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Reducing Transaction Costs by Regulating Canada's Organic Industry

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The Issue

The regulation of Canada's organic industry has been discussed for over a decade. Under the current voluntary system, organic producers and handlers are not required to obtain organic certification. Certifiers, in turn, are not required to obtain accreditation to Canada's voluntary national organic standard. Participation in Canada's national standard is low because certifiers feel that accreditation to the standard is too costly and does not provide access for their clients to foreign markets. At the same time, the federal government is having difficulty establishing equivalency agreements to enhance market access for Canadian organic products because participation in the national standard is low.

This Catch-22 situation has meant that there is no minimum Canadian organic standard in place. The resultant proliferation of multiple regional certification standards results in high transaction costs for buyers and sellers of organic products (in both domestic and foreign markets), who must verify organic authenticity by evaluating regional standards on a case-by-case basis. Using a transaction cost framework, this paper examines the implications of regulating the Canadian organic industry through the creation of a mandatory minimum organic standard.

Implications and Conclusions

Regulation of the Canadian organic industry could have several benefits for industry participants in Canada and abroad. Mandatory participation of certifiers in Canada's



national standard would bolster the federal government's ability to pursue equivalency agreements with Canada's trading partners, which would reduce transaction costs for buyers and sellers in domestic and foreign markets. A legally enforceable minimum standard would also make it difficult for sellers of non-organic products to misrepresent their products as organic in an effort to obtain price premiums currently earned by most organic products. Segregation costs could be reduced, as it would no longer be necessary to keep products with different certification status separate as they move along the supply chain. Finally, accreditation costs for certifiers could be reduced because equivalency agreements between Canada and her trading partners would mean that accreditation to Canada's national standard would provide access to foreign markets for Canadian exporters. This would make additional international accreditations, currently held by Canadian certifiers, redundant and therefore unnecessary.

Background

Introduction and Definitions

Transaction costs are costs associated with activities carried out in preparation for (*ex ante* costs) and after an exchange (*ex post* costs) (Williamson, 1979). It is the goal of buyers and sellers in an exchange to minimize transaction costs. *Ex ante* costs include the costs of searching for an exchange, as well as negotiating, drafting, and safeguarding an agreement that specifies the terms of exchange. *Ex post* costs are costs associated with monitoring and enforcing the terms of an agreed-upon exchange.

In the organic industry, transaction costs are primarily *ex ante* search costs associated with verifying organic authenticity. Consumers of organic products may be willing to pay a premium for products they believe to be "organic." Uncertainty over product quality, however, can reduce buyers' willingness to pay (Akerlof, 1970). This uncertainty is increased by the "credence"¹ quality of organic products, which means that organic authenticity cannot be verified easily (or cheaply) through physical inspection or consumption after an exchange. Thus there is an incentive to signal quality to consumers through *ex ante* quality verification. In the organic industry, certification and accreditation systems have evolved to achieve this verification.

Certification is the process by which a third party (a certification body) verifies that commodities moving along the supply chain are produced, stored, transported, and processed according to principles outlined in an organic standard. As it pertains to transaction costs, the certification process means that, provided a buyer of organic products recognizes and accepts a certifier's standards, the buyer does not have to incur costs associated with verification.

Accreditation is the process by which buyers ensure that certifiers' standards are at a minimum acceptable level. Where a diversity of certifiers employ a variety of standards (the global organic industry), the process of becoming familiar with individual standards can also increase transaction costs substantially. By granting accreditation status, an

accreditation agency acknowledges that the standards employed by a certification body, and hence exporters associated with that certifier, are equivalent to its own. This gives sellers access to those markets for which the accreditation agency has jurisdiction. Without formal accreditation, buyers have to establish the equivalency of standards for individual certifiers, a process that increases transaction costs considerably (Lohr, 1998).

An *equivalency agreement* is an agreement under which two or more nations agree that each other's national standards are equivalent for the purpose of trade.² Like accreditation, an equivalency agreement seeks to reduce the transaction costs associated with verifying that certification bodies' standards are acceptable. The difference is that an equivalency agreement is between nations rather than between a certification body and an accreditation agency.

For an equivalency agreement to be effective, certification bodies operating in each nation are usually required to obtain accreditation from their respective national accreditation agencies (i.e., the industry is regulated). This allows the equivalency agreement to provide access to the other nation's market for all certified organic entities operating in each country. Equivalency agreements are preferable to accreditation because they can reduce transaction costs and fees associated with obtaining multiple accreditations. For example, an equivalency agreement between Canada and the European Union would provide market access for clients of Canadian certifiers to all member states in the EU, thus eliminating the need to obtain accreditation from each member state.

Characteristics of the Existing Organic Regulatory System in Canada

Organic certification and accreditation in Canada are currently voluntary. Organic sellers (including producers) need not obtain certification from a recognized certifier, and certifiers need not obtain accreditation from domestic or international accreditation agencies. Canada does have a national organic standard, to which accreditation can be obtained through the Standards Council of Canada (SCC).³ However, participation in the standard is extremely low. At present, only two of approximately forty certifiers have accreditation under Canada's national standard: Pro-Cert Organics and the Organic Producers Association of Manitoba (OPAM) (Standards Council of Canada, 2004).⁴

Many certification bodies have opted out of the national standard because of cost and the belief that national accreditation does not increase their market access. The federal government (Agriculture and Agri-Food Canada) is trying to use the Canadian national standard to negotiate equivalency agreements with various trading partners, but equivalency has yet to be established with any other country (COABC, 2005).

Each of the forty Canadian certifiers has its own standard, to which producers and handlers are certified. Many of these certification bodies operate on a regional level, though several are national and even international in scale. Participants in organic markets typically become certified by the regional certification body they feel will provide the

greatest net benefit. Perceived advantages include lower annual fees, greater flexibility in terms of what constitutes “organic farming,” and greater access to foreign markets.

Canada’s two primary organic export markets are the United States and the European Union. To obtain access to U.S. markets, many Canadian certifiers have obtained accreditation under the recently introduced U.S. National Organic Program (NOP). The NOP requires all organic entities operating in or exporting to the United States to obtain certification from certifiers accredited to the American national organic standard (NOP, 2005).

There are two ways to gain access to EU organic markets. The first is obtaining status on the EU’s Third Country List, which is essentially an equivalency agreement between an exporting nation and the broader EU, including each of its member states. By December 31, 2006, any country wanting to export organic products to Europe will have to obtain status on this list. The second option (used by most Canadian exporters) is to prove on a case-by-case basis (through accreditation) that products are produced according to procedures deemed to be equivalent to those described within the EU Organic Regulation. The fact that Canadian exporters use a variety of regional standards, however, increases the aggregate transaction costs of this verification process considerably. This is discussed in more detail in the next section.

Problems with the Canadian Organic Regulatory System

Despite the availability of certification and accreditation systems and the existence of a national standard, the current mechanism for verifying organic authenticity in Canada creates a variety of problems for industry stakeholders. These include high transaction costs for buyers and sellers in both domestic and foreign markets, high segregation costs, high accreditation fees for sellers, and an inability to protect domestic consumers against fraudulent organic claims. Each of these problems is discussed below.

High Transaction Costs

Sellers of authentic organic products have an incentive to obtain certification because buyers can reduce their own transaction costs by purchasing only certified products. Further, accreditation allows buyers to see that standards are at a minimum acceptable level. However, low participation in the Canadian national standard means there are essentially no minimum standards. Buyers cannot be certain that certified products are truly organic without having their respective accrediters evaluate on a case-by-case basis the standards and procedures employed by regional certifiers. The magnitude and detail of most organic standards can make this process difficult, expensive, and time-consuming.

At first glance, the problem of maintaining market access to the EU seems as simple as negotiating equivalency (in other words, being placed on the Third Country List) using the Canadian national organic standard. However, the ability to negotiate an equivalency agreement with the EU hinges on the compliance of domestic certifiers with the Canadian

national standard, something that has yet to be widely achieved under the current voluntary system. Since only two certification bodies are currently accredited to the national standard, an equivalency agreement with Europe will reduce transaction costs for EU member states only if they purchase from sellers certified by one of those two certifiers. If EU buyers want to purchase from sellers associated with other Canadian certifiers, they will incur transaction costs associated with facilitating the evaluation, by their respective competent authority, of those certifiers' standards and procedures. Here, the efficacy for the EU is questionable, as the transaction costs saved through the equivalency agreement are likely to be less than the costs of developing the agreement itself. This is especially true when the voluntary nature of the Canadian standard means organic sellers in the EU already have access to Canadian markets.

In short, an equivalency agreement between Canada and the EU today would not improve the access of EU exporters into Canada, and would do very little to reduce transaction costs on commodities entering Europe. It is not surprising, therefore, that Europe has recommended that Canada invoke more complete participation in the Canadian standard by its certifiers prior to seeking Third Country status (Organic Regulatory Committee, 2003).

It is important to recognize that to acquire market access, sellers will also incur transaction costs associated with validating the integrity of their certification status as, all things being equal, foreign buyers will partake in an exchange only if they are able to assess certification status at a cost lower than that which they would incur in an equivalent alternative exchange. Barzel (1982) makes a similar argument by suggesting that high sorting and measurement costs reduce a buyer's willingness to pay, creating an incentive for sellers to carry out these functions. Using oranges as an example, he suggests that sellers will incur sorting costs just up to the point that buyers themselves are dissuaded from sorting. Sorting by buyers represents an increase in transaction costs and can potentially prevent an exchange from occurring. In the case of the organic industry, verifying organic authenticity is like Barzel's sorting. If a seller is unwilling to incur transaction costs associated with this process, the buyer will seek a lower price or the transaction will not occur at all, as the buyer would then be inclined to purchase organic products elsewhere. The fact that the Canadian organic system brings about high transaction costs for buyers with regard to assessing the equivalency of organic standards means that sellers must absorb a higher proportion of these costs than would sellers in countries where an efficient system is already in place. This situation places Canadian exporters at a disadvantage relative to exporters in nations where full participation in a minimum standard occurs.

Protecting Domestic Consumers against Fraudulent Organic Claims

Although seldom cited as an inefficiency in the Canadian organic certification/accreditation system, the lack of a national standard and the lack of labeling requirements

(except in Quebec) make difficult the protection of domestic consumers against fraudulent organic claims. This is especially true given that Canada's trading partners continue to develop and refine their own mandatory systems of organic standardization. The EU has had mandatory organic standards in place since 1991, while the United States introduced organic industry regulation in October 2002. This means that only high-quality organic products are allowed into these markets. Sellers of lower-quality organic products are therefore likely to look toward the Canadian market, as Canada is one of few organic markets without industry regulation. Canadian consumers still have the option of verifying organic authenticity through their own evaluation of standards. However, in many cases they may be completely unfamiliar with certification/accreditation procedures. As long as Canadian consumers have difficulty authenticating the true nature of organic products, there is potential for the Canadian market to become infiltrated with products that cannot meet standards in markets outside of Canada. A situation like this is likely to increase the competition faced by domestic producers of authentic organic products trying to market products locally as well as diminish consumer confidence in the availability of high quality products (thus eroding price premiums), and, in the long run, create a "market for lemons," in much the same way as proposed by Akerlof (1970).

High Accreditation Costs

In addition to increased transaction costs for buyers and sellers, the absence of equivalency agreements between Canada and her trading partners has led to increased accreditation costs for domestic certifiers and, in turn, for their clients (producers, processors, exporters, etc.). Without equivalency, certifiers often acquire market access for sellers by obtaining accreditation to individual agencies typically operating in separate countries. A certifier's clients may sell products in a variety of countries; therefore, there is a need to obtain and maintain multiple accreditations. For example, Pro-cert Organic Systems, one of the largest certifiers in Western Canada, pays annual fees to maintain accreditation status with four accrediters including the Standards Council of Canada (SCC), the U.S. National Organic Program (NOP), the European Economic Community (EEC), and the Conseil d'accréditation du Québec (CAQ) (Pro-cert Organic Systems Website, 2005). The total costs of these fees for many certifiers can be quite large, and may be passed down to the certifiers' clients.

If equivalency agreements could be reached with Canada's trading partners, certification bodies could obtain market access through a single accreditation to a Canadian national standard. A recent study by IFOAM endorses this notion by suggesting that equivalency would greatly reduce accreditation requirements, and hence costs, as it would substantially reduce the number of accreditations required by exporters (IFOAM, 2004b).

High Segregation Costs

One of the primary costs resulting from inefficiencies in the Canadian certification/accreditation system results from the need to keep organic products isolated as they move along the supply chain. Under the current system, commodities certified by different certification bodies must be kept separate because the standards may be different. An inability to maintain segregation can ultimately prevent commodities from being marketed as organic, thus resulting in a loss of any organic premium. The Canadian organic industry is heavily export-dependent, with almost 80 percent of commodities destined for the EU or the United States; hence, segregation and identity preservation costs can be quite high (Agriculture and Agri-food Canada, 2002).

Potential Solutions

The problems described above result primarily from low participation in the Canadian national organic standard. In the case of foreign markets, if all organic certifiers operating in Canada participated in the national standard, the negotiation of equivalency agreements would be facilitated. This would reduce transaction costs for buyers and sellers in these markets, as well as accreditation and segregation costs for sellers. Similarly, the domestic market would be protected because anyone selling in Canada would be certified by a nationally accredited certifier. The next section of the article evaluates the potential to achieve these objectives through voluntary and mandatory systems.

Can Voluntary Accreditation Work?

Under the current voluntary system, it can be assumed that most certifiers avoid obtaining accreditation to the Canadian national organic standard because the costs of doing so outweigh the benefits. The government (i.e., the Standards Council of Canada) could decrease the cost/benefit ratio by lowering accreditation fees and obtaining equivalency agreements with Canada's major trading partners. However, it is evident that without full participation by Canadian certifiers in the national standard, our trading partners have little incentive to negotiate equivalency agreements with Canada. This is especially true given that our voluntary standard allows free access into Canadian organic markets, irrespective of equivalency.

The Catch-22 situation described here might suggest that the most realistic solution to the problem is to make the Canadian national standard mandatory (an option that will be discussed in the next section); however, assume for a minute that the federal government could negotiate equivalency agreements and reduce accreditation fees despite the low participation. Would the voluntary standard then provide enough incentives to invoke full participation? The answer is *no*. Sellers in the Canadian organic industry participate in two different markets and therefore have two separate objective functions. For certifiers whose primary clients are exporters, the reduction in transaction costs, accreditation costs, and segregation costs derived from participating in the standard could be enough incentive

to obtain accreditation. The same cannot be said for certifiers whose clients participate only in Canadian markets. For these certifiers, accreditation to Canada's national standard is still of little competitive advantage because it is not required to sell organic products in Canada. Many certifiers would still likely choose to bypass accreditation, and domestic consumers would still have no reliable way of verifying organic authenticity. The threat of substandard organic products infiltrating the marketplace would remain high, as would the potential emergence of the "market for lemons" alluded to earlier. Thus, in addition to current difficulties that the Canadian government is having with equivalency negotiations, it appears evident that although a voluntary system could potentially alleviate many of the problems experienced by Canadian exporters, it does little to protect domestic consumers.

Mandatory Standards as a Solution

Recognizing the shortcomings of a voluntary system of accreditation, the federal government is taking steps to introduce mandatory organic regulations in Canada. The defined national standard will effectively become the minimum acceptable benchmark for participants in the Canadian organic industry. Certifiers will still be free to add their own additional requirements for product differentiation strategies, but there will be a common minimum definition of what it means to be organic.

These characteristics allow mandatory standards to succeed in two key areas that voluntary regulations cannot: providing incentive, through reduced transaction costs, for trading partners to negotiate equivalency agreements, and preventing, through the threat of legal sanctions, the infiltration of poor-quality organic products into domestic markets. In addition, they would eliminate the further proliferation of regional standards, thus reducing confusion among consumers about the true definition of "organic."

Conclusions and Further Research

This article examines the notion of implementing a minimum mandatory national standard in the Canadian organic industry. Under the current voluntary system, buyers and sellers of organic commodities experience high transaction costs associated with verifying organic authenticity, as well as high accreditation and segregation costs. In addition, the voluntary system does little to prevent the Canadian domestic market from becoming a "dumping ground" for low-quality organic products. These problems result primarily from low participation in the Canadian national organic standard.

Low participation in the standard results from the fact that costs of accreditation are higher than the perceived benefits for certifiers and their clients. If the federal government were able to reach equivalency with Europe and the United States, it is likely that the perceived benefits for certifiers whose primary clients are exporters would outweigh the costs of accreditation. These clients would therefore have incentive to voluntarily seek accreditation to the national standard, which could significantly lower transaction costs otherwise faced by buyers and sellers in foreign markets.

It is unlikely that equivalency agreements alone would provide incentive to participate in the Canadian national standard for certifiers whose primary clients sell in Canada. Equivalency agreements are not required for access to Canadian markets, and the “credence” quality of organic products makes it difficult and costly for consumers to verify organic authenticity. Over time, Canadian consumers could lose confidence in all organic products and a “market for lemons” could emerge. A mandatory standard, however, could alleviate this problem, as it would require full participation of all certifiers operating or selling in Canada as well as abroad.

It should be noted that although mandatory regulation of the Canadian organic industry can potentially reduce transaction, accreditation, and certification costs, and can improve Canada’s ability to protect domestic consumers, the costs of implementing such a system are non-trivial. Therefore, future research in this area should focus on weighing the costs against the benefits of implementing and maintaining a mandatory system. Only then can the benefits of mandatory standards for the organic industry truly be assessed.

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Endnotes

¹ Credence goods are goods for which it is impossible to authenticate quality through physical inspection or consumption.

² In some cases, an equivalency agreement could be between a nation (e.g., Canada) and a group of countries (e.g., the European Union).

³ The SCC is the national standards association in Canada and provides accreditation for a wide range of voluntary standards.

⁴ Estimates on this number vary widely, depending on whether provincial and regional affiliations with international certification bodies are counted.