

Trade, Standards, and Regional Integration

Gerrit Faber and Hein Roelfsema¹

Utrecht University, Department of Economics, the Netherlands

1. Introduction

In the pursuit of trade liberalization, the diversity in national regulation has become the object of international negotiations. It can safely be assumed that the scope and intensity of regulation has increased since the industrial revolution, and particularly in the second half of the twentieth century. Several factors may be responsible for this increase. First, universal suffrage has induced politicians to protect large sections of the population against negative impacts from for instance dangers occurring in the work place, from consumption, participation in traffic etc. Second, the perception of role of the state has changed, amongst others under the influence of Keynesian ideas. It became accepted that the state takes care for the management of the economy and the impact of economic downturns on groups in society. Third, technological development may give rise to feelings of vulnerability for unknown risks.² The state is expected to reduce these risks by introducing regulations and standards to protect citizens from harm. Finally, because of the availability of better information and open government, people have become more aware of the risks involved in consumption (beef!) and production (pollution). Therefore, there has been an increase in number and membership of groups - often indicated as non-governmental organizations or NGOs - that try to represent the interests of both domestic and foreign disadvantaged groups, endangered species of living organisms, landscapes and environmental resources. These groups put pressure on governments and international organizations to take care of these concerns. (Ogus, 1994: 8/9)

Although deregulation has been popular in the 1980s and 90s, and has indeed led to less regulation in some policy areas, more recently many countries show a general

¹ Please direct comments, suggestions and remarks to h.j.roelfsema@econ.uu.nl

² Information and communication technology may contribute to closing the information gap. However, it also has the effect that people know more more about potential dangers of goods and services.

trend towards an expanding scope of regulation. Although popular forms of direct intervention have been abandoned or have become unpopular (state monopolies, subsidies), forms of regulation (through norms and standards, prior approval, self regulation by the sector) have filled the gap.

The costs that result from differences in regulation between countries have become prominent in the debates on trade policy. Until recently, tariffs and quantitative restrictions (QRs) were considered to be the most important factors hampering trade. However, to the extent that trade liberalization in these areas was successful, differences in standards resulting from varying regulation became more important as barriers to trade. Solutions for these trade barriers are the creation of common standards through new common policies, harmonization, approximation, or, quite different, regulatory competition.³ Countries increasingly use regional fora to create common standards. Such regional fora are called Standardization Unions (SUs), comparable to Customs Unions (CUs) that abolish traditional barriers in regional trade.

The General Agreement on Tariffs and Trade (GATT) and the World Trade Organization (WTO) have indeed been active in breaking down differences in standards, and not without success. At the same time, SUs have achieved harmonization of standards sometimes leading to a complete breakdown of regulatory barriers in regional trade. It can be argued that multilateral harmonization of standards is the best way to liberalize international trade, as regional solutions are likely to create distortions in international competition. This leads to a number of questions. First, why do countries pursue regulatory integration at the regional level? Why not depend completely on the global fora? Second, which are the effects of SUs on the world trading order? In this paper we argue that countries have strong incentives to harmonize policies more quickly in regional agreements than they do in a multilateral setting. The set up of this paper is as follows. First, in section 2 we discuss the role of standards in international trade negotiations in the GATT/WTO. Section 3 reviews the way the EC has achieved a high degree of harmonization of standards. In section 4 we discuss economic theories that indicate under which circumstances countries will be able to improve their social welfare

³ This implies the decision to leave nations free in their regulatory policies but to forbid the imposition of these regulations on foreign produced goods.

by concluding a SU. Subsequently, we introduce the role of various political actors by introducing theories of political economy of trade policy making. The effects of the emergence of regulatory blocs like the EU are the subject of section 5. Conclusions of the paper are presented in section 6.

2. Regulation and trade liberalization in the GATT/WTO

The tension between trade liberalization that benefits economic welfare and the effects that this may have on non-economic objectives has long been recognized in international trade negotiations. Many studies (see for a survey Cole 1999) analyze how trade liberalization may conflict with non-economic objectives. First, trade regulation under the WTO may curb the ability to implement regulation that serves non-economic interests. At an international level, the restrictions that the WTO imposes limits on the freedom to use trade sanctions as an instrument to influence other countries' policies. On a national level, international trade rules restrain nation states to implement national standards that restrict trade. As an example to this may serve the 1998 shrimp-turtle decision that prohibited the USA to ban imports of shrimps caught in a manner that hurt turtles. The Appellate Body of the WTO ruled that this measure created unjustifiable discrimination among WTO members.

Second, trade liberalization may force national standards down. Because member states increasingly use the WTO to gain foreign market access, it is feared that this forces down domestic standards. Although there is not much proof of this "race to the bottom" (Revesz 2001), environmentalists see this as an important argument to curb the power of the WTO. Also, multilateral efforts to come to specific agreements to harmonize standards may prevent nation states to implement regulation that is stricter than these international standards. This raises the fear that nation states lose the sovereignty over important policy areas and standards fall to the level of the lowest denominator.

Third, WTO regulation limits the use of trade restrictions to protect domestic non-economic interests. Although under WTO provisions there are many possibilities to deal with the consumption externalities of trade, it has proven to be more difficult to use trade restrictions to curb foreign production externalities, whereby a country feels injured by

the production methods of a good in other countries. The reason for this is that under WTO provisions countries are not allowed to discriminate between "like" products, irrespective of their production methods.

For these reasons, countries that participate in the WTO face a trade off. On the one hand, harmonization of standards increases trade and economic welfare. On the other hand, free trade and the harmonization of standards reduce the possibilities of nation states to protect their citizens from the negative non-economic effects of free trade.

For many decades, multilateral trade negotiations in GATT were preoccupied with lowering and abolishing tariffs and quotas. Hence, not much emphasis was placed on the role of national standards as a barrier to trade. However, from its start, the GATT contained art. XX that allows contracting parties to enforce measures 'necessary to protect human, animal or plant life or health' or 'relating to the conservation of exhaustible natural resources'. These measures are allowed but subject to the requirement that they are not applied in a manner 'which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade ...'. This reference in GATT to the possibility that national policies beyond the area of tariffs and quotas may have consequences for international trade is phrased as an exception to the GATT principles of non-discrimination and national treatment. In the first three decades of GATT's existence, art. XX played a marginal role. A successful attempt at deepening was made during the Tokyo Round of Trade Negotiations (1973 – 1979). This effort was prompted by the increasing importance of regulatory barriers to international trade. The Round produced eleven agreements or codes of which nine dealt with non-tariff issues. The most generally applicable code was the standards code. It addressed the trade barriers that may arise from differences in standards, technical regulations and certification systems. The basic principles of the code are national treatment, non-discrimination and transparency. The code itself does not develop standards, but requires the signatories to use standards in the least trade distorting way. To this end the code urged the signatories to use international standards; it granted foreign manufacturers access to domestic certification systems; and

it provided for facilities for foreign manufacturers to gather information on standards and for prior notification of intended standards with a period for comments by trade partners.

The code has been effective in reducing regulatory obstacles to international trade. It contributed to the internationalization of product, health and safety standards, to the reduction of various trade-distorting applications of standards and has made the imposition of technical barriers to trade more difficult. Many potential problems have been solved in the permanent Committee on Technical Barriers to Trade meetings and in bilateral consultations between the signatories (Eicher, 1987).

During the Uruguay Round much energy was invested in the further harmonization of regulatory diversity. This produced a number of agreements. First, the Standards Code has been expanded into an Agreement on Technical Barriers to Trade (TBT). Furthermore, an Agreement on the Application of Sanitary and Phytosanitary Measures (SPSM) was concluded. Contrary to the previous codes, these agreements apply to all members of the WTO and place a strong emphasis on the formulation of international standards and on mutual acceptance of national standards.

The TBT agreement prescribes national treatment in the application of technical regulations. According to art. 2, the regulations 'shall not be more trade-restrictive than necessary to fulfill a legitimate objective'. These legitimate objectives include the protection of human health or safety, animal or plant life or health, or the environment. The necessity of regulations shall be established on the basis of, *inter alia*, 'available scientific and technical information, related processing technology or intended end-uses of products'. A major difference with the previous code is, that not only the characteristics of the product itself are taken into account, but also its processing technology. This opening for 'process standards' is relevant for the link between trade and social and environmental protection.

If a country introduces a regulation that is in accordance with an internationally agreed standard, 'it shall be rebuttably presumed not to create an unnecessary obstacle to international trade' (art 2.5 TBT Agreement). Stricter regulations are therefore allowed if the international standards do not realize the 'legitimate' objectives of the country

concerned.⁴ Furthermore, members shall give ‘positive consideration’ to the regulations of other members in order to accept them as equivalent even if these differ from their own, ‘provided they are satisfied that these regulations adequately fulfill the objectives of their own regulations’ (art. 2.7). This goes into the direction of the principle of mutual recognition as used in the EU, which is dependent on the existence of equivalence of objectives.

The SPSM agreement heavily relies on international standards as well: they are supposed to fulfill the criteria of Art. XX.⁵ Members are allowed to impose stricter standards if there is a scientific justification and by using risk assessment techniques developed by the relevant international organizations. The burden of proof is with the country that wants stricter regulations than those that have been internationally agreed. If relevant scientific evidence is insufficient, stricter measures may be imposed provisionally ‘on the basis of available pertinent information, including that from the relevant international organizations as well as from sanitary or phytosanitary measures applied by other members’.⁶ Members are encouraged to recognize the product regulations of other members. If the exporting member has regulations that differ from the importing country’s regulations, and the former can show that its measures achieve the importing member’s appropriate level of sanitary and phytosanitary protection, the regulations are considered to be equivalent (art. 4.1). This is again similar to, but less coercive than the EU principle of mutual recognition.

This overview shows, that regulatory integration in the GATT and the WTO has progressed by stimulating the formulation of standards and specific minimum product norms in international organizations and the formulation of constraints for the

⁴ This opening for stricter standards apparently should be interpreted in a restrictive way as the article continues ‘for instance because of fundamental climatic or geographical factors or fundamental technological problems’.

⁵ International standards are developed in the Codex Alimentarius Commission, the International Office of Epizootics and organizations operating in the framework of the International Plant Protection Convention.

⁶ Other agreements that can be classified under the label of harmonization of standards are the Agreement on Agriculture, the General Agreement on Trade in Services (GATS), the Agreement on Trade Related Investment Measures (TRIMS), the Agreement on Trade-Related Aspects of Intellectual Property Rights and the Agreement on Subsidies and Countervailing Measures.

introduction of stricter norms than internationally agreed. As a result, regulatory barriers have been diminished in large sections of world trade.

However, the harmonization of standards has been far from universal: food safety is largely harmonized by the Codex Alimentarius while technical standards for other products are much less harmonized (Leebron, 1996). Thus, regulatory trade barriers remain, or are newly introduced, where no international standards exist and members cannot show equivalence, or where members are allowed to introduce stricter regulations than the international ones.

Despite the steps that have been taken to lower regulatory barriers at the multilateral level, major conflicts among WTO members have arisen. The WTO Ministerial in Seattle (end 1999) that was to launch the Millennium Round failed as a result of a conflict over process standards, in particular labor standards. The use of hormones in cattle breeding and the use of genetically modified organisms (GMOs) have for many years been a source of tensions between the EU and the USA (Van Dijck and Faber, 2000). In spite of the multilateral work, differences in national regulation and preferences play an increasingly important role in international trade. To overcome these problems, countries revert to an old strategy: regional integration.

3. The EC as a Standardization Union

The EC was established as a Common Market with elements of an economic union. The breaking down of tariffs and quantitative restrictions was the first achievement in terms of market integration. It was completed even before the transition period had elapsed. In the beginning of the 1960s, the EC started to build up the Common Agricultural Policy (CAP), which can be considered as the first major attempt at harmonization of national policies. The CAP not only brought common objectives and intervention mechanisms for almost all agricultural products; it also laid the foundation for the common formulation of definitions of products and quality norms and standards (sanitary and phytosanitary measures) which were to become such bones of contention in later multilateral trade negotiations. After the rapid integration in the sixties, the overall progress in integration became very slow and in some areas there was even a reversed movement. One of the

reasons was the inability of the member states to take significant steps towards regulatory harmonization. It was the Court of Justice of the EC that introduced a number of principles that substantially reduced the regulatory barriers in intra-EC trade. It gave a wide definition of "measures having equivalent effect" to quantitative restrictions (forbidden under art. 28 EC Treaty) in its Dassonville ruling in 1974 and introduced the principle of mutual recognition in the Cassis de Dijon case in 1979 which says that member states have to accept products that have been legitimately brought on the market in other member states as long as the objectives of regulatory policies are equivalent. The consequence of this ruling has been, that detailed harmonization of norms and standards became superfluous wherever there was equivalence of regulatory objectives. The Commission and the Council could concentrate on the formulation of objectives and broad minimum standards in EC Directives, while the technical specifications were left to international bodies for standardization or the member states. The Court also introduced the principle of proportionality in the application of art. 30 EC Treaty which says that member states are allowed to introduce trade barriers "on grounds of public morality, public policy or public security; the protection of health and life of humans, animals or plants; the protection of national treasures [...]; or the protection of industrial and commercial property." This implies that the trade measure should have a reasonable relation with the objective. Furthermore, the Court put the burden of proof upon the member state that wants to introduce the trade-distorting standard. The Single European Act did away with the internal frontiers and incorporated the principles of mutual recognition and minimum standards. The approach adopted by the EC brought substantial advantages. It achieves most of the benefits of harmonization at a much lower cost compared to detailed harmonization or unification and it substantially enhances transparency in an area where this was seriously lacking. (Leebron, 1996: 91)

If we compare progress in regulatory harmonization in the GATT/WTO and the EC, it is clear that the EC has achieved more. The EC has largely realized one internal market where internal borders have been abolished and market segmentation has been reduced to a very low level for most products.⁷ Apparently, the member states have been willing to harmonize their regulations in the framework of the EC or to apply mutual

recognition among themselves, while the very states have collectively many conflicts with their partners in the WTO over the same regulations.

The Treaty objectives played a crucial role in the path towards a SU. As Article 8 on the objectives of the EC shows, the overall objective of the integration process is free trade. This has proven to be a key instrument in countering the barriers to trade that result from differences in national regulation. Because the Treaty creates a need to harmonize standards to achieve the goal of the common market, national regulation is subordinate to the goal of internal free trade. This is significantly more integrationist than commitments in GATT or indeed under WTO law. These agreements make national regulation subordinate to the principles of MFN and non-discrimination, but not to achieving the goal of free trade. A second factor that provides the EC with an advantage over multilateral organizations is the ability to create institutions that solve national differences. Especially the role of the European Court of Justice has been of major importance in harmonizing national regulation in the EU.

This section shows that the EC has been successful in harmonizing national standards. The emergence of the EC as a “regulatory bloc” is likely to have effects on world trade relations. In the next section we analyze the economic effects of such regulatory blocs on international trade and offer a political economy explanation for their emergence.

⁷ For some products, there are still significant price variations over member states. Cars and medicines are a cases in point.

4. The economics and politics of Standardization Unions

4.1 *The Economics of Standardization Unions*

From neo-classical economic theory it is well known that free trade increases economic welfare. However, neo-classical theories assume markets to work perfectly. If market failures are taken into account, this may change the desirability of free trade. A main market imperfection is the lack of property rights that may lead to over production and excess trade (OECD 1995). An example of this is the trade in tropical woods. Because much of the tropical rain forest in the Amazon area is owned by (private citizens in) Brazil, citizens in other countries have no rights and claims on utility these woods bring. Because Brazilian companies and their government may not value the benefits that others derive from preserving the rain forest, there will be overproduction of tropical wood. In this case, prices in international trade do not reflect the true value of the product.⁸

If costs to the environment are not included in the prices of product, such costs are externalized and neglected in the course of trade. If people value the environment in which they live and bargaining mechanisms are absent or costly, production and consumption may create non-priced externalities. To overcome this, there is a basis for the regulation of international trade. Because policy makers prefer instruments that are close to the source of the imperfection, they use specific standards to regulate and restrict international trade.

The trade restricting nature of differences in national standards results from three sources. First, domestic standards may be higher than international standards. This increases the costs to foreign as well as domestic producers. Because most of the compliance costs are sunk in the production process, foreign producers have to make switching costs if they decide to export to the domestic market to adapt the production process to higher standards. These switching costs may serve as a barrier to trade.

Second, even if domestic standards are not higher than international standards, they simply may be different. Because foreign producers have to comply with different

⁸ Cole (1999, p24) states that even if property rights are defined, lack of markets restricts the ability to price goods according to their true value.

standards, this raises their costs of production relative to producers that serve only the domestic market.

Third, differences in standards increases trade uncertainty for exporters. This uncertainty may be ex ante (“will my product be accepted by the export market authorities?”) or ex post (“will regulations on the export market stay unchanged once I enter that market”). Given the sometimes long periods of investigation and reviews, this uncertainty raises the costs of exporting.

Although the trade effects of differences in standards may serve as an instrument of protection, there are important differences between standards and border protection. Most importantly, standards have a different effect on general welfare. Tariffs, quotas and other border restrictions on trade in general reduce welfare. Standards on the other hand are assumed to be a solution for externalities in production and consumption. In that case, general welfare is increased by standards that change the pattern of production or consumption in such a way that the difference between private and social welfare is reduced to zero.

This difference is quite clear for trade that causes negative consumption or production externalities. In that case standards may be justified on welfare grounds. In the case of positive externalities, harmonization of standards increases the gains from international trade. A specific type of positive externality that is associated with the harmonization of standards are network economies. International differences in standards diminish the value of goods, as users will have problems to use the product concerned internationally. The reduction of traditional barriers to trade “only” opens spending possibilities to domestic consumers because of lower prices of imported goods. In the case of foreign acceptance of domestic standards, it is the value of the good itself that is increased, because increases the use of goods and services that are bought locally.⁹

Domestic standards in general do not discriminate between domestic and foreign suppliers. Although the national treatment principle (WTO art. III) does not exclude the

⁹ For example, the international acceptance of standards in the telecom services increases the consumption value of mobile phones. Roaming contracts ensure that these can be used in many countries.

possibility that states *de facto* segment their domestic markets from world markets in order to protect domestic producers, the economic and political rationale for trade barriers resulting from differences in regulations may differ in a fundamental way. Where tariffs and other instruments can be used to shift rents to domestic producers, national treatment restricts this option in the case of standards.

A last difference is that international negotiations on the harmonization of standards are more complicated than the negotiations on border restrictions on trade. Tariffs can be reduced using across the board formula, while differences between standards have to be taken away by either formulating new standards or by mutual recognition. This makes the latter kind of liberalization a time consuming affair.

To increase international trade, countries reduce tariffs and harmonize standards. From a policy perspective the resulting increase in international trade should increase general welfare, whereas the harmonization of standards is mostly seen as moving away from the domestically preferred policy position. Because harmonization is in part seen as a cost to domestic interest, policy makers care about the scope of harmonization. This scope may be the choice of policy domains to harmonize, or it may focus on the geographical area of partner countries. To analyze the effects of standard harmonization and mutual recognition in SUs, we start by using the Vinerian approach to Customs Unions.¹⁰ At the core of this approach are three effects of regional integration: the trade creation effect, the consumption effect and the trade diversion effect.

The trade creation effect results if SU reduces the costs for partner producers on the domestic market and therefore replaces inefficient domestic production by more efficient production in partner countries. This increases general welfare from a world perspective, although the effect is negative if seen from the perspective of domestic producers. Countries lose industries that have no genuine comparative advantage compared to foreign firms. These industries were only able to produce for the domestic market as long as they were protected by high standards.

¹⁰ See for an in depth analysis of the economic effects of regional integration Bhagwati, Krishna and Panagariya 1999.

The consumption effect is caused by changes in the prices to consumers and by the change in the consumption externalities that arise from a change in standards. The consumption effect is positive if prices decrease. The effect on prices depends on the method of integration. In the case of mutual recognition, the costs to producers in partner countries is likely to go down, which may result in lower prices to domestic consumers. However, if standards are harmonized, the effect on prices depends on the new level of harmonization and compliance costs.

Because standards are introduced to reduce externalities, changes their level influences consumer welfare. If consumers *ceteris paribus* prefer higher standards (they only do not like the increase in prices that result from higher compliance costs), consumer welfare is reduced if regional integration results in lower domestic standards (because of harmonization or recognition of lower standards in partner countries) and increased if it results in higher standards.

Trade diversion occurs if a SU causes trade to divert from world market producers to partner producers. Because trade shifts from the most efficient source of production to the source that has lower compliance costs because of harmonization or mutual recognition, welfare from a world perspective is lost. From a domestic perspective the trade diversion effect means that, on the basis of production efficiency, countries pay too much for imports. Consumers only buy the product from the partner country because the compliance costs are lower not because they are cheaper if compensated for the cost-compliance effect.

Diversion may reduce the welfare of consumers. Assume that before entering a SU domestic standards and world market standards are higher than standards in the future partner country. If in that situation, a SU may cause prices to fall because mutual recognition reduces the compliance costs of the partner country. However, because the new level of standards is lower than world market standards, consumers trade is diverted to sources that have lower standards. This increases the negative consumption externalities.

The analysis shows that harmonization of standards affects trade flows between member and non-member states. Furthermore, it is clear that a SU does not automatically increase

the social welfare of the participating countries. As social welfare is dependent on prices and standards, and the effects are different for producers and consumers in the various countries, one needs precise information on the effect of a change in standards on consumer welfare and on compliance cost in the different countries. Also, the effect of SU on specific groups in society will vary. Some groups may win and some groups may lose from SU. This creates differences in political incentives with respect to the formation of SU to which we return later in this paragraph.

There is a growing interest in the impact on the competitiveness of countries that impose standards. For years the academic discussions on the impact of environmental standards subdued because most empirical studies suggested little impact of standards on competitiveness (Jaffe 1995, Beghin and Potier 1997). However, the Kyoto conference on climate change spurred renewed interest in these questions and resulted in new studies that show that marginal costs curves for CO₂ reduction are steeper for high levels of reduction. Because requirements are expected to rise in the future, this revived interest in the competitiveness effects of environmental policy (see Fischer and Serra 2000, Gandal and Shy 2001, Nannerup 2001).

Particularly in the field of environmental standards there has been considerable theoretical work on the relation between industrial policy and the international competitiveness of firms (see for a survey Ulph 1994). These models borrow the basic assumptions from the Brander-Spencer framework (1983) and model the strategic interactions between governments in setting pollution standards. The perceived gain in international competitiveness is a driving force behind the formation of Regional Trade Agreements (RTAs).¹¹ Because RTAs may create economies of scale to domestic firms, the resulting lower costs improve competitiveness on world markets. Because

¹¹ For instance, the political success of agreeing to the Single European Market (SEM) program can largely be attributed to a greater awareness of the effects of imperfect competition. European industrialists were concerned that small domestic markets prohibited the use of economies of scale. Japanese firms with large domestic markets did make use of economies of scale, which proved to be a major entrance barrier for EU firms to compete on the world market. By creating the SEM, EU firms could reap these economies of scale as well. The success of the creation of the SEM and the resulting Europeanization of firms improved their strategic position on world markets and increased the power of the EU institutions in world trade negotiations. Whereas many EU countries are small on a world scale, under the umbrella of the EU their have significant bargaining power.

harmonization policies change the cost structure of domestic firms, strategic standardization policies have additional effects on domestic welfare because they change the strategic behavior of domestic and foreign firms. Kennedy (1994) shows that lower standards may increase social welfare. The argument comes close to the Brander-Spencer case for strategic export subsidies. If high standards reflect true domestic preferences, lowering them reduces social welfare. However, because domestic firms gain market share in international trade, lower standards are more than compensated for by increases in profits by domestic firms and lower domestic prices.

A related strategic effect is the improvement of the terms of trade if countries form a customs union. The argument is that customs unions are beneficial for small countries because it creates degree of monopsony power in world markets. The costs of compliance with national regulation are likely to be presented to domestic consumers in the form of higher prices of foreign products. For large SUs, exporters absorb part of the compliance costs. The result of this is that an increase in standards by SU will have a more positive effect on domestic social welfare than a comparable increase in standards by individual members of that union.¹²

A last question is the optimum size of SUs. Following Oates' (1972) reasoning, centralized decision making in federations increases welfare because it internalizes externalities in other districts and more effectively exploits economies of scale in policy making. However, central decision-making mostly results in uniform levels of local public goods or in harmonized regulation. This reduces general welfare because it causes provision of public goods on a local level to deviate from the preferred position of the median voter. In deciding on what level to allocate policy making authority, these two effects have to be balanced.

In setting common standards, countries benefit by internalizing the external effects of differences in national standards, which improves welfare in standard unions. However, harmonized standards have the effects that the median voter in any member country of the SU loses welfare because the common standards are further away from her

¹² This may also explain why S U set higher norms than individual countries. If domestic consumers trade off the positive effects of higher standards with the increases of the costs of consumption, the lower costs of compliance induce consumers to support policy makers that set higher levels of standards.

preferred policy position. SUs are formed between countries where the benefits of introducing common standards outweigh the costs that are incurred because of differences in national preferences. This is likely to be the case in a geographically concentrated context. There are two reasons for that. First, spill over effects that cause externalities in other countries have a regional setting in many policy domains. Second, creating common standards is easier if there are only minor differences in the preferred policy positions of the median voters. Setting common standards among these countries only marginally reduces welfare because the outcome of central decision making remains close to the preferences of the median voters in all countries.

The trade off between externalities and heterogeneity of preferences varies across policy domains. If externalities are small and preferences vary between countries (like for instance the amount of non-American movies shown on television), the optimum size of SU is small. SUs tend to be large if externalities are large and preferences homogenous. In the extreme case, this may result in multilateral harmonization.

4.2 A political economy approach to standard unions

The previous section shows that SUs have conflicting welfare effects on groups in society. Small countries can use SUs to improve the competitive position of domestic firms, to shift rents from foreign to domestic producers, to increase social welfare by regulating activities that produce trans-boundary externalities at the regional level. A SU brings at least part of the welfare advantages of addressing the market failure and of trade liberalization and gives the small country a voice in the harmonization process. In addition, the standardization union can be considered to be a large country that has a strong position in international negotiations on standards while small third countries will adopt their regulation towards the union. The national politician can use this argument to defend his decision vis-à-vis NGOs that fear lowering of standards. However, entering into SU may reduce the competitiveness of domestic firms vis-à-vis partner countries and consumer groups may not like the effects of harmonization and mutual recognition. Therefore, a SU may give rise to a conflict of interests among groups in society. These

conflicts have to be resolved by the political process before the choice of entering a SU is made.

Political economy theories analyze the effects of the political decision making process and political institutions on policy formation. In determining trade policy, it can be argued that politicians make a trade-off between the lowering of the general level of welfare that results from tariffs and quotas and the support they get from industries that profit from protection and from groups that are in favor of trade liberalization (e.g., Grossman and Helpman, 1993 and Mitra, 1999). A somewhat different explanation is based on the conservative welfare function politicians are supposed to maximize (Corden, 1974). In this theory policy makers try to maintain the status quo and use trade policy instruments to reduce adjustment costs. Other studies (e.g. Baldwin 1986) show that policy makers out of social justice principles may have the objective to support low-income groups. Sectors where low-income groups are over represented and that face severe import competition will be protected from a sharp income decline. Empirical studies give broad support to these political economy explanations (see Rodrik 1995 for a survey).

As far as the economics is concerned, domestic pressures for and against tariffs can be classified according to the domestic economic effects of tariffs. In general, if the redistribution between groups in society is costly and interests are organized according to the effects of trade policies, economic actors lobby for trade policies. If national standards are used as barriers to international trade, we expect the same group characteristics to play a role in the explanation of the use these standards. However, national standards are set in such a way as to preserve the heterogeneity of national preferences. These preferences are linked to domestic values and customs. In that case pressure groups are organized according to political instead of economic characteristics.

If it is accepted that tariffs and quotas are the outcome of political decision making in which policy makers try to realize their objectives by balancing collective, social and industry interests, it follows that trade liberalization can only be achieved if it enables the relevant politicians to strike a balance between the different pressure groups and the collective interest that maximizes their utility function. The principles of the

GATT of non-discrimination and reciprocity are necessary to enable politicians to conclude such package deals. These principles bring about the transparency and predictability that reduce transaction cost sufficiently to make these trade agreements possible and viable (Dixit, 1996).

In the present era of worldwide and regional harmonization of standards, policy makers have to operate in much more complex situation than before. The reason for this is, first, that the number of pressure groups has increased as a result of the changing nature of trade negotiations. Second, the nature of the new pressure groups is different from the traditional ones. Before regulatory barriers became the object of trade negotiations, policy makers had to deal with lobby groups representing sector interests. Trade policy was strongly linked to industrial policy. These sector lobby groups try to put pressure on policy makers by providing them with financial resources and information collected within the sector organization. In the new context of trade liberalization, in addition to the traditional lobbies, pressure is organized by groups that normally are not motivated by pecuniary gains from protection of liberalization. Their objectives are the conservation of nature, the protection of health, human and worker's rights, the eradication of child labor to mention the most important.

Funding of politician's campaigns or narrow co-operation with politicians would undermine the legitimacy of these pressure groups. Their main instrument is their ability to affect public opinion through publicity and endorsing candidates (Grossman and Helpman 1999). A second instrument is provision of information (Austen Smith and Potters and Van Winden 1992). Because of time and money constraints, policy makers are "in the dark" about the effects of policy stances. They need the information of pressure groups to formulate policy. Therefore, non-economic pressure groups may trade this information for political support or may strategically enclose information to the policy maker.

The significance of this difference with the industry lobby groups cannot be overestimated. Policy makers used to make their trade-offs in the isolated surroundings of their government offices and negotiating centers, far from public attention. In the case of non-economic interests, the results of the policy making process will be scrutinized by

the press and vocal pressure groups. This makes the policy outcome highly visible and making "the wrong" choice much more costly to policy makers.

The technical language used and the invisible effects tariffs and quotas have on the welfare of consumers, further reduced public attention. In the present situation this has been reversed. Even before the agenda of a new trade round is discussed by the Ministerial Meeting of the WTO, public debates take place on domestic and foreign regulatory regimes and the way liberalization and harmonization may affect these sets of rules. Politicians have to clarify their positions and make statements on which it is difficult to compromise later during the negotiations. The "democratization" of trade policy changes the behavior of negotiators and it can be expected that it will also affect the structure of decision making in this area. As the number of 'constituencies' of commercial policy increases, potential conflicts between interest groups and policy makers grow in number and policy makers may face mounting difficulties in striking a balance between the different interests (Smith and Woolcock, 1999).

There are good reasons for national politicians to keep the powers over standards at the national level, given the opportunities to gain political support from NGOs and their related public by introducing the 'right' standards. Furthermore, defending the national position in global negotiations would enable the national politician to claim the credit for having achieved the right international standard or to be a martyr if the national standard is not adopted internationally.

The discussion in this section so far shows that non-economic interests have become more involved in trade policy negotiations. To explain the rise of regulatory blocs, the question is why organized interests prefer negotiations in regional forums to national and indeed multilateral policy making.

Political economy theories show that several factors play a crucial role in the choice of the policy making platform. Esty (1996) claims that differences in organizational costs are important in determining the optimum policy platform. He shows that many non-economic interest groups need critical mass and for that reason like to shift decision making to a higher level of decision making. He also argues that "one stop shopping" reduces the costs of non-economic interest groups because duplication of costs

to enter the political process. Revesz (2001) argues the opposite: organization on a larger scale magnifies the free rider problem and increases the heterogeneity of interest. Only non-economic lobby organizations with truly homogeneous interest (like for instance Amnesty International) are able to organize at a global level. Revesz also argues that barriers to enter international negotiations are high for small groups in society, reducing the scope of interests that can be represented in the international arena.

The level of policy making influences the relative bargaining power of lobby groups. Because policy makers have to balance more interests, the policy outcome may be further from the preferred (national) position. In some cases, the opposite may be true. On a national level non-economic interests are confronted with well-organized producer interests because of low free riding. However, if firm interests are dispersed in the international arena, this increases the bargaining power of non-economic interests.

Last, the higher the institutional level of decision making the more likely it becomes that the objectives and preferences of the policy maker are distant from those of national interests. They may have different “values” or “tastes”, or they care about different constituencies and therefore have different electoral objectives. Seen from the local interest this increases the costs of harmonization.

In summary, the level of policy making (national, regional, international) has effects on pressure group organization and lobbying. Many groups in society would like to reap the benefits that harmonization of standards bring by increasing international trade. For this, they are willing to give up national standards. However, shifting decision making competences to multilateral institutions would increase organizational costs, would magnify counter pressures, and would place decision making power in the hands of policy makers that may have preferences that are too far from the preferred national position. In that case, standard unions may just strike the balance.

5. The impact of regulatory blocks on world trade negotiations

If it is attractive for small open economies to enter into a SU, it is to be expected that large negotiating parties will increasingly characterize the world trading order. This is

already the case for tariffs and QRs. Now that the harmonization of standards is gaining importance, large countries and SUs will dominate the negotiations. This section will discuss this thesis and its consequences.

In practice, most SUs are part of a RTA. This means that a SU combines the negotiations over standards and other, traditional trade barriers. Thus, a well-developed RTA including a SU acts like a large country in bilateral and multilateral trade negotiations. This is visible in trade diplomacy of the large trading parties. These economies tend to export their regulatory systems, for at least two reasons. First, if large markets have high standards, it may be very profitable for exporters in third countries to meet the high standards in order to make larger quantities of an identical product. The increasing openness of many economies implies a growing dependence on foreign markets and as such is a factor stimulating market driven harmonization. As small economies are generally more open than large economies, it is to be expected that smaller economies will adapt to the standards of the large economies as far as the latter's standards are higher. As the USA and the EU are by far the largest economies in the world economy attracting large shares of world exports and having high standards, most 'spontaneous' harmonization takes place in countries exporting to these large economies. Vogel (1995) presents many examples of this California effect. The pull of green markets is also effective in North/South trade. It has been reported that Indian producers of clothing and shoes are preparing to meet high EU standards; this puts pressure on the Indian government to implement the high standards in order to stimulate exports (Wiemann, 1996). Second, large markets often try to export their regulations in an active way. A case in point is the proliferation of free trade arrangements between the EU and its neighboring countries. These agreements show a strong element of regulatory harmonization to the level of the EU (Faber 2000). The same tendency can be observed in NAFTA: through the side agreements the US induces Mexico to lift its regulatory standards and their implementation to the US level.¹³

The fact that large and rich trading nations - the EU and the USA - have highly developed regulatory systems and export their standards to their partners both through

¹³ This harmonization is not by definition a smooth process. It has been reported that upon the opening of the US market for Mexican fruit and vegetables resulting from NAFTA, health and safety standards have been invoked to lower the competitive pressure on US

trade agreements and through trade as such, gives rise to the emergence of regulatory blocs. These blocs have developed their standards over the years through the formulation of laws and rules and through judicial review. Regional agreements have extended the geographical area where these regulations apply. The regulatory systems become entrenched in the groups of countries that constitute the blocs through judicial review and the adaptation of economic activities to these regulations.

5. Conclusions

The harmonization of standards has become an important subject of international trade negotiations. As relatively small countries, the member states of the EC have found it attractive to expand the EC towards a SU. This has developed into a regulatory bloc. It has been indicated in the previous sections that regulatory blocs are better equipped to realize regulatory harmonization than multilateral organizations. As a result, regional harmonization is often realized and has become entrenched at the regional level before the multilateral efforts have had results. Products and production processes have been adapted to meet the regulations concerned. Changing the regulations in the bloc as a result of international harmonization is costly for vested producers. They will lobby politicians not to give in to the demands of the other regulatory bloc. NGOs will also support the existing regulations. The consequence is that regulatory blocs may come into sharp conflicts over the harmonization of their regulations. The Uruguay Round Agreements have created a framework for harmonization and approximation, but it is clear that this framework is not capable to force the regulatory blocs to recognize that different ways can realize the same objective or, more even more difficult, to adopt the same objectives for the protection of consumers, workers and the environment. The recent conflicts between the EU and the USA over GMOs and the use of hormones in cattle breeding are cases in point. Given the trends towards increased consumer awareness, sensitivity for health and safety and the wish to protect endangered species, the demand for high regulatory objectives will not fall. As far as regulatory blocs have

producers. (Trebilcock and Howse, 1999: 137)

different objectives and use different means to realize these objectives, there will be conflicting regulations, leading to regulatory trade barriers.

References

- Austen-Smith, D. (1997), Interest groups: Money, information and influence, in D.C. Mueller, ed., *Perspectives on public choice*, Cambridge University Press
- Baldwin, R. (1986), *The Political Economy of U.S. Import Policy*, Cambridge, Mass., and London: MIT Press.
- Beghin, J. and Potier, M. (1997), Effects of Trade Liberalisation on the Environment in the Manufacturing Sector, *World Economy*, 20(4), 435-56..
- Bhagwati, J. (1996), The Demands to Reduce Domestic diversity among Trading Nations, in: J. Bhagwati and R.E. Hudec (eds), *Fair Trade and Harmonization* Vol. I Economic Analysis (Cambridge, MIT Press), pp. 9 – 41
- Idem (1996b), The Agenda of the WTO, in: P. van Dijck and G. Faber (eds), *Challenges to the New World Trade Organization* (The Hague: Kluwer Law International), pp. 27 - 61
- Bhagwati, J., Krishna, P., Panagariy, A. (eds.) (1999), *Trading blocs: Alternative approaches to analyzing preferential trade agreements*, Cambridge and London, MIT Press
- Bilal, S. (1998), Political Economy Considerations on the Supply of Trade Protection in Regional Integration Agreements, in: *Journal of Common Market Studies*, Vol. 36, pp. 2 - 31
- Casadio, G.P. (1973), *Transatlantic Trade; USA-EEC Confrontation in the GATT Negotiations* (Farnborough, Hants)
- Dijck, P. van (1996), NAFTA: A model for the WTO, in: P. van Dijck and G. Faber (eds), *Challenges to the New World Trade Organization* (The Hague: Kluwer Law International), pp. 127 – 153
- Dijck, P. van and G. Faber (2000), After the Failure of Seattle: New Challenges to the EU, in: *European Foreign Affairs Review*, Vol. 5, pp. 317 - 335
- Dixit, A. (1996) *The making of economic policy: A transaction-cost politics perspective*, Cambridge and London: MIT Press
- Economist, the (1998), *Dirt Poor. A Survey of Development and the Environment*, March 21st 1998

- Eicher, L. (1987), Technical regulations and standards, in: J.M. Finger and A. Olechowski (eds), *The Uruguay Round; A Handbook on the Multilateral Trade Negotiations* (Washington, D.C.: The World Bank), pp. 137-143
- Esty, D. and Geradin, D. (Eds.) (2001), *Regulatory Competition and Economic Integration : Comparative Perspectives*, Oxford Univ. Press.
- Esty, D.C. (1994), *Greening the GATT* (Washington, D.C.: Institute for international Economics)
- Evans, J.W. (1971), *The Kennedy Round in American Trade Policy: the Twilight of the GATT?* (Cambridge, Mass.)
- Faber, G. (1996), International Trade and Environmental Policies, in: A. Blowers and P. Glasbergen (eds.), *Environmental Policy in an International Context* (London: Arnold), pp. 79-105
- Faber, G. (2000), Towards a Pan-European-Mediterranean Free Trade Area? in: P. van Dijck and G. Faber (eds.), *The External Economic Dimension of the European Union* (The Hague: Kluwer Law International) pp. 247 – 273
- Fischer, R and Serra, P., Standards and Protection, *Journal of International Economics* 52(2), 377-400..
- Gandal, N. and Shyb, O., Standardization policy and international trade, *Journal-of-International-Economics*; 53(2), pp 363-383..
- Grossman, G., Helpman, E., 1994. Protection for sale. *American Economic Review* (89), 501–524..
- Grossman, G., Helpman, E., 1999. Competing for endorsement. *American Economic Review* (84), 833–850..
- Jaffe, A. et-al, (1995) Environmental Regulation and the Competitiveness of U.S. Manufacturing: What Does the Evidence Tell Us?, *Journal of Economic Literature* 33(1), 132-63..
- Kennedy, P., 1994. Equilibrium pollution taxes in open economies with imperfect competition, *Journal of Environmental Economics and Management* 27 (1), 49-63..
- Krugman, P. (eds.) (1986) , *Strategic trade policy and the new international economics*, Cambridge, Mass., and London: MIT Press

- Leebron, D.W. (1996), Lying Down with Procrustes: An Analysis of Harmonization Claims, in: J. Bhagwati and R.E. Hudec (eds), *Fair Trade and Harmonization* Vol. I Economic Analysis (Cambridge, MIT Press), pp. 41 – 118
- Revetz(2001) in Esty, D. and Geradin, D. (eds.), *Regulatory Competition and Economic Integration : Comparative Perspectives*, Oxford Univ Press.
- Mitra, D. (1999), Endogenous Lobby Formation and Endogenous Protection: A Long-Run Model of Trade Policy Determination, in: *American Economic Review*, Vol. 89, no. 5, pp. 1116 - 1135
- Nannerup, N. (2001), Equilibrium pollution taxes in a two industry open economy, *European Economic Review* 45 (3), pp 519-532
- OECD (1995), *Report on trade the environment*, www.oecd.org
- Ogus, A (1994), *Regulation. Legal Form and Economic Theory* (Oxford: Oxford University Press)
- Pelkmans, J. (1997), *European Integration. Methods and Economic Analysis* (Harlow: Addison Wesley Longman)
- Potters, J. and van Winden, F. (1992), “Lobbying and asymmetric information”, *Public Choice* 74, 269-92
- Revesz, R. (2001), Federalism and Regulation: Some Generalisations, in Esty, D. and Geradin, D. (Eds.) (2001), *Regulatory Competition and Economic Integration: Comparative Perspectives*, Oxford Univ. Press.
- Rodrik, D. (1995). Political economy of trade policy. In: Grossman, G., Rogoff, K. (Eds.). *Handbook of International Economics*, Vol. 3. North-Holland, Amsterdam, 1457–1495.
- Smith, M. and S. Woolcock (1999), European Commercial Policy: A Leadership Role in the New Millennium? in: *European Foreign Affairs Review*, Vol. 4, pp. 439 – 462
- Spencer, B.J., Brander, J.A. (1983). International R&D rivalry and industrial strategy. *Review of Economic Studies*, 707-722.
- Srinivasan, T.N. (1996), International Trade and Labour Standards from an Economic Perspective, in: P. van Dijck and G. Faber (eds), *Challenges to the New World Trade Organization* (The Hague: Kluwer Law International), pp. 219 – 245

- Stern, R. and B. Hoekman (1987), The codes approach, in: J.M. Finger and A. Olechowski (eds), *The Uruguay Round: A Handbook on the Multilateral Trade Negotiations* (Washington, D.C.: The World Bank), pp. 59-69
- Tims, W. (1996), New Standards in World Trade Agreements: Two Bridges too Far. A Comment, in: P. van Dijck and G. Faber (eds), *Challenges to the New World Trade Organization* (The Hague: Kluwer Law International), pp. 307 –317
- Trebilcock, M and R. Howse (1999), *The Regulation of International Trade* (London and New York: Routledge)
- Ulph, A., (1994), Environmental policy and international trade: a survey of recent economic analysis. In: Carraro, C. (Ed.), *Handbook of Environmental Economics and Trade*. Kluwer, Dordrecht.
- Vogel, D. (1995), *Trading Up; Consumer and Environmental Regulation in a Global Economy*, (Cambridge, Mass.: Harvard University Press)
- Wiemann, J. (1996), Green Protectionism: A Threat to Third World Exports? in: M.P. van Dijk and S. Sideri (eds), *Multilateralism versus Regionalism: Trade Issues After the Uruguay Round* (London: Frank Cass), pp. 91 – 120
- World Bank, the (1992), Development and the Environment, in: *World development Report 1992*, Oxford, 1992)