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The Impact of Equivalency and Harmonization for Organic Food Markets

1. Introduction

The market for organic products has emerged as an important segment in the global agriculture industry. Consumer concern for the environment, food safety and personal health have fuelled the growth of the organic industry. Currently, the market for organic products is based primarily in the European Union (EU), the United States (US), Canada and Japan, and the potential for global trade in organic products is growing.

In order for a product to be labeled “organic” it must pass through a certification process, which ensures that specific production and handling standards are followed. Organic standards and organic certification procedures can differ between countries, and difficulties can arise when producers attempt to trade their products across national borders. Differences in organic standards and certification systems mean that products that are considered organic in one country may not be considered organic in another country. As a result, international trade and any associated benefits can be inhibited.

Equivalency agreements and harmonization are often discussed as potential solutions to inhibited trade in organic products caused by differing standards and certification procedures among nations.

Harmonization is a process through which two or more nations adopt a common standard. The harmonized standard will typically be the preferred of the two nation’s national standards, a hybrid of the two

nation’s national standards, or an agreed upon international standard (e.g. IFOAM’s international standard). The option that is chosen obviously depends on the respective needs and bargaining positions of the nations involved. An equivalency agreement is similar to harmonization except each nation agrees that the standards can be considered equivalent for the purpose of trade. An equivalency agreement therefore does not require trading nations to have identical standards. In addition, standards in each country usually do not have to be modified significantly in order to reach an equivalency agreement.

The impact of obtaining harmonized organic standards or an equivalency agreement depends on several factors. Moreover, organic standard harmonization and equivalency are not identical in their impacts. Given this situation, the purpose of this study is two-fold. The first objective is to define, compare and contrast equivalency and harmonization of organic standards. The second objective is to provide an economic framework that can be used to measure the economic net benefit of equivalency or harmonization.

The paper is divided into four sections. The similarities and differences of equivalency and harmonization are discussed in Section Two. An approach to measuring the impacts of equivalency and harmonization is described in Section Three. Implications and conclusions are presented in Section Four.

2. An Overview of Equivalency and Harmonization: Looking at the Similarities and Differences

As it pertains to organic standards, there is one primary difference between an equivalency agreement and harmonization. Harmonization requires that the nations involved adopt an identical common standard, while an equivalency agreement does not. In the case of equivalency, standards are deemed to be equivalent only for the purpose of trade but in fact may differ substantially in terms of production and processing practices. Both options, however, can offer several potential advantages over the case where neither type of agreement exists. These advantages are discussed below.

Advantages of Harmonization and Equivalency

Both harmonization and equivalency can reduce trade costs associated with verifying that organic standards and certification processes are acceptable to importing nations. Without equivalency or harmonization, exporters must have their shipments evaluated on a case-by-case basis to ensure that they are produced according to organic standards that are considered satisfactory to the importing nation, a process that can be costly and time consuming. In extreme cases, Canadian shipments have actually been held up in port for several weeks while the equivalency of standards is verified (Western Producer, 2002). Both harmonization and equivalency would eliminate the need to carry out this evaluation on a case-by-case basis, as equivalency would be determined in advance.

In addition to the potential reduction in trade costs, equivalency and harmonization could both reduce accreditation fees paid by certification bodies. Certification bodies presently acquire market access for their clients by obtaining accreditation to agencies operating in countries where exports markets exist. A certification body's clients may sell products in a variety of countries; therefore, there is a need to

obtain and maintain multiple accreditations. The total costs of these fees for many certifiers can be quite large. In the case of either equivalency or harmonization, certification bodies would obtain market access through having a single accreditation to a national standard. This could greatly reduce the accreditation costs incurred by certifiers. Furthermore, these cost savings may be passed back to clients through lower certification costs.

A third advantage of either harmonization or equivalency is increased market access that would be created through the reduction of non-tariff trade barriers (i.e. regulations that prevent trade from occurring). Without harmonization or equivalency, governments or private bodies can impose minimum standard requirements that make it difficult for outsiders to access the market. An example of this is the requirement that Swiss chocolate producers use imported organic milk powder from Great Britain in order to obtain an organic label for their chocolate in the British market (Aebi 2002). Although these requirements could easily be considered non-tariff trade barriers, they are often justified as responses to increased consumer concerns regarding food safety and the environment, increased demand for product information and differentiation (Roberts 1999), and for protection of domestic producers. Harmonization of organic standards or equivalency would do much to reduce such barriers, as requirements would be the same for all participating nations and would be less likely to change over time.

It is clear from the above discussion that both harmonization and equivalency have advantages over the situation where organic standards are verified on a sale-by-sale basis. Another purpose of this paper, however, is to evaluate the differences between these two options. In fact, equivalency has several advantages over harmonization. Some of the advantages of equivalency have quantifiable

economic impacts, while other advantages have non-economic impacts.

Economic Advantages of Equivalency

The primary advantage of equivalency agreements over harmonization is that equivalency does not require identical organic standards and/or certification processes between trading partners. This allows for greater flexibility to accommodate differences in technology and farming practices that may exist between trading partners. Harmonization requires that a common standard or certification process be adopted by all trading partners involved, which in some cases might require substantial changes to existing farming systems. Undertaking such changes can be costly and time consuming, especially when considering that most nations have already spent considerable time developing standards, certification processes, and farm practices. Additional costs like this are expected to be highest when a nation agrees to harmonize to a stricter standard in place of a more lenient standard. On the other hand, production costs may decrease when a nation agrees to harmonize to a more lenient standard in place of a stricter standard. Obtaining equivalency may also require changes in each country's organic standard that may increase production costs, but equivalency will not affect production practices as much as harmonization since equivalency does not require identical standards.

Harmonizing to a more lenient or different standard has the potential to influence demand. In a nation where a more lenient harmonized standard replaces a stricter standard, there is potential for consumers to view products produced under the new standard as being of lower quality. The introduction of lower quality organic products may result in decreased demand for those products, which in turn would cause organic prices to fall. Regardless of whether standards differ in strictness or are different in other respects, a greater difference between the original

domestic standards will lead to a more severe decrease in demand as a result of harmonization.

Non-Economic Advantages of Equivalency

In addition to economic advantages of equivalency, there are also some non-economic advantages that equivalency has over harmonization that deserve mention. One non-economic advantage of equivalency is the ability of countries to maintain control of their own standard. In contrast, harmonization results in the loss of a country's sovereign control over their organic standard. Under harmonization, a country can request a review of the standards but the decision to change them must be made as a collective. It is extremely difficult to convince a country to partially give up control of a domestic industry.

A second non-economic advantage of equivalency is the relative ease for negotiation since there is no need to have identical standards. In contrast, it can be difficult for countries to find common ground in agreeing to a common harmonized standard. Consumer tastes will dictate standard placement to some extent. If consumers are homogeneous then the standard should be set to conform to their tastes, but consumer preferences may be homogeneous within their country but different across borders. A median point could be chosen between the two countries' standards; however, this ignores the relative strengths in bargaining power between nations and the strengths of consumers' preferences. It is likely that the relative bargaining power of each country will determine the optimal standard.

3.

The Economic Impact of Equivalency and Harmonization

Given the economic significance of equivalency and harmonization as described in Section Two, it is useful to describe an approach to analyze the economic effects of equivalency and harmonization. This section discusses the factors that must be considered in order to determine the net benefit equivalency or harmonization. This paper does not attempt to calculate the effect of harmonization or equivalency for organic markets, but the proposed framework could be used to do so. A benchmark scenario is first developed in this section, then the factors that affect the economic impact of equivalency and harmonization are described.

The Benchmark Scenario

In order to examine the impacts of harmonization and equivalency, one can compare the outcome of equivalency or harmonization to the status quo. It is thus useful to define a status quo or “benchmark” scenario. One can use the scenario of “no trade” as a benchmark, assuming that trade in organic products is not allowed because of a lack of equivalency or a lack of harmonization in organic standards. Alternatively, one can use the scenario of “costly trade” as a benchmark, assuming that trade is occurring without equivalency or harmonization, but the trade is costly or problematic because of the difficulty of showing equivalency on a sale-by-sale basis. A benchmark of costly trade is used in this analysis because it resembles the status quo situation for Canada exporting organic food products to the EU.

Using the benchmark of costly trade without equivalency or harmonization, this framework pertains to two countries, one exporting to the other. It is also assumed that both countries are “large,” meaning that changes in supply and demand in each country affect the world price.

Changes from the Benchmark of Costly Trade

In short, the net benefit of equivalency and harmonization depends on three general factors:

- 1) The resulting changes in supply and demand in each country, compared to the benchmark scenario
- 2) The relative sizes of the production and consumption market in each country
- 3) The sensitivity of each country's production and consumption to changes in price

The net benefit of equivalency or harmonization is dependent on the interaction between these three factors. In general, any initiative that increases supply or increases demand in a country (factor 1) has a positive impact on the net benefit. However, the contribution of a supply or demand change in a country towards an overall net benefit depends on factors 2 and 3. Since it is difficult to examine all three factors at once, some simplifying assumptions about factors 2 and 3 can be made in order for the net benefit be dependent on only the supply and demand impacts. These assumptions are:

- the sensitivity of production and consumption to changes in demand in both countries are the same
- the size of the market in both countries is the same
- trade is small compared to total production

Given these assumptions, the net benefit of equivalency or harmonization is mainly dependent on the changes in supply and demand in the market. The proceeding sections discuss the economic impacts of equivalency and harmonization as they affect the supply and demand of organic products.

Cost/Supply Impacts

Cost changes that can result from equivalency or harmonization include changes in costs of accreditation for certification bodies, costs of trading for exporters, and production costs for producers. An increase in these costs results in a decrease in

supply, which has a negative impact on net benefit. On the other hand, a decrease in these costs results in an increase in supply, which has a positive impact on the net benefit. The net effect on supply depends on the trade-off between certification and trade cost savings and production cost increases. If production cost increases outweigh other cost savings in a country, there would be a decrease in supply, which would contribute to a negative impact on the net benefit of equivalency or harmonization for that country.

While equivalency is expected to have positive impacts through certification, accreditation and trade cost savings and minimal production cost disadvantages, harmonization may have more negative impacts on production costs. Equivalency is thus more likely to have a positive impact on supply than harmonization.

Demand Impacts

Consumer preferences dictate the demand for organic products in a country. A decrease in consumer demand for organic products due to a change in a standard has negative impact on the net benefit of equivalency or harmonization. On the other hand, an increase in demand for organic products has a positive impact on the net benefit. In the case of equivalency, it is expected that demand will not be effected compared to the benchmark situation of costly trade. Equivalency will not decrease consumer demand since trade is already occurring and standards do not change. However, in the case of harmonization, it is expected that demand may decrease, particularly in the country that harmonizes to a standard that is considered less strict or different from their original domestic standard.

Net Benefit of Supply and Demand Impacts

After making the simplifying assumptions described earlier, the net benefit of equivalency or harmonization depends on whether the positive effects on supply through accreditation, trade and production cost

savings outweigh the negative effects of increased production costs and lower demand. In the case of equivalency, production costs and consumer demand should not change compared to the benchmark of costly trade. In the case of harmonization, however, production costs may have a net positive or negative effect, and demand may decrease if the standards are different to begin with.

The difference between the original domestic standards in the countries that intend to harmonize has a very strong effect on the resulting net benefit of harmonization. If the standards are perceived by both countries to be equivalent, then there will be no production cost or demand changes under harmonization. On the other hand, harmonization has the potential for a negative net benefit as the standards are perceived to be more dissimilar to begin with.

Each country may be impacted differently from equivalency and harmonization. One country may have a positive net benefit, while another country may have a negative net benefit. The net benefit can be calculated for each country involved, plus the sum of all countries. A positive net benefit from the perspective of all countries in aggregate therefore does not imply a positive net benefit for each individual country.

The initial costs of negotiating equivalency or harmonization must also be considered, and can be weighed against any benefits resulting from consequent increases in supply and demand. Negotiation costs could be incorporated into the analysis by using a Cost-Benefit analysis, with an initial outlay of negotiation costs and a stream of net benefits of equivalency or harmonization discounted into the future. Such an analysis would require choosing a discount rate and making assumptions about the growth of the markets into the future.

The Effect of Using Autarky (No Trade) as the Benchmark

The choice of a benchmark scenario has an important effect on the net benefit of equivalency or harmonization. This analysis has compared the results to a benchmark scenario of costly trade. Since a benchmark of costly trade assumes that trade is already occurring, the demand in the importing country prior to equivalency or harmonization already reflects the acceptance or rejection of foreign organic food. Alternatively, the benchmark of autarky (no trade) could be employed instead. Comparing the impact of equivalency or harmonization to autarky would involve including two additional effects:

- 1) The degree to which imports are rejected due to country of origin preferences
- 2) The economic gains from trade

According to Lohr and Krissoff (2002, p.212), "Even if standards are identical, consumers and buyers in the importing country are likely to view imports as subject to less stringent requirements." Thus, while the idea of open borders between two countries that have developed equivalency may seem ideal, it does not take into consideration consumer response in the importing country.

Equivalency or harmonization may result in more severe decreases in demand in the importing country if some consumers in the importing country reject imported organic food products. Alternatively, some consumers could reject all organic food products in the importing country if they cannot tell whether the products contain foreign organic food or not. In the end, the demand impacts compared to a benchmark of autarky will be more negative compared to a benchmark of costly trade.

If autarky is the benchmark situation, the gains from trade must also be considered. Gains from trade would occur if the prices in each country are different under a situation of no trade. When trade is allowed, a world price will emerge and one country will sell its

excess supply to the other country that has excess demand. The gains from trade due to obtaining equivalency or harmonization could be substantial.

4) Implications and Conclusions

Overall, the net benefit of equivalency and harmonization depends on several factors, including changes in costs and consumer preferences. An implication of this is that it is very difficult to judge the net benefit of equivalency or harmonization without performing a quantitative analysis. However, this paper has concluded that equivalency has less potential for negative impacts than harmonization. This is the case because equivalency is expected to result in smaller changes in each country's original organic standard, which translates into smaller effects on production costs and smaller losses in demand. In short, it can be concluded that equivalency has a more certain positive net benefit than harmonization.

A second important implication is that the net benefit of equivalency or harmonization decreases as the beginning standards in each country are more dissimilar. Thus, there may be no economic net benefit by gaining equivalency or harmonization if the initial domestic standards are very different.

A final important implication is that the impacts depend on whether trade was already occurring or not. It is thus important to use the appropriate benchmark situation in the economic analysis. If one uses a benchmark of autarky (no trade), one must include the additional effects due to country of origin preferences and the gains from trade.

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