of forms from declarations of intent to unilateral preferential trade agreements, free trade treaties, customs unions, and the common market with its freedom of movement for labour and capital. Which factors have contributed to the great popularity of regional integration agreements?

In regional integration agreements (RIAs), partner countries agree to dismantle trade barriers on a reciprocal basis while barriers to imports from other countries remain fundamentally unchanged. In 1996, the World Trade Organisation (WTO) counted 88 RIAs currently in operation. RIAs cover declarations of intent (APEC), preferential trade agreements, free trade treaties (EEA, EFTA, NAFTA), customs unions (MERCOSUR, CARICOM) to the common market with its freedom of movement for labour and capital (EU). Regional forms of integration are widespread, and all the member nations of the WTO are currently party to at least one such agreement. Intraregional trade currently accounts for approximately half of world trade. In western Europe – the region where regional integration is most advanced – regional trade's share of total trade has risen from around 50% in the 1950s to about 70%.[1]

Which reasons contribute to the popularity of RIAs? The foremost reason is that RIAs are expected to have positive welfare effects arising from improved allocation. However, RIAs are not only popular as a result of their expected welfare effects, but can also be politically attractive because of their potential effects on distribution.

Welfare Effects

Fig. 1 provides an overview of the various mechanisms by which RIAs achieve welfare effects. Firstly, RIAs influence the allocation of resources between particular industries within the area of integration and possibly also in the rest of the world. Secondly, integration has consequences for the spatial distribution of economic activities within the area of integration and, finally, integration can be accompanied by temporary or permanent growth effects. The following remarks concentrate on static allocation effects.[2]

Perfect Competition

A mutual reduction of tariffs or other trade barriers with economic rents which accrue domestically leads to the well-known trade-creating and trade-diverting effects. This distinction, which was introduced by Viner,[3] is based on the fact that tariff reductions in the partner countries (let us say A and B) lead to lower prices for imports from the partner country and thus to an increase in the consumption of these goods and a fall in domestic production. Trade expands. On the other hand it is possible that, due to the tariff discrimination against imports from the rest of the world (C), lower-cost goods from C are replaced by goods imported from the respective partner country. Although the goods from the respective partner country are produced at higher cost, customs exemption makes them cheaper for domestic consumers than the goods from country C. The partner country affected loses out as a result of this diversion of trade, because if it were possible for everybody in that country to undertake to purchase the product from country C despite the higher price, to pay the tariffs and then to refund the duty to themselves, the product would be cheaper on a net basis than the duty-free good from the partner

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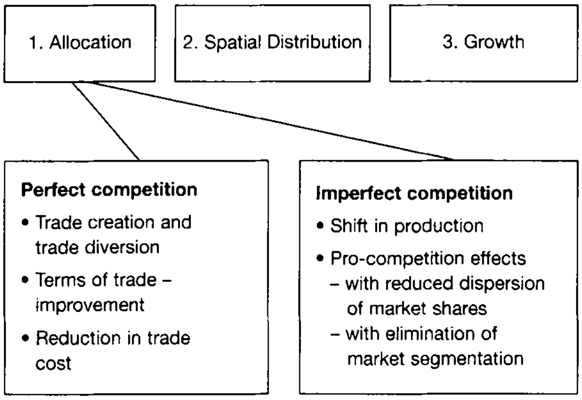
[1] WTO: Annual Report 1996.

[2] For a thorough survey see R. E. Baldwin, A. J. Venables: Regional Economic Integration, in: G. Grossman, K. Rogoff (eds.): Handbook of International Economics, Vol. 3, Amsterdam 1995, pp. 1597-1644.

[3] J. Viner: The Customs Union Issue, New York 1950.

Figure 1
Effects of Regional Integration Agreements



country.[4] Because of the possibility of trade diversion, so-called "small countries" should always give preference to unilateral liberalisation rather than membership of an RIA.

The arguments become more sophisticated if changes in the terms of trade are taken into consideration. Any change in the internal exchange relationship between the partner countries will favour one country and disadvantage the other; however, these effects cancel each other out. On the other hand, the partner countries' increased strength of demand and supply, along with the diversion of trade, leads to an improvement in their external terms of trade. As Ohyama[5] and Kemp/Wan[6] have demonstrated in the case of a customs union with common external tariffs, it is always possible to raise the common welfare of the partner countries if the external tariff rate is adjusted accordingly. If the "compensatory tariff rate" is chosen, a term which was introduced by Vanek[7] and which leaves the volume of trade with country C unchanged, and if country C does not alter its trade policy,[8] then the customs union represents a Pareto improvement for the whole world. Country C does not lose out and the common welfare of the partner countries increases as there is free trade between them. However, compensation payments may be necessary between the partner countries.

The third mechansim in competitive markets is the trade cost effect. Baldwin/Venables[9] use this term to describe the removal of trade barriers which do not involve a domestic rent. This is the case, for example, when different regulations in the respective countries lead to higher production costs or when the rent accrues abroad (e.g. in the case of voluntary export restraints). Dismantling trade barriers of this sort by means of an RIA is always advantageous, even for a small country. In a situation of this sort, trade diversion has a positive effect, because the country does not lose rents in the form of customs revenues, but saves real costs.

Imperfect Competition

A number of RIAs link industrialised countries with a high proportion of intra-industrial trade. Their markets are usually characterised by heterogenous products, increasing returns to scale and strategic interaction between suppliers. Given market forms of this kind, RIAs can shift the volume of production and influence the intensity of competition within an industry.[10]

A shift in production is characterised by the fact that while production within the member countries A and B rises, it falls elsewhere (country C). This effect can be illustrated using the example of a market with monopolistic competition. Each company produces its own variant of a particular good. Integration between A and B reduces the trade costs for companies located in A or B, thus giving these companies a price advantage which leads to an increase in market share and to positive profits. Conversely, companies in country C suffer a decline in sales revenues and profits since by assumption they do not benefit from the regional liberalisation. If market access and withdrawal is admitted, then the number of companies within the member countries increases while that in country C falls. In this market form, welfare effects arise not only as a result of the

[4] A. L. Hillman: Resolving the Puzzle of Welfare Reducing Trade Diversion: A Prisoner's Dilemma Interpretation, in: Oxford Economic Papers, Vol. 41 (1989), pp. 452-455.

[5] M. Ohyama: Trade and Welfare in General Equilibrium, in: Keio Economic Studies, Vol. 9 (1972), pp. 37-73.

[6] M. Kemp, H. Y. Wan: An Elementary Proposition Concerning the Formation of Customs Unions, in: Journal of International Economics, Vol. 6 (1976), pp. 95-97.

[7] J. Vanek: General Equilibrium of International Discrimination: The Case of Customs Unions, Cambridge 1965.

[8] M. Richardson: On the Interpretation of the Kemp/Wan Theorem, in: Oxford Economic Papers, Vol. 47 (1995), pp. 696-703.

[9] R. E. Baldwin, A. J. Venables, op. cit.

[10] W. Ethier, H. Horn: A New Look at Economic Integration, in: H. Kierszkowski (ed.): Monopolistic Competition and International Trade, Oxford 1984; A. J. Venables: Customs Union, Tariff Reform and Imperfect Competition, in: European Economic Review, Vol. 31 (1987), pp. 103-110; A. J. Venables: The Economic Integration in Oligopolistic Markets, in: European Economic Review, Vol. 34 (1990), pp 753-769; J. Haaland, I. Wooton: Market Integration, Competition and Welfare, in: L. A. Winters (ed.): Trade Flow and Trade Policy After "1992", Cambridge 1992.

increase in trade volume, but also because of changes in the variety of products available. Since a greater variety of products is now produced within the partner countries themselves – and trade costs are thus avoided – the consumer prices for these goods within the integration area fall. Welfare in countries A and B increases. Country C on the other hand now produces less variety of goods and imports more. Since imports involve trade costs, consumer prices in country C rise and welfare declines.

RIAs can also alter the strategic interaction between companies and so influence profit surcharges as well as the optimal size of a firm. Effects on competition such as these can have a variety of sources. Firstly, regional trade liberalisation can reduce the dispersion of the market shares held by individual companies: companies within the integration area lose domestic market share and gain market share in the partner country. This intensifies competition and so lowers prices and reduces company profits. In the case of free market access and withdrawal, the number of firms will fall and the remaining firms will increase their production. If there are increasing returns to scale, then the RIA will lead to their being better utilised. Consequently, additional welfare effects arise from the reduction of average costs and thus lower prices. Secondly, a pro-competitive effect can arise from the fact that an RIA can completely eliminate market segmentation. Price differentiation is then no longer possible.

Regional vs. Unilateral or Multilateral Liberalisation

The above observations on welfare effects demonstrate welfare improvements compared to a situation with trade barriers. The only negative effect is the diversion of trade, and this can be reduced by suitable design of external tariffs. The advantages of an RIA compared to a unilateral liberalisation of trade lie in the development of the terms of trade, in the possible shift of production, in the larger fall in prices together with more product variety, and in the greater reduction of production costs. The question remains as to why regional liberalisation should be preferred to multilateral removal of trade barriers. A variety of arguments come into play here, including the fact that multilateral liberalisation is often only possible on the basis of the lowest common denominator.[11] This is likely to be particularly important when it comes to dismantling the non-tariff trade barriers which are often key areas of RIAs. Thus a harmonisation or mutual acceptance of product standards and market access regulations between countries with similar levels of protection is easier than between countries with large discrepancies in their regulatory traditions. Additionally, the mutual advantages of trade liberalisation are especially great if, due to transport cost advantages, reciprocal market access is particularly beneficial.[12] Finally, there is the chance that, via the RIA, partner countries can gain advantages at the cost of non-participating countries, for example by exploiting their increased market power.[13]

Distributional Effects

Distributional effects influence political practicability whenever certain people or groups of people exercise different degrees of influence on the political decision-making process. If distributional effects are small, for example, then general welfare effects dominate political decisions. For instance, few distributional effects are to be expected from the liberalisation of intra-industrial trade, since structural adjustments take place largely within a particular industry.[14] In this case it is not only the consumers in the member countries who benefit from a greater variety of lower priced products, but at the same time most manufacturers can increase their profits thanks to additional exports. However, distributional effects can also ease political practicability in that, in the case of reciprocal trade diversion, export companies can participate from higher prices in the other partner country[15] or, where rules of origin privide protection for the manufacturers of intermediate products in the partner countries.[16]

[11] A. L. Hillman, P. Moser: Trade Liberalization as Politically Optimal Exchange of Market Access, in: M. Canzoneri, W. Ethier, V. Grilli (eds.): The New Transatlantic Economy, Cambridge 1996, pp. 295-312.

[12] P. Wonnacott, R. J. Wonnacott: Is Unilateral Tariff Reduction Preferable to a Customs Union? The Curious Case of the Missing Foreign Tariffs, in: American Economic Review, Vol. 71 (1981), pp. 704-714.

[13] P. Krugman: The Move to Free Trade Zones, in: Federal Reserve Bank of Kansas City Review, Vol. 76 (1991), pp. 5-25; J. A. Frankel, E. Stein, S-J. Wie: Regional Trading Arrangements: Natural or Supernatural?, in: American Economic Review, Vol. 86 (1996), No. 2, pp.52-56.

[14] See also the empirical study by H. P. Marvel, E. J. Ray: Intra-industry Trade: Sources and Effects on Protection, in: Journal of Political Economy, Vol. 95 (1987), pp.1278-1291.

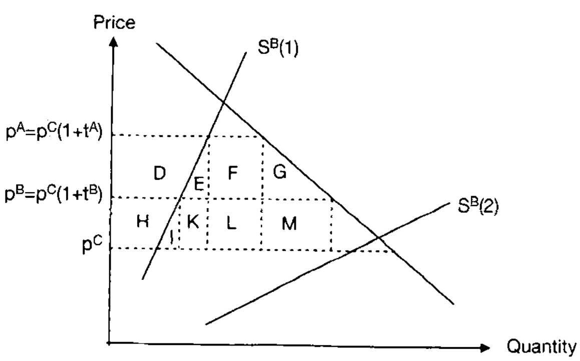
[15] G. M. Grossman, E. Helpman: The Politics of Free Trade Agreements, in: American Economic Review, Vol. 85, No. 4 (1995), pp. 667-690.

[16] A. O. Kruger: Free Trade Agreements as Protectionist Devices: Rules of Origin, National Bureau of Economic Research Working Paper No. 4352, 1993.

Reciprocal Trade Diversion

Reciprocal trade diversion caused by an RIA can be politically advantageous if export companies can benefit from higher prices in the partner country and thus achieve an economic rent. In addition, import protection for protected producers in the partner country declines less than if they were faced by competition from the cheapest suppliers in the case of unilateral tariff cuts. Fig. 2 clearly demonstrates this point. Country A and country B conclude a free trade agreement whereby each country retains its own tariff rate (t^A, t^B) on imports from the rest of the world (country C). M^A represents import demand for a good in country A, and S^B describes the *total* supply curve in country B. In case (1), country B has relatively few of the production factors required to manufacture this good, such that supply in B is not sufficient to cover country A's total import demand at the price p^A. Since the price in country A is higher than in B, companies in country B export their entire production to country A. Consequently, consumers in country B cover their requirements with imports from the rest of the world. What are distributive consequences between A and B as a result of the RIA? There are no advantages or disadvantages for consumers in either of the two countries since consumer prices in A and B remain unchanged. Manufacturers in country B, on the other hand, receive a higher rent as they can share in the advantages of the higher tariff rate in country A. The level of protection for manufacturers in country A remains unchanged. Since there are benefits for manufacturers in B without those in A suffering any losses, Grossman/Helpman describe this case as extended protection. Welfare in country A falls because the country loses customs revenue (to the extent of the areas D+E+H+I+K in Fig. 2): only trade diversion takes place. Welfare in country B increases due to the additional producer's surplus (area D) and the rise in customs revenue (H+I), since home-produced goods previously sold in B are now exported to A and are replaced by imports from C. The loss of welfare in A is greater than the welfare gain in B to the extent of the area E+K, reflecting the global loss of efficiency caused by trade diversion.

Figure 2
Effects of Trade Diversion



In case (2) on the other hand, protection is reduced as a result of the RIA. In B, the supply from the companies is so large that country A imports exclusively from B and the price in A falls to the same level as that in B. The producer's surplus in A dwindles while there is no advantage to manufacturers in B because they cannot achieve a higher price in A and because they continue to sell part of their production in their own country. Beneficiaries are the consumers in A. Customs revenues in A dry up while those in country B increase since B imports more from the rest of the world. Welfare in A increases if the profits from trade creation (area G) are greater than the costs of trade diversion (H+I+K+L). On the other hand, welfare in B rises as a result of the higher customs revenues (H+I+K+L+M) since, for domestic consumption, the products exported to Country A are replaced by imports from the rest of the world. In this case, diversion of trade does not go hand in hand with an increase in production in B, and for this reason there is a rise in the common welfare of both countries (G+M).

Comparison of the two cases demonstrates the following: if political decision-makers are aiming to achieve the highest possible level of welfare, then they should only conclude RIAs which involve a reduction in protection (case 2). If, however, greater weight is given to manufacturers' rather than consumers' interests – and a number of theoretical arguments and empirical studies support this supposition[17] – then a certain degree of reciprocal trade diversion in combination with greater protection is politically advantageous. This is because export companies in both partner countries benefit from this solution, and the losses of rents suffered by producers who have to compete with imports are smaller than in the case of regional integration with reduced protection (and also, of course, smaller than in the case of unilateral or multilateral liberalisation).

Protection Through Rules of Origin

Rules of origin determine from which country a product originates. This is necessary in all forms of

[17] See the summaries in A. L. Hillman: The Political Economy of Protection, Chur 1989, and D. Rodrik: Political Economy of Trade Protection, in: G. Grossman, K. Rogoff (eds.): Handbook of International Economics, Vol. III, Amsterdam 1995, pp. 1457-1494.

RIAs – with the exception of customs unions – in order to prevent products from third countries being imported into the partner country which applies the lowest of external tariff rate. Rules of origin are extremely complex and comprehensive. The rules of origin contained in the interim agreement between the European Union and Poland, for example, take up more than 60 pages. Two rules of origin commonly applied are the following: (1) Goods production within a particular country must be designed in such as way as that the final product falls under a different tariff heading than the intermediate products imported from other countries. (2) A certain proportion of value added (e.g. 40%) must be created in the country itself. The costs of documenting the origin of products represent considerable trade costs. Herin,[18] for example, demonstrates that in 1984 a quarter of EFTA exports to the EU did without the relevant documentary evidence, thus forgoing the tariff exemption to which they were entitled by the free trade agreement between the EFTA countries and the EU.

While there are certain disadvantages for producers of final products, there are also advantages for the producers of intermediate products. If, for example, a Polish manufacturer imported intermediate products from Lithuania before the free trade agreement with the EU, then that manufacturer may now be forced by the stipulated minimum level of value added (e.g. 40%) to purchase these intermediate products from a supplier in the EU or in Poland. Together with the rules of origin, the free trade agreement can thus provide protection to manufacturers of intermediate products within the partner countries. This protectionist effect is mitigated if, when calculating the minimum value added, the value added in a certain country can be cumulated with that in countries with a similar trade policy status.

Conclusions

RIAs are politically attractive both as a result of the expected welfare effects and the potential distributional effects. The weight given to the two arguments is an empirical issue. There is a wide range of empirical studies on the effects of both the EU and of NAFTA.[19] There is a consensus amongst EU researchers that while there has been considerable trade creation for industrial products, trade diversion has taken place in the case of agricultural goods. This is a direct result of the EU's divergent external trade policies in these two sectors. While external customs duties for industrial products were reduced in the course of free trade agreements and GATT, trade protection for agricultural products remains extremely high. Balassa,[20] Robson[21] and Winters[22] consider the net effect of trade creation and trade diversion to be positive, while others such as El-Agraa[23] and Pomfret[24] regard it as negative. If competitive effects are taken into consideration, there is evidence of additional welfare effects thanks to the greater utilisation of economies of scale. The extent of these additional effects is equal to around half a percent of gross domestic product[25] and is only significantly higher if possible accumulation effects resulting from capital stock adjustments are taken into consideration.

These results imply that western European integration has indeed increased welfare levels in the countries involved, but that it has been accompanied by considerable diversion of trade and thus by distributional effects. This suggests that both arguments – welfare and distribution – are indeed of political importance when concluding an RIA. While the empirical studies on the EU mentioned above have dealt with integration in western Europe, it should not be overlooked that the EU's policy of integration towards the countries of eastern and central Europe is taking place much more strongly on a bilateral basis. Baldwin[26] speaks of "hub and spoke" bilateralism, because trade liberalisation in the transformation economies is strongly focused on the hub of western Europe. This policy may induce a considerable degree of trade diversion and possibly also diversion of investment. While this may make RIAs in these countries politically more easy to realise, it reduces welfare benefits.

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[18] J. Herin: Rules of Origin and Differences between Tariff Levels in EFTA and the EC, EFTA Occasional Paper, No. 13, 1986.

[19] See for example the overview by L. A. Winters: The European Community: A Case of Successful Integration? in J. de Melo and A. Panagariya (eds.): New Dimensions in Regional Integration, Cambridge 1993, pp. 202-228, on the EU, and that of J. F. Francois, C. R. Shiells (eds.): Modelling Trade Policy: Applied General Equilibrium Asessment of North American Free Trade, Cambridge 1994, on NAFTA.

[20] B. Balassa (ed.): European Economic Integration, Amsterdam 1975.

[21] P. Robson: The Economics of International Integration, London 1984.

[22] L. A. Winters: Britain in Europe: A Survey of Quantitative Trade Studies, in: Journal of Common Market Studies, Vol. 25 (1987), pp. 315-335.

[23] A. M. El-Agraa: The Theory and Measurement of International Economic Integration, New York 1989.

[24] R. Pomfret: Unequal Trade: The Economics of Discriminatory International Trade Policies, Oxford 1988.

[25] See the compilation in R. E. Baldwin, A. J. Venables, op. cit. p.1632.

[26] R. E. Baldwin: Towards an Integrated Europe, Centre for Economic Policy Research, London 1994.