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Proceedings of the Third
Agricultural and Food Policy Systems
Information Workshop

Harmonization/Convergence/ Compatibility in Agriculture and Agri-Food Policy: Canada, United States and Mexico

Edited by

R.M.A. Loyns
Ronald D. Knutson
Karl Meilke
Daniel Sumner

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Edited by:

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Ronald D. Knutson	Texas A & M University
Karl Meilke	University of Guelph
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October, 1997

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— EXECUTIVE SUMMARY —
AGRICULTURE AND FOOD POLICY SYSTEM INFORMATION WORKSHOP ON HARMONIZATION/CONVERGENCE/COMPATIBILITY IN AGRICULTURAL AND AGRI-FOOD POLICY IN CANADA, THE UNITED STATES AND MEXICO

BACKGROUND

Trade in agricultural and food products between Canada and the United States has been significant over the years and it is growing. As a consequence of the North American Free Trade Agreement, trade with Mexico is also growing rapidly. The United States, Canada and Mexico are evolving into one of the worlds prominent trading blocs. Agricultural and food products are important today and much of the growth in trade in the years ahead will occur in these areas.

Usually increased trade is accompanied by elements of trade stress and sometimes there may be full blown trade disputes. The United States and Canada have had their share of trade disputes both pre and post NAFTA. Similarly there are stresses and strains in relations with Mexico over some products and in policy issues such as environmental protection. Stress among and between countries resulting from trade relations produces the need for dispute settlement mechanisms. But it also creates a need for vehicles and mechanisms to understand, prevent and avoid stress reaching the point of a dispute.

The need for analysing and understanding trade stress and disputes in the agriculture and agri-food industry is the motivating force behind a series of workshops and publications on trade and policy disputes in North America. The objective of this initiative is to use timely and relevant economic information to reduce policy and trade stress, to influence policy development and enhance the economic gains from increased trade.

The workshop on harmonization/convergence/compatibility of agricultural and agri-food policy among Canada, the United States and Mexico was the third in the series. The first workshop and publication dealt with grain disputes between Canada and the United States. The second in 1996 dealt with dairy disputes. The proceedings of each workshop are published and distributed in a timely fashion as part of the objective of influencing trade relations and policy development.

CONTENTS OF THE PUBLICATION

The book consists of thirteen major papers presented in five thematic sections. Each section contains one or more discussion comments. Authors and discussants are drawn from among agricultural economists knowledgeable in the particular area of analysis, and working in government, academic or research positions, or in business or interest group organizations related to the particular policy or trade issue. The extended title for this workshop — **Policy Harmonization/Convergence/Compatibility** — indicates that the organizers viewed the process of achieving harmony in trading relationships as a complex process, indeed a process partly in search of definition.

The lead paper by Tim Josling (Stanford University) addresses in considerable detail the definitional issues involved in searching for policy harmonization among countries, and he addresses some of the practicalities of sovereign nations like Canada, the United States and Mexico altering their policy frameworks to achieve H/C/C. Josling presents the view that harmonization is not to be taken as "identical" nor "sameness" in policy, programs and regulation. Perhaps this point should be obvious but it may not be in many stakeholders minds; this point was made repeatedly throughout the workshop. Josling also distinguishes among the three terms in the title of the workshop — harmonization, convergence and compatibility — and argues that there is a "strong" and a "weak" form of each in relation to interpreting international linkages in domestic policies. Josling's paper and the discussion comments by Kelly White and Don McClatchey provide a comprehensive treatment of many of the important issues in defining the problem which is often euphemistically referred to simply as "policy harmonization".

The second paper by Mike Gifford, an experienced negotiator in trade agreements for Canada, deals with the implications of H/C/C for dispute settlement mechanisms. The paper reviews trade tension experiences under GATT, and more recently under NAFTA. His overall conclusion is that formal dispute settlement mechanisms are a necessary and positive component of trade agreements, but knowledge of trading partner programs and negotiation prior to formal application of these mechanisms are the preferred means for resolving conflict. Meilke (University of Guelph) discussion comments complement Gifford's development of the disputes settlement process and provides a comprehensive list of references for those who may wish to research these developments further. The Josling and Gifford papers, and discussion comments, provide a substantive framework for understanding the broad issues involved in "harmonizing policy and trading relations among nations".

The next section contains four papers on more specific and sectoral issues. Dan Sumner (University of California, Davis) addresses the general implications of H/C/C for the agricultural sector. Antonio Yunez-Naude (El Colegio de Mexico) discusses Sumner's paper and provides a short but valuable description of the agricultural and agri-food policy situation in Mexico. Technical standards, grades, sanitary and phytosanitary requirements are all part of the regulations that emanate from agricultural and food policy. This is a broad but critical component, and often highly technical and highly controversial component of trading

relations addressed by Maury Bredahl (University of Missouri). Policy differences in relation to treatment of the environment have given rise to trade disagreements in the 1990s. Patricia Lindsey (Oregon State University) and Mary Bohman (University of British Columbia) provide a conceptual framework for consideration of environmental issues in trade harmonization and review institutional arrangements in the three countries, including those encompassed by the NAFTA. These two areas, i.e., technical standards and the environment, are characterized by wide diversity among countries in policies and programs and, therefore, particular challenges to trade harmonization. Finally, reflecting the reality that competitive conditions within countries are crucial to determining benefits, and their distribution, associated with freer trade, Robertson and Stanbury (Industry Canada) discuss the role and status of competition policy in the three countries. Tom Sporleder's (Ohio State University) comments include a short discussion on investment policy and its role in trade harmonization.

The fourth section extends the sectoral theme into livestock and meats, dairy and poultry, grains and oilseeds, and horticultural products. Dermot Hayes (Iowa State University) and Bill Kerr (University of Calgary) apply a transaction cost framework to analysing the impacts of freer trade conditions in the livestock and meats sectors where formal trade barriers are already low but where non-tariff barriers are significant and not easily removed. De Gorter (Cornell University) and de Valk (a private consultant) provide an interesting chronology and commentary on disputes between Canada and the United States in the Canadian supply managed sectors. Gray (University of Saskatchewan) and Smith (Montana State University) examine changes in Canadian and U.S. programs in the grains and oilseeds sectors over the period 1985-1996 and assess the convergence of programs in the context of emerging harmonization. The last set of three papers in this section by Fairchild and colleagues (University of Florida), Schildroth (Government of British Columbia), and Hope (Government of Ontario) discuss and illustrate the problems, needs, and progress achieved towards "trade and policy harmonization" in the horticultural sector. Each paper is accompanied by discussion comments.

The last section of the publication includes reaction comments of a panel directed toward overall implications of the workshop, research needs and future directions for policy development. Views are presented by John Murphy (a Canadian banking representative), Fred Woods (USDA), Hal Harris (Clemson University) and Tom Richardson (AAFC).

The coordinators of this workshop were:

Dan Sumner, University of California, Davis
Ron Knutson, Food and Agricultural Policy Center, Texas A&M
Karl Meilke, University of Guelph
Jack Gellner, Agriculture and Agri-Food Canada, and
Al Loyns, University of Manitoba

ORDERING THE PUBLICATION

The book is available at the nominal cost of $15.00, which includes shipping and handling charges, from:

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FOREWORD

In 1995 a small group of agricultural economists from the United States and Canada initiated a series of workshops designed to generate information in the two countries on policy systems and trade relations. We embarked on this task because we saw policy and trade disputes in many areas. These disputes occupied a great deal of political and bureaucratic time, fractured trade relations between two enormous trading partners, and reduced the benefits associated with the newly negotiated trading agreements. It is our belief that accurate, timely, economic analysis and information can play a positive role in reducing trade tensions, and perhaps avoid some.

This publication is the proceedings of the third workshop. This time we have taken the objective into two new dimensions: the subject matter of the workshop is the flip side of trade disputes — policy harmonization. In addition, we have incorporated the growing role of Mexico in North American Trade.

There are a number of people and organizations who support this program, and continue to make it possible. We run a tight operation from a financial standpoint. Authors and discussants contribute to the program well beyond any renumeration they receive for their efforts, particularly in view of the publication constraints imposed on them. We appreciate this contribution and we will likely continue to ask for more! The Farm Foundation, United States Department of Agriculture, and Agriculture and Agrifood Canada have provided base funding for the project each year; without that, we could not have operated. This year, the Agricultural and AgriBusiness Banking Division of the Royal Bank of Canada also provided financial support. We appreciate this sponsorship. Each of the industry groups which attended provided support in the form of participation, papers and discussion comments. The Competition Bureau, Industry Canada provided both direct and indirect support through paper presentation and the purchase of multiple publications.

Meeting a short publication target stretches resources and relationships. Besides the authors who met their deadlines, four individuals did the editorial and production work that produced this book on time. Bonnie Warkentine did all of the word processing and cover design. Lenore Loyns rehoned her editing skills in California and in Winnipeg and she did much of the pre-conference organization. Brenda Tjaden helped keep things running in Tucson and assisted in editing. And, Gary Hamel at Friesen Printers delivered a quality product, in a short time.

We have done a short evaluation of the project within the group of individuals who participated in all Workshops. We would also like to hear from a group of readers. Please give us your views on the value of this work.

R.M.A. Loyns
University of Manitoba

Ron D. Knutson
Texas A&M

Karl Meilke
University of Guelph

Daniel A. Sumner
University of California, Davis

October 22, 1997

WORKSHOP AUTHORS, DISCUSSANTS AND ORGANIZERS

Walter Armbruster is Managing Director of the Farm Foundation, Chicago. The Foundation is involved in projects related to rural education, extension, and information dissemination. Walter sits on several professional committees and is President of the American Agricultural Economics Association.

Jack Bamford in Policy Directorate, Agriculture and Agri-Food Canada (AAFC), Ottawa. He assisted in planning this workshop and was the primary source of information and writer of the Canadian Background paper.

Mary Bohman was Professor, Agricultural Economics, University of British Columbia. She researches and writes on the linkages between trade policy and domestic environment policy.

Maury Bredahl is Professor of Agricultural Economics at the University of Missouri, Columbia, where he is Director of Center for International Trade Studies.

Deborah Bryantan is an analyst with the Policy Analysis and Coordination Division, AAFC. She has conducted several studies on sanitary and phytosanitary regulations in relation to trade in agricultural products.

Kate De Remer works on the technical barriers to trade project at ERS. She was a professional staff member on the senate agriculture committee (minority staff) working on the political facets of SPS disputes. She was also a regulatory analyst at Animal Plant Health Inspection Service (APHIS).

Mike Dungate is Head of Trade, Policy and Economics for Chicken Farmers of Canada, on leave from the Department of Foreign Affairs and International Trade. Most recently, he has worked on Canada/U.S. agriculture trade issues, including the Canada's dairy and poultry tariffs dispute.

Gary Fairchild is Professor and Extension Economist, Food and Resource Economics, University of Florida. He researches, writes, and conducts extension work in marketing of Florida agricultural products, and in trade policy.

Jack Gellner is Director of the Industry and Policy Analysis Division, Policy Branch, AAFC, Ottawa and one of the members of the Coordinating Committee for the workshops. His responsibilities include research, analysis and development on most aspects of federal policy, including providing analysis and advice related to the dairy industry.

Mike Gifford is Director General, International Trade Policy, Agriculture and Agri-Food Canada. From 1986-93 he served as senior negotiator on agriculture in the GATT, CUSTA and NAFTA agreements with External Affairs.

Richard Gray is Professor at the University of Saskatchewan, Saskatoon. He has published studies on price analysis and grain marketing, and he has been actively involved in the recent studies on prairie grain marketing organization.

Hal Harris is Professor in the Department of Agricultural Economics and Applied Economics at Clemson University. His research and extension interests include public policy, trade policy, dairy policy and agricultural marketing.

Dermot Hayes is currently Professor of Economics, Iowa State University, in charge of the Meat Export Center. His research interests include food safety, livestock modeling, and demand and market analysis, and trade policy.

Erin Holleran is former Graduate Research Assistant and currently a research analyst at the University of Missouri, Columbia.

David Hope is Director of Policy Analysis, Ministry of Agriculture, Food and Rural Affairs (Ontario). He is involved in policy development and analysis in a wide range of topics facing the agriculture and food sector.

Tim Josling is well known for his research and writing on many aspects of international trade and trade impediments. He is currently Professor and Senior Fellow, Institute for International Studies, Standford University.

Bill Kerr is Professor of Economics at the University of Calgary. He has become a prolific author in the area of trade and trade policy, particularly in meats. He is co-editor of the *Canadian Journal of Agricultural Economics*.

Gernot Kofler is employed by Economics and International Affairs, Competition Bureau, Industry Canada in Ottawa.

Ron Knutson is Director, Agriculture and Food Policy Center at Texas A & M University. Ron serves in many extension, teaching and research capacities in the policy arena; he is a member of the Board of the the Farm Foundation and a member of the workshop Coordinating Committee.

Patricia Lindsey was Assistant Professor of Agricultural Economics at Oregon State University, Corvallis. She has written widely on resource economics issues and has co-authored several papers with Ms. Bohman on trade and environmental policy.

Al Loyns is Professor of Agricultural Economics, University of Manitoba and a member of the workshop Coordinating Committee. At the time of the workshop he was Fulbright Research Scholar at the University of California (Davis) and President, CAEFMS.

Don McClatchy was with Agriculture and Agri-Food Canada and has been involved in policy development and analysis of agricultural marketing systems. Don has moved from AAFC and is consulting in the area of trade and public policy.

Karl Meilke is Professor and Acting Head of Agricultural Economics and Business, University of Guelph. Karl is active in the International Agricultural Trade Consortium and he is a member of the Coordinating Committee for these workshops.

Joseph Monteiro is employed by Economics and International Affairs, Competition Bureau, Industry Canada in Ottawa.

John Murphy is Vice-President of Agricultural and Agribusiness Banking, Royal Bank of Canada. John has had a long career with the Royal but he has worked for both the federal and Ontario governments as well. He is a member of the Board of CAEFMS.

Tom Richardson is Director General, Farm Income Policy Directorate, AAFC, Ottawa. He has held various positions in Treasury Board, National Defense and Communications in the federal government.

Gerald Robertson is Coordinator, Regulatory Economics, Competition Bureau, Industry Canada in Ottawa. He has had experience in agricultural policy analysis, with the Patented Medicine Prices Review Board, and in telecommunications, agriculture and trade matters in the Competition Bureau.

John Schildroth is the Director of the Trade Competition Branch for the British Columbia Ministry of Agriculture, Fisheries and Food.

Tom Sporleder is Professor of Agricultural Economics at Ohio State University where he holds the Income Enhancement Endowed Chair. His research interests include value added marketing, vertical coordination in marketing channels, and agricultural cooperatives.

Bill Stanbury is UPS Foundation Professor of Regulation and Competition Policy, Univeristy of British Columbia, on leave as T.D. MacDonald Chair in Industrial Economics in the Competition Bureau, Ottawa. He is by far the most published and best known author in Canada on regulation and competition policy.

Dan Sumner is Frank H. Buck, Jr. Professor, Department of Agricultural Economics, University of California at Davis. Dan was Assistant Secretary for Economics, USDA. His research focuses on impacts of farm and trade policy.

Tim Taylor is Professor, Food and Resource Economics Department, University of Florida. His research and teaching focus on international trade and development, competitiveness and sustainability, microeconomic theory, and quantitative methods applied to business decisions.

Brenda Tjaden was a senior undergraduate in agricultural economics, University of Manitoba. She is currently a grain market analyst with Louis Dreyfus Canada Ltd. in Winnipeg.

Bob de Valk is President of de Valk Consulting Inc., located in Ottawa and specializing in regulated import markets especially poultry. He spent several years in Consumer and Corporate Affairs Canada as a Competition Bureau investigator and policy analyst in the formative years of supply management.

Tom Wahl is Associate Professor, Department of Agricultural Economics, Washington State University. His research and teaching interests include international agricultural trade and development, and agricultural price, income, and policy analysis.

Bonnie Warkentine is Assistant to Head, Department of Agricultural Economics, University of Manitoba. Bonnie has done the production work on three manuscripts for the workshops.

Kelley White, Jr. is currently Associate Administrator, ERS, Washington. He has worked several administrative positions in USDA and FAO where he was responsible for FAO's program of food security analysis.

Fred Woods is the coordinator for extension public policy education in the Cooperative State Research Education and Extension Service of U.S.D.A.

Antonio Yunez-Naude is a professor in Centro de Estudios Economicos, El Colegio de Mexico in Mexico City, and currently Visiting Scholar at UC Berkeley and Davis. Antonio specializes in agricultural and trade policy in Mexico.

CONTENTS

AGRICULTURE AND FOOD POLICY SYSTEM INFORMATION WORKSHOP ON HARMONIZATION/CONVERGENCE/COMPATIBILITY IN AGRICULTURAL AND AGRI-FOOD POLICY IN CANADA, THE UNITED STATES AND MEXICO

R.M.A. Loyns

BACKGROUND

Trade in agricultural and food products between Canada and the United States has been significant over the years and it is growing. As a consequence of the North American Free Trade Agreement (NAFTA), trade with Mexico by both countries is also growing rapidly. The United States, Canada and Mexico are evolving into one of the worlds prominent trading blocs. Agricultural and food products are important today and much of the growth will occur in these areas.

Usually with increased trade comes elements of trade stress and sometimes trade disputes. The United States and Canada have had their share of trade disputes both pre and post NAFTA. Similarly there are stresses and strains in relations with Mexico over some products and issues such as environmental protection. Stress among and between countries resulting from trade relations produces the need for dispute settlement mechanisms. But it also creates a need for vehicles and mechanisms to understand, avoid and prevent stress from reaching the point of a full blown dispute. It is the need for analysis and understanding of trade stress and disputes in the agriculture and agri-food industry that lead the group of agricultural economists identified at the end of this section to initiate this workshop project. Our objective is use economic information to attempt to reduce policy and trade stress, and allow the welfare advantages of increased trade to be played out.

It is the belief of the organizers of these policy and trade workshops that some of the stress and disputes have their origins in lack of information, incorrect information and posturing that may not stand tests of logic and accuracy. As a consequence, we set out in 1995 to run a series of workshops focused on trade and policy disputes, to produce timely, accurate economic information, and to distribute the information as widely as possible. The first workshop and publication dealt with grain disputes between Canada and the United States. The second in 1996 dealt with dairy disputes.

We have learned a lot in this process about disputes and their resolution. Of course, information is only one contributor to most public policy decisions, and most information strategies have a long gestation period. Some may never produce. As well, it became obvious in both workshops that we can no longer treat Canada and the United States in isolation of our neighbour (actually several neighbours) to the south. As a result, the 1997 workshop was expanded to incorporate Mexico, and there is no doubt that subsequent workshops will follow this approach. And we have learned that the overall policy framework within countries, as they relate to the interface between countries, is also an important factor in determining the degree of harmony or disharmony between trading nations. This latter point raises the important issue of **policy harmonization** between and among trading partners, and in trade agreements.

The 1997 workshop and this publication began with the concept of policy harmonization. At the end of the workshop on the Canadian and U.S. dairy industries in 1996, Kempton Matte who is with the National Dairy Council in Canada observed....

> We need to define in common terms what we mean by "harmonization" so that analysts, negotiators and stakeholders speak the same language with the same meaning.
>
> Major areas requiring "harmonization" include the whole area of product labeling, nutritional claims, plant inspection procedures, farm inspection methods, process methodologies, and product standards.

The organizing committee took this statement as the basis for the next workshop and set out to formulate a program around Mr. Matte's comments. Policy harmonization in many respects seems to be, or should be, the flip side of trade disputes. Surely if policies were "harmonized" trade disputes would decline or disappear. In this context then, the focus of our workshops changed from dealing with negative reality of disputes, to more pro-active prevention in the form of "harmonization". That juxtaposition is fully consistent with our workshop objectives. But the notion of "harmonization" by itself did not sustain. Indeed it took only part of one planning meeting to determine that Matte was extremely prophetic in his call for definition and clarification. That is how the cumbersome title(Harmonization/ Convergence/Compatibility) emerged. We tried several different combinations of wording to capture the meaning that we sought. In the end we settled on **Harmonization/Convergence/Compatibility** (H/C/C) as indicative of the scope of the policy issue and left it to authors, discussants and discussion to flush out the full meaning.

THE PROGRAM

The lead paper by Tim Josling addresses in considerable detail the definitional issues involved in searching for policy harmonization among countries, and he addresses some of the practicalities of sovereign nations like Canada, the United States and Mexico altering their policy frameworks to achieve H/C/C. Certainly Josling is of the view that

harmonization is not to be taken as "identical" nor "sameness" in policy, programs and regulation which was the view of the organizing committee and one of the reasons for the extended title. Perhaps this point should be obvious but it may not be in many stakeholders minds; this point was made repeatedly throughout the workshop. This point is likely to occupy analysts, negotiators, stakeholders and political time into the future. Josling's paper and the discussion comments by Kelly White and Don McClatchey provide a thorough treatment of many of the important issues in defining the problem identified by Matte in 1996.

The paper by Mike Gifford, an experienced negotiator in trade agreements for Canada, deals with the implications of H/C/C for dispute settlement mechanisms. Combining the Josling and Gifford papers provides a substantial backdrop for the framework of H/C/C, or the general issues, and set up the need to move to more specific issues in the agricultural and agri-food industry.

The next section contains four papers on more specific and sectoral issues. Dan Sumner addresses the general implications of H/C/C for the agricultural sector. Antonio Yunez-Naude discusses Sumner's paper and provides a short but valuable description of the agricultural and agri-food policy situation in Mexico. Technical standards, grades, sanitary and phytosanitary requirements are all part of the regulations that emanate from agricultural and food policy. This is a broad but critical component, and often highly technical and highly controversial component of trading relations addressed by Maury Bredahl. Policy differences in relation to treatment of the environment have given rise to trade disagreements in the 1990s. Patricia Lindsey and Mary Bohman present a penetrating paper benefiting from their research in this area, and from comments by Glenn Fox. And finally, reflecting the reality that the competitive conditions within countries are crucial to determining benefits, and their distribution, associated with freer trade, Robertson and Stanbury discuss the role and status of competition policy in the three countries. Tom Sporleder's discussion comments include a short discussion on investment policy.

The fourth section extends the sectoral theme into livestock and meats, dairy and poultry, grains and oilseeds, and horticultural products. Authors took different approaches to dealing with their subject matter but the information contained in this section could justify a publication on its own.

In the last section we have provided comments by a group of participants who were asked to summarize their views and the workshop by addressing Impacts, Research Needs, and Future Directions of harmonization, convergence and compatibility of agricultural and agri-food programs. We have not written a concluding chapter to this book because discussants and the wrap-up speakers served that role extremely well.

AN EDITORS FINAL COMMENT

As senior editor on our three workshop publications, I will take editorial license at this stage to convey a few personal comments. First, I extend my own thanks to the three original funders of this project — the Farm Foundation and Walter Armbruster, United States Department of Agriculture through Fred Woods, and Agriculture and Agri-Food Canada through Jack Gellner. And as indicated earlier the Royal Bank of Canada through John Murphy provided financial support for the 1997 workshop and publication.

Without repeating, but rather reinforcing, acknowledgments made earlier, the people who prepare and revise these papers, and the industry people who participate at their own expense are essential to our process and to the quality of our output. The format was changed for the dairy workshop to include dairy industry representatives. That decision proved to be very positive and continued with industry representatives at the third workshop.

The coordinating committee that does the planning, organizes finances and expedites these workshops are:

Dan Sumner, University of California, Davis,
Ron Knutson, Food and Agricultural Policy Center, Texas A&M,
Karl Meilke, University of Guelph,
Jack Gellner, Agriculture and Agri-Food Canada, and
Al Loyns, University of Manitoba.

It has been a pleasure to be associated with the coordinating committee over almost four years. It has been a genuine pleasure to participate in this process of information generation where some of our professional energy is directed toward improved economic conditions within three important countries. The level of success may never be known, but the attempt has been gratifying. When agricultural economists publish relevant and timely information on policy issues, they often find themselves at odds with members of the public or interest groups. That is especially true in Canada. This process has been almost devoid of negative feedback. Perhaps that is one measure of the success of meeting our objective.

I. HARMONIZATION/CONVERGENCE/COMPATIBILITY: DEFINITIONS AND CAUSES

POLICY DYNAMICS IN NORTH AMERICAN AGRICULTURE: DEFINITIONS OF AND PRESSURES FOR HARMONIZATION, CONVERGENCE AND COMPATIBILITY IN POLICIES AND PROGRAMS AFFECTING THE AGRI-FOOD SECTOR

Tim Josling

INTRODUCTION

The theme of this Workshop is the process of harmonization, steady convergence and increased compatibility of public policy in the area of agriculture and the related parts of the food sector in the three economies of North America. My specific task is to define the terms "harmonization, convergence and compatibility" (hereafter H/C/C); to raise at least at a general level the issues which such a process poses for the countries concerned; to illustrate the way in which the H/C/C process is related to the implementation of North American Free Trade Agreement (NAFTA) and the World Trade Organization (WTO) Agreement on Agriculture; and to relate these issues to the broader changes in the agricultural policy environment expected in the future.

Two underlying concepts can be used to guide this exploratory paper. The first is that as the market for agricultural and food commodities becomes more and more integrated on a continental basis the regulations which are needed to govern that market will also over time become continent-wide. This phenomenon could be called "shifting the regulatory framework to fit the scope of the market". It is essentially an efficiency argument, and one that relies on notions of the optimal jurisdiction of policy instruments. The second concept is that entering into a free trade area essentially changes the nature of the policy decision within the member countries. This could be called "changing domestic policy to be compatible with free regional trade". At one level it poses the question as to whether the provision of free trade itself takes precedence over other policy objectives. At another level it challenges the notion that a free trade area is a "light" form of integration that needs no elaborate institutional (supranational) structure. Of course these two concepts tend to overlap: the solution to the problems of the loss of autonomy for national policy may be to redefine policy to fit the scope of the market. But each provide a powerful underlying logic to the process of H/C/C.

The logic of these conceptual arguments may be satisfying to an academic observer, but in the world of agricultural policies it can cause political difficulties. The tension is clear in the case of NAFTA in that the development of common approaches to common problems requires a degree of political interaction among the three governments which may be impossible at this time. The comparison with European integration is illuminating. The administrative and political framework was established for a common approach to agricultural sector problems at the beginning of the integration process. Though issues of sovereignty came up in many contexts, no one really doubted the desirability of doing certain things at the level of the European Union (EU). But the question as to what should be done collectively is still alive, in particular in issues of environmental policy, income support and structural change.

The international dimension to H/C/C is also worth exploring in this context. There is a close parallel between what is going on within regions and what is being attempted within the WTO. The problems faced are similar and the solutions are also likely to contain the same elements. The articulation between the regional and the multilateral processes is of great significance for agriculture. The question for NAFTA is therefore as much a question of harmonization, convergence and compatibility with the policies of Brazil and Europe as within the North American continent.

The paper is organized in the following way. The next section gives a suggested definition of the process of H/C/C and illustrates it with respect to NAFTA, the EU and the WTO. The three concepts are then developed further with respect to their main characteristics: harmonization is entwined with the issue of sovereignty; convergence with the process of growing constraints on domestic policies as a result of regional integration; and compatibility with the development of dispute settlement or avoidance mechanisms on the North American continent. The paper concludes with a discussion of the future agenda for talks at the multilateral level, specifically the next round of trade negotiations in the WTO.

DEFINITIONS OF HARMONIZATION, CONVERGENCE AND COMPATIBILITY

As a first step in categorizing the development of agricultural policies in North America, an attempt at a definition of the terms harmonization, convergence and compatibility may help to focus the discussions of the topic.

Harmonization The process of introducing uniform or essentially similar regulations in different countries. This can come about through two different processes: the enactment of common policy instruments, by agreement between the countries, and the use of similar instruments within a common framework. The first corresponds to the category of Regulations in the EU, while the second can be thought of as Directives agreed by the EU to be implemented by national legislation. Both types of harmonization can be said to

constitute a "common policy" for the sector. But this policy can coexist with national instruments in other aspects of regulation.

Convergence The process of approximation of policy instruments over time. This can also be as a result of two different pressures: market interdependence, where policy instruments are constrained by the linkages among markets; and seemingly-unrelated policy pressures where countries react independently to similar events and thus converge in policy responses. Both these types of convergence can be consistent with independent policy-making processes and may go unnoticed by actors in those processes.

Compatibility The development of policies and instruments which avoid conflict and are designed to be consistent with those in other countries. In some cases the conflict is removed (by policy shifts which fall short of harmonization or convergence) and in other cases the conflict is resolved, perhaps as a result of dispute resolution processes. In the latter case the compatibility is imposed, which may lead to political tensions. Both types of compatibility have a fundamental problem of visibility; such compatibility may be evident only by looking at alternative policies which might have led to conflict. Policies which are already compatible do not show up on the political radar screen.

Each of the three concepts therefore has a "strong" and a "weak" variant. These variants are illustrated in graphical form in Table 1. As with any taxonomy there are likely to be a number of disputed cases where the allocation is arbitrary. Cause and effect may be difficult to distinguish, and the fact that policies are constantly changing leads to differences in interpretation as to the moment of policy shifts. Nevertheless that categorization seems to be quite useful in the case of North America and Europe, and for linking to the changes at the international level.

Table 1. Schema for Classifying Harmonization, Convergence and Compatibility

	Harmonization	**Convergence**	**Compatibility**
Strong form	"Regulations", Common Policies	Market Interdependence and Arbitrage	Conflict removal by policy change
Weak form	"Directives", Similar Policies Agreed frameworks	Reaction to common influences	Conflict resolution by dispute settlement

The extent of H/C/C embodied in NAFTA is shown in Table 2 and the situation in the EU is described in Table 3. Policy harmonization has occurred only in very limited areas of agriculture in North America, in particular in the conditions of internal market access, relative to the Common Agricultural Policy of the EU and the numerous EU regulations and directives that govern the food industry. (The closest that NAFTA has come to the use of

directives may be the labour and environmental side-agreements, which reinforce rather than replace national law but within a common framework). Convergence is already noticeable in North America and is likely to continue — as discussed at length below. The pressure to converge is of course country-dependent: the United States as the dominant economy and polity of the region will naturally consider itself more immune to change, and Canada and Mexico are more likely to be under pressure to converge their policies with those of the United States. In Europe the process of convergence was largely preempted by the stronger process of harmonization as a result of the more functional common institutions. The issues of compatibility are likely to be a focus of attention in North America, as policies are adapted to avoid or resolve conflicts. In Europe the strong compatibility was embedded in the Treaty of Rome which determined the rules of competition and the scope of national competence: weak compatibility is well illustrated by the widespread use of "mutual recognition" as a way of avoiding conflict among national policies.

Table 2. Harmonization, Convergence and Compatibility in NAFTA

	Harmonization	**Convergence**	**Compatibility**
Strong form	Internal Tariff Reduction	Market Interdependence and Arbitrage	Rules on internal export subsidies
Weak form		Coordination of approaches within GATT Round	Dispute settlement Mechanism set up for Conflict Resolution

Table 3. Harmonization, Convergence and Compatibility in European Union

	Harmonization	**Convergence**	**Compatibility**
Strong form	"Regulations" for External and Internal Trade: Common Agricultural Policy (CAP) instruments		Control of domestic policies; competition policy.
Weak form	"Directives" for national legislation, Structural and environmental policies		Conflict resolution by appeal to European Court of Justice

Convergence can also happen on a global scale, and this may indeed be a more significant pressure at present, at least for the United States, for policy change. The situation

at the end of the Uruguay Round is illustrated in Table 4. Tariffication represents a major step in harmonisation of policy instruments, and the Sanitary and Phytosanitary Agreement falls into the category of weak harmonization. Convergence is implied in the limits on export subsidies and in the changes in national policies in the same direction over the past few years. Compatibility also plays a part in the agreement with rules on subsidies and the strengthening of the dispute settlement mechanism.

Table 4. Harmonization, Convergence and Compatibility at the International Level

	Harmonization	**Convergence**	**Compatibility**
Strong form	Tariffication	Convergence through limits on national export subsidies	Rules for Green Box
Weak form	SPS Agreement	Liberalisation of agricultural policies for domestic reasons	Conflict resolution by WTO dispute settlement, subject to Peace Clause

HARMONIZATION AND THE ISSUE OF SOVEREIGNTY

The issue of harmonization is intimately bound up with sovereignty. Countries like to feel that they have independence in policy making, and resist the yielding of power to a supranational body. In the NAFTA context, the degree of sovereignty-reduction is minimal (*pace* Patrick Buchanan): the detailed agreements on tariff reductions are the stuff of most trade negotiations, and no one doubts the ability of the United States to suspend any provision of the NAFTA that was seen to cause serious domestic harm.

However the definition of sovereignty is often hazy and the issue of when one gives it up is never clear cut. Can one cede sovereignty for limited periods of time, in the best interests of the country? This issue is significant in the current European discussion. There has always been a strong feeling in the United Kingdom (UK) that sovereignty has been abridged by joining the EU. But the British Parliament could at any time repeal the European Communities Act and regain total control over economic policy. So long as this remains the case, one could argue that ultimate sovereignty has been retained. These fears are being raised at present on the extent to which sovereignty would be significantly curtailed by Monetary Union. In this case a vital aspect of nationhood, the currency, would be issued by a supranational entity, albeit with UK representation. But one could argue that such representation itself constitutes a willing suspension of sovereignty. The pound could always reemerge if the euro failed.

With respect to NAFTA the issues are not quite so clear-cut: there is no likelihood of Political Union in North America. But even in this case one can raise the issue of sovereignty. At what point does participation in a regional arrangement such as NAFTA become irreversible? As one sets up institutions to handle the trilateral relationship, might decisions get taken against the wishes of the national legislature? Or is the issue not so much ultimate responsibility but the day-to-day managerial functions and current oversight of policy that politicians wish to preserve?

In the case of NAFTA one also has to make the distinction between the member states. The U.S. Congress would be reluctant to accept any constraints over its constitutional authority for domestic legislation. Foreign policy is shared in an uneasy way between the Legislative and the Executive Branches. Trade policy can be negotiated by the Executive Branch subject to a mandate. If that Congressional Mandate allowed for the negotiation of a uniform NAFTA tariff against third countries then one could argue that would not violate sovereignty any more than negotiating tariff reductions in the WTO.

Sovereignty in the area of domestic agricultural policy is perhaps more problematic. For one thing such policies usually involve funds, and the notion of spending taxpayers money on farm programs in neighbouring countries is one that is unlikely to catch on in the United States — though of course it is a significant part of the agricultural policy regime in Europe. In NAFTA only relatively minor steps in the direction of common policies, such as the inclusion of Mexican producers in U.S. marketing schemes would be possible. Negotiating the peanut policy with Mexico and Canada at the table seems more remote. And yet the more the markets become integrated the more attractive such common policies are likely to become.

Sovereignty is also likely to be an issue for Canada and Mexico, which would no doubt wish to avoid the imposition of regulations decided in Washington. But the NAFTA institutions do offer the possibility for some pooling of sovereignty which could be to Canada's advantage and could be even more attractive to Mexico. Transportation policy is one obvious area where the rejection of NAFTA-wide schemes in the name of national independence could have a high cost. The same is true of many technical regulations such as packaging standards, where arbitrary differences merely make work for border officials and bureaucrats without adding to the store of human happiness. Sanitary and phytosanitary regulations on traded goods at present are the cause of much friction within the North American market. Harmonization of such regulations is a clear case of the reduction of transactions costs. Moreover it might avoid policy capture by interest groups and allow a modernization of established regulations. And it fits in with the concept of tailoring the regulatory instruments to the appropriate geographical space.

PRESSURES FOR CONVERGENCE IN AGRICULTURAL POLICIES

If harmonization is likely to come slowly through the logic of the benefits of collective action, the pressure from arbitrage among markets for convergence of policies could be quite rapid. Convergence of polices within free trade areas such as NAFTA may have important consequences for agriculture: the implications of including agriculture among the sectors which are subjected to free trade may turn out to be the most effective way to get continued reform of agricultural policies. Domestic programs of the traditional type require border measures to be effective; removing these border measures makes most domestic programs difficult to work. If one allows free trade within a Free Trade Agreement (FTA) one is agreeing to modify domestic programs. Moreover the external trade policies of the members are also impacted by the FTA, as the independence of the policy instruments meets the realities of market arbitrage. The internal and the external market pressures in the direction of convergence are dealt with separately below.

Internal Market Pressures for Convergence

Free agricultural trade within a region such as NAFTA has strong implications for the future scope of domestic policies. Free trade does not however threaten to eliminate farm programs altogether. Governments are not likely to buy the argument that forming a free-trade area involves giving up all domestic sectoral, regional and industrial policies. In practice, the question is how to constrain policies that give a marked incentive to expand the production, or reduce the consumption, of a product of export interest to a trading partner.

One would expect the issue of internal market access to be the most immediate concern in FTAs: the natural focus of such agreements is on a reduction on tariffs and quantitative trade restrictions on intra-bloc trade, leaving members to run their own external commercial policy. The tariff reductions can be subject to safeguard provisions, which can act to "snap-back" tariffs if imports rise too fast. The U.S.-Canada Free Trade Agreement included liberalization of Canada's import licensing arrangements for cereals. NAFTA goes further to include tariffication of a large number of non-tariff import barriers. Among other forms of protection, it also seems natural that FTA partners remove all Voluntary Export Restraint (VER) arrangements between them, perhaps after a transition period. This happened in both the U.S.-Canada Agreement and in the NAFTA: each country exempted its partner(s) from the application of VERs on meat.

Export subsidies operated by one member are also likely to be objectionable to producer interests in a FTA, on grounds that competition is distorted. The U.S.-Canada Free Trade Agreement removed export subsidies on intra-FTA trade in agricultural products, presumably because both countries had a similar export composition. The issue is not so clear-cut when one country is an importer. On occasions an importing country may wish to keep the advantage of subsidized imports from the partner, at the expenses of domestic producer interests. NAFTA, therefore, allows export subsidies on internal trade if the importer agrees to them, and in cases where the importer is benefiting from subsidized goods

from third countries. This allows, for example, continued U.S. government credit guarantees on sales of dairy and grain products to Mexico.

This problem of what to do with institutions that run current policies arises also in the case of state trading. A parastatal importer can offer protection without the need for a tariff or explicit quota. The effective quota is the amount imported, which can be less than would have come in under free trade, and the implicit tariff revenue is the profit made by reselling on the domestic market. Export agencies also can influence traded quantities, often giving an effective subsidy through trading losses. The NAFTA experience is interesting. Mexico has, as a part of its economic reforms, curtailed the actions of CONASUPO. It would in any case have been contentious. Canada seems less willing at present to sacrifice the Canadian Wheat Board. Instead, one can sense a long protracted battle over the issue of hidden subsidies arising from Board operations. Canadian provincial marketing boards also seem to have survived NAFTA, though one can foresee a gradual diminution of their powers. A country may be reluctant to give up its cherished institutions on account of a FTA: in practice, some accommodation will be found to prevent conflicts arising within the FTA from state trading activity.

Producer subsidies raise problems for FTAs only slightly less serious than direct trade barriers. Competitors in other countries are likely to challenge producer subsidies as distortive of competition. Deficiency payments are a special breed of producer subsidy, triggered by the relationship between market prices and a pre-set guaranteed price. They add stability to farm prices (if not incomes) and are generally considered by recipients to be the next best thing to adequate market prices. To give up these policies in NAFTA may prove difficult. It may be necessary to put limits on such subsidies, or to attempt to harmonize the levels of such assistance. The U.S.-Canada Free Trade Agreement attempted to deal with this issue in the context of opening up Canadian markets to U.S. grain, as noted earlier. In the end, it is likely that attempts to "decouple" such payments, as has now been done in all three countries, will largely defuse the problem of producer subsidies in NAFTA.

Consumer subsidies are unlikely to generate significant problems within a FTA, even though they may distort competition. Similarly benign are programs that are effectively decoupled from output and consumption decisions, such as food stamps (which act much as an income supplement) and crop insurance (so long as it is not commodity specific).

How compatible are the policies that fall into the category of wholly or partially decoupled payments such as income supplements. These may pose some problems in a FTA, though if truly decoupled from current output decisions they may have a minimal impact on competition. The payments under the new Farm Bill in the United States could be deemed to be non-distorting within NAFTA. But what about payments per hectare, such as employed in the PROCAMPO program in Mexico? The Mexican program looks like an imaginative solution to internal policy issues broadly compatible with NAFTA. But with a deepening of the market integration such schemes may have to be carefully designed to avoid challenges from other countries. Over time one would expect to see a qualitative shift in domestic policies as a result of negotiations within FTAs. Moreover, members will tend to modify their policies over time even if not the subject of negotiations, as a way of adjusting to the reality of intra-bloc trade.

Third Country Trade Policy and Convergence

The problem of domestic instruments as barriers to market access for FTA partners is the focus of most attention in free-trade negotiations. On the face of it, members can remove those policies that cause the most trade friction within the FTA and still maintain their individual policies against non-members. But an equally important issue that has received somewhat less attention is the impact of freer intra-bloc trade on the effectiveness of trade policy instruments that might be used by member countries on third country trade.

The act of opening up one's market to a FTA partner changes the range of policy instruments that can be used on third country trade. The feasible commercial policy set in a FTA is much smaller once protection against partner trade is removed. The loss of policy effectiveness can be illustrated by considering the various instruments in the presence of free partner trade.

The problem of disparate tariffs on third country trade among FTA members is well known. Trade can be "deflected" through the country with the lowest border protection and dilute the protection in the other countries. It is normal in FTAs to deal with trade deflection by means of rules of origin. To qualify as "internal" a product must have undergone a substantial transformation (or acquired a particular value added) in the partner country. Unfortunately, this remedy is of limited use for agricultural products. Rules of origin are both more difficult to enforce and likely to be less effective for a homogenous good: even if one could trace the origin of a particular bushel of wheat or gallon of milk, national supplies are fungible. The low-priced country could import up to its total consumption needs to free up exports to the high-priced market. The significance of this "leakage" will depend upon the size of domestic production in the low-price partner relative to imports into the high-price region. The impact can range from the capture of some rents by the low-price partner exporters all the way to the erosion of the market price in the high-price country to that of the low-price market.

Similar problems apply in the case of tariff-rate quotas on third country imports. One country cannot effectively maintain such quotas if its partner with free access does not. Import quotas can be fully effective only if "regionalized" to apply to both markets — in effect the introduction of a "common policy" — just as tariffs will only be fully effective if harmonized. Third-country import policy can still be nominally independent in a FTA, but in practice pressures will mount for convergence in the case of homogenous products.

Export policy fares no better. An export subsidy (on third country trade) may survive the negotiation of a FTA. But if there is free access into the market of the subsidizing country, and supplies are fungible, production from the non-subsidizing country will flow to the subsidizing partner and over time may cause the policy to collapse. Canadian wheat enters the United States not directly to be exported with the aid of Export Enhancement Program (EEP) payments but to fill the market left by the EEP exports. Once again, the solution is either common policies or the abandonment of the instruments. Home-market schemes and "producer-financed" export subsidies also lose their efficacy in a situation of free partner access, even if restricted to third countries. The ability of marketing boards to

operate such schemes is impaired by lack of control of all sources of supply. Consumers can in effect choose not to subsidize exports: they merely buy partner-country products instead.

Convergence of Domestic Farm Policies

The ability of countries within a FTA to run independent policies on third country trade are *de facto* restricted by arbitrage; but surely they can still run domestic policies to maintain and stabilize farm incomes? Arbitrage, however, has a debilitating impact on even such "domestic" policies. In general, it is difficult for one country to stabilize its market if it has free trade with a less stable partner; instability will flow across the border. This will tend to lead to either a departure from FTA principles or a common stability policy. Independent stability policies may not survive for as long a regional free trade regime. Take as an example the control of domestic markets through storage schemes. Storage policies will become less effective, as one partner attempts to stabilize the whole FTA internal market. There may be no objection from trading partners to such a scheme, but it might prove too expensive for one country to have to stabilize the whole FTA market. In addition, different policies toward trade with third countries will make such storage schemes even less manageable. The "storing" country could attract imports through the lowest-price FTA member. If this member chose to buy at world market prices, the storage policy would in effect be attempting to stabilize world markets. Without some coordination of import regimes, it is not easy to see how any country could run its own independent storage scheme. The tendency will be to develop coordinated or collective storage policies.

The same result is even more evident in the case of the control of domestic supply through production or marketing quotas. Free partner trade will not in itself prevent such quotas from operating. The effectiveness of such quotas, however, will be significantly limited. It is clear both from economic analysis and trade policy practice that domestic supply controls need trade measures as support. If substitute production can be freely imported from a FTA partner, the supply control will be ineffective in maintaining price. This was the reasoning behind the exception in the GATT to the rule of "tariffs only" (Article XI), which allowed quantitative restrictions when domestic production was controlled — until overtaken in the Uruguay Round Agreement on Agriculture by the provision that converted non-tariff barriers to tariffs. It also lay behind the use of import quotas under Section 22 of the U.S. Agricultural Adjustment Act (as amended) which mandated such action in support of domestic policies until abandoned as part of the Uruguay Round Agreement.

Decoupling such policies from output decisions, suggested above as the response to the intra-FTA competition issue, would also tend to free farm incomes from market prices. The set of decoupled policies will generally be left unaffected by freer intra-bloc trade. Crop insurance, hectarage payments (for the reduction in price support, tending the land, or abstaining from chemical dependency) and food stamps can all thrive in an environment of free trade. In some cases, there might be higher costs, if market prices fell or were more unstable, but such extra costs in effect would be compensation for the beneficial impact of lower cost supplies. It is no coincidence that the same set of policies are placed in the "green

box" in the Uruguay Round Agreement. Policies that are consistent with free regional trade are also likely to be acceptable at the international level. They are not only consistent with market access and competition needs of a FTA, but also they, almost alone among existing policies, can be run effectively in the presence of free trade among partners. The reinstrumentation of policies towards decoupling and targeting may be the only way for farm groups to preserve benefits without facing head-on the movement to regional free trade.

POLICY COMPATIBILITY AND FREE TRADE AREAS

The argument for the need for compatibility among agricultural policies of different members of a free trade area is relatively easy to make. To look at the issue of compatibility it is useful to review some of the conflicts that have come up recently in the context of NAFTA. The one major conflict that has arisen is a consequence not so much of NAFTA but of shifting technology and consumer taste. The case is the inflow of tomatoes from Mexico that caused growers in Florida in March 1996 to seek help from the Courts to force the U.S. Administration to impose restrictions over and above NAFTA safeguards on these imports. The Mexican government was concerned over the precedent but recognized the political pressures on the U.S. Administration in an election year and helpfully agreed to a minimum import price. The surge of tomato imports was however hardly a reflection of market liberalization under NAFTA (tariffs on tomato imports were low already): rather it was a result of quality improvements in Mexico and good marketing skills in the United States. Unfortunately it does not appear that the "snapback" provisions which are supposed to guard against such import surges were effective, but then if the imports were not growing in response to the cuts in tariff then the snapback would not have helped.

What does this event portend for the compatibility of policies within NAFTA? The negative lesson is that pressure from domestic groups can cause the United States to attempt to modify the NAFTA arrangements, at least over the transition period to free trade, rather than to make domestic adjustments. It was always likely that such domestic pressures would have to be accommodated, but the Treaty itself makes such accommodation to protectionist pleas more difficult. The tomato growers pulled out all the stops and failed to get an anti-dumping decision, ending up with a politically negotiated settlement which in fact will do little harm to the Mexican exporter. It seems unlikely that any other commodity group will take much heart over this, and try to renegotiate their own NAFTA terms.

Domestic, electoral politics was evident not only in the tomato case. Perhaps the most important implementation issue has arisen in the trucking industry. Here is a case where compatibility was built into the NAFTA agreement. Passage of trucks across the border, at least into border states, was to have been in effect by now. The U.S. Administration, upon a request by the Teamsters Union, delayed the implementation of these provisions. The result has been that goods often still have to be off-loaded at the border and be reloaded onto other vehicles. But if pressure of election politics played a role in this decision then the removal of that pressure could lead to a speedy solution. It seems likely that the commercial

interests of traders in the border states, including those selling agricultural products, will prevail over the complaints of U.S. truckers as soon as the Administration is convinced that no safety or environmental issues remain unresolved. Compatibility will have been achieved as a result of the NAFTA decision.

The third irritant which has bedevilled the implementation process is that of the ban on avocados in the U.S. market. The discussions dragged on for years as to the risks of pest infestations to Californian avocado growers, and studies have appeared which indicate that the U.S. consumer pays highly for the trade restriction. A compromise has emerged which would give the Mexican producer at least seasonal access to the market in the Northeast United States, where no avocados are grown, subject to minimum import prices. Though no politician likes to anger a vocal group such as the Californian avocado growers, if one is going to take such a decision then the period after an election is the best time. In the avocado case, compatibility has come as a result of the search for compromise among the agencies in the two countries responsible for phytosanitary regulations.

THE INTERNATIONAL DIMENSION

The common set of issues which countries have addressed in both multilateral and regional trade negotiations is the considerable economic harm being done both domestically and to trading partners by a set of agricultural price support policies which were clearly out of tune with the times. Such policies were at the root of most of the trade tensions between the EC and the United States, the developing countries and (more recently) Eastern Europe. Moreover, they were increasingly unpopular at home and generally agreed to be ineffective. Government after government made efforts to implement domestic reform of farm programs. All agreed that what was needed was international action on the issue, bringing the political benefits of blame-shift and the economic bonus of firmer world prices to reduce the cost of adjustment. It is inconceivable that the situation could have been allowed to go on for much longer. A process of weak convergence in domestic policy allowed the contemplation of stronger harmonization at the international level as embodied in the Uruguay Round Agreement.

The next round of the WTO talks on agriculture is nearly upon us. There is by now general agreement that the Uruguay Round made a useful start to the process of bringing the rules of agricultural trade more into line with those for manufactured trade but achieved only limited success in liberalizing agricultural trade. The process of tariffication has left exposed the high degree of protection still in the sector. Export subsidies are still allowed and indeed are sanctioned to the limits included in the Schedules. Domestic (coupled) support continues to be legal at a level not much below that of the high support period of the mid-1980s. The process of tariffication also exposed the difference in the role of the state in the import regimes in different countries, just as the tighter rules on export subsidies exposes differences in export marketing institutions. These institutional differences are themselves becoming a

trade policy issue which will have to be faced. Thus the agenda for the next Round of trade negotiations is already full, and preparations for the talks should begin as early as possible.

The Uruguay Round itself agreed the next steps for the multilateral process of trade liberalization. The Agreement on Agriculture calls for talks to be initiated no later than 1999 on the continuation of the process of reform of the trade system for farm products. The Agreement confirms 'the long-term objective of substantial, progressive reductions in support and protection resulting in fundamental reform'. The responsibility for review of the implementation of the Uruguay Round Agreement for agriculture rests with the newly-formed Committee on Agriculture (CoA).[1] This Committee will carry out the review on an ongoing basis in its regular meetings. The CoA would also seem to be the appropriate body to initiate the next stage of the process and to define the agenda for achieving the objective.

The agenda for the next round of agricultural talks is already crowded. First, it will be necessary to review the workings of the Agreement and the progress of transition laid out in the Schedules. Second, the mini-round will have to deal with the remaining anomalies, such as the postponement of tariffication for rice for Japan, Korea and the Philippines and for some products in Israel. Third it will have to decide on the next step toward the greater market-orientation promised at Punta del Este. The strategy for the continuation of the reform process will need to encompass additional market access provisions, further reductions in export subsidies, and more discipline in the area of trade-distorting domestic subsidies.

As a result of these pressures, there could be a movement toward more similar bloc policies, involving convergence of national policy instruments and national treatment for partner supplies. Or the members of the free-trade area could change to policies which rely on simple border tariffs and decoupled payments — in effect making them compatible. The relation between regional and global attempts to liberalize markets will depend on which outcome materializes. It may be politically convenient to sell a FTA as having no impact on domestic farm support policies, but this places additional burdens on global talks to impose such constraints. By contrast, the development of harmonized or collective policies by trade blocs could make negotiation at a global level somewhat easier: problems might be internalized within a group that would otherwise slow down multilateral talks. Policy change along the lines discussed above will also contribute to successful global negotiations. If FTAs move for internal reasons toward decoupled policies, then agreements at a multilateral level would be facilitated.

The conclusion to this line of argument seems to be that there are no longer clear distinctions between domestic and trade policies, nor between regional and multilateral trade processes. It may not matter much what is the order of policy actions, the forum in which agreement is reached, or the label under which the action is taken. Agriculture is being exposed to competition in country after country because the government thinks it makes good sense. The GATT helps in that it is important to have global trade rules. The NAFTA

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[1] The Committee is set up in Article 18 of the Agreement. The issue of future negotiations is dealt with in Article 20, entitled Continuation of the Reform Process.

and the Europe Agreements have their roles either leading or following the global talks. Domestic decisions can be spurred by trade policies: they are no longer sacrosanct. Trade policy decisions will be scrutinized by the same constituencies as examine domestic policies. Such a policy environment may be less tidy, but it will not be uninteresting.

CONCLUSION

The economies of Canada, Mexico and the United States are already closely integrated and this process has been accelerated by NAFTA. This implies that policies premised on independence are no longer likely to be viable. Some degree of policy harmonization, convergence or compatibility will emerge, either planned or as an *ad hoc* response to crises and tensions. This is as true of agriculture as of other sectors of the economy. The argument of this paper can be summed up in three propositions, as follows:

i) Formal harmonization of North American agricultural policies is unlikely to happen outside the conditions of market access and a few areas such as technical standards. The political will to have joint institutions decide on policies, either as regulations or as directives is not present in the United States nor in Canada, and the willingness of Mexico to adopt U.S. standards may even have its limits. Harmonization will continue however at the multilateral level as a result of yet firmer trade rules in the next WTO Round.

ii) North American agricultural trade policies toward other countries are most likely to converge (rather than be harmonized) as a result of the difficulties of operating divergent policies and the benefits of presenting a common front to other countries. Convergence of domestic policies will be as a result of international pressures as much as NAFTA rules, with each country's agricultural policies looking similar but retaining individual characteristics.

iii) Compatibility will be a relatively slow process in North America, driven by trade disputes and the results of panels. The NAFTA institutions are unlikely to make much headway in forcing policy change. Nevertheless the result will be to move to more compatible policies. This will over time allow the NAFTA-wide internal market to operate more efficiently and with less conflict.

— DISCUSSION —
POLICY DYNAMICS IN NORTH AMERICAN AGRICULTURE

T. Kelley White

Senator Lugar said recently in commenting on the report of the Commission on International Trade, Development and Cooperation, "it is always fun to read something that agrees with my biases". That Tim Josling says little with which I can disagree is comforting, but at the same time it makes for difficulty in finding something meaningful to add in my comments.

After providing the ambitious objectives of the paper and a very useful conceptual underpinning, the paper attempts definitions of three processes (harmonization, convergence and compatibility) by which policies and programs affecting the agri-food sectors of member countries of Free Trade Agreements (specifically the members of North American Free Trade Agreement (NAFTA)) come together either in form or effect as a result of implementation of the agreement. On first reading I must admit to coming away with the impression that the differences were primarily semantic in nature, maybe more confusing than enlightening and that the remainder of the paper could have been just as well written or read without worrying about the terms or their definition. After a second reading and a little thought, I think that there is real difference and that the distinctions are useful in differentiating between economic and political pressures shaping policy and for distinguishing between form and effect of policy instruments.

If I understand the definitions, harmonization and convergence are processes by which the policies, instruments, rules and regulations of member countries of a FTA come to be similar. Harmonization occurs through joint political decisions of the member countries to adopt common policy instruments that are sometimes formulated and administered by supranational institutions. Convergence, on the other hand, occurs through political decisions of the individual countries in response to pressures, largely economic I believe, growing out of the implementation of the agreement. There is minimal, if any, reliance on supranational institutions. Convergence might be thought of as unintentional harmonization and harmonization as intentional convergence.

Compatibility is the process by which conflicting effects of national policies are reduced or eliminated but not necessarily by adopting the same or similar policy instruments. Tim notes that compatibility has the disadvantage of lacking visibility — I wonder if that

isn't an advantage instead of a disadvantage. It may be a problem for economists who are trying to classify policies as being compatible or incompatible, but if they are incompatible, we will find out before too long and the advantage is that compatible policies are off the political radar screen. One disadvantage may be that by not being able to identify incompatible policies until there is conflict, the solution is forced into the conflict resolution rather than the conflict avoidance arena. Conflict resolution is by nature adversarial and the conflict likely to be settled on legal and political grounds while conflict avoidance can be cooperative and there is a better chance of reaching a settlement on economic efficiency grounds.

The middle part of the paper is a very interesting discussion of the issues raised by implementation of the NAFTA and World Trade Organization (WTO) by the NAFTA member countries with the discussion organized under the three processes. One of the real contributions of this part of the paper is that it is both backward and forward looking and thereby succeeds in defining the trade policy agenda for the United States, Canada and Mexico within the context of the further implementation of NAFTA and of the mini-round in the WTO.

HARMONIZATION

The discussion of harmonization deals primarily with the issue of national sovereignty and differences in attitude (or conditions) in Europe and the North American countries, especially the United States and Canada, as explaining why the former chose harmonization while the latter chose convergence as processes for implementation of FTAs. I have nothing to add to this discussion except one thought that occurred on reading this section, that is that sovereignty, like beauty, is in some sense in the eye of the beholder. Opening borders and integrating markets, whether financial or goods, reduces the ability of nations to control the behavior of the opened market through national policies. Politicians sometimes seem not to mind (or maybe not to recognize) the loss of sovereignty (ability to exercise control over the sector) so long as they have the "sovereignty" to pass laws or impose policies **intended** to control. The U.S. Congress doesn't seem nearly as concerned with the loss of control over the financial sector as it is to be told that the WTO does not allow it to impose a ban on the importation of tuna caught with a certain type of net.

CONVERGENCE

The discussion of the convergence process and related issues does an excellent job of organizing most of the issues that have been, are being, and will likely be confronted by NAFTA. It is for this reason that I first thought that the paper would have been just as useful

and easier to read had Tim just skipped over the attempt to define the three processes. This section did stimulate a few reactions that might add to the discussion.

The discussion, even within the section on internal pressures for convergence, sometimes seems to assume that open markets exist and talks about the pressures these open markets exert on internal domestic policies to converge. At other times the focus is on pressures, internal or external, for convergence of trade or border policies i.e., the process of integration. What seems to receive little or no attention are the kinds of pressures exerted for convergence of internal domestic policies by the **continuing process of convergence of border policies**. In other words does the process of opening borders exert the same kinds of pressures on internal policies as does the existence of open borders?

In discussing the unlikeliness of governments giving up all sectoral policies, the paper concludes, "In practice the question is how to constrain policies that give a marked incentive to expand the production, or reduce the consumption, of a product of export interest to a trading partner." In practice, this is probably the question. But doesn't restricting the question to the interest of the export interest of the trading partner reflect the producer/exporter bias of trade policy negotiations and analysis? Why aren't the consumer interests of importing trading partners of just as much importance? Why did the Uruguay Round deal almost exclusively with those policies that distort export supply upward and import demand and world prices downward? Why are export subsidies bad and export taxes not?

In discussing the reluctance of countries to give up their "cherished institutions" such as national and state/provincial marketing boards, the conclusion seems to be that the FTA will weaken their power and that accommodation will be found to avoid conflict. If this is true and it results over time in defanging these institutions, won't their reason for being and their political support erode and won't they eventually either disappear or become irrelevant?

The discussion of wholly or partially decoupled programs raises a question about "payments per hectare". Isn't the relevant question not whether payments are made on a per-unit-of-land basis, but what requirements affecting the use of the land entitle the owner of the land to receive the payment?

COMPATIBILITY

This discussion emphasizes the important role that compensation and transition payments can make to reducing the resistance to trade liberalization and policy reform. The historical failure of the U.S. to effectively use such payments exposes the Congress and the Executive to unnecessary political pressure to make accommodations that are much more costly in both the long and short term than necessary.

The final paragraph of the discussion of the international dimension of compatibility makes what may be the most important conclusion of the paper -- "there are no longer clear

distinctions between domestic and trade policies, nor between regional and multilateral trade processes. It may not matter much what is the order of policy actions, the forum in which agreement is reached, or the label under which the action is taken". The lack of distinction between domestic and trade policies came to be widely understood and accepted during the Uruguay Round. I was not aware that the substitutability of regional and multilateral trade processes was so well accepted. It agrees with my biases and, if true, gives much more cause for optimism that progress is being made toward more open and efficient world markets.

— DISCUSSION —
HARMONIZATION/CONVERGENCE/COMPATIBILITY: TOWARDS SOME CONCEPTUAL DEFINITIONS

Don McClatchy

Tim Josling has once again provided a reflective, insightful, innovative and stimulating paper. I complement and thank him. In general, my comments are supplemental rather than critical, and focus mainly on definitions. These should be interpreted as a personal, rather than an official response.

Definitions are important to facilitate effective communication. Ideally, we would be able to agree on a common usage for the terms "harmonization", "convergence" and "compatibility". At least each of us needs to be aware of how others are using and interpreting the concepts. The Workshop "Outline" document used "H/C/C" in the singular, implying a single concept encompassing all three words. Josling has chosen to define each word differently and draw distinctions. I find this useful.

Implicit in Josling's definitions, and in his own subsequent use of the three terms, are, I think, the following important points:

1) All three terms, in the present context, describe policies or policy instruments.

2) Policy instruments in two countries may be compatible with each other without being identical or even similar.[1]

3) Sometimes, governments change or modify policy instruments in a deliberate attempt to make them more compatible with those of another country; at other times policy changes implemented for other reasons can result in policy instruments becoming more similar or compatible.

4) The terms "harmonization" and "convergence" both seem to imply a comparison of policy instruments in two or more countries, whereas "compatibility", while it may also be applied to a pair of corresponding policy instruments, may alternatively be

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[1] "Green box" type programs are probably the best examples of policy instruments which can be quite different without being "incompatible".

used to connote political acceptability of a single instrument to another country, or even to indicate its consistency with other policy instruments of the same country.

Additional points, not inconsistent with the above, which are less evident in Josling's text, but which I would like to emphasize, include:

5) All three terms might be used in an absolute or in a relative (progress towards the absolute) sense. "Harmonization" and "compatibility" on their own (i.e., in the absence of a qualifier like "increased") would grammatically seem to refer to an absolute end-point, while "convergence" on its own is more indicative of progress in a certain direction.

6) Notwithstanding the previous point, our practical interest in the three concepts is essentially an immediate, transitional and dynamic one. What is compatible this year may no longer be compatible next year.

7) Not all trade conflicts derive from insufficient H/C/C, and not all such conflicts can be resolved by more H/C/C.

8) Tests or criteria for compatibility range all the way from pure economic logic to pure politics.

In the light of the above preamble, the key points of distinction in the usages proposed by Josling would seem to be as follows:

Harmonization

- results from deliberate action by governments;
- results in identical or very similar instruments;
  - sovereignty an important counter-force here because of this;
  - mainly applicable to regulations and import barriers;
- is often pursued mainly for reasons of economic efficiency gains, rather than because of political pressures.

Convergence

- is usually a by-product of policy changes implemented in response to other forces, rather than in an intentional effort to make instruments more similar or compatible between countries;
- driven by forces of technical change, globalization, economic interdependence, etc., an element of inevitability is apparent;
- logical necessity may be the key driving force in many cases.

Compatibility

- as with harmonization, deliberate action by one or more governments seems to be implied in its pursuit; however, unlike the case of harmonization, the mutually acceptable,

consistent or compatible policy instruments resulting from the process may be quite different from each other;

- favourable political perception may often be the indefinable test or criterion of "compatibility" (and its corollary, the absence of disputes, its indicator).

I see a disadvantage with Josling's seemingly broad further use of "compatibility" to include the political dimension.[2] It appears to open up the possibility of a policy instrument being "compatible", from the point of view of another country, in one sense but not in another. For example, Canada's removal of Western Grains Transportation (WGT) subsidies was probably compatible with U.S. political wishes at the time.[3] It could also be argued to have been incompatible with the continuation of the use of the Export Enhancement Program (EEP) by the United States, because it exacerbated cross-border price differences. As a result, other ways had to be temporarily found (Canadian Wheat Board restraint on its U.S. sales) to curb resulting flows of Canadian grain into the United States while the EEP was being used. However, with tariffs removed between the two countries, the potential problem still remains if the EEP is reapplied. The only permanent solutions would seem to be for the United States to follow Canada's lead and eliminate the EEP, or, as Josling argues, for Canada and the United States to have a joint or coordinated export subsidy program.[4] So the question remains unanswerable, under such a broad definition of the term, as to whether Canada's repeal of the W.G.T. Act resulted in more or less compatibility. For this reason, my own inclination is to confine the use of the term to a more technical or economic meaning.

Is H/C/C a phenomenon to be merely studied, for the sake of its better understanding, or is it something to be actively pursued by governments? Josling would appear to put "convergence" in the former category and "harmonization" and "compatibility" in the latter. Some further insights into refining his definitions of the last two might be derived by considering why active pursuit of H/C may be desirable. At least four reasons come to mind:

Mutual Advantage Even if two programs in different countries are already compatible and/or equivalent, there may be considerable efficiency gains to be obtained by making them the same or similar. This fits well with Josling's definition of "harmonization", and could involve changes by one country or by both countries. A comparison of a policy instrument of one country with the corresponding instrument in another country is implied.

Mutual Compatibility In a global market with significant trade, some grades, standards and regulations which differ between countries may be incompatible. Consumers in all countries stand to benefit to the extent that world-wide industry standards can be agreed and adopted. Governments can at least facilitate this, by changing incompatible regulations and

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[2] In places, he seems to implicitly equate 'achieving compatibility' with 'doing whatever it takes to defuse a political problem'.

[3] While exceeding Canada's WTO export subsidy reduction commitments, it was, of course, compatible with these too.

[4] Strictly speaking, the former is just a special case of the latter.

encouraging industry initiatives. Again, a between-country comparison of policy instruments is implied.

Improved International Relations To the extent that the goal is to avoid trade disputes and to achieve or maintain harmonious relations, then the focus may well be just on one policy instrument at a time without any cross-country comparisons. If a particular program is perceived to put another country at a disadvantage, and if that perception can not be changed (by objective analysis, education, dialogue, etc.), then that program may have to be changed for H/C to be achieved, regardless of whether adverse international effects are real or only imagined. Just as civilized people avoid language which is offensive to others for the sake of good interpersonal and social relations, so civilized countries may have to avoid the use of offensive programs, for the sake of good international relations. In both cases, insisting on a right to individual action (sovereignty) may not be worth the cost. Such a motivation for pursuing H/C would support the adoption of Josling's rather broad concept of "compatibility".

Long Term Agricultural Policy Reform Since the late 1970s, this has been recognized as needed in many countries to curb fiscal waste, inefficiency and economic distortions, lack of market orientation, undesirable distributional effects, etc. It has been agreed that such reforms are politically difficult if attempted unilaterally and more feasible if pursued multilaterally. The latter implies a certain degree of coordination, and international equality in the pace of reform, in order to maintain a sense of balance and fairness between countries. The Uruguay Round negotiations and commitments are a part of that multilateral undertaking. In this context, pursuing H/C can imply assessing a whole package of policy instruments or policy changes simultaneously, relative to the package being applied by another country. For these purposes, indicators like Product Subsidy Equivalent (PSE) and Aggregate Measures of Support (AMS) levels, average percentage tariff levels or cuts, etc., can be useful. Josling's definitions of both "harmonization" and "compatibility" seem to fall short of embracing this motivation for mutually advantageous agricultural support policy change, and the more aggregative perspective which it implies. This must surely be an oversight by the father of the PSE.

Finally, I should point to a couple of misleading statements in Josling's text about the state of affairs in Canada. He overemphasizes, in my view, the importance of interprovincial trade barriers for the supply-managed products. Much progress has been made in this area, and the main international problems of supply management will remain even when and if there is a single Canadian market across the board. Second, "pooling" in the marketing of western Canadian grain implies averaging returns over time (within a crop year) and, to a limited extent, over quality (within a grade), but not, generally, over geographic space. Farmers located further away from export position have commensurately higher transportation charges deducted from their return. Neither of these examples were essential or important to Josling's arguments, but, for the record and to avoid misconception, they needed to be corrected.

I I. HARMONIZATION/CONVERGENCE/COMPATIBILITY: IMPLICATIONS FOR DISPUTE SETTLEMENT

AGRICULTURAL POLICIES, TRADE AGREEMENTS AND DISPUTE SETTLEMENT

Michael N. Gifford

INTRODUCTION

The purpose of this paper is to examine how dispute settlement mechanisms in trade agreements have evolved and to discuss the implications of differences in domestic agricultural policies for dispute settlement in multilateral as well as regional trade agreements.

Agricultural Trade Disputes

The Multilateral Experience There is no question that fundamental differences in agricultural policy goals and instruments were at the heart of the agricultural trade disputes which permeated the General Agreement on Tariffs and Trade (GATT) throughout its existence.

The propensity of governments to treat agriculture as a "special" sector because of its political sensitivities resulted in agriculture-specific rules (Article XI:2(c)I), special treatment (grand-fathered measures, country waivers, refusing to ban agricultural export subsidies when industrial export subsidies were banned) and, ultimately, lack of credibility when it became apparent that the rules were not effective and did not apply equally to all.

The lack of credibility became most apparent when GATT members began in the 1980s to block the adoption of findings of the Subsidies and Countervailing Code which had been negotiated in the Tokyo Round.

With the benefit of hindsight, the Tokyo Round Code provisions that applied to agricultural export subsidies illustrate the danger of negotiators trying to draft around a problem. The rule of law cannot be built on a foundation of "creative ambiguity". Consequently, because the parties did not share a common understanding of what the provisions were designed to accomplish, GATT members started to block the adoption of Panel reports they did not like.

The general provisions of the GATT fared much better than the Subsidies and Countervailing Code. By and large, the dispute settlement system worked when basic issues of non-discrimination and nullification and impairment were at stake. Probably the best example of the GATT overcoming its inherent shortcomings regarding agricultural trade was the Panel finding which required the European Community (EC) to modify its support system for oilseeds which had been found to nullify duty-free bindings on oilseed imports. However, it is no coincidence that Europe accepted and implemented the Panel finding on oilseeds only after it had come to the conclusion that its relationship with the United States and the rest of the world could not continue to stand the strain of perpetual anarchy in agricultural trade.

The recognition that multilateral trade in agricultural products must be based on a system of effective rules equally applicable to all was a necessary condition for bringing the Uruguay Round negotiations on agriculture to a successful conclusion.

Also contributing to the Uruguay Round breakthrough on agriculture was the explicit recognition (missing from earlier GATT Rounds) that agricultural trade problems stem largely from differences in domestic agricultural policies, particularly in the level and type of support. The acceptance of the importance of these concepts had been greatly facilitated by the Producer Subsidy Equivalent (PSE) work of the Organization for Economic Cooperation and Development (OECD) which had provided governments for the first time with an objective means to make country and commodity comparisons in agricultural support.

Probably the best example of a GATT member consciously deciding to narrow the policy differences with its most important trading partners was the 1992 decision of the EC to reduce its internal market grain prices to levels much closer to world levels and to compensate producers through direct income supports tied to a system of acreage set asides. It should come as no surprise that the practical effect of these reforms was to make the European support system for grains more compatible with that of the United States.

Complementing a set of agricultural trade rules and commitments which were perceived as fair and effective was an improved system of dispute settlement. Many trade policy observers regard the new dispute settlement system of the World Trade Organization (WTO) as the glue which is necessary to keep the organization credible.

The decision to prevent parties to a dispute from blocking a Panel report; the decision to make the dispute settlement more credible by establishing an Appellate Body review; and, the decision to regard the Uruguay Round results as a single undertaking, subject to common membership and a common dispute settlement system, have given the WTO the credibility the GATT was sadly lacking in its last years.

Before turning to an examination of dispute settlement in a North American Free Trade Agreement (NAFTA) context, it is worthwhile to recall that the WTO system of dispute settlement evolved out of almost fifty years of GATT experience. In the beginning, the major emphasis in the GATT was to secure a positive solution to a dispute through consultation and negotiation. Thus, a solution mutually acceptable to the parties to a dispute was always preferred to litigation. However, if bilateral or plurilateral discussions did not

resolve the dispute then the objective of the dispute settlement system was to secure the withdrawal of the measures concerned if the panel or Working Party found them to be inconsistent with the GATT. If the offending member did not bring its measures into conformity with the finding, the last resort of the GATT (and the WTO) was to provide for compensation or the suspension of equivalent concessions (retaliation) on a discriminatory basis, subject to the authorization of the GATT members. In short, a major goal of the GATT was to ensure that a balance of interests, once established, be maintained.

In the earlier days of the GATT, Working Parties comprised of government representatives were often called upon to assist in dispute resolution. With the benefit of hindsight this was not a very satisfactory process as witnessed by the fact that a GATT Working Party concluded in the mid-1970s that Canada could apply import quotas in support of its supply management system for eggs. That Working Party "win" certainly gave Canadian policy makers the false security that its system of Article XI import quotas was fully consistent with its GATT obligations. Fifteen years later a GATT panel addressing certain Japanese import quotas interpreted Article XI in a much more restrictive and legalistic way than the Egg Working Party.

Gradually, over the years, even the larger economic powers, such as the United States and the EC, began to share the views of the smaller members that a more neutral, more codified, more legalistic approach was required to manage disputes and avoid conflicts. Quiet diplomacy and the old boy networks were simply not sufficient, nor were Working Parties. However, it took nearly five decades before the GATT dispute settlement system acquired the features which characterize today's WTO and NAFTA dispute settlement procedures: the right to the establishment of a panel; rosters of experts to serve on panels in their personal capacity and not as government representatives; the quasi-judicial panel process of written submissions, counter-submissions, oral hearings and cross-examination within the context of a legal framework of rights and obligations; the establishment of firm time-lines governing the establishment and operation of the panel; and the acceptance that a party to a dispute could not block the adoption of a report.

The NAFTA Experience One of the major differences between the European Union (a customs union) and NAFTA (a free trade area) is that the former is predicated on the progressive adoption of common commercial policies. Europe now has common policies governing virtually all economic activity including: competition, technical regulations, trade, transport and agriculture. However, even a customs union with common policies requires an effective dispute settlement mechanism. Thus, the Treaty of Rome provides that the European Court of Justice "shall ensure observance of law and justice in the interpretation of this Treaty" and that the judgements of the Court "shall" be executed by the offending member.

In contrast, WTO and NAFTA panel decisions are not self-enforcing. However, once a Panel decision is rendered the offending party must bring its measure into conformity with the treaty provisions or face compensation/retaliation. This provides a healthy incentive to respect the Panel finding.

NAFTA is not predicated on common policies. Instead specific commitments are undertaken and it is presumed that members will make the domestic policy changes necessary to bring them into conformity with the trade agreement provisions.

Clearly, the domestic policy adjustments required tend to be fairly modest for areas where the level of support and the marketing systems are similar and the terms of market access are reciprocal. This is the case for most Canada/U.S. agricultural trade. There are notable exceptions, however, and they, not surprisingly, are the areas where friction is currently being experienced. Dairy, poultry, grains, sugar and peanuts are all sectors which are experiencing difficulties because of real or perceived differences in the level of support and/or marketing systems and/or asymmetrical terms of access.

Other speakers will deal with the specifics of these commodity sectors in more detail. Suffice to say that the dispute settlement provisions of the NAFTA will continue to be tested wherever there is a perception that the trade playing-field is somehow tilted in favour of one party at the expense of another. However, there are different categories of irritants. Some (like dairy, poultry, sugar) are examples of irritation that the NAFTA has not gone far enough in reducing barriers to trade. Others (like potatoes, grain, cattle) are concerns relating to the perception that NAFTA has gone too far and that "unfair" imports are triggering political pain thresholds.

The solutions to these two categories of irritants are obviously not the same. However, both types can put pressure on the dispute settlement system. The recent NAFTA panel on Canadian dairy, poultry, egg, barley and margarine tariff equivalents found that Canada (and by extension the United States) can maintain tariff equivalents on items which were identified in our respective WTO schedules. In effect, the Panel confirmed that the original balance of interests in agriculture in the Canada/U.S. Free Trade Agreement included an agreement to maintain certain non-tariff barriers, recognizing that the Uruguay Round was underway which could have implications for their future. Put another way, the Panel concluded that a deal is a deal, and if the parties wished to change the deal it would require a renegotiation.

It is interesting to note that the Panel on tariff equivalents was comprised of two U.S. law professors chosen by Canada, two Canadian law professors chosen by the United States, and a mutually agreed British law professor acting as Chairman. The professional composition of this Panel is indicative of how legalistic dispute settlement panels have become. Political economy is out, law is in!

This Panel is instructive in a number of ways. It reflected a basic difference of views as to how WTO tariff equivalents should be interpreted in the context of the NAFTA. It was preceded by extensive bilateral negotiations which lasted for nearly a year before it was concluded that a negotiated solution was not possible and that referral to a neutral panel of experts was needed in order to determine authoritatively the legal rights and obligations of the parties. The legal issue was not whether one party could maintain a certain support and marketing system, the issue was what import measure could be applied, given the original Canada/U.S. deal on agriculture and the later WTO Agreements.

A somewhat similar issue is looming on sugar. Here the question is whether or not the United States is obligated to terminate its re-export program on sugar containing products. Unless there is a bilateral solution, this case will eventually be placed before a panel to determine the legal rights and obligations with respect to this measure.

More disturbing, however, are the irritants which do not reflect differences in the interpretation of the NAFTA, but rather reflect the politicization of an import issue and the perception that "something" should be done to limit imports because a political pain threshold has been reached. The classic example of this was the limit placed on imports of wheat from Canada for a year in the fall of 1994. To be blunt, the only reason Canada agreed to this was under the threat of a more punitive Section 22 import quota. However, today the United States no longer has the right to apply Section 22 import quotas because it, like all WTO members, agreed to convert all existing non-tariff barriers into tariff equivalents and not to reintroduce them. This provision took effect on the entry into force of the WTO on January 1, 1995.

Since Canada and United States cannot apply import quotas against one another and since "normal" tariffs are to be eliminated on all goods (agricultural and industrial) effective January 1, 1998, the only ongoing import measures which can be applied on bilateral trade under NAFTA are the "tariff equivalents" resulting from the WTO conversion of non-tariff barriers.

Of course, neither NAFTA nor the WTO prevent the application of anti-dumping, countervail or safeguard measures. However, a party wishing to invoke a special import measure must follow the international rules governing their application.

I mentioned earlier that there are two categories of irritants. I could add two more by drawing a distinction between problems which are being handled on their technical merits in accordance with the letter of the law and those which have become so politicized that facts have become almost irrelevant and perceptions have become reality. If an irritant reaches this politicized stage, it risks undermining the acceptance that bilateral trade relations are based on the rule of law. The agricultural experience of the GATT clearly illustrates that if the political economy of agriculture is allowed to overwhelm the law, the end result is anarchy.

SUMMARY AND CONCLUSIONS

An effective, rules based, dispute settlement system is an essential part of multilateral and regional trade agreements. The panel system which evolved in the GATT and which is now incorporated in the WTO and NAFTA provides an objective way of resolving disputes where bilateral discussions have failed to reach a mutually agreed resolution of differences.

Even in the best written trade agreements there is always a potential for differences in interpretation to emerge, particularly as time passes. Parties to a trade agreement are

constantly having to assess their international rights and obligations when making changes to domestic laws and regulations.

Formal litigation through the dispute settlement process should be, however, treated as a means of last resort if the system is not to become overloaded and its quasi-judicial character de-based.

In most cases, it is much preferable for the parties to a dispute to reach a bilateral agreement and it is even more preferable that the parties and their constituencies take the action necessary to minimize the need to involve the dispute settlement machinery.

Lack of knowledge and understanding of each party's agricultural support and marketing systems, lack of formal and informal consultations on an ongoing basis can lead to an environment where small, localized irritants can erupt into a major trade relation confrontation, with unpredictable results.

While recourse to effective, and impartial dispute settlement procedures may, in some cases, be the only way of resolving particularly contentious issues, many potential disputes can be settled without recourse to litigation, provided the governments and the industries concerned work hard at cultivating a genuine understanding and dialogue so that myths are addressed early before political rhetoric turns perceptions into reality.

The GATT experience clearly showed that most trade problems stem from differences in the level and types of support governments provide to their rural sectors. The challenge for a free trade area which does not have a common agricultural policy is to identify, control and reduce the pressures which result from differences in domestic agricultural policies. This can be done within the framework of a rules based trade agreement provided all stakeholders, government and industry, work hard to address legitimate concerns and grievances. These concerns once identified should be promptly dealt with. It is unrealistic and counter-productive to expect the dispute settlement system to handle every irritant, in particular, those that result from an inability to negotiate a solution at the time an agreement was negotiated. The parties must do their part to resolve as many of their differences as possible, thus leaving litigation as the last resort.

This conclusion may appear to go somewhat against the grain to the extent it gives the appearance of harking back to the earlier days of the GATT and older bilateral trade agreements which were characterized by an emphasis on consultative mechanisms and negotiations in order to manage disputes and avoid conflicts. This is not what is intended. Instead, what is being suggested is that a modern trade agreement needs a rules based dispute settlement system and it must also have mechanisms to ensure ongoing government-to-government and industry-to-industry dialogues. In short, fostering an harmonious agricultural trade relationship requires more than an effective litigation mechanism. It also requires a willingness by governments and private sector interests in all member countries to devote sustained efforts into making trade agreements work effectively by managing problems and resolving potential conflicts before they become too entrenched.

— DISCUSSION —
AGRICULTURAL POLICIES, TRADE AGREEMENTS AND DISPUTE SETTLEMENT

Karl D. Meilke

Mike Gifford has done a good job of outlining how the Uruguay Round multilateral trade agreement has changed the rules governing the ways in which national governments are allowed to interfere with and engage in international commerce (IATRC, 1994; Josling, Tangermann and Warley, 1996; Meilke, McClatchy and de Gorter, 1996). While the rules governing trade in primary agricultural products continue to differ from those governing trade in manufactured products, most observers would agree that progress was made in "normalizing" trading relations for agricultural products by: 1) eliminating all non-tariff barriers to trade; 2) banning the use of export subsidies on commodities which are not explicitly identified in a countries World Trade Organization (WTO) schedule; 3) reducing export subsidies on all commodities; 4) reducing all tariffs and the binding of most agrifood tariffs; and 5) developing an improved dispute settlement mechanism that applies to all products.

ANTI-DUMPING (AD) AND COUNTERVAILING DUTY (CVD) DISPUTES

There are two types of disputes which will be taken to the WTO. First, disputes alleging that countries are not abiding by the obligations they assumed with the signing of the Uruguay Round agreement (nullification, impairment, circumvention). Second, disputes governed by the Agreement on Subsidies and Countervailing Measures, the Agreement on Implementation of Article VI of GATT 1994 (anti-dumping) and the Agreement on Agriculture. My comments are focused on the second type of dispute which deals primarily with anti-dumping and countervailing duty actions.

Anti-dumping actions are brought by domestic producers against foreign firms. The original intent was to combat predatory pricing (Boltuck and Litan, 1991; USITC, 1995). Predatory pricing is the practice of a firm selling products below cost to drive out rival firms thereby creating a market power for itself. Its market power position then allows it to subsequently raise prices above those that prevailed before the predatory pricing began. The

description of predatory pricing should be sufficient to suggest that it will never be successful for agrifood products and uncommon outside of the agricultural sector (Shin, 1994). Instead, anti-dumping provisions are generally used to combat international price discrimination. Interestingly, price discrimination is perfectly legal if practiced by domestic firms, and applauded internally when used by the Canadian Wheat Board (CWB) to benefit Canadian grain producers. Schott (1994, p. 85) has described the Uruguay Round agreement on anti-dumping as "a bandage to a festering sore of trade policy."

The economic basis for a CVD complaint is different than for an AD action. A countervailing duty case is brought by domestic firms against foreign governments. As Horlick (1991, p. 137) notes, "there is a grain of truth, which is the distortion caused by subsidies" lying behind the rationale for a CVD, while AD actions are "90 percent pure protectionist." Essentially, domestic firms should not be expected to compete against the treasuries of foreign governments.

Significant changes were made in AD/CVD laws as a result of the Uruguay Round of trade negotiations. For CVD investigations the changes include: 1) specific time schedules for decisions; 2) a higher *de minimis* level; 3) a five year sunset provision; 4) the opportunity for consumers of the foreign product to make representations; 5) different rules for developing nations; and 6) an appeals process (Schott 1994, Jackson 1996). Most importantly, WTO panel reports cannot be blocked from adoption, except by consensus. The WTO rules governing AD and CVD actions are not self-executing, hence these procedures must be incorporated into domestic legislation.

ADMINISTERIAL PROTECTION RULES

Before proceeding, it is useful to ask what desirable features countries would like to see embodied in administered protection rules. Of course, countries can be schizophrenic depending on whether they are protecting domestic industries or challenging other nations "unfair" trading practices. However, there are at least four desirable features, of the administered protection rules, on which there would be general agreement:

- The proceedings should be "rules based". The criteria for determining if a subsidy or practice is illegal should be stable, well defined and straightforward. While there will always be "grey areas" these should be kept to the minimum by using language that is as clear as possible. The "creative ambiguity" mentioned by Gifford (1997) should be avoided. Clear rules should also limit the number of frivolous cases brought before panels.

- Rulings should be predictable. Predictability is enhanced when the number of potential "courts" in which a case can be heard is limited. An industry should be protected from double jeopardy and endless litigation.
- There should be a time schedule for panel findings that insures the resolution of disputes in a timely fashion.
- For AD/CVD cases the arguments, evidence and findings should be consistent with basic economic theory (van Duren, 1991; Meilke and Sarker, 1996).

THE AGRI-FOOD INDUSTRY

As Gifford (1997) has mentioned, progress was made on most of the issues raised above, in the Uruguay Round. However, based on these common-sense criteria there is reason for concern with the current arrangements for administered protection. The issues are important for agri-food producers because they are heavy users of this form of protection. About one-half of the cases brought to the WTO since its inception have involved agri-food products and two of the three extraordinary challenges under the CUSTA have involved agri-food (pork, live swine, softwood lumber) (Endsley 1995, Dixit 1996).

Historically, the United States, Canada, the European Union and Australia have been the principle users of contingency protection legislation. However, more than forty countries now have domestic administered protection rules. As developing nations increase their use of administered protection, domestically and through the WTO, the proportion of agri-food disputes is likely to increase.

The WTO embodies new rules which classifies subsidies into three groups: 1) prohibited; 2) actionable; and 3) non-actionable. However, the list of subsidies differs greatly among manufactured goods and agri-food products (Table 1 and Table 2).

The rules governing Canada's external trading relations are further complicated by its membership in the NAFTA. Consider a case brought against Canada by the United States and Mexico. Mexico and the United States would have to decide whether to bring the case under NAFTA or the WTO, but not both (Endsley, 1995). If they chose to pursue the case under NAFTA, two panels would be formed. One governing the Canada-Mexico case and one governing the Canada-United States case. Alternatively, if both Mexico and the United States brought separate cases under domestic legislation, they could also simultaneously file a case with the WTO (Cadsby and Woodside, 1996). To an economist, but perhaps not to a lawyer, this is an exceedingly complex arrangement with a high likelihood of generating conflicting decisions. If NAFTA is eventually expanded to include more countries, as seems undeniable, the process will get even more cumbersome without fundamental institutional changes.

Table 1. WTO Rules as they Apply to Subsidies and Countervailing Measures: Manufactured Products

Prohibited Subsidies:
• Government Transfers of Funds, Revenue Foregone or Provision of Services other than General Infrastructure to a Specific Industry
• Income or Price Support
• Export Subsidies
• Domestic Use Regulations
Actionable Subsidies:
• Ad Valorem Subsidization Exceeds 5 percent[a]
• Subsidies to Cover an Industries Operating Losses[a]
• Forgiveness of Government Held Debt[a]
Non-Actionable Subsidies:
• Generally Available Subsidies
• Specific Subsidies Which Met the Following Conditions:
* ad valorem subsidization less than 1 percent
* assistance for research activities if the assistance covers not more than 75 percent of the costs of industrial research or 50 percent of the costs of pre-competitive development activity[b]
* assistance to disadvantaged regions, based on specified development criteria[b]
* assistance to promote adoption of existing facilities to new environmental requirements, provided the assistance is limited to 20 percent of the cost of adaption[b]

[a] These subsidies must be shown to have trade effects as described in the Agreement on Subsidies and Countervailing Measures.

[b] Other conditions apply.

Table 2. WTO Rules as they Apply to Subsidies and Countervailing Measures: Agriculture

Prohibited Subsidies: • Export Subsidies on Products not Identified in the Countries Schedule of Commitments
Actionable Subsidies: • Ad Valorem Product Specific Support Exceeds 5 percent • Ad Valorem Product Specific Support 1 percent - 5 percent[a] • Ad Valorem Non-Specific[b] Support Exceeds 1 percent[a] • Direct Payments under Production Limiting Programs[a] • Export Subsidies on Products Specified in the Countries Schedule of Commitments[a]
Non-Actionable Subsidies: • Generally Available Subsidies • Ad Valorem Subsidization Less than 1% • General Services: * research * pest and disease control * training services * extension and advisory services * inspection services * marketing and promotion services * infrastructure • Public Stockholding for Food Security Purposes • Domestic Food Aid • Direct Payments to Producers through Decoupled Income Support • Government Financial Participation in income insurance and income safety-net programs * Payments for Relief from Natural Disasters * Structural Adjustment Assistance Provided through: - producer retirement programs - resource retirement programs - investment aids • Payments Under Environmental Programs • Payments Under Regional Assistance Programs • Specific Subsidies which Meet the Following Conditions: * assistance for research activities if the assistance covers not more than 75 percent of the costs of industrial research or 50 percent of the costs of pre-competitive development activity * assistance to disadvantaged regions, based on specified development criteria * assistance to promote adoption of existing facilities to new environmental requirements, provided the assistance is limited to 20 percent of the cost of adaption.

[a] With a determination of "injury" and "due restraint" must be shown in bringing a case.

[b] The term non-specific is used in the context of Article 6 of the Agreement on Agriculture.

There are many forces of change pushing the dispute settlement system in various directions. National governments, and experts such as Mike Gifford who have a deep understanding of the institutional issues involved, need to think about how to create the most fair, liberal and efficient mechanism as possible — and how to stick-handle the political sovereignty issues involved. A list of "forces" includes the following:

- The rules governing trade in agri-food products will become increasingly like those governing trade in manufactured products. The Uruguay Round agreement sets this process in motion and there will be no turning back. In the meantime, mechanisms are needed to insure countries live up to their commitments and to define the grey areas in the agreements.
- Regional Integration Agreements (RIA) will be enlarged in North America, Europe (and in Asia, but more slowly) creating trading blocks which are subject to more liberal trading rules than those governing trade between non-block countries. In North America, there will be increasing pressure to form a common market instead of a free trade area; agri-food is likely to be one of the major stumbling blocks towards progress.
- The growth and deepening of regional integration agreements will increasingly blur the distinction among domestic and foreign firms.

These forces will push the evolution of an efficient dispute settlement mechanism in two directions. First, disputes occurring between countries, which are not in the same RIA, should be heard and settled in the WTO. Second, disputes among members of the same RIA, where trade is subject to more liberal trading rules than in the WTO, should be heard and settled by RIA panels. National administered protection agencies should become "transparency" agents along the lines suggested by Meilke and Sarker (1996) and Spriggs (1994). Their role would be to "filter" cases before they proceeded to either the RIA or WTO dispute settlement bodies. National administered protection agencies, given a new mandate, could play an important "informal" role in examining and negotiating trade irritants. However, this suggests the elimination of purely domestic contingency protection legislation, and no matter the arguments on efficiency grounds, this will be a difficult concept to sell in many countries.

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III. HARMONIZATION/CONVERGENCE/COMPATIBILITY: ISSUES, IMPLICATIONS AND IMPACTS

COMMODITY POLICY COMPATIBILITY WITH FREE TRADE AGREEMENTS

Daniel A. Sumner and Daniel G. Hallstrom

ISSUES AND APPROACH

Agricultural trade negotiations have been especially complicated and controversial. Complications arise because, in addition to border measures such as import barriers and export subsidies, nations employ a mind boggling array of internal agricultural subsidies and regulations. Among the important issues encountered during negotiations, and in their aftermath, is the compatibility of internal programs with the legal and economic implications of the trade agreement. Free trade agreements do not necessarily require commitments on internal commodity subsidies and regulations, but such agreements may imply economically that certain policies are not sustainable.

There are several types of compatibility problems that arise with internal commodity programs under free trade. First, a program may be unsustainable for financial reasons. A program designed to transfer funds from the treasury may have acceptable budget costs with import limits, but these costs may explode when trade is allowed. Second, a program may contain price or other guarantees that simply fail to be feasible in the face of imports. A program may promise outcomes that are not economically possible unless imports can be controlled. Third, a subsidy or internal regulatory program may be feasible and have relatively low budget costs, but violate the free trade agreement itself by implicitly blocking importation through economic means. Fourth, for exporters, domestic commodity programs may act as effective export subsidies, and thus be incompatible with free trade agreements on legal grounds. Note, compatibility problems three and four may lead to trade disputes rather than internal inconsistencies.

The relationships between trade agreements and internal commodity programs may be dealt with in two ways. First, international negotiations may develop binding commitments on internal subsidies and regulations. This was the approach taken in negotiating the Uruguay Round Agreement for agriculture of the General Agreement on Tariffs and Trade (GATT)/World Trade Organization (WTO) (URA). Because certain internal programs were seen to have trade effects, an attempt was made to draw up

binding commitments to limit the scope of such programs. A second approach is to focus the trade agreement itself on border measures and let the incompatibility with free trade apply pressure on the internal programs. Such pressure may be through direct budget or economic implications, or through legal means such as nullification and impairment clauses, or antidumping and countervailing duties cases.

Two polar-case solutions to the compatibility question may be mentioned to set the stage. The first solution is to abandon opening the borders at all. If the domestic commodity programs seem to be absolutely incompatible with open markets, the free trade agreement may simply leave that commodity out. This approach was taken for several supply-managed commodities in Canada's agreements with the United States, Mexico and Chile. A second solution is to go far beyond the free trade agreement and harmonize internal commodities policies (and perhaps adopt common border policies as well). The European Union (EU) has moved a substantial way down this path.

This paper continues as follows. The next section contains an analysis of how free trade affects the domestic economics of common commodity program types. We lay out the simple analytics of stylized commodity programs and show how the familiar results are affected by the introduction of free trade. This section includes a discussion of how compatibility issues, with respect to common farm programs, were addressed in NAFTA and the URA. The third section uses the example of free trade among states in the United States to consider further when policies that vary geographically are compatible with open borders. In particular, we examine the incompatibility of federal and state dairy policy and the pressure for a kind of harmonization. The next section presents an argument for letting border pressures discipline internal programs rather than including commitments on internal support in trade agreements. A concluding section draws implications for the trade agreements and for nations domestic policy reforms.

THE SIMPLE ANALYTICS OF COMMODITY PROGRAM COMPATIBILITY WITH FREE TRADE

This section uses a series of familiar commodity policy models to focus our discussion on how particular types of commodity programs are affected by opening up international markets. We show how the impacts of policies such as price supports, marketing quotas and direct payment programs may be affected by free trade. In the discussion that follows, we analyze the effects of a free trade agreement on welfare, budget costs, and other policy objectives under a variety of stylized commodity programs (as in McCalla and Josling, 1985).

These programs are examined using a series of figures that illustrate the economic impact of free trade on a country that has a particular commodity program in place. Commodity program cases considered are:

(1) a production subsidy which is sufficient to exclude imports;

(2) a production subsidy under which some imports flow under free trade;
(3) a price support;
(4) a production quota which is held fixed in response to imports;
(5) a production quota which is adjusted when free trade is introduced; and
(6) direct payments unrelated to current output.

In each figure we show only two countries; the country with the domestic policy upon which we focus is labeled "home", the other country is labeled "foreign". For simplicity, we examine cases in which there is no trade initially and only the home country has an internal commodity program. In the figures, D_f corresponds to foreign demand and D_h corresponds to foreign demand; S_f is foreign supply and S_h is home supply. The excess supply for the foreign country is $E_f = S_f - D_f$.

The first commodity program considered is a per unit production subsidy of v. In Figure 1, autarky equilibrium price and quantity in the foreign country is shown as (p_{fa}, q_{fa}). Autarky price in the home country is determined by the intersection of the subsidy-included supply curve S_{hv} with D_h. At this point, production is q_{hv}, consumer price is p_{hv}, and producer price is p_{hv} +v.

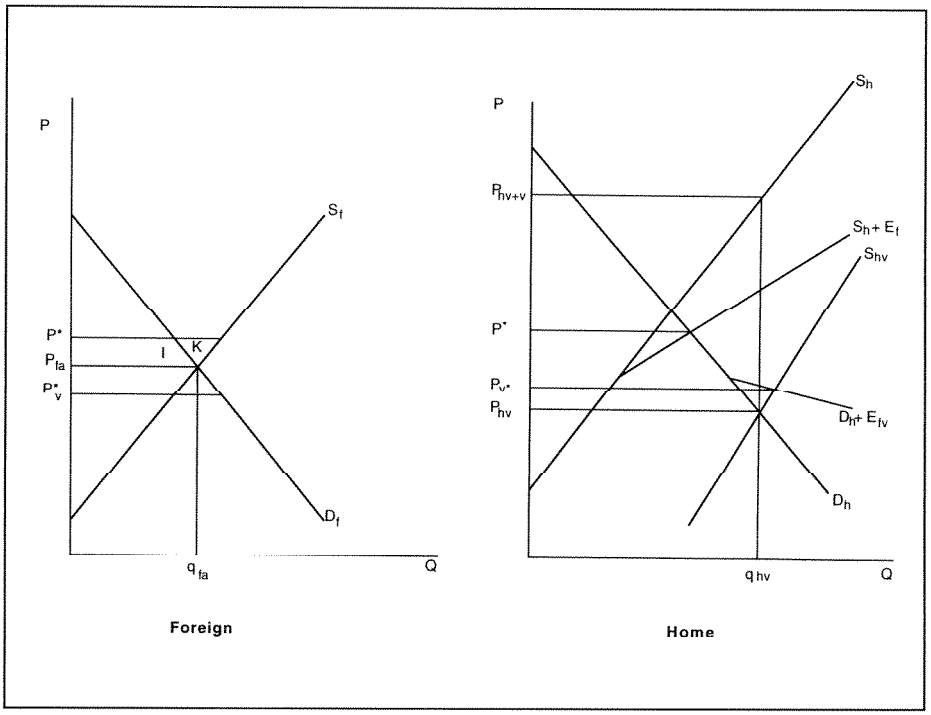

Figure 1. Production Subsidy (Case 1)

Now let us open the border and allow imports. Since imports from the foreign country to the home country must compete with the consumer price in the home country, the effect of free trade upon the autarky equilibrium depends upon the sign of the excess supply E_f, at p_{hv}. In the first case illustrated, the production subsidy v has depressed the home consumer price so much that the foreign country would actually be an importer if the border was opened ($p_{hv} < p_{fa}$). In this case, opening the border places no direct pressure on the operation of the domestic program in the home country. If exports from the home country to foreign market were allowed with no complaint, the effective demand in the home country would be $D_h + E_{fv}$. The price to consumers in the home market would rise and the quantity consumed would rise to include exports.

However, since p_{hv} is below cost of production, trade flowing in this direction could be ruled as dumping and subject to import restrictions in the foreign country. Assuming that the countervailing duties imply no exports from home to foreign, "free trade" will have no effect upon the autarky equilibrium. However, there is a clear conflict between free trade and the production subsidy, since the subsidy implicitly blocks exports from the foreign country to the home country by lowering the home market consumer price.

To see the impact the home production subsidy has on the foreign country, note that with no subsidy and free trade, price would be p*. The production subsidy causes an increase in consumer surplus in the foreign country of I, but producer surplus is lower by I+K. Therefore, the subsidy in the home country imposes a loss in potential welfare in its partner country equal to K. By implicitly blocking trade, the subsidy results in a reduction in welfare in the foreign country relative to what it would be able to achieve with no commodity program in place in the home country. Of course home country welfare is also lower, at least as conventionally measured.

In Figure 2, the home country still uses a production subsidy of v. However, E_f is now greater than zero at p_{hv}. Therefore, even with the subsidy, there will be imports into the home country. With a free trade agreement, but with the subsidy remaining in place, the equilibrium price of p_v* is determined by the intersection of $S_{hv}+E_f$ and D_h. With the free trade agreement, home production falls from q_{hv} to q_{hvh}, and imports are q_{hvf}- q_{hvh} As imports enter into the home country, both producer and consumer prices fall. With trade, home producer surplus is lower compared to autarky by A+B, and home consumer surplus is higher by C+D+E+F+G. As illustrated, the net gain in home welfare caused by free trade is F+G. In addition to the changes in producer and consumer surplus, free trade affects the budgetary costs of the subsidy program. Since we are assuming for now that the per unit subsidy remains the same with free trade, there is a reduction in budgetary costs of $v(q_{hv} - q_{hvh})$. Finally, note that with free trade, market price in the foreign country increases from p_a to p_v* which results in a loss to foreign consumers, a gain to foreign producers, and a net foreign welfare gain shown by area J.

When the initial production subsidy is not so large as to depress the home country price beyond the point that eliminates all trade, both countries experience a net increase in the sum of producer and consumer surplus from a free trade agreement. In addition, budgetary costs of the subsidy are lower. Of course, the production subsidy remains an implicit trade barrier and might be subject to a nullification and impairment case. While

production subsidies are often discussed, such pure programs are not often used. Even the U.S. deficiency payment schemes did not constitute this sort of stylized program. The budgetary cost of such a program would have been prohibitive, so the United States used base rules and land idling to contain costs. The net result was output that likely differed little from the no subsidy equilibrium (Sumner, 1995a; ERS, 1996; Smith and Glauber, 1996 and; Young and Westcott, 1996).

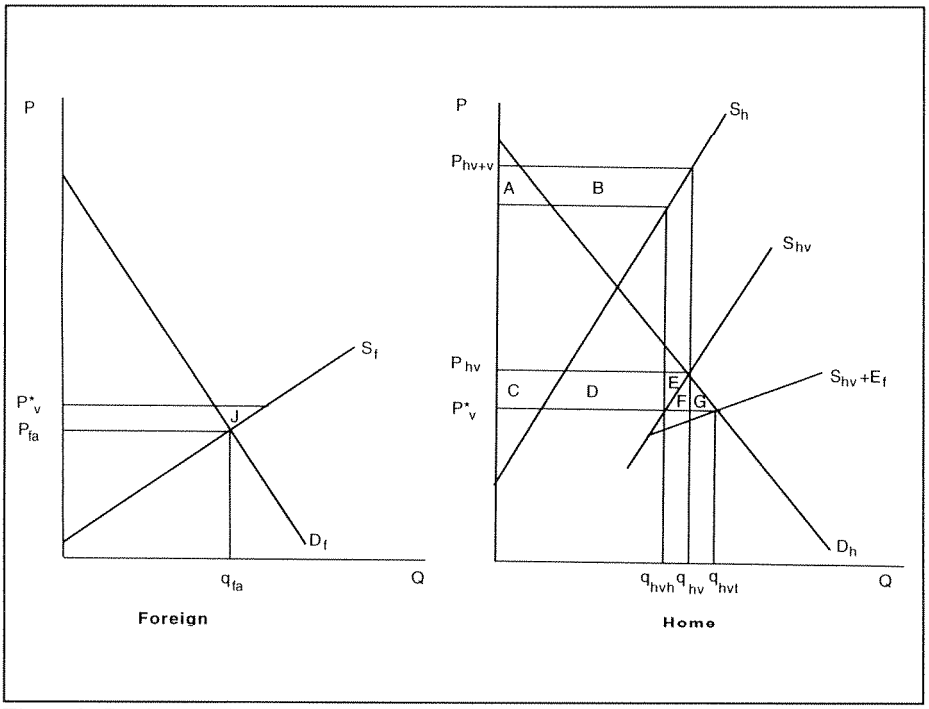

Figure 2. Production Subsidy (Case 2)

The next commodity program considered is a price support that is operated in conjunction with a subsidy to consumers of the amount necessary to clear the market. In Figure 3, the support price is fixed at p_{hs}. The government does not acquire stocks with this policy; in order to clear the market of excess output, it must offer a subsidy to consumers of c. Consumer price is p_{hs} - c, and the policy is a transfer from taxpayers to both the producers and the consumers of the commodity. In a very stylized way, this illustrates the broad policy that Mexico pursued for corn prior to NAFTA and the introduction of the PROCAMPO program.

With free trade, but maintaining the price support, home country producer price remains p_{hs} and output remains q_{hs}. Commodity will flow into the home country until the

free trade equilibrium price of p_s^* is reached. This price is determined by the intersection of the total supply curve in the home country ($q_{hs} + E_f$), with the demand curve, D_h.

Since producer price and output in the home country remain constant, the free trade agreement does not change producer surplus. It does cause an increase in consumer surplus in the home country of A+B+C. There is also an increase in budgetary costs of A+B because the per unit consumer subsidy increases by (p_{hs} - c) - p_s^* for the domestic quantity q_{hs}. In the foreign country, free trade causes a net welfare gain of E.

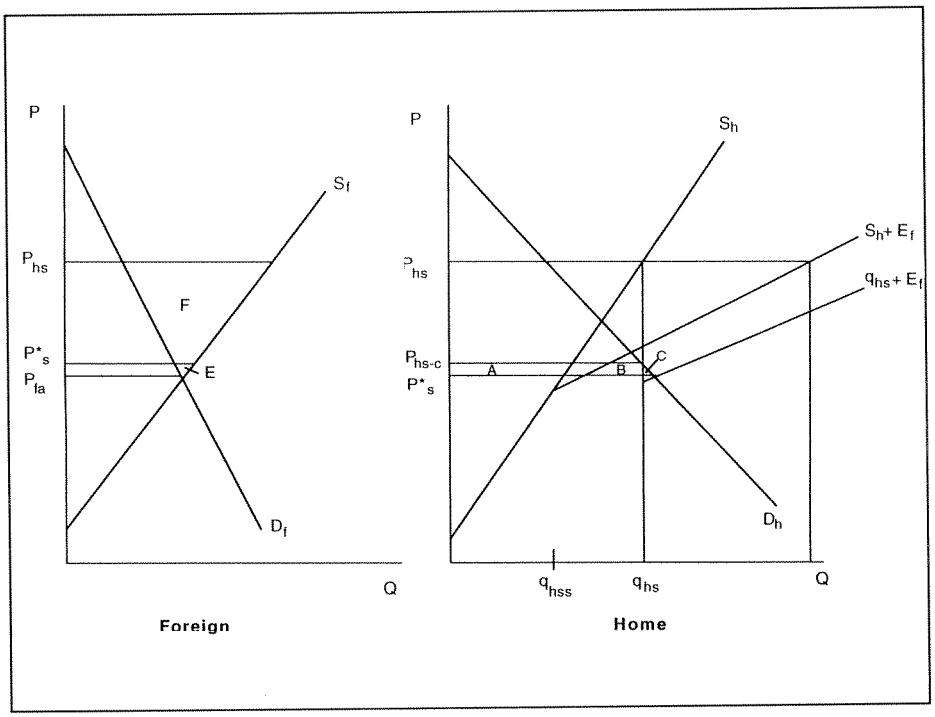

Figure 3. Price Support

The free trade agreement makes the domestic price support and consumer subsidy harder to maintain because the budget cost increases. At the same time, consumer support for the combined program is mitigated because low priced imports are available, making their gain from the subsidy less obvious. With the price support and domestic subsidy, there is also potential for trade dispute. In this case, home country output is unaffected by imports. This implies an extra loss in foreign country producer surplus compared to a production subsidy.

An alternative price support policy would be for the home government to support the price of the commodity at p_{hs} by purchasing any excess supply at this price and either storing

it, or disposing of it in some way that does not affect the market price. Under this policy both producer and consumer price is p_{hs} and quantity consumed falls from q_{hs} to q_{hss}. With free trade, and such a high price in the home country, exports from the foreign country will be $E_f(P_{hs})$. As illustrated, the home government will be committed to purchasing $(q_{hs} + E_f(P_{hs})) - q_{hss}$ of the commodity.

With this policy there definitely is no longer a trade conflict. In the foreign country, net welfare gain from free trade is E+F, which is much larger than it would be in the absence of the home country program. However, free trade has resulted in an increase in budgetary costs in the home country which may not be sustainable.

Figure 4 illustrates a production or marketing quota which remains constant under free trade. The quota in the home country is set at q_{ha} which in autarky would result in the quota constrained price in the home country, p_{ha}, and quota rents of A+B. With free trade, market price in the home country will fall to p_q^*. At p_q^*, consumer surplus in the home country increases by A+C+D, and quota rents decrease by A. Thus, free trade causes distributional effects, but there is an increase of total welfare in the home country of C+D. With this policy, the producer gains in the foreign country from a free trade are larger than they would be in the absence of the quota. By restricting production, the quota drives up the free trade agreement price and allows additional exports. With a constant production or marketing quota in an importing country there will be no trade conflict with the exporter, but the quota rents in the home country decline drastically.

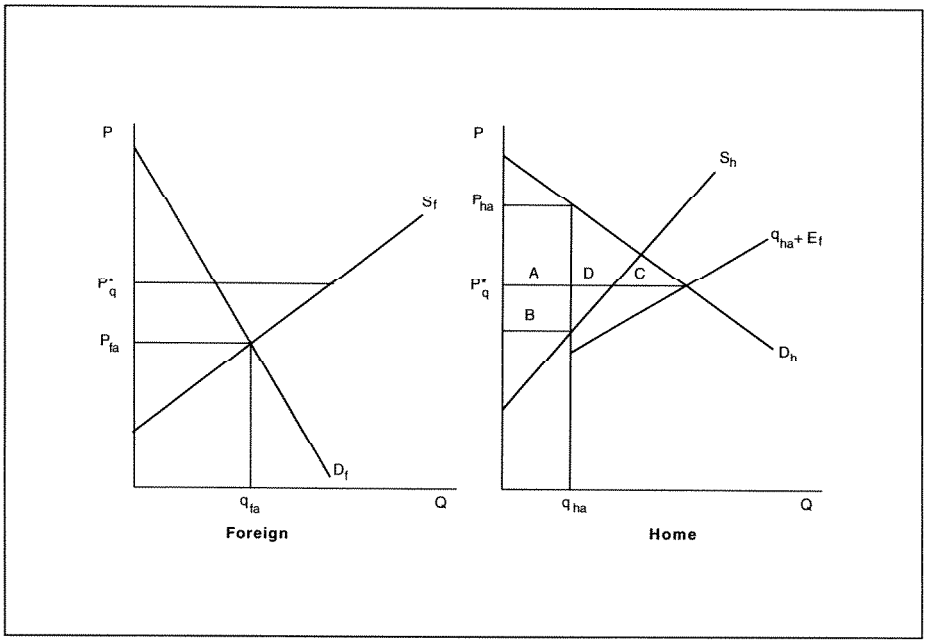

Figure 4. Production or Marketing Quota

In order to see more clearly the effect that import competition can have upon quota rents, Figure 5 depicts an alternative policy in which the quota quantity is adjusted in response to the free trade agreement. Autarky equilibrium will be the same as in Figure 4, with home country price of p_{ha} and quota rents of A+B+C. In this case, under a free trade agreement, rather than leave the quota fixed and allow imports to expand to take the additional market, the home country expands its production quota to q_h. Price falls to p_h which is enough to preclude imports. Now, compared to the case where the quota remains constant, there is an increase in consumer surplus of A+D, and an increase in producer surplus of F. However, free trade has resulted in a decrease in quota rents from A+B+C to B+E. The net effect on producers is (E+F) - (A) which is assumed to be negative, or the quota would have been expanded without a free trade agreement.

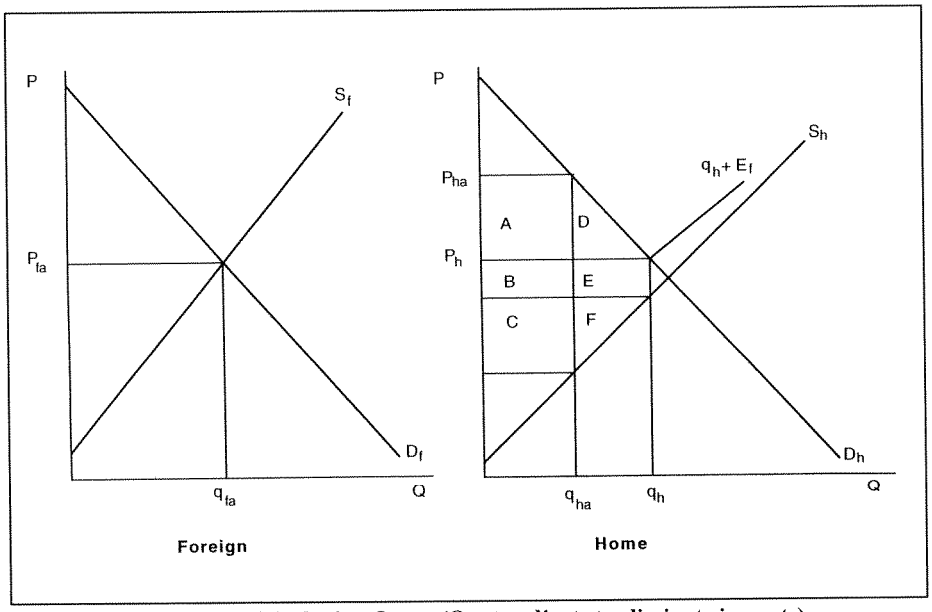

Figure 5. Production or Marketing Quota (Quota adjusts to eliminate imports)

Under the adjusted home country quota policy, the foreign equilibrium with free trade is the same as under autarky because exports remain zero. The foreign country suppliers, who presumably pressured for free trade would see no benefit. The losers with free trade are the holders of quota who would see the value of their quota rents decrease. If the result is obvious prior to the agreement the home country producer lobby would argue vigorously against free trade for their industry. Foreign exporters would be indifferent and consumers in the two countries would be split. Home country consumers will argue for free trade, not because they would benefit from trade, but because a free trade agreement would force domestic policy adjustment. Some argue that this case may approximate what would happen

because they would benefit from trade, but because a free trade agreement would force domestic policy adjustment. Some argue that this case may approximate what would happen if the Canadian dairy market were opened to imports from the United States (Barichello and Romain, 1996; Meilke, Sarker and LeRoy, 1996; and Veeman and St. Louis, 1996. See also Moschini and Meilke, 1987 and Alston and Spriggs, 1996).

The last commodity program considered is a direct payment to producers that is not tied to current production. Since these direct payments do not alter economic incentives on the margin, the equilibrium adjustments when trade is introduced are the same as they would be in the absence of the program. In Figure 6, direct payments are represented by area D. The autarky equilibrium is at price p_{ha} and quantity q_{ha} in the home country, and price p_{fa} and quantity q_{fa} in the foreign country. With free trade, the equilibrium price decreases to p*, production increases in the foreign country, and falls in the home country. The policy has had no effect on equilibrium adjustments to free trade or welfare. Of course, if payments demand production of a particular crop or have other ties to output, then we are back to the cases illustrated in Figures 1 and 2.

The variety of policies that could be examined in this way is long and tedious. We might mention such programs as subsidized crop insurance (which is similar to a production subsidy) and subsidies tied to land set asides. As a final example, we will consider a policy of price discrimination practiced in conjunction with price pooling or blend pricing.

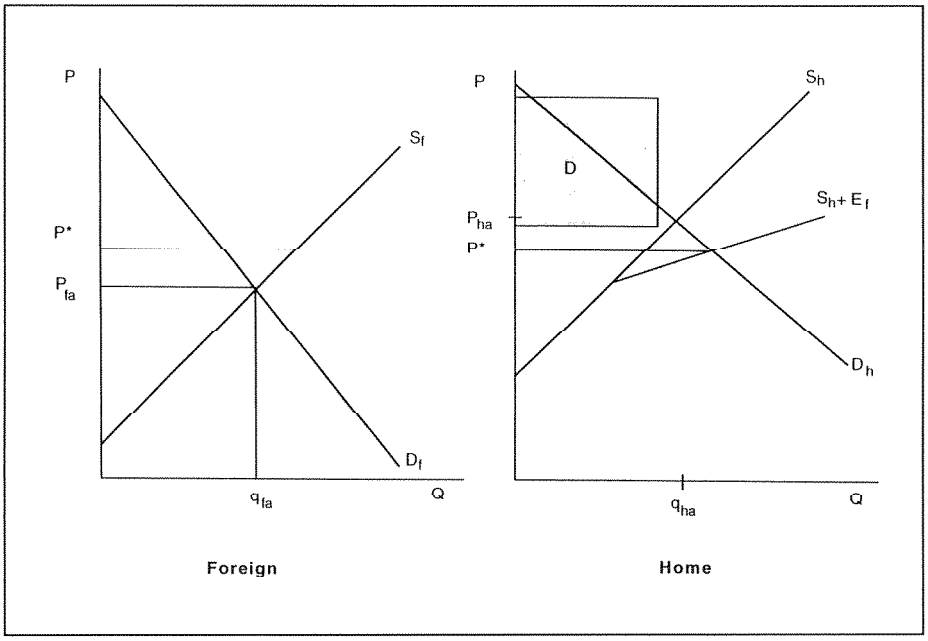

Figure 6. Direct Payment

AN EXAMPLE OF U.S. DAIRY PROGRAM COMPATIBILITY WITH TRADE AMONG U.S. STATES

For the most part, agricultural trade among the states and regions of the United States is open. The major exception is the case of milk for fresh use which is regulated by federal and state marketing orders. The federal marketing orders regulate milk sold within particular geographic boundaries, and limit incentives for arbitrage from milk that is not regulated in that jurisdiction. As a part of the implementation of the FAIR Act of 1996, the boundaries are changing and the number of orders is being reduced dramatically to between 10 and 14 (Cox and Sumner ,1996a; ERS, 1996).

California is the only major dairy production area that does not participate in the federal milk marketing order system. Instead, California maintains its own milk marketing order which predates the federal system. In the FAIR Act, California was invited to join the federal system with the assurance that it could maintain state borders as the federal order region, and that it could maintain its market-share quota program. The incentive for California to join the federal system provides a lesson in farm policy compatibility and harmonization.

Both the federal and California milk marketing orders maintain price discrimination such that milk used for fresh products receives a price differential above milk used for manufactured products. The revenue from all milk sales are placed in order-wide revenue pools and distributed back to producers, irrespective of how the milk from any specific farm was actually used. In the federal system, the rents earned from price discrimination in each order are distributed back to producers equally as a weighted average pool price. The average and marginal per unit price received by producers uses sales of fresh and manufactured products from milk in that order as weights, and the order-specific price of each end-use class of milk. In California the procedure is similar except that the pool revenue is distributed back to individuals based on their ownership of pool quota (Sumner and Wolf, 1996). Currently producers receive $1.70 per hundredweight of quota from the pool before the rest of the revenue is distributed.

Given the regionalization of pricing policy, even under the federal system the price for milk in fresh use differs by region. For example, the price of fluid milk is higher in the Southeast than it is in the Upper Midwest. In addition, utilization by end-use class differs by region. Milk in the Upper Midwest is used mostly for manufactured products whereas milk in the Southeast is used mainly for fresh products. Under federal law and regulation this system is maintained and arbitrage is restricted, though not without considerable regional strife within the industry (Cox and Sumner, 1996a; Cox and Sumner, 1996b).

The restrictions on arbitrage under the federal milk marketing orders have been protected under U.S. law even though restriction of trade among states is generally prohibited by the Interstate Commerce Clause of the U.S. Constitution. So whereas arbitrage between Wisconsin and Florida is restricted by law, California is not allowed to restrict arbitrage associated with its price policy. In the past, two factors reduced the pressure on California's milk marketing order. First, being geographically isolated from other major milk producing

regions has meant transport costs were relatively high. Second, California has maintained lower milk prices than neighbor states. In general, each class price and the blend price in California has been below that available in other markets.

It turns out however, this is not enough to remove the incentive for arbitrage. Under the federal order, a producer in Arizona would receive the blend price in the local federal order. That blend price is likely to be above the blend price in California, but below the California class 1 price paid by bottlers of fresh milk. If the difference between the California class 1 price and the Arizona blend price is higher than the transport cost, there is an incentive for arbitrage. Notice that this is a purely policy created arbitrage. Cost of production may be lower in California. Yet as long as the class 1 price in California is above the average price in Arizona, there are incentives for class 1 milk to flow from Arizona into California.

The result of this arbitrage in California is a substantial decline in producer revenues with little benefit for consumers. The milk from out of state flows only into the high price uses so the "imported" milk reduces the share of fresh uses in the weighted average price received by California producers. It is unlikely that the arbitrage could be restricted without California joining the federal milk marketing order system, which is cumbersome and less efficient than the California program.

Consider the effect of creating a California federal milk marketing order. First, milk from Arizona that was shipped to California would now be priced under the California order. These producers, who as yet have no California pool quota, would receive the lowest of the California blend prices, which is below the blend price they would receive in Arizona. With policy harmonization, the result would be that no trade would flow, and the California producers would have a more cumbersome and less efficient program. This case is similar to the U.S.-Canada dairy example discussed in the second section. This case also shows how policy harmonization, or at least having a common jurisdiction, can reduce trade and reduce policy efficiency.

THE DESIGN OF FREE TRADE AGREEMENTS: BORDER MEASURES VERSUS INTERNAL MEASURES

Previous sections have shown that domestic commodity programs have important trade effects that may make them incompatible with free trade agreements. One approach to dealing with such programs is to include internal support disciplines directly into the trade agreement. Internal commodity programs may be made compatible with a free trade agreement by simply including disciplines on such programs directly into the agreement. This was the approach taken in the Uruguay Round agreement, whereas NAFTA does not attempt to discipline internal subsidies directly.

There seems to be broad acceptance of including internal subsidy programs in trade agreements. Failure to include internal supports has been seen as a reason agricultural trade

reform was so limited in previous GATT rounds; NAFTA is also seen as lacking for this reason. We argue that such a position is mistaken. Such provisions are (1) unnecessary; (2) unworkable; and (3) positively counter productive (Sumner, 1996).

Based on our discussion above there are two major reasons to focus trade agreements on border measures, as opposed to internal agricultural support measures. First, as we have seen in the second section, reducing trade barriers and export subsidies makes trade distorting internal subsidy programs much harder to sustain. This means that the benefits of dealing directly with internal subsidies and barriers in the trade agreement may add little. When faced with open borders the policies disciplined would have relatively little scope for effect, or would be prohibitively expensive. The benefits of internal support provisions of trade agreements are likely to stimulate little reform for a second reason. As a matter of practical fact, such provisions are unlikely to be workable. This means that a series of complex provisions may be agreed to but little real policy will be affected. In this case, something is not better than nothing. Third, basic GATT articles and other trade law already include provisions that can be used to limit production subsidies; including provisions on internal supports in a trade agreement risks a reduction in furthering the effectiveness of those provisions

We developed the first point in some detail in the previous sections. Border barriers and export subsides are sometimes required in order to make internal programs feasible. If the border measures are themselves removed or reduced, the trade effects of the internal subsidies are themselves limited. Further, many trade distorting internal subsidies have been reformed in recent years, either through pressures from trade agreements (as in Mexico) or as a part of a larger reform process with little or no attention to trade agreements (as in the United States).

One way to examine the workability of disciplines on internal supports is to consider the evolution and implementation of the internal support provisions in the Uruguay Round Agreement. The Uruguay Round Agreement for agriculture devotes more space to internal support than to either of the border measures. The result of this effort is a text that imposes no serious commitments on any of the largest agricultural traders, and a text that has had zero effect on agricultural trade. The reasons for this result are not accidental. First, domestic subsidy programs occur with such variety and have such complex effects (many of which have very little to do with trade) that it is literally impossible to create effective, enforceable policy commitments in the context of a multilateral agreement. There are just too many individual policies to discipline each policy individually, and the idea of using an index of trade effects of policies has proven illusive. For example, there is no policy index that measures trade impact exclusive of changing market conditions which are beyond the control of the country making a commitment. Second, aggregation of policies into an index tends to ignore their differential trade impacts, and may encourage more trade distorting policies in preference to less distorting policies. For example, the definition of programs classified U.S. crop disaster assistance into a green category, when it has encouraged planting on marginal land and thus increased U.S. production and exports. Alternatively, the deficiency payment program, which probably reduced production and export of grains, was not considered green under URA provisions. Third, with such complexity it is easy to build

deliberate loopholes into the text so that internal programs in major negotiating nations remain undisciplined in fact.

Of course even politicians and trade lawyers recognize that domestic commodity programs can reduce imports or increase exports. In trade agreements, a country's interests are expressed, almost exclusively, in terms of the value of net exports rather than as national income, or producer and consumer surplus, so any policy that tends to increase net exports (that is, any policy that either expands exports or constrains imports) is a candidate for trade sanctions. For many years this economic logic was formally incorporated in international trade law in several ways without specific text disciplining domestic programs directly. The GATT and national trade policies both have provisions to discipline production subsidies of other countries that were considered detrimental to industry interests. GATT articles VI (on antidumping and countervailing duties), XVI (on subsidies) and XXIII (on nullification and impairment) all deal with attempting to limit the use of policy measures that have a detrimental impact on the trade interests of other countries, even when there has not been an explicit GATT agreement on the particular policy measure.

Given these other provisions, international negotiations and agreements on internal support are not irrelevant; we argue that they are positively harmful to progress in agricultural liberalization. By including text on internal supports in a multilateral agreement, the ability to use WTO provisions related to nullification and impairment is weakened. Including explicit internal support commitments in a trade agreement may make it more difficult to use the other legal remedies. Countries with distorting internal subsidies may now argue that they are complying with an explicit agreement when they maintain subsidies that impair border measure concessions. Further, by diverting attention away from border measures, including internal support in the negotiating process reduces the amount of progress made on the policies that block imports or subsidize exports directly.

SUMMARY

This paper has explored a variety of ways that domestic commodity programs may be incompatible with a free trade agreement. We show in general that if a policy creates an incentive for arbitrage, the policy may be unsustainable after trade reform. We also show that if the policy blocks the economic forces of free trade it may be vulnerable to countervail or to nullification and impairment cases. In some cases, a free trade agreement may even be incompatible with a program because no trade flows after the agreement. Finally, we argue that, given the economic and legal forces that make many trade distorting programs incompatible with elimination of border barriers and export subsidies, there is little reason to include disciplines on internal commodity programs in trade agreements. In fact, we argue that the attempt to include such disciplines weakens free trade agreements.

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AGRICULTURAL POLICY REFORMS AND HARMONIZATION/ CONVERGENCE/COMPATIBILITY: THE CASE OF MEXICO

Antonio Yunez-Naude

This paper is divided into three parts. The first summarizes the main conclusions of Sumner and Hallstrom's paper "Commodity Policy Compatibility with Free Trade Agreement" and makes some suggestions for further research. The second part presents some thoughts concerning Mexico's domestic agricultural policies in relation to the authors' analysis on the theme of the Workshop. The discussion finishes by presenting the reasons why the exclusion of domestic agricultural commitments in NAFTA was sensible for Mexico.

CONTRIBUTIONS OF SUMNER AND HALLSTROM'S STUDY

The paper addresses directly two of the objectives of this workshop, that is the authors discuss the compatibility and harmonization of policies among NAFTA countries.

In relation to the issue of compatibility the authors argue that, by itself, a free trade agreement (FTA) based on liberalization of border measures will be capable of solving the existence of incompatibilities between internal policy programs and free trade; they conclude that the changes in border measures that countries in a FTA commit to follow will put pressures (economic and/or legal) on internal programs. So they favour the strategy adopted in the NAFTA and criticize trade negotiations that include binding commitments on domestic policies (the latter being the approach followed in the Uruguay Round for Agriculture).

As for the case of harmonization, they mention that this purpose is far beyond a FTA. They also argue that harmonization can reduce both trade and policy efficiency. Their view is based on the experience of the U.S. dairy program, which shows that policies that vary geographically are compatible with open borders.

Further on the question of compatibility, Sumner and Hallstrom criticize the inclusion of internal policy commitments in trade negotiations on two main grounds: analytically and on the zero effect on agricultural trade of the agreements reached in the Uruguay Round.

I have a comment with respect to the analytical component of their argument that shows the effects of free trade on the domestic economics of common commodity programs. The framework is simple, stylized and illustrated by diagrams. It assumes two countries (only one of which, "the home country", has an internal commodity program), and standard supply and demand curves. In addition, the introduction of the effects of internal intervention before trade is quite stylized. I think that these features provide a very clear discussion of FTA and compatibility for specific countries and for other ones different from Canada, Mexico and the United States. However, its simplifying assumptions may limit the robustness of their conclusions. That is, it could be possible that if we introduce into the analysis a third country, the rest of the world, trading partners with domestic distorting policies, and market power, the conclusion about the pressures that border liberalization will put on internal policies may not hold any more.

Finally, it would have been useful if the authors had presented more on domestic policies and dairy trade in NAFTA. As well as being relevant for the discussions in this Workshop, it is not clear in the text whether or not they favour changes in Canadian and U.S. dairy policies. It would also be very interesting to include Mexico into the picture since it is a major importer of dairy products.

POLICY COMPATIBILITY AND NAFTA: THE CASE OF MEXICO

I found the analytical framework and conclusions of Sumner and Hallstrom's paper to be quite enlightening for thinking about Mexico's recent economic reforms, its commitments in NAFTA and the strategies that it can pursue. This is particularly so for their discussion of compatibility (section 2 of the paper). In contrast to the earlier comments on the possible limits of the analysis, their two country scheme is an appropriate approximation for Mexico because the weight of the United States in its agricultural trade is overwhelming.

Sumner and Hallstrom do this themselves by suggesting that their third and sixth cases apply, respectively, to the former Mexican policy of producers' support prices for basic grains and consumption subsidies, and to PROCAMPO, the current policy of direct income transfers to the farmers that produce these crops. PROCAMPO is the policy that the Salinas and Zedillo's Administrations have adopted as a way to go from intervention to the liberalization of the domestic agricultural basic grains' sector. Two of the reasons explaining this policy of transition was NAFTA negotiations and the burden on Mexico's public budget of the guaranteed prices and consumption subsidy's programs. The latter reason is consistent with the results of the analysis of Sumner and Hallstrom.

There are two other cases of the authors' analytical proposal that are relevant for Mexico. Case one can be used to frame one of the arguments of those, in the Mexican public opinion circles, that were against including maize in NAFTA. Their position is that with the elimination of domestic guaranteed price of maize, together with the maintenance of U.S. agricultural subsidies, will create a huge (and artificial) increase in Mexico's imports of the

grain. Of course, in this aspect of the argument, those opposed to including maize in NAFTA ignore Mexico's maize producers competitive stand vis a vis the United States, even without subsidies. In addition, they included in their argument the question of food self-sufficiency.

In the case of Mexico's domestic agricultural policies, it is important to say that in addition to PROCAMPO, the Administration of President Zedillo has included PRODUCE, a governmental scheme to subsidize agricultural producers.[1] We can frame this program in case two of Sumner and Hallstrom's paper.

In principle, and as stated in the sixth case of the paper, PROCAMPO posses no limit to trade flows. On the other hand, PRODUCE could be taken as an implicit trade barrier that might be subject to trade disputes (this is specially so for those commodities competing with U.S. production such as horticultural goods). However, and at the same time, the lack of explicit commitments in NAFTA about domestic programs has allowed the current government of Mexico to include PRODUCE in their agricultural policies. This possibility could be added to the arguments of Sumner and Hallstrom in favour of concentrating a FTA on border measures since it gives more room of action to national governments to pursue their rural development objectives.

We have shown that programs such as PRODUCE are required in Mexico, because they have better results with respect to other "neutral" income transfers as PROCAMPO in rising productivity and income in rural areas (Taylor, J.E., A. Yunez-Naude and S. Hampton, forthcoming). PROCAMPO can lower the exports to Mexico of its NAFTA partners, but programs as PRODUCE definitely reduces more than PROCAMPO the pressures to international migration. To point this out is relevant to this Workshop since it could help to improve understanding among advisors and policy makers of Mexico's North American trade partners.

On Sumner and Hallstrom's doubts about pursuing the harmonization of agricultural policies between NAFTA members, I add the following. At least for the time being, it will be unwise for Mexico to follow this objective. As argued in the final part of my discussion, this is so because the enormous heterogeneity of its countryside and the lack of a clear understanding of the effects of economic reforms on the components of rural Mexico require time and flexibility in the design of its agricultural policies.

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[1] PRODUCE forms an important part of the "Alianza para el Campo", the governmental agricultural program for 1995-2000. It has three components: 1) the "capitalization" program that gives subsidies to those producers buying machinery and equipment for irrigation and fertilization, as well as for those establishing grass areas for livestock; 2) the "productive conversion" program, that helps those farmers that change their activities from annual crops to plantations; and 3) the program for the protection of natural resources, which supports those projects that promote a more rational use of land and water.

REFLECTIONS ABOUT MEXICO

Mexico was one of the first Latin American countries to follow a radical change in its development strategy: from deep government intervention to economic liberalization. In fact, beginning with the debt crisis of 1982, the Mexican governments have radically reoriented its development policy from import substitution to outward orientation.

In the agricultural area this has meant — among other policy changes: the abolition of import controls of "basic staples"; the elimination of producers' price supports; the reduction or elimination of State owned enterprises activities in buying, importing, storing, processing and selling "basic crops" (corn, beans, rice, wheat, oilseeds and barley); the reduction of government subsidies in rural credit and insurance; and the privatization of the irrigation system and of property rights in land (the details are present in Yunez-Naude, A., 1995). These changes were done before NAFTA and are in line with the process of compatibility discussed previously.

The last two Administrations and the current one expect that, with economic liberalization, macroeconomic stability is going to be achieved and, together with NAFTA and the increase in foreign investment promoted by this trade agreement, a new vigorous stage of economic development will arise.

With respect to the agricultural sector, the reduction of State intervention is expected to lead to the efficient use of the resources of rural Mexico; the market forces will reallocate them to those activities in which the country has comparative advantage. The governments have not been too worried about the consequences of this change on food self-sufficiency and on rural emigration. PROCAMPO and PRODUCE do not have these purposes, although they may reduce the pressures for rural emigration.

Most of the studies, discussions and official expectations on the effects of the reforms and NAFTA on the agricultural sector are too aggregated and ignore the enormous heterogeneity prevailing in Mexico's countryside. They also ignore the fact that most of maize and bean production — the basic foods in Mexicans' diet — is done not by modern agriculture, but by family units of production and consumption, whose members are also engaged in activities other than the production of staples (internal and international migration, earning wages in regional labour markets, and income in commerce and livestock production, etc.).[2]

The consideration of rural heterogeneity as a fundamental feature of the agrarian structure of Mexico has led us to conclude that the effects and size of structural change in agriculture depend on the type of producers considered and on the linkages they have with the product and labour markets. On the contrary, most of the studies and official views on this respect assume the existence of complete markets in rural Mexico, and, furthermore, that

[2] Such heterogeneity is present both at the microeconomic and regional levels. Modern farms (located mainly in the North and West Coast of Mexico) coexist with traditional and intermediate farms (most of them in the East, Center and South West of the country).

these markets are not segmented and/or that economic agents face no transaction costs. So, their results and policy recommendations can only be applicable to modern agriculture and, at the most, to a portion of intermediate farmers. Consequently, the estimated or expected effects (both, positive and negative) of policy reforms on agriculture have been overestimated.[3] At the same time, the assumption that all relevant markets are present and well functioning has limited the study of the effects of liberalization on traditional agriculture, and, more importantly, has meant the lack of serious consideration of them in policy design.[4]

There is evidence that liberalization and the current economic crisis of Mexico have led to a "process of regression" of peasant households whose income depends heavily on the domestic labour markets. The recent developments of the Mexican economy have also increased emigration to the United States and the pressure on farmers' natural resources.[5] To this the growth of rural political unrest must be added.

To avoid these consequences, program addressing directly the peasantry are required (for example, investments in technical education, infrastructure, etc.). This, together with the positive effects that PRODUCE will bring about, leads me to conclude that — in addition to Sumner and Hallstrom arguments — it was appropriate not to include internal agricultural policy liberalization commitments in NAFTA.

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[3] This is shown in Taylor and Yunez (December 1996) when comparing their results on this respect using a village computable general equilibrium model (CGE) with those obtained by Nationwide CGEs. De Janvry, *et al.* (December 1995) also find this type of discrepancy using a different modeling approach and data.

[4] The exception is SOLIDARIDAD. However, the aim of this program — designed and put into practice since the first years of Salinas de Gortari's government — is to combat poverty in rural and urban areas and not to promote productivity.

[5] In their study of the changes of Mexican ejidal sector before and after the Ejidal Reform, de Janvry *et al.* (August, 1995) conclude that the subsistence producers have experienced a process of "technological regression", that is the recurrence by them of more traditional and less productive technology. Field work conducted in current research in the Sierra of the State of Puebla shows that construction workers, being incapable of finding a job in the cities of the region, have to return to the villages of their origin, increasing the burden on natural resources of their family's lands.

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— DISCUSSION —
COMMODITY POLICY COMPATIBILITY WITH FREE TRADE AGREEMENTS

Tom Richardson

One of the key points in Dan Sumner's paper is that there is limited negotiating capital in any trade round, so the question is where should resources be focussed? Sumner's analysis, for the most part, leads to the conclusion that a lot of internal programs, one way or another, will be modified or will self-destruct, and will be redesigned into something that is more benign. That is an important conclusion. But if that's going to happen, one might ask why focus on it?

The paper seems to be saying that nullification and impairment should be able to take care of things. In fact, if some of the kinds of disciplines that exist in the World Trade Organization (WTO) text were there, maybe it would be better if they weren't because maybe the nullification would work better when it was needed. Your conclusion in relation to this framework was to go after the border and go after exports. I agree with that general conclusion, particularly in relation to limited negotiating capital.

Like Antonio Yunez-Naude, I want to address a specific situation that applies in Canada. My first question is on the nullification and impairment issue. I don't personally know a lot about GATT history on the use of that paragraph and how powerful it might be. It may be worthwhile to see how that section would work with some of the existing, domestic disciplines that are in the WTO like Annex II, paragraph 6, paragraph 7, paragraph 8, in combination with nullification. Is that a better combination than having nothing?

Or, what if you got rid of Annex II and you didn't worry about the colour of money and what everybody did. Would that work better? Perhaps one should analyse the options because there are paragraphs that allow certain things, some that are more benign than others, some of that may cause problems. Paragraph 7 in certain situations might be quite powerful, but you might argue should not be there. Perhaps that should be investigated in terms of whether or not that would work with or without some kind of disciplines on domestic support.

In terms of the Canadian experience, two examples come to mind, including one that was mentioned in discussion earlier in the workshop-- adjustment of the Crow subsidy. The

other program that was eliminated in Canada at the same time was actually a very small program of "feed freight" assistance. This latter program was a subsidy to livestock producers in feed deficit areas in Canada. When the federal government decided to eliminate that program for budgetary reasons, they agreed to compensate producers but the question was, what kind of compensation is appropriate?

The dairy and poultry producers that benefited from that program didn't really care about the form of compensation because, since they did not export, it didn't affect them. The hog producers and cattle producers cared a lot! They pushed very hard for a compensation package that was basically green and which was similar to the Crow payout. So with both of these subsidies, we ended up with a compensation package that basically meets the intent of paragraph 6. In the hog industry, one-third of the exports go to the United States and there has been an ongoing countervail action going on with the United States for a long period of time. Any payment that our hog industry receives will likely be examined in terms of the protection or advantage it provides Canadian hog producers. That is Sumner's point. If the compensation that hog producers receive gets reflected back into some kind of distortion in production, then does the U.S. hog industry have a chance to get at Canadian exports, or not? This is an obvious area for some empirical work to be done. From a political perspective, my sense is that giving some flexibility or some room for payments to be made for domestic adjustments where you know that those payments will not or cannot be countervailed, is a really important political issue in a country like Canada.

It's tough enough for the politicians to cut subsidies, but to also tell farmers that there will be no compensation because compensation may be countervailed if you're in an export position is a very difficult position for politicians.

There is value to having some room to manoeuvre in terms of domestic programming, and a balance must be struck between domestic and trade responsibilities. The experience that Canada has had so far is that the paragraphs in Annex II do give enough room to manoeuvre. From a U.S. perspective perhaps there is a perception of too much room to manoeuvre.

There is some interesting work that could be done here to try to take the Sumner thesis to the next step, to try to look at these disciplines and determine practically whether protection can be accommodated along with a reasonable adjustment process.

TECHNICAL REGULATIONS AND FOOD SAFETY IN NAFTA

Maury E. Bredahl and Erin Holleran

INTRODUCTION

The range and diversity of technical regulations and voluntary standards that influence the level and direction of trade flows is large indeed. This paper discusses the role of technical regulations in the international food sector with a focus on sanitary and phytosanitary (SPS) measures and technical regulations in NAFTA. It defines and describes technical regulations and voluntary standards. This is accomplished by defining the terms and specifying the targets of the regulations. The second task presents the NAFTA SPS measures and then discusses some of the disputes that have arisen from them. The generic discussion of technical barriers leads to a full-fledged discussion of a technical barrier which reached the level of a lengthy trade dispute between the United States and Mexico. The trade dispute arose from a 1914 U.S. quarantine of Mexican avocados. The paper ends with an examination of food safety strategies countries can adopt to address food safety issues.

TECHNICAL REGULATIONS AND VOLUNTARY STANDARDS

Technical regulations are national or international government-enforced legal requirements imposed for health, safety, or environmental reasons. Voluntary standards, on the other hand, are nationally or internationally-accepted procedures and guidelines adopted in order to maintain consistent quality. ISO 9000 is probably the most recognized voluntary standard in the world. It is important to emphasize that a voluntary standard, like ISO 9000, is not a substitute for either product safety or other regulatory requirements. Instead, a voluntary standard like ISO 9000 specifies the elements necessary for quality systems to consistently meet specifications. When implemented nationally, technical regulations and voluntary standards can serve as barriers to trade. Kinsey (Ndayisenga and Kinsey, 1994) noted that approximately one-third of the non-tariff barriers used for all countries for agricultural products were technical regulations and standards.

The dimensions of the potential impact of technical requirements of trade in food and agricultural products is illustrated by delineating the attributes of food affected and by discussing the regulatory regimes that may be used to govern those attributes. Table 1 groups the several product attributes governed by technical regulations and voluntary standards into four major categories: 1) food safety, 2) nutrition, 3) value, and 4) packaging. Hooker and Caswell (1995) identify food safety attributes, such as food borne pathogens, as the most important food attribute.

The importance of each food attribute as an impediment to trade, of course, varies. Food borne pathogens, which can affect human, animal or plant life, are at the center of many technical regulations and are at the center of many trade disputes. Foot-and-mouth disease and rabies are examples of food borne pathogens that affect animal health. Residues of veterinary treatments in meat and meat products and of pesticides on plant products are important concerns for many countries and are also the target of many technical regulations. *E. Coli and listeria monocytogenes* are examples of food borne pathogens that can dramatically affect human life. In December 1992, for example, an outbreak of food-related illness affected 500 people after eating *E. Coli*-contaminated hamburger from a Washington fast-food restaurant. A recent 1996 *E.Coli* outbreak in Japan resulted in widespread illness and in several deaths. In this paper, we concentrate on food's food safety attributes with a particular focus on measures adopted in trade agreements to address them.

Other technical regulations are not as well known, but nonetheless have important trade impacts. Labeling regulations, such as Canada's requirement of bilingual labels, can have important trade impacts by increasing production and transaction costs.

The food attribute targets in Table 1 can be met by a number of regulatory regimes. For example, preventing the introduction of foot-and-mouth disease, a food borne pathogen, could be accomplished by specifying production and processing standards (eradication versus vaccination), by performance standards, or by conditions of sales and service requirements. Pesticide residues could be controlled by establishing input standards, by specifying certain acceptable production practices, or by testing for product characteristics. But, the test procedure itself could be a point of contention between countries.

Table 1. Food Attributes Governed by Technical Regulations and Voluntary Standards

Food Safety	Nutrition	Value (Sensory)	Packaging
Food borne Pathogens	Calories	Purity	Packaging Material
Heavy Metals	Fat & Cholesterol	Compositional Integrity	Labeling
Pesticide Residues	Sodium	Size	
Food Additives	Carbohydrates & Fiber	Appearance	
Toxins	Protein	Taste	
Veterinary Residues	Vitamins & Minerals	Convenience of Preparation	

Source: Hooker and Caswell, Roberts and Siddiqui

Table 2 summarizes the several regulatory regimes that can be used interchangeably to govern food attributes. An additional complication is that voluntary quality assurance or control schemes can be adopted to meet the same targets as regulatory regimes and they could also serve as technical barriers. However, some of the schemes are outside the purview of the World Trade Organization (WTO) and of bilateral negotiations. The WTO is important in trade disputes because it is the final arbiter in deciding whether a set of requirements is justified by scientific evidence or are non-tariff barriers (Flickinger, 1995).

Table 2. Matrix of Regulatory Targets and Regimes

	Regulatory Regimes					
Regulatory Targets	Input Standards	Process Standards	Performance Standards	Information Requirements	Conditions of Sale or Service	Conditions of Use
Food Safety						
Nutrition						
Value (Sensory)						
Packaging						

Source: Hooker and Caswell, p.6

The selection of regulatory targets is conditioned on the cultural, political and social fabric of a nation. For example, unpasteurized cheeses can not be produced in the United States, but they are widely produced and consumed in France and other European countries. The choice of regulatory regimes is, likewise, influenced by national conditions. Britain and the United States still maintain negative lists of food additives that can not be used; all others are considered to be safe (GRAS-generally regarded as safe) and so can be used without restriction. South Korea and France maintain positive lists; if an additive is not on that list, it cannot be used. Domestic food processors have an advantage in the countries that maintain positive lists, because they have immediate access to regulatory authorities and they have a vested interest in clearing the additives they use. Another important cultural difference can be the very basis for the legal system: case-based Anglo-Saxon law versus Napoleonic law.

TECHNICAL REGULATIONS IN THE WTO AND NAFTA

WTO Technical Barriers to Trade (TBT Agreement)

The WTO Agreement on Technical Barriers to Trade (TBT Agreement) states that when members develop and institute voluntary and mandatory product standards and when they set procedures to determine if a product meets the standards, they must not discriminate against imported products and from creating unnecessary obstacles to international trade.

The TBT Agreement affects all technical regulations which are not included in the Sanitary and Phytosanitary (SPS) Agreement such as quality, labeling, packaging and product content. The Agreement encourages members 1) to accept other members' standards as equivalent and 2) to use international standards and work toward harmonization of standards and procedures.

The TBT Agreement contains two mechanisms to facilitate implementation: technical assistance and notification of proposed standards. The TBT Agreement states that all members must notify the TBT Committee of all proposed standards that allow members to submit comments or discuss the proposals in the Committee. Regional and bilateral trade agreements such as NAFTA also contain language about technical barriers to trade such as sanitary and phytosanitary barriers. The NAFTA and WTO Agreements together govern the trade relationship between the United States, Canada and Mexico. The important difference between NAFTA and WTO, as Hooker and Caswell note, is that the WTO has "institutional arrangements for binding arbitration of differences between countries on safety regulation" (Hooker and Caswell 1995, p.13).

Sanitary and Phytosanitary Restrictions

Sanitary (human and animal health) and phytosanitary (plant health) measures are laws, regulations and procedures instituted to protect animal, plant and human health. Sanitary and phytosanitary measures can restrict trade when used for protectionist purposes. SPS restrictions that affect trade recognize the sovereign right of each country to set its own food safety, and animal and plant health standards. These restrictions were permitted in Article XX:b of the GATT (upon which NAFTA is modeled) so that countries could take measures "necessary to protect human, animal or plant life or health", as long as they do not discriminate between countries, nor serve as a disguised barrier to free trade. (GATT Secretariat, p.4) The SPS Agreement of the GATT was designed to "avoid the inherent uncertainties in determining whether import regulations are the equivalent of domestic regulations... (The) Agreement establishes rules as to how import measures are adopted to assure transparency of the rules and to govern the way these rules are applied" (Abbott, 1995, p.18).

NAFTA includes text on sanitary and phytosanitary measures, modeled after the Uruguay Round Agreement on sanitary and phytosanitary measures. Article 756 of NAFTA recommends that the three countries "pursue equivalence of their respective sanitary and phytosanitary standards". This article was drafted to assist in avoiding trade disputes among the three regarding the preparation and processing of food products that are traded. The idea is that the countries pledge to harmonize food production processes to "the extent feasible" and that measures do not become disguised trade restrictions.

SPS Principals and Elements

The NAFTA SPS measures consist of six principals:

1. May adopt any sanitary and phytosanitary measures necessary to protect human, animal, and plant life and health;
2. May establish appropriate levels of protection;
3. Must adopt science-based measures;
4. Must not discriminate between foreign and domestic goods;
5. May apply measures only to the extent necessary to achieve its appropriate level of protection;
6. May not adopt sanitary and phytosanitary measures which create disguised restriction on trade (Roberts and Orden, 1995).

To avoid barriers to trade, the NAFTA agreement encourages countries to use relevant international standards, if existent, when developing their SPS measures. However, each country is permitted to adopt a standard more stringent than international standards to achieve an appropriate level of desired protection of human, animal or plant health if the standard is based upon scientific principles (Looney, 1995, p.369).

The NAFTA signatories have agreed to work toward "equivalent" SPS measures without reducing national levels of desired, appropriate protection. Equivalency recognizes that different methods may be used to reach the same level of protection. Each country agreed to accept the others' SPS measures as equivalent, provided the exporter shows that its SPS measures meet the importer's desired level of protection.

NAFTA allows countries to determine their own level of appropriate protection. That said, the level of protection should be based on risk assessment techniques developed by NAFTA or international entities. NAFTA also establishes guidelines on risk assessment which include, for example, the evaluation of the likelihood of entry or spread of pests and diseases.

NAFTA also allows for the adaptation of SPS measures to regional conditions and "to consider the prevalence of specific diseases or pests, the existence of eradication and control programs and any relevant international standards, guidelines or recommendations in adapting SPS measure to them" (Looney, p.373). Looney adds that NAFTA asks countries to consider geography, ecosystems, epidemiological surveillance and effectiveness of sanitary and phytosanitary controls in the determination of pest-free and disease-free areas. NAFTA requires the exporting country to provide scientific evidence sufficient to meet the importing country's satisfaction.

NAFTA calls for countries to notify and publish proposed SPS regulations at least 60 days prior to implementation. The notification should identify the goods covered in the regulation and the reason for the SPS measure.

There is a NAFTA committee on sanitary and phytosanitary measures which was created to facilitate the enhancement of food safety and sanitary conditions and to promote the equivalence of SPS measures within the NAFTA countries. Under NAFTA, a country may challenge that an SPS measure is inconsistent with the Agreement; the burden of proof

lies with the party making the challenge (Looney, 1995). The NAFTA SPS Committee provides countries with a forum to maintain dialogue or challenge inconsistencies.

That the use of technical requirements as trade barriers will increase seems a reasonable conclusion given various trade agreements' (e.g. GATT and NAFTA) removals of tariffs and other overt trade barriers. Mechanisms, however, have been put into place to effectively challenge those barriers (e.g. import regulations) in order to either get them removed or to compensate the injured party. For example, the use of growth promoters in beef production has been found safe for human health; there is no scientific basis for prohibiting their use. However, the (GATT's) SPS Agreement will not force the European Union (EU) to rescind the ban on the imports of hormone-treated beef, but the EU will be forced to compensate the losses realized by its trading partners.

In total, there are more than 30 NAFTA Committees and Working Groups in areas such as technical standards, rules of origin, and government procurement. These committees and working groups provide members with the opportunity to negotiate measures in trade disagreements.

U.S. SPS Regulatory Agencies All food products, except most meat and poultry products, are regulated by the U.S. Food and Drug Administration (FDA). Imported food products are subject to FDA examination upon arrival in the United States. The FDA determines if imported food products meet the same standards as domestic food products and determines if the food products are pure, wholesome, safe to eat and produced under sanitary conditions. The Food and Safety Inspection Service (FSIS) regulates meat and poultry products and has its own separate regulatory mechanisms for ensuring that meat and poultry imported into the United States meet domestic standards for safety, wholesomeness and labeling.

Safety of food refers to the risk to human health. The risks stem from chemical and microbial contamination and natural toxins. There are also secondary risks which stem from mislabelling of allergens, additives and preservatives. All of these risks are present during the production, processing and distribution of food extending to on-site consumption in homes, restaurants and institutions.

The U.S. Department of Agriculture (USDA) protects domestic agriculture from the introduction and establishment of foreign plant pests. USDA/Animal and Plant Health Inspection Service (APHIS) inspects imported agricultural products guarding the United States against the entry of foreign agricultural pests and diseases at airports, seaports and borders.

EXAMPLES OF AGRICULTURAL BARRIERS

That food safety regulations will be a key element in international trade in food production is not speculation (Hooker and Caswell, p.6). With the increase in trade agreements, the relative importance of non-tariff barriers has increased (Kinsey).

Agricultural barriers to trade between the NAFTA countries are no exception; barriers remain. Kinsey points out that the implications of non-tariff barriers are decreased transparency in protective instruments and increased trade transaction costs (Kinsey, 1994, p.276).

Some of the agricultural barriers described below are either currently under negotiation or have been recently resolved. The next section presents an example of a trade barrier which has reached the level of being a high profile trade dispute.

Canadian Barriers for U.S. Agricultural Products

- Canada restricts the direct export of Pacific salmon and herring by requiring that a portion of the Canadian catch be landed in Canada before being exported. Following a settlement, Canada permits the direct export of a portion of the catch by Canadian licensees.
- Canadian restrictions on international and interprovincial trade of bulk produce pose obstacles for U.S. potato exporters. Additionally, Canadian regulations on fresh fruit and vegetable imports prohibit consignment sales of fruit and vegetables without a prearranged buyer.
- There are Canadian market access barriers for U.S. wine and spirit exporters including cost of service markups, listings, reference prices and discriminatory distribution and warehousing policies.

Mexican Barriers for U.S. Agricultural Products

- Mexican phytosanitary product-specific standards have created export barriers for certain U.S. agricultural products such as grains, citrus, Christmas trees, cherries and cling peaches.
- Since 1994, Mexico has often used "emergency" powers to establish phytosanitary standards which have disrupted trade. "Emergency" rules do not follow the normal rule-making notification process.
- NAFTA required Mexico to comply with the International Convention for the Protection of New Varieties of Plants (UPOV). Although Mexico is a UPOV member and has accepted approximately 2000 plant patent applications from U.S. plant breeders, it has never acted on these applications and it has yet to adopt a plant protection system.

There are also instances in which some barriers have risen to the level of being aggressively disputed through the channels. The U.S.-Mexico trade dispute over a U.S. quarantine on Mexican avocados illustrates this point well.

THE U.S.-MEXICO AVOCADO DISPUTE

Background

A recent longstanding, high profile dispute between the United States and Mexico over U.S. phytosanitary regulations was resolved this February after eighty-one years. In 1914, U.S. officials first established a quarantine prohibiting the importation of Mexican avocados when they identified avocado seed weevils in Mexican avocados. Fearing pest infection, U.S. officials implemented the quarantine which has remained on the books ever since. In the 1970s, Mexico twice petitioned for approval to export avocados to the United States. USDA/APHIS rejected the Mexican requests citing 1) the apparent ease with which seed weevils were recovered in the Mexican state of Michoacan and 2) that seed weevils and Mexican fruit flies were frequently intercepted in fruit contraband at the border.

In the 1980s, Mexico expanded its avocado groves and improved its production processes. Again in the 1990s, Mexico issued several requests for approval to export the avocados to the United States. One of the requests led APHIS in July 1993 to allow Hass avocados grown in Michoacan to be imported into Alaska under certain conditions. Mexico is the world's largest producer of avocados and Michoacan produces over two-thirds of Mexico's total avocado production. Growers and packers in Michoacan adopted sophisticated grove management techniques, packing practices and shipping practices in order to export their avocados. (Roberts and Orden, 1995).

Inspired by NAFTA negotiations in 1994, Mexico requested extended entry for Hass avocados to be imported into the northeastern states. APHIS acted on the request, drew up a proposal to allow fresh Hass avocados from Michoacan to enter certain areas of the United States, and then solicited comments as the process requires. Finally, on February 5, 1997, APHIS published its final science-based rule allowing Mexican Hass avocados to enter certain U.S. states under a systems approach.

Issues

U.S. Avocado Growers On one side, the U.S. avocado growers from California and Florida voiced their discontent about lifting the quarantine on Mexican avocados citing fear over the pest risk to the U.S. industry. Domestic producers also expressed concern about Mexico's ability to guarantee pest mitigation procedures as called for in the proposal.

On the other side, growers and others voiced concern that the continued prohibition on Mexican avocados could result in a third country regulatory standard that would affect U.S. products. The concern, for example, was that Mexico would impose standards against U.S. wheat, apples, peaches and cherries.

SPS Elements at Issue Mexico maintained that there was no scientific reason to reject the systems approach proposal; with the quarantine, Mexico argued, the United States had

established a high standard of protection. Mexico also argued that surveys indicated that host-specific pests had been eradicated from avocado export producing areas and that the fruit fly populations were low in these areas. Mexico challenged the United States that it was not complying with trade agreement provisions and allowing trade from low pest prevalent areas. Additionally, Mexico argued that pre-harvest, packing, transport and shipping practices had been implemented to minimize the risk of pests in avocado export shipments.

The U.S. Restrictive Quarantine "Q56" "The PPQ (Plant Protection and Quarantine Program) administers the Fruit and Vegetables Quarantine 7 CFR 319.56 which establishes the terms under which fruits and vegetables can gain entry into the United States" (Roberts and Orden, p.10). The restrictive quarantine, under which the Mexican avocado quarantine falls, is referred to as "Q56".

According to Q56, APHIS can grant an import permit if the fruit or vegetable:

1. is not attacked in the country of origin by injurious insects;
2. has been treated or is to be treated for all injurious insects that attack it in the country of origin;
3. is imported from a definite area or district in the country of origin that is free from all injurious insects; or
4. is imported from a definite area or district that is free from certain injurious insects that all other injurious insects have been eliminated by treatment or any other approved procedures. (Code of Federal Regulations, p.220)

Rule Making Process USDA/APHIS issued a proposal in 1995 to allow fresh Hass avocados grown in Michoacan be imported into the United States under certain conditions. Following that, USDA provided 105 days of comment period for scientists and independent scientific panels to present their views on the proposed rule. The comment period included five public hearings across the country and collected over 2,000 comments. Over half of the comments came from the avocado industry; and, 85 percent of the comments opposed the rule. The final rule was based on a thorough scientific risk assessment which recommended that a "systems approach" would be appropriate.

Resolution Mechanism: "Systems Approach"

On February 5, 1997, USDA/APHIS published a new rule that allows the importation of avocados from Michoacan, Mexico under certain conditions. The rule is based on scientific risk assessments that include a series of interrelated restrictions termed a "systems approach". The rule contains APHIS' requirements which were devised to prevent the entry of any exotic plant pests which attack avocados into the United States. Under the systems approach, commercial shipments of fresh Hass avocados grown in approved orchards in the Mexican state of Michoacan may be imported into 19 northeastern states and the District of Columbia from November through February.

The systems approach safeguards are designed to progressively reduce risk to an insignificant level. The safeguards make up what is termed a "fail-safe" system which means that if one of the mitigating measures should fail, there are others in place to ensure that the risk is managed and reduced. It is a system of safeguards which occur consecutively in stages. The nine mitigating measures consist of: 1) natural host plant resistance to fruit flies; 2) field surveys; 3) pest trap and bait measures in the orchards; 4) field sanitation measures; 5) post-harvest safeguards; 6) winter shipping; 7) packinghouse instructions; 8) port-of-arrival inspections; and 9) limited U.S. distribution. USDA oversees and supervises all of these stages. Should pests in the avocados be detected at any stage in the system, avocado imports may be suspended from affected areas. Clearly, the final rule does not imply guaranteed entry for the Michoacan avocado growers; avocados can only enter if all the safeguards are met.

Systems approach resolution mechanisms are not novel in agricultural trade. Systems approach requirements are also used to allow the United States to export fruits and vegetables from areas that are not free of certain pests, including citrus from Florida to Japan and apples from Washington State to China and Japan. The United States also uses the systems approach to import products like Japanese Unshu oranges, Spanish tomatoes, and Israeli peppers.

Implications

To address the concern that Mexican avocados are diverted from approved destinations to California and Florida, each imported avocado must be individually labeled with a sticker of origin. Additionally, each shipment must be made in a sealed container with the Northeast destinations labeled. States in other areas have instituted a look-out for diverted avocados.

From an economic perspective, USDA estimates that approximately eight percent of the U.S. avocado production is sold in the 19 states where the Hass Mexican avocados will be imported. As a result, it is estimated that the rule will only have a limited impact on U.S. producers. APHIS believes that consumers stand to benefit from the systems approach.

FOOD SAFETY STRATEGIES: INTERNATIONAL STANDARDS AND COORDINATION

The U.S.-Mexico avocado trade dispute over U.S. phytosanitary regulations illustrates the issue that resolution of SPS issues can be complex, even when national SPS measures are science-based. One means countries have for addressing SPS issues is to adopt relevant standards or regulations such as ISO 9000 or HACCP. That said, the trade agreements allow countries' standards to be more stringent than international standards. Since trading partners

may have different food safety concerns, they may therefore have differing food safety strategies. How these strategies coexist can be important.

Rapprochement Strategies

There are various strategies countries can adopt to address food safety. Jacobs proposed three strategies for reducing international trade conflicts arising from differences in non-tariff barriers to trade, of which technical regulations and voluntary standards are a subset:

- Harmonization: standardization of regulations in identical form.
- Mutual Recognition: acceptance that alternative technical regulations, systems and standards can lead to the same level of food safety and quality. Hooker and Caswell equate this approach to "reciprocity" in the Canadian-U.S. Free Trade Agreement or "equivalency" as used in GATT.
- Coordination or alignment: the gradual narrowing of difference between alternative technical regulations, systems and standards, perhaps based on voluntary international codes of practice.

Hooker and Caswell use the term rapprochement to add a qualitative dimension to the reduction of trade tensions and disputes arising from differences in technical barriers and voluntary standards. The level of rapprochement would be strong, for example, if identical technical regulations were adopted by trading partners. Each of the strategies is discussed in turn starting with the strongest level of rapprochement, harmonization, and ending with the weakest, coordination.

The following example illustrates the futility of attempts to harmonize technical regulations and voluntary standards. Peckham (1996)compares green colors to signify "safety" for warning symbols:

> "Safety green is the one color that is markedly different between two standards. The ANSI (U.S. standard) color range for green is slightly bluer than the range for green specified in ISO (an international standard.) There is a reason for this. In the United States we recognize that approximately 4 percent of the population has color blindness that cannot easily distinguish between certain shades of red and green. Making the specification for safety green bluer helps the red/green color blind person to perceive a difference" (Peckham, p.25).

Should the United States prohibit the importation of products that use the ISO color scheme or should it ignore the welfare of a small, but perhaps vocal, segment of its population? Clearly, agreement on something as seemingly simple as the color green may not be possible!

Mutual recognition is a formal agreement among nations that a product legally produced in one country can be sold in the other nations. This approach is the basis for food

safety in the EU. This approach was adopted after it became apparent that agreement could not be reached on even simple and seemingly insignificant aspects of a harmonized food safety system. As a concept, mutual recognition will likely work better between fewer countries with closely related legal systems and similar cultural values. This should be the case for the United States and Canada.

The final strategy, coordination, is the strategic approach that will be followed by the United States. (Thiermann,1995) The U.S. approach is summarized as: "Although the SPS principles are intended for global application, the rapid implementation of these concepts relies on a series of bilateral and multi-lateral agreement between willing trade partners using the WTO-SPS as an umbrella." (Thiermann, p.42).

Challenges for Food Safety Rapprochement

There are several challenges which confront nations operating in the international food sector. Specifically, nations face two imperatives as the more liberal trading regimes for agricultural and food products promote export opportunities and import competition. First, nations must develop regulatory regimes capable of assuming the safety of the food of both domestic and international origins. In this paper, the importance of food safety attributes was discussed, as were the means of regulating them. According to the WTO and NAFTA agreements on SPS, the regulatory regime which is selected for food safety attributes must be based on appropriate science and risk processes and applied evenly to domestic and imported goods. Therefore, a nation's food safety regulatory regime (e.g. process standard) must meet SPS requirements or risk WTO or NAFTA action. National food safety regimes must meet a country's international obligations and be able to withstand the scrutiny of its international trading partners.

One "example of developing rapprochement of country-level food regulations is the widespread movement toward adoption of a Hazard Analysis Critical Control Point (HACCP) approach to assuring microbial food safety" (Hooker and Caswell 1995, p.13). Both the United States and Canada are in the process of moving toward the adoption of HACCP, but in different manners. To the authors' knowledge, Mexico has not taken measures to adopt HACCP. Caswell and Hooker believe that neither harmonization nor mutual recognition will occur on the NAFTA HACCP front, due, in part, to the different microbial food safety regulations. Additionally, the US HACCP system for meat and poultry products is complex. Coordination is, therefore, likely to occur between the trading partners. At this date, it is clear that regulatory differences concerning HACCP are being established among NAFTA countries.

In contrast, the EU member states are striving for harmonization with HACCP. The 1993 EU hygiene legislation called for all food businesses in the EU to adopt a risk management tool like HACCP. To date though, this has not occurred. Harmonization is complicated by national differences such as tastes, wealth and income distribution. (Orden, Roberts and Josling, 1996). EU members have adopted the legislation to varying degrees as

food safety policy tends to differ from country to country. So, the different national approaches to HACCP may pose technical barriers to trade in the future.

Second, countries must adopt efficient regulatory regimes so that producers remain competitive in the domestic and international markets. With the globalization of the food sector, nations need to be aware of their trading partners' regulatory regimes. The adoption of an efficient regulatory regime, either a technical regulation or a voluntary standard, could lead to reduced production and transaction costs. Production costs can be reduced through improved internal production processes. Transaction costs can be reduced through fewer audits or acceptance as an approved supplier. Failure to adopt an efficient regime could result not only in increased production and transaction costs, but also in the denial of market access due to an inadequate regulatory regime.

CONCLUSIONS AND AREAS OF FUTURE RESEARCH

Recent high profile food safety-related incidents such as the 1996 British BSE (bovine spongiform encephalopathy) scare and the 1996 Japanese *E. Coli* outbreak indicate that food safety is a concern for consumers, producers and governments alike. However, countries tend to react differently to food safety concerns and adopt different food safety policies. This can lead to the adoption of national technical regulations and voluntary standards whose targets are primarily the food safety attribute. Failure to adequately address food safety can result in fatal foodborne illnesses, liability suits, and/or economic losses.

When national regulatory regimes do not apply regulations evenly for domestic and imported goods, or when they are not accepted by other countries, trade impacts can arise. That food safety and SPS measures are important international issues in the food sector is indisputable. How countries and their trading partners choose to address food safety is of critical importance if they wish to remain competitive in the domestic and international market. If rapprochement is to occur, how can trading partners' differing food safety strategies coexist? Can their differences be narrowed? Will nations move toward coordination and mutual recognition?

Nations need not be reactionary toward the food safety challenges in the food sector. GATT and NAFTA allow nations to set appropriate national levels of protection for sanitary and phytosanitary reasons. The goal of the respective agreements is to foster equivalent, though not necessarily identical, SPS measures among members. Some coordination attempts have already begun between the United States and Canada. For example, some U.S. and Canadian agencies have begun to share and exchange food safety-related information. The U.S. and Canadian food inspection agencies share information to prevent unsafe food, particularly meat and poultry, from entering either country. Similarly, the regional offices of the Canadian Fisheries and Oceans Canada and the U.S. FDA share information, as do Health Canada and FDA. Clearly, some coordination attempts are already functioning. It remains to be seen what other food safety-related measures the trading partners will adopt.

Current understanding of SPS measures in trade agreements could be enhanced by undertaking further research into the issue. Information could be gleaned from case studies on technical barriers, comparative studies on national food safety regulations, or additional studies on voluntary standards adopted for food safety reasons. As global food trade continues to consist of an increasing quantity of further processed food products, food safety-related research will likely become increasingly needed.

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—DISCUSSION—
ISSUES, IMPLICATIONS AND IMPACTS OF HARMONIZATION, CONVERGENCE/COMPATIBILITY

Debra Bryanton

Bredahl/Holleran's paper serves to highlight the complexity of technical requirements and their impact on the trade of agriculture and food products. A common understanding of objectives and adherence to the rights and obligations under bilateral and multilateral trade agreements should lead to greater harmonization/convergence/compatibility, reducing the complication and costs of trade.

GOVERNMENT AND INDUSTRY ROLES IN STANDARDS SETTING

Agriculture and food products are commonly regulated for the protection of human, animal and plant health and consumer/economic fraud prevention. Government standards can be mandatory or voluntary depending on the policy objectives of the standard, with consumer protection requirements most frequently mandatory and quality criteria often voluntary. While governments have traditionally been seen as standard setters and enforcers, over the past decade there has been an increased trend toward industry taking on more responsibility for the safety and quality of products they sell. Many food manufacturers and retailers are taking steps to introduce total quality management and Hazard Analysis and Critical Control Point (HACCP) concepts, which introduce private requirements for suppliers and distributors.

The requirements of private sector buyers may result in domestic and international trade concerns; there is limited authority for government to resolve associated technical issues. While governments must take reasonable measures to ensure that non-governmental entities comply with the relevant provisions of trade agreements, it is not expected that this would extend to government involvement in private buyer-seller transactions.

TRADE AGREEMENTS AND INTERNATIONAL HARMONIZATION

The World Trade Organization (WTO) which resulted from the Uruguay Round on the General Agreement on Tariffs and Trade is important to agriculture and food in that it established and confirmed rights, obligations and disciplines on food safety, animal health, plant health and technical measures (standards, procedures) that directly or indirectly impact on trade. This is of particular importance in a time when tariffs are being reduced as a result of bilateral and multilateral trade agreements and countries are in some cases looking at non-tariff measures as a means to hinder trade. As noted below, several of the rights and obligations under WTO may influence the harmonization and compatibility of standards internationally. Provisions relating to technical trade requirements under NAFTA are consistent with those of the WTO.

Level of Protection/Legitimate Objectives

Countries can establish a desired level of protection for human, animal or plant life or health within its territory e.g., disease freedom, and introduce sanitary and phytosanitary measures to achieve that level of protection. Technical measures such as quality criteria or labelling provisions can be introduced to achieve legitimate objectives e.g., consumer protection. These measures must be consistent with other provisions of the WTO, e.g., they must not be more trade restrictive than necessary to fulfil a legitimate objective, be applied in an arbitrary or discriminatory manner nor constitute a disguised restriction on international trade.

International Standards

The WTO Agreement provides that WTO Members should use international standards where such standards meet their level of protection, and specifically cites three international standards- setting organizations as reference points for such international standards. If a country uses an international standard as the basis for its import measure, it is presumed to be consistent with the obligations of the WTO and, therefore cannot be easily challenged.

Risk Assessment and Science Base

If a country chooses not to use an international standard, then it is to demonstrate, through a risk assessment and sound science, that the international standard does not meet the desired level of protection or legitimate objective.

Equivalency

Countries are required to accept the sanitary or phytosanitary measures of other countries as equivalent, even if these measures differ from their own, if the exporting country can objectively demonstrate that its measures achieve the importing country's appropriate level of protection. Bilateral and multilateral agreements on recognition of the equivalence of specified sanitary or phytosanitary measures are encouraged. The equivalency concept will be important when international standards are established. Harmonization has traditionally meant "same as" — adoption of international standards may be encouraged through outcome-based rather than prescriptive standards, permitting countries more flexibility in how a level of protection may be met.

THE CHALLENGES

Countries will be requested to provide more detail and scientific rationale for their import measures if they choose to adopt standards that are more stringent than the international standard. There will be a need to put more resources into risk assessment and scientific rationales to support import measures.

The WTO encourages countries to look at the equivalency or outcome of a measure rather than defining a prescriptive standard from which there can be no deviations. This will require resources and the building of scientific and technical expertise on the part of both importing and exporting countries — creating a strong case for international harmonization. The international standards-setting bodies have an important role under the WTO and must focus their efforts on establishing standards that will be adopted with confidence by member countries.

The WTO raises the question of consistency among levels of protection. For example, if a country has stringent requirements to prevent food-borne illnesses in one food product, does not have similar requirements for another food product where the hazard and likelihood of food borne illness are similar, there could be a challenge on the basis of a lack of consistency. The question of consistency has not yet been specifically defined, however, it is anticipated that a common approach among products of similar risk may be a factor to be considered.

The agreement sets out rights and obligations, but is not prescriptive about how such rights and obligations are to be interpreted. It is expected that there will be further interpretation of the WTO as a result of challenges of member countries and decisions made by panels established through dispute settlement processes.

THE OPPORTUNITIES

Trade in food and agricultural products is becoming more global in nature. Food companies have a more global perspective and more often are looking to processing product that will meet the requirements of domestic and export markets. They will strongly influence the move to international standards. As noted by Bredahl/Holleran, international adoption of HACCP-based approaches should lead to greater harmonization of food safety inspection approaches. They also note however, that Canada and the United States are approaching the adoption of HACCP in a different manner. While the approaches to adoption of HACCP may differ, they are based on common HACCP principles and objectives and are expected to be assessed as equivalent for trade purposes.

In response to resource pressures, governments are revisiting their role as regulators. The introduction of cost recovery for activities that are seen to provide private benefit will result in pressure from industry to harmonize rather than face the additional costs of maintaining a unique national approach.

Rights and obligations under the WTO will force governments to revisit the policy and rationale behind their standards and inspection programs. However, it will remain a challenge to balance the sovereign rights of countries to legitimately protect borders against risks and at the same time to provide disciplines on countries using technical requirements as barriers to trade.

—DISCUSSION—
TECHNICAL REGULATIONS AND FOOD SAFETY IN NAFTA

Kate DeRemer

Bredahl and Holleran's paper provides a general overview of international technical barriers for food and agricultural products by giving a limited review of current literature, details on the Sanitary Phytosanitary (SPS) agreements, and highlights of particular technical barrier concerns. The paper also discusses the differences between voluntary standards and technical regulations. The article concludes with a detailed description of the issues surrounding the importation of Mexican avocados to the United States, and a few general suggestions on international cooperation and coordination.

The definition of technical barriers to trade in the opening discussion should be expanded. Technical regulations are defined in the paper as "national or international government-enforced legal requirements imposed for health, safety, or environmental reasons." Voluntary standards are defined as "nationally or internationally accepted procedures or guidelines adopted to maintain consistent quality." This definition of technical barriers omits a class of technical barriers required and handled by governments that address *quality* concerns. In the United States, agricultural quality standards are primarily voluntary, but many countries regulate and legislate the protection of agricultural products and food quality. Countries have mandated shelf-life restrictions for food safety and quality concerns. Countries also regulate grain quality and standards. Two agencies within USDA are responsible for handling foreign countries' quality concerns with U.S. agricultural products. The Agricultural Marketing Service handles foreign quality regulations for U.S. fruits and vegetables exported to foreign countries. The Grain Inspection and Packers and Stockyards Association addresses grain quality concerns voiced by foreign governments and companies.

Following the opening definition, Bredahl and Holleran provide one method to categorize technical barriers for food. The cited categorization is a misleading system for organizing technical barriers because it does not make the clear distinction between regulatory goals, targets, and methods. Food safety and packaging belong in two discrete categories, whereas the paper's example groups them as one. *Regulatory goals* are the rationale for a specific SPS or quality issue, such as plant health, animal health, food safety, environmental measures, or quality or conformity requirements. *Regulatory targets* pinpoint where in the production process a particular regulation is aimed, such as during the inputs

for production, processing stage, or distribution. The *regulatory* method includes the specific requirements imposed, such as a requirement to list the ingredients on the package.

Under the above classification, food safety and packaging should not be grouped in the same category. Food safety is a regulatory goal, while packaging is a regulatory method that targets the processing stage of production. For example, packaging requirements may serve many different regulatory goals. Food safety could be the rationale for listing the contents on a product's package to avoid specific allergens. Limited packaging or packaging material made of recyclable materials could meet an environmental objective. Packaging methods could also provide quality assurances for a particular product.

The paper follows the classification discussion with a concise descriptive section on the current NAFTA and WTO regimes for technical barriers and SPS issues. Following the WTO and NAFTA discussion, a case study illustrates the length and complexity of one SPS issue: the importation of Mexican avocados into the United States. The resolution mechanism is described as a systems approach. It is designed to achieve one regulatory goal, in this case plant health, but uses several regulatory targets and regulatory methods to achieve the goal.

The paper concludes with a discussion of how to reach accord and efficiency between countries in the regional and multilateral TBT and SPS agreements. Methods suggested are:

1. regulatory harmonization (the same);
2. regulatory equivalence (different, but striving to reach the same regulatory goal) both suggested in the GATT SPS agreement; and
3. coordination and alignment.

The explanation for alignment recognizes that there could be a gradual narrowing of technical food and agricultural regulations based on voluntary standards of practice. This observation reopened the earlier brief discussion of voluntary standards. The issue of voluntary standards is left unexplored and would be a good addition to the suggested areas for future research.

The paper provides a good description of the NAFTA and GATT SPS and Technical Barriers to Trade (TBT) agreements. It addresses some interesting issues that warrant further exploration in addition to the voluntary standards topic. These issues include: 1) how historical cultural differences can effect the legal system and thus, SPS rules, 2) how coordination or overlap of regional SPS agreements (NAFTA) may interact with the multilateral SPS agreements (WTO), and 3) an analysis in efficiency differences and germaneness of voluntary standards versus regulatory mandates.

ENVIRONMENTAL POLICY HARMONIZATION

Patricia J. Lindsey and Mary Bohman

INTRODUCTION

Concern about the environment played a role in the drafting of the original NAFTA document and an even larger role in its ultimate ratification, as evidenced by the environmental side accords. The expressed concerns stemmed from a number of sources, including: the dismal environmental performance of the Maquiladora sector along the Mexico-U.S. border; the increasing awareness around the globe of various threats to environmental integrity; the existence of North-South conflicts regarding the role of environmental safeguards in a trading context; environmentalists' frustration with the treatment of environmental policies within the GATT; and fears that differential standards would affect relative competitiveness among producers in the three countries. Environmental concerns had also been raised in Canada during the debate which preceded the ratification of the Canada-U.S. Trade Agreement, but those were not reflected in this precursor agreement and did not play as pivotal a role as they did with the NAFTA.

This concern in the context of North American trade liberalization is in most respects merely one expression of the heightened awareness within the global community. Trebilcock and Howse (1995) state that "The relationship between international trade and the environment has only recently attained a prominent place on the trade agenda, although it has been a concern of environmentalists for some time" (p. 331).

Agricultural and agri-food production is inextricably linked with the environment, both as a generator of environmental problems and as bearer of the consequences of others' environmental transgressions. The interrelationship between agriculture and the environment encompasses many of the inputs, such as air, soil, water, fertilizers, energy and pesticides. Choices among possible agricultural production methods have important environmental implications and there is currently considerable variation within and across the three countries with respect to environmental policies and their enforcement.

The broad objective of this paper is to take an analytical view of the potential harmonization of environmental policies pertaining to agriculture within and across North America. Following a brief review of the theoretical and applied economic literature, we provide an overview of existing environmental institutional arrangements within the three countries and within the NAFTA framework. We then turn to a more detailed look at the livestock sector and its associated environmental polices in Canada, the United States and Mexico. We finish with some concluding observations.

ANALYSIS OF HARMONIZATION

Diversity and Scale

Socioeconomic diversity is a relevant feature within the Area and clearly plays a role in harmonization prospects. At the same time, geographic diversity makes its own contribution to the potential for gains from freer trade and to the problems associated with harmonization of environmental policies. From the Arctic north to the tropical south, from rainforests to deserts, and from densely populated urban centers to uninhabited wilderness, the geographic region encompassing the North American Free Trade Area (NAFTA) is characterized by its diversity. Such variation gives rise to the potential for freer trade in a tremendous array of complementary agricultural and agri-food products as the provisions of the Free Trade Agreement come fully into force. Many of the restrictions apt to remain for the foreseeable future can be seen to arise at least partially out of the geographically diverse conditions faced by producers of similar products among the Area's growing regions.

It is sometimes said that a person's greatest strength is simultaneously his or her greatest weakness. This same principle may well apply to the NAFTA with regard to its vastness and diversity. When viewed from the vantage point of agri-food production potential, the size and variation contained within the region is a tremendous advantage. Yet when viewed from the vantage point of harmonization of environmental policies, it can be a distinct disadvantage. The nature, form and magnitude of the environmental problems faced and the set of desirable, or even feasible solutions are geographically and economically linked. Agriculture and the agri-food complex inherently span much of the geographic and environmental extent of the NAFTA. Yet while convergence to a single, all-encompassing set of environmental policies boggles the mind, looking at the problem of environmental policies and outcomes in a piecemeal fashion can be fruitful.

In terms of policy harmonization, convergence and compatibility in the environmental arena, there are different categories of environmental problems which are distinct in their implications for appropriate responses. Distinctions are made with respect to the geographic scope of the environmental effects. Such distinctions are important in general because environmental problems seem to be best addressed at the most local level which is feasible. A guiding principle is to address global problems globally and local problems locally. This is particularly relevant for agriculture where producers of the same end product face different

conditions with implications for the environmental effects of their production. They also may have quite different sets of feasible production process options across geographic regions. Even when there is a national concern, the specific manner of achieving desirable environmental outcomes is often left up to more local governing bodies.

One set of problems is those which are essentially global in nature, such as atmospheric warming. Policy guidelines to address such problems are most appropriately established on a global, or at least multinational basis. As there are explicit agreements or accords signed by many nations to address at least some of these issues and the resulting obligations of individual nations are respected under the terms of the NAFTA, the only question remaining would be whether or not the NAFTA parties are pursuing compatible approaches and if not, whether the individual countries' approaches should be made more compatible.

At the next level are cases where undesirable environmental consequences directly cross the border into the neighboring country. Canada, Mexico and the United States are particularly vulnerable given the length of the borders between the neighboring countries within the NAFTA. Nowhere is it more apparent for agriculture than where there are upstream-downstream problems with water availability and quality. Similar to this is the situation where there is a shared resource such as air or a body of water or a fishery, where the actions of those on either side of the border affect the conditions on the other. Both of these types of environmental and resource problems necessitate binational policy solutions, and examples of formal joint problem solving both pre-date and are included within the NAFTA.

Trade economists and policy analysts may also be concerned with apparently local environmental problems and their regulation when trade liberalization removes what had been a second best policy solution to an environmental problem or when trade increases lead to an exacerbation of negative environmental outcomes. Similarly, the imposition of environmental regulations may have differing social welfare implications within and across national boundaries under conditions of restricted *versus* unrestricted trade. It is this set of issues for which the answers are the least clear cut in terms of harmonization and upon which we focus the remainder of this paper.

Externalities and Indirect Spillovers

As economists we tend to pay attention to only those environmental concerns which involve an externality: when an action has consequences beyond the immediate producer (or consumer in the case of consumption externalities[1]) which are not fully reflected in the price or cost. The first round effect on the environment can be considered to be a direct spillover.

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[1] Note that consumption externalities represent another way for apparently local environmental effects to cross borders, and policies in one country which restrict the sale or consumption of goods having consumption externalities can have an effect on the exporting country through alteration of trade flows.

The failure to include (as much of) the cost of the externalities for one set of producers when they are included for another set gives rise to the competitiveness concerns expressed by some industry groups. The latter can be considered to be indirect spillovers, in that the externality itself does not cross the border, yet there are ripple effects. Removal of tariffs and other trade barriers behind which the more highly regulated industries had been operating exacerbates fears of an inability to compete. Those worried about competitiveness join political forces with those who care about environmental outcomes in other countries even when there are neither direct nor indirect spillover effects for the home country environment. Together they are able to bring into the cross-national political arena issues which would normally be only the province of more local authorities.

One case for harmonization or compatibility of environmental measures even when the direct consequences are strictly local is tied to the notion of pollution havens. Where there is a discrepancy in the stringency of policies or in their implementation, it is possible that pollution-intensive firms could be enticed to locate in the more lenient country. Further, the removal of barriers to trade in the resulting products could foster such actions since the production cost advantage (under lenient restrictions) is no longer offset fully or partially by the trade restriction. This relationship has been explored theoretically by Krutilla (1991) who evaluated the potentially dual role of trade and environmental policies. Responding to the proposition that countries enjoying relatively large environmental endowments should specialize in the production of environmentally intensive goods, Pethig (1976) demonstrated for a two-country, two-factor, two-good case the necessary and sufficient conditions for this to lead to a welfare loss. His assumption is that at low levels of output there is no socially significant environmental cost whereas at some high level, environmental capacity is exceeded. Somewhere in between these two points, the environmental degradation may well reduce welfare more than it is increased by the greater consumption of private goods due to trade. The country importing the environmentally intensive good always gains. Note that these results presume a lack of environmental protection in the exporting country.

The tradeoffs at work when one or more countries impose environmental regulations in an open economy can be shown in a two country partial equilibrium model. Table 1 reports the welfare effects of regulations on a production externality.[2] The analysis assumes that both countries are large in the sense that changes in domestic supply and demand have a world price effect. Such effects influence the producer and consumer surplus results and are shown in the first column of Table 1. Imposing the environmental regulation is presumed to cause private supply to decrease (the supply curve shifts leftward). Consider the case when both countries regulate. The decrease in supply from both countries results in a higher world price. For the importing country the higher price adversely affects the terms of trade and the opposite is true for an exporting country. Focusing on market welfare, there are two opposing effects on producer welfare: producer surplus falls because of the decrease in supply induced by the regulations and increases as a result of the higher price. The net effect is indeterminate. The higher price reduces consumer welfare in both countries. Whether a

[2] Krissoff et al. (1996) clearly present the type of graphical model that underlies the signs of the welfare changes in Table 1.

country is an importer or an exporter partially determines the net welfare effect. For an importing country, consumer interests dominate those of producers and, irrespective of the sign of the change in producer welfare, the net market effect is negative. In contrast, producer interests dominate the net welfare change for an exporting country and the net effect is indeterminate. The environmental regulations have the intended positive effect on non-market welfare. The net (market and non-market) welfare effect is indeterminate.

Table 1. Market and Non-market Effects from Regulation of a Production Externality

Policy change from no regulations	Terms of Trade	Market Welfare			Non-market Welfare	Net Effect
		PS*	CS*	Net		
Both Regulate						
Importing country	-	?	-	-	+	?
Exporting country	+	?	-	?	+	?
Importing Country Regulates						
Importing country	-	?	-	-	+	?
Exporting country	+	+	-	+	-	?
Exporting Country Regulates						
Importing country	-	+	-	-	-	-
Exporting country	+	?	-	?	+	?

*PS=producer surplus and CS=consumer surplus

Where there are divergent regulations, the effects of one country's policies have indirect spillover effects on the other country. When only the importing country regulates, its own net market welfare falls, but non-market benefits are positive. As a result of the regulation indirect spillovers have both market and non-market effects in the exporting country — production shifts to the exporting country with the associated market benefits and increased pollution. When only the exporting country regulates, the effect on domestic producers is an empirical question, but pollution decreases. The spillover effects cause producer welfare to increase, but net market welfare falls. The combination of lower market welfare and more pollution lead to an overall reduction in welfare. While not shown in the table, comparisons between one country regulating and both regulating are difficult to sign. For example, when comparing producer surplus in the importing country between the case where both regulate and the case where only the exporting country regulates, the smaller price effect when only the exporting country decreases output has the opposite effect than that due to the importing country not restricting output, so the net effect depends on the relative magnitudes of the gains and losses.

A Case for Divergence

Before making a case for divergence, it is helpful to clarify what is meant by harmonization. The nature of environmental problems leads to two different definitions of

harmonization based alternatively on identical environmental outcomes or production practices. The popular press and producer group calls for harmonization have in mind the idea of a level playing field or equal environmental compliance costs based on similar production practices. Given the wide range in environmental externalities from the same production practices, this type of harmonization moves in the opposite direction from economic efficiency by negating any comparative advantage given by environmental assimilative capacity.[3] Harmonization of environmental outcomes would result in outcomes closer to the economically efficient level and reflect the underlying comparative advantage. But this approach does not take into account different social preferences and priorities and could be expected to exacerbate differences in the costs of regulation. It also could be expected to add to problems of regulatory inefficiency, since regulation and monitoring would be called for regardless of its necessity in terms of socially optimal environmental quality. Upward harmonization of outcomes would appear to require monitoring and regulation everywhere for that which is in need of intervention anywhere within NAFTA. Such a policy is consistent with neither equalization of costs of regulation nor regulatory efficiency.

Whether across-country relocation of the production of goods with environmental consequences makes sense or not is a function of the arguments of the social welfare function and their weights. Diao and Roe (1996) developed a general equilibrium model (two-country, two-factor, two-good) which treated pollution as a function of production inputs. The production sectors differ in their factor intensity and factor immobility is assumed, with the rich country ("North") having a greater endowment of capital. Production externalities are treated as negative arguments in the consumer utility function, and the authors run an experiment which includes a harmonized environmental policy (tax) and make comparisons with the unregulated base case. They find that whether or not a country benefits is related to whether or not it is large enough to affect price, i.e., whether it is a large or small country. Under certain sets of assumptions, harmonization of environmental policies requires income transfers among trading partners to avoid welfare transfers from the poorer to the richer partner. Unless such transfers occur, divergent policies may in fact be optimal from an equity standpoint where countries are diverse. This relates, in part, to the not entirely implausible assumption that environmental quality is a superior good.

Another theoretical case for continued divergence of environmental policies in the local effects situation links back to physical geographic (but not socioeconomic, as in the previous argument) diversity. What makes sense under one set of conditions may be impractical or otherwise undesirable under another. In addition the initial conditions prevailing in each country (or region) will generally not be the same. Thus even given the

[3] The treatment of environmental assimilative capacity as an endowment that provides a source of comparative advantage has been controversial. One the one hand, having good soil conditions that can support intensive production methods that could lead to soil erosion or water pollution elsewhere can be seen as similar to the presence of an ore body that provides a comparative advantage in trade. On the other hand, environmentalists argue that no justification can be given for increased pollution in a region just because environmental degradation has not already taken place.

same utility functions, the emphases of environmental policies will naturally differ. Bhagwati and Srinivasian (1997) analytically demonstrate that "different countries will have *legitimate diversity of...environmental taxes and standards.* This diversity will arise even if they share the same 'utility function'...: the diverse tax rates can come from differences in technology and in endowments in the broadest sense." (pp 167-8) To take one example from agriculture, it is common for different pesticides to be approved for use in different countries. Indeed, it makes little sense to go through the regulatory process to approve pesticides effective against pests which are not present in a country, or for application to crops which are not grown there. Looking at the problem a little differently, Bhagwati (1996) uses the example of dysentery in one location making clean water a priority, vs. a high priority placed on clean air in a location not subject to immediate health risks from a contaminated water supply but with air pollution problems. This can be viewed in the context of the difference between constrained and unconstrained optima: in the absence of a budget constraint, the choices might be the same or similar while in the presence of budget constraints there is a different policy choice where initial conditions and endowments are diverse. Also, in familiar marginal terms, the marginal pollution abatement dollar will optimally be spent where it will yield the greatest return (Bhagwati and Srinivasian, 1997).

It is easy to demonstrate that upward harmonization of environmental policies does not necessarily benefit the (previously) high standards country. Upward harmonization can in fact lead to lose-lose outcomes where the country raising its standards loses from the movement to a less optimal set of constraints and the higher standards country loses by having to pay higher prices for the products imported from the trading partner. Think of a restriction on effluent from food manufacturing operations in country A, which has a fairly low absorptive capacity for this type of pollutant. Before harmonization country A imports manufactured food products from country B which does not find it socially desirable to regulate effluent from this type of manufacturing, possibly due to a relatively large absorptive capacity. After (upward) harmonization, the effluent restrictions in country B increase operating costs without appreciably affecting environmental quality. The increased costs lead in turn to an increase in product price for consumers in both countries, possibly some shift in production from country B to country A, overall smaller combined production, and little or no environmental benefit. Gains may accrue to the manufacturers of effluent-restricting technology, but to few other groups in either country.

Empirical Studies

One characteristic finding of theoretical analyses of the problem of environmental regulation in countries linked through trade is that under many circumstances the outcomes (trade, social welfare, environmental) are ambiguous and are dependent upon the relative strength of positive and negative effects (Copeland and Taylor, 1995). The analysis presented in Table 1 illustrates the difficulty of finding definitive theoretical results. Further, harmonization across heterogenous countries or locations is not typically found to be the optimal policy approach. Other generalizations which are worth considering are: 1) it makes a difference for social welfare outcomes whether a country is "large" or "small;" 2) importer

vs. exporter status affects the desirability of environmental regulation from a welfare standpoint; and 3) rich countries are likely to choose higher levels of environmental quality than are poorer countries, *ceteris paribus*.

Probably the most pertinent example of harmonization of environmental policies across countries is to be found in the EU set of environmental Directives. These were developed as a part of the deepening of the economic and political integration process. One Directive that has been relatively well studied for agriculture is the Nitrate Directive, which was passed in 1991 (Leuck, et al., 1995). The Directive sets forth timetables, some processes and standards, and has an 8 year phase-in period. It also allows for variability of application within a country (mandatory compliance in designated "vulnerable zones" and voluntary compliance elsewhere) and for individual countries to have stricter standards than those established under the Directive. Leuck, et al. (1995) found that implementation is likely to both alter the distribution of livestock production within the EU and to mildly reduce aggregate EU livestock production. Social welfare assessments were not reported.

Little empirical support beyond anecdotal evidence has been found for the theoretically supportable argument that (differential) environmental regulations reduce or enhance international competitiveness (von Moltke, 1993, Jaffee, et al., 1993). Nor is there conclusive evidence that differences in environmental policies across countries play a meaningful role in industrial migration decisions or otherwise systematically affects the location of production for environmentally intensive goods, where one would most expect to see the effects (Low, 1993, Tobey, 1993, and Jaffee et al., 1993). In general, these results are attributable to the relatively low share of environmental compliance costs in total costs of production.

If, as it appears, that environmental policy differences do not necessarily lead to a redistribution of competitive advantage and may or may not lead to meaningful alterations in the location of production, the desirability of policy harmonization from a social welfare standpoint should be carefully assessed for the agricultural and agri-food sectors within North America.[4] The problem, of course, is that the specificity regarding subsectoral markets, policies and environmental effects which is necessary for even a crude assessment of social welfare outcomes is not compatible with the kinds of assumptions which are necessarily made in order to construct and solve (computable) general equilibrium models. At the same time, failure to consider the trade-offs across subsectors can lead to poor policy choices and/or difficult negotiations. Stated differently, it is neither enough to know merely that "country A gains at country B's expense" on a macro level nor that "producers of X gain at the expense of consumers, taxpayers and the environment," as these conclusions may well be reversed in a different market or location. As Bhagwati (1996) points out, the absolute and comparative advantage effects of environmental policies may not be the same, an effect which argues against making easy generalizations of competitive and welfare effects. Quantitative and theoretical modeling exercises at the economy-wide, sector-specific and location-specific level each have a contribution to make to the policy dialog, without any one

[4] This question has relevance for those production processes having local, as opposed to global or cross-border, environmental implications.

approach being capable of providing a definitive answer regarding the desirability of policy harmonization.

We turn now to an overview of the environmental provisions in the NAFTA and in other relevant arenas to provide some of the institutional context for this discussion of harmonization/convergence/compatibility of environmental policies. This is followed by a closer look at an individual agri-food subsector.

ENVIRONMENTAL PROVISIONS IN TRADE AGREEMENTS

Formal co-operation on North American environmental issues predates the FTA and NAFTA. Previous treaties and agreements have generally focused on management of joint resources such as the Boundary Waters Treaty between the United States and Canada (1909) and the United States and Mexico (1944). Similarly, disputes regarding environmental pollution between the NAFTA countries are not new and have concerned border regions. Although previous disputes have not focused on agriculture, future environmental conflicts involving the sector are likely, e.g., along the U.S.-Mexico border where agriculture is a major user of increasingly scarce water, and where fertilizers and pesticides in irrigation drainage contribute to water pollution (CEC, 1996a).

NAFTA Institutional Arrangements

NAFTA is the first trade agreement to explicitly address concerns about the linkages between environmental regulations and competitiveness and to raise the issue of harmonization. Four aspects of the NAFTA and the environmental side agreement, the North American Agreement on Environmental Cooperation (NAAEC) affect the conduct of members and relate to harmonization. First, a number of principles are set out. Importantly, each country retains sovereignty over domestic environmental policy and has the right to maintain its own environmental standards. Countries also have the right to participate in international environmental agreements and provisions of those agreements take precedence over those in the NAFTA. Countries can change their regulations as long as modifications do not result in less protection of the environment, and the agreement encourages harmonization through raising environmental regulations to the highest existing level among the member countries. Environmental policies cannot create a barrier to trade. Only the later statement, against using environmental regulations as disguised trade barriers, is enforceable. The contrast between having recourse to a dispute settlement process when regulations create a trade barrier on the one hand, and unenforceable principles for high levels of environmental protection on the other, stems from the reality that the NAFTA, including the NAAEC, was negotiated as a trade agreement and not as an environmental treaty.

Second, each party is obligated to enforce its own environmental laws, to monitor compliance and environmental outcomes, and to make this information publicly available.

The NAAEC provides the authority to impose sanctions when a country does not enforce its own laws. The process to apply for sanctions is similar to the panel process for dispute settlements under the NAFTA.[5] The differences are that private citizens and Non Governmental Organizations (NGOs) can initiate complaints and a request for a panel must be approved by two-thirds of the countries or as a practical matter both of the countries not cited in the complaint. Penalties include fines or having a country suspend its NAFTA provisions for certain goods from the country found to be persistently violating its own environmental laws. Johnson and Beaulieu (1996) point out the irony that having no environmental protection or actively enforcing low levels of protection would meet NAFTA obligations while partial enforcement of high standards potentially subjects a country to sanctions.

Third, the NAAEC established the North American Commission for Environmental Cooperation (CEC), a tri-lateral regulatory agency having monitoring, enforcement, and dispute settlement powers. The CEC manages the process to impose sanctions for failure to enforce environmental regulations. The CEC also has a mandate to provide input into NAFTA Chapter 20 dispute settlement panels that touch on environmental issues.[6] As part of a Chapter 20 dispute, the CEC may create working groups of experts and make recommendations to solve the dispute. The provisions, written after NAFTA was negotiated, were designed to complement its dispute settlement process. The CEC is also charged with evaluating the environmental consequences of NAFTA implementation and reporting on actions taken by each country related to the environmental agreement.

Fourth, the NAFTA agreement on sanitary and phytosanitary measures and standards-related measures addresses environmental issues in agriculture. These technical measures are discussed in the paper by Bredahl and Holleran in this volume. Of note for the current discussion is that the measures are also based on the principle of national sovereignty, and countries have the right to set their own standards subject to restrictions to prevent them from being used as disguised trade barriers. The sanitary and phytosanitary measures recognize that, for environmental issues, national boundaries may not set the relevant borders. For example, in establishing restrictions on live animal trade because of disease, the NAFTA makes regions and not countries the relevant geographical area.

Dispute Cases with Environmental Implications As of May 1997, NGOs or private citizens had filed nine complaints with the CEC about failure to enforce environmental laws.

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[5] Special provisions for the applications of sanctions against Canada are included in the NAAEC because the Federal and Provincial governments share responsibility for environmental regulation and dispute responsibility in some areas. Briefly, if Canada fails to comply with a decision a court case must be filed in the relevant Canadian jurisdiction.

[6] NAFTA contains several dispute settlement processes. Chapter 20 covers disputes not related to unfair trade practices and is intended to cover most environment related cases. Chapter 19 sets rules for Binational Panels arbitrating domestic countervailing duty and anti-dumping cases. However, unlike Chapter 20, the NAAEC does not establish a process to provide input into Chapter 19 cases.

Although the small number makes generalizations risky, the fact that seven of the nine cases involve the United States or Canada suggests that more stringent environmental laws, perhaps combined with better information about environmental conditions and compliance, give rise to complaints. Also, there is some indication that the NAFTA process is being used as a tool in contentious domestic environmental disputes. CEC complaints are a new way for organized environmental groups to attempt to force compliance with a country's laws outside of the established domestic channels.

The three cases against the United State claim that the government failed to enforce the Endangered Species Act, did not satisfy laws regarding timber disposal, and did not conduct a proper environmental review prior to expanding a military base. The two cases concerning Mexico relate to an environmental impact report about expansion of a port and pollution of the Magdalena River. One of the four cases filed against Canada concerns enforcement of pollution laws in Quebec for agriculture, primarily the hog industry. The three other Canadian cases have possible implications for agriculture. A complaint filed by an environmental group claims that the government did not follow laws to evaluate the environmental impact of the Old Man River dam which has been a contentious environmental issue. When completed this dam will provide water for irrigation. Another complaint was filed by a private citizen who claimed that water pollution laws have been violated resulting in pollution of a lake in Alberta. This complaint states that, "The anaerobic polluted water may come from any of a variety of sources: agricultural wastes, oil and gas production and processing, sewage and waste treatment, landfills and so forth. Some of these activities are poorly regulated by the Alberta Government and some are essentially unregulated (such as agricultural wastes, since agriculture and agricultural processing are exempt from the Alberta Environmental Protection and Enhancement Act)." (CEC, 1997) The complaint met the criteria for official review, but was not heard because of an ongoing court case in Alberta on the same matter. The fourth case involves protection of fisheries in British Columbia.

Formal disputes based on technical regulations related to the environment and agriculture have already been heard under NAFTA. These disputes focus on whether regulations to protect the environment of a country create barriers to trade. One potential case involves U.S. Food and Drug Agency (FDA) regulations requiring zero tolerance for salmonella in poultry which could adversely affect exports of Canadian game birds (CEC, 1996a). It remains to be seen what kinds of evidence are accepted in this context as convincing justification that an action represents legitimate protection rather than protectionism, or *vice versa*.

NAFTA and GATT/WTO Provisions

The NAFTA and the GATT both focus on preventing environmental regulations from acting as unnecessary trade barriers and the sanitary and phytosanitary and standards provisions of the NAFTA are modeled after those in the GATT. Members of the NAFTA can also bring disputes on trade policies with environmental implications to the World Trade Organization (WTO). Notwithstanding the similarities, the NAFTA contains broader

coverage on environmental policy than do the provisions under the GATT agreement. The GATT does not contain any provisions regarding enforcement of domestic environmental regulation or mechanisms for citizen complaints. The GATT does not allow trade barriers based on production processes, as exemplified by the tuna-dolphin case. The NAFTA contains a statement of principle that regulations on process are relevant, but this has not yet been tested through a formal dispute.

NAFTA vs. European Union

In contrast to the NAFTA, the European Union (EU) contains deeper harmonization of environmental regulations. This reflects both general EU economic integration and an explicit statement by EU members that environmental protection is a fundamental value. The EU has made an explicit choice to deepen the integration of the member countries and agreements have been reached regarding overall objectives, but timing and many specifics are allowed to vary among countries. The exception is minimum standards (though they may be achieved differently) and those elements which would serve to impede trade within the EU. Key to the success within the EU of such harmonization measures is that the Directives require each country's government to enact statutes to implement the EU-wide policies. No such authority is contained within the NAFTA provisions.

As mentioned above, the EU has enacted a set of environmental Directives that cover cases, like nitrates, where there are direct spillover effects outside of the originating country and cases, like the package recycling and recyclability Directive, where the non-local effects are less direct but have direct trade implications. In both cases, there is significant scope for higher than minimum standards on a country-by-country basis and some flexibility in implementation. Other aspects are less flexible. For example, in order for food and other products to be sold within the EU, their packaging will have to meet the recycling/recyclability requirements regardless of country of origin (Latriche and Lindsey, 1994). Here, compatibility of regulations is a meaningful trade issue and the Directive was designed to foster the free flow of products across borders while maintaining a certain level of environmental protection. Lower income countries within the EU are allowed a longer phase-in period. The Nitrate Directive also includes a phase-in period, but makes its distinctions among local areas (which do not necessarily correspond to national boundaries) in which nitrate pollution is a problem. Here the differences have to do with mandatory vs. voluntary compliance.

Contrast the above situation with that of the NAFTA, where economic and political integration is not a goal of the member countries. For technical regulations, harmonization or mutual recognition of certain standards or practices could make implementation more straightforward and improve the free flow of goods and services (e.g., the EU-wide symbols regarding the recyclability of packaging and the presence of recycled materials). Such harmonization/compatibility could also contribute to freer trade. Yet, the absence of authority under the NAFTA to compel subnational governing units within each member country to recognize mutually agreed symbols or practices is problematic for this type of harmonization,

and even at the national level the Canadian-U.S. working groups set up under the FTA are instructive regarding the difficulty of this task.

LIVESTOCK INDUSTRY EXAMPLE

Environmental regulations in the livestock industry provide an illustration of the implications of harmonization of environmental regulations for competitiveness and environmental quality. Three main points from the general discussion are examined. First, examples of environmental policies are given to show the differences between harmonization of environmental effects and regulatory burden. Second, policy regimes in the NAFTA countries are discussed showing the substantive differences in regulations that occurs both within and across countries. Last, costs of compliance with environmental regulations for the livestock industry are low.

Two Types Of Harmonization For Livestock Waste Management Environmental Policies

The livestock industry is a major agricultural contributor to pollution. Negative externalities from the livestock industry potentially occur at all stages of production and processing. At the primary production level, externalities result from animal waste products, animal disposal, and animal welfare. Pollution from processing is tied to wastewater disposal and worker health and safety. Our analysis focuses on regulation of water pollution from waste management. Externalities from the livestock waste can create a number of serious problems such as pollution of groundwater by nitrate emissions (from excess nitrogen), eutrophication of surface waters by phosphate emissions, acidification by ammonium emissions, contamination by heavy metals such as cadmium, copper, mercury, lead and zinc originating from concentrated feedstuffs, contamination by pathogenic micro-organisms, and odour problems. Pollution from nitrogen has received the most attention since it affects human and animal health. Infants under six months of age are susceptible to a potentially lethal blood disorder called methaemoglobinaemia, caused by large amounts of nitrates in drinking water. Links between excessive nitrate levels and stomach cancer are more controversial. Phosphorus is the other major environmental indicator because it is the limiting nutrient in euthrophication of surface water.

Several policies for livestock waste management regulate the environmental outcome rather than the production process.[7] Harmonization, should it take place, would be of environmental quality rather than of cost equalization. An example of this type of policy is

[7] Livestock waste management produces both point and nonpoint source pollution. Our objective is to analyze existing regulations in terms of harmonization and not optimal regulations.

mandating that farmers dispose of manure in a way that does not cause nitrogen or phosphorus to end up in surface or ground water. For example, in order to spread manure, a farmer must show that land planted to a specific crop could absorb the amount of nutrients present in the manure. The regulations establishing manure management plans also restrict harmful practices such as spreading manure during high rainfall periods or close to surface water. In some jurisdictions, farmers must document their actions by filing manure management plans.[8]

The cost of complying with manure management plans varies as a function of each farmer's specific soil conditions, amount of rainfall, and proximity to surface water. For example, the British Columbia Code of Agricultural Practices legislates that manure disposal must not exceed an amount such that the soil can absorb the nutrients. The long rainy season represents the largest constraint to spreading and most farmers have had approximately three months manure storage capacity, which is less than that implied by the regulations. In British Columbia, construction of additional storage for a 100 cow dairy herd costs between C$12,000 for a clay pit in favorable soil conditions to C$120,000 for a concrete lined, covered pit. Thus the costs differ according to environmental conditions, even with the same regulations in place. Note that these same variables affect the amount of the externality associated with production of a unit of manure.

Another example of a policy in the spirit of harmonization of environmental outcomes is special standards for regions that are environmentally sensitive. For example, coastal zones in the United States will face stricter management standards for the livestock (including poultry) industry than elsewhere. This policy is expected to lead to higher costs for coastal livestock and poultry producers.

Other policies for waste management require farmers to satisfy common production practice standards and, if there was harmonization, would lead to equalization in the costs of compliance. These policies result in variation in environmental outcomes. Examples of such policies are minimum acreage per animal unit and specific requirements detailing waste handling facilities. For example, in Quebec regulations require farmers to have a minimum land area per hog. The cost of compliance can differ according to land values, but variation across farmers should be less than with regulations that mandate equal environmental outcomes. However, the amount of pollution will vary depending on the absorptive capacity of the soil (Savard et al., 1996) and both the timing and amount of rainfall.

Regulations in NAFTA Countries

Under any plausible criteria for harmonization, existing environmental regulations paint a clear picture of diversity both within and across national boundaries. In addition to

[8] In practice, while the goal of manure management plans is to prevent excess nutrients from entering surface or groundwater, differences in how the regulations are implemented exist. For example, some regions (e.g., North Carolina) only regulate nitrogen while other regions (e.g., Ohio) have guidelines for both nitrogen and phosphorus.

national environmental regulations, all three NAFTA countries empower local governments with the ability to establish and enforce environmental regulations. The devolution of regulatory power within each country suggests the irrationality of trying to impose a common set of standards across the three NAFTA countries, particularly in view of their extreme diversity in environmental conditions. Given the acceptance of differences in local regulations, it would be difficult to then argue for harmonization across national boundaries by any of the member countries.

Canadian Regulations While both federal and provincial governments in Canada have ministries with responsibility for protection of the environment, provincial environmental laws play the most important role including those laws affecting agriculture. Local governments have authority over environmental regulation related to agriculture through powers to regulate air, water, and noise pollution as well as the power to protect sensitive areas. Local governments have been increasingly active in establishing and enforcing regulations (CEC, 1995). Water quality regulations illustrate the nature of shared responsibility for the environment in Canada. Federal laws establish regulations to protect surface water quality. Under separate legislation, the federal "Fisheries Act" prohibits discharging substances into water that can harm fish and has been used to control agricultural pollution. Groundwater is regulated at the provincial level and both provinces and municipalities regulate the quality of drinking water.

For waste management, the types of policies vary across provinces. As discussed previously, Quebec has regulations on animal units per hectare. Both British Columbia and Ontario have regulations on manure management that focus on environmental objectives rather than specific practices. Education of farmers has been an objective in both these provinces. For example, Ontario has Environmental Farm Plans with an educational objective to identify concerns and introduce changes in farm management (CEC, 1996b).

U.S. Regulations A large number of federal government agencies have responsibility for environmental regulations. Every state also has agencies with the power to set standards, implement, and administer laws, develop education programs, and monitor compliance. Several state agencies have been delegated authority to administer federal programs including the Clean Water Act which contains provisions relating to agricultural nonpoint discharges.

The Clean Water Act in the United States directs states to identify and remedy water quality problems such as those caused by manure. Differences in policies across states and local municipalities exist. In addition to regulations constraining farmer behavior, some state governments provide subsidies for investments to meet regulations (e.g., an improved manure storage facility). Evidence exists of substantial differences in subsidies among states (Trebilcock and Howse, p. 125). There is also national-level regulation by the Environmental Protection Agency of animal feedlot operations large enough to meet the criterion for point as opposed to nonpoint source pollution, while smaller operations are exempt.

Mexican Regulations The authority to protect the environment is embedded in the Mexican constitution and this power has been expanded over time and now encompasses the

preservation and restoration of ecological equilibrium and specifically includes pollution prevention.[9] NAFTA provisions for disclosure appear to expand the public's right to information about pollution discharges. Regulation of water quality is governed by the National Water Law which gives the National Water Commission (part of the Secretariat of Environment, Natural Resources, and Fisheries) responsibility to protect surface and groundwater and include land use as a factor determining water quality.

While in general the federal government plays the dominant role in environmental regulation, states have authority over establishing and ensuring compliance of water pollution regulation. There is an overall trend in Mexico towards increasing the role of state and local governments in the formulation and enforcement of environmental regulations. Therefore, local regulations are likely to play a large role in livestock waste management if projections for expansion of intensive feeding operations prove accurate. The government provides some subsidies for pollution control, but they are directed towards air pollution.

Compliance Costs for Regulations

Many North American livestock markets are highly integrated, especially between Canada and the United States (e.g., beef and pork). The strong linkages between national markets mean that differences in environmental regulations potentially affect competitiveness. However, to date environmental regulations have not been the source of trade disputes. The relatively small cost of regulations to producers for the livestock sector doubtless contributes to the ability to live with policy diversity thus far. Cost estimates for the United States serve to illustrate this point.

While no single measure is ideal, estimates of regulatory costs in the United States calculated in different ways each yield modest values on a percentage basis. The Bureau of Economic Analysis estimates the costs of pollution abatement for feedlot operations in 1990 equal to $12 million. Combined with USDA data for livestock on feed (cattle, sheep and lambs and hogs/pigs), this works out to 0.2 percent of the value of the animals. Ingo Walter's input-output based calculations using data for 1968 to 1970 found direct and overall environmental control "loadings" for livestock and products entering international trade flows to be 1.28 percent direct, and 1.98 percent overall (percent of final sales). More recently Jaffe, et al. estimated that the 1991 gross annual pollution abatement and control costs as a percent of value of shipments for all industries was 0.62 percent, those with "High" abatement costs include paper and allied products with 1.27 percent, chemical and allied products with 1.38 percent, petroleum and coal with 1.8 percent and primary metal with 1.51 percent. Jaffee, et al.'s estimates are consistently below Walter's.

This said, costs for individual producers can be expected to differ substantially from any overall averages, and differential costs faced by similar producers in partner countries could make a difference at the margin. Yet, when viewed in the context of other relevant

[9]The CEC report, "Status of Pollution Prevention in North America" contains a description of the evolution of Mexican environmental law.

production cost and policy variability across regions and countries, the case for concern over competitive advantage or disadvantage due to diverse environmental regulations is not compelling.

CONCLUSIONS

Tremendous diversity exists in the types of environmental policies within each of the NAFTA countries. This diversity is largely consistent with efficient economic policies because of the wide range of environmental conditions in Canada, the United States, and Mexico and possible differences in demand for environmental quality. All three NAFTA countries foster diversity in regulations within their own borders by providing local governments with jurisdiction over some types of environmental quality, including water quality. This is very different from national agricultural policy programs that are familiar to stakeholders within agriculture.

The NAFTA and its environmental side agreement (NAAEC) respect domestic sovereignty over environmental policy as long as the policies do not create trade barriers. Against this background permitting differences in environmental policies is a statement of principle that countries should not lower environmental standards and should pursue upward harmonization of policies. However, no details are provided as to the type of harmonization envisioned.

While a citizen complaint has been filed under NAFTA about failure to enforce environmental laws affecting the pork sector, differences in environmental regulations have not yet led to trade disputes for agriculture, and this could continue in the long run. One plausible reason for the lack of disputes is that, for all but a few industries, the costs of environmental regulation are relatively small. Agriculture is not an exception to this general statement. In addition, the diversity in regulations within Canada, the United States, and Mexico, would make it difficult to argue that differences in regulations across country boundaries provide a justification for a countervailing duty. Finally, there is no evidence to date of a 'race to the bottom' to lower environmental standards in an attempt to cause production to relocate.

When trade disputes do occur, the nature of environmental policies calls for region-specific solutions. Because of the specificity of problems and solutions, it is important to make use of subsector- and geographic-specific information when evaluating sectoral environmental policies. This is likely to be a troublesome issue for any disputes over technical regulations relating to environmental problems.

However, there are some areas where harmonization or policy coordination could lead to more efficient outcomes. The experience of the EU provides lessons about where to push for harmonization of domestic policies within the economic integration process. The recycling example stands out in this context as one in which harmonization facilitates trade and is compatible across countries. Clearly environmental problems located in border

regions also require policy coordination, but all three NAFTA countries have been working together in this area for many years, and this process is already facilitated by the NAFTA.

Future research that provides information on the market and nonmarket effects of existing policies would help manage and evaluate the environmental policy diversity that will exist in the long run. There is also a need for additional information specific to agriculture on the types of policies that exist and their environmental impacts. Ideally this would include detailed studies on sectors where producers have expressed concerns about costs of compliance with environmental regulation and its competitive consequences.

Overall, the case for harmonization of environmental policies pertaining to agriculture within North America is not strong, and the diverse conditions and specificity of optimal policy responses together with devolution of regulatory authority within the NAFTA countries suggests that convergence is neither likely nor socially optimal for environmental problems having no direct cross-border effects.

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ENVIRONMENTAL POLICY HARMONIZATION: COMMENT

Glenn Fox

Patricia Lindsey and Mary Bohman have provided us with an excellent overview of the harmonization of environmental regulations directed at primary agriculture in the context of trade treaties. Harmonization has a considerable popular following (Esty, 1994). Concerns about differences in environmental regulations were an important obstacle to achieving a resolution to the NAFTA negotiations and to securing passage of the relevant legislation by the signatories. This paper begins to de-mystify the concept of harmonization. It raises important and as yet unresolved conceptual issues. It identifies some lessons from the limited experience with the harmonization of environmental policies related to agriculture in the context of trade treaties.

ON THE MEANING OF HARMONIZATION

Lindsey and Bohman's paper raises an important question about the meaning of harmonization. They differentiate between harmonization of environmental effects and harmonization of regulatory burden. These are not the same thing. What *does* harmonization mean? Does it mean common outcomes, common policy standards and instruments, equalization of compliance costs, or, something that is not often considered, common institutions? Does harmonization mean that the form of environmental protection policies must be the same or that different policies achieve the same function? In the context of pesticide regulations, harmonization has come to mean reciprocal acceptance of registrations based on equivalency of testing procedures and standards.[1] Lindsey and Bohman argue

[1] One limitation of this paper is its failure to analyse the process and the progress in the harmonization of pesticide registration and the reciprocal recognition of registrations both in the European Community and between Canada and the United States. My impression is that there has been more deliberation than actual substantive progress on this front, both in the Community and in the North American context. Nevertheless, the attention that this issue has received would

(continued...)

persuasively that equalization of compliance costs of meeting environmental regulations is what most producer and environmental interest groups seem to have in mind. Not surprisingly, most economists (Bhagwati and Hudec, 1996) that have written about this issue have taken exception to the idea that regulatory compliance costs should be equalized across trading partners. The essence of their argument is that the expression of comparative advantage in absorbing emissions, driven by resource endowments, preferences, standards of living or technology, would be compromised by a requirement that all trading partners incur the same costs in protecting environmental resources. If trading partners enjoy substantially different standards of living, as is the case with Mexico compared to the United States or Canada, equalization of water or air quality standards could result in the poorer country consuming too much of a superior good and the richer country too little. If environmental resources have different values in different jurisdictions, why impose equal costs for the protection of those resources?

Economists' suggestions have not had much of an impact on the development of environmental agreements associated with trade treaties, however. And the public choice literature suggests that there may be good reasons for ignoring economists' musings in this area. The idea that national environmental regulations will be an accurate reflection of a country's comparative advantage in environmental services, including absorbing waste, makes heroic assumptions about the ability of the political process to discern preferences, resource availabilities and production possibilities. But we have realized at least since Arrow's impossibility theorem that collective decision making is problematical. It should, therefore, not be surprising that the North American Free Trade Agreement (NAFTA) and the related North American Agreement on Environmental Cooperation (NAAEC) encourages the recognition of equivalency of standards for protection of human and environmental safety as well as the use of the most cost effective (or least trade distorting) measures to protect environmental resources. In my judgement, the language of the NAFTA and of the NAAEC clearly indicates that environmental regulations are not to be used as disguised measures to protect domestic firms from foreign competition. Harmonization of the function but not necessarily the form of environmental policies seems to be encouraged.

The third and usually neglected sense in which environmental policies could be harmonized is at a comparative institutional level. For example, common institutions, such as anglo-american common law remedies against nuisance (see Rothbard, 1982 or Brubaker, 1995), can be operational in two different contexts and give different physical or financial outcomes. Common law remedies are animated by precedent and by actions initiated by plaintiffs. History is path dependent, especially the history of judicial decisions. A relatively poor country with an abundant endowment of natural resources and sparse population may not have experienced as many nuisance actions as a relatively wealthy and densely populated country. So, institutions could be harmonized but compliance costs, environmental outcomes and standards could be quite different. Harmonization of institutions across countries that

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[1](...continued)
make it a good case study of the pitfalls but also of the opportunities for environmental regulatory policy harmonization in an area that is of critical importance to primary agriculture.

follow a common law tradition that is different from anglo-american common law is a neglected issued within a neglected issue. If "environmental regulation" is conceived broadly as all institutions or measures that mitigate harm to water or air quality or indigenous plants and animals within a jurisdiction, then alternative institutions can jointly and severally support these aims. Most discussions of harmonization fail to recognize potential substitutions among institutions, such as common law remedies against trespass and nuisance, quantitative restrictions on inputs, outputs or emissions, taxes in inputs, outputs or emissions, the imposition of global emissions ceilings in a tradeable permits scheme or other measures. Harmonization of institutions that can substitute for one another is much more complex, but may be economically much more efficient, than harmonization of outcomes.

THERE ARE ENVIRONMENTAL REGULATIONS AND *THEN*...

Much of the literature on the harmonization of environmental regulations seems to have a deeper appreciation of the categories of market failure than it does of the categories of non-market or policy failure.[2] A more balanced perspective would beg the question "Are all 'environmental regulations' created equal?" Coase (1960, 1988) suggests that environmental regulations on the part of government may be a transaction cost economising alternative to individual negotiation or civil litigation. But some environmental regulations would seem to stretch these Coasian limits. An example of such a regulation that is discussed in Lindsey and Bohman's paper is the requirement that food packaging in the European Community meet pre-determined standards for ease of recycling. Another current case involves potential trade barriers for livestock products produced with the aid of synthetic hormones. They also refer to human health risks from exposure to nitrate nitrogen in drinking water.[3] The case of electric cars in California is another example that comes to mind. To my eye, the "environmental" benefits of some environmental regulations are far from clear. The NAFTA and the NAAEC both encourage the adoption of environmental policy measures that minimally distort trade.[4] I am not aware of any accepted procedure to

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[2] Wolf (1979) has furnished a general theory of non-market failure that indicates that regulation may end up having effects that were not intended by its creators. Any framework to analyse harmonization of regulations needs to be able to accommodate the insights of the economic theory of regulation (i.e., Peltzman, 1976) and the rest of the Public Choice (Mueller, 1979) literature.

[3] Giraldez and Fox indicate that the epidemiological and toxicological literature is equivocal regarding human health risks from such exposure at concentrations that exceed the 10 ppm standard by modest margins.

[4] The issue of using environmental protection as a disguised trade barrier is mentioned at several points in the paper. But it is not clear to me that trade policy analysts currently are in possession of the apparatus necessary to unmask disguises. In 1995, Luther Tweeten told me that the economist who can achieve this will have made his (or I would add her) career. How do

evaluate policy options on this basis, but I am confident that environmental and trade economists will soon be applying their tools to this question.

INTEGRATION OF GAINS FROM TRADE AND GAINS FROM ENVIRONMENTAL REGULATION

The trade policy literature, like the environmental economics literature, has not yet resolved how to compare and ultimately to integrate, measures of environmental benefits with measures of gains from trade. As James Buchanan (1969) pointed out almost thirty years ago, many environmental harms and benefits are not objectively observable. They occur as losses or gains in utilities and these gains and losses are subjective. This is one of the main reasons that the results obtained from models are ambiguous, although Lindsey and Bohman do not explicitly acknowledge this point in their review of this literature. We continue to wait for an acceptable process to translate these subjective magnitudes into objective ones.

LESSONS FROM EXPERIENCE

Lindsey and Bohman's discussion of the admittedly limited track record of harmonization of environmental regulations indicates considerable variation in that experience. There is substantial variation across actual attempts at policy harmonization on matters such as the timing of implementation of common standards, whether these standards are compulsory or voluntary or applied within each country with some discretion to reflect local environmental problems. Overall, their conclusion is not encouraging to advocates of harmonization of environmental regulations among trading partners. They point out that neither Canada nor the United States have yet achieved harmonization of environmental regulations directed at agriculture within their own borders. And jurisdiction is split between

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we protect against the "New Protectionism?" Lindsey and Bohman acknowledge that the Iron Triangle of environmental lobbyists, who have often been suspicious of trade liberalization generally, Labour Unions seeking to protect their members from competition from what they perceive to be lower cost labour abroad and managers and shareholders of firms currently operating with the benefit of protection from import competition can create pressure for harmonization of environmental regulations not for its own sake, but as a means to another end. Trade economists need to devise a framework to help separate the spurious arguments for harmonization from the legitimate ones.

the two senior levels of government, and the specific allocation of jurisdiction over particular emissions or resources is different in each country.[5]

POLLUTION HAVENS

One of the findings from the empirical literature that Lindsey and Bohman quote with apparent approval is that differences in environmental regulations have not been an important factor determining the location of emission intensive industries. But I wonder if it is appropriate to apply that generalization to the NAFTA context. Here we have three countries with two significantly different levels of economic and general institutional development that are contiguous. The geographic proximity of Mexico to large markets for consumer goods in the western United States could mean that what is generally true if one looks at the empirical literature globally may not hold in this particular instance. And isn't the allegation that the sum of lower wages, land costs and less stringent environmental regulations, acting in concert, might effect the location of firms?

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[5] As an aside, Lindsey and Bohman's discussion of environmental policies regarding livestock waste management are offered as examples of the harmonization of environmental outcomes, but I fail to see what is being harmonized, at least in the NAFTA context.

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COMPETITION POLICY, TRADE LIBERALIZATION AND AGRICULTURE

Gerald Robertson, W.T. Stanbury, Gernot Kofler and Joseph Montelro

INTRODUCTION

Over the past two decades, one of the most notable changes in public policy in Canada and many other countries has been the growing political strength toward advocating free trade or at least some reductions in government-created barriers to trade. During this period, Canada has been a party to a new GATT agreement, the Free Trade Agreement with the United States (or CUSTA), and the North American Free Trade Agreement (NAFTA). While these agreements contain many exceptions, exemptions, and special provisions, they send a clear signal of a need for change to policies in those sectors which have enjoyed various types of protection from foreign competition.

Trade liberalization has put pressure on a wide variety of domestic industrial policies which have been erected to provide financial support and to protect producers from foreign (and sometimes domestic) competition. The effect of trade agreements has been to make explicit and codify almost all the protections that remain. This raises their visibility (as does tariffication, etc.,) and so probably makes them more vulnerable in future trade negotiations. The framework for analysis within which this paper has been written is summarized in Figure 1. These relationships are the substance of this paper.

While the forces of trade liberalization have "worn away" some industrial policies in some sectors, in others most of these policies have been sustained largely by interest group lobbying. Thus it is fair to say that the agriculture sector in Canada - while "feeling the heat" - has so far been less directly affected by trade liberalization than many other sectors. But the pressures to reduce/end protectionist measures remain strong and appear to be growing.[1]

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[1] We also recognize that economic, hence political, interests in the agriculture sector have long been divided. Export-oriented farmers and processors want easy access to foreign markets and so favour policies which help to reduce barriers to their exports. Other interests focus on the domestic market and fear competition from imports as well as from within the domestic market. They want a wide variety of government policies (regulation, tariffs, quotas, subsidies, etc.) which

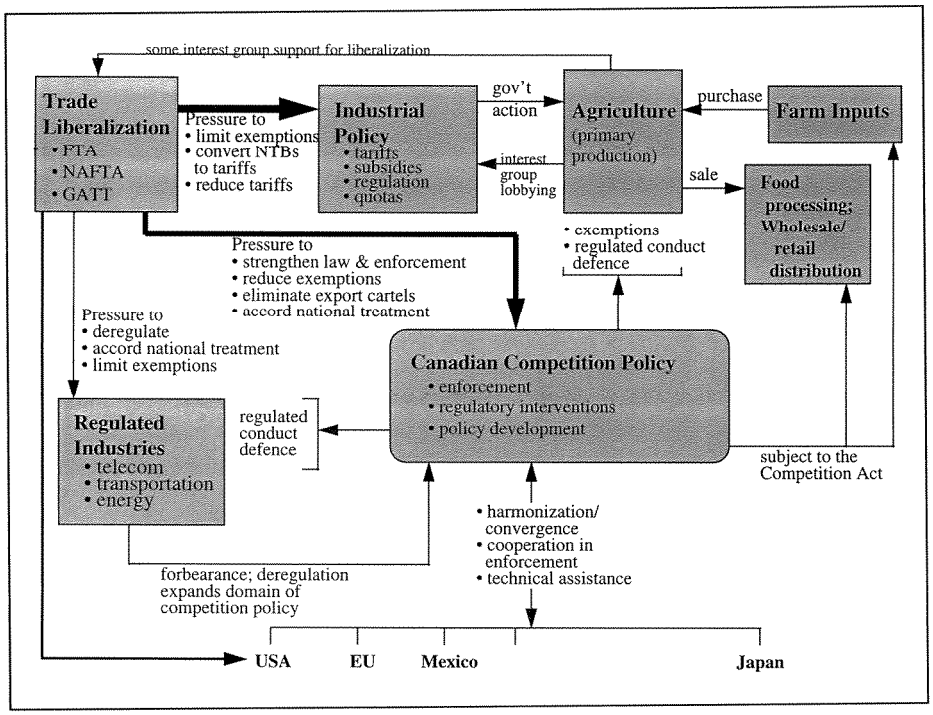

Figure 1. Framework for Analysis

In addition, trade liberalization has created pressures to modify national competition policies in the direction of harmonization.[2] Supporters of trade liberalization recognize that as various industrial policy measures are reduced or eliminated the importance of competition policy grows. Their concern is that private anti-competitive behaviour could

to a greater or lesser extent may restrict competition and raise their incomes (often in the name of protecting the family farm).

[2] Authors use different terms to describe harmonization including convergence, compatibility, and consistency. Some use one or more of these in a general sense, others use different terms for different meanings. For example in competition policy terminology, convergence is used to describe moving towards a particular model (i.e., the same substantive rules) whereas harmonization is used to mean maintaining differences in approach but basing all approaches on similar principles. In this paper the terms are used somewhat interchangeably in their general English sense. Generally, see *Interim Report on Convergence of Competition Policies* (Paris: OECD, 1994), and Derek Ireland et al.; "Globalization, The Canadian *Competition Act* and the Future Policy Agenda " (Paper prepared for the Conference "Trade Investment and Competition Policies: Conflict or Convergence?" Ottawa, May 18-19, 1993).

frustrate access to foreign markets despite trade liberalization.[3] Of course, the central role of competition policy is to prevent or eliminate anti-competitive behaviour. But not all national competition laws are equally effective in this regard. Another limitation on the effectiveness of national competition laws is their jurisdictional limitation. For example, international anti-competitive activity by multinational enterprises may be able to frustrate the operation of competition laws because they operate across several national boundaries and so may be beyond the reach of any national authority. Also, the competition laws of most advanced industrial countries contain specific provisions which are antithetical to free trade doctrines of national treatment, market access, etc. These include exemptions for export cartels, and exemptions for state-owned enterprises (even those which are engaged in commercial activities). Further, certain activities (even whole industries) may be exempted from competition or antitrust laws either by statute or by common law, e.g., the regulated conduct defence in Canada and the state action immunity doctrine in the United States.

Trade liberalization creates pressures (1) to strengthen both the specific provisions of competition law and its enforcement, (2) to reduce exemptions, and (3) to ensure national treatment for foreign corporations. It also puts pressure on industries subject to economic or direct regulation (based on price and entry controls) to deregulate, accord national treatment (largely by liberalizing or eliminating constraints on foreign ownership), and to limit the scope of exemptions from competition laws. In turn, changes occurring in regulated industries (notably forbearance and deregulation) expand the economic domain of competition policy (see Figure 1).

Canadian competition policy has been (and will continue to be) influenced by its linkages with the competition policies of other nations, most notably the United States. The nature and importance of these linkages have changed in the face of trade liberalization and the greater global integration of economic activity. In particular, there are pressures to harmonize national competition policies. Also, the existence of transborder private restraints of trade create a strong interest in cooperative enforcement efforts. In addition, countries like Canada are asked to provide technical assistance to countries creating a competition policy for the first time or seeking to harmonize their policy with major trading partners.

The purpose of this paper is to (1) discuss the linkages between trade liberalization and competition policy, (2) to identify emerging issues for the Competition Bureau including its role in agricultural policy issues, and (3) to examine the activities of the Competition Bureau as they relate to the agriculture/agri-food sectors, over the past decade. It is organized as follows. The next section outlines some of the key provisions of Canada's *Competition Act*. The third describes the regulated conduct defence and the statutory

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[3] An OECD study notes that "a 'weak' competition policy that condones predatory or exclusionary behaviour by domestic firms trying to keep out foreign goods, services or investments may effectively serve as a substitute for 'traditional' protection." Of course, "the difficulty lies in determining whether competition laws are relaxed for reasons appropriate to competition policy or for protectionist reasons". See OECD, *Antitrust and Market Access: The Scope and Coverage of Competition Law* (Paris: OECD, 1996), p. 9 and p. 10.

provisions which exempt large parts of agriculture from the purview of the *Competition Act*. The fourth briefly compares the competition laws of Canada, the United States, and Mexico. The fifth section briefly summarizes the Competition Bureau's enforcement activities and regulatory interventions as they relate to agriculture and agri-food over the past decade. The sixth section outlines the Bureau's policy development activities related to agriculture. The seventh section discusses the linkages between trade liberalization and competition policy. Our conclusions are set out in the last section.

OVERVIEW OF CANADA'S COMPETITION ACT

The *Competition Act*[4] is framework law which establishes basic rules for the conduct of businesses in Canada. It is designed to maintain and encourage competition in Canada in order to: promote the efficiency and adaptability of the Canadian economy; expand opportunities for Canadian participation in world markets while recognizing the role of foreign competition in Canada; ensure small and medium-sized enterprises have an equitable opportunity to participate in the Canadian economy; and provide consumers with competitive prices and product choices. The *Act* applies to all sectors of the economy with the exception of activities that are specifically exempted such as collective bargaining, and amateur sport, or are subject to direct regulation pursuant to other legislation. The Director of Investigation and Research is responsible for the enforcement of the *Act*. In addition to traditional enforcement actions, a program of compliance has been developed to inform the public about the application of the *Act*, and to provide Advisory Opinions upon request. Its purpose is to encourage voluntary compliance with the *Act*.

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[4] *Competition Act*, R.S., 1985, c. C-34 as amended. This *Act* replaced the *Combines Investigation Act* in mid-1986. W.T. Stanbury, "The New Competition Act and the Competition Tribunal Act: 'Not with a Bang but with a Whimper'," *Canadian Business Law Journal*, Vol. 12(1), 1986, pp. 2-42. The first competition law in Canada was enacted in 1889, see Paul K. Gorecki and W.T. Stanbury, "The Administration and Enforcement of Competition Policy in Canada, 1889 to 1952," in R.S. Khemani & W.T. Stanbury (eds.) *Historical Perspectives in Canadian Competition Policy* (Halifax: Institute for Research on Public Policy, 1991), pp. 53-154.

The key criminal provision of the *Act* is the conspiracy provision.[5] This section (i.e., 45), makes it an indictable offence for any person to conspire, combine, agree or arrange with another person to prevent, limit or lessen competition unduly.[6] It does not prohibit any or all types of agreements outright, necessitating an assessment of the likely effect of the agreement on a case-by-case basis. The *Act* lists several defences from the conspiracy provision. If the conspiracy relates only to the export of products from Canada, the conspiracy section does not apply provided that the conspiracy does not result in a reduction or limitation of the real value of a product or has restricted or is likely to restrict any person from entering into or expanding the business of exporting products from Canada or has lessened competition unduly in the supply of services facilitating the export of products from Canada. However, export cartels may be subject to foreign antitrust enforcement. A conviction under section 45 could result in imprisonment for a term not exceeding five years or to a fine not exceeding $10 million, or both.

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[5] In addition, s.47 makes bid-rigging illegal per se; s.49 makes certain agreements among banks illegal per se; and s.46 prohibits foreign directives to give effect to an agreement made outside Canada which, if made inside Canada, would violate s.45. For section 46, the penalty is a fine at the discretion of the Court. Section 47 carries a penalty of a fine in the discretion of the court or to imprisonment for a term not exceeding five years, or both. For section 47, the penalty is a fine not exceeding four million dollars or to imprisonment for a term not exceeding five years, or both. The history of the conspiracy provisions and their enforcement is discussed in W.T. Stanbury, "Legislation to Control Agreements in Restraint of Trade in Canada: Review of the Historical Record and Proposals for Reform," in R.S. Khemani and W.T. Stanbury (eds.) *Canadian Competition Law and Policy At the Centenary* (Halifax: Institute for Research on Public Policy, 1991), pp. 61-148. For a recent review, see Patrick Hughes & Margaret Sanderson, "Conspiracy Law and Jurisprudence in Canada: Towards an Economic Approach", *Review of Industrial Organization (forthcoming).*

[6] "Undueness" has been described by the Supreme Court of Canada as a serious or significant effect on competition as determined by a two stage examination. As a preliminary step, the relevant product and geographic markets in which the parties operate are defined. The first stage is to determine if the parties to the agreement have market power, which is the ability to unilaterally affect industry pricing. Market share alone, although a significant factor, is not sufficient to demonstrate market power; other factors, such as ease of entry, are also of importance. The Supreme Court has noted that possession of even a moderate amount of market power may support a finding of undueness. The second stage requires the court to look at the parties' behaviour to determine whether some behaviour likely to injure competition has occurred, or is likely to occur. It is a combination of market power and behaviour that makes a lessening of competition undue; particularly injurious behaviour may trigger liability even if market power is not considerable. About one half the acquittals in Canadian conspiracy cases are due to the Crown's failure to prove, beyond a reasonable doubt, that the effect of the agreement was to lessen competition unduly.

Price discrimination and regional price discrimination are prohibited in s.50(1)(a) and (b) of the *Competition Act*.[7] Price discrimination exists when a supplier charges different prices to competitors who purchase similar volumes of an article. The supplier must know that the purchasers are in competition and make a practice of discrimination for this to be an offence. Predatory pricing is prohibited by s.50(1)(c).[8] The offence consists of a policy of selling products at unreasonably low prices where the effect or tendency is to substantially lessen competition or eliminate a competitor or is designed to have that effect.

Price maintenance and refusal to supply because of a low pricing policy are illegal *per se* under s.61 of the *Competition Act*. Price maintenance involves an attempt by suppliers to influence upward prices charged by those supplied, or to discourage price reduction, by agreement, threat or promise. It is also illegal to refuse to supply a product or to discriminate against any other person because of their low pricing policy. Likewise, it is illegal to attempt to induce a supplier to engage in price maintenance. It is only necessary to show an attempt to influence prices in this manner. Suppliers or producers who make suggestions regarding resale prices must clearly state that customers are under no obligation to accept the suggested price. Price maintenance penalties include a fine at the discretion of the court or imprisonment for a term not exceeding five years, or both.

The misleading advertising and deceptive marketing practices provisions in sections 52 to 60 of the *Act* help to ensure an honest and effective functioning of the market.[9] Representations which are false or misleading in a material respect are prohibited. Unsubstantiated performance and durability claims, misleading warranties and misrepresentations as to regular price fall into this category. Penalties include a fine at the discretion of the court or imprisonment for not more than five years, or both. Promotional contests are also subject to the *Act* and the *Act* also prohibits double ticketing.

We turn now to the key civil reviewable provisions. The abuse of dominance provision is contained in section 79 of the *Competition Act*.[10] For the abuse of dominance provision to apply, one or more persons: 1) must substantially control a class of business throughout Canada, 2) have engaged in or are currently engaging in anti-competitive acts, and 3) the anti-competitive acts must prevent or lessen competition substantially. An illustrative list of anti-competitive acts is provided in section 78. The Tribunal may make orders prohibiting the continuance of the practice or may order alternative additional

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[7] Director of Investigation and Research, *Price Discrimination Enforcement Guidelines* (Ottawa: Minister of Supply and Services, 1992).

[8] Director of Investigation and Research, *Predatory Pricing Enforcement Guidelines* (Ottawa: Minister of Supply and Services, 1992).

[9] Director of Investigation and Research, "Misleading Advertising Guidelines", in the *Misleading Advertising Bulletin* (Ottawa: Consumer and Corporate Affairs Canada, 1991), pp. 1-19.

[10] Robert D. Anderson, S. Dev Khosla and Joseph Monteiro, "Market Definition in Abuse of Dominant Position Cases Under the Canadian Competition Act," *Abuse of Dominance and Monopolization* (Paris: OECD, 1996), pp. 89-112.

remedies. This civil law provision replaced the all-but unenforceable criminal law dealing with monopoly in 1986.

The civil law provisions covering mergers (sections 92-107) are intended to control transactions that substantially lessen or prevent competition.[11] The Tribunal shall not find that a merger or proposed merger prevents or lessens competition or is likely to prevent or lessen competition substantially solely on the basis of evidence of concentration or market share. In determining the matter, other factors may be considered. These respond directly to such developments as the growth of foreign competition, the importance of innovation to Canada's future economic development and the need to facilitate the efficient restructuring of Canadian businesses. Further, an explicit exception for transactions that yield efficiency gains that will be greater than and will offset the likely anti-competitive effects of the merger is contained in the provision (see s.96).

Section 125 of the *Competition Act* authorizes the Director to appear before federal boards, commissions or other tribunals to advocate the role and advantages of competition. A similar role may be played by the Director before provincial boards, commissions or tribunals at their consent or request under s.126.

THE RELATIONSHIP BETWEEN COMPETITION POLICY AND ECONOMIC REGULATION[12]

In Canada, the relationship between competition policy and economic regulation is governed by a doctrine known as the regulated conduct defence (RCD).[13] This doctrine provides a legal defence to individuals or corporations for conduct which would otherwise be a criminal violation of the *Competition Act*, when that conduct is subject to valid federal or provincial regulatory authority. Much of this doctrine has its roots in cases involving agriculture, for example *Rex v. Chung Chuck (1929)*, *Rex v. Simoneau (1935)*, *Cherry v. The*

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[11]Director of Investigation and Research, *Merger Enforcement Guidelines* (Ottawa: Minister of Supply and Services, 1991).

[12] This is based partly on Robert D. Anderson, Abraham Hollander and Joseph Monteiro, "Regulatory Reform and the Expanding Role of Competition Policy in the Canadian Economy, 1986-1996," *Review of Industrial Organization*, (forthcoming). Also see W.T. Stanbury, "Competition Policy and the Regulation of Telecommunications in Canada," in W.T. Stanbury (ed.), *Perspectives on the New Economics and Regulation of Telecommunications* (Montreal: Institute for Research on Public Policy, 1996), pp. 103-160.

[13] For general background, see W.T. Stanbury, "How Wide the Ocean: The Regulated Conduct Defence in Canada," *Antitrust Bulletin*, Fall 1984, pp. 577-604 and W.T. Stanbury, "Provincial Regulation and Federal Competition Policy: The Jabour Case," *Windsor Yearbook Of Access to Justice*, Vol. 3, 1983, pp. 291-347.

King ex rel. Wood (1937), Reference Re the Farm Products Marketing Act, (1957), etc. and is well known to individuals in agriculture and the agri-food sector.[14]

Before the RCD applies four elements must be present according to the Competition Bureau's interpretation of jurisprudence[15]: First, the relevant regulatory legislation must be validly enacted (i.e., it must be *intra vires* the responsible legislature). As stated in *Rex v. Chung Chuck, (1929)*:

> Whether or not s.498[16] is intra vires of the Dominion parliament, it cannot be said that to operate under an Act of the provincial legislature validly enacted enabling producers to market the products of the soil by orderly methods and under such restrictions as will tend to insure a fair return, is to commit a criminal offence with the meaning of s.498... Granted that the Act is intra vires following its provisions and acting under its sanction cannot constitute a criminal offence.

Second, the activity or conduct in question must not only fall within the scope of the regulatory legislation, but must also be specifically authorized by the relevant body.[17] Often the details of a regulatory regime are contained in its regulations or subordinate legislation. As the Supreme Court of Canada in *Jabour*[18] observed:

> "It should be noted that in none of these cases so far has there been any requirement in the provincial statute for approval by the province of any regulations adopted by the statutory body for the control of the activities in question."

Third, the regulator's authority must be exercised for the defence to be applicable, mere passive acquiescence or tacit approval will not suffice to displace the application of competition law. Finally, before the defence will apply, a court must be satisfied that the

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[14] These cases are reviewed in *A.G. of Canada et al. v. Law Society of British Columbia,* (1982) 5 W.W.R. 289, (1982) 2 S.C.R. 307.

[15]Submission of the Director of Investigation and Research to the Canadian Radio-television and Telecommunications Commission re: Telecom Public Notice CRTC 92-78, *Review of Regulatory Framework*, April 13, 1993, pp. 7-8, and Don Mercer, *The Regulated Conduct Defence and the Telecommunications Industry* (Ottawa: Competition Bureau, September 1995).

[16] Section 498 of the Criminal Code dealing with agreements in restraint of trade, now in s.45 of the *Competition Act.*

[17] Some commentators argue that a general authorization will suffice. See, e.g., Lawson A.W. Hunter *et al, All We Are Saying, Is Give Competition A Chance -- The Role of Competition Policy in Industries in Transition from Regulation to Competition* (Paper presented at a Roundtable on the Competition Act, Ten Years On: A Stock Taking, University of Toronto Faculty of Law, December 8, 1995).

[18] See *A.G. of Canada et al. v. Law Society of British Columbia*, (1982) 5 W.W.R. 289, (1982) 2 S.C.R. 307.

activity that has raised concern will not frustrate the exercise of authority by the regulatory body.[19]

Whether the RCD is applicable in the context of the non-criminal (i.e., civil) provisions of the *Act* is less clearcut. The view of the Competition Bureau is that:

> ...the courts may be willing to accept the enforcement of the non-criminal provisions (supported under the trade and commerce powers of the federal government), which prohibit certain anti-competitive conduct, a regulator might otherwise accept. In other words, judicial bodies may be more willing to accept the paramountcy doctrine once the criminal stigma is removed.[20]

It is worthwhile noting that in a recent case, the court accepted the regulated conduct defence in a civil case. For example, in a case involving the Law Society of Upper Canada, the applicants alleged that the Law Society's scheme which did not permit members from buying insurance competitively on the open market was contrary to the abuse of dominant position and tied selling provisions of the *Competition Act*. The Court found that the *Ontario Law Society Act* contained specific authority to operate an insurance scheme and therefore the regulated conduct defence applied.[21] The Director decided to not proceed with the inquiry even though it involved the civil provisions.

It has also been held that the civil provisions may be concurrently applicable to particular conduct, along with relevant regulatory statutes.

> ... even more important, is to recognize that it is the Director's view, that where there is concurrent jurisdiction, as in NB Tel, the Director will not hesitate to challenge anti-competitive conduct under the *Act*, even though the issue is simultaneously being addressed by a regulator under the umbrella of other legislation. However, should the Director be of the opinion that the regulator is adequately addressing the issue, then he may stand aside. In short, the

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[19] This point was established in *R. v. Canadian Breweries*, a competition law case. *R. v. Canadian Breweries Ltd.*, (1960) O.R. 601, 126 C.C.C. 133, 33 C.R. 1, 34 C.P.R. 179. For example, in the *Charterways* case, school bus operators were charged with bid-rigging tenders to a Board of Education for school transportation services. At both trial and appeal, the application of the RCD was rejected on the basis that the bid-rigging offence prevented the provincial authority from exercising the power given to it to protect the public interest. *R. v. Charterways Transport Ltd.* (1981), 32 O.R. (2d) 791.

[20] Mercer, *supra* note 15.

[21] In the matter of an Application pursuant to Rules 14.05(3)(d), (g) and (h) of the Rules of Civil Procedure between The Law Society of Upper Canada and The Attorney General of Canada and the Director of Investigation and Research, March 27, 1996.

Director is simply leaving a message that competition law can have a concurrent and independent role to play in the regulatory arena.[22]

As far as the agriculture sector is concerned,[23] the existence of exemptions and the application of the regulated conduct defence has limited the application of competition law in some important parts of agriculture, namely dairy, poultry, eggs, and grains and oilseeds. For poultry and eggs, the national marketing agencies have been specifically formed under the *Farm Product Agencies Act* which expressly exempts marketing agencies from the *Competition Act*.[24] Dairy is regulated pursuant to the *Canadian Dairy Commission Act*. Some grains and oilseeds are regulated by the Canadian Wheat Board and the Canadian Grain Commission in Western Canada and the Winter Wheat Marketing Board in Ontario. The Canadian Wheat Board is established under the *Canadian Wheat Board Act*.[25] To the extent that this statute specifically authorizes the key activities of these agencies, the *Canadian Wheat Board Act* effectively puts them beyond the purview of the criminal law sections of the *Competition Act* due to the regulated conduct defence which has been developed in the context of the Canadian criminal law provisions of the *Act*. However, given the appropriate circumstances, the Director would argue that they are not beyond the reach of the civil law provisions. There is no doubt that the rest of the agriculture sector falls under the ambit of the *Competition Act*.

There are pressures to extend competition laws to some parts of the agriculture sector, namely grain and oilseeds, dairy and poultry, specifically the activities of marketing boards. However, the impact has been rather limited, as government policy in this sector has not changed as much as in some of the other regulated sectors like transportation and communications. This may be due to less pressure from technological change in agriculture.

In light of the above, perhaps a related activity of forbearance should be mentioned. Forbearance is an action whereby the regulator explicitly withdraws from regulation of a specific activity based on a determination on his part that such action serves best the

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[22] Mercer, *supra*, note 15.

[23] This sector accounts for approximately 3 percent of Canada's GDP at factor cost. However, when all aspects of the agri-food sector are included (i.e., to reflect the volume of food processing, distribution and retail activity), the contribution of this sector is considerably more significant, representing between 9 to 10 percent of GDP. From other perspectives, the contribution of agriculture is even greater. For example the Agri-food sector accounted for 13.1 percent of total employment in 1985.

[24] Section 32 of the *Farm Product Agencies Act* states that, "Nothing in the *Competition Act* applies to any contract, agreement or other arrangement between an agency and any person or persons engaged in the production or marketing of a regulated product where the agency has authority under this or any other Act, under a proclamation issued under this Act or under an agreement entered into pursuant to section 31 of this Act to enter into such an arrangement."

[25] Larry Martin, Linda Cousineau and Vincent Amanor-Boadu, *Competition in the Agri-food Industry*, A Report for the Bureau of Competition Policy, August 6, 1994, p. 36.

purposes of relevant legislation. Forbearance starts with legislative authority to forbear, a determination by the regulator that the private actions of market participants serve the purposes of relevant legislation as well if not better than regulation. By forbearing the regulator refrains from certain forms of market intervention, he does not however abdicate or transfer responsibilities. Forbearance is reversible (i.e., if the regulator resolves that the assessment of market performance was wrong, or that changes in the marketplace no longer warrant a reliance on competitive processes, the status quo ante can be restored). Forbearance does not relieve the regulator from the duty of monitoring whether the forborne activities are carried out in a manner consistent with the relevant legislation.[26] Further, forbearance may be conditional or unconditional, in whole or in part, it may apply to some sellers in a market or to all of them.

Principles of whether or not to forbear, for example, have been set out with regard to telecommunication in a recent decision.[27] The combination of RCD and forbearance is a flexible and effective way to monitor for anticompetitive behaviour especially during the transition from economic regulation to competition.[28]

COMPARING CANADIAN, UNITED STATES AND MEXICAN COMPETITION LAW AND POLICY

This section briefly compares the competition laws of the three trading partners: Canada, United States and Mexico. Competition law in the United States is based on the *Sherman Act*, the *Clayton Act*, the *Robinson-Patman Act* and the *Federal Trade Commission Act* and in Mexico it is based on the recently enacted *Ley Federal de Compentencia Economica* (LFCE).[29] The major areas that will be briefly reviewed are as follows: the objectives of the laws and policies, conspiracy provisions, monopoly provisions, price discrimination and predatory pricing, the merger provisions, and the application of these laws to regulated industries.

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[26] See *Telecom Decision CRTC 95-19*, "Forbearance - services provided by non-dominant Canadian carriers," Ottawa, September 8, 1995.

[27] See CRTC Decision, *supra*, note 26.

[28] For a further discussion see Stanbury, *supra*, note 12.

[29] See *Report of the Task Force of the Antitrust Section of the American Bar Association on The Competition Dimension of The North American Free Trade Agreement* (American Bar Association, Summer 1984), p. 81.

The primary objective of competition policy in Canada has already been examined in the overview.[30] In the United States, the goals of antitrust have evolved over history with emphasis on promotion of economic efficiency and maximization of consumer welfare.[31] The primary goal of Mexico's competition law is the promotion of economic efficiency. While the U.S. law appears to be most oriented towards consumer welfare, the Mexican law is not explicitly concerned with consumer surplus, protecting small business or redistribution. The Canadian law appears to be somewhere in the middle addressing concerns of efficiency and economic opportunity for small and medium-sized enterprises, and consumer welfare.[32]

The conspiracy provision in s.1 of the *Sherman Act* in the United States applies to virtually every form of horizontal or vertical act that may restrain competition. It has the broadest scope of the antitrust statutes in the United States. For this section to be violated four conditions must be met. First, there must be at least two persons acting in concert; second, the restraint complained of must restrain trade or commerce; third, the trade or commerce must be trade or commerce among several states or with foreign nations; and fourth, the restraint must be unreasonable. In Canada in general, horizontal matters fall under s.45 of the *Competition Act* which cover agreements to fix prices, eliminate or restrict competitors or new entrants, allocate customers or territories or agreements not to compete for certain customers, fix or limit production quantities, and to manage granting of trade credit.[33] Article 8 of the *LFCE* in Mexico condemns contracts and combinations among competitors whose intent or effect is to fix prices for goods or services, restrict output, divide market segments or rig bids. The *per se* rule is applied to "garden variety" price-fixing, market-sharing and entry barring agreements in United States[34] and Mexico, whereas in Canada such agreements must be shown to have lessened competition "unduly." However, agreements to rig bids are illegal *per se* in Canada under s.47 of the *Competition Act*.

Monopoly and monopolization is covered in the United States under section 2 of the *Sherman Act* and such acts in their incipiency can be addressed under section 5 of the *Federal Trade Commission Act*. In Canada, the counterpart is the abuse of dominant position provision in section 79 of the *Competition Act*. Mexico has a general section on relative monopolistic practices (Article X) that deal with anti-competitive practices involving market power, although there is no specific provision which addresses abuses by a dominant firm. While abuse of dominant position is a civil reviewable matter under Canadian law, in the

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[30]For the evolution of the objectives, see Paul K. Gorecki & W.T. Stanbury, *The Objectives of Canadian Competition Policy, 1888-1983* (Montreal: The Institute for Research on Public Policy, 1984).

[31] See Robert H. Bork, *The Antitrust Paradox* (New York: Basic Books, 1978).

[32] In a wide variety of public statements, the Director of Investigation and Research has emphasized the efficiency goal.

[33] Also see section 49 of the *Competition Act* which prohibits a number of types of agreements among banks.

[34] The court-established "rule of reason" applies to other agreements in the United States.

United States, monopoly and monopolization can be addressed under both civil and criminal law, although most cases are brought under civil law.

Under the predatory pricing provision in Canada, the Director is of the opinion that the seller must have market power, the price must be below average variable cost, and the seller must be able to recoup its initial losses (which requires barriers to entry.)[35] In the United States, the matter can be dealt with under section 2 of the *Sherman Act* as pricing below cost can be used to establish an attempt to monopolize a market.[36] There is no specific test for establishing below cost pricing in the United States[37] as in Canada, further the issue of the ability to recoup lost profits is considered a threshold issue. While the wording of the laws pertaining to predatory pricing in United States and Canada are different, they lead to similar results.[38] In both countries, the matter falls under the criminal provisions. The *LFCE's* drafters in Mexico have explained in the Exposición de Motivos that predatory pricing can be addressed under the catchall provision of Article 10 (VII), provided that the predator has power to drive out actual and potential competitors. While the principles of predatory pricing in Mexico may be consistent with those in Canada and the United States, the enforcement policy on this matter could provide greater clarity for harmonization and convergence.

Under the price discrimination section in Canada, the seller must not only knowingly discriminate between competitors in the purchase of an article, but must engage in a practice of discriminating. In the United States, price discrimination is covered under the provisions of the *Robinson-Patman Act*. Unlike the U.S. law, the Canadian law does not require injury to competition and focuses on secondary line price discrimination, further there is nothing to prevent the law from being applied extraterritorially.[39] Furthermore, unlike the U.S. law,

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[35] Director of Investigation and Research, *Predatory Pricing Enforcement Guidelines* (Ottawa: Supply and Services Canada, 1992).

[36] It is also possible to deal with the matter under section 2 of the *Robinson-Patman Act*.

[37] A recent U.S. Supreme Court decision regarding generic cigarettes establishes a recoupment test very close to the Canadian *Predatory Pricing Enforcement Guidelines*. See *Liggett Group Inc. v. Brown and Williamson Tobacco Corp.*, Trade Case 69,817, *CCH Trade Cases 1992-1*, pp. 67,805-67,810.

[38] A two stage structural and behavioural approach in these cases is involved in both jurisdictions. See R. D. Anderson and S.D. Khosla, "Review of McFetridge and Wong on Predatory Pricing in Canada", *Canadian Competition Policy Record*, March, 1986, Vol. 7, No. 1, pp. 16-21 and R. D. Anderson and S.D. Khosla, "Recent Developments in the Competition Policy Treatment of Predatory Pricing", *Canadian Competition Policy Record*, September, 1985, Vol. 6, No. 3, pp. 1-16.

[39]This pertains to section 50(1)(a). However, geographic price discrimination in Canada is covered under section 50(1)(b), and requires that the seller engages in a policy of price discriminating which has the effect of substantially lessening competition or eliminating a competitor. See Director of Investigation and Research, *supra*, note 7.

price differentials based on cost differences or lower prices to meet competition is not a defence to a price discrimination charge in Canada, though it may be permitted if it is not a practice. Price discrimination is not specifically dealt with in the *LFCE's* provisions, nor mentioned in the Exposición de Motivos, however it is presumed that it could be covered under the catchall provision of Article 10 described above.

The merger provisions in all three countries are based on a substantial prevention or lessening of competition test.[40] However, there are minor differences between the three laws. The Canadian provisions contain an efficiency defence in situations where the efficiency gains would not have been realized without the merger, and the efficiency gains are greater than and will offset the likely anti-competitive effects of the merger. In determining whether the merger will be anti-competitive, the Canadian Competition Tribunal shall not base its decisions solely on evidence of concentration or market share and may have regard to a list of eight factors, including whether the party to the merger has failed or is likely to fail. While the law in the United States does not specifically contain clauses regarding failing firms or consideration of efficiencies, the application of the statute indicates that these matters will be taken into consideration.[41] Indeed, the failing firm defence is well developed in the United States.

In Mexico, although the merger law does not address failing firms, consideration is given to firms facing bankruptcy. Further, vertical and conglomerate mergers are viewed as efficiency enhancing and the merger provisions appear to be flexible.[42] All three countries have pre-notification provisions.

While the regulated conduct defence in Canada and the state action doctrine in the United States effectively exempts certain regulated industries, Mexico has no comparable defence or doctrine that would allow individual States to override federal competition law. One of the important goals of the LFCE was to expose state enterprises and the government itself to the forces of competition. The public sector would be subject to the new law, except those sectors expressly reserved to the State in the Constitution for example, oil, basic petrochemicals, etc. However, agents responsible for the above sectors will be subject to the competition laws when their acts go beyond those sectors.

There are a few other differences between Canadian and U.S. antitrust laws which should be noted. (1) While private actions are possible under the *Competition Act*, these are strictly for violations of the criminal provisions (though they can be used for a violation of a Tribunal order in a civil case), and only single damages may be awarded by the courts. In the United States, treble damages are available and private parties may sue for violations of

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[40]See subsections 92(1) and (2) of the *Competition Act* in Canada, sections 7 and 7a of the *Clayton Act* and articles 16 and 35 of Chapter III of the *LFCE*.

[41] See *U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines* (Washington: U.S. Department of Justice, 1992).

[42]*Antecedentes Económicos Para una Ley Federal de Competencia Económicas,* December 1992, pp. 15-17.

either the criminal or civil provisions. (2) Canada has a single public enforcement agency, the Competition Bureau, while the United States has two: the Antitrust Division of the Department of Justice, and the Federal Trade Commission. Their responsibilities overlap in some areas, e.g., mergers. (3) Some U.S. states have antitrust laws and in a few states enforcement is of some consequence. There is no counterpart in Canada. (4) In the United States, judges dealing with criminal antitrust cases are subject to the U.S. Sentencing Commission Guidelines. This has meant more frequent use of jail terms for individuals in price-fixing cases, for example, the Guidelines also provide a basis for much larger fines — such as the $70 million fine in the recent ADM case.[43] There is no counterpart in Canada. Jail sentences are very rare in Canada.[44] (5) On the matter of adjudication, the United States. uses the courts for both civil and criminal antitrust cases. Canada has a quasi-judicial tribunal (the Competition Tribunal) for all civil reviewable matters, notably mergers and abuse of dominant position. The courts deal with criminal cases. (6) Price maintenance is illegal *per se* in Canada. The U.S. courts are now close to a rule of reason approach under the influence of Chicago school thinking.

The generally modest differences in competition laws and policies of the three countries mean that the most important provisions of these laws are quite harmonious. Further, "fine tuning" could be done to bring about harmonization in some areas of conspiracy (i.e., undueness requirement, export consortium defence), price discrimination law (i.e., quantity requirement), etc.[45]

COMPETITION BUREAU ENFORCEMENT ACTIVITIES AND REGULATORY INTERVENTIONS

This section reviews the volume of enforcement activities related to agriculture and agri-food over the past decade and describes the Bureau's interventions before regulatory agencies.

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[43] United States Sentencing Commission, *Federal Sentencing Guidelines Manual* (1993 Edition) (St. Paul: West Publishing Company, 1993).

[44] An explanation is offered in W.T. Stanbury, "Prosecuting Individuals Under Canadian Competition Law "*Canadian Competition Policy Record,* Vol. 14(2), 1993, pp. 57-81.

[45] See concerns expressed in Albert C. Gourley, "Information Flow Across the Border: Is the Bureau of Competition Policy Considering the Public Interest Factor?," *Ottawa Law Review*, Volume 27, No. 2, 1995, pp. 233-259.

Criminal Cases

Between 1984/85 and 1995/96, the Bureau completed eight criminal cases related to the agri-food sector. Four involved the conspiracy provisions (s.45 or s.47), and four involved price maintenance (which includes refusal to supply). Convictions were obtained in all cases except the prosecution involving 13 tree fruit packers and the B.C. Tree Fruit Grower's Association. The Crown failed to prove that the agreement had lessened competition unduly.[46]

In the price maintenance cases, the fines were modest: $2000, $5000, $5000 and $9000. In the price-fixing cases, the fines ranged from $30,000 (one firm in the flour milling case) to $1 million (three firms in the flour-milling case). At the time (December 1990), the $1 million fine per firm was a record in a conspiracy or bid-rigging case (the present record is $2.5 million established in 1995). Note however, that the total amount of fines in the flour milling case ($3.41 million) amounted to only 0.6 percent of the value of the contracts on which the eight firms engaged in bid-rigging.

Abuse of Dominant Position

The *Competition Act*, which came into effect in June 1986, included important new civil law provisions dealing with mergers and abuse of dominant position. For two decades, the previous criminal law dealing with mergers and monopoly was unenforceable. Between mid-1986 and 1995/96, the five Applications to the Competition Tribunal concerning abuse of dominant position were completed. The first one involved the NutraSweet Company, producer of the artificial sweetener aspartame. The Director obtained an Order from the Competition Tribunal preventing NutraSweet from entering into or enforcing exclusive supply or tied selling agreements.

Mergers

Of the six (completed) merger cases brought by the Director before the Tribunal over the last decade, three related to the agri-food sector. One involved the acquisition of Palm Dairies Limited by four dairy cooperatives, and two involved the waste rendering industry. In Palm Dairies, the Tribunal denied the Director's Application for a Consent Order. When the Director then proposed to challenge the merger, it was abandoned. One of the Applications (re *Alex Couture Inc.*) concerning the waste rendering industry was withdrawn after delays and changes in circumstances. In the other (*Hillsdown*), the Tribunal refused to

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[46]About one-half the acquittals in s.45 (conspiracy) cases are attributable to the requirement that the agreement lessen competition *unduly*. In the United States a conviction would have been obtained because such an agreement is illegal *per se*.

grant the Director's request for an Order requiring the acquiring firm to divest one of its rendering facilities.[47]

As noted above, the new merger review process established in 1986 resulted in very, very few mergers being challenged by the Director in front of the Competition Tribunal. However, the review process influenced a somewhat larger number of transactions. Between 1987/88 and 1995/96, some 156 mergers in the agri-food sector were examined by the Competition Bureau, i.e., their review required at least two person-days — often many more. This number amounted to 9 percent of all mergers reviewed during the period.

For two-thirds of the 156 agri-food mergers reviewed by the Bureau the file was closed on the grounds that the merger posed no issue under the Act. For 28, an Advance Ruling Certificate was issued under s. 102 of the Act — indicating that the Director was satisfied that he would not have sufficient grounds to make an Application to the Tribunal, i.e., there was not likely to be a substantial lessening or prevention of competition.

The effect of the merger review process is that for the vast majority of cases where the Director expresses some concern, they are "settled" in his office.[48] This was true of agri-food mergers as well. Fifteen mergers were resolved by the Director indicating that he would monitor the situation for three years during which he could challenge it by bringing an Application for dissolution or partial divestiture. (Note that this has not occurred during the first decade the new merger provisions have been in effect.) In five cases, the Director's concerns led the parties to the merger to restructure the deal to alleviate those concerns. Thus the Director had no reason to bring any Application. In three cases, the proposed merger was abandoned in light of the concerns expressed by the Director following his review.

Regulatory Interventions

Between 1975/76 and 1994/95 the Bureau made 13 interventions in the agriculture or agri-food sectors or 6.6 percent of the total.[49]

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[47] *Canada (Director of Investigation and Research) v. Hillsdown Holdings (Canada) Ltd.* (1992) 41 C.P.R. (3d) 289 (Competition Tribunal, March 1992).

[48] The reasons for this are discussed in W.T. Stanbury, "An Assessment of the Merger Review Process Under the *Competition Act*," *Canadian Business Law Journal*, Vol. 20, 1992, pp. 423-63, and W.T. Stanbury, "The Merger Review Process In Canada: Information and the Structure of Incentives, "*Canadian Competition Record,* Vol. 16, No. 3, Autumn 1995, pp. 73-89.

[49] Generally, see Gordon E. Kaiser, "Regulation or Competition: Where do we go from Here," in R.S. Khemani & W.T. Stanbury (eds.) *Canadian Competition Law and Policy At the Centenary* (Halifax: Institute for Research on Public Policy, 1991), pp. 427-437 at p. 435, N.J. Schultz, "Commentary: Competition Advocacy in the Deregulation Era," *Canadian Competition Policy Record,* Vol. 10, No. 3, September 1989, pp. 42-43 at p. 42, Joseph Monteiro, "Regulatory Interventions by the Bureau of Competition Policy" in R.S. Khemani & W.T. Stanbury (eds.)

In the poultry sector, three interventions were made regarding chickens and two interventions were made on eggs. In the dairy sector, two interventions were made regarding milk. In the fruit and vegetable sector, two interventions were made pertaining to apples, two with regard to potatoes, one regarding sugar beets and one regarding maple syrup.

Seven representations were made to various federal boards and six to provincial boards. Six were made to the National Farm Products Marketing Council; two were made to the Ontario Chicken Producer's Marketing Board; two were made to the Régie des marchés agricoles du Québec; and one was made to each of the following: Royal Commission on the British Columbia Tree Fruit Industry; Alberta Public Utilities Board; and Special Measures Committee.

The issues addressed in interventions in various sectors of the economy have ranged from licence and access application, rate/tariff, merger-agreement, dumping-imports, etc. However, there have been two basic issues that have been addressed so far in the interventions in agriculture: supply-management (10 interventions) and price setting (three interventions).

COMPETITION BUREAU'S POLICY DEVELOPMENT ACTIVITIES

In addition to enforcement of the *Competition Act* and formal submissions to federal and provincial regulatory bodies, the Competition Bureau engages in efforts to influence a variety of public policies which relate to its statutory mandate, directly or indirectly. These policies are very largely those of the federal government, but the Bureau also participates in the policy development activities of several international bodies, e.g., the OECD. These policy-related activities have had a long history in the Competition Bureau.

Policy development activities arise not only from the initiative of the Bureau, but also because its advice is frequently sought by others as they develop policy. Some policy-related actions are relatively formal while others are very informal. Some involve a substantial amount of resources, others far less. In some cases, the Bureau acts alone while in others it is part of a team within the federal government. The Bureau tries to choose those policy activities in which it has a comparative advantage, and where there is a reasonable chance of having a beneficial effect, consistent with the objectives of the *Competition Act*.

From a Bureau perspective, there is a tradeoff between devoting resources to policy development and spending those resources enforcing the *Competition Act* or intervening before regulatory bodies. The advocacy of competition in the policy development process

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Canadian Competition Law And Policy At The Centenary (Halifax: Institute for Research on Public Policy, 1991), pp. 451-461, Joseph Monteiro, "Representation by the Bureau of Competition Policy: The First Fifteen Years," *Canadian Competition Record*, Vol. 15, March 1994, pp. 18-38, and Joseph Monteiro, *Interventions by the Bureau of Competition Policy* (Ottawa: Competition Bureau, May 1996, unpublished study).

may replace or reduce the need for enforcement actions or regulatory interventions in the future. They can also increase the responsibilities of the Bureau in terms of the amount of economic activity which is subject to the *Competition Act*. The best example is telecommunications where the Director has made a major effort to participate in the regulatory hearings of the CRTC.

The Bureau's policy development activities take several forms and occur in a variety of fora. These include:

- Regulatory interventions (see above),
- Participation in intra-departmental policy-making (since 1994, the Bureau has been lodged in Industry Canada),
- Participation in the federal inter-departmental policy process,
- Providing comments to policy advisory bodies,
- Participation in international bodies, e.g., OECD; various trade bodies,
- Financial support for and diffusion of research
  - by grants to academics and others outside the Bureau, and
  - by Bureau staff (some of which is used largely inside government, while other research is publicly disseminated), and
- Speeches and seminars.

Intra-Departmental Policy Activities The Competition Bureau participates in policy development within Industry Canada[50], the department in which the Bureau is located. The department's policy staff is vastly larger than the Bureau's reflecting the department's wide-ranging responsibilities. In some instances, coordination is required, e.g., where the Director is making regulatory interventions under s.125. As well, the Bureau's pro-competition position can come into conflict with an interventionist approach proposed by sector specialists in the department. The extent of the Bureau's involvement varies with the issue and the expertise of staff members.

Inter-Departmental Policy Activities Policy making in Ottawa is a collaborative process although the degree of involvement of particular departments and agencies varies across issues and over time. On a selective basis, the Bureau participates in the federal government's interdepartmental policy development process. This may include analysis, discussions and briefings regarding draft policy papers from other departments (e.g., comments on Agriculture and Agri-Food Competition Paper). The Bureau may also review and comment on Memoranda to Cabinet[51] and draft bills.

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[50] For example, officials participate in the Policy Integration Committee and the Assistant Deputy Minister Policy Coordination Group.

[51] As these documents are secret, examples cannot be provided.

The Director's *Annual Report* for 1989/90 indicated that the Bureau was involved in discussions with External Affairs and Industry, Science, Technology Canada, provincial trade officials and representatives of the beer industry in an attempt to reduce or eliminate interprovincial barriers to trade in the sale of beer in Canada. These talks, spurred in part by a GATT panel ruling that Canadian policies and practices in the beer, wine and spirits industries discriminate against imports, were also intended to lead to the elimination of barriers in trade to imported beer as well.

In addition, the Bureau participated in interdepartmental consultations on agri-food related to the implementation of the Canada-U.S. Trade Agreement (e.g. accelerated tariff removal), administration of imports of supply-managed commodities (e.g. poultry), assessment of retaliatory trade actions, and the development of the Canadian position on agriculture in the Uruguay Round of the Multilateral Trade Negotiations.

Providing Comments The Bureau also helps to shape public policy by providing comments or submissions at the request of ad hoc commissions or other bodies. Bureau officers have appeared before Parliamentary Committees (for example, The Review of Farm Inputs) and Royal Commissions (e.g., Royal Commission on the British Columbia Fruit Tree Industry). Further, the Bureau may respond to a public announcement. For example, it recently submitted a brief to a task force conducting a review of Canada Post, a Crown corporation.

The Competition Bureau also regularly provides comments on research and reports by other government departments and agencies. On occasion and upon request, it comments on private sector research relating to competition matters where the Bureau has developed expertise.

Participation in International Bodies One of the more recent and growing policy-related activities of the Competition Bureau is its participation in international discussions involving competition matters. Bureau officials are active participants in the activities in the OECD and in other international fora.[52] They also participated in the Canada-United States Agreement through interdepartmental work and industry consultations which addressed anti-dumping, subsidies and countervailing duties. One of the effects of trade liberalization has been the need for a number of countries to create competition legislation[53] or to amend their legislation extensively. Canada's approach has been seen as a model by other countries. As a result, the Bureau has hosted delegations from other countries to exchange ideas, information and to learn more about how the *Competition Act* works in Canada.

Research The Bureau conducts its own research on a variety of policy matters, especially those in which it has a long-term interest, for example, intellectual property rights, abuse of dominance, etc. Much of this research is made available in papers which are available to the

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[52] Discussions toward a Canada-European Commission accord on cooperation in the enforcement of competition law have also occurred.

[53] The new countries created by the breakup of the USSR are obvious examples.

public.[54] Between April 1991 and fall 1996, Bureau officials have written or been co-authors of 38 competition policy-related papers dealing with such issues as the role of competition policy as a dimension of Canadian economic policy, applied aspects of competition law and policy, theoretical aspects of industrial organization, competition policy and intellectual property rights, competition policy and economic regulation, Canadian and comparative competition policy institutions, and international aspects of competition policy. It also provides financial assistance for academics conducting research on competition policy-related issues.[55] Some projects are directly related to interventions before regulatory bodies, some are related to current competition policy issues, and some are done in anticipation of future developments.

Speeches and Seminars Senior personnel (particularly the Director) make speeches regularly to the business and academic community. These occasions are used not only to provide information about competition policy, but also to gain feedback. Some of these have been related to agriculture and agri-food sectors. For example, in May, 1984 the Director gave an address to the Consultative Committee to the Canadian Dairy Commission on the subject of changes in the structure and performance of the dairy industry.[56] In 1983-84, six speeches on buying groups were delivered by the Director or his staff.[57] In 1987, a speech on the new competition legislation was delivered at a meeting of the Grocery Products Manufacturers of Canada.[58] In 1988, a speech on mergers was delivered to Women in Food Industry Management.[59] The Director's staff presented a workshop for members of the Agri-Food Competitiveness Council in Montreal on March 30, 1993 on the *Competition Act*, with a special focus on the status of strategic alliances under the *Act*. The Bureau also sponsors seminars and workshops (e.g., Dairy Transition Workshop held at the University of Guelph). These not only help to diffuse the Bureau's own analysis and the research it has supported, but they also bring into the Bureau the ideas and analyses of others.

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[54]For a list of these documents, see *Annotated Listing of Economic and Policy Analysis and Research* (Ottawa: Economics and International Affairs Branch, Competition Bureau, Industry Canada, 1996). This list can be made available upon request.

[55] Larry Martin, Linda Cousineau and Vincent Amanor-Boadu, *Competition in the Agri-food Industry*, A Report for the Bureau of Competition Policy, August 6, 1994; Larry Martin and Linda Cousineau, *Update on Changes Made in Market Policy for the Supply Managed Grain and Oilseed and Red Meat Industries*, A Report for the Bureau of Competition Policy, March 30, 1995; and Randall E. Westgren and Larry J. Martin, *Public Policy Implications of the Resource-Based Theory of Firm Strategy*, A Discussion Paper for the Bureau of Competition Policy, November 6, 1995.

[56] Director of Investigation and Research, *Annual Report* for year ended, March 31, 1985.

[57] Director of Investigation and Research, *Annual Report* for year ended, March 31, 1985.

[58] Director of Investigation and Research, *Annual Report* for year ended, March 31, 1988.

[59] Director of Investigation and Research, *Annual Report* for year ended, March 31, 1988.

Inputs The inputs to the Bureau's policy development activities consist largely of augmenting the intellectual capital of officials and expanding the Bureau's data base. Thus the Bureau monitors current developments in a variety of policy fields. It also systematically reviews the academic literature related to its enforcement, regulatory interventions and selected policy issues. Linkage to academic research is strengthened by the annual appointment of an academic to the T. D. MacDonald Chair in Industrial Economics in the Bureau. Additional insights have been gained through the advice of academic and industry experts with respect to cases and broader policy issues. Further, the Bureau regularly invites Canadian and foreign experts in the field of industrial economics and competition policy to provide seminars for staff members.

Bureau's Approach In its policy development activities the Bureau urges governments to rely to the maximum extent possible on market forces supported by the application of the *Competition Act* to prohibit anti-competitive behaviour. That is not to say that there is no role for regulation in the economy, but rather that its scope and use should be narrowed to those instances where market forces and competition cannot be relied upon to discipline participants in the market place and to allocate resources efficiently. While recognizing that there may be transition costs when moving from direct or economic regulation to competition, the Bureau is much more concerned about the protection of competition in the market place than the protection of specific competitors. As long as there is no anti-competitive behaviour, competitors are expected to succeed or fail based on price, quality and service (and innovation over the longer term). On the other hand, most federal regulatory agencies are very much concerned about the economic well being of incumbent firms. For example, the convergence of telecommunications and broadcasting has led to extensive rhetoric by the CRTC and officials in Industry Canada and Heritage Canada on the subject of "fair and sustainable competition." The tradition of regulated monopolies has not yet adapted to Schumpeter's "gales of creative destruction".[60]

TRADE LIBERALIZATION AND COMPETITION POLICY

This section explores three aspects of the complex relationship between trade liberalization and competition policy. The first notes that a nation's trade policy and its competition policy can complement and reinforce each other or they may be in conflict in certain areas. The second aspect examines how the three main trade agreements signed by Canada formally relate to competition policy. The third aspect of the relationship between trade liberalization and competition policy is the way the former has, indirectly, helped to expand the scope of the formal agreement between Canada and the United States regarding cooperation in the enforcement of their competition/antitrust laws.

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[60] Joseph A. Schumpeter, *Capitalism, Socialism and Democracy* (New York: Harper & Row 1947).

Conflicts and Complementarities

As trade agreements reduce the "policy room" of national governments and as more countries are reducing the role of direct economic regulation, competition policy is becoming more important. The underlying assumption is that market forces, backed-up by competition or antitrust laws, can keep markets open and allocate resources efficiently and so improve economic welfare.

However, as Figure 2 indicates, there are both complementarities and conflicts between trade and competition policies. Trade liberalization and a competition policy which has limited exemptions and which is effective in striking down restraints of trade complement each other. Yet, "in practice, certain trade measures have anti-competitive effects and certain competition rules have trade-discouraging effects".[61]

An OECD[62] study suggests that four variables affect the strength or weakness of a nation's competition laws:

- scope of application to governmental entities and to government-encouraged or sanctioned conduct of state-operated enterprises and private firms;
- substantive rules governing specific business practices and arrangements;
- scope of sectoral coverage; and
- enforcement.

The types of business practices and arrangements often cited as hindering market access to foreign competitors include:

- horizontal arrangements among competitors; such as, boycotts of foreign firms, exclusion from trade associations, predatory use of standards, predatory pricing and collective exclusive dealing;
- vertical restraints, notably exclusive dealing; and
- abuse of dominance, predatory/exclusionary behaviour, e.g., predatory pricing, price discrimination, fidelity rebates (and discounts, etc.) and "aggressive marketing".[63]

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[61] OECD, *Trade and Competition Policies: Comparing Objectives and Methods* (Paris: OECD, 1994), p. 43.

[62] OECD, *Antitrust and Market Access: The Scope and Coverage of Competition Laws and Implications for Trade* (Paris: OECD, 1996), p. 11.

[63] OECD, 1996, *supra*, note 62, p. 12.

Figure 2. Complementarities and Conflicts Between Trade and Competition Policies

	Trade Policy	Competition Policy
Complementarities	When the policy aims to: • open markets • reduce public support of national firms	When the policy aims to: • control anti-competitive practices • remove statutory barriers to entry
Conflicts	When the policy seeks to: • use selective measures • provide lower/different standard of treatment to foreign firms • establish export/import cartels and other forms of trade management	When the policy allows: • exemption of regulated industries • exemption of export/import cartels • trade-affecting state-aids

Source: OECD, *Trade and Competition Policies: Comparing Objectives and Methods* Paris:OECD, 1994, p. 40

Even if they address the full range of anti-competitive practices which limit competition within the domestic market or restrict access to foreign competition, a nation's competition laws may be limited in their effectiveness if key sectors are exempted from their application. For example, in some countries agriculture, or transportation may be regulated precluding the competition authority from acting against price-fixing, abuses of single-desk selling, supply-management, export restraints, etc. However, the deregulation of a number of sectors is increasing the scope and coverage of competition laws. Even without deregulation, there have been attempts to constrain the exemption from becoming broader in the agricultural sector, where resistance has been particularly notable.[64]

Even if a nation's competition laws are harmonized with its trading partners and are effective, anti-competitive practices may still frustrate market access if those laws are not properly enforced. Assessing the quality of the enforcement of competition laws is complex and fact intensive. For example, the absence of cases in a particular sector could mean either that the competition agency is choosing not to investigate (perhaps due to budget restraints), or simply that there are no violations of the law. To determine which in fact is the case may

[64]Michael J., Trebilcock, "Competition Policy, Trade Policy and the Problem of the Second Best," in R.S. Khemani & W.T. Stanbury (eds.) *Canadian Competition Law and Policy At the Centenary* (Halifax: Institute for Research on Public Policy, 1991), pp. 29-44.

require an inquiry into the underlying facts; moreover, different observers may place different interpretations on similar facts.[65]

Enforcement of the competition laws can be complicated or frustrated by multinational enterprises (MNEs). Since their business operations often cut across several national boundaries, it can be difficult to detect and document the anti-competitive activities of "stateless corporations".[66] National antitrust authorities have little control over anti-competitive agreements made beyond their borders except through multinational antitrust cooperation agreements such as those between Canada and the United States.

In general terms, how can trade and competition policies be modified to reduce/eliminate conflicts and to increase the degree to which they reinforce each other? An OECD study states that three kinds of actions can be taken in this regard.[67] First, existing trade regulations can be changed so as to minimize their adverse effects on competition, for example, by converting various restrictions to tariffs which are more visible and likely to be eroded over time. Further it is necessary to get credible commitments to wear off trade management measures — including the "voluntary" type. At the same time, the exemptions for export and import cartels must be removed from competition laws.

Second, and even more difficult, remaining non-tariff barriers must be eliminated (reduced). Also, "binding disciplines in domestic policies that distort trade"[68] must be established, and the competition rules against collusion and monopolization must be consistently enforced in a transparent/apolitical fashion.[69]

Third, and most difficult, policy makers must "tackle structural/systemic differences and conflicting interpretations of competition rules which could distort trade and investment".[70] The former include rules/policies relating to mergers, government ownership, and regulated industries (often exempted). Conflicting interpretations are often found in exemptions granted to co-operating firms, the review of transborder mergers and the treatment of efficiency claims in collusion or monopolization behaviour that inhibit international trade. International harmonization will be difficult on these matters because there is little consensus.

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[65] See OECD, *Strengthening the coherence between trade and competition policies*, Joint Report, Vol. IV, No. 40 (Paris: OECD, 1996).

[66] See S. Rao, *Global (Stateless) Corporations and the Internationalization of Business: Implications for Canada and Canadian Marketplace Framework* (Ottawa: Industry and Science Canada Interim Report, July 13, 1993), p. 32.

[67] See OECD, 1994, *supra*, note 61, pp. 43-44.

[68] Including subsidies, preferential public procurement and incompatible technical standards.

[69] See OECD, 1994, *supra*, note 61, p. 43.

[70] See OECD, 1994, *supra*, note 61, p. 43.

Trade Agreements and Competition Policy

In an attempt, to ensure that the trading partners maximize the benefits under trade agreements and to see that the objectives of such agreements are not frustrated, some effort has been made to incorporate competition laws into trade agreements. The following reviews those attempts in the FTA, the NAFTA and the GATT.

Canada-U.S. Free Trade Agreement The Canada-U.S. Free Trade Agreement (FTA) did not contain any specific chapter on harmonization or convergence of antitrust laws between Canada and the United States. However, consideration of competition policy in the FTA arose as a result of the possibility of convergence of antidumping and antitrust laws. Antidumping and countervailing duty dispute settlement cases are dealt with in Chapter 19 of the FTA.[71]

In the past, trade remedy procedures (antidumping and countervailing procedures) had posed a serious threat to predictability and security of access and became a major trade irritant between the two countries. The two governments agreed that there was a need for conditions of fair competition to ensure equal access to the whole free trade area.

This is to be achieved through a three-track set of obligations. The first one is the development of mutually advantageous rules dealing with government subsidies and private anti-competitive pricing practices such as dumping, which are controlled through the unilateral application of countervailing and antidumping duties. The second is a bilateral review of any changes in existing countervailing or antidumping laws and regulations for consistency with the GATT and the FTA. The third is the review of countervailing and antidumping final orders by a panel. Provision was also made for the establishment of a Working Party under Article 1907.

An interdepartmental group was formed to develop the Canadian position under Article 1907. The Competition Bureau focused mainly on the area of dumping, where the possibility exists of relying on competition law as a substitute for the current anti-dumping system.[72] Research on the matter showed that there are no technical barriers to substituting competition law for the existing anti-dumping regime, and that replacement of the latter would provide clear benefits in terms of enhanced efficiency and competitiveness for both countries.[73] The dumping-antitrust convergence was suspended pending the negotiation and adoption of NAFTA.

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[71] See External Affairs Canada, *The Canada - U.S. Free Trade Agreement* (Ottawa: Minister of Supply and Services, 1988), pp. 267-293.

[72] An inter-departmental study was prepared in which the Bureau was involved. Director of Investigation and Research, *Annual Report* for the year ended March 31, 1993, p. 24.

[73] An attempt was made to gather support for this option in light of the steel anti-dumping cases. In this regard, the Prosperity Report, *Inventing our Future* (Ottawa: October, 1992, p. 28) proposed that anti-dumping trade law be replaced with competition law under the FTA within 18 months.

NAFTA The explicit inclusion of competition law in international trade agreements was achieved for the first time in the NAFTA signed by Canada, Mexico and the United States. Chapter 15 of NAFTA reflects a commitment in principle to maintain and enforce national competition laws and to promote effective competition law enforcement in the North American free trade area.

To achieve this objective, the parties are required to consult each other about the effectiveness of the measures undertaken by them. Further, the parties are required to cooperate on the enforcement of competition laws. This includes, mutual legal assistance, notification,[74] consultation and exchange of information on the enforcement of competition laws and policies in the free trade area. However, no method of dispute settlement is available in NAFTA for matters arising from conflicts in competition laws.

Regarding monopolies and state enterprises, the NAFTA does not prevent the parties from designating a monopoly, to which certain regulations apply. In such cases, where the interests of persons of another party may be affected, the latter shall be informed in writing whenever possible and conditions on the monopoly shall be introduced to minimize or eliminate any nullification or impairment of the benefits of the Agreement.

In addition, each party is responsible for ensuring: 1) that each designated privately-owned monopoly acts in a manner that is not inconsistent with its obligations under the Agreement (for example the power to grant import or export licenses, approve commercial transactions or impose quotas, fees or other charges); 2) that the monopoly acts solely in accordance with commercial considerations, except to comply with the terms of its designation (which are not inconsistent with non-discriminatory treatment or anti-competitive practices indicated hereafter); 3) that the monopoly provides non-discriminatory treatment to another party in its purchase of the monopoly good; and 4) that it does not use its monopoly position to engage in anti-competitive practices in competitive markets that affect the investment of another party. However, none of this applies to procurement by government agencies of goods and services for its own end use.

Further, the NAFTA does not prevent the parties from maintaining or establishing a state enterprise. However, such enterprises must act in a manner consistent with the nation's obligations under NAFTA dealing with investment and financial services whenever the enterprise exercises authority delegated to it (for example power to expropriate, grant licenses, approve commercial transactions, impose quotas, fees or other charges). In addition, the state enterprise shall accord non-discriminatory treatment in the sale of its goods or services to investments from another party in its territory.

Finally, Article 1504 of NAFTA provides for the setting up of a Working Group on Trade and Competition with members from the three countries with a mandate to report to the Free Trade Commission within five years on further issues relating to the relationship between competition laws and policies and trade in the free trade area.

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[74] This is mainly in the area of enforcement activity and is elaborated in the section on Canada-U.S. cooperation in enforcement below.

A senior official of the Competition Bureau is the head of the Canadian negotiating team for the Working Group. The group held its first meeting in Washington on March 29, 1994, and met thereafter in Ottawa, Mexico City, Washington, Ottawa and Mexico.[75] The Working Group is examining the relationship between trade and competition policy within the framework established by the provisions of NAFTA. As part of this work, the Competition Bureau took the lead role in tabling a paper on National Treatment under the competition laws of the NAFTA countries. The Bureau has also contributed to competition-related questions and issues in respect of Chile's proposed accession into NAFTA.[76]

GATT[77] The first attempt at convergence of national competition policies came in the 1948 Havana Charter for the International Trade Organization (ITO). Under the draft Charter, ITO Members were to take measures to prevent such anti-competitive practices as price-fixing, allocation of markets, boycotts, suppression of technology and unauthorized extension of patent monopolies. However, concerns about loss of sovereignty meant that the Charter was not adopted. Similarly, the ITO's successor, the GATT has never contained rules on competition policies *per se*.[78] The GATT deals only with government policies and therefore only indirectly encompasses the anti-competitive practices of private entities (e.g., government support of anti-competitive behaviour by the private sector).

The next significant initiatives to harmonize competition policies under trade agreements were introduced during the 1970s under the aegis of UNCTAD. Developing countries were looking for ways to control and regulate the business practices of the increasingly powerful multinationals. In 1980, a voluntary restrictive business practices (RBP) code was established. It reflected a compromise position between the United States and EC competition policies, and required multinational enterprises (MNEs) to conform to RBP laws of the countries in which they operate and encouraged greater enforcement efforts.

Around the same time, members of the OECD adopted Guidelines for Multinational Enterprises.[79] These guidelines focused on possible abuse of dominant market position by

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[75] See Director of Investigation and Research, *Annual Report* for the year ended March 31, 1994, p. 41 and March 1995, p. 29.

[76] Director of Investigation and Research, *Annual Report* for the year ended March 31, 1995, p. 29.

[77] This section draws heavily from *Competition Policy And The Agro-Food Sector*, OECD Working Paper, Vol. IV, No. 44 (Paris: OECD, 1996).

[78] Eleanor Fox, "Competition Law and the Next Agenda for the WTO", in OECD, *New Dimensions of Market Access in a Globalising World Economy* (Paris: OECD, 1995), pp. 169-194.

[79] *Competition Policy and the Agro-Food Sector, OECD Working Papers*, Vol. IV, No. 44 (Paris: OECD, 1996), p. 25.

requiring that companies refrain from predatory behaviour and from discriminatory pricing to limit access to markets or otherwise unduly restrain competition.

The Uruguay Round of GATT contains several competition-related provisions. For example, under the General Agreement on Trade in Services (GATS) there are disciplines covering most-favoured-nation treatment, monopolies and exclusive service suppliers and other anti-competitive business practices. The Agreement on Trade-Related Investment Measures (TRIMs) generally prohibits measures which require the purchase of domestic products or restrict the use of imported products. Of significance to the agri-food sector, because of the importance for biotechnology development, is the Agreement on Trade-Related Aspects of Intellectual Property Rights. It helps ensure protection against unfair competition with obligations and disciplines in such areas as copyrights, patents, protection of undisclosed information and control of anti-competitive practices in contractual licences.[80]

Most recently, ministers of the member countries of the World Trade Organization (WTO) met in Singapore for the first regular biennial meeting in December 1996. It was agreed that a working group would be established to study issues raised by members relating to the interaction between trade and competition policy, including anti-competitive practices, in order to identify areas that may merit further consideration in the WTO framework.[81] A second working group on trade and investment was also established. Though the future paths of the two working groups have not been determined, they were encouraged to draw on each others' work and the work of UNCTAD and other intergovernmental fora.

Trade Liberalization, Globalization and the Need for Closer Cooperation in the Enforcement of Competition Laws

Trade liberalization has spurred international trade and with it the close integration of natural economies. Even before the FTA and NAFTA, Canada and the United States, as each other's largest trading partner, have found it useful to exchange information and to consult each other on competition policy issues, particularly enforcement. The relationship has developed over time to facilitate cooperation in enforcement.[82] Recently, a far more

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[80]GATT Secretariat, *The Results of the Uruguay Round of Multilateral Trade Negotiations: The Legal Texts* (Geneva: GATT, 1994).

[81]World Trade Organization, *Singapore Ministerial Declaration*, No. 96-5315, Ministerial Conference, Singapore, December 9-13, 1996.

[82]The formal relationship began in 1959 when the Minister of Justice E. Davie Fulton and Attorney General William Rogers concluded a bilateral understanding. This was followed by another in 1969 by the Minister of Consumer and Corporate Affairs, Ron Basford and U.S. Attorney General John Mitchell, together with cooperative arrangements between the Department of Consumer and Corporate Affairs and the Federal Trade Commission. This arrangement was superseded in 1984 by a Memorandum of Understanding between Minister of Consumer and

comprehensive agreement between Industry Minister John Manley and Attorney General Janet Reno and Federal Trade Commission Chairman Robert Pitofsky was signed in August 1995.[83]

This new agreement is particularly significant in an era of increasing trade and the recent North American Free Trade Agreement. As the Minister of Industry Canada John Manley indicated "Effective enforcement of the *Competition Act* is essential to promoting Canada's economic welfare in today's global economy. Increasing trade between Canada and the United States benefits Canadian consumers and businesses. Closer cooperation between our two countries' competition authorities is essential to ensure that cross-border anti-competitive activities do not impair those benefits."[84] This formal international agreement deals with notification;[85] enforcement cooperation; coordination with regard to related matters; cooperation regarding anti-competitive activities in the territory of one party that adversely affect the interests of the other party; avoidance of conflicts; cooperation and coordination with respect to enforcement of deceptive marketing practices laws; consultations; semi-annual meetings; confidentiality of information that is exchanged; and communications under the agreement.

The Agreement in this regard goes beyond the earlier Memorandum of Understanding with regard to timing, notification of investigations that are relevant to the other countries enforcement activity, investigation of mergers involved in the two countries, remedial orders requiring implementation in both countries and interventions in regulatory or judicial proceedings in the other country. Notification is also required seven days in advance of enforcement action or settlement in particular cases notwithstanding prior notification in the original investigation.

Corporate Affairs Judy Erola and Attorney General William Smith and Federal Trade Commission Chairman James Miller. See Director of Investigation and Research, *Annual Report* for the year ending March 31, 1984 (Ottawa: Consumer and Corporate Affairs Canada, 1984), p. 22 and pp. 155-159.

[83] See "Industry Minister Manley Signs Canada-U.S. Competition Policy Agreement," *News Release* 7304, Industry Canada, August 3, 1995, pp. 1-2.

[84] See *News Release*, *op cit.* p. 1.

[85] Each country is to notify the other "with respect to its enforcement activities that may affect important interests of the other [country]".

In recent years, the number of notifications have been as follows:

Year	Canada to United States	United States to Canada
1990-91	4	24
1991-92	5	8
1992-93	11	20
1993-94[86]	5	20
1994-95[87]	21	39
1995-96[88]	9	23

Source: Director of Investigation and Research, ***Annual Reports.***

The enforcement of competition laws in importing countries against foreign-based cartels can face procedural and practical difficulties, for example the difficulty of obtaining evidence. Bilateral and multilateral co-operative arrangements for the enforcement of competition laws may help another country investigating those same export cartels (although at present all such arrangements are voluntary). Where they are absent, aggressive pursuit of a cartel organized beyond the affected nation's borders can be problematic.

This was the case, for example, when U.S. antitrust authorities prosecuted Japanese firms for fixing the price of thermal fax paper being sold in the United States. The agreement was made in Japan among firms exporting to the United States. While Mitsubishi Corp. was convicted of violating s.1 of the *Sherman Act*, Nippon Paper was acquitted at the trial level. This was overturned at the Appellate level.[89] Judge Joseph Tauro held that a criminal

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[86]Canada received requests for assistance in two criminal cases and made one of the United States.

[87]Canada obtained assistance in two cases which resulted in convictions and fines - thermal fax paper; and ductile iron pipe. See "Another Fine levied under the Competition Act, in Joint Canada- U.S. Investigation, *News Release* 7375, Bureau of Competition Policy, August 3, 1995; and "Canada Pipe Company Ltd. Pleads Guilty and Pays Record $2.5 million fine for Conspiracy Offence under the Competition Act", *News Release* 7331, Bureau of Competition Policy, September 27, 1995.

[88] These figures include all notifications under the US-Canada Agreement and the revised OECD Recommendation.

[89]*United States v. Nippon Paper Industries Co., Ltd.* [No. 96-2001, U.S. Court of Appeals, First Circuit] (March 17, 1997).

conspiracy by foreign nationals on foreign soil cannot be pursued under the *Sherman Act*.[90] The Japanese government argued that the U.S. prosecution violated international law and Japanese sovereignty by the extraterritorial application of its antitrust laws. It also indicated that the current talks aimed at the closer coordination of U.S. and Japanese competition laws could be "seriously undermined". William Niskanen, economist and head of the Cato Institute, said that the Antitrust Division's actions "clearly violate the spirit of trade law" and that "It threatens foreign investment in the United States if we hold the subsidiaries of foreign firms hostage for the behaviour of the parents abroad".[91] An antitrust expert noted that Japan was not interested in prosecuting the cartel members because their agreement did not harm their citizens.

The fax paper case also indicates the usefulness of the agreement between Canadian and U.S. competition authorities regarding application of their competition laws.[92] A joint investigation was conducted in Canada and the United States into the effects of the agreement.[93] Competition Bureau investigators found an agreement in Canada in 1991 (as well as one in Japan in 1990). Crown prosecutors obtained a guilty plea (after negotiations) from four corporations. Substantial fines were obtained.[94]

CONCLUSIONS

Tariffs have been reduced and government-administered import quotas and other quantitative restraints are being converted to tariffs and are likely to be reduced over time.

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[90] John R. Wilke, "U.S. trust busters flex muscles abroad," *Globe and Mail*, February 5, 1997, p. B 12.

[91] This argument seems illogical. The parent directed the subsidiary to implement in the United States the price-fixing agreement reached in Japan. The economic benefits of the agreement accrue to the parent. Why shouldn't a subsidiary be liable for the action of its parent in these circumstances?

[92] See "Agreement between the Government of Canada and the Government of the United States Regarding Application of their Competition and Deceptive Marketing Practices Laws," August 3, 1995.

[93] Francine Matte, *Business Across Borders Competition Law Enforcement in a Global Environment,* 11th Commonwealth Law Conference Canadian Bar Association Annual Meeting, Vancouver, August 27, 1996.

[94] Mitsubishi Canada and Mitsubishi Corp. pleaded guilty to one count under s.61 (price maintenance), one under s.45 (conspiracy) and one under s.46 (foreign conspiracy). Kanzaki Specialty Papers pleaded guilty to violating s.45. Rittenhouse Ribbons & Rolls pleaded guilty to violating s.61. New Oji Paper Company Limited pleaded guilty to a violation of s.45.

Trade liberalization through GATT and other treaties (e.g., FTA, NAFTA) has had (and will continue to have) wide ramifications for industrial policies, competition policy, regulated industries and state-owned enterprises. In trade-offs between national sovereignty and economic efficiency, it is evident that the material benefits of the latter are becoming more important.

As competition, trade and investment policies become more integrated, pressures are likely to increase for even higher limits on export/import arrangements, voluntary restraints, standards, intellectual property rights, investment restrictions and other competition-related barriers to trade. Under such a scenario, it may become increasingly difficult for the agriculture sector to resist trade liberalization pressures and pressures to eliminate the exemptions for supply management regimes.

In some ways, trade liberalization has become a new form of "collective imperialism". Ireland et. al. noted that, "It is argued that virtually any domestic policy which potentially could affect the free flow of goods, services, capital, technologies and people across national borders could find itself on the multi-lateral trade negotiating agenda of the future."[95] Even Canada's cultural industries, said to be exempt under the FTA, have proved to be vulnerable under GATT.[96]

Eliminating barriers to trade does not necessarily ensure free access to foreign markets, however. Restrictive business practices and discriminatory investment laws that limit foreign competition can offset more liberal trade laws. Market-sharing and output-restricting agreements are generally prohibited, but it can be difficult to distinguish between meeting competition and hindering access.[97] For these and other reasons, an effective competition policy is increasingly being seen as an important complement to trade policy reforms. Trade policy analysts recognize that the application of competition policy to governments themselves, state enterprises and various levels of government are very important given the size of the public sector and its influence on the private sector.

Governments may not apply the same criteria for their competition policies in their domestic markets as they do in their trade policies to foreign competition. For example, the competition laws of many industrial nations exempt export cartels from their conspiracy provisions. In other words, it is acceptable for domestic firms to exploit foreigners, but not domestic consumers. This is hardly consonant with a liberal trade policy.

The application of trade policy is embedded in international treaties and ultimately subject to international review and sanction — depending on the dispute resolution process.

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[95] Ireland et. al., *supra,* note 2.

[96] See, for example, Giles Gherson, "Canada' good ship Culture listing badly as barriers shot down," *Ottawa Citizen*, January 24, 1997, p. A10. Laura Eggertson et. al., "Copps sets stage for war over culture," *Globe and Mail*, February 11, 1997, pp. A1-A4.

[97] Americo Beviglia Zampetti and Pierre Sauvé, "New Dimensions of Market Access: An Overview," in *New Dimensions of Market Access in a Globalising World Economy* (Paris: OECD, 1995), pp. 13-22.

Competition policy is governed by national law and institutions (with the EU an important exception). This has led to increased pressure to harmonize national competition policies, and to make them complementary to the new trade agreements. Trade liberalization, combined with domestic pressures to reduce the scope and intensity of price and entry control-type regulation, was seen increasingly as substitution of market forces backed-up by competition policy for direct regulation. Competition policy and direct regulation are quite different modes of social control.[98]

The growing importance of competition policy through its expanded economic domain has raised some questions about whether it is "up to the job". Do competition law enforcers have sufficient resources?[99] Do they have the specialized knowledge of the industries/activities newly brought under their jurisdiction? Can the authorities respond quickly enough to be effective in light of often rapid changes in competitive strategies? Do they have the legal tools[100] and necessary cooperative arrangements to be effective in dealing with transborder anti-competitive activities in the age of the multi-national enterprise? If corporate economic activity is "globalizing", can antitrust authorities do their job effectively without either some supra-national laws and enforcement organization?

Canada's Competition Bureau has benefited from Ottawa's more comprehensive agreements with Washington to exchange information and cooperate in the enforcement of competition/antitrust policy. In 1986, in a little noted amendment, Canada effectively expanded its competition law jurisdiction to price-fixing and related agreements made outside Canada, but which, if made inside Canada, would be illegal. The first use of s.46 of the *Competition Act* did not occur until June, 1993, and it has been used successfully in several other cases since then. Yet there has not been a legal challenge to the apparent extraterritorial reach of s.46 unlike the situation in the United States which has no counterpart legislation.

It is likely that greater information sharing in the name of the cooperation between Canada and the United States in competition antitrust law enforcement will be strongly

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[98] See Stanbury, *supra,* note 12.

[99] A recent paper indicates that both the legal responsibilities and economic domain of the Competition Bureau increased quite substantially at least by one quarter - yet its resources declined, particularly in the past few years. (See W.T. Stanbury, "Expanding Responsibilitites and Declining Resources: The Strategic Responses of the Competition Bureau, 1986-1996," *Review of Industrial Organization*, forthcoming.) This situation does not bode well if - as expected - the Bureau's responsibilities increase in the future in light of further trade liberalization and deregulation. The Competition Bureau has found that the globalization of economic activity can also mean that restraints of trade now more frequently cross borders. Officials state that they are finding more international cartels. This requires closer cooperation with foreign antitrust authorities, most notably those in the United States and the EU.

[100] Strategic alliances because they can takes so many different forms in terms of both horizontal and vertical forms and because they can be like the Curate's egg, are just one example. See Ireland et. al., *supra*, note 2, pp. 12-13).

resisted by large firms and major trade associations in Canada. This can be seen in the division of views in the report of the Consultative Panel on proposed amendments to the *Competition Act* relating to such information sharing.[101] Business interests wanted elaborate safeguards. While the present law, the *Mutual Legal Assistance in Criminal Matters Act,*[102] deals with the criminal provisions of both countries competition laws, it does not address civil law provisions which became much more important in Canada in the 1986 legislation.

The ability of "protectionist" interests in Canada's agriculture sector to keep much of the sector immune from trade liberalization will continue to be tested. As industrial policies in other areas are reduced or eliminated, agriculture will increasingly be seen as an anomaly; this could make it harder for protectionist forces to resist those wanting freer trade.

Mark Twain observed that prediction is mighty hazardous — particularly when it concerns the future! Suitably warned, we still believe that it is useful to try to identify issues in agriculture which are now emerging or which are likely to emerge in the next two to three years in which the Competition Bureau might well be involved.

The United States would like to find ways to gain access to agricultural markets protected by the high tariffs which support the Canadian supply management system.[103] These markets are essentially exempt from NAFTA and, as a result of the GATT, have the protection of very high tariffs.[104] There will be pressure bilaterally and in the next round of the WTO negotiations for reductions in the tariff levels and any subsidies. There will be continued pressure from both the United States and from some domestic producers for

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[101] See Ed Ratushny, chairman, *Report of the Consultative Panel on Amendments to the Competition Act* (Ottawa: Competition Bureau, March 7, 1996).

[102] On March 18, 1985, the Canada-United States Treaty on Mutual Legal Assistance on Criminal Matters was signed. It was proclaimed in force October 1, 1988. See Canada Gazette Part II, Vol. 122, No. 22, October 26, 1988, pp. 4390-4391. The text can be found in *Mutual Legal Assistance in Criminal Matters Act*, RSC 1985, c. 37, 35-36-37 Elizabeth II.

[103] Early in January 1997, the U.S. Trade Representative and Secretary of Agriculture announced a joint study of Canada's new dairy pricing system to see if it violates NAFTA, see Peter Morton, "U.S. renews fight over dairy and poultry pricing," *Financial Post*, January 8, 1997, p. 8. Trade Representative Charlene Barshefsky indicated that the United States would act to reduce Canada's high tariffs on dairy and poultry products and to curb Canada's export of wheat and barley. See Peter Morton, "Barshefsky rattles sabre at Canada", *Financial Post*, January 30, 1997, pp. 1-2. International negotiations on agriculture are scheduled to start again in 1999, but Ottawa has already said that the protection of dairy and poultry farmers will not be on the table.

[104] The tariffication of quotas on imports into Canada of certain agricultural products under WTO rules effective January 1, 1995 resulted in a huge increase in tariffs, see *Financial Post*, August 22, 1996, p. 1. For the interim decision see Drew Fagan, "Canada triumphs in tariff battle," *Globe and Mail*, July 16, 1996, pp. A1-A2.

further changes to the Canadian Wheat Board. The changes being considered now essentially change the future of the governance of the organization.[105]

Continued pressure to harmonize any differences in technical regulations and to recognize the certifications of other countries are expected. This will likely continue whether or not the different treatment is "justified", or is seen as a barrier to trade. In any event, different treatment will be seen to cause "systemic friction" to the free flow of goods and services internationally. It is also expected that there will be continued pressure for harmonization and convergence in competition and antitrust legislation, largely from multinational firms. This will likely continue whether or not the different treatment is "justified".

What role might the Competition Bureau play in these developments? Obviously it will continue to be involved in the appropriate discussions concerning the harmonization and convergence of competition and antitrust laws. This may include, to the extent possible, the conclusion of a Memorandum of Understanding similar to the 1995 Agreement between Canada and the United States on cooperation with respect to enforcement activities.

At the other end of the scale, since the harmonization of technical regulations involves a large amount of rather specialized knowledge, the Bureau will probably not play much of a role in this area. It will continue to argue that governments should try to accomplish their goals at the least cost in terms of reductions in economic efficiency. In many cases this will involve trying to prevent government or private actors from creating unnecessary barriers to trade in the first place.

In the other two areas, the transition from "supply management" to more reliance on market forces and the future of the Canadian Wheat Board, advice from the Competition Bureau could be useful to the federal government. As mentioned above, the Bureau is not opposed to the use of direct regulation in principle. Rather, it believes that globalization, trade agreements and technological changes are obviating the need for much price and entry-type regulation. It is now possible to rely more heavily on market forces backed-up by the enforcement of the *Competition Act* to discipline anti-competitive behaviour in markets that are presently subject to direct regulation.

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[105]Scott Haggett, "Farmers to vote on wheat sale," *Financial Post,* October 5, 1996, p. 11. More generally, see Diane Francis, "Originally a savior, wheat board has become an oppressor," *Financial Post*, February 18, 1997, p. 21.

—DISCUSSION—

TRADE LIBERALIZATION AND COMPETITION POLICY: INFLUENCES ON AGRIBUSINESS AND INVESTMENT IN NAFTA COUNTRIES

Thomas L. Sporleder

INTRODUCTION

Trade Policy Background

The advent of the North American Free Trade Agreement (NAFTA) laid the groundwork for negotiations to establish a Free Trade Area of the Americas (FTAA) by the year 2010. Western Hemisphere (WH) market integration reduces or eliminates trade barriers among member countries, providing more open markets and freer movement of investment capital across national boundaries. The formation and expansion of a free trade agreement in the WH increases export and investment opportunities for agribusinesses in member countries, particularly as the demand for goods and services increases with the growth in the number of consumers and their corresponding income levels.

One factor that may influence the location of production is trade policy. In December 1994, Western Hemisphere (WH) countries met in Miami to begin negotiations to establish a "Free Trade Area of the Americas" (FTAA) by the year 2010. These negotiations closely followed the passage of the North American Free Trade Agreement (NAFTA) and the ratification of the Uruguay Round under the General Agreement on Tariffs and Trade (GATT) by 125 member nations. While the GATT is a world agreement that reduces trade barriers, the NAFTA is a free trade agreement that seeks to remove barriers to trade between the United States, Mexico, and Canada over a 15-year time frame.

Thirty-two WH countries participated in the Summit of the Americas. A theme of the Summit was economic integration to provide more open markets and freer movement of investment capital across national boundaries within the WH. A WH Free Trade Agreement would expand the NAFTA to include countries in Latin

America, the Caribbean, and South America. Several trading blocs have already emerged within the WH.

Agreements among WH countries already established include: the Latin American Integration Association (ALADI); Central American Common Market (Bolivia, Columbia, Ecuador, Peru, Venezuela); Caribbean Community and Common Market (CARICOM); Group of Three (Colombia, Mexico, Venezuela); and Southern Cone Common Market (MERCOSUR - Argentina, Brazil, Paraguay, and Uruguay). In mid-1995, Chile was negotiating for inclusion into NAFTA, however, incorporating established trading blocs into NAFTA is considered simpler than adding some thirty-five independent countries individually.

The NAFTA should provide Mexico an advantage over Latin American and Caribbean countries in their exports to the United States. Foreign direct investment (FDI) also should be more attractive in Mexico than in other Western Hemisphere (WH) countries as a result of the NAFTA. For these reasons, countries in the WH will likely seek membership in the NAFTA.

Purpose

The purpose here is to briefly review and provide some comments on the Robertson, Stanbury, Kofler, and Monteiro manuscript entitled *Competition Policy, Trade Liberalization and Agriculture* presented at this Workshop. An additional aspiration here is to provide some focus on Mexico, particularly since the work by Robertson et al provides scant comment about Mexico. As a final agenda item and because this session also includes investment, the attention to Mexico focuses on the factors influencing investment, including some general economic factors and Mexican federal competition and trade policy changes which influence foreign direct investment (FDI).

COMPETITION POLICY, TRADE LIBERALIZATION AND AGRICULTURE

The lengthy manuscript by Robertson et al. offers a comprehensive treatment of competition policy in North America. On the whole, they view changes in trade policy, as embodied by GATT and NAFTA, as substantially influencing industrial and competition policies in the United States and Canada. In their view, the broad result of these policies are trade-offs where economic efficiency gains are made at the expense of national sovereignty. They even refer to the influence of these policies as "collective imperialism" (Robertson, et al, p. 54). This view is perhaps jaded given the global events which move toward capitalism and away from socialistic economic systems.

Robertson et al also assess, in some detail, the benefit of Canada's Competition Bureau linkage with the United States Department of Justice and Federal Trade Commission.

On balance, the authors conclude that the enhanced exchange of information assists Canadians in their competition antitrust law enforcement. The enhanced harmonization or cooperation and information exchange across national boundaries in terms of governments is certainly a spillover effect of freer trade policies.

A major contribution of this paper is to provide an extensive assessment of the Canadian Competition Bureau relative to agriculture. They provide the reader with detailed information concerning the interventions made by the Canadian Bureau of Competition relative to agriculture. They cite 197 total interventions between 1975 and 1995. Only 13 of these interventions involved agriculture or downstream firms in the value added food chain. The detail of these interventions provided in the manuscript is useful to all students of competition policy. However, the authors may under-value the extent of structural adjustment that will be occurring in agriculture in the Western Hemisphere over the next decade.

One topic, examined in notable detail in the Robertson et al manuscript, is merger activity, especially in Canada. The recurring theme here appears to be from the viewpoint of prejudging merger activity, in the sense of the Canadian government either allowing the merger or disallowing the merger on an *ex ante* basis. It is interesting to note that over the last decade or so, the United States government has adopted a permissive policy regarding merger formation. Concomitantly the United States has been less permissive in terms of monitoring performance of the merged companies. The United States has evolved to a point where competition policy, at least with respect to merger activity, will allow mergers but more closely monitor performance of the resulting firm. This appears to be a substantial difference in Canada and the United States regarding merger policy.

MEXICAN COMPETITION POLICIES AND FACTORS INFLUENCING FDI

Robertson et al pay scant attention to Mexico. The intent here is to provide some focus on Mexico. Robertson et al provide much information and analysis concerning United States and Canadian competition policy. However, Mexico's problem is not so much competition policy as it is investment, or lack thereof. Thus, investment is an important part of the emphasis on Mexico provided here.

There are some widely recognized factors that influence foreign direct investment over time:

- General economic conditions
- National laws relative to FDI
- Labor conditions
- Trade barriers
    - Licensing
    - Tariffs

In this context, it is prudent to examine national laws relative to FDI.

Mexico's economic policy evolution witnessed a major shift during the 1980s. In general, government intervention dramatically declined and privatization was encouraged. Prior to the 1980s, some basic laws influenced foreign direct investment in Mexico. These included the 1) Land Tenure Law, 2) Article 27 of the 1926 Organic Law, and 3) the 1973 Law to Promote Mexican Investment and Regulate Foreign Investment.

Based on the Land Tenure Law, Mexico redistributed massive landholdings. The 1910 Mexican Revolution fostered the *ejido* system of collectively held land. *Ejido* land can only be inherited — not bought, sold, or rented. Furthermore, e*jido* land comprises about 75 percent of crop area and 50 percent of the land area.

Article 27 of the 1926 Organic Law prohibited stock corporations from acquiring, owning, or operating farms. It also sets legal limits on foreign ownership of land.

The 1973 Law on Foreign Investment placed limits on foreign companies' investment in Mexican enterprises. Also, approval for investment had to be granted by the National Commission of Foreign Investment.

The contemporary situation is that e*jidos* may now legally rent or sell their land due to changes in Mexico's laws in 1992. Corporate farms may manage up to 2,500 hectares of irrigated land, even though a 100-hectare limitation applies. The 1989 *Regulations on Foreign Investment* allowed foreign investors to hold 100 percent of a new enterprise in Mexico in "unrestricted" economic activities. However, industrial projects still require prior approval by the National Commission of Foreign Investment.

As part of the landscape of Mexican competition policy and investment policy, the Maquiladora Program originally was used to circumvent strict laws against FDI. Originally a maquiladora company had to locate within 20 kilometers of the U.S. border. The situation now, however, is that maquiladoras are mostly foreign-owned businesses with a home base in the U.S., Japan, Sweden, France, Canada, Taiwan, Hong Kong, and Korea. They operate under favorable customs treatment and liberal FDI regulations in order to promote exports from Mexico. Maquiladoras import machinery, equipment, and raw materials into Mexico duty-free and value-added products are exported. The Maquiladora Program has been liberalized over time. A maquiladora company now may sell up to 30 percent of its output in the domestic Mexican market and locate anywhere within Mexico except the urban areas of Mexico City, Monterrey, and Guadalajara.

FOREIGN DIRECT INVESTMENT IN MEXICO

Investment by a company or individual in new facilities, purchasing interest in whole or part of an existing enterprise, or purchasing land in a country outside the company or individual's home country is considered to be FDI. In 1994, SECOFI, an official Mexican government data source, estimated inbound FDI to be $8.0 billion, a four-fold increase since

1984, Figure 1. Although data are limited, an examination of the amount of direct investment by sector in Mexico is also interesting, Figure 2. The amount of direct investment in Mexico from the U.S. in 1992 was at an annual rate of US$ 23.9 million. Of this, only US$ 1.3 million, or 5.4 percent, was food sector investment. The impact on FDI of the liberalized federal policies of Mexico are evident in these time series data.

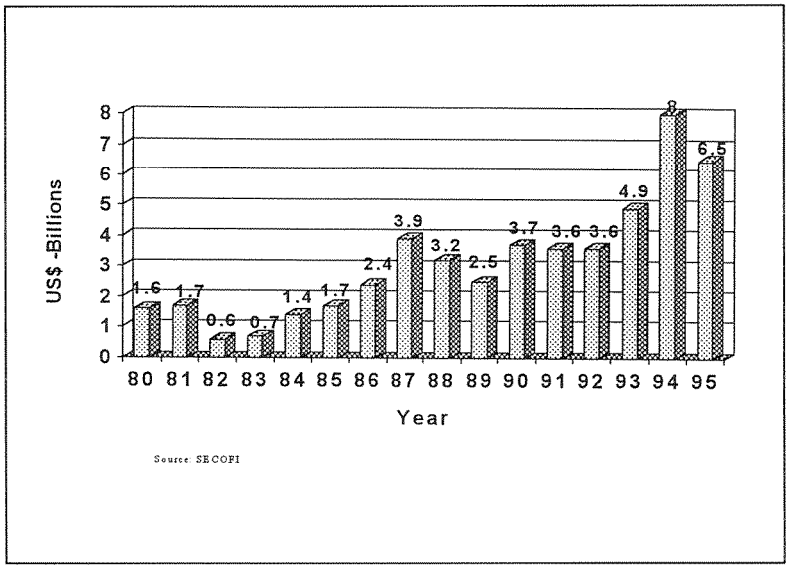

Figure 1. Annual FDI in Mexico

CONCLUSIONS

Clearly, Robertson et al. have made a significant contribution to the literature regarding competition policy in Canada and the United States. Their detail and specific accounting of interventions, for example, catalogs information that will be a useful reference for a long time.

Also, some evidence is presented here which indicates that FDI is important in investment in North American food and agricultural industries. As a consequence of NAFTA and other "free trade" agreements, substantial investment capital flows into Mexico. These flows are directly related to competition policy and other federal policies of the Mexican government.

Significant structural adjustment will occur, both in agriculture and value added food industries. For the most part, this structural adjustment will occur regardless of competition policy in Canada or the United States. Mexico and the Western Hemisphere is headed toward economic integration by 2010.

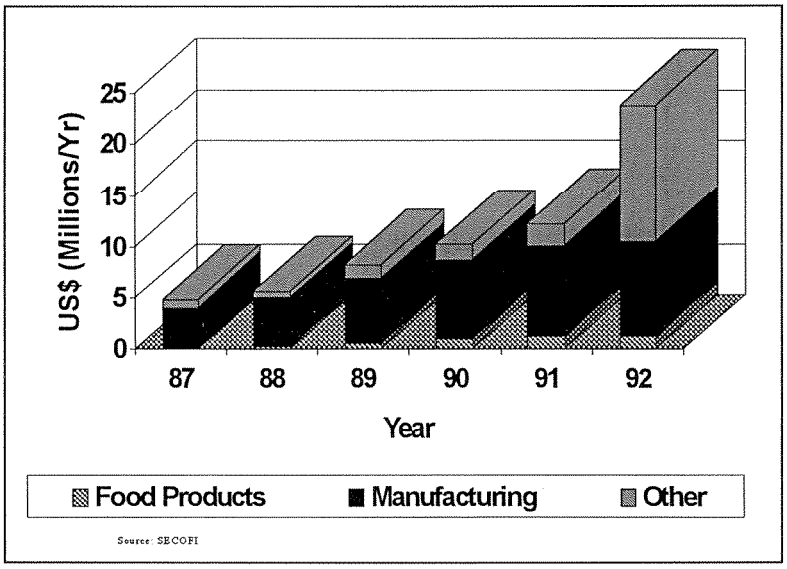

Figure 2. U.S. DI in Mexico by Sector

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SECOFI, Direccion General de Inversion Extranjera.

IV. APPLICATION TO SELECTED SECTORS

- **Red Meats, Poultry and Dairy**
- **Grains and Oilseeds**

PROGRESS TOWARD A SINGLE MARKET: THE NEW INSTITUTIONAL ECONOMICS OF THE NAFTA LIVESTOCK SECTORS

Dermot J. Hayes and William A. Kerr

INTRODUCTION

Even before the initiatives which brought about the Canada-United States Trade Agreement (CUSTA) and, subsequently, the North American Free Trade Agreement (NAFTA), trade in red meat and livestock between the United States and Canada was characterized by low levels of formal trade barriers. Tariff levels were so low as to be considered a nuisance rather than a real barrier to trade (Kerr and Cullen, 1985). Import quotas on beef from Canada could be put in place under the U.S. Meat Import Quota Law and while the imposition of quotas disrupted commercial transactions in the short run, they were imposed so seldom that they were, again, considered more of an annoyance than an important trade barrier (Kerr, et al ,1986). Prior to the CUSTA, the beef and pork sectors were often offered as examples of the kind of *North American Market* that could be achieved with the removal of trade barriers under a Canada-U.S. agreement.

It was recognized in the run up to the CUSTA negotiations that a considerable number of non-tariff barriers existed which limited the potential to create a truly integrated market in beef and pork (Bruce and Kerr, 1986). These non-tariff barriers included: (1) contingent protection; (2) health and sanitary regulations; and (3) consumer regulations. It was agreed that some of these non-tariff barriers would be directly eliminated in the text of the CUSTA. In other cases, it was agreed that ongoing negotiations would take place to eliminate existing non-tariff barriers through harmonization, national treatment, or the granting of equivalence. Consultative mechanisms were to be put in place to prevent new non-tariff barriers from arising (Kerr, 1988). The CUSTA was signed with considerable optimism that a *Single Market* for livestock and red meat products would be achieved relatively quickly.

Prior to the NAFTA being signed, formal trade barriers in livestock, pork and beef between the United States and Mexico were, with a few exceptions, relatively benign. Further, as part of its internal deregulation and restructuring initiatives, Mexico was already eliminating many of its trade restrictions (Gerber and Kerr, 1995). Mexico had removed its

ariffs on cattle and beef and was in the process of eliminating an export tax on feeder cattle Rosson et al., 1993). Live hogs and pork products, however, faced a 20 percent import ariff. Mexico's extensive import licensing system was largely absent in the livestock and ed meat sectors.

Mexican exports faced U.S. tariffs on feeder cattle of approximately 1.5 percent and or finished livestock and meat of approximately six percent *ad valorem*. Mexican beef was lso subject to the U.S. Meat Import Quota Law. As in the case of Canada, these formal arriers were not considered significant inhibitors of international trade. Health and sanitary estrictions, however, presented considerable hurdles for many Mexican processors. In the NAFTA, all three countries agreed to eliminate their formal trade barriers and to put nechanisms in place to reduce or eliminate non-tariff barriers.

The new World Trade Organization/General Agreement on Tariffs and Trade WTO/GATT) added additional weight to the need to cooperate to remove non-tariff barriers o trade through the provisions of the Agreement on Sanitary and Phytosanitary Measures, he Agreement on Technical Barriers to Trade, the Agreement on Implementation of Article VI (Anti- Dumping) and the Agreement on Subsidies and Countervailing Measures.

Once the provisions and mechanisms to reduce non-tariff barriers to trade in livestock nd red meat products had been negotiated and agreed in the CUSTA/NAFTA, many of hose involved in providing input into the negotiation process — livestock producers, meat ackers, academics, government officials — simply sat back with the expectation that what ad been agreed to would be carried out. While it is probably too early to know how ffective the provisions of the NAFTA and the WTO/GATT will be, the CUSTA has been n operation for seven years and some insights as to how the progress to a *Single Continental Market* in red meat and livestock is evolving should be discernible. The evidence to date is lisappointing. This does not mean that no progress has been made, but it is far short of what vas expected (except by the most cynical of observers) when the CUSTA was signed.

The disappointing rate of progress on the elimination of non-tariff barriers to the novement of livestock and red meat suggests that the process needs to be re-examined and hat a new theoretical approach to the problem may be warranted. This paper suggests (but loes not fully develop) a new theoretical framework for examining trade liberalization/trade lisputes relating to non-tariff barriers, provides some examples of the difficulties associated vith liberalizing non-tariff barriers and indicates how further liberalization might be pproached.

THE NEW INSTITUTIONAL ECONOMICS OF LIBERALIZING NON-TARIFF BARRIERS TO TRADE

In moving from trade liberalization based on the removal of formal barriers to trade uch as tariffs and import quotas to international market integration based on the removal of on-tariff barriers to trade, the nature of international interaction changes. A sophisticated

set of domestic and international institutions has evolved over a long period of time to facilitate the reduction and elimination of formal trade barriers. Specific and easily identifiable government departments administer import tariffs and import quotas. The Office of the U.S. Trade Representative or the Department of Foreign Affairs in Canada is responsible for trade negotiations in multi-lateral forums such as the WTO or bi-laterally as in the NAFTA. Thus, it is relatively easy for those who have a vested interest in having a formal trade barrier reduced or removed to identify to whom they must make their case. The officials in these departments are professionals whose direct concern is the formulation and administration of trade policy. While it may take considerable lobbying resources to achieve one's goal, once it has been achieved through international agreement, an interested party can have considerable confidence that it will be carried out.

The tariff reductions offered at the GATT or the tariff elimination schedules agreed to in the NAFTA are implemented automatically by the department which is responsible for administering tariffs. If tariffs are not removed on schedule, their continued collection provides a *smoking gun* of evidence which cannot easily be denied. Channels where one can formally complain exist and dispute mechanisms are available if no satisfaction is received from consultation. Similarly, the removal of import quotas is relatively automatic once they have been agreed to. There are seldom complaints that countries fail to live up to their commitments to remove tariffs or import quotas.

On the other hand, commitments relating to the removal of non-tariff barriers often pertain to ongoing consultations and negotiations. The regulations which constitute the non-tariff barriers to trade in livestock and red meat products are scattered among a large number of government departments, agencies and sub-agencies. Trade liberalization and the administration of international trade is not the primary function of these institutions. Their personnel are not experts in international trade law. Simply because the trade negotiation arm of government has agreed to procedures aimed at the eventual liberalization of non-tariff barriers does not mean that the agreed liberalization will be carried out or that a satisfactory resolution to ongoing discussions will be reached. Those who negotiate trade agreements have no direct authority to influence events in other government departments or agencies nor do they have a vested interest in seeing that what has been agreed to is implemented. Hence, to ensure that progress continues to be made, those who have a vested interest in liberalization of the sector must be much more active after a trade agreement is signed than is the case when the removal of formal barriers to trade is the primary objective of liberalization initiatives. While these difficulties might appear to be primarily a principle-agent problem, and certainly they have aspects to which that analytical approach applies, it is only part of the problem. Adapting the transaction cost approach of New Institutional Economics may provide broader insights into the liberalization process pertaining to the removal of non-tariff barriers.

One of the central tenets of New Institutional Economics is that transactions do not occur in the frictionless economic environment assumed in standard neoclassical economic analysis (Hobbs, 1996). This friction means that there are costs associated with organizing economic activity (Coase, 1937). The costs are generally referred to as transaction costs. Although transaction costs can be identified in a broad spectrum of economic activities, one

area where there has been particular interest is the organization of complex transactions. Complex transactions are those that involve production and payment over time, which have complicated quality and/or performance specifications and where the quality of the goods exchanged is not transparent (Kerr, 1996). The transaction costs that arise in complex transactions can be divided into three main classifications: information costs, negotiation costs and monitoring/enforcement costs. According to Hobbs (1996):

> Firms and individuals face costs in the search for information about products, prices, inputs, and buyers and sellers. Negotiation costs arise from the physical act of the transaction, such as negotiating and writing contracts (costs in terms of managerial expertise, the hiring of lawyers, etc.) or paying for the services of an intermediary to the transaction (such as an auctioneer or a broker). Monitoring or enforcement costs arise after an exchange has been negotiated. This may involve monitoring the quality of goods from a supplier or monitoring the behaviour of a supplier or buyer to ensure that all the pre-agreed terms of the transaction are met. Also included are the costs of legally enforcing a broken contract, should the need arise (p. 17).

Trade agreements dealing with the removal or reduction of non-tariff barriers to international trade have many elements which are similar to a complex transaction. As a specific non-tariff barrier which is to be reduced or eliminated is seldom directly identified in the trade agreement, it is up to those who have an interest in creating a Single Market to search out information about: (1) trade inhibiting regulations and to quantify the costs they impose on the economies to which they apply; (2) the organizations which administer the regulations and their procedures for changing regulations; (3) the individuals within the organizations who have the power to initiate change; and (4) influential allies which can be enlisted to support an initiative for change. It should be noted that proposals for the reduction/elimination of non-tariff barriers will have to come from those with an interest in liberalization since politicians or government bureaucrats will seldom have a personal interest in liberalization (or for that matter protection). These information gathering activities will require resources and, hence, impose costs — *information costs* — on firms or organizations with an interest in liberalization. Further, in the case of non-tariff barriers, considerable intelligence gathering activities must be ongoing to ensure that new regulations do not arise as a result of activities unrelated to trade undertaken by various regulatory agencies e.g., a new sanitary regulation which is being put in place for purely domestic reasons but which may have considerable trade ramifications that have not occurred to the scientists developing the regulations.

Once the non-tariff barrier has been identified and information has been obtained on the relevant economic actors, there will be costs associated with securing an agreement to reduce or eliminate the trade inhibiting effects of the non-tariff barrier. These costs may include lobbying those responsible for initiating legislative/regulatory changes in the government. Studies may have to be commissioned to evaluate the welfare effects of the change. Research may have to be funded to provide the scientific evidence required to convince those responsible for administering regulatory regimes. Proposals for regulatory changes may have to be drafted. Input to hearings, both public and private may have to be

prepared and effectively delivered. Formal and informal discussions with stakeholders in the other country may be required. These *negotiation costs* will continue to be incurred until an agreement to take action on a non-tariff barrier is secured.

Securing an agreement to take action on a non-tariff barrier, however, does not mean that the agreed undertaking will actually be carried out. In many cases, the branch of government which agrees to the undertaking may not be responsible for implementing the change. The state is not a unified actor (Kwon, 1995). The government consists of the various components within it, which have different preferences, cultures and standard operating procedures, and which play their roles interactively in the decision-making process (Allison, 1969). Hence, even if the bureaucracy is neutral, those with an interest in liberalization will have to monitor the agency responsible for implementation to ensure that acceptable progress is being made. If the changes which have been agreed to lead to job losses, retraining or significant changes to standard operating procedures in the implementing agency, then the agency itself may have a vested interest in sabotaging or delaying the changes and, hence, will not be a neutral actor. This will raise the costs of having the changes implemented for those interested in liberalization.

As those with an interest in securing liberalization may not have *standing* when dealing with the bureaucracy in the other country, they may have to convince their own government to press the matter with the other government. As the officials in the home country's government may have a broad agenda for their dealings with the other country's government, the particular concern may become a *poker chip* in ongoing bi-lateral negotiations. Hence, the actions of the home government officials also need to be monitored. These activities require staff and other resources.

If acceptable rates of progress cannot be discerned, then the party with an interest in liberalization will have to work towards having the dispute mechanism activated to ensure that the agreement is enforced. This will require the preparation of a case, convincing their own government that the case has sufficient merit for it to proceed, etc. In the case of sanitary regulations and some other non-tariff barriers the dispute settlement procedures are less transparent than those relating to, for example, dumping or countervail cases. Taken together, these *monitoring/enforcement costs* may be considerable.

In the case of a trade agreement (as opposed to a complex transaction) these information, negotiation and monitoring/enforcement costs can be designated *fulfillment costs* — those costs associated with ensuring that the benefits expected from a trade agreement are actually realized or fulfilled. While many of these topics are dealt with in the political economy literature, putting them into the *fulfillment cost* framework may be useful for those who must allocate resources to these activities and for identifying where action is needed to reduce fulfillment costs in aid of facilitating the movement to single continental markets for livestock, beef and pork. Table 1 provides an illustrative (but by no means a comprehensive) list of the fulfillment costs associated with trade agreements, as well as a comparison with the transaction costs which are typically associated with complex transactions.

Table 1. Comparison of Representative Fulfillment Costs and Transaction Costs

	COMPLEX TRANSACTIONS **Transaction Costs**	TRADE AGREEMENTS **Fulfillment Costs**
INFORMATION COSTS	Identifying potential customers/suppliers	Identifying non-tariff barrier
	Acquiring product quality information	Acquiring an understanding of the specific regulations and how they impact trade flows
	Determining the reputation of potential customers/suppliers	Identifying key political and administrative players
	Acquiring and assessing price information	Identifying potential allies in both countries
	Acquiring information on future price and/or product quality trends which may alter the desirability of the transaction	Monitoring legislative and/or regulatory initiatives which may increase the trade inhibiting effects of non-tariff barriers
NEGOTIATION COSTS	Time spent developing and negotiating contract offers	Time spent lobbying and providing input into regulatory hearings
	Legal costs of drawing up formal contracts	Legal and other costs associated with drawing up proposals for regulatory changes
	Formal assessments of contract offers in budget, financial and production models	Formal assessments of the economic (and possibly other) benefits from regulatory reform
	Informing suppliers/customers of any affects of the proposed contract on exiting relationships such as quality or quantity changes involving inputs	Informing and/or lobbying potential allies on either side of the border
MONITORING AND ENFORCEMENT COSTS	Monitoring the activities of the other party to the contract to ensure that provisions of the contract are adhered to - e.g. monitoring deliveries to ensure that they are of the quality specified in the contract	Monitoring the activities of foreign legislatures and bureaucracies to ensure that the agreed changes are taking place and at an acceptable rate - i.e. to ensure the expected benefits from trade are not nullified
	Discussing any problems identified with the other party	Lobbying foreign officials regarding any problems identified, if allowed, and lobbying home government to press for implementation
	Costs of preparing a formal legal case if contract is breached	Cost of preparing a case upon which a dispute mechanism challenge can be mounted
	Court or arbitration costs	Preparing for and responding to dispute settlement activities directly or through officials of the home government

In terms of the NAFTA continental market, one should expect fulfillment costs to rise when different languages are involved. Mexican organizations will have to have staff (or agents) who are fluent in English or French. Canadian and American organizations will require individuals with a similar degree of capability in Spanish. International language capability cannot be expected among the domestic bureaucracies which are responsible for framing and administering the regulations that constitute non-tariff barriers. The professionals who are charged with negotiating the reduction and elimination of formal trade barriers are, in contrast, likely to be multilingual or operate in venues with a high degree of translation capability.

How significant are fulfillment costs? As with transactions costs, measuring fulfillment costs is unlikely to be easy. According to Hobbs (1996):

> ...unlike production costs, transactions costs - the costs of economic organization are neither easy to separate from other managerial costs nor readily measurable. (The problem is analogous to the difficulty accountants have in assigning costs of jointly used assets to individual enterprises in a multiple enterprise firm). The complex nature of companies and market institutions means that the costs of their operation are not easy to quantify and the data which one might use to measure transaction costs are not usually collected by governments or by the standard accountancy practices of firms. Although one can recognize that there is indeed a cost involved in valuing a good or in monitoring the actions of a buyer or seller, it is difficult to measure these costs in financial terms (p. 20).

Fulfillment costs will, for the most part, have the same *overhead* aspects to them as transaction costs and, hence, will be difficult to measure. Certainly, some fulfillment activities will have directly measurable costs such as legal fees and the hiring of economic consultants to prepare studies. Measuring fulfillment costs, however, may not be particularly important. If they can simply be identified they can provide insights into the problems associated with ensuring that the benefits expected to arise from a trade agreement are not *nullified*. A word of caution, however, the absolute level of fulfillment costs must be more of a concern than transaction costs because competitive forces are expected to move an industry toward the most transaction cost efficient vertical coordination system, *ceteris paribus* (Gaisford, et al 1994). Fulfillment costs relate primarily to ensuring that activity takes place within the political and bureaucratic arena but there will be no competitive pressure to reduce them. As a result, pro-active measures may be required to reduce these costs; otherwise fulfillment costs may, in themselves, remain a significant barrier to the achievement of a single market.

While it may not be easy to measure fulfillment costs, examples may be found to illustrate their importance. If the agreed upon removal of a non-tariff barrier has not taken place and, hence, the expected benefit from liberalization is *nullified*, this would suggest that organizations or firms with an interest in removing the non-tariff barrier did not expend sufficient resources on the activity. Alternatively, the fulfillment costs may have been sufficiently high so as to exceed the potential benefit from liberalization. One suspects that organizations and firms have not yet adjusted to the higher costs associated with ensuring

that liberalization is realized in the case of non-tariff barriers. By explicitly identifying their fulfillment costs, these organizations may begin to allocate more resources to these activities. They may also realize that there may be benefits to attempting, individually or collectively, to reduce these costs. In the next section, a number of examples from the livestock and red meat industries are presented which illustrate the problems associated the failure to accomplish liberalization already agreed to in trade negotiations.

NON-TARIFF BARRIERS WHICH HAVE NOT BEEN REMOVED OR REDUCED IN LIVESTOCK AND RED MEATS

This illustrative discussion will begin with two examples where specific commitments to reduce or eliminate a non-tariff barrier were written directly into the trade agreement but were not acted upon. In these cases, organizations or firms with an interest in the liberalization of the specific provision would only have to incur monitoring and/or enforcement costs to have their expectation realized. Subsequent examples will examine cases where there was an agreement to work toward removal of certain classes of non-tariff barriers. Hence, organizations and firms with an interest in liberalization would be faced with information and negotiation costs as well as monitoring/enforcement costs.

Countervailing Duties

Prior to the signing of the CUSTA, the Canadian pork industry had been subject to countervailing duties imposed by the United States. The industry had complained about the lack of fairness in the U.S. countervailing duties system and the costs involved in preparing cases against both formal countervail proceedings and the threat of countervail actions. Their organizations had lobbied hard for relief from U.S. countervail to be included in the CUSTA Agreement. There was no resolution to the countervail procedures question, or for that matter the equally contentious anti-dumping procedures, at the formal CUSTA negotiations. Instead, a temporary arrangement was negotiated and in Article 1907 of the CUSTA it was agreed that:

> The Parties shall establish a Working Group that shall:
> (a) seek to develop more effective rules and disciplines concerning the use of government subsidies;
> (b) seek to develop a substitute system of rules for dealing with unfair pricing and government subsidization

Further, in Article 1906 it was agreed that:

> The provisions of this Chapter shall be in effect for five years pending the development of a substitute system of rules in both countries for antidumping and countervailing duties as applied to their bilateral trade. If no such system of rules is agreed and implemented at the end of five years the provisions of

> this Chapter shall be extended for a further two years. Failure to agree and implement a new regime at the end of the two year extension shall allow either Party to terminate the Agreement on six months notice.

Hence, the Canadian pork industry should have been able to expect some relief from U.S. contingency protection measures after no longer than seven years. (Presumably the U.S. industry could have expected relief from equally capricious Canadian countervail actions). There was clearly a commitment to find a mutually acceptable countervailing duties system and a very strong sunset clause built in to ensure *bargaining in good faith.* The entire CUSTA was to be put at risk if no resolution was found.

In theory, the Canadian pork industry should have been able to monitor the progress of these discussions, present its views to Canadian negotiators and lobby the appropriate Canadian government officials to ensure that progress was being made. Of course, contingency protection measures were an issue for many industries on both sides of the border and to keep the pressure on would have required the Canadian pork industry to forge alliances with other Canadian groups or firms with an interest in improving the contingent protection system, as well as with allies in the United States. Forging these alliances would have taken considerable resources given the high costs associated with organizing such a diverse group. Admittedly, the resolution of the contingent protection problems was complicated by the ongoing and slower than expected GATT negotiations pertaining to contingent protection but it was apparent that little real progress was being made fairly early on in the five-year mandate. The Canadian and U.S. pork industries and their various formal and informal allies could not exert sufficient pressure on the negotiators to ensure that they received this very important expected benefit from the CUSTA.

Buried in the fine print of the NAFTA is a clause which removes the seven year deadline for arriving at new countervail and dumping definitions and procedures (Gerber and Kerr, 1995). Hence, either the pork industries in the United States and Canada and their allies failed to allocate sufficient resources to ensure fulfillment of the contingency protection provisions of the CUSTA or, alternatively, the expected (collective) benefits could not justify the required (collective) fulfillment costs.

In the synopsis of the CUSTA released by the Government of Canada (1987), Canadians were led to believe that they would be much better protected from the capricious use of countervail than they eventually were:

> The combined effect of bilateral review of the existing law and the development of a new set of rules will be to ensure that by the time all tariffs are removed and other aspects of the Agreement phased in, Canadian firms will have not only more open access, but also *more secure and predictable access* (emphasis added) (Government of Canada, 1987, p. 53).

One doubts if the Canadian pork industry currently believes that it has more secure and predictable access to the U.S. market than was the case when the new bilateral review procedures introduced in the CUSTA became fully operational.

Border Inspections

Canadian beef packers had complained of what they perceived as capricious, if not strategic, use of border inspections for meat as a non-tariff barrier to trade prior to the CUSTA negotiations. While rejection of products at the point of export is a trade irritant for many commodities, it does not impose large economic costs. If meat products are monitored at the border they can be delayed and if rejected returned to the exporter. Due to meat's perishability, delays and *turn backs* can lead to deterioration in quality and a subsequent reduction in price.

In addition, border delays or rejections will likely have other economic effects. Given the tight logistics parameters of cold chains for meat, delays may lead to reductions in quality and subsequent doubt about the reliability of the exporter in the mind of the consignee. This is likely to affect future sales orders adversely. Rejection of product at the border can affect the consignee's ability to fill pre-committed orders and, hence, raises concerns pertaining to security of supply. Again, this can adversely affect the ability of the exporter to secure future sales. Rejection of product at the border may also lead to a reduction in returns to processors even if there is no deterioration in product quality. As the meat is destined for export, it is cut to U.S. standards. To the extent that product specifications differ, if the rejected product has to be sold in the Canadian market it will suffer a discount. These losses must be added to the cost of trucking to the border and back and the cost of loading and unloading the vehicle.

All meat leaving Canadian export plants (all of which are approved by USDA) is inspected by Agriculture and AgriFood Canada veterinarians and certified as satisfying U.S. standards prior to leaving the plant. All meat exports are, however, also inspected at the border by officials from the USDA. These inspectors may examine a random sample of the cartons (known as skip-lot) with the help of a computerized selection process. This procedure generally takes about three hours. The officials may also choose to inspect every carton (known as full-lot) and this requires six hours. Obviously, the probability of finding unsatisfactory product or packaging increases with the number of cartons inspected. All, or only part, of a shipment may be refused if the product is not sealed or preserved properly or if the quality is poor or is not as stated. An increase in the number of full-lot rather than skip-lot inspections may imply an attempt to reduce trade flows. This is also true when entire rather than part loads are rejected. Product is often inspected again at the point of delivery.

There was some evidence that border inspections were being used strategically to limit imports with the number of rejections inversely related to the price of beef in the United States (Kerr, et al, 1986). According to Menzie and Prentice (1987):

> There are suspicions and some evidence, however, that these regulations have been used to control movements beyond the legitimate levels (p. 947).

While the degree of emphasis placed on this non-tariff barrier may appear excessive to those outside the meat industry, the organizations and firms representing the Canadian beef industry felt that border inspections were sufficiently disruptive to the operation of the North

American beef market to lobby extremely hard to have a special provision to address the problem written into the CUSTA.

Article 708:3 states:

> Where, for agriculture, food beverage and certain related goods other than animals:
>
> ... (b) the exporting party has, pursuant to such systems, procedures or requirements, determined or certified, as the case may be, that such goods meet the standards or technical regulations of the importing Party, the importing Party may examine such goods imported from the territory of the exporting Party only to ensure that (b) has occurred. This provision shall not preclude spot checks or similar verifying measures necessary to ensure compliance with the importing Party's standards or technical regulations provided that such spot checks or similar verifying measures, including any conducted at the border, are conducted no more frequently than those conducted by the importing Party under similar circumstances with respect to its goods.

The clear intent was to effectively eliminate border inspections and the interpretation of the agreement at the time was to move to a system whereby inspection would take place only at the final destination of the meat. Seven years later little has changed.

Border inspections remain an irritant. Part of the difficulty is that it is not clear where the lines of authority within the U.S. government lie in relation to having USDA comply with the CUSTA. One suspects that the change was resisted within the inspection bureaucracy due to fears of job losses and by those who had invested in private border inspection facilities. In Canada, having the matter pressed with the U.S. government required that the correct officials in the Canadian bureaucracy be identified and then convinced that the rather narrow provision justified a concerted effort on the part of the Canadian government to press the point with the Americans. In other words, was it worth pressing the issue of border inspections of red meat — of interest to only one industry — within the dynamics of the broad spectrum of Canada-U.S. relations? The organizations and firms representing the red meat industry could also have attempted to have the issue brought to the dispute settlement mechanism but, again, it required bringing Canadian officials on side. These lobbying activities carry a considerable cost and, as it was a single industry issue, there were no prospects of finding allies among whom the costs could be shared.

This issue can be couched in the new institutional economics paradigm outlined above. Both nations realized that there were gains to be had from certifying each others plants for safety, and the law was written as such. However, the border inspectors had a very different viewpoint than the trade negotiators even though both work for the same government.

Take the case of a particular — and now very famous — USDA inspector in Montana, Bill Lehman from the Sweetgrass border station. Unlike his colleagues in Washington, this inspector had little contact with parties outside Montana agriculture. Acknowledgment by the United States that Canadian packing plants are safe not only removed the need for his

job, but also invalidated a lifetime's work. This particular inspector refused to implement the new provisions and was asked to relocate. Rather than do this, the inspector quit, and is now a popular celebrity in that part of Montana, and has begun a media campaign to convince consumers that the USDA is allowing unsafe Canadian meat into the United States. Although other inspectors have not gone to this extreme, it is easy to understand why they are imposing as many restrictions as the law allows. The enormous popularity of the inspector who quit is also instructive. Local beef farmers have noticed a constant flow of Canadian cattle into the United States, and given the depressed state of United States cattle prices in general, it is easy to see why they assume a causal relationship between imports and low prices.

Economists and others promoting advantages of free trade have failed in two ways. First, we did not anticipate the reaction of the border inspectors, and second, we did not do a good job convincing those producers along the border that they would benefit from this agreement. To do the latter, we would have had to convince cattle producers in Montana that U.S. cattle exports from midwestern plants increase prices throughout the United States. This concept of a spatially integrated market does not come easily to some cattle producers for whom all business is local.

Beef Grade Equivalency

Grading represents a technical standard rather than a sanitary regulation. Chapter Six of the CUSTA pertains to technical standards. According to Article 604 the Parties agreed:

> To the greatest extent possible, and taking into account international standardization activities, each Party shall make compatible its standards-related measures and procedures for product approval with those of the other Party.

where *make compatible*:

> means the process by which differing standards, technical regulations or certification systems of the same scope which have been approved by differing standardizing bodies are recognized as being either identical or *technically equivalent* in practice (emphasis added) (Article 609).

Differences in grading standards have been recognized as an impediment to the creation of a single North American market for beef for a number of years (Kerr, 1992). As a result, boxed choice Canadian beef sold into the United States must be sold at a *no-roll* discount. Boxed U.S. Select beef must be sold into Quebec and Ontario as ungraded beef and, hence, does not receive the premiums associated with equivalent quality graded Canadian beef. The net result is lower sales and returns in both markets. A single market does not yet exist. As a result of Canada unilaterally changing some of its grading procedures, as of January 1, 1996, Canada and the United States have been using the exactly the same methods for grading beef quality (Hayes et al., 1995).

Grade equivalency would have to be approved by both governments. It should be noted that there is no mechanism within either government or bilaterally to push for the implementation of Chapter Six of the CUSTA. This means that lobbying must be done by interested parties. Grade equivalency is unlikely to be approved if it is opposed by a major organization on either side of the border. According to Thomas (1996):

> The Canadian Cattlemen's Association supports cross-border grades, but the U.S. cattle industry is much more skeptical — in some cases, even hostile (p.56).

The Canadian Cattlemen's Association had to undertake a long process of consultations to bring the National Cattlemen's Beef Association (NCBA) on side in the United States and:

> Grade equalization got a kick at the can in 1994 when it made it to the National Cattlemen's Association (NCA) annual meeting. Unfortunately, it was tabled at the meeting in favour of further study (Thomas, 1996, p. 56).

A study was subsequently commissioned to respond to questions raised by a subgroup of the National Cattlemen's Association's U.S.-Canada Grade Equivalency Task Force. The major conclusion of the study was that it would be beneficial to the industry if the market for beef was approached from a Single Market perspective:

> The overall effect would be to allow the North American packing industry to operate more efficiently. This effect is equivalent to cutting the packer margin by a small amount. The volume of U.S. beef exports to Canada and of Canadian beef exports to the United States would increase (Hayes et al, 1995).

Despite the results of the study, there is still resistance to the granting of grading equivalence and:

> At the moment, grading negotiations with the National Cattlemen's Beef Association have been suspended until a better negotiating climate arises (Thomas, 1996, p. 56).

Meanwhile, the Canadian Cattlemen's Association (CCA) continues to expend resources attempting to gain allies in the United States. For example, in 1996:

> Questions about the Canadian industry from U.S. producers frustrated with the market prompted the CCA to invite a delegation to tour Canadian feedlots and packing plants in mid-June. The tour was aimed at helping our major trading partner understand the Canadian industry and recent trade patterns.
> ... The quality of our genetics and commercial production practices, plus the high safety standards of our packing plants, was demonstrated in detail.
> ... All in all, the Montana and Idaho cattlemen were impressed with what they saw (Grogen, 1996, p. 32).

This is all part of the expensive process of recruiting allies for the removal of non-tariff barriers and the mental movement to the concept of a single continental market. According to Dennis Laycraft of the CCA:

> Right now there are knowledgeable U.S. ranchers willing to stand up at NCBA meetings and promote freer trade with Canada. They are being listened to , and that, for me, is a bright sign for better things to come (Thomas, 1996, p. 56).

This is a case where both consumers and producers would have benefited from removal of a barrier. Yet, the USDA reaction was to defer to the wishes of U.S. beef producers who opposed the chain. The U.S. beef producers were made aware of the benefits but they came out against equivalency. There are two possible reasons for this position. First, the discussions were dominated by producers in border areas who did not want any Canadian imports and beef producers in the U.S. corn belt who stood to gain by accessing central Canadian markets were not as vocal.

The argument that eventually won the day was that the words *US Choice* were a highly valuable U.S. trade mark and should not be shared with the competition. This argument won despite an explicit provision that prohibited the Canadians from using this brand outside the United States.

The current situation is one where both sides have almost identical standards, but where *Choice* Canadian carcasses must cross the United States border as live animals so that they can be graded in the United States. Likewise, *Select* US meat must sell at discounts in Central Canada because it cannot be labeled *A*.

Economists in the United States have failed to convince U.S. beef producers that the North American beef market is now spatially integrated. We have failed to convince producers of the benefits of free trade.

Again, we see schizophrenic behaviour on behalf of the U.S. government. One arm, the trade negotiators, assumed that the other arm would follow its lead. Meanwhile, the group responsible for grading was responding only to the needs of a relatively small group, and it chose to let policy be dictated by that one group.

Clearly, the removal of non-tariff barriers imposes considerable fulfillment costs on the industry organizations in both countries. Once the organizations themselves accept the proposition of grading equivalence, the long process of convincing the governments will begin.

Rules for Importation of Animals and Animal Products

Under Article 708 of the CUSTA relating to health, sanitary and phytosanitary regulations the Parties agree to:

> © notify and consult with each other during the development or prior to the implementation or change in the application of any technical regulation or technical standard that may affect trade in such goods.

On April 18, 1996, the USDA's Animal and Plant Health Inspection Service (APHIS) published a set of proposed Importation of Animals and Animals Products Rules. While the issues are complex, one intent of the rules is to allow for regional differences in health standards whereas in the existing rules animal health status was determined on a national basis. The new regulations also assign risk levels to regions. The greater the assigned risk levels, the more stringent the animal exporting procedures required. The CCA believes that the levels of risk assigned to Canada have the potential to considerably reduce trade in live animals from current levels. It would appear that the USDA developed these proposals in isolation - which contravenes the spirit, if not the letter of the CUSTA. The CCA and other interested Canadian parties are now restricted to a reactive role rather than having been consulted during the development of the rules. This is in spite of CCA initiatives taken in conjunction with the NCBA in the United States. The two organizations had formed a Cross-Border Animal Health Committee in 1993.

The major problem seems to be that either the USDA did not feel obligated to consult with Canada *ex ante* about the development of the regulations, or if a government body was consulted in Canada, the CCA did not have their ear. While the USDA did subsequently receive responses from interested Canadian organizations, this appears to be far from the active process of consultation envisioned in the CUSTA. The government agencies in each country still approach regulation from a national rather than a single market perspective and, as a result, new non-tariff barriers can still arise. According to Thomas (1997):

> One senior trade analyst told *Cattlemen* the USDA proposal is a *scary document*, nothing more than a non-tariff barrier (p. 41).

Presumably, this is what the CUSTA provisions on sanitary non-tariff barriers to trade were intended to prevent.

United States International Trade Commission 332 Study

Simply keeping informed of potential problems in the non-tariff area may be expensive. In November, 1996 the U.S Congress ordered the International Trade Commission to conduct a 332 study into the effects of new WTO trade rules on U.S. imports of live cattle for slaughter and fresh, chilled and frozen beef. It also called for a review of the steps the United States has taken to prevent trans-shipment of these products through Mexico and Canada. While the study itself cannot trigger a trade action, once the report is

released an official complaint can be launched with the U.S. Department of Commerce based on the information in the report.

While 332 studies are not covered by the WTO or the NAFTA, what is disconcerting is that the Canadian industry was taken by surprise:

> This time, the 332 came out of the blue — tossed into an omnibus agricultural marketing bill that passed through Congress just before the politicians headed off to campaign for the November elections. In fact the Canadian Cattlemen's Association first heard about it from their Washington lawyers, not from U.S. cattlemen (Winslow, 1996, p. 6)

Clearly the CCA had not expended sufficient resources to acquire information. With better information, as a best case the Congress could have been lobbied and the study dropped from the Bill. In the worst case, the CCA would have had more time to prepare input into the study and to consult with U.S. beef organizations to reduce the probability of their launching a formal complaint with the Department of Commerce.

SUMMARY AND CONCLUSIONS

From the few examples outlined above, it should be clear that the process of reducing non-tariff barriers and preventing new non-tariff barriers from arising is a resource intensive activity — much more resource intensive than reducing formal trade barriers. These examples are only representative of the hundreds of issues that have arisen since the coming into being of the CUSTA, NAFTA and the WTO. These large costs arise because the responsibility for administering non-tariff barriers is diffused among a large number of government organizations. The lines of responsibility for ensuring the implementation of trade commitments are not clear within the wider machinery of government and by their very nature, non-tariff barriers tend to be industry specific, hence, it is more difficult to build politically effective alliances. In contrast, tariff policy is the responsibility of one government department and the responsibility for tariff reduction is well defined and understood. Further, tariffs are transparent while most non-tariff barriers are not.

New Institutional Economics has had an important role in explaining the workings of economic systems. Transaction costs have provided insights into the success and efficiency of complex transactions. Trade agreements share many characteristics with the contracts which are often used to facilitate complex transactions. Extending the concept of transaction costs to the processes required to ensure the liberalization of non-tariff barriers — fulfillment costs — hopefully provides insights into the difficulties associated with the creation of a single market. By using the information, negotiation and monitoring/enforcement cost framework, organizations can begin to think formally about the resources they need to expend to accomplish the removal of non-tariff barriers. Further, once costs are identified, means to reduce them can be sought individually or collectively. Clearly, high fulfillment costs can themselves act as a non-tariff barrier to trade.

As formal barriers to trade in livestock and red meat have, for the most part, been removed from the continental market as a result of the CUSTA and NAFTA, the discussion of the costs associated with removing non-tariff barriers is particularly relevant to the creation of a single market. Once the major organizations representing livestock and red meat interests begin to approach problems from a single market perspective, negotiation costs will fall and the pace of progress toward the goal will increase. Governments also need to think about how to reduce fulfillment costs. One problem within the NAFTA, and within the three national governments, is that there is no institution with a prime responsibility for the promotion of trade liberalization and ensuring that the agreements are implemented. The Office of the U.S. Trade Representative and its counterparts in Canada and Mexico have responsibilities which are inherently protectionist. One possible means to reduce fulfillment costs would be to create trilaterally, or within the individual countries, a Trade Ombudsman with responsibility for implementing the agreements and through which interested parties could obtain information and provide input as to how the removal of non-tariff barriers could be facilitated. The Ombudsman could be given the power to intervene when a department was seen to be dragging its feet or acting to thwart implementation of the international trade agreement.

The process of removing non-tariff barriers to trade is in its infancy. New and less costly institutions will be required to ensure that progress toward single markets is maintained. Using the fulfillment cost framework outlined in this paper may be a useful first step.

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THE CANADA -U.S. TRADE DISPUTES ON DAIRY AND POULTRY: A GOOD EXAMPLE

Harry de Gorter and Robert G. de Valk

INTRODUCTION

The dispute between Canada and the United States on the supply managed commodities of dairy and poultry is a long standing one that goes back at least two decades. The dispute has its roots in each country's agricultural policies which now have structures, investments and stakeholders built around them. The dairy and poultry dispute is a good example of how policy choices can make harmonization, compatibility and consistency (H/C/C) not only difficult to achieve but also can lead to conflict. Yet this dispute also provides insight into how policy harmonization can be achieved, disputes avoided and trading relationships improved.

One of the keys to understanding the dairy and poultry dispute is to take account of the division of powers over agriculture and food matters which has led to supply management in Canada and the Federal Marketing Order system in the United States. To protect these programs, non-tariff barriers were put in place which were subsequently legitimized by use of international dispute settlement mechanisms and, in some cases, the national courts.

The trade environment between Canada and the United States is changing. The United States is becoming more sensitive to the realities of using dispute settlement mechanisms and the wider perception that the United States cannot control the outcome of such efforts[1]. Canada is quietly becoming more confident in its role as a food exporter and this brings with it a different approach to trade matters.

By reviewing a number of the international cases arising from the poultry and dairy dispute, we will try to demonstrate how the dispute evolved and also identify some of the

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[1] A coalition of 21 lobby groups, the American Coalition for Competitive Trade, has started a legal effort to overturn the authority of the NAFTA (North American Free Trade Agreement) Panel in the U.S. Court of Appeal.

failures and opportunities for harmonization. We also will identify some of the market forces which are currently working toward harmonization in these two sectors.

Our conclusion is that harmonization of the poultry and dairy industries on a NAFTA basis (Canada, United States, Mexico) is well underway and will be achieved by market forces rather than by political leadership. Moreover, within North America, Canada can be a consistent exporter of both dairy and poultry products while maintaining a larger share of the Canadian market than most analysts have projected, providing that the necessary adjustment process in the production and processing sectors is given time to be completed.

Finally, our paper makes no attempt to differentiate between harmonization, compatibility and consistency. Instead, we have taken the broad approach of defining H/C/C as any change which achieves or makes possible freer trade in dairy and poultry products.

HISTORY OF CANADA-U.S. DISPUTE IN DAIRY AND POULTRY: THE CASES AND ISSUES

The General Agreement on Tariffs and Trade (GATT) Working Party on Canadian Import Quotas on Eggs (l/4279) adopted February 17, 1976

Dispute Settlement Mechanism On September 9, 1976, the United States requested a meeting of the GATT Council of Representatives to discuss the establishment of a working party to make an advisory ruling on Canada's import quota for shell eggs and egg products set up under GATT Article XI.

Issues The United States asked for an advisory ruling on the following:

a) Does the Canadian supply management system on eggs conform to the requirements of GATT Article XI?

b) Is the basis for determining the import quotas in accord with the requirements of the last paragraph of Article XI?

c) Irrespective of the findings under (a) and (b) above, does the imposition of the Canadian quotas under Article XI constitute nullification and impairment of a prior binding?

Working Party Terms of Reference *"To examine the matters referred to the CONTRACTING PARTIES by the Government of the United States (L/4223) concerning the imposition of import quotas for eggs and egg products by the Government of Canada (L/4207), and to report thereon to the Council."*

The Decision All but the United States agreed that Canada's egg supply management program was in conformity with GATT Article XI.[2] The working party suggested the parties revisit the "representative" period upon which the import quotas were to be calculated.[3] On the third question of nullification of prior binding, the working party did not come to a conclusion.

Comments and Observations The United States did not make a similar challenge to the dairy and turkey import quotas also in place at that time or those subsequently set up for chicken and hatching eggs. It would appear that the egg reference was a test case for the United States. The issue of effective control was not raised again until the United States challenged, in the GATT, the addition by Canada of ice cream and yogurt to the import control list. The "pressure" of maintaining effective control did play a key role within Canada and allowed provinces with less production to use the withdrawal threat effectively. Such a strategy for a larger province was not credible because it was argued that effective control would be lost and Canada would no longer be in conformity with GATT Article XI thereby losing its ability to protect the border with import quota. Considering that Ontario joined the Chicken Farmers of Canada (CFC), formerly the Canadian Chicken Marketing Agency, only because this would allow border controls to be put in place, the significance of the United States raising this issue at the working party in the evolution of Canada's supply management program should not be underestimated.[4]

Looking back, the one vote per province arrangement in Canadian supply management marketing plans, combined with the "restrict" provision of GATT Article XI, gave sufficient power to each province to essentially override the intent in the legislation to allocate growth on the basis of comparative advantage. The failure to execute this key aspect of the legislation has prevented production adjustments from taking place in response to a

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[2] The United States did not agree because they stated effective domestic production control has not been achieved and, therefore, domestic production was not restricted. Some industry stakeholders in Canada would have agreed with this view at that time since eggs and not layers were being counted. The problem, however, is in defining "effective" and this term in Canada, over time, has come to mean that at least 90 percent or more of Canadian production is directly participating in the supply management program. The findings of this working party remained until the World Trade Organization (WTO) Agreement replaced GATT Article XI.

[3] This was done, resulting in a doubling of access.

[4] It is still a mystery to some in Canada as to why the United States did not raise the issue of effective control when the third largest chicken producing province, namely British Columbia, withdrew from the CFC. The CFC tried to protect its "effective" control through a separate agreement but B.C. set production levels during this time, independent of the CFC. It could have been debated whether the B.C. agreement is a "governmental measure" as set out in GATT Article XI. If one recalls that GATT Article XI has its origins with the United States, it is ironic that the United States should be challenging its use. The United States has been criticized for choosing a working party format rather than a full panel. Some U.S. trade law experts have cited the egg working party decision as an example of a bad trade law decision.

changing market. The failure to allow such adjustments may yet prove to be more of a threat to the supply management system than external forces.

Successfully resisting the U.S. challenge gave Canadian policy makers confidence that GATT Article XI could be used to "protect" the domestic industry. The long run consequences of eliminating competition among processors, producers and provinces while controlling import competition were either not examined or ignored.[5] It is speculation, but had the United States not challenged Canada, domestic participants beyond the farm gate, as well as policy analysts, might have been more effective in influencing the way supply management programs evolved. The egg working party decision also shifted the balance of power in food policy matters to the Canadian federal government. Had the United States chosen to challenge Canada by way of a panel of trade experts, it is possible that a more restrictive interpretation of GATT Article XI would have resulted. With less effective border protection available, the advantage of creating new supply management programs would have been reduced.

The GATT Panel on Ice Cream and Yogurt (L/6568, September 27, 1989, Adopted in December 1989)

Dispute Settlement Mechanism The consultative and dispute settlement provisions as set out in the GATT.

Issues. The United States is the main exporter of ice cream and yogurt products to Canada. On January 28, 1988, Canada amended the import control list by adding ice cream products and yogurt. This decision significantly reduced the ability of the United States to export these products. The Panel, therefore, was asked by the United States to restore its access by making a recommendation that Canada eliminate its quotas and import permit system. Canada stated that its actions were consistent with GATT Article XI.

At issue was the scope of coverage provided by GATT Article XI.

GATT Panel Terms of Reference *"To examine, in the light of the relevant GATT provisions, the matter referred to the CONTRACTING PARTIES by the United States in document L/6445 and to make such findings as will assist the CONTRACTING PARTIES in making the recommendations or in giving the rulings provided for in Article XXIII:2."*

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[5] One attempt to examine the issues was the (1976) cost of production formula challenge by the Consumers' Association of Canada (CAC) for eggs. This was lost, in part, because the CAC was overwhelmed by the Canadian Egg Marketing Agency's (CEMA) legal counsel and accountants, but much of what the CAC raised as concerns proved to be valid. Similarly, the Food Prices Review Board and the Economic Council of Canada raised concerns about supply management which were not heard. The failure to listen to other stakeholders was a point also made by Kempton Matte at the dairy session last year.

The Decisions The Panel concluded that ice cream and yogurt did not compete directly with raw milk and would not undermine the milk supply management program if left uncontrolled at the border. Choosing to keep the scope of GATT Article XI narrow, the Panel found ice cream and yogurt not to be "like" milk and, therefore, Canada did not meet the conditions set out in GATT Article XI. The Panel recommended that Canada be requested by the GATT to terminate the restrictions.

Comments and Observations The Panel did not rule on the meaning of "in early stages of processing" or the meaning of "still perishable" or the issue of what it means to "restrict" production or have "effective" control. The United States, this time, had a much stronger case on the failure of Canada to "restrict" milk production which included evidence that overproduction had occurred six years in a row. The Panel, in commenting on its decision not to rule on the meaning of "restrict", did state that the concept of "restricting" production as distinct from regulating production was difficult to apply in practice. It is unfortunate that the Panel chose not to comment further because a finding on this matter could have modified the Canadian perception of an "effective" control which was formed from the shell egg working party. Again, this is speculation, but a finding that overproduction is evidence of a failure to restrict production could have provided Canadian policy analysts with additional means to influence the way supply management programs continued to evolve or at least raised some concerns for the policy makers to consider.

On the finding that ice cream and yogurt did not compete directly with raw milk, the Panel also noted that GATT Article XI was not designed to protect the producer or processing industries from international competition and it was never intended to be used to promote self-sufficiency.[6] It was feared in Canada that the Panel findings could also encourage the United States to challenge the import control of further processed chicken and turkey products or challenge the entire system if the Panel sided with the United States on the issue of "restricting" production. This challenge never happened primarily, we suspect, because the United States felt it could achieve a more desirable outcome at the GATT. This aspect of the U.S. trade strategy was confirmed by the recent NAFTA Panel in reviewing the intentions of the parties.

The ice cream and yogurt situation is an example of political considerations overriding economic ones. The Canadian government was informed that putting ice cream and yogurt on the import control list would be a high risk effort and if challenged at the GATT, could be lost. However, the government overruled this advice due primarily to the sensitivity of dairy matters to the province of Quebec and the need to show that the federal system was essential for Quebec agriculture.[7] Whereas Canada was looking at the Uruguay Round to

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[6] A similar ruling was handed down by the Panel on Japanese agricultural quotas - L/6253, November 18, 1987.

[7] The threat of separation was often a factor influencing the government on dairy policy. Canada was able to put off implementing the Panel findings by suggesting that the GATT negotiations were underway and serious proposals to clarify the working of GATT Article XI were being put forward and considered. From the U.S. perspective, the Panel ruling was the first

justify its restrictions with a strengthening of GATT Article XI, the United States was hoping to use the same Round to eliminate GATT Article XI exceptions. Once again, the dispute settlement mechanism, even though the United States prevailed this time, failed to defuse the dispute.

The Canada-U.S. Trade Agreement (CUSTA) (1989) and NAFTA (1995) Trade Agreements

CUSTA

The next time Canada and the United States faced the issue of supply management was during the agricultural negotiations leading to the CUSTA of 1989. The United States pressed for an agreement on agriculture without exceptions while Canada insisted on the right to protect the supply managed commodities through the use of quantitative import restrictions. To achieve this, Canada did agree to provide the United States with some increased access for chicken, turkey, shell eggs, and egg products (see Article 706 below). Since both parties had domestic dairy programs in place, it was agreed not to make any reference in the CUSTA to dairy.

Article 706: Market Access for Poultry and Eggs

If Canada maintains or introduces quantitative import restrictions on any of the following goods, Canada shall permit the importation of such goods as follows:

a) the level of global import quota on chicken and chicken products, as defined in Annex 706, for any given year shall be no less than 7.5 percent of the previous year's domestic production of chicken in Canada;

b) the level of global import quota on turkey and turkey products, as defined in Annex 706, for any given year shall be no less than 3.5 percent of that year's Canadian domestic turkey production quota; and

c) the level of global import quotas on eggs and egg products for any given year shall be no less than the following percentages of the previous year's Canadian domestic shell egg production:

I) 1.647 percent for shell eggs;
ii) 0.714 percent for frozen, liquid and further processed eggs; and
iii) 0.627 percent for powdered eggs.

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international proof that Canada had expanded the use of GATT Article XI to restrict trade and access.

In the CUSTA, Canada and the United States also agreed to work towards eliminating technical barriers to trade and setting up working groups to harmonize or achieve equivalency in the following areas:

I) Animal Health,
ii) Plant Health, Seeds and Fertilizers,
iii) Meat and Poultry inspection,
iv) Dairy, Fruit, Vegetable and Egg Inspection,
v) Veterinary Drugs and Feeds,
vi) Food, Beverage and Colour Additives and Unavoidable Contaminants,
vii) Pesticides, and
viii) Packaging and Labelling of Agricultural, Food, Beverage and Certain Related Goods for Human Consumption.

In addition, Canada and the United States agreed to work towards developing a new regime to address dumping and subsidization.

> *"Article 1907 provides that the two governments will work towards establishing a new regime to address problems of dumping and subsidization to come into effect no later than at the end of the seventh year. During the course of the current negotiations, the two sides recognized that developing a new regime was a complex task and would require more time. The goal of any new regime, however, will be to obviate the need for border remedies, as are now sanctioned by the GATT Antidumping and Subsidies Codes, for example, by developing new rules on subsidy practices and relying on domestic competition law. Thus the goal of the two governments remains the establishment of a new regime to replace current trade remedy law well before the end of the transition period."*
>
> *"Article 1907: Working Group*
>
> *1. The Parties shall establish a Working Group that shall:*
>
> *a) seek to develop more effective rules and disciplines concerning the use of government subsidies;*
>
> *b) seek to develop a substitute system or rules for dealing with unfair pricing and government subsidization; and*
>
> *c) consider any problems that may arise with respect to the implementation of this Chapter and recommend solutions, where appropriate.*
>
> *2. The Working Group shall report to the Parties as soon as possible. The Parties shall use their best efforts to develop and implement the substitute system of rules within the time limits established in Article 1908."*

Comments The increase in access granted to the United States for poultry was an arbitrarily chosen number. However, in trying to defend this concession to Canadians, one politician said that the Canadian industry should not be concerned because the increase was "about" equal to the supplementary import permits that had been issued in previous years. This unfortunate justification has stuck and served to alert the chicken, turkey and egg agencies to the "danger" of supplementary imports. As a result, the Agencies have resisted all attempts to allow any imports in addition to the global import access annually available, even if such issuance is a reasonable solution to a problem in the market place created by the regulatory environment. A more liberal import policy would have provided more flexibility to an otherwise rigid system and, as a result, would probably have provided more scope for market forces to influence industry structure (e.g. the average Canadian farm size for both poultry and dairy).

The harmonization committees have quietly gone about their work although the effort was much more energetic in the early years following the agreement. Much has been achieved, more because of industry pressure on both sides of the border and technological developments than because of the CUSTA. Nevertheless, the existence of the committee did provide a mechanism which is being used. However, our view is that the usefulness of these committees has been reduced by failing to involve industry as active participants. The pace and agenda is still in the hands of government and the process of decision-making is far from transparent.

The bold attempt to develop new anti-dumping and countervail procedures which would eliminate the need for border controls has so far failed. Perhaps it was the experience with the bilateral panels that reduced U.S. enthusiasm for the project, but we are well past the seventh year and little has been achieved.[8] The longer than expected GATT Round was a factor, but we suspect neither country is now anxious to pursue this task. With the NAFTA Panel decision in hand, Canada's incentive to develop a new regime is reduced even further, at least from the agricultural perspective. If policy analysts can convince the policy makers in Canada and the United States that gains from free trade in poultry and dairy exist, the process could be picked up again. However, so far, a win-win outcome for producers in both countries has not been documented by policy analysts.

NAFTA

During the NAFTA negotiations, agricultural issues were raised but did not receive as much attention as non-agricultural ones. This was because both the United States and Canada had expectations regarding agriculture that might result from the then ongoing GATT discussions. As a result, the CUSTA understandings on agriculture were restated in the NAFTA for Canada and the United States and, as well, the parties agreed to again "protect" their GATT rights.

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[8] In the NAFTA, both Canada and the United States agreed to eliminate the timetable set out in the CUSTA on this matter. This clause has received very little public attention.

For poultry products, Mexico and the United States agreed to minimum access levels as well as a ten-year adjustment period before free trade would take effect. To give the Mexican poultry and egg industry time to adjust, the decline in tariffs would not begin until the sixth year and then decline at the rate of 25 percent annually. Similarly, for dairy products, Mexico and the United States agreed to a ten-to-fifteen year adjustment period and tariffication.

Comments It is not known to us how the Canadian and Mexican poultry and egg industries compare competitively, but we suspect that Canada may have the edge. This raises the question, if Mexico can live with a ten year adjustment period, why is this not possible for the Canadian industry? Elements beyond the farm gate in Canada have suggested a ten-year phase-in is worth considering and U.S. poultry and egg industry participants have expressed similar views.[9]

As a footnote, Mexican buyers of MSCM (mechanically separated chicken meat) have made serious efforts to buy from Canada but the high tariffs have made it uncompetitive with the United States. It would appear an opportunity to develop a poultry export market has been missed. This demonstrates how policies can rob the policy maker of the flexibility to make reasonable choices. A similar approach (poultry and eggs left out) was recently taken in the trade agreement with Chile. Forgoing export opportunities to keep Canadian industry protection does not appear to be a policy which is sustainable either internally or externally at the next round of multilateral trade negotiations.

The NAFTA Panel in the Matter of Tariffs Applied by Canada to Certain U.S.-Origin Agricultural Products (Secretariate File No. CDA-95-2008) December 2, 1996

Mechanism Article 2006(4) of NAFTA to pursue consultations and Article 2007 to provide the Free Trade Commission an opportunity to resolve the dispute. Article 2008 to establish an arbitration panel.

Products Covered Dairy,[10] poultry, eggs, barley and margarine, including their respective products.

The Issue The United States alleged that Canada increased tariffs for a range of agricultural products contrary to Canada's NAFTA undertakings. Canada agreed that the duties had been raised but justified its action on the basis that this was tariffication consistent with Canada's obligations as set out in the Marrakesh Agreement establishing the WTO. At issue,

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[9] The U.S. dairy industry's willingness to engage in a ten-year phase out for most dairy tariffs with Mexico suggests the Canadian dairy industry could have done the same and supports our point on poultry.

[10] Dairy includes milk, yogurt, buttermilk, whey, butter and other milk fats and oils, cheese curd, ice cream and other preparations containing milk and milk products.

therefore, is which agreement takes precedence in light of the relevant provision of the NAFTA. The Panel was not asked to make recommendations for resolution of the dispute.

Findings The Panel took particular care to sort out the timing of the various agreements Canada and the United States had reached since negotiations were ongoing both at a multilateral and bilateral level. Of importance is the Panel observation that Canada and the United States agreed that exports in excess of the import quotas for certain agricultural goods would continue to be governed by multilateral agreements. Based on these observations, the intent of the parties, and the wording in the relevant agreements, the Panel concluded that Canada's action to put into effect the tariffication option provided by the WTO conforms with the provisions of the NAFTA.

Comments and Observations A late intervention by the United States suggested that the Panel should consider the special situation of ice cream and yogurt since the non-tariff barriers on these products had been ruled as being outside GATT Article XI by a GATT Panel. The Panel did assess this matter but concluded it had no basis for questioning the tariffication schedules agreed to by the parties as part of the WTO. It would appear that the United States should have questioned the inclusion of ice cream and yogurt in the tariff schedules exchanged among the parties in 1994. The opportunity to put into effect the ice cream and yogurt panel decision, therefore, has been missed by the United States and the tariffication process has made all the GATT Article XI issues irrelevant.

The panel decision means the United States focus will shift to the next WTO round where a case can be made for a rapid decline in tariffication duties. Canada will have to be alert to the possibility of a WTO decision on the poultry and dairy tariffs which could be worse than a transition period negotiated directly with the United States. However, we suspect Canadian governments are more comfortable implementing multilateral trade decisions than bilateral ones.

Some observers commenting on the NAFTA Panel suggested that even if Canada wins, further negotiations with the United States would quickly have to follow. We see no evidence of this nor any compelling need for Canada to do so.

The call for this NAFTA Panel, in part, may lie in the lack of results from the Canada-U.S. bilateral discussions held in Geneva between Mr. Goodale and then U.S. Secretary of Agriculture, Mr. Espy. Perhaps the failure to find any common ground at those discussions provided Canada with further justification that tariffication was the best course of action, while the United States became more convinced of its position. Choosing tariffication as the means of dealing with the U.S. dairy and poultry trade has the disadvantage of leaving U.S. concerns unresolved domestically. It also weakens the Canadian government's position on agricultural matters at a time when a strong federal hand is needed if Canada is to take its place as a major food producer in the world.

Once tariffication duties were put in place, the requirement for national supply management agencies to maintain effective control over production was removed. Removing the "effective" control function takes away one of the key reasons for the existence of national agencies and makes it more difficult to develop a competitive Canadian poultry

industry.[11] Already, the CFC has felt the effect of this change and are now operating a "bottom up" allocation approach under which the CFC, in effect, "rubber stamps" the allocation requests of the provinces. This new allocation approach was proposed by Ontario, confident with the knowledge that border protection is firmly in place. Similarly, in turkey, the Ontario Turkey Producers Marketing Board recently filed a withdrawal notice with the Canadian Turkey Marketing Agency (CTMA) over quota and export credit matters, something which likely would not have happened prior to tariffication.[12]

ADDITIONAL CONSIDERATIONS

Harmonization And Equivalency

Canada and the United States have accepted each others' inspection systems as equivalent even though there are differences in detail and in some cases, approach. The key is that officials agree similar results are achieved and, therefore, the objective of the relevant legislation is met. An attempt through the courts by the National Broiler Council in the United States to have equivalency defined as "identical," failed. This action was taken mainly with the Europeans in mind, not Canada. The United States and European Union are currently testing the meaning of equivalency and appear to be heading for a showdown. The WTO Agreement on sanitary and phytosanitary provisions should bring some sense and reason to the equivalency issue because food safety factors are now the accepted justification for import restrictions, not the failure of being equivalent. By eliminating the equivalency issue, the scope for conflict is reduced.

The U.S. Department of Agriculture (USDA) mega-regulation is again testing the equivalency status of Canadian inspection regulations but so far, Canada has met all the conditions. In both Hazard Analysis Critical Control Point (HACCP) system and the new Food Inspection Agency, Canada is ahead of the United States and some industry stakeholders in the United States have indicated (unofficially) their desire to move in a similar direction. In Canada, because a higher level of cooperation exists between industry and government, it has been able to move somewhat quicker on inspection matters and U.S. officials appear to respect this factor rather than turn it into an issue of equivalency. However, this can change quickly because the United States has many more active consumer lobby groups than does Canada and there is always the possibility that someone will take legal action hoping to force the U.S. government to behave differently.

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[11] Those in Canada wanting a strong competitive Canadian poultry industry might have been wishing for a decision in favour of the United States. Similarly, the business community in general is not happy that uncertainty remains.

[12] At the time of writing, the problems underlying the Withdrawal Notice appear to be resolved.

The U.S. Role in Supporting Canadian Supply Management Programs

Creating Fear As we have already noted, the United States, in its attempts to challenge Canada's trade restrictions put in place under GATT Article XI for dairy and poultry, may actually have served to forge support for this policy and influenced its evolution.

Similarly, repeated and consistently overstated estimates of how big a share the U.S. dairy and poultry exporters could obtain of the Canadian market only served to convince producers and policy makers of the need to keep trade protection in place.[13] This kind of lobbying information feeds the misconception that the Canadian dairy and poultry sectors are not competitive with their U.S. counterparts. Many Canadian producers in these sectors now fear competition from U.S. producers. Such fears and efforts encourage policy conflict and build the foundation for serious disputes where parties can easily underestimate each others resolve.[14] To better understand supply management issues, U.S. policy analysts should look at Canada as a federation of twelve separate "countries" or more like the EU model rather than like the United States.

Providing a Safety Valve Perhaps the most overlooked factor in the longevity of Canadian supply management systems is the geographic proximity of Canada to one of the world's largest producers of poultry and dairy products. This factor played a much bigger role in poultry than in dairy but, nevertheless, was a key element in the acceptability of supply management to the Canadian public. On behalf of Canadian consumers, the CAC and the Department of Consumers and Corporate Affairs, fought to ensure that Canadian producers of supply managed commodities would not be allowed to control production and raise prices to unreasonable levels.

In the absence of direct competition, unreasonable price levels were quite possible even though the competition of substitutes still existed. One way of ensuring that retail prices would not be unreasonable was the creation of a mechanism which became known as

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[13] Overstated estimates again appeared last year when Canadian supply management groups hired Infometrica Ltd. to do a study of the economic impact if Canada were to lose border protection and 165 U.S. companies pushed the United States to keep up its fight for more access. The Infometrica study estimated losses in market share of 20 to 25 percent, job losses of 138,000 over a five-year period, an economic output loss of $16 billion, and a tax revenue loss of $18.1 billion through to the year 2000. The U.S. ad hoc coalition suggested that gains of US$300 million in chicken and US$1 billion in dairy were likely. These gains are even greater than the estimated losses by Infometrica.

[14] The United States may have misread Canada's resolve in the last GATT Round because the United States, we understand, offered Canada a ten-year period to phase out dairy and poultry border controls which Canada rejected. On several occasions in Geneva, the United States was taken back by the uncompromising approach Canada took on supply management issues in Geneva. It appears the United States was not well prepared for the new Liberal government and were still basing their perceptions on the Conservative government with which the United States had negotiated the CUSTA.

the supplementary import system.[15] In short, this mechanism allowed the Minister in charge of import permits to issue permits whenever a market shortage existed. The administration of this safety valve proved to be tricky and controversial but it worked and did provide additional chicken at critical times.[16] This safety valve worked only because the United States was ready, at a moments notice, to supply Canada with whatever poultry product was needed. By being a ready supplier whenever the supply management manager made a mistake (and mistakes were made), the United States prevented the Canadian consumer from experiencing the market realities that often resulted from attempts to control production and has happened in other countries that attempted to control production. The United States, therefore, assisted Canadian policy makers by blunting the full market impact of controlling production.[17]

It is our view that the United States has never taken the time to fully understand the administrative procedures that make up the import control regime.[18] Similarly, we can generalize and say that on both sides of the border, the way policy is administered is often not as great a concern to analysts as the policy itself. Yet, our experience is that both are equally important and a policy objective can often be undone by administrative procedures

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[15] The other way was that supply management producers agreed not to price by the market but rather be guided by the cost of production.

[16] On two occasions the discretion of the Minister to issue permits was challenged all the way to the Supreme Court but in both cases, the courts rejected any attempt to bind or put conditions on the exercise of discretion. Even the condition in the Export and Import Permits Act that the Minister must act to support supply management was interpreted so liberally that the Minister could, if he wished, allow sufficient imports to put pressure on producer prices. Reference Maple Lodge Farms vs the Government of Canada and the Canadian Association of Regulated Importers vs the Attorney General of Canada.

[17] One astute observer at the Department of Finance, in about 1978, suggested the Canadian government give the supply management agencies total control over supplementary permits because they would misuse this power and bring about their own demise. He may have been right but this was not done and to this day, the government still controls the supplementary import system which can be used as a lever to make changes if the government wishes to exercise this option.

[18] This was demonstrated when Carla Hills visited Michael Wilson on one of the regularly scheduled trade talks. KFC and other companies had complained to the U.S. Trade Representatives Office that access was being denied and this was causing problems. Ms. Hills raised the issue and Mr. Wilson suggested that KFC should make use of the supplementary import system. They subsequently did and received about 5 kilotonnes in access for new products, about 10 percent of the existing access. The United States was no doubt surprised by this development but it shows that opportunities may have existed which the United States did not fully exploit and which could have served to reduce the intensity of the poultry conflict.

which frustrate the policy objective. Similarly, it should be clear that the choice of administrative procedures can serve either to promote harmonization or prevent it.[19]

Fear of One-Way Trade Other than the perception of some producers that they will never be able to compete, the next biggest obstacle to harmonization is U.S. trade laws and U.S. senators who exploit these laws.[20] The perception in Canada is that the United States wants Canada to open its border for all food products but if Canada makes inroads on the U.S. market, even by a small share, questions are raised and often action to reduce the trade flow is the result. For example, at the recent Outlook Conference, the newly appointed representative of the U.S. Trade Representatives Office, Ms. Barshefsky, noted that Canada was exporting subsidized eggs into the United States. Potato exports have been a growth item for Canada recently and it looks like Canada captured about 5 percent of the U.S. market last year. As a result, the U.S. International Trade Commission (ITC) is launching an investigation which could lead to trade action. As the hog and softwood industries have found out, these actions are expensive and disruptive even if the dispute is won.

GENERAL COMMENTS AND OBSERVATIONS

In reviewing the dairy and poultry dispute, it is evident that many factors have made the dispute a difficult one to resolve. It is our view that the dispute will not now be resolved by government initiatives.[21] The need to do so will come from industry and the economic realities of the marketplace. This dispute demonstrates the case of economics leading the political process.[22] The government still dominates but cannot stop the harmonization process that is taking place in trade, inspection, labelling, health claims, food safety,

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[19] Canadian supply management has its origins in the simple policy objective that producers should receive a fair return for their labour and investments as announced in a Speech from the Throne in 1971. How this policy was operationalized and administered has given rise to the poultry and dairy disputes, even though for dairy, at least, U.S. policy objectives were similar.

[20] The use of U.S. trade laws was noted as a concern in the text of the 1989 CUSTA. The recent decision by the U.S. government to ignore the WTO Panel examining the Helms-Burton law again fuels the perception that the United States will not abide by international rules if they hurt.

[21] Indeed, Mayer and Josling suggest that the nature of the U.S. political system makes change in U.S. dairy policy difficult to achieve. See *Agricultural Policy Reform: Politics and Process in the EC and USA*, 1990.

[22] For a discussion on how market forces are reshaping corporate America and how the policy makers are failing to keep up, see *Tales of a New America*, by Robert B. Reich, particularly chapter 20.

HACCP, technology, products, and the rationalization of food manufacturing on a NAFTA basis.

One way to speed progress is to remove the fear producers have that they will lose income or be put out of business. This goal can be achieved by policy analysts showing producers that market acceptance of the products they produce is the only way to ensure their future. This point was made at last year's dairy session but as the poultry dispute shows, this means reversing or undoing what has been said many times — not an easy task. Another way to speed up the process is to harmonize Canadian and U.S. trade laws, anti-dumping and countervail ones in particular, and agree on safety mechanisms which can be used once a free trade environment is achieved.

Uncertainty and the inability to obtain competitively priced inputs from the dairy and poultry sectors are forcing changes on the supply management commodities as are changes in the market place and in technology. Change is also being fuelled by the debt loads of governments. Corporations do not like uncertainty or risk. They are always taking steps to create a more certain future with reduced risks. Reduced costs and increased productivity are being achieved by rationalization, adopting new technology, consolidation, entering into strategic alliances, benchmarking, and developing export markets. In Canada, the pace of change is quicker beyond the farm gate than at the producer level for both the dairy and poultry sectors. In the United States, changes at the processing level are also significant. It is an irreversible process which in part has been accelerated by the WTO agreement, particularly for dairy. The production sectors will have to join in and there are signs that supply management producers are realizing they must do more to ensure their future. Some interprovincial production transfers have taken place and some provinces have removed the maximum size restrictions for registered growers.

Several interesting ideas are being pursued by groups of producers, taking them beyond the farm gate. These moves have been made possible in part because after twenty years of supply management, producers and cooperatives have a stronger capital base than do the processor and further processor sectors. It is not surprising that in the dairy sector, several co-ops have recently made strategic moves. (i.e., Agropur purchasing Ault milk business, 1997.)

The NAFTA decision has given many stakeholders in the poultry and dairy producer sector the confidence that there remains at least ten years of protection. As a result, quota value for chicken in Ontario has increased from $18 a bird to $23 and complacency is again settling in. The pace of change has slowed down and a new battle appears to be developing over the price of live chicken. We view this as a temporary situation as most stakeholders feel, including individual producers, that the current protection will gradually erode. This position is supported by the realization that border protection is not complete and that "leakage" of products not controlled at the border is increasing. The leakage problem is greater for poultry than for dairy because fowl meat is not covered by tariff rate quotas (TRQs). For example, of the $88.5 million of further processed poultry products (i.e., chicken dinners, frozen entrees, or fully prepared meals) imported last year from the United States, 70 percent or $62 million was not covered by TRQs. In 1988, imports for this

category totalled only $30 million. Similarly, Canada has become a major market for U.S. fowl meat with imports increasing during five out of the last six years.

Harmonization of the poultry and dairy sectors on a NAFTA basis is a real possibility. The technology and inspection systems are very similar already, while the regulatory environment is being harmonized a little bit at a time. When the border restrictions are removed, it is our view that, like beef, Canada, the United States and Mexico will trade poultry and dairy products on a north/south basis. In dairy, the results presented by Meilke et al. at the last workshop was an outcome with which we are comfortable.[23] Often, U.S. analysts have over-estimated the gain that can be made from trade while Canadian analysis has underestimated Canada's ability to be competitive with U.S. producers and processors of dairy and poultry. The food service distribution sector, which uses at least 40 to 50 percent of the poultry produced in North America, is quickly being reorganized on a north/south basis. The feed grain industry is similarly reorganizing on a north/south basis, particularly now that the Crow Rate has been eliminated. Since Canada is already shipping feed grain into the United States and feed grain makes up about 60 percent of the cost of producing poultry, Canada can be a competitive poultry producer.[24]

Further evidence that two-way trade will be a reality can be found in dairy and poultry export and import performance since 1990. For example, two-way trade in dairy products, despite border measures, has increased from US$65 million in 1990 to US$140 million in 1995. Although the United States is the net exporter, Canadian dairy exports to the United States are also increasing. In 1994, Canadian dairy exports totalled about US$50 million and in 1996 are expected to reach over US$76 million. Imports of chicken have grown from about 51 kilotonnes in 1990 to over 57 kilotonnes in 1996. Chicken exports have grown from almost nothing to 18.5 kilotonnes in 1996. Canadian chicken exports compete with U.S. chicken exports in offshore markets but further processed chicken products are also being marketed in the United States. A similar pattern can be observed in the trade flows for turkey products.

In the dairy sector on both sides of the border, changes in policy have been made as a result of the WTO and budget pressures in Canada. Subsidies are being phased out over a period of time but we do not see this change bringing about increased trade. It does, however, bring the possibility of freer trade a step closer. Similarly, the shift from producer financed subsidies to an end-use pricing system brings the dairy sector closer to market realities. This particular change in Canadian dairy policy is being informally reviewed by

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[23] Similar results are forecast by Langley et al. in their recent article, "Dairy Policies are Limiting U.S.-Canada Trade," published in the January/February 1997 issue of *Agricultural Outlook*, ERS, USDA. This is an excellent, well-balanced article and more work of this nature is needed.

[24] A study by De Valk Consulting Inc. comparing the competitiveness of Canada and U.S. poultry processors shows that the difference in processing costs has narrowed significantly since 1991. The January 1996 issue of *Poultry International* contains broiler meat cost of production comparisons. Although Canada is not included, our information on Canada suggests that costs similar to the United States are achievable.

Australia, New Zealand and the United States to determine if WTO conformity has been achieved. If the approach is found wanting, the WTO may yet be the catalyst for some more fundamental changes.[25] Interprovincial quota transfers (similar to the EC's country transfers) are becoming a reality and will help rationalize production on a more effective basis, but this is something policy analysts recommended be put in place twenty years ago.

The U.S. dairy policy change to consolidate the current thirty-two milk marketing orders into eleven will expand each region's market and is a necessary interim step to achieve harmonization. Just as in Canada, any remaining interprovincial barriers on dairy products and milk have to be eliminated. The issue of imitation dairy products also has to be dealt with and Quebec's recent suggestion that all provinces harmonize by each adopting the same prohibition on margarine is not a realistic one. Pressure to eliminate provincial restrictions is building.

The NAFTA agreement has the greatest impact on the Mexican dairy industry as a ten-to-fifteen year phase in period to achieve trade without restrictions is in place.

The likelihood of harmonization is made more compelling when consideration is given to the form of ownership that might evolve in the poultry and dairy industries. Currently, there are three approaches being used to achieve vertical coordination: the U.S. vertical integration approach where control is achieved through 100 percent ownership and one-to-one grower contracts; the European supply chain management approach where vertical coordination is achieved through means other than 100 percent ownership or control, including "voluntary" cooperation; and the Canadian supply management approach where vertical cooperation is attempted under the umbrella of national marketing agencies. It is our view that the supply chain management concept will evolve as the preferred approach because it provides the ability to manage food safety issues in a cost effective manner and best responds to changing consumer demands. We see both U.S. vertically integrated firms and Canada's supply management system evolving toward the chain management model. In Canada, this will mean that an independent producer sector coordinated through producer agencies can continue to exist while in the United States, the larger vertically integrated firms will likely spin off units and become more focused on core business.[26]

The common goal of ensuring production of safe food products will bring the Canadian and U.S. industries closer together. Sharing the same export markets and being a consistent exporter will do likewise.

As these changes take place, governments will follow and, from time to time, may be tempted to stall or reverse the process in response to demands by special interest groups. It is during these actions that analysts will need to ensure that policy makers have a good understanding of the options and the outcome. If, as Kempton Matte suggested at last year's seminar, the analysis available is complete and includes the downstream and trade

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[25] If it is "approved", it is likely the United States will adopt a similar approach.

[26] Alan Barkema and Mark Drabenstott, *The Many Paths of Vertical Coordination: Structural Implications for the U.S. Food Industry.*

implications, the policy makers will at least have the economic consequences of their policy choices clearly set out. This was not the case when dairy and poultry policies were first developed.

CONCLUSIONS AND RECOMMENDATIONS

The following are a number of conclusions we have drawn from the poultry and dairy disputes.

- The use of dispute settlement mechanisms does not always resolve the dispute. It could, and probably has, made resolution more difficult. Policy makers should only use this mechanism when the implications of both winning and losing, both in the short and long run, are considered.
- International trade rules, even in agriculture, are starting to have some impact on modifying "political" rule-making.
- The transparency provided by international trade rules is superior to "political" rule-making and supply management rule-making. Transparency and predictability are good for business because they reduce risk and uncertainty.
- Policy analysts and agricultural economists have a role to play in bringing to bear on agricultural and food disputes, transparent rule-making. Their input can help keep issues from becoming disputes and provide opportunities for harmonization. A greater reliance on international trade rules also achieves this objective.
- Canada's aggressive efforts to increase access and reduce barriers to trade for all agricultural products while keeping in place trade restrictions for poultry and dairy will be difficult to defend and maintain both domestically and internationally. The latter because doing so contradicts the spirit of the trade agreements Canada has signed, as shown by this dispute. Inconsistency in approach, by developing trade policy for sectors, leads to disputes.
- Both Canada and the United States have a comparative advantage in producing poultry and dairy products compared to other producers around the world. This common denominator should provide opportunities for harmonization and freer trade so that both countries can build a strong North American base from which to export and also one which will be of benefit to Mexico.
- The poultry program in Canada, and dairy program in both countries, transfers income to producers. If this factor is addressed, a more harmonized environment can be achieved more quickly.

Although it does not appear to be part of most of the workshop presentations, we will take this opportunity to move beyond conclusions to recommendations. In order to defuse the dairy and poultry dispute, the following suggestions are put forward:

1. The U.S. poultry industry needs to develop meaningful and representative live chicken and turkey prices that can be compared to Canadian live prices by developing a more transparent pricing arrangement with their contract growers.

2. In both dairy and poultry, Blue Ribbon Industry Panels (U.S. and Canadian) should be established to make recommendations to both governments on how and when freer trade can be achieved.

3. The Canadian and U.S. governments should resume their efforts to develop a new regime of trade remedies and safeguards, pushed by industry on both sides of the border.

4. Harmonization of inspection systems, labelling, product definition and other technical areas need to be continued and encouraged.

5. In Canada, interprovincial movement of milk and poultry production quotas should be facilitated and maximum limits on farm size should be removed.

6. Interprovincial trade barriers in the dairy sector and interprovincial differences on imitation dairy products should be eliminated while in the United States, the efforts to reduce the number of milk marketing orders should continue.

7. Policy analysts should be studying the implications of removing border controls on poultry and dairy products based on industry structures and costs which reflect the outcome of structural adjustments made during a suitable adjustment period.

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—DISCUSSION—
EMPHASIS ON TECHNICAL BARRIERS TO TRADE IN DAIRY UNDER NAFTA

Ronald D. Knutson

The de Gorter/de Valk paper and the Kerr/Hayes paper provided an excellent basis for discussion. My comments reflect:

- Questions concerning what we do not know with regard to competitiveness.
- Issues of vertical integration and supply chain management.
- The need for balance in discussion of the dairy issues.
- What we do not know.

The de Gorter and de Valk paper asserts that "Moreover, within North America, Canada can be a consistent exporter of both dairy and poultry..." Many in U.S. agriculture assert that the United States has an absolute advantage in most commodities. I do not know which is right. Moreover, I do not think that anyone knows where the advantage lies. Economists on both sides of the border have done a very poor job of analysing the comparative costs. While it is sometimes argued by economists that costs are meaningless because they are influenced by policy, it is possible to estimate the impacts of policy. For economists, these arguments are a copout. While the information may not be perfect, comparable data from both sides of the border, given its inadequacy, can be very useful to policy makers.

VERTICAL INTEGRATION

Kerr/Hayes and de Gorter/de Valk make a distinction between the U.S. vertical integration approach and the European supply chain management approach. The U.S. integration approach is characterized as one where the corporate integrator owns and controls production throughout the market channel.

There are very few U.S. cases of this type of integration and primarily involve small firms. The large U.S. poultry and hog integrators utilize a contract system involving growers who own the physical production facilities. The integrator supplies feed, pigs or chicks. Production is according to a set of specifications.

A distinction can be made between investor-owned and producer-owned integrators. Both exist in the United States although investor-owned integration tends to be dominant. While producers have more to say about how an integrated system that they own operates and have a more direct pipeline to benefits, to be competitive their goal still has to be efficiently producing a uniform quality product that consumers want. This requires a high level of control over production. Control may either be accomplished through vertical integration or by a very small number of large producers who, themselves, are integrated.

In discussion, the point was made that U.S. poultry integrators may be reconsidering the number of functions that they perform internally. Surely, during a time of out sourcing, any large integrator has to be evaluating whether there are certain functions that can be performed at a low cost by out sourcing. But, the product or service that is out sourced will still be produced to highly controlled specifications.

On a milk equivalent basis, Mexico produces only about 50 percent of its dairy product consumption. Neither the United States nor Canada have been large net exporters. U.S. and Canadian exports have been limited to commodities that have been subsidized either directly or through technical classified pricing. U.S. dairy trade with Canada has been limited largely to Canadian consumers who cross the border to buy lower priced U.S. dairy products, when they exist.

The purpose of this paper is to explore technological barriers to trade in milk and its products under NAFTA. These barriers to trade appear to revolve largely around the U.S. Pasteurized Milk Ordinance (PMO) whose provisions are set by the National Conference on Interstate Milk Shipments and its equivalents in Mexico and Canada. A central issue is the equivalency of these provisions between the United States and Canada. Since dairy trade with Mexico only moves in one direction, from the United States and Canada to Mexico, the equivalency issue involves the conditions under which Mexican dairy products can enter the United States. The issue of the use of rBST also looms as a potential technical barrier.

Canadian supply management programs and the related tariff rate quota schedule preclude dairy trade between the United States and Canada, except for direct consumer border crossing sales. As a result, it is difficult to determine the extent of dairy technical barriers. It is also important to note that there may be different technical barriers among the Canadian provinces, although it is understood that efforts are being made to identify and eliminate these barriers to inter-provincial trade.

HEALTH AND SANITARY REGULATIONS

Discussion of the U.S. PMO provides a useful point of departure for indicating the nature of potential technical barriers to trade affecting health and sanitary conditions related to dairy. The PMO was adopted in the 1950s to facilitate free movement of Grade A milk from one state to another.

The commerce clause of the U.S. Constitution provides that no state shall take action to impede the movement of products from one state to another. Historically, this clause, which effectively mandates free trade among the states, has been one of our more powerful constitutional provisions. After World War II, the geographic scope of milk markets expanded rapidly with improvements in transportation, refrigeration and packaging. Markets for milk used for bottling expanded rapidly from a local to a regional basis or multi state basis. Efforts to protect local markets on the basis of somatic cell count or inspection requirements were struck down by the U.S. Supreme Court on the grounds that they were a barrier to the interstate movement of milk.

The result of these court decisions was the need for a single national uniform standard which was accomplished by state adoption of the PMO =AF a model law. All states adhere to the PMO which contains requirements which inspectors utilize in certifying farms for Grade A (suitable for use in fluid products) sales. These requirements become relatively detailed such as one indicating that a milk house must contain double wash vats or a penalty of receipts from two days milk for a farmer who contaminates a tanker of milk with antibiotic residues.

Under NAFTA, there logically develops an issue of whether other countries (Mexico and Canada) can participate in the National Conference on Interstate Milk Shipments that sets the rules for PMO. In 1993, delegates to the Conference voted that other countries could participate and receive the benefits of the PMO if the U.S. Food and Drug Administration (FDA) certified that the country follows Conference/PMO procedures. This means that FDA would have the right to review farm inspection and quality programs of Interstate Milk Shippers listed countries.

The elimination of U.S. import quotas on Canadian supply management programs, combined with certification of equivalency would mean free movement of fluid milk and dairy products among the states and provinces of the three NAFTA countries.

CANADIAN TECHNICAL DISPUTES

There is at least one instance where the equivalency issue has been challenged. It involved a Quebec processor who had been shipping UHT milk into Puerto Rico for more than a decade. After becoming a full member of the Conference in 1989, Puerto Rico moved to prohibit imports of milk from the Quebec processor.

In June 1993, a CFTA dispute settlement panel recommended that an equivalency study be undertaken. Subsequently, in October 1993, the United States and Canada agreed to a three-part equivalency study (not including market access):

1. The equivalency of the UHT system of Quebec with that of Puerto Rico (a scheduled 8-10 week study).
2. The equivalency of fluid milk and fluid products (yogurt and sour cream, for example) between Quebec and the United States (a scheduled 2-year study).
3. The equivalency of all provinces and the United States, (a scheduled 6-year study).

It is significant to note that the first of these studies, which took two years to complete and was signed in October 1995, found equivalency in the case of UHT for Quebec and Puerto Rico. It is also significant to note that the total process is scheduled to take eight years. Moreover, it is anticipated that the safety and technical issues will only be taken up toward the end of the eight-year period. Depending on when you start counting, that means between 2001 and 2003.

MEXICAN TECHNICAL DISPUTES

The situation with Mexico is different but equally interesting. The United States exports substantial quantities of fluid milk and products to Mexico. The fluid milk crosses the border in both bulk and packaged form. A few border conflicts have developed over these shipments.

But, since most of the bulk imports are by cooperatives that need milk to offset Fall deficit production, these protests have been limited.

Concern has developed on the U.S. side of the border that a plant located across the border might import U.S. bulk milk, process it and send it back across the border as finished products. The economic incentive for doing this lies in lower Mexican labour costs (which really are not that significant in a milk plant) and questions of whether the price of bulk milk moving into Mexico can legally be administered under NAFTA by Federal Milk Marketing Orders (FMMO). The FMMO issue is made more complex by the fact that New Mexico producers are significantly large to own their own 18-wheeler tankers, and haul and sell their production across the border. This is reminiscent of Canadian wheat farmers running the U.S.-Canadian border to obtain a higher price.

THE CASE OF rBST

When the United States and Canada get into the guts of the equivalency study, it will be interesting to see how they handle the rBST issue. Approval of the use of rBST in Mexico goes back several years. U.S. producers began using it on a commercial basis in 1994. Its approval was the most studied animal drug in U.S. history. While there were initial consumer and producer protests, these died down rapidly. The death blow was a U.S. Supreme Court decision that Vermont could not require the labelling of milk products as being rBST-free =AF a violation of the interstate commerce clause.

The sale of rBST in Canada is prohibited, as it is in the European Union. With production controls, there is little incentive to use rBST because it would mean buying more quota (investment cost about = 2410,000 per cow in Canada) or selling cows which reduces capacity utilization.

PRICING MILK FOR EXPORT

While not a technical barrier to trade, the impact of milk pricing policies on trade has the potential to become quite important and controversial. The 1996 Farm Bill directs the Secretary of Agriculture to get the U.S. dairy industry more involved in exports. While it arguably even includes the authority for the United States to become a state trader in dairy exports, this is an unlikely alternative.

A more likely option involves establishing a separate lower price Class on milk used to make products exported under FMMOs. The proceeds from this Class would go into the Federal Order pool and be reflected in average producer returns. The issue is whether such a pricing scheme is legal under the WTO. Interestingly, the Quebec processor who was shipping UHT milk to Puerto Rico was competing on the basis of a separate price Class for products exported = 21. This is one of the reasons U.S. dairy farmers charge that they are being asked to compete internationally with their arms tied behind their backs.

PROSPECTS

Without breakthroughs in the next round of trade negotiations, it would appear unlikely that the fate of technical barriers to trade between the United States and Canada in dairy will be decided for 8 to10 years. However, these issues will surface each time there are discussions over the expansion of NAFTA into a Western Hemisphere free trade bloc.

The pressures of global economic forces could be more influential than negotiation in lowering barriers to trade. The 1996 Farm Bill decoupling and milk price support decisions were a product of the reality that the United States could not maintain its protectionist policies in the face of global economic forces. The realities of a global economy could force equivalency in dairy among Canada, Mexico and the United States.

POLICY DIVERGENCE — REGULATORY CONVERGENCE IN THE LIVESTOCK AND POULTRY INDUSTRIES

Mike Dungate

One of the stated objectives of this conference is to explore how harmonization, convergence and compatibility (H/C/C) of agriculture policies, programs and regulations could avoid costly trade disputes between NAFTA partners. This paper comments on two very different perspectives within the livestock and poultry industries.

Bill Kerr and Dermot Hayes, in their paper, have used the example of the livestock and red meat sectors to demonstrate how Canada-U.S. trade, which is ostensibly free (all tariffs will be removed by January 1, 1998), can still be peppered by a variety of trade irritants and disputes. In fact, their paper suggests that removal of formal tariffs may in fact engender an increase in the number of trade actions as domestic industries seek protection under any cloak that fits. As conference participants discussed earlier, to the cloaks of technical regulations (grading and inspection), health standards, countervail actions, and Section 332 investigations, may be added the new cloak of environmental regulations. The point to emphasize is that these disputes are occurring in a sector where the domestic agriculture policies in Canada and the United States are compatible, if not harmonized. The discongruity is not in the policy environment, but in the regulatory one.

This is not to say that these sectors have not benefited from free trade. As the authors have shown, however, the high "fulfilment costs" of the "resource intensive activity" of removing non-tariff barriers and preventing new ones from being implemented has restricted the full potential of these benefits from being realized. Along with convergence in tariffs and regulations, there needs to be a change in the mind set of industry. Expectations need to be managed.

Harry de Gorter and Robert de Valk, in their paper, attempt to demonstrate, through the example of Canada-U.S. trade disputes in the dairy and poultry industries, how different agriculture policies make H/C/C difficult and lead to conflict. This paper, however, deals less with H/C/C than it does with one side of a Canadian domestic agriculture policy issue. Their paper also contains many gratuitous comments, factual errors and unsubstantiated conclusions, some of which are addressed below.

These authors indicate that the disputes in these industries go back at least two decades. In fact, the origins go much farther back; back to the original GATT negotiations, at which time Canada opposed U.S. attempts to exempt agriculture from stringent disciplines for trade in industrial products.[1] The compromise result in 1947 was the limited exemption for agriculture contained in GATT Article XI 2(c)(I). It quickly became evident, however, that even this limited discipline was too stringent for the United States, as it was not prepared to bring its *Agricultural Adjustment Act* (1933) programs in line with GATT Article XI. In 1995, therefore, the United States sought and obtained a waiver from GATT disciplines for its Section 22 import quotas.

Notwithstanding the substantial progress in reducing normal agricultural tariffs, Canada and the United States were never able to negotiate the liberalization of quantitative import restrictions which covered the U.S. dairy, sugar, peanut and cotton sectors (throughout virtually all of the post-World War II period) and the import quotas on supply-managed products (which Canada progressively introduced, primarily during the 1970s). The U.S. reliance on its Section 22 import quotas and Canada's reliance on Article XI 2(c)(I) import quotas in support of its supply-managed dairy, poultry and egg sectors were well entrenched by the early-1980s when the first suggestions of a Canada-U.S. Free Trade Agreement began to emerge.

In their history of the dispute, de Gorter and de Valk give significant weight to the 1976 GATT Working Party report on Canadian import quotas on eggs. In their view, the working party was a watershed event in the development of supply management in Canada as the ruling in Canada's favour gave Canadian policy makers confidence that GATT Article XI could be used effectively to block imports. Rather than the egg working party, the watershed point for national supply management in Canada (more for domestic considerations than international ones) was 1970. It was in 1970, after intense federal-provincial discussions, the Canadian federal government proposed legislation to permit the establishment of national supply management systems consistent with the provisions of GATT Article XI 2(c)(I) (remember that this avenue had been open to all GATT members, including Canada, since 1947, and only the United States with its 1955 GATT waiver did not have to meet the GATT's stringent criteria). This strategy of stabilizing prices by controlling production and/or marketing on a national basis led to the implementation of a system of supply management with the *National Milk Marketing Plan* (NMMP) between 1970 and 1974, as each province joined the Plan. Concurrent with the NMMP, the *Farm Products Marketing Agencies Act* of 1972 provided for the establishment of national marketing agencies in the poultry industries with authority to allocate national output among each of the provinces.

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[1] For a detailed historical overview of Canada-U.S. agricultural disputes for these industries, see: Michael Hart, *Damned if you Do and Damned if you Don't: The Trials and Tribulations of Canada-US Agriculture Trade*, Occasional Paper No. 38, Centre for Trade Policy and Law.

Supply management is a unique Canadian marketing system that has been viewed as a kind of "industrial strategy" to maintain agricultural production in all regions of the country, while contributing to the development of rural Canada, and ensuring the survival of the traditional "family farm" structure. Historically, the core objectives of supply management in Canada is to provide efficient producers with the opportunity of obtaining a fair return for their labour and investment, while providing consumers with a continuous and adequate supply of high quality products.

Canada's national supply management systems have their roots in the troubled agricultural conditions of the 1960s: surpluses were accumulating, and prices and incomes were low and unstable. Although producer marketing boards with varying degrees of power had become fairly well-established at the provincial level, they had very little authority to regulate interprovincial trade and none to regulate international trade. Matters changed in the late-1960s, more because of interprovincial than international factors. New production, management and shipping techniques had increased the supply of agricultural products on an interprovincial basis. The limitations of provincial marketing boards had become clearly evident. While provincial regulation was effective in managing the production and marketing of products such as fluid milk which are bulky and perishable, and products such as tobacco that are produced almost exclusively in one province, supply management on a national basis was required to deal with products for which there was interprovincial competition.

In order to operate its national supply management systems effectively, Canada adopted measures to monitor and control imports of supply-managed products. Without these measures, the stability provided by the national policies would be undermined by imports, as it would be impossible for the national agencies to determine domestic demand accurately and allocate domestic quotas accordingly.

The 1988 GATT Panel on Ice Cream and Yogurt ruled that Canada's import quotas on ice cream and yogurt were inconsistent with Canada's GATT obligations under Article XI because they were deemed not to be "like" products with milk. Instead of focusing on that ruling, the authors chose instead to focus on an aspect that the panel chose not to rule on - that of restricting production. The authors muse about how beneficial it would have been, for certain industry sectors in Canada, had the panel ruled on this matter. The fact that there is over-production does not *ipso facto* mean that production is not restricted. All producers attempt to produce to the maximum of their allocation. The vagaries of agriculture production, however, are such that they rarely hit that number exactly, being either slightly under or slightly over. As the integrity of the system depends on production meeting demand, to counterbalance the producers' desire to maximize their production, there are prohibitive over-production penalties in place that provide a real disincentive to over produce and ensure that production remains restricted.

In the Canada-U.S. Free Trade Agreement (FTA) negotiations, not just Canada, but neither country was prepared to negotiate the removal of quantitative import restrictions.

> In the first substantive meeting between the Canadian and U.S. negotiating teams, the U.S. negotiators made it clear that they were prepared to work towards the elimination

> of all normal agricultural tariffs, but that Section 22 import quotas, export subsidies to third markets and domestic agricultural support could only be negotiated in the GATT where other countries, in particular those of the European Community, could be engaged.[2]
>
> The Canadians will not eliminate their quota program on eggs and egg products. It will continue in effect, just as some of our agriculture programs, dairy for example...We do have an opportunity to remove the quotas in the Uruguay round and we did deliberately leave a lot of these agricultural issues for the Uruguay round because they are global issues, rather than bilateral ones.[3]

Both countries recognized at the time that the rules related to market access under the GATT would probably be modified as a result of the Uruguay Round, which had just gotten underway. However, neither country knew in what manner these modifications might occur. The eventual agreement for dealing with this uncertainty was the wording in FTA Article 710 which stated that both countries retain their GATT rights, including those under Article XI.

Regarding de Gorter's and de Valk's comments on the FTA, they state that the increase in access "granted" to the United States for poultry was an "arbitrarily chosen number". In any trade negotiation, nothing is granted, and nothing is chosen arbitrarily. The level of access is a negotiated one, and the bilateral deal was to provide access at the current level of imports (imports within the existing quota as well as supplemental imports). Regarding the NAFTA Panel and a new anti-dumping and countervail dispute settlement system, the two are unrelated. The NAFTA panel falls under Chapter 20, while anti-dumping and countervail are covered by the dispute settlement provisions of Chapter 19. The Canadian government has stated that it remains committed to pursuing a new dispute settlement system as it was at the time it negotiated the FTA. In fact, the recently concluded Canada-Chile free trade agreement includes a provision to eliminate anti-dumping actions.

An important point raised by the authors is that much has been achieved in the harmonization of the regulatory environment since the signing of the FTA. It is interesting to note that this harmonization is occurring in the poultry industries despite continuing tariff barriers. This is not to say that the Canadian market is closed. There is significant trade. For chicken, Canada is the United States' 7th largest export market by volume and 4th largest by value. In 1996, the United States exported 56 million kilograms of chicken to Canada valued

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[2] *Counter-Submission of Canada, North American Free Trade Agreement Chapter Twenty Panel in the matter of tariffs applied by Canada to certain U.S.-origin agricultural products*, February 19, 1996, p.1.

[3] *United States-Canada Free Trade Agreement: Hearings Before the Subcommittee on Trade of the House Committee on Ways and Means*, 100th Congress, 2d Session 56 (1988) (statement of Hon. Clayton Yeutter, U.S. Trade Representative, February 9, 1988).

at $141 million.[4] Furthermore, the economic rent of these imports is worth another $60 million to Canadian import quota holders, which includes retailers, distributors, food service operators, further processors and processors. The difference between bilateral trade in chicken and beef is that the chicken Tariff Rate Quota (TRQ) effectively dictates the terms of trade - the level of imports and who gets them, while trade in beef is driven more by market dynamics. As the terms of trade are well-established, the trade that is permitted flows freely without regulatory impediment, as witnessed by the fact that the TRQ is consistently fully utilized.

The North American Free Trade Agreement (NAFTA) negotiations were conducted at a time when the results of the Uruguay Round negotiations were not known. There was general agreement to phase-out normal tariffs but there was no agreement on how non-tariff barriers were to be handled. Canada refused to prejudice its Uruguay Round negotiating position of clarifying Article XI and indicated that, while it was prepared to phase-out all normal tariffs, it would maintain its import quotas on supply-managed products.

The end result was that Canada and the United States did not engage in any market access negotiations. The United States and Mexico, and Canada and Mexico conducted separate bilateral market access negotiations on agriculture. Canada and the United States agreed to incorporate the key provisions of Chapter Seven of the FTA into the NAFTA. The only trilateral provisions of the agricultural chapter in the NAFTA were those dealing with non-market access issues.

From the beginning of the Uruguay Round negotiations, Canada pressed for clarification of GATT Article XI as a means of improving market access opportunities while still maintaining import restrictions in support of effective supply management programs. In March of 1990, Canada tabled a detailed proposal for strengthening and clarifying Article XI.

The United States was proceeding on a different track in the negotiations, i.e., comprehensive tariffication. The United States circulated a paper on tariffication in Geneva on November 7, 1988, and this proposal was further developed in a discussion paper on tariffication submitted to the GATT by the United States in July, 1989. Eventually the concept of tariffication was incorporated as a central feature of the market access section of the draft agriculture negotiating texts. Canada, however, continued to press for a solution incorporating changes to Article XI until the close of negotiations in December, 1993. The end result of the Uruguay Round was tariffication.

During a number of occasions throughout 1994, Canada and the United States met to discuss the implications of the Uruguay Round results for the agricultural provisions of the

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[4] Under the terms of the FTA, the United States has access equal to 7.5 percent of Canada's domestic production during the previous year. As a result of increased Canadian production, U.S. exports have risen from 34 million kilograms in 1988 to 56 million kilograms in 1996. The value of these exports has increased to $141 million from $66 million over the same time frame. The tariff rate applied to these within-quota imports will be reduced to zero as of January 1, 1998.

NAFTA. The United States argued that tariff equivalents could not be applied to bilateral trade. When it became apparent that the legal differences could not be bridged, the two countries attempted to negotiate a pragmatic package which would put the legal differences to one side for five or six years. These discussions failed to reach an agreement and in late-1994 the United States indicated it would pursue its interests through the dispute settlement provisions of the NAFTA.

Regarding the NAFTA Panel itself, the question was not whether the World Trade Organization (WTO) took precedence over the NAFTA, as claimed by de Gorter and de Valk. The United States fully conceded that Canada's tariff equivalents were WTO consistent. What they questioned was whether they also met Canada's independent NAFTA obligations. And what the panel unanimously agreed was that Canada's conversion of its import quotas to tariff equivalents was fully consistent with the NAFTA by virtue of NAFTA Annex 702.1 which incorporated FTA Article 710. WTO tariffication did not increase tariffs or introduce new ones, what it did was convert import quotas to tariff equivalents — a process sold by the United States to GATT Parties as trade liberalizing.

De Valk and de Gorter erroneously imply that the United States can now take this case to the WTO. Nothing is further from the truth. NAFTA Chapter 20 clearly states that a country can choose the NAFTA or the WTO dispute settlement procedure. Furthermore, as mentioned above, the United States conceded in the NAFTA Panel that Canada's tariffication fully met its WTO obligations.

The authors then make the bold assertion that now that tariffication is in place "the need for national supply management agencies to maintain effective control over production is removed." Just as national supply management was not put in place simply to obtain import controls, the change in the nature of import controls does not obviate the need for domestic supply management. As noted earlier, controls over both domestic and import supply are essential to operate supply management effectively. Just as control over domestic supply was not enough in the 1970s, neither would control over imports alone be enough in the 1990s and beyond.

Leaving aside the arguments on the merits of supply management and the proposition that the Canadian industry should be harmonized to the U.S. model (and not the other way around), I propose to look at an issue that I believe is leading to increased confrontation, and that is the creation of "unrealistic expectations".

I agree with the authors that unrealistic expectations created in the United States have played a large role in this dispute. But, more than just stiffening the resolve of Canadian industry to force the United States to abide by the agreements it has negotiated, it has convinced U.S. industry of its right to unlimited access to the Canadian market for these products. In order to sell the Uruguay Round to Congress, the U.S. Administration had to demonstrate the benefit of the WTO Agreement on Agriculture to U.S. industry. The U.S. government stated that the United States would gain access to the $1 billion dairy industry in Canada. This did not happen. No matter — the U.S. government said it would challenge these tariffs as NAFTA inconsistent and there was no way it could loose. But loose it did, and clamour did the industry. In the same vein, the U.S. government has created similar

unrealistic expectations regarding wheat shipments from Canada, i.e., that the United States can legally do something about them. For political expediency purposes, the U.S. government has not been forthright with its industry. This has created increased political pressure in the United States against these decisions as well as the dispute settlement process itself. This is a dangerous game that the government is playing, by insinuating that Canadian policies or trade are actually WTO or NAFTA incompatible.

De Gorter and de Valk make several recommendations to settle the dairy and poultry dispute. First, I would point out that the dispute has been settled by a NAFTA panel. The United States has, and continues to try to obtain through dispute settlement and other means what it was unable to negotiate bilaterally in the FTA, trilaterally in the NAFTA or multilaterally in the WTO. That aside, as for the specific recommendations:

1. It will never be possible to develop a meaningful and representative live poultry price from U.S. integrated processors as there is no live price. Contract growers are not paid for their product, but only for their labour.
2. As demonstrated by the blue ribbon commission on wheat, this is a political process that is not conducive to settling disputes.
3. Canada continues to push for clearer trade remedy and safeguard regimes.
4. Harmonization of regulatory issues should proceed.
5. Interprovincial trade in goods in Canada and milk marketing order reform in the United States are domestic matters and it is not appropriate to deal with them in an international forum. It is sufficient to agree that domestic policies/regulations will be brought into conformance with negotiated international commitments.
6. The best, and only, venue to address these issues is during the next round of WTO agricultural trade negotiations scheduled to begin in 1999.

In conclusion, the two papers have highlighted two telling aspects on how H/C/C implications affect trade disputes:

1. On the one hand, as Bill Kerr and Dermot Hayes highlight, the continuing frictions in wheat, beef and pork trade demonstrate that tariff-free trade does not necessarily negate disputes; regulatory issues continue to be irritants.
2. On the other hand, as de Valk and de Gorter point out, there has been progress made on regulatory issues in the poultry industries, demonstrating that tariff barriers, which effectively determine the terms of trade, can create a non-confrontational environment in which non-tariff issues can be addressed.
3. In general, with the huge change engendered by the Uruguay Round bringing agriculture more fully within international trade disciplines, we may see more trade disputes, in the short term, as agriculture industries around the globe are forced to adapt quickly to new trading environments.

Given these observations, perhaps the solution is for the next round of WTO agriculture negotiations to consider the Mercosur proposal for Free Trade of the Americas Agreement (FTAA) negotiations as an option. Mercosur has proposed a three stage negotiation process. During the first stage, talks would focus on business facilitation issues such as customs documentation measures, certification of origin, and acceptance of SPS certificates. The second stage would encompass norms and disciplines such as administration of customs procedures, investment promotion and protection regimes, technical standards, sanitary and phytosanitary measures, antidumping and countervail measures, transparency in government procurement, professional services and intellectual property rights. Only once these issues are satisfactorily solved would negotiations begin on market access, export subsidies and competition policy.[5]

[5] *Special Report: Mercosur plan at odds with U.S., Canada on start date for FTAA talks*, in Inside U.S. Trade, February 28, 1997.

HARMONIZATION AND CONVERGENCE OF CANADIAN AND U.S. GRAINS AND OILSEEDS POLICIES: 1985-1996

Richard Gray and Vincent H. Smith

INTRODUCTION

The United States and Canada share the longest common border and largest bilateral trading relationship in the world. Recent trading agreements — CUSTA, NAFTA and GATT — hold the promise of further enhancing trade by encouraging elimination of many remaining trade barriers. However, one cause for concern about the effectiveness of these trade agreements has been the frequency of Canadian-U.S. trade disputes over bilateral wheat and barley trade arrangements and trade flows. To some extent, these disputes have arisen because of differences in the domestic and trade policies implemented by the two countries although other political factors have also clearly been important causes of disagreements involving bilateral grains and oilseed trade relationships.

This paper examines changes in U.S. and Canadian grains and oilseeds programs over the period 1985 to 1996 and provides assessments of whether or not different aspects of the two countries' domestic and trade grains and oilseeds have converged towards harmonization since implementation of the Canadian-U.S. Free Trade Agreement in 1989. It should be noted, however, that many of the changes in each countries' agricultural policies discussed in this study cannot be attributed to that agreement. Rather, many adjustments that have taken place since 1988 reflect government responses to budgetary pressures, commitments under international trade agreements, changes in the relative political importance of rural and urban voters, and other factors.

Canada has export-orientated grains and oilseeds sectors in which world markets have played a large role in determining grain prices, which in turn has affected how much grain is produced, consumed and exported. Both sectors have also been the recipient of many government programs designed primarily to enhance and stabilize farm income particularly during periods of low prices. As in Canada, the U.S. small grains, feed grains and oil seeds sectors (wheat, barley, oats, corn, soybeans and other oilseeds) are fundamentally important components of the country's agricultural sector. Also, as in Canada, although to a considerably lesser degree, exports are an important component of the aggregate demand

facing U.S.. producers of these commodities. Further, again as in Canada, over the past sixty years, U.S. producers of most of these commodities have benefited directly or indirectly from a multitude of government programs.

However, in Canada and the United States (as in the European Union and elsewhere) producers of these commodities have encountered apparently substantial changes in government programs that appear to reduce government support for agriculture in general and grain and oilseed producers in particular. Moreover, in the United States, the very recent changes in income support programs implement under the *Federal Agricultural Improvement and Reform (FAIR) Act* of 1996 have also altered the mechanisms by which many U.S. farmers receive subsidies, largely decoupling them from either current price levels or current production decisions. Similarly, in Canada, grains and oilseeds producers have experienced substantial reduction in levels of support derived from income and transportation subsidies over the period 1991-1996.

A GENERAL OVERVIEW OF COMMODITY SPECIFIC SUPPORT LEVELS: PRODUCER SUBSIDY EQUIVALENTS

Accurate evaluations of the implications of changes in commodity programs require careful economic analysis of the full impacts of these programs on domestic production, consumption and trade, as well as effects on the derived demand for inputs. Aggregate but partial measures of intervention such as *Aggregate Measures of Support* (AMSs) and *Producer Subsidy Equivalents* (PSEs) are only incomplete indicators of the degree to which commodity specific policies in different countries are converging towards harmonization. The potential for these indicators to be misleading is especially large for commodities such as grains and oilseeds whose international prices vary substantially when comparisons are made on a year to year basis. However, they do provide some indication of movements in general levels of aggregate direct and indirect income transfers when computed on an average basis over longer periods of time.

Figures 1, 2 and 3 present average PSEs for the periods 1986-88, 1990-92 and 1993-95 for wheat, other grains and oilseeds respectively. Between 1986-88 and 1993-95, in Canada, the PSEs for each of the three commodity groups declined by about half (from 51 percent to 24 percent for wheat, from 60 to 28 percent for other grains, and from 31 percent to 17 percent for oilseeds). In the United States, over the same period, the PSE for wheat declined by about one third from 54 percent to 36 percent, a smaller proportional decrease from about the same initial level than in Canada. For other grains, the U.S. PSE declined by about half from 42 percent to 20 percent, a similar proportional decrease to that implemented in Canada. For oilseeds, the U.S. PSE remained constant at the relatively low level of about ten percent. U.S. PSE's for wheat and other grains have almost certainly declined substantially from their 1993-95 average levels as a result of the decoupling of income support payments under the 1996 FAIR Act. Similarly, the average wheat, other grains and

oilseeds PSE's reported for Canada over the same period overstate current PSE's because of the elimination in 1995 of Canadian grain transportation subsidies.

The data also indicate that distortionary income support programs for wheat and other grains appear to have been curtailed in both countries and by somewhat similar amounts. For oilseeds, Canadian income transfer programs have been substantially reduced and appear to have converged towards the modest levels of support provided to U.S. oilseeds producers.

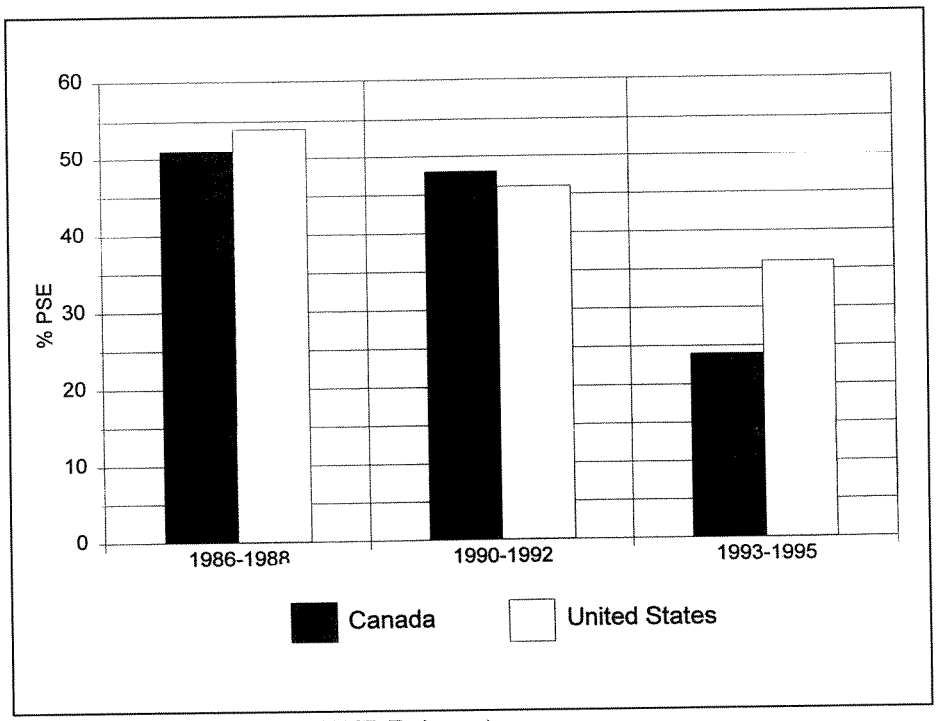

Figure 1. Wheat PSE Levels (OECD Estimates)

FARM INCOME SUPPORTS

Canadian Farm Income Supports

Farm income support in Canada has been delivered through several different programs. In the last decade alone the federal government operated four different income stabilization programs and made three major *ad hoc* payments to producers. The picture is further complicated by provincial variations in program designs. The only current direct income support program is the Net Income Stabilization Account (NISA). The predecessors to this programs were the Agricultural Stabilization Act (ASA), the Western Grain Stabilization Program (WGSP) and the Gross Revenue Insurance Program (GRIP).

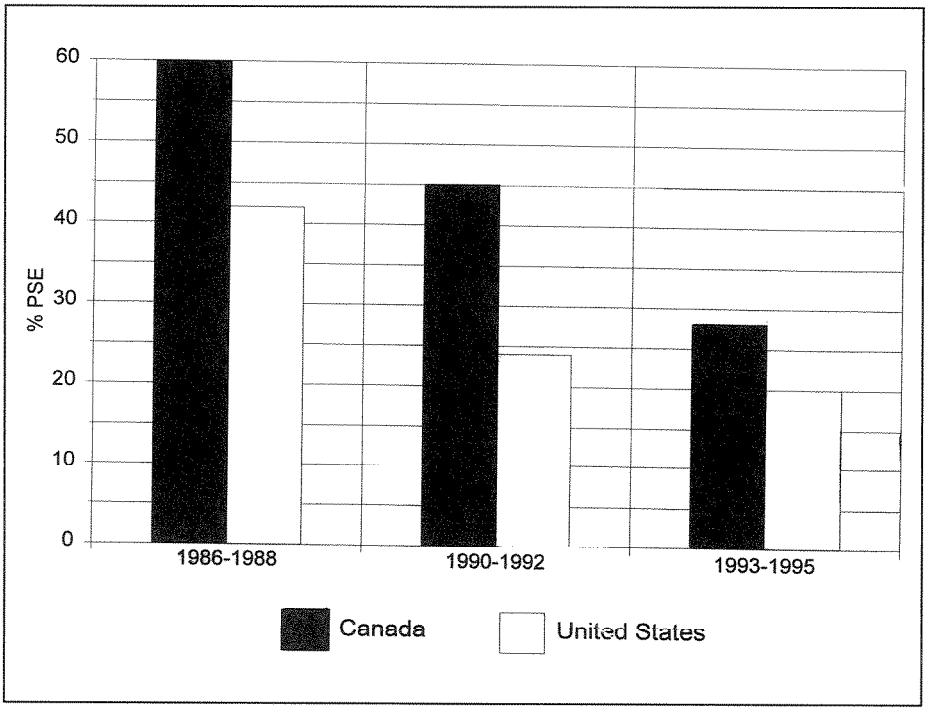

Figure 2. Other Grains PSE Levels (OECD Estimates)

The WGSP, introduced in 1976, was designed to stabilize income in the Western Canadian grain sector. Producers and the federal government contributed to a buffer fund that made payments to producers when aggregate cash flow in the grain sector fell below a five year moving average. A second trigger, added in 1982, resulted in payments whenever net cash flow per marketed tonne fell below the previous five year average. When GRIP

replaced WGSP in 1990, the fund had accumulated a large deficit and the income trigger values had fallen to very low levels.

After the dissolution of the WGSP in 1990, the Grains and Oilseeds Farm Safety Net Committee, made up of federal and provincial representatives and farm leaders, was given the task of designing an income stabilization program for the grain sector. In a report released in August 1990, the Committee recommended two new programs; the Gross Revenue Insurance Program (GRIP), and the Net Income Stabilization Account (NISA). A Federal-Provincial agreement for GRIP led to implementation of the safety net program in most provinces in the 1991/92 crop year.

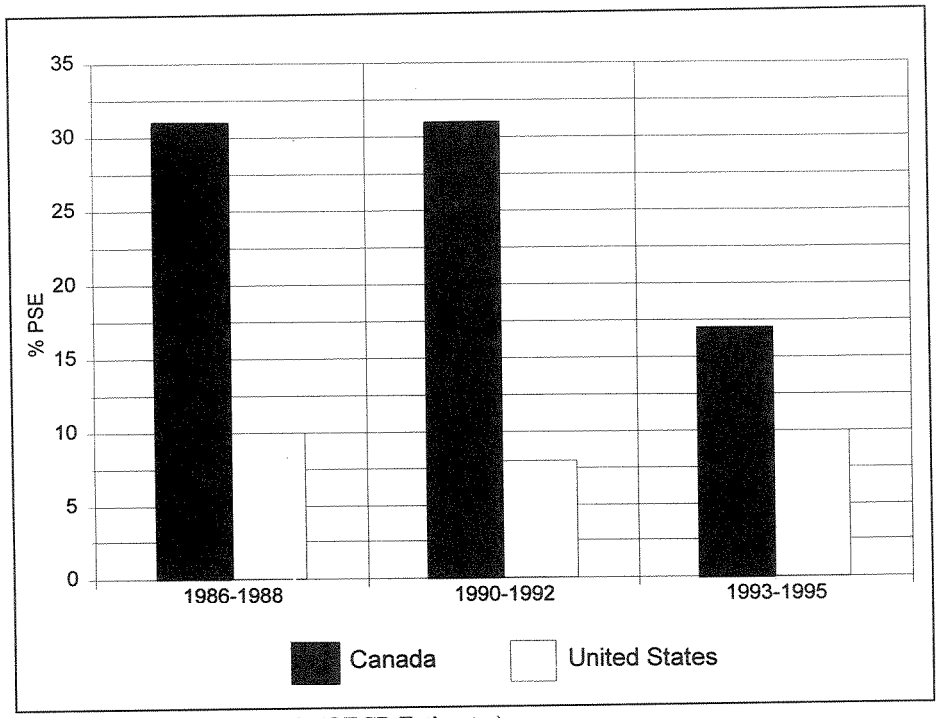

Figure 3. Oilseed PSE Levels (OECD Estimates)

The GRIP guaranteed a minimum gross revenue for producers by giving them the option of insuring a target revenue per acre for virtually any grain or oilseed crop. The insured level of gross revenue was derived by multiplying a producer's long term average yield for each crop by a target price for that crop. In Saskatchewan, the target price for each commodity was equal to 70 percent of a fifteen year indexed moving average price. A crop specific payout was made to a producer when his actual production multiplied by the crop year average market price was less than his guaranteed revenue. The producer paid 33 percent of the premium cost of the program, the federal government 42 percent and each

most links at the farm level between current production decisions and current or future deficiency payment income transfers had been severed by 1986. In this context, the 1996 FAIR Act can be viewed as simply completing the decoupling process for deficiency payments and production decisions that began in 1973 by ending the system of base acres that required farmers actually to plant crops in order to receive government transfer payments. The decoupling process embedded in the 1996 Act, while not representing a radical departure from the trend line in U.S. grain policy, does imply a substantial shift towards harmonization between U.S. and Canadian grain programs. The decoupled market transition payments which U.S. grains farmers receive do give them a guarantee income stream that many Canadian grains producers would like to have, but do not provide substantive distortionary incentives to US producers to change their production decisions. Thus they also do not represent a real problem from the perspective of agricultural policy harmonization.

The U.S. soybean and oilseeds income support programs are quite different than the programs for food and feed grains. Under the 1977 Food and Agriculture Act, soybean producers were provided with a mandated nonrecourse loan (guarantee minimum price) program for the first time. Under the 1980 and 1985 Farm Bills, loan rates or minimum support prices were established at 75 percent of the Olympic average of market prices over the previous five years. In 1990, the nonrecourse loan program was extended to the remaining oilseed crops including canola, safflower seed, flaxseed, mustard seed, sunflower seed and sesame seed. In addition a marketing loan program was introduced for soybeans and all other oilseeds. However, there has been no target price/deficience payment program for oilseeds. The 1996 FAIR Act continues both the nonrecourse loan rate and marketing loan programs for soybeans and other oilseeds. The loan rate for soybean will not be less than $4.92 per bushel or more than $5.26 per bushel, but otherwise will equal 85 percent of the five year Olympic average of market prices. Minimum and maximum loan rate prices for other oilseeds were reduced very slightly (by about 3 percent) but otherwise no major changes were made to the loan rate and marketing loan programs for other oilseeds. Thus, in the case of oilseeds, there has been very little change in U.S. oilseeds income and price support programs. However, the levels of support provided to U.S. oilseeds producers under these programs have been modest.

Harmonization of Farm Income Support

The distortionary effects of Canadian and U.S. income support programs for wheat and other grains have been substantially curtailed over the period 1990-1996. Similarly, the distortionary effects of Canadian income support programs for oilseeds have also been reduced towards the relatively modest levels associated with the U.S. oilseeds program. Thus, while income support programs for these commodities have not been harmonized, there has been economic convergence in that producers of these commodities in both countries operate in policy environments that force them to rely more heavily on market signals.

LAND RETIREMENT AND ENVIRONMENTAL POLICY

Canadian Land Retirement and Environmental Policy

Environmental policy has had very limited effects on the grains and oilseed sector in Western Canada. Environmental problems have largely been restricted to soil depletion and the loss of wild life habitat. Many of the soil erosion problems have been diminished by the widespread adoption of zero and minimum tillage practices. Policy has limited cultivation and retired cultivated land into non cultivated uses. The government controls large acres of fragile lands and leases them to producers only for the purposes of livestock grazing. This has restricted the cultivation of land in southwest Saskatchewan and southern Alberta.

The Permanent Cover Program (PCP) which existed in the period 1992-1994, paid producers to take marginal land out of grain production, i.e., land at a high risk of erosion or salinization, and place the land into forage or pasture production. Payments included a $20/acre preliminary payment, which is intended to offset the cost of seeding the targeted areas, and a final payment (of $20 or $50/acre for a 10 or 21 year contract respectively). Payment is made to the farmer once the viability of the permanent crop has been verified and the contract signed. This contract, which includes an easement on the land title, binds the farmer to ensure maintenance of the permanent cover for the specified time. It must be emphasized, this does not mean that the land cannot be put into productive uses. The contract only prohibits the farmer from plowing the permanent cover crop under and planting annual crops. Currently, about one million acres are enrolled in the PCP. The effect of this program on grain is modest given that marginal lands were targeted for the program.

Finally, it should be noted that the North American Waterfowl Management Plan, a joint conservation program between the government and the private sector, has procured wetland and nesting habitat. Under the program about 150 thousand acres of land has been retired permanently from cultivation.

U.S. Land Retirement and Environmental Policy

An important difference between U.S. and Canadian grain and oilseed programs was removed when, under the 1996 FAIR Act, annual acreage reduction programs were eliminated. Grain and oilseed farmers now have almost complete flexibility over crop planting and production decisions. Under previous legislation, to be eligible for deficiency payments a producer had to participate in the annual acreage reduction program. Acreage Reduction Programs (ARP) were implemented to control the costs of deficiency payments and nonrecourse loan outlays by restricting the amount of production eligible for payment and by attempting to keep prices high (and deficiency payment rates low) by taking land out of production. As market prices fell in the early 1980s, government stocks rose, deficiency payments and loan forfeitures increased, and acreage reduction percentages were increased.

In 1986, for example, corn and wheat producers, respectively, had to set aside 25 percent and 30 percent of their base acreage to be eligible for deficiency payments.

By the late 1980s, the role of acreage reduction levels for wheat and feed grains in controlling supplies had diminished considerably. This was due in part to run downs in government inventories associated with the droughts of 1988 and 1989, in part to the decisions of some farmers who chose to place program acreages in the "0-92" program established under the 1985 Act,[3] and, perhaps most importantly, because of enrollment in the Conservation Reserve Program (CRP), a voluntary 10-year paid acreage retirement program initiated by the 1985 Act. By the early 1990s, the CRP, ostensibly an environmental program, had resulted in the long term retirement of over 40 million acres of land, substantially reducing the need for annual acreage reduction programs for wheat and other grains. Thus the abolition of the ARP program under the provisions of the 1996 FAIR Act is likely to have little impact on U.S. farm level production decisions with respect to grains and oilseeds. However, the removal of ARPs from the inventory of U.S. farm programs represents a step towards institutional policy harmonization with Canada with respect to grains and oilseeds.

Restrictive rules governing base acreage calculations under the 1981 and 1985 farm bills also made it much more costly for producers to switch to non-program crops like soybeans and thus represented an important restriction on U.S. grain and oilseed producers' land use choices. Planting less program crop acreage reduced eligible base acreage in subsequent years. Under the 1985 Act, a producer with a 100 acre corn base who chose to plant soybeans on those acres would lose 20 acres of corn base in the subsequent year and ultimately one third of that base unless he left the program to rebuild base. Thus, when soybean prices rose sharply relative to corn prices in the late 1980s, producers were faced with little or no ability to shift production out of corn and into soybeans due to restrictive base provisions.

These problems were mitigated in the 1990 *Food, Agriculture, Conservation and Trade Act* which introduced the concepts of normal flex acres and optional flex acres. Under the 1990 Act, producers could plant any non-program or program crop (other than selected fruits and vegetables) on up to 15 percent of their base acreage ("normal flex acres").[4] In addition, farmers could choose to forego deficiency payments on an additional 10 percent of their base acres in return for the right to plant those acres to other crops ("other flex acres"). Thus, after 1990, program crop producers could choose to reallocate up to 25 percent of their base acres to other crops.

The evidence suggests that the planting flexibility provided by the 1990 Act has never been fully utilized by producers. While it contributed to the 5 percent increase in soybean

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[3] Under the Omnibus Budget Reconciliation Act of 1993, this was changed to 85 percent of the expected deficiency payment rate. Under this program, producers could place base acreage in conserving use and receive 92 percent of their expected deficiency payment.

[4] Under provisions of the Omnibus Budget Reconciliation Act of 1990, passed only weeks after the 1990 Act, normal flex acres were ineligible for deficiency payments.

acreage witnessed since 1990, program compliance data for crop years 1992-95 showed that about 50 percent of corn and wheat normal flex acres and over 90 percent of optional flex acres remained planted to corn and wheat. Moreover, in no state did the planted acres for program food and feed grain crops (or soybeans) rise or fall by more than 15 percent between 1990 and 1995. Thus, it seems unlikely that the removal of all restrictions on planting decisions at the individual farm level will have large effects on total acres planted to individual program crops. Clearly, the planting flexibility generated by the provisions of the 1996 FAIR Act increased the degrees of freedom under which U.S. food and feed grain producers operate. Similarly, some farmers may make radical adjustments in the mix of crops they grow. But in the aggregate, the effects of the 1996 FAIR Act planting flexibility provisions on aggregate supplies of individual crops are likely to be quite modest.[5] Again, in this respect, U.S. income support programs have become relatively more similar to Canadian programs for grain and oil seeds.

The 1996 FAIR Act was noteworthy for some farm programs with which it did not grapple in any thorough manner, including environmental programs. Foremost among these, from the perspective of the food and feed grains sector is, perhaps, the CRP. Both Congress and the Clinton Administration have agreed that the CRP should be extended and the 1996 FAIR Act defines the maximum acreage for the program between 1996 and 2002 as 36.4 million acres. However, the Act does not indicate the precise criteria for program eligibility. These unresolved issues matter. If a high priority were placed on water quality criteria, then land in feed and food grain producing regions currently in the CRP would move back into production. In contrast, if emphasis is placed on soil erodability and wildlife, then higher rents would be paid to keep land in the CRP in grain producing area such as the Northern Plains and the Mid West. In the latter case, grain and oilseed producers would be better off and U.S. production of these commodities would be lower.

Other U.S. environmental policies have included a plethora of programs such as the Sodbuster and Swampbuster programs, the Wetlands Reserve Program (WRP), the Environmental Quality Incentive Program (EQUIP), and the Integrated Farm Management Program, all of which existed prior to 1996. Under the 1996 Act, modest changes have been made to some of these programs and some new initiatives have been implemented, all with relatively modest funding levels (although the EQUIP programs funded at $1.3 billion to be expended over seven years). None of these programs are explicitly targeted at grains and oil seed producers although all such producers are eligible for benefits under most of the programs.[6]

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[5] Farm choices with respect to planting decisions are affected by relative prices but are also often heavily constrained by agronomic considerations with respect to weather, disease, pest infestations, soil erosion concerns, etc. In general, estimates of acreage supply response price elasticities in unconstrained environments have been quite small.

[6] One obvious practical exception, of course, is the Everglades Agricultural Area program, under which $200 million is to be allocated for restoration activities in South Florida. Some other programs are also targeted to regions in which grains and soybeans are not major crops.

Harmonization in Land Retirement and Environmental Policy

For the most part, Canada and the United States have environmental policies targeted towards some domestic environmental concerns but these policies have also had farm income enhancement objectives associated with supply controls via land retirement. In the United States, acreage reduction programs were implemented to control budgetary outlays under target price/deficiency programs. These have not been formally abandoned but mainly because the need for them has been obviated by voluntary land retirement under the CRP. There is no obvious trend towards convergence and harmonization for either land retirement programs or agricultural environmental programs between the two countries, except with respect to the abandonment of year-to-year management programs such as ARPs.

FARM INPUT SUBSIDIES

Canadian Farm Input Subsidies

Farm credit in Canada is provided by a mixture of private sector organizations and provincial and federal government agencies. In the grains and oilseeds sector, the Farm Credit Corporation (FCC), a federal government crown agency, has played a significant role. Beginning in the mid-1980s, as a result of budget cutting measures, the FCC has very largely become a commercial entity through which funds are raised on financial markets and lent to producers on a commercial basis. Thus, currently, very little subsidized credit is available to grain and oilseed producers.

Other input subsidies have been limited to provisions of the tax system. Provincial governments have rebated provincial road taxes on the use of farm fuel. These rebates currently remain in place. Investment tax credits established by the federal government for farm machinery in the 1960s were abolished in the late 1980s. Other provisions of the tax system such as capital gains exemptions for farmland continue to provide indirect input subsidies.

U.S. Farm Input Subsidies

Subsidies for farm inputs have generally been indirect in the United States. One important source of subsidies has been the U.S. Farm Credit System and the Farmers Home Administration. During the 1980s, access to subsidized credit was expanded. However, under the 1990 FACT Act and, again under the 1996 FAIR Act, tighter lending restrictions were placed on Farmers Home Administration loans. In addition, under the provisions of the 1996 Farm Credit System Reform Act, the operation of the Farm Credit System is to be the subject of an extensive review.

The tax structure has also provided the agricultural sector with a variety of input subsidies through provisions permitting accelerated deprecation schedules, investment tax credits and expensing of a modest amount investment outlays. However, under the provisions of the 1986 Tax Reform Act the investment tax credit was abolished and deprecation rules adjusted to be less favorable to farms and firms. An additional source of subsidy involves differential tax rates for agricultural land and real estate. In many states within the United States, agricultural land is subject to lower tax rates than land in non-agricultural use.

Harmonization of Farm Input Subsidies

Some degree of convergence has taken place in the United States and Canada with respect to the tax treatment of agricultural inputs. However, the complex nature of each country's tax code makes it very difficult to develop a detailed assessment whether changes to those codes have led to a greater degree of agricultural policy harmonization. Perhaps most significantly, however, neither country has implemented policies that provide explicit targeted subsidies for individual agricultural inputs.

AGRICULTURAL RESEARCH AND EXTENSION

Canadian Agricultural Research and Extension

Research in the grains and oilseeds sector is funded by the private sector, by commodity check off funds and by the government. The largest growth in private research has been for canola where hybrids are becoming commercially viable, and in herbicide resistance. Public research expenditures have remained relatively stable over the past ten years. Much of this funding is now used for grants where private sector funds are matched with public funds for research. Commodity check off funds have increased. The private sector is likely to expand research expenditures as hybridization becomes viable for other crops.

U.S. Agricultural Research and Extension

As in many countries, agricultural research policy in the United States has been complex, partly because of the dual roles of the federal and state government.[7] In general, as Alston and Pardey report (Alston and Pardey, Tables 2-5, p 46 and Tables 2-10, p 57) over

[7] Alston and Pardey provide an excellent recent historical discussion of U.S. agricultural research policy between the eighteen hundreds and 1995.

ıe period 1980 to 1993, aggregate public sector agricultural research expenditures have ıcreased in real terms at a rate of about 2.3 percent per year. With respect to agricultural esearch, there has been some change in the mix of research funding sources, with a slightly ıcreased emphasis on the use of competitive grants processes. In contrast, public funding or extension activities has declined since the mid-1980s, a common trend in many countries. The 1996 FAIR Act did not address agricultural research in any substantive fashion and the ikely direction of future U.S. agricultural research policy is not yet determined. The esearch provisions of the 1990 FACT Act are to be revised in 1997 and at this time there is o clear indication of how federal agricultural research programs are likely to be reformed.

Harmonization of Agricultural Research and Extension

Relative to Canada, Alston and Pardey have pointed out that the United States spends smaller fraction of the value of agricultural production on publicly and privately funded gricultural research (2.13 percent as opposed to 4.42 percent over the period 1981-85) lthough aggregate absolute expenditures are much larger. Little has probably been ccomplished with respect to convergence and harmonization of research policies in the two ountries. However, the distortionary impacts of these programs are difficult to assess.

CROP INSURANCE

Canadian Crop Insurance

In Canada, crop insurance programs vary by province. In 1985, Canadian crop nsurance programs offered 70 percent yield protection. At that time the federal government aid half of the premium costs, producers paid half of the premium costs and the provincial overnments paid the administrative costs. After significant droughts in the late 1980s reated large deficits in the insurance fund, many modifications were made to the program o maintain a client base while repaying the outstanding deficit. More coverage and more ptions for producers were also provided. It was recently announced that the governments f Canada and Saskatchewan had agreed to pay off much of the outstanding debt. Crop nsurance programs in Western Canada have recently amended premium structures. rovincial and federal governments pay eighty percent of the premium costs for basic ontracts covering losses in excess of 50 percent of average yields and forty percent of the dditional premiums associated with contracts that provide greater coverage against yield osses.

U.S. Crop Insurance

As in Canada, federal crop insurance programs also provide substantial subsidies for grain and oilseed producers, and especially for wheat and barley producers in Western States. As noted above, the 1996 FAIR Act only addressed these programs by removing the requirement, introduced in 1994, that farmers receiving benefits from major government programs purchase catastrophic multiple peril crop insurance contracts. This was a provision widely sought by producers with very small acreages for whom the fixed catastrophic contract fee of $50 per crop made the insurance contract quite expensive. However, Congress had addressed federal crop insurance subsidies, which averaged over $2 billion per year for all crops between 1990 and 1993, in the Federal Crop Insurance Reform Act of 1994. Under the provisions of this Act, the Federal Crop Insurance Corporation was given a mandate to achieve substantial reductions in loss ratios and to increase premium rates to accomplish that objective. U.S. crop insurance program subsidies have increased in the 1990s relative to the 1980s (Goodwin and Smith) and the programs have become more complicated.[8]

Harmonization of Crop Insurance

Crop insurance is likely to persist as an increasingly important source of income transfers in both the United States and Canada. A little progress has been achieved with respect to harmonization in relation to these policies. However, it is reasonable to be skeptical about the probability that these programs will converge in the future. This is partly because of the increasingly complex mix of insurance contracts being offered in both the United States and Canada and partly because of increased regionalization of these programs in Canada.

TRANSPORTATION POLICY

Canadian Transportation Policy

The Western Grain Transportation Act (WGTA) was a federal statute that paid railways a subsidy for the movement of grain from prairie positions to terminal positions at the West Coast, the Port of Churchill and for all shipments to Thunder Bay. The 1983

[8] In particular, a wide array of new insurance product based on either area yields or some measures of expected farm revenues have been introduced by the U.S. Federal Crop Instance Corporation over the past two years, partly in order to meet the requirements of the 1994 Crop Insurance Reform Act and partly as a result of rent seeking activities by private crop insurance companies whose rewards under federal programs are based largely on value of contracts, not the actuarial performance of their books of business.

WGTA legislation allowed for a payment of $659 million to the railways with some small provisions for inflation and branch line costs. Between 1986/87 and 1992/93 the payment varied between $721 and $726 million (Producer Payment Panel, 1994). This payment was reduced to $560 million in 1994/95 and was then eliminated with a one time lump sum payout in the 1995/96. Producers received a payment of $1.6 billion dollars based on estimates of land productivity and cropping intensity. For taxation purposes, this payment was treated as a capital grant to producers, somewhat increasing its efficacy.

Producers now pay a regulated freight rate for grain based on a cost formula of the WGTA. This has resulted in an increase in the cost of grain shipment of $22 per tonne on average. This has lowered the price of grain on the prairies relative to world prices. This probably creates a more favorable environment for the development of a larger livestock sector. In 1999 the regulation of freight rates is up for review. If deregulation takes place producers could pay an additional $20 to $30 per tonne in freight costs if freight rates approach trucking rates as they have done in Montana. This would tend to reduce grain output and increase livestock feeding in the region. It would also increase the economic viability of trucking grain to the U.S. Mississippi system.

U.S. Transportation Policy

In the United States, transportation policy generally has not been targeted towards the agricultural sector over the past decade. Clearly, subsidies for the maintenance of transportation networks such as those associated with the work of the army corp of engineers on the Mississippi may have benefited U.S. agricultural producers. However, no substantial changes have taken place in U.S. transportation policy in relation to the U.S. agricultural sector.

Harmonization of Transportation Policy

The substantial shifts in Canadian agricultural transportation policy away from rail freight subsidies and towards a less regulated environment for rail transportation have resulted in smaller differences between the United States and Canada with respect to agricultural transportation policy. It should be noted that differences in fuel and vehicle tax programs may have some effects on the competitiveness of the two countries' agricultural producers in export markets and each other's domestic markets. Future deregulation of the Canadian transportation industry may lead to further harmonization between the two countries' policies.

GRAIN MARKETING AND EXPORT SUBSIDY PROGRAMS

Canadian State Trading, Credit Guarantee and Market Access Programs

The system of marketing grain in Canada is a subject of some controversy both within Canada and in the United States. With the exception of wheat and barley for human consumption or export, grains in Canada are marketed through the private trade. The grain handling system is owned and operated by the private grain trade and farmer cooperatives. There are no government payments for the construction of the use of grain storage.

The Canadian Wheat Board (CWB) has sole powers to market non-feed wheat originating in the designated region in western Canada for human consumption within Canada and has sole jurisdiction for exports. The CWB also has the sole jurisdiction for barley exports and domestic sales for malting and human consumption purposes produced in the CWB region. The CWB has adopted a mandate of maximizing the return to wheat and barley producers. The CWB pays producers an initial price when grain is delivered, then market the grain, deduct any operating costs of the CWB and then return any revenue surplus to producers in the form of a final payment. The CWB has no mandate to retain revenues from producers or to receive any government subsidies except in the case of pool account deficits.

The CWB is currently at a touchstone for intense debate in Western Canada. Producers have been asked to vote on whether the CWB should maintain its role in barley marketing. Whether or not the CWB retains its monopoly in exporting barley and marketing barley for domestic human consumption, the future of Canadian export programs for wheat and barley is uncertain. If the CWB remains in place, it is very likely that substantial changes will be made in its operating procedures. The federal government has introduced a parliamentary bill which would give the CWB greater flexibility in marketing. Producers would be given direct responsibility for the election of CWB commissioners who would be subject to re-election on a regular basis.

Canadian exports of grain and oilseeds are also eligible for export credit guarantees under the Credit Grains Sales Program. This program allocates each importing country to a risk category which is allocated a global credit ceiling. If credit is provided under this programs, loan conditions must reflect prevailing interest rates and loan periods must not exceed three years.

U.S. Export Subsidy, Credit Guarantee and Market Access Programs

In the United States, targeted agricultural export subsidies for grains and oilseeds are determined under the Export Enhancement Program (EEP). In the late 1980s and early 1990s, annual EEP expenditures amounted to over one billion dollars in several years. In accordance with U.S. obligations under the GATT, under which the maximum permitted funding for export subsidies in 2000 is $579 million, the 1996 FAIR Act provides

substantially reduced authorizations for EEP subsidies over the period 1996-2002. These annual authorizations range from a low of $250 million in 1997 to a high of $579 million in 2000. However, the Secretary of Agriculture has discretionary authority to implement EEP subsidies and did not provide any EEPs for grains or oilseeds in 1996, a year in which grain and oil seed prices were relatively high. In years in which world prices are lower, EEP subsidies are more likely to be implemented. Typically, wheat has been the largest beneficiary of the EEP program, although barley and corn exports have received substantial EEP subsidies over the history of the program. In future low price years for those commodities, the U.S. government is likely to provide EEP export subsidies for those commodities. On balance, then, since 1988, while the institutional structure of the U.S. export subsidy program for grains and oil seeds has not changed, funding levels for targeted export subsidies have been reduced quite substantially and, within the GATT framework, the U.S. agricultural export subsidy policy is likely to be further curtailed after the year 2000.

Food aid programs, operated primarily under Public Law 480 provisions, have also been important for grains, in particular, wheat, and oilseeds. These programs, initiated 1954, were re-authorized under the provisions of the 1996 FAIR Act with assistance levels somewhat in excess of those authorized under the 1990 FACT Act.

Export credit guarantee programs were introduced in the 1980 farm bill (GSM-102) and the 1985 farm bill (GSM-103). The first of these, GSM-102, authorizes the Commodity Credit Corporation to guarantee, for a fee, payments owed to U.S. exporters on deferred-payments sales contracts when the foreign buyer defaults on payment. The second program,, GSM-103 (the Intermediate Export Credit Guarantee Program), guarantees loans for 3 to 7 years. Under the 1996 FAIR Act, these programs have been expanded relative to the levels established under the 1985 and 1990 Acts.

In addition to export subsidy, food aid and export credit guarantee programs, the United States also funds market access programs. Under these programs, funds have been provided to support the work of agricultural commodity marketing organizations such as U.S. Wheat Associates who could demonstrate that they have been harmed by other countries' unfair trading practices. Funded at $200 million per year under the 1990 FACT Act, the Market Promotion Program was subject to cuts in 1993 under the 1993 Omnibus Budget Reconciliation Act and, again, in 1996 under the 1996 FAIR Act which reduced annual funding for market access programs to $90 million. The FAIR Act also abolished the Cottonseed and Oilseed Assistance Programs, funded at $50 million per year under the 1990 FACT Act, which were designed to encourage export sales of those commodities.

Harmonization in Export Policy

To the extent that U.S. export subsidy programs have become subject to GATT disciplines and funding for the U.S. export enhancement program has been reduced, the United States has moved towards a less distortionary set of trade policies for grains and oilseeds. While the removal of freight subsidies has also moved Canada's grains trade policy in a less distortionary direction, Canada's export marketing board policy operated through

the CWB has not changed in recent years. With respect to export credit guarantees, both countries operate roughly comparable programs, although under the GSM-103 program, the United States is able to offer three to seven year lines of credit. These programs have been subject only to relatively modest changes over the past ten years.

CONCLUSION AND OVERALL ASSESSMENT

Canadian and U.S. farm programs have undergone substantial changes over the period 1988-96. Most of these changes have been generated as responses to budgetary pressures, reductions in the political influence of agricultural lobbies, shifts in grain and oilseed prices and domestic concerns about environmental and other policy objectives. However, the pattern of reduced intervention common to both countries has resulted in considerable economic convergence in the grain and oilseeds programs implemented in the two countries. It is difficult to predict whether this pattern of convergence will continue, although GATT and NAFTA related disciplines clearly constrain both countries from substantially increasing domestic levels of support through conventional agricultural price and income support programs. However, it is conceivable that new transfer programs could be developed via farm income safety net programs such as crop yield and revenue insurance.

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— DISCUSSION —
PROGRESS WITH HARMONIZATION/CONVERGENCE/COMPATIBILITY: U.S. AND CANADIAN GRAIN MARKETING SYSTEMS

Don McClatchy

In the wake of the U.S./Canada Joint Commission on Grains (1994-96) and considerable recent and continuing re-examination in Canada of its Western grains marketing system (1996-97), it may be useful to try to assess what the key bilateral agenda items for H/C/C in grains marketing will be for the next few years.

Many issues have been discussed in this area over recent years but it seems that these issues now fall into three groups. The first of these groups I would characterize as the "chaff". It includes several different accusations about the effects of the Canadian Wheat Board (CWB) which, despite being argued and analysed at length, have never been demonstrated substantively or conclusively to hold water, and I do not think they ever will. These issues serve to divert attention, energy and resources from the more fundamental problems, in my view.

The second group contains issues which are being addressed and on which steady progress seems to be being made, and can be expected to continue. They might be thought of as the "grist on which the mill is currently grinding".

Of most concern to me are the issues in the third group. These I foresee as posing the biggest problems for the future. They are key outstanding issues on which little or no progress in resolution has yet been made. To push the analogy further, they are perhaps closest to stones which, if not removed, threaten to break the machinery and bring the whole process to a crisis point.

GROUP 1: THE CHAFF

CWB Price Discrimination (spatial)

The CWB is a monopoly buyer but not a monopoly seller. Furthermore, it has no inherent powers (other than requiring that a cargo be shipped to an indicated destination) to effectively separate the markets into which it is selling, as the successful price-discriminating monopolist must have.[1] Despite its own periodic domestic claims to the contrary, and notwithstanding the results of recent studies commissioned by the Board, I remain persuaded that the opportunities for the CWB to increase total market returns by pricing differentially, in order to take advantage of differences in the slopes of the demand curves for the Canadian product which it faces, are probably quite limited.[2] What seems to be more common and important is that the CWB offers competitive prices in certain separated export markets in order to maintain a presence in those markets (perhaps for longer-term strategic reasons) and in so doing may accept lower-than-opportunity-cost returns in those markets in the current period. In this sense of competitive (though not necessarily profit-maximising) price discrimination, the CWB is effectively doing the same thing as other major grains exporters, — the EU, the United States and Australia. The United States claims to price down in certain targeted markets (using the EEP) in order to allow U.S. suppliers to be competitive with EU exporters subsidised with 'restitutions'. The CWB follows to remain competitive with the United States and the EU. In the absence of EU and U.S. export subsidies there would be no incentive for the CWB to price lower in such markets, in order to be able to retain a share (the case in the 1995-96 period). The answer to this problem is to get rid of the targeted, discriminatory export subsidy programs, not the CWB.

Price Leadership (in time) by the CWB

Statisticians seem to have run wild in recent years trying to prove this one. Implicit in reported studies and their interpretations seem to be presumptions that there is (or must be) a price leader, that related industrial economic theories have relevance for the world wheat market, that one country has an incentive to lead market prices up or down, and that such price leadership would be necessarily disadvantageous to other exporting countries. Discussion of economic rationale has been largely absent from studies I have seen.

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[1] Such arbitrage preventing separation on world wheat markets may exist, but not due to the existence of the CWB.

[2] The most obvious exception to this is the Japanese market, where Japan's policy of diversifying its supplies implies much lower elasticity in the Japanese demand for Canadian wheat (at least over a certain range) than that facing the CWB in most other markets. Another example may be a significantly lower demand elasticities for Canadian barley in various malting markets than those in feed markets.

A reasonable empirical statistical case for CWB price leadership seems to be now confined to hard spring and durum wheats. A higher CWB share of total world market supplies for these types lends some plausibility to this, but also suggests a motivation for price leadership lying simply in a better knowledge of current world market supply conditions and a consequent better appreciation of the way prices need to move in order to achieve market clearance. I personally remain sceptical that the CWB can really do this forward price discovery job better than the big U.S. grains exchanges, and that it does in fact lead them for some wheat types. Both types of institution must also anticipate future levels of key policy parameters (e.g., EEP), and I don't believe that the CWB has an advantage in this.

Rather, I remain persuaded that the main price discovery for world grain markets occurs on the Minneapolis, Chicago and Kansas City exchanges, whose participants are as well informed as the CWB about the current state of world market prices, and, in the event of good harvests, about how far prices may have to drop in order to clear the market. I see no incentive for the CWB to lead prices below market-determined levels.

CWB quotes are claimed to follow the daily Minneapolis prices. This claim could, I think, be easily tested. To my knowledge it has not been refuted. The Achilles heel of virtually all statistical analyses to date lies in their use of these quotes, which are not actual sales prices, just as reported fob Gulf or West Coast Ports prices are not actual net sales prices in particular markets. There may be some scope for statistical analysis of price changes over time in particular markets to test the arguments in the previous section. To my knowledge, this has not yet been attempted, and would have to overcome the difficulties of obtaining actual sales prices (adjusted for particular terms and conditions) from both the private sector grain companies and the CWB.

Canadian Price Premiums

It is recognized and accepted that these exist in many markets, have done for a long time, and derive from a reputation for a reliable grading system providing a high degree of consistency in quality. This grading system is provided by the Canadian Grain Commission, which now operates on a full cost recovery basis. Naturally Canada wants to preserve this reputation and the premiums it generates. Apart from the direct costs associated with the grading system, there may have been some indirect costs to Canadian producers over the years because of the limited number of varieties which have been licenced in an effort to ensure purity in the product. There is no evidence, however, that the premiums derive from unfair practices by the CWB. Furthermore, it is erroneous, in my view, to attribute these consistency/reliability premiums to CWB pricing practices or the existence of the single desk seller, rather than to the Canadian grading system. I acknowledge the possibility of a relatively small additional component of the 'Canadian premium' which derives from a superior quality of 'service' provided by the CWB as a seller, but remain sceptical about such claims.

Inadequacies of the CWB in Meeting the Needs of Canadian Producers

Arguments have at times appeared from U.S. academic and other sources suggesting that the CWB pooling system may have some costs as well as benefits for Canadian producers. My impression is that most prairie grain growers understand this quite well, and, as a result, there is a very intense ongoing debate about such questions in Canada. However, as long as the subject is confined to relative costs and benefits for Canadians, then this is a domestic matter, to be resolved in Canada. In my judgement, efforts by outsiders to influence the outcome of this debate could prove counterproductive.

Canadian Grain Displacing U.S. Grain From The U.S. Market

It has now been amply analyzed, demonstrated and explained that such departures from more traditional Canadian grain export patterns happen in response to incentives provided by price differentials when use of the EEP drives a wedge between U.S. domestic prices and world market prices. In other words, they are a product of classical market arbitrage. With no tariffs, the U.S. market automatically becomes more attractive to Canadian exporters than other export markets at such times. The basic problem here lies with the internal inconsistency of the U.S. policy package. Export subsidies don't work unless backed up by some border barrier. The problem is not the existence of the CWB, nor are there hidden Canadian subsidies involved. In fact the problem would have been worse in the absence of the CWB; the single desk seller was able to apply some restraint which may not have resulted from a deregulated marketing situation.

Canadian Grains Exports Increased by CWB System

The job of the CWB is to market all grain which is produced in Western Canada. Exports are the residual after domestic needs are met. Since the elimination of the 'two-price wheat' policy some years ago, the actions of the CWB have not been a factor in Canadian consumption levels. If the claims of the CWB, that it can extract better average prices for growers from the world market than could an unregulated market, are true, then I suspect that the magnitude of the benefit is only marginal.[3] When a small price benefit is applied to a very low price elasticity of supply, then the production impact must be very small. Similarly, such other Canadian subsidy programs as still exist generally apply to all western crops equally, and so do not perceptibly distort the allocation of the fixed land base, or stimulate production of some individual crops relative to others. I conclude that the CWB marketing

[3] I conclude that the CWB could only affect the quantity of Canadian exports by achieving better market returns (producer prices) and thus stimulating production. Accepting this leads to an inconsistency between the arguments of some CWB critics, who argue that the CWB boosts Canadian exports, and arguments of others that the CWB undercuts and/or drives down market prices, which would imply lower returns for Canadian farmers and hence lower production and exports.

system has very little, if any, impact on the quantities of Canadian grains produced, consumed and exported.

GROUP 2: THE GRIST

Grain Grading, Standards and Description Differences

Both countries' systems have their strong points. The need for progress towards more compatibility, in order that a single North American market might function effectively, is well recognised and steady progress is being made. Superimposed on this is the recognition of the need for flexibility of specifications to meet the special needs of individual customers, and for new, more refined techniques of measuring quality characteristics to be adopted as they are developed and become available. There appears to be good bi-national cooperation on this activity.

Equal Access to Each Others' Grain Markets and Marketing Infrastructure

End use certificates are still in place on both sides of the border, but have little effect in restricting access (with the possible exception of small lots in local border areas). Full two-way access to millers and to feed markets effectively exists now. Canada's main remaining concern is to keep U.S. grain out of the country elevator system, in order to avoid visually-indistinguishable lower-quality (or more variable quality) grain contaminating Canadian export supplies. U.S. grain can and has moved on the Canadian rail system, and through Canadian terminal elevators and ports. Similarly, Canadian grain has begun moving on the Mississippi waterway system and on the U.S. rail system. Such cases will undoubtedly become more frequent and accepted as normal.

Lengthening the Arm between the Canadian Government and the CWB

Clearly this needs to happen, as international opposition will continue as long as the CWB is seen to be to some degree under the control of the Canadian Government. There is also considerable domestic pressure in this direction and some progress is evident. New legislation recently tabled changes the control structure to some extent. Commissioners would be replaced with a more traditional CEO/Board of Directors structure with the policy intent of having a majority of the Board elected by producers and a minority appointed by government.

GROUP 3: THE STONES

These are issues on which little progress is yet evident, and which will probably need to be the main points of focus in future discussions and negotiations, in my view. In some cases (particularly CWB Transparency and Domestic Floor Price Supports which follow) there is need and scope for intellectual input, in the form of good objective analysis, to assist progress.

EEP

This program will be an irritant as long as it remains. I recognize that its removal will probably have to be in the context of the phasing out of EU export restitutions on grains.

CWB Transparency

The bulk of evidence suggests that less is generally known about the prices, terms and conditions of CWB sales than about corresponding private sector sales. The CWB argues that, given the nature of the world grain market and the way many importing countries prefer to do business, it can do better for its producers by operating confidentially. This may well be true. The problem is that in the eyes of other countries who wish to change the structure of the international grain market to make it more open and transparent, the CWB facilitates the status quo and is therefore an obstacle to progress. As long the secrecy remains, the perception of a possibility of unfair trade practices will be there and the CWB will remain an international target.

Domestic Floor Price Supports

It may be argued that both CWB initial prices and U.S. loan rates are equivalent in that they provide a price floor, financed as necessary by taxpayers (CWB pool deficits, and CCC purchases of grain forfeited under the non-recourse loan system), which has been managed at quite low (well below market) levels in recent years. Nevertheless, there is fear on both sides of the border that the other's discipline could be arbitrarily relaxed at any time, turning one or the other instrument into a significant subsidy, and tilting the playing field. Conceptually, there would seem to be a possibility to formally link these two measures. Ideally, it could be jointly agreed to harmonize the levels of the U.S. loan rate and the Canadian initial payment and only to change them by mutual consent. If that would be an unacceptable erosion of U.S. sovereignty, then Canada could still choose to unilaterally follow any U.S. lead in this respect. Then, in deciding to change its loan rate, the U.S. would at least have to presume that Canada would follow suit (and that any down sides to the decision may therefore be exacerbated). There may even be more widespread international

interest in the idea of a coordinated low-slung safety net, where international pressures could be expected to keep it low in all countries.

Disciplines on Legislated Monopolies

It is clear that State Trading Enterprises are going to be a focus of attention in the next round of multilateral trade negotiations. In the eyes of the United States and a few other countries they are an important object of unfinished business left over from the Uruguay Round. One important question will be whether single desk importers and single desk exporters should be treated symmetrically, or whether separate and distinct disciplines are needed for each. My comments are restricted to exporting STEs.

The right of producers to band together to market cooperatively is not at issue; such forms of agricultural marketing exist in most countries and enjoy wide support. When the institution involved is an agency of government or a parastatal, then the potential undesirable effects are relatively clear and it seems likely that some international disciplines will be agreed to curb such effects. The most difficult case may be the intermediate one of legislated monopolies (e.g., marketing cooperatives) which, aside from the underpinning legislation, operate quite independently of government. Whether and why international disciplines would be appropriate in such cases, and, if so, what sorts of disciplines, may become the toughest issue for the STE negotiators to address. The outcome will be crucial to the future of the CWB which can relatively easily be made more independent of the Government, but which regards its purchasing monopoly status as essential to its survival.

U.S. Export Credit Guarantees

As long as the credit guarantees offered under the GSM programs exceed in length of term the norms agreed by virtually all other countries (3 years for grains; more generally, the life of the product), then this is going to remain a source of bilateral and international irritation.

CONCLUSIONS

I conclude from the above that both the United States and Canada have some bullets to bite unilaterally which would further the cause of H/C in grain marketing. There is room for coordinated joint action on at least the issue of floor price support. A cooperative rather than confrontational approach to the STE disciplines issue may also pay dividends for both countries.

HARMONIZATION/ CONVERGENCE/COMPATIBILITY IN GRAINS AND OILSEEDS: A COMMENT

R.M.A. Loyns

Gray and Smith have provided a comprehensive and useful review of programs in the U.S. and Canadian grains and oilseeds industry. The comments provided here will be more "in relation" to the paper than on the paper per se because there are a number of related issues that deserve comment. As well, they managed to avoid much discussion about one of the significant sources of trade tension between Canada and the United States in grains, the Canadian Wheat Board (CWB). Since this workshop is about disputes, information and H/C/C, that topic deserves comment because it is rampant with incomplete and incorrect information as well as "transparency" problems.

GENERAL COMMENTS

The first comments are about the workshop generally rather than the grains industry. The Coordinating Committee actually initiated discussions for this topic on "harmonization" of policy and programs. But we were reluctant to use only that term because of its limited connotation and use. We then moved to the H/C/C designation but where one "C" stood for "consistency" instead of "convergence". Without going to extremes in use of "C" words, it should be noted that there have been several examples provided in papers and discussion so far to indicate the need for "policy consistency". Bredahl's dolphins in tuna nets vs. Mexican avocados is a graphic example of inconsistency in policy perspectives. Canadian agricultural policy has its share as well: how do we explain in any rational manner (outside of sheer political expediency) the divergent (inconsistent) policy approaches applied to the grains, livestock and dairy/poultry sectors in Canada over the last three decades? **Policy Consistency** in the context of this workshop would have at least two critical dimensions: within country; and between countries. We have enough experience in Canada with the three sectors identified to know that inconsistency leads to much unproductive policy debate. It is my view that the inconsistency between policy instruments in the grains industry and

supply managed sectors within Canada are a source of trade tensions in grains between the United States and Canada.

The second general comment has to do with the process of H/C/C and the terminology we use in economics. In economics we are quick to use terminology like "efficient resource use", "minimizing costs", "optimizing tariffs and taxes", and so on. This terminology is common in these workshops. Certainly we all know the genesis of this terminology; it is what our limited social science is about. The point that I wish to make is that in policy processes we need to establish more modest goals, perhaps even different terminology, to strive for accomplishments that take us in the right direction. My suggestion is that we pursue goals of "positive incrementalism" rather than optimization. If we present our policy analysis and proposals in this framework we are more likely to be heard, and if our mind set is directed in this manner we are less likely to be disappointed in apparent lack of results. The organizers of these workshops keep reminding themselves of this point; no one method of trade dispute resolution will accomplish that goal. We hope that this small information contribution is helping to take us in the right direction — positive incrementalism.

GRAINS AND OILSEEDS

Grains disputes have taken on new dimensions in Canada. Three years ago when we initiated the Workshop series with Grains Disputes, the problem was relatively narrowly defined. It referred to the border and other problems ongoing between Canada and the United States. These issues were addressed by U.S./Canada Joint Commission on Grains, and reported on in 1995. Some of those problems are resurfacing again in 1997 and could become another major policy/trade dispute. But as Canadians are often inclined to do, by internal bickering we have expanded the problem substantially internally; not once but twice. The second internal dimension directly involves economists.

Grains disputes have genuinely broken out **within** Canadian prairies since our first workshop three years ago. The issues center on retention of the CWB in its monopolist role or moving to some form of dual marketing. This dispute, among other things, generated a review and reporting process (the Western Grain Marketing Panel), a plebiscite on barley marketing, a proposal for amending the Canadian Wheat Board Act[1], and a challenge by barley producers under the Canadian Charter of Rights. The prairies, and to some extent the country, are seriously divided on what the appropriate organization is for the grains sector. Our disagreements with the United States, in my view, have been moved too far backwards on the policy agenda because of this internal dispute. In my view, there is an unavoidable

[1] Bill C-72 was introduced in the House of Commons near the end of the term before Parliament was dissolved for the June 2, 1997 federal election. The Bill "died on the order paper" as often happens to legislative proposals in Canada around election time. That means that a new government would have to decide on the legislative priority this initiative should receive when Parliament reconvenes following the election.

connection between the two because the CWB remains a source of controversy (and misinformation) between Canada and the United States

The third layer of dispute is among economists on the relative merits of the CWB. This is not the venue to detail this dispute but it another component of the information/debate process within Canada. Basically there is one set of analysts who purport to have demonstrated substantial producer benefits from SDS of wheat and barley, based on access to confidential CWB data. There is another set, smaller in number but more diverse in their funding sources and approach, that dispute the positive findings. This dispute may be less colossal in its scope but it is real no less, and many decision makers are watching. Perhaps Canada has managed to produce its own 1990s version of the coloured margarine scandal that rocked the U.S. profession over forty years ago. I refer to this dimension of grains disputes as "duel marketing".

THE LOYNS GRAINS DISPUTES MODEL

In a submission to the Joint Commission on Grain Marketing[2], we provided an expanded version of the simple disputes model below (see Figure 1). Freer trade (my positive incrementalist tendencies cause me to want to avoid the term "free") has to be seen to be fair trade. If freer trade is successful, and product flows in significant volume in competition with domestic product, there is a high probability that some producers will begin to express "fear" that the new trade is not "fair". If the afflicted groups are large enough and strong enough, they will attract political attention, and a genuine trade dispute can break out. This is not exactly the pattern of the original dispute between Canada and the United States, but it is close enough to be prescriptive, and it is close to where we are as the bickering resurfaces in 1997. Many Canadians wonder if there could seriously be genuinely free trade in wheat and barley with the United States. Their questions are raised partly because they see open trade in fruits and vegetables, corn, soybeans, flax, canola and many other agricultural products but serious reaction by producer groups and politicians to wheat and barley. They also see totally invalid arguments raised about the cause of these exports, including the level of subsidization of prairie grains. They hear Senator Conrad and other U.S. politicians making major threats about how Canada will be treated, including his infamous missile reference in 1995. Trade agreements exist to resolve these differences, they have been used, and Canada has emerged from that form of dispute settlement relatively well.

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[2] Loyns and Kraut. ***Pricing To Value in the Canadian Grains Industry.*** Canada/U.S. Joint Commission on Grains. **"Final Report"** Volume II. 1995.

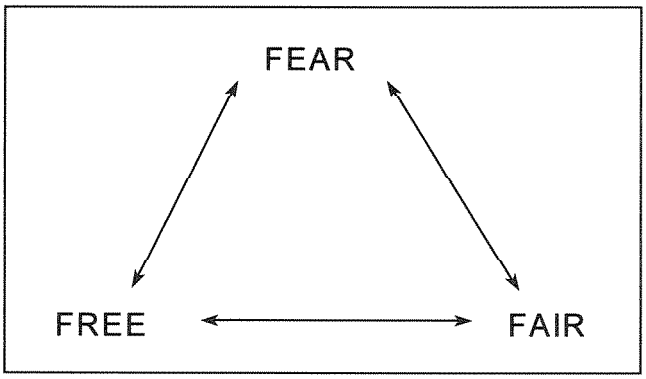

Figure 1. Loyns' Model of Free Trade

But this is a two sided coin. On the prairies we perpetuate the operation of a secretive marketing agency that tells the world it is a fair trader, but justifies its existence domestically by demonstrating that it is a perfect discriminating monopolist. This behaviour is objectionable to Americans and more than a few Canadians. I could go on but will conclude this argument with the observation that much of what is involved in the availability of hard information and the conveyance of that information to industry participants and decision makers. When the facts are on the table, it will be difficult for U.S. producers to argue that there are massive levels of subsidization on Canadian prairie grains in 1997. If all the facts had been on the table when Canada had its grain transportation subsidy, the relativity of public support to grain transportation would have looked very different than the Product Subsidy Equivalent (PSEs) measured, but now that the Canadian subsidy is gone it should be U.S. public support that is challenged. If we had reasonable, public information available on the Canadian Wheat Board and the agency met a reasonable measure of the term transparency, it is unclear what we would see. But I am certain that many people, including some Americans would have a different view of that agency as well. If Canadians really understood the potential as a state trade agency of the Commodity Credit Corporation (CCC), perhaps that issue would be raised higher on the discussion list.

Attempting to place hard information on the public table is what this series of workshops is about. About five years ago when the idea for these workshops was being developed, my perception of the need for economists to become involved in this way was heavily influenced by serious misinformation on Canadian agricultural programs and on the CWB, presented by a particular "research" unit in the United States to a dispute settlement body. The first organization that I contacted for support for what was to become this Workshop series was the CWB.

POLICY HARMONIZATION, CONVERGENCE , AND COMPATIBILITY ISSUES IN NORTH AMERICAN HORTICULTURE

Gary F. Fairchild, Timothy G. Taylor and Thomas I. Wahl

INTRODUCTION

The past decade has brought trade liberalization out of the shadow of debate among economists and into the glare of public opinion. In addition to the completion of the Uruguay Round of GATT and the creation of the World Trade Organization (WTO) at the international level, the 1990s have witnessed both the initiation and the strengthening of regional preferential trading arrangements. The European Union continues to struggle towards an economic union. In the western hemisphere, the NAFTA became a reality, several other regional trade agreements, such as the Mercado Comun del Sur (MERCOSUR), the Andean Pact, the Central American Common Market (CACM), and the Caribbean Common Market (CARICOM) gained renewed importance, and the Summit of the Americas resulted in 34 nations agreeing to set 2005 as a goal for hemispheric free trade.

The trend toward trade liberalization will continue to eliminate quotas, reduce tariffs and tariff-rate quotas, and thus, open many "ball parks" to the international trade game. The challenge now confronting policy makers is that of eliminating or equalizing non-tariff barriers to trade in order to develop a common set of rules by which industry participants must play the trade game. As tariffs and quotas are phased out under the provisions of NAFTA, the pressure to use nontariff barriers to protect domestic industries can be expected to increase. Thus, harmonization, convergence , and compatibility (HCC) issues will move to the center of the trade policy stage.

It can be argued that policy issues associated with HCC, which focus on often-opaque nontariff barriers, are more difficult to address than traditional trade barriers such as tariffs and quotas. This is because HCC involves a broad range of complex and interrelated issues, often embodied in domestic policies that reflect differences in national values and beliefs (e.g., environmental quality and sustainability). For purposes of perspective, policy harmonization and policy compatibility can be defined as flip sides of the same coin, while policy convergence is the rate at which harmonization or compatibility can be achieved.

The objective of this paper is to discuss the major HCC issues confronting the North American horticultural sub-sector. The following section provides an overview of horticulture and discusses some of the unique characteristics of the sub-sector that make HCC issues critical. Sections three, four and five examine HCC issues regarding sanitary and phytosanitary regulations, environmental laws and competition, and post-harvest regulations and technology, respectively. Concluding observations with respect to policy convergence, competition, and future food fights in the NAFTA cafeteria are offered in the final section.

OVERVIEW OF HORTICULTURAL SUB-SECTOR

North American horticulture represents a significant, complex, and unique sub-sector of agriculture which is both large and diverse. Horticulture is really an umbrella sector which includes an incredibly diverse collection of fruits, vegetables, nuts, ornamentals, wine, and other speciality crops marketed in fresh and various processed forms, including dried, canned, frozen and juice. In 1994, U.S. retail fresh fruit and vegetable sales alone totaled $54.9 billion. The combined value of retail and food service fresh produce sales are estimated to be approximately $90 billion (Cook).

The horticultural sub-sector is becoming increasingly internationalized, with significant portions of production being exported and consumption being imported. In 1995, the value of U.S. vegetable exports (all product forms) was $2.833 billion, while vegetable imports were valued at $2.632 billion (USDA, 1996). Furthermore, the U.S. has been a net exporter of vegetables over the 1992 to 1995 period.

The importance of the horticultural sub-sector in North America can be seen in terms of both production and trade. In 1994, the Food and Agriculture Organization of the United Nations (FAO) estimated that North American production of fruits, vegetables, and nuts totaled 84.5 million metric tons, including 2.7 million metric tons from Canada, 15.6 million metric tons from Mexico, and 66.2 million metric tons from the United States. The value of fruit and vegetable imports into Canada, Mexico, and the United States totaled US$ 10.25 billion in 1994 (FAO). Canadian imports were valued at$ 2.595 billion compared to United States imports of$ 6.994 billion and Mexican imports of $ 661 million. In the same year these three countries exported a total of $ 9.989 billion of fruits and vegetables, including $828 million from Canada, $ 2.057 billion from Mexico, and $7.104 from the United States.

Examining trade between the United States and Canada and Mexico provides an additional perspective. In 1995, the Foreign Agricultural Service of the United States Department of Agriculture (FAS) estimated U.S. imports of fresh and processed fruits and vegetables and fruit and vegetable juices from Canada and Mexico at US$ 498 million and US$ 1.8 billion, respectively. In 1996, U.S. exports of the same products to Canada and Mexico were US$ 1.8 billion and US$210 million, respectively.

Canada and Mexico are important to the United States in terms of the import and export of various categories of horticultural products. With respect to sources of 1995 U.S. imports, Mexico ranked first in fresh fruit (excluding bananas and plantains), fresh vegetables, and processed fruits and vegetables, third in fruit and vegetable juices and tree nuts, and fourth in beer and wine. As a source of U.S. imports, Canada ranked second in fresh vegetables, third in fresh fruit (excluding bananas and plantains) and processed fruits and vegetables, fifth in beer and wine, and tenth in fruit and vegetable juices.

In terms of leading markets for 1995 U.S. exports, Canada ranked first in fresh fruits, fresh vegetables, and fruit and vegetables, second in processed fruits and vegetables and beer and wine, and fifth in tree nuts. Meanwhile, as an export market for U.S. products, Mexico ranked third in fresh vegetables, fourth in processed fruits and vegetables, fifth in fresh fruit, and tenth in fruit and vegetable juices, and beer and wine, and fourteenth in tree nuts.

The uniqueness of the horticultural sub-sector is due to both its diversity and complexity. The perishability of horticultural crops, the range of climatic factors, significant vulnerability to pests and diseases, and high labor intensities and the use of migratory labor are unique in North American agriculture. Horticultural products tend to be highly perishable, often with very narrow market windows, creating several significant trade issues, including loss from spoilage, bargaining power, and transportation costs.

Horticultural products are extremely vulnerable to pests and diseases, resulting in high chemical-input costs. Consumers demand high internal quality as well as cosmetic perfection. Chemical use, chemical regulations and costs, and potential disease transmission are major trans-border issues. Most horticultural crops have high production and harvesting costs, are labor intensive and require seasonal, often migratory, labor. Many horticultural crops are perennial tree crops, requiring long- term investments. Furthermore, some horticultural crops are produced on lands which have low opportunity costs associated with the next-best agro-economic use.

Horticulture has a variety of features which combine to create a substantial risk profile. These characteristics of the horticultural sub-sector translate into unusual sensitivity to changes in import competition and regulatory environments which may be affected by policy HCC. Such vulnerability can be expected to create both economic and political challenges for the policy adjustment process.

This vulnerability has created both inter- and intra-seasonal diversification in order to manage risk and take advantage of emerging opportunities, particularly in fresh produce. Wilson, Thompson, and Cook note that the economics of climate (econoclimonics) is becoming more important in a global, industrialized agriculture as managers seek spatially-dispersed production capacity through formal and informal contracts, alliances and ownership. Thus, changes in agribusiness activities are leading the way for changes on trade policies.

While it is dangerous to generalize, many horticultural commodities have rather concentrated market structures with a core of large integrated firms accounting for a large market share using advanced production and handling technology, and sophisticated management and marketing systems. These firms tend to be vertically integrated and

›rizontally dispersed, often across national borders. These firms often have large research ıd development budgets and ongoing relationships with downstream firms including retail od chains. Most horticultural industries also have a competitive fringe of smaller firms. ıese firms are often less technologically and managerially sophisticated, but lend a flavor `the small family farm to many horticultural industries. This is often beneficial in the rent-eking process.

As trade in horticultural products has increased, issues concerning cross-border ›mpetitiveness have become more important. Cross-border competitiveness has become tertwined with trade policy in several horticultural industries (e.g. Florida tomatoes). In e horticultural sub-sector, these entanglements are particularly complex. Due to the nature `fresh, and to an extent processed, fruits and vegetables, policy HCC may be more difficult achieve than with many other agricultural industries.

The level of emotional response in the horticultural sub-sector in response to both USTA and NAFTA serves as evidence of the depth and breadth of the competitiveness sue. For example, the lists of products on which tariffs are to be phased out over 10 and 15 :ars are dominated by horticultural crops. While the specific character of the battleground ffers from industry to industry within the horticultural sub-sector, there are generalizations hich can and will be made with respect to the competitive environment in horticultural ·oduct industries in Canada, the United States, and Mexico.

U.S. horticultural crops generally have not been included in traditional domestic ›licies featuring price and income support. Rather, the horticultural sub-sector has benefited om market-facilitating mechanisms, such as marketing orders, and import-protection ›licies designed to protect domestic industries from both phytosanitary and competitive ıreats. Tariff and Quota issues have been a major contention in the fruit and vegetable ıdustry for a long time. Recall the great tomato war between the United States and Mexico.

As tariff and quota barriers to trade have been eliminated, or in some cases have :gun their scheduled phase out over 5, 10, or 15 years under NAFTA, and as tariff rate ıotas (TRQs) have been established, there have been increasing complaints as various ›rticultural products have experienced increased import competition. Charges of dumping ıd import surges have been filed in several product categories. In fact, relations across `orth American borders have in many cases become more contentious since NAFTA than ıey were before NAFTA. Key issues are the perishability of horticultural products and the ·ice flexibilities. Products normally have a narrow market window and are susceptible to ıpid price swings due to the sensitive nature of prices in most fresh markets.

As noted, policy HCC issues in the horticultural sub sector are perhaps more difficult › address than the issues surrounding the elimination or reduction of tariffs, quotas, and ıriff-rate quotas. Policy HCC issues in horticulture involve a particularly broad range of ›mplex and interrelated issues which are viewed by firms in many horticultural industries › serious threats to both biologic and economic survival. The resulting fear, which is often ıstified, is very real and drives significant industry rent-seeking behavior. Thus, ›mpetitiveness issues often create barriers to policy HCC.

From the smorgasbord of possible horticultural policy HCC issues, the following have been selected for discussion: sanitary and phytosanitary regulations; environmental laws and competition; and post-harvest regulations and technology.

SANITARY AND PHYTOSANITARY REGULATIONS

Sanitary and phytosanitary (SPS) regulations are particularly important for horticultural crops. Their importance derives from the vulnerability of most horticultural products to the biologic and economic harm associated with pests and diseases. Thus, SPS regulations serve legitimate purposes in the horticultural sub-sector. SPS regulations also serve as effective trade barriers in the horticultural sub-sector. The SPS regulation drama is played out on the same world stage as import competition. This casts a shadow on the credibility of any discussion of whether SPS regulations are really necessary to protect the health of consumers and plant material. Thus, it is often difficult to separate the regulations that are necessary to protect plant and human health from the regulations necessary only to protect domestic producers from foreign competition.

It must be noted that when the biologic survival of an industry, particularly a perennial tree crop industry, is at stake, the burden of proof weighs heavily on the regulatory and scientific communities. Thus, it is easy to see why regulators tend to err on the side of caution, a position strongly supported by horticultural industry representatives. When consumers perceive that such regulatory vigor works to protect their food supply, the result tends to be strong public support for high levels of protection.

The ongoing avocado controversy between the United States and Mexico serves an example of the confluence of science, politics, and economics in producing an emotionally-charged border war. To put it into perspective, the avocado case has been a contentious issue since 1914.

In February 1997, the United States finally developed a protocol, known as a systems approach, to allow the importation of Hass avocadoes from the Mexican state of Michoacan into 19 northeastern States and the District of Columbia from November through February, provided firms meet certain safeguards. The safeguards include identifying host resistance, field surveys, trapping and field-bait treatments, field sanitation, post-harvest safeguards, winter shipping, packinghouse inspection, port-of-arrival inspection, and limited distribution (USDA-APHIS). While the scientific issue seems to have been settled, the California Avocado industry continues to oppose this harmonization effort in the political and economic arenas.

There are numerous examples of regulations in the horticultural sub-sector designed to protect crops from the importation of pests and diseases. Most of these SPS regulations are based on legitimate concerns, such as Caribbean fruit fly or canker in citrus, which prevent the importation of fresh fruit from various locations. While most of these regulations

re based on sound science and legitimate fears, the potential for use and abuse in the name f science is very real. It is interesting that most perceived abuse occurs when "our" roducts are denied entrance into "their" market.

The bottom line is that competition by any other name is still competition. As the rocess of converting quotas to tariffs and eliminating/phasing out tariffs under NAFTA ontinues, the pressure to use SPS regulations to protect domestic industries will continue o increase. One result already seen by some U.S. Animal and Plant Health Inspection ervice (APHIS) inspectors in the Caribbean Basin is a shift toward a philosophy of "guilty ntil proven innocent." Thus, it may become more difficult to ship fresh fruit, vegetables, nd ornamentals into the United States.

This increase in import-protocol requirements in fresh horticultural products could ave a significant impact on developing economies which may lack the financial and echnical ability to prove compliance. Many small countries cannot afford to develop the rotocols to gain approval to access the U.S. market or lack the production scale needed to revent treatment costs from being prohibitively high.

Orden and Romano suggest that rent seeking and capture theory can be applied to the PS regulatory arena for horticultural products. That is, when any uncertainty exists with espect to an SPS situation, the domestic industry can capture the regulatory process. This s not to say that there are no legitimate SPS concerns, but rather that well-orchestrated rent eeking can leverage a small degree of uncertainty into a large degree of protection. As in ny trade matter, the importance of politics must not be underestimated.

Finally, it must be noted that the Agreement on the Application of Sanitary and hytosanitary Measures, negotiated in the Uruguay Round of GATT, has become the verarching guide on SPS issues. The World Trade Organization's (WTO) SPS Agreement s based on the principle of minimal interference in commerce when pursuing the objective f protecting human, animal, or plant health. Requirements are established for risk ssessment, equivalency, transparency, and the separation of scientific and political ecisions. Thiermann notes that the WTO principles are so significant that they will not only hange the rules of the game, they will revolutionize the game itself (Thiermann, p.63). In his context, Sumner and Lee provide an insightful discussion of the potential impacts of SPS arriers in the context of empirical trade modeling, noting that SPS rules can change ssumptions about a country's supply and demand for a particular product, the size of the ountry, and the degree of product differentiation. The critical point of this discussion can e summarized by referencing Thiermann as follows:

> "The (WTO) SPS Agreement promises to decrease and eliminate the most flagrant and unjustified trade barriers. Nonetheless, since SPS measures, in the future, will be the only way to legally regulate agricultural trade, the incentive to use them to control imports will increase. At this time, it is still easier to restrict unjustifiably, and then retreat if challenged, because other than a loss in technical and regulatory credibility, there is no real penalty for the initial barrier" (Thiermann, p.64).

Clearly, the horticultural sub-sector is the field on which this game will be played with greatest abandon.

ENVIRONMENTAL LAWS AND COMPETITION

The relationship between trade and environment has been a growing area of concern over the past decade. In part, this is because trade policy continues to be one of the most effective methods for one nation to influence the domestic policies of another nation. For centuries, countries have used trade policies to reward friends, punish enemies, and meet other political objectives. It is no surprise that environmental-lobby groups have begun to influence the trade policy process in an effort to meet their environmental objectives. Generally, environmental groups argue that international trade stimulates economic growth, which, in turn causes negative impacts on sustainability of the environment (Seale and Fairchild). Hillman summarized the implications for agriculture when he suggested that "environment is being used to characterize most everything that impinges on the production and trade of all agricultural commodities and food products." This is nowhere more true than in the case of horticulture, which relies heavily on chemical inputs in the production process.

From a competitive perspective, when a nation requires its agricultural and agribusiness firms to pay the full cost of their production and processing operations, i.e., internalize all negative externalities, these firms can be placed at a competitive disadvantage with firms located in countries which do not have similar requirements. Even in a world which is moving toward more open trading systems, agricultural industries lobby their governments to erect tariffs and other import barriers against countries with cost advantages argued to be based on unequal environmental policies. The argument is not that economically-inefficient industries should be protected, but rather that environmentally-efficient industries should be given an opportunity to compete.

It is important to remember that many of these issues are akin to *holy wars*, being fought for environmental quality. Never mind that international trade is thought by many in the economics profession to increase efficient resource use. However, the stage of economic development is an important factor in determining how environmental quality is addressed in a particular country. It can be argued that environmental quality is a normal good in relatively-developed economies and a luxury good in less-developed countries. As nations realize the income growth associated with increasingly open trading systems, the expectation is that increased attention will be given to improving environmental quality (Seale and Fairchild). In the meantime, those countries valuing environmental quality at a higher level than other countries may need to help pay for such quality.

Those who are concerned about environmental performance often seem interested in controlling both the final product as well as production, harvesting, and post-harvest handling processes. Currently, the controlling of production processes through the imposition of trade barriers is not permitted under the WTO. While GATT focused attention on product quality, there is increasing attention being focused on production and post-production processes by other institutions. The ISO-9000 standards developed by the International Standards Organization provide a well-known example. Horticultural products, particularly fruits and vegetables, are often the subject of cross-border disagreements concerning chemical use in the production process.

Differences in chemical labels as to what can be used in each country represent a significant issue in the horticultural sub-sector. For example, a chemical which is not approved for use on a particular crop in one country may be approved for use on that crop in another country. This situation results in three primary areas of concern: food safety; environment; and competition. All of these are significant issues in the horticulture.

An important example of the interface between trade, the environment, and HCC is found in the proposed ban on methyl bromide, a broad spectrum pesticide widely used in vegetable production and as a post-harvest treatment of certain fruits. In 1992, the parties[1] to the Montreal Protocol, an international treaty developed to protect against ozone depletion, agreed to list methyl bromide as an ozone depleting substance with an ozone depleting potential (ODP) of 0.7. This ODP classified methyl bromide as a class I ozone depleter. Thus, under the U.S. Clean Air Act, the production and importation of methyl bromide in the United States was banned after 2001.

Amid concerns about the impact of this ban on the competitive position of U.S. producers and exporters, the 1995 meeting of the parties to the Montreal Protocol discussed the issue. The U.S. position supported a complete global phase-out of methyl bromide by 2001. After much debate, final agreement was reached. For industrial nations, a production phase-out schedule was established whereby production would be reduced by 25 percent by 2001, 50 percent by 2005 and eliminated by 2010. For developing nations, production levels are to be frozen in 2002 at 1995-1998 average levels, and eliminated in 2010.

Recent studies (Deepak et al.) suggest that if the ban on methyl bromide becomes a reality, the competitiveness of many vegetables in Florida (especially tomatoes) will be eroded to the point of threatening the viability of the industry. How the industry will respond, remains to be seen. To date the response has been relatively muted. However, it is clear that as the effective date of the ban approaches, HCC issues will be at the forefront of discussion and debate.

The central issue with respect to environmental laws and competition is the relationship between environmental costs and competitiveness. Horticultural industries in countries which regulate the internalization of negative environmental externalities have added costs which may make it difficult to compete with industries in countries which do not address these externalities. As a result, "scientific" tariffs designed to equalize production-cost differences are still being suggested in the horticultural sub-sector, and often supported by those concerned about the global environment.

[1] Currently 160 countries are signatories to the Montreal Protocol

POST-HARVEST REGULATIONS AND TECHNOLOGY

Most industrialized countries have established grades, standards, and other post-harvest handling regulations for horticultural products. The stated reason for such regulations and standards is a quest for quality. Some regulations are designed to assure minimal internal quality, while other regulations are designed for external quality in order to prevent cosmetically-challenged products from reaching consumers. Comprehensive grades and standards are common in fresh fruits and vegetables, particularly external quality standards which require more chemical inputs in the production process. Conflicts between countries as to appropriate chemical usage are prevalent in horticulture.

A key question regarding harmonization centers on who dictates quality standards. There are variations from country to country which are shaped by consumer preferences. There is legitimate debate as to whether imports need to meet the same standards as domestic products, or whether consumers should be allowed to choose. Can we compare apples with apples? This, of course, brings the entire logic of mandated quality standards into question. It is not likely that this issue will be soon settled.

As discussed under SPS regulations, when horticultural products cross international borders, there is the issue of controlling final product quality standards verses controlling production and handling methods. Many domestic producers, and some consumers, would like to be able to regulate imports in terms of both end product characteristics and the means of production. While this an issue which will not be easily solved, it does suggest niche marketing opportunities to differentiate internationally-traded products for certain consumer segments. Future battlegrounds to watch will be fumigation and irradiation. Both of these post-harvest technologies represent explosive issues for both consumers and policy makers.

When it comes to cross-border differences in grades, standards, and other post-harvest regulations, competition is often the real issue. The Florida tomato grower-shipper petition to ban the use of the more-protective nested shipping containers by Mexican grower-shippers serves as an example. Mexican tomatoes tend to be vine ripened and more susceptible to damage during shipping than Florida tomatoes which are harvested at the mature-green stage. Thus, such a regulation would serve to improve the competitive position of Florida tomatoes relative to Mexican tomatoes. This is interesting in light of a quote by Mr. Paul DiMare, a large Florida grower-shipper, in response to the suggestion that Mexican tomatoes taste better than Florida tomatoes, "It doesn't really matter how tomatoes taste because they are condiments, seldom eaten alone" (Cooper and Ingersoll). As with SPS regulations in horticulture, grades, standards, and post-harvest regulations are subject to reciprocity and retaliation.

Policy HCC in horticulture also will be affected by biotechnology. The theory of technology waves developed by the Russian economist Nikolai Kondratieff suggests that technological innovations exhibit cycles of roughly 30 years (Drucker). Although biotechnology has existed for awhile, innovations based on biotechnology have only recently begun to appear in the market. Thus, it is possible that the peak of the biotechnology wave is many years away.

Biotechnology is expected to have a major impact on horticulture. Both climate and he ability to control pests and diseases strongly influence the geographic distribution of ıorticultural production. Also, as noted, SPS concerns play a major role in determining nternational flows of horticultural products. Biotechnology has the potential to change ıroduct definitions and the rules of the game by genetically altering the quality, size, taste, helf-life, disease resistance, climatic requirements, and health benefits of fruits, vegetables, ınd other horticultural products. Competitive position can be affected by changes in product :haracteristics, e.g. the marketing of extended shelf life (ESL) tomatoes by Mexican grower-ıhippers.

Issues related to the protection of patents and intellectual property rights concerning ;enetic material will affect horticultural trade policies in interesting ways. Thus, significant :hanges in competitive advantages and resulting shifts in production and trade patterns can ɔe expected. Fear of these changes and the sense of vulnerability in fruits and vegetables ndustries will continue to drive rent seeking in the trade-policy arena.

SUMMARY AND CONCLUSIONS

Policy harmonization and policy compatibility can be defined as opposite sides of the ;ame coin, while convergence is the rate at which harmonization/compatibility will be achieved. The rate of policy convergence in horticulture depends on how the sub-sector evolves. Policy makers may wish to monitor industry changes in the three issue areas described: sanitary and phytosanitary regulations; environmental laws and competition; and post-harvest regulations and technology.

Domestic resistance to harmonization seems to be based primarily on competitive-advantage concerns. There is a great deal of fear in the horticultural sub-sector of North America. While some fear is based on perception, much of it reflects a realistic assessment of the changing trade environment and associated policy harmonization and convergence issues. The costs and benefits of developing more open trading systems are often overestimated by opponents and proponents, respectively. However, in the case of the horticultural sub-sector, it does appear that there will be losers in many fruit and vegetable industries on all sides of the border due to many of the industry characteristics discussed earlier. These losses can be viewed as signals for firms to adjust to a different economic reality. Competitive shifts may trigger a discussion of transitional compensation in extreme cases.

Intrafirm trade within multinational companies represents a significant portion of international trade. In 1994, intrafirm trade for both U.S. and non-U.S. firms accounted for 36 percent of all U.S. exports (both agricultural and non-agricultural) and 43 percent of all U.S. imports (Zeile, p. 24). In the horticultural sub-sector, international production and trade no longer involves us verses them, as now we are on both sides of the border. This trend is certain to have significant ramifications for policy HCC in North America.

The increased importance of both multinational companies and strategic alliances is expected to continue in the horticultural sub-sector. Many horticultural industries are characterized by large grower-shipper firms accounting for the majority of market share and remainder spread among smaller producers. California avocadoes and Florida tomatoes (top 5 firms control about 75 percent of the winter tomato market) are representative of this market structure.

Multinational linkages will blur the borders with respect to trade in horticultural products. The trend toward large multinational grower-shippers can be expected to continue and expand as a result of the demand for year-round sourcing and the need for diversification. Innovations in biotechnology will begin to significantly impact trade policies. Trade deflection, transshipments, and country of origin issues also will take on new dimensions for policy consideration given expected changes in multinational firms and biotechnology.

Trade policies will remain political, and rent seeking by horticultural lobbies will continue although some may discover there are limitations to their political capital in future trade policy negotiations. However, it is important to recognize that business activity tends to lead trade policy, rather than trade policy dictating business activity. One only has to observe investment and trade activities of multinational firms for confirmation.

Policies governing the trade of horticultural products among Canada, the United States, and Mexico are likely to converge, but what will dictate the rate of convergence? Perhaps more and better analysis, improved information, and increased communication among both industry and policy participants. Will food fights continue in the NAFTA cafeteria? Yes. Will anyone get hurt? Yes. Will we see policy harmonization in the North American horticultural sub-sector? Yes. Ultimately, the rate of convergence will be dictated by the issues discussed in the foregoing sections.

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IMPLICATIONS OF CANADA AGRICULTURAL PRODUCTS ACT REGULATIONS FOR HARMONIZATION, CONVERGENCE AND COMPATIBILITY IN HORTICULTURE: THE BRITISH COLUMBIA EXPERIENCE

John Schildroth

INTRODUCTION

The Canada Agricultural Products Act (CAP), among other things, regulates the marketing of agricultural products in import, export and interprovincial trade, and it provides for national standards and grades of agricultural products in Canada. It was designed to facilitate the orderly marketing of both fresh and processed fruits and vegetables, by prescribing standards in four areas:

1. Health and Safety;
2. Quality Standards (grades);
3. Packaging; and
4. Labelling.

This paper discusses how the application of two of these standards, grades and packaging, impact on provincial industry competitiveness. Impacts upon competitiveness, in turn, serve as a barrier to harmonization, convergence and compatibility (H/C/C) in horticultural regulations across political jurisdictions. The two applications of the CAP Act regulations selected for review are those pertaining to bulk containers carrying processing vegetables, and those involving a small potato grade standard. The paper concludes with some observations and conclusions regarding possible H/C/C initiatives/directions that could be taken within the existing policy framework for horticulture.

HISTORICAL CONTEXT

The federal Fresh Fruit and Vegetable Regulations and the Processed Products Regulations, both under the CAP Act, have their origins in the early 1900s. Officially, these regulations were put in place to ensure "orderly marketing". In practice, the regulations were introduced to secure higher grade local produce in the domestic fresh market in horticultural products, partially by controlling the importation of lower-grade fresh produce from other provinces or countries. Processing of produce was seen largely as a residual activity.

An indigenous, competitive industry was in existence in certain horticultural sub-sectors in British Columbia at this time. For example, B.C. tree fruits were exported across the Pacific, and indeed were the dominant temperate climate tree fruit product in the Asia-Pacific market at that time. At the end of World War I, a B.C. Royal Commission was struck to investigate grower complaints of anti-competitive practices by fruit packers and processors in the tree fruit industry, which in turn led to recommendations calling for orderly marketing practices and regulations. Consequently, the earlier introduction of the federal CAP Act and its attendant regulations promoting orderly marketing were consistent with, or at least complementary to, the later recommendations of the British Columbia Tree Fruit Royal Commission.

In particular, orderly marketing for horticultural products, including for that produce in which British Columbia had a comparative advantage, was deemed to be a necessary policy objective, and was shared by the federal and provincial authorities of the day.

The federal CAP Act has been amended over the past 80 years. The present Act dates from 1988, less than ten years ago chronologically, but light years ago in terms of changing competitive conditions in the North American horticultural industry. The Canada-U.S. Free Trade Agreement, the North American Free Trade Agreement, the Agreement on Internal Trade in Canada, and the World Trade Organization have all been established over this short period while much of the CAP Act and its attendant regulations have remained, a rock of certainty and familiarity for those seeking shelter from a seething sea of change and uncertainty.

Consequently, B.C. horticultural growers have typically embraced the federal CAP Act regulations as necessary to their industry's continued economic health. The fact that this Act and its attendant regulations were developed to address public policy issues that have been pre-empted by global marketing issues has largely not been acknowledged, and has certainly not been embraced. The known benefits of the existing regulatory framework is typically preferred to the unknown outcomes associated with de-regulation or re-regulation. Institutions, once established, take on a life of their own, a force that may resist policy harmonization, convergence and compatibility (H/C/C).

THE REGULATIONS

Under the CAP Act, the federal minister of agriculture can specify container, labelling and grade standards for agricultural products in Canada to ensure the orderly marketing of product.

Bulk containers are not considered standard containers under these regulations, and consequently the interprovincial and international movement of these bins, potentially containing ungraded/unlabelled produce, is prohibited. A federal Ministerial Exemption is possible if sufficient supplies of product, fresh or frozen, are deemed not available within the province for processing or further-processing. However, these exemptions are discretionary, involve time delays, and decisions to grant/not grant an exemption are not necessarily based upon buyer (i.e., processor) needs.

Grade standards, such as the small potato grade, are required by the federal government for the interprovincial and international movement of fresh horticultural products, to ensure that quality standards are observed. The CAP Act grade may only be a "floor" standard, below which no fresh product can move across provincial or international borders as imports or exports. A specific horticultural industry sector may actually employ a higher grade quality standard, in order to be market-competitive. The absence of a particular CAP Act grade for a product effectively means no interprovincial or international movement of that grade of product.

BRITISH COLUMBIA EXPERIENCE

Processing Vegetables and Bulk Container Regulations

At the beginning of 1988, the dawn of the present free trade decade, there were four major vegetable processors in British Columbia; today there is one (the smallest of the original four), and its present survival is allegedly a function of creatively end-running CAP Act Bulk Container regulations. In 1988, the B.C. farmgate value of processing vegetables (i.e., corn, beans, peas) was about $10 million. Frozen fruit and vegetable processing value-added was approximately $50 million according to Statistics Canada, with roughly 80 percent of that value generated from freezing vegetables. The loss of value-added and processing jobs since then has been substantial.

Processors freezing corn, peas and beans, or packaging already-frozen product, require large quantities of a single grade of product, fresh or frozen, in bulk containers, on a continuous basis. Ministerial Exemptions to CAP Act regulations are designed to provide flexibility to the system by allowing bulk importations of horticultural products when local sources are insufficient to meet processor demand.

In British Columbia, product was contracted with local producers via the B.C. Vegetable Marketing Commission before the start of the growing season. Price was negotiated through a binding arbitration system involving the Commission and the local processors. Quantities and grades could not be contracted with the certainty required by processors, given the variability of yields and weather conditions. Consequently, the four processors typically found themselves short of a particular commodity of a particular grade each season.

In order to get a Ministerial Exemption to bring in a bulk shipment of the short product, the processor had to satisfy federal officials that neither the B.C. Vegetable Commission nor another local processor had the necessary product. Arguments also had to be made for US imports, as opposed to other Canadian supplies.

There were at least three problems with this process.

1. The processor had to attempt to source an input from a direct competitor, i.e., another B.C. processor. This was further complicated by the fact there were only four processors;

2. The processor had to try to get an input from the B.C. Vegetable Marketing Commission, with which there was, typically, ongoing negotiations on price; and

3. Initiating the process with the federal bureaucracy did not guarantee the processor would get the necessary product in a timely fashion. The decision to grant a Ministerial Exemption was often delayed until late in the season when British Columbia supply could be accurately determined. As a result, processors had to delay production decisions and this constrained their ability to develop effective strategic plans, which are an essential component of any competitive strategy. Indeed, given the nature of the Bulk Container Ministerial Exemption review process, it was a virtual certainty that if a B.C. processor was short of product, they would experience costly time delays in accessing the requested grade of commodity from the United States.

The regional characteristics of horticulture played a definitive role. In Ontario, the other major vegetable-producing region in the country, the impact of the CAP Act regulations was muted. Why?

1. There were many more processors, ensuring anonymity and increasing the probability that the desired bulk product was indeed available;

2. The major Ontario processors typically had plants in both Ontario and Quebec, allowing for same-firm interprovincial transfers of bulk product without a permit;

3. There was much more processing vegetable production in Ontario, looking for a processor- buyer; and

4. The relationships among the Ontario vegetable marketing boards, the processors, and the federal officials in Ontario responsible for the CAP Act Bulk Container regulations were more cooperative and business-oriented, and less confrontational or defensive.

In the case of British Columbia, the growers, through the Vegetable Marketing Commission, saw the CAP Act as an opportunity to minimize the importation of competitive international bulk containers of fresh and frozen corn, peas and beans for processing by B.C. processors. Because British Columbia is essentially isolated on the west coast, and the area for growing vegetables commercially is limited to the Fraser Valley, U.S. or Mexican bulk imports for processing was the only option. Intra or inter-provincial shipments of bulk produce were never options for British Columbia.

By placing restrictions on bulk shipments at provincial borders, CAP Act regulations have the dual effects of insulating local horticultural producers from competitive rivals and of lessening incentive for these producers to develop sustainable markets for their products outside provincial boundaries. Border restrictions encourage inward-looking production strategies and maximum rent-seeking behaviour.

Innovation is the development of new products, the use of new technology, new packaging techniques, new purchasing techniques, new marketing or distribution techniques, or new management practices. In the absence of competitive rivals, firms have little incentive to undertake these innovations. This type of competitive pressure was lacking in British Columbia. CAP Act regulations insulated B.C. vegetable producers from competitive rivals seeking contracts to supply local processing operations. Competition among growers within the province was virtually non-existent, as growers marketed their products through co-operatives.

At the same time, British Columbia food processors, who relied upon competitive raw product inputs, faced increasing competition from American and Mexican food processors as tariffs on packaged processed products were reduced/eliminated under the Canada - United States Free Trade Agreement (FTA) and the North American Free Trade Agreement (NAFTA). The lack of incentives to innovate at the producer level constrained the ability of B.C. processors to compete against imported processed products.

A favourable economic climate is one that encourages both Canadians and foreigners to invest in the Canadian agri-food sector. By restricting interprovincial and international trade, CAP Act regulations do little to encourage investment in British Columbia. Any prospective investors would be hesitant to become involved in British Columbia processing operations, which do not have open access to competitive sources of inputs and which must operate, in turn, in a market in which competition is increasing.

CAP Act regulations, in fact, encourage international processors to import competitively priced, value-added products and to market them in Canada through Canadian subsidiaries as opposed to having them processed in Canada. This, in fact, is the situation in British Columbia now.

Small Potatoes - Canada No. 1 Grade

Following the signing of the FTA, the federal government began a review of its many regulations, including those in horticulture. It was discovered that the wording of the CAP

Act regulation concerning the Canada No. 1 Small Potato Grade (1.5 to 2.25 inches) was a problem from a federal/provincial perspective, and it was inconsistent with Canada's changing trade obligations. The regulation established a No.1 Small Potato Grade, but then went on to prohibit any interprovincial or international movement of small potatoes. Either the regulation had to be amended to allow for cross-border trade, as this is the area in which the federal government has jurisdiction, or the grade had to be revoked and no small potatoes could be marketed interprovincally or internationally.

Potato grower organizations across Canada, through the Canadian Horticulture Council, asked the federal government to revoke the No. 1 Small Grade, as some grower groups were fearful of severe price competition from imported small potatoes. The B.C. growers were one such group.

Again, to understand the current horticultural policy nexus, one needs to look at the regional peculiarities of production and regulation. In the case of potatoes, a reverse symmetry exists along the Canada/U.S. border. On the east coast, Prince Edward Island and, to a lesser extent, New Brunswick, are competitive in potatoes, and wish to export potatoes interprovincially and internationally. Prince Edward Island finds the lack of a small potato grade to be restrictive and a disadvantage. Across the border in Maine, producers there would like to see more restrictions on P.E.I. potato exports.

On the west coast, just the opposite situation exists. In Washington State, potatoes are aggressively marketed in Pacific Rim countries. Small potatoes are typically called 'peelers', and are more a by-product of large-scale, table potato production. Across the border in British Columbia, small potatoes are a niche market that earns a very attractive premium. An effective ban on imports of small potatoes protects the B.C. market and keeps the small potato price high. For example, small potatoes in British Columbia realize $42 per cwt., versus a $12 per cwt. maximum for normal values calculated for a B.C. regional potato dumping ruling under the Canadian International Trade Tribunal (CITT), against U.S. potato imports. The AD order has been in place since 1985. The lack of a No. 1 Small Potato Grade Standard is more effective than a potato anti-dumping ruling.

Ironically, any attempt to harmonize potato grade standards would find British Columbia and Maine opposed to the development of a small potato standard, or at the least wanting special safeguards, while Prince Edward Island and Washington State will be supportive of any H/C/C initiative on potato grades. The regulation, or lack of it, has different impacts in different parts of Canada and the United States.

SUMMARY AND CONCLUSIONS

Trade agreements only partially explain why H/C/C of technical regulations in horticulture have become a policy priority of governments. Another important part of the explanation has to do with the changing nature of demand for horticultural products. Processors are now major users of horticultural products, and their standards can be very

specific as in frozen potato products. Processors are not interested in processing low-grade bulk product. so the orderly marketing benefits of the CAP Act regulations are no longer effective or necessary.

Consumer demand has also changed, both in the domestic market and through international opportunities. The growing demand for quality and variety in fresh produce is satisfied by imported product, because our CAP Act standards ensure that only quality product can be imported. Today in British Columbia grocery stores, a mix of imported and domestic apples are more likely to satisfy changing B.C. consumer tastes than simply B.C. apples. Our highest quality apples are exported; they are not marketed in the province. Again, orderly marketing is no longer the issue; being competitive in domestic and export markets is now critical to success. Consequently, there is the need to harmonize standards (H/C/C) to bring our institutional regulations into line with industry's strategic interests.

H/C/C initiatives should not be seen as zero sum games, in which some parties gain while others lose. The small potato grade example illustrates that point. For the past four years, Canada has had a No. 1 Creamer Potato Grade in place. These are potatoes from 3/4 to 1 5/8 inches, smaller than the small size. Despite the protection provided by the lack of a small grade since 1990, and despite the protection of a regional anti-dumping duties, B.C. potato producers have not been driven out of the creamer potato market in British Columbia. In other words, when faced with competitive imports from California, B.C. growers made the necessary adjustments. There is considerable room for both producers and importers to adjust when the protected price was $42 cwt. and the floor price, established by the regional dumping duty, was $12 cwt.

H/C/C initiatives in horticulture will not only have differential impacts between countries, but will have quite different regional impacts within each country. Documenting the existing technical standards policy, and estimating the differential impacts of existing horticultural regulations are necessary first steps to H/C/C initiatives. Where technical regulations have provided protection from competition, we need to first address the political economy of the regulation before asking the scientific and technical experts in each country to sit down together to devise an H/C/C strategy.

It is much easier to undertake H/C/C in horticulture when the industry is experiencing growing and/or changing market opportunities in which they are competitive. The possible challenges from increased competition under H/C/C is balanced with new opportunities, perhaps in other commodities.

ISSUES FACING THE ONTARIO HORTICULTURAL INDUSTRY

David Hope

INTRODUCTION

The Ontario government has recently made several changes with the intent of removing barriers to business, reducing red tape and eliminating unnecessary overlap among services offered by different levels of government. Both national standards and provincial grade standards have existed for many crops. The provincial legislation mandating the use of provincial standards and requiring their enforcement by provincial inspectors has recently been amended.

Decisions on appropriate standards and appropriate methods to enforce these regulations face the horticultural industry. At the same time industry is considering the implementation of a system re-useable plastic shipping containers. The horticultural industry in Ontario is also pushing quite strongly for a harmonized pesticide registration system. All of these issues impact on the competitiveness of the producers and processors of horticultural products.

This paper outlines three issues facing the Ontario horticultural industry and highlights some of the implications for this industry as it operates within the continental marketplace.

HISTORICAL CONTEXT FOR GRADE STANDARDS IN CANADA

Government intervention in the field of grading and inspection of farm products pre-dated Confederation. The first legislation dealing with fresh fruits and vegetables was enacted when export grades for apples were established in 1892. In early legislation, the federal government assumed authority for establishing and enforcing grade standards. This was a natural development since the export grades were enacted by the federal government.

In the 1920s, the courts ruled that the federal government had no authority to legislate on transactions which originated and ended within a province. The result was that most provinces enacted legislation delegating authority to the Dominion Government. In 1935, the courts ruled that the provinces could not delegate to the Dominion Parliament authority which was specifically stated in the *British North American Act* to belong to the provinces. Provinces then repealed their enabling legislation and instead passed concurrent legislation which merely duplicated the federal legislation in the field of intra-provincial trade.

All provinces, however, did not uniformly adopt the federal regulations pertaining to fruit and vegetables. All did not provide grades for all products covered by federal legislation. In most cases the main grades for the main products remained the same but regulations covering the application of grades, movement of produce, standard packaging, etc. varied, to suit the marketing setup peculiar to the province.

In Ontario the *Farm Products Grades and Sales Act* was passed in 1973. It provided

- grades for nearly all fresh fruit and vegetables, honey, maple products and tobacco,
- grades for fruit and vegetables for processing,
- several general regulations covering packing, grading, marking, transporting, handling and selling fruit and vegetables within the province, and
- licensing regulations for dealers in fruit and vegetables buying or selling within the province.

These regulations were administered and enforced by provincial inspectors with some federal assistance. The Act has remained in place without major changes for approximately 50 years. Certain rigidities were found in the provincial regulations. One example was the absence of any standard to allow the sale of a mixed basket of fruit in a farmers market. Federal regulations remain paramount for movement across provincial or national boundaries.

RECENT LEGISLATIVE INITIATIVES

In June of 1996, legislation was passed in Ontario that amended the *Farm Products Grades and Sales Act*. Compliance, licensing and regulatory aspects of the program are being phased out. These functions will be replaced with industry driven quality assurance programs and industry dispute resolution initiatives. Effective April 1, 1997 provincial inspectors will no longer enforce grade standards within Ontario. Most of the former inspection staff have ceased their employment with the provincial Ministry of Agriculture, Food and Rural Affairs (OMAFRA). Industry organizations, however, may use the Act to have inspectors appointed. The remaining OMAFRA staff will serve as quality control specialists to assist the commodity organizations and industry to develop their own quality assurance programs.

Each commodity organization must deal with this situation based on the particular challenges and opportunities facing their sector. Buyers of fresh produce often set high

standards, often exceeding those reflected by the grade standards. Products facing intense competition from imports may require a different strategy from one that that comes on to the market at a different time than that of major competing regions. This is different from a crop for which a large proportion is focused on export markets.

National standards remain relevant as minimum import requirements and for produce moving into export markets. The federal government, however, is in the process of moving its inspection services into a national agency, at the same time that it is introducing significant cost recovery initiatives.

INDUSTRY DECISIONS

Horticultural commodity organizations are now developing their strategies for dealing with the world as it is evolving. While provincial regulations made sense when the majority of the crop was marketed locally and interprovincial movements were less of a factor, this is no longer the case. The following decisions must be addressed.

1. Should the industry maintain grade standards for product sold within the province or for product exported?
2. If standards are maintained, should federal grade standards be adopted, should previous provincial standards be maintained, or should different standards be developed?
3. Who should be responsible for enforcing standards, federal agency staff or industry staff appointed under provincial authority or others?
4. Are quality initiatives different than traditional enforcement of grade standards more appropriate?

Several issues must be considered when an industry chooses an approach. For many organizations cost is the first aspect considered. Some sectors faced with grading charges for product being exported that are perceived to be high or considered of little value in selling the product are requesting the removal of grade standards for exported product. This has happened without provincial legislative changes.

The adoption of national standards sometimes comes with additional costs to meet the standard if it requires practices different than that common within the province. For example honey producers would not be able to sell unpasteurized honey if federal standards were followed. Also niche markets for maple products may be lost if full harmonization to federal standards were implemented. The needs of the consumer and/or the retailer may not be reflected in established grade standards. Marketing strategies may incorporate a *seal of approval* that reflects product qualities in demand.

Trade issues have an impact. Provincial differences can be seen as providing protection for local produce. The maintenance of regulations due to their benefit as a barrier to trade cannot be considered a long term strategy given the pressures for reduction in barriers to trade, both within Canada and from outside the country.

OTHER IMPACTS FROM THE LEGISLATIVE INITIATIVE

The OMAFRA inspection service provided several functions for industry. Grading raw product to assist in price determination for processed crops was previously provided on a cost recovery basis. A recently established agency which delivers Crop Insurance and Income Stabilization Programs has been contracted to provide several of these services.

Both federal and provincial inspectors once played a role in price reporting. Initiatives to cost recover some of these activities have not been successful to date. There are examples where provincial licensing is significant in meeting the demands of an importing country. Other methods to meet these requirements have to be found in the absence of provincial licenses.

OTHER HARMONIZATION CONCERNS

The main issue for the Ontario horticultural industry is the harmonization of pesticide regulations. Many issues around the harmonization of pesticide standards have been successfully addressed. The main outstanding issues are in the area of process. Producers feel strongly that the Canadian government agency responsible for pesticide registration has not demonstrated sufficient desire to move forward. They see no reason why steps must be duplicated and cannot understand why produce treated with a product are allowed to enter the country while they are not allowed to use the same product. Cost recovery initiatives have heightened the tensions.

With the signing of the CUSTA, expectations were raised on the benefits that could accrue from harmonization. In the early years of the agreement little was accomplished. There are now many examples of cooperative efforts. The expectations around harmonization, however, have definitely not been met. The expectations around harmonization, however, have definitely not been met. Canadian growers have turned to their U.S. industry colleagues, on occasion, to apply pressure on the Canadian government through their connections with U.S. officials.

One issue where Ontario growers have taken a lead is in the area of reusable plastic shipping containers. Producer organizations have cooperated closely with marketers, shippers, wholesalers and retailers and have been supported by both levels of government in this project. Ontario producers have been cooperating with colleagues in the province of Quebec and recently have involved someone from the University of California in Davis. This project if successful has huge ramifications for products moving across regional boundaries.

V. IMPLICATIONS, RESEARCH NEEDS AND FUTURE DIRECTION

ROUND TABLE PANEL OVERVIEW AND WRAP-UP

John J. Murphy

I consider it an honour and a pleasure to have been invited to be a participant and an observer at this important international event. I make the following comments as a Canadian agricultural banker whose customers are highly dependent on international trade for their livelihood and the special interest they hold in the U.S. and Mexican marketplace which accounts for at least half of their exports of agricultural commodities and food products. While I am not sure as to the extent to which we have narrowed the gap at this meeting in harmonizing the agriculture and agri-food policies within our three countries, I am convinced that the dialogue and study that went into the presentations delivered at this meeting will contribute significantly to an improved marketing scenario. .

One of the presenters raised the issue that perhaps the work was somewhat redundant. It was noted in the Canada-U.S. dairy dispute, rather than experts attending this meeting adjudicating on the issue, there were four lawyers, all of them from academic institutions that in fact deliberated the Canada-U.S. dairy dispute.

I would encourage the academic community as it relates to agriculture to continue its vigilance in assessing in a chronological and objective fashion the issues facing freer international trade in agriculture and food commodities. While rarely are your efforts seen as high profile, front-end issues, it is my strong opinion that the accomplishments made to date in liberalizing agriculture trade throughout the world is attributable to your efforts. I would encourage you to be as pro-active as you have been in the past, if not more so, in advancing the findings in your analysis in order that we may advance and encourage a greater degree of freer trade throughout the world.

I regard the deliberations at this meeting to be of first-class quality, highly complex and as such it is somewhat impossible to provide a critical review of each presentation. I would however suggest that the proceedings of this meeting receive wide distribution in order that others like myself can benefit from the extensive work and analysis of the issues that have been provided vis-à-vis the delivery of the papers presented at this meeting. All of us here should accept the challenge of distributing this information by whatever means possible in order that we may influence the political process in freeing up world trade in agriculture.

FUTURE DIRECTIONS

Fred Woods

As economists, we know that the better our knowledge (both qualitative and quantitative) the better the market works. Just coincidentally, the same applies to our political systems.

Increased knowledge and improved understanding of the implications of free trade among our countries is not a goal of all our compatriots. Not all want to dispel the "Fear" of Al Loyns' dispute resolution model. Dan Summer's reference to the "Grain Disputes Industry" is a telling one.

But what can a group such as ours accomplish? Can we contribute to harmonization, convergence and compatibility? Obviously we can, as long as we recognize that these are part of a political process. We can, and have, identified research and education needs, recognizing that issues are not all economic, but nearly all have economic elements. Perhaps we could make an even more basic contribution if we could just get our farmers, politicians and media to understand that free trade applies equally to imports as well as exports.

Our next most important contribution may well be to an increased awareness and understanding on the part of our collective producers of the three countries agricultural sectors. We have increased our own understanding during this and the previous two workshops, and I think we have had some positive impact on policymakers in the United States and Canada through distribution of the proceedings of the earlier workshops. This represents a good start, but we need to go the next step in increasing understanding.

All three of our countries are democracies, and as I mentioned first, the more informed our citizens, the better our governments function.

Thomas Jefferson, third U.S. president and framer of our constitution, wrote:

> I know no safe depository
> of the ultimate powers of the society
> but the people themselves;
> and if we think them not enlightened enough
> to service their control with a wholesome discretion,

> the remedy is not to take it from them,
> but to inform their discretion by education.[1]

The typical U.S. extension education model we have used successfully in many past instances to educate about issues such as these consists of a comprehensive basebook (published proceedings of this and earlier workshops have given us the basebooks); and non-technical popular style leaflets dealing with issues and problems discussed in depth in the basebooks to be used as the basis for educational programs with farmers, ranchers and others. We have not, as yet, been able to secure the resources for this broader educational step.

For the workshops themselves, we have seen that the involvement of producers, agribusiness and their representatives stimulates discussions and improves understanding of issues. We must also continue to seek greater Mexican involvement.

Antonio Yunez has made a good contribution to this workshops and represents an important first step in securing Mexican involvement.

Improved knowledge and increased understanding of issues relating to agricultural trade among our countries will lessen tensions and contribute toward a smoother, more efficient North American free trade area.

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[1] Jefferson's letter to William C. Jarvis, September 28, 1820.

REFLECTIONS ON U.S. - CANADA-MEXICO POLICY HARMONIZATION/CONVERGENCY/COMPATIBILITY

Hal Harris

I am one of the handful of people who have participated in all three of the trade dispute resolution workshops. My comments are a reflection of that experience and a recent experience. Earlier this week, I participated in the National Agricultural Forum, "Food and Agriculture in a Borderless World", held in Des Moines, Iowa.

Our workshop here in Tucson was extremely productive. However, as we university agricultural economists and government officials discussed key issues, I was somewhat disappointed about the speed at which progress was occurring. Indeed, we once again addressed issues that had not changed since our workshops in Rio Rico in 1995 and in Clearwater last year.

In contrast, The National Agricultural Forum, dominated by agribusiness representatives and farm group leaders, was characterized by an upbeat sense of dramatic change in the world trade environment — change wrought by huge technological advances and rapidly increasing global demand for value added food products.

One of my least favourite cliches associated with recent changes in the U.S. political climate is "You just don't get it!" The cliche is typically uttered by a conservative politician in response to a well-meaning honest question about dismantling some of our entrenched government programs. For example, "If we cut Program X, Y or Z, won't people go hungry, get sick, be forced out of business, etc.?" The response, "You just don't get it, do you?" is completely unresponsive to the question, but conveys a sense of intellectual superiority and make a good TV sound bite.

But perhaps in this case it is us who "just don't get it." I for one am convinced that we are on the verge of a tremendous structural upheaval in agriculture. This upheaval will affect the geography of where products are produced and processed; in the number, type and size of farms; and in the various forms of vertical linkages that will emerge to coordinate the system. These changes will not happen overnight, but they are likely to happen much faster than our discussions this week would indicate. They will happen both within and among our three countries.

At the Agricultural Forum, I heard an Iowa farm leader comment that his state would prosper in the emerging less trade restrictive, more market driven global agricultural economy. For sure, there will be bumps in the road he said, but we will prosper." Then he pointed to my neighbouring state. "But now take Georgia for instance, I don't think they can compete with us in corn and soybeans. Maybe those farmers can just grow pecans." Maybe he is correct. Not that Georgia can have a prosperous agriculture growing only pecans, but just maybe we in our southeast region won't be producing nearly as much of some commodities as we do today.

It is urgent that we as educators and researchers take a leadership role in helping guide our industries and our governments through this process. Harmonization, convergence and compatibility are going to occur. Governments and trade negotiators will be forced in this direction by changes in the sector. We do not have a decade or two to adjust, but must develop a sound strategy of research and education to forecast future directions, prepare industries for growth or decline, and develop sound transition policies.

Much of the blame here for our lack of progress has been attributed to lawyers, and that's fine. But be reminded, behind every lawyer in this game, there is usually an agricultural economist arguing for continued protection of economic rents that can be attributed to some ancient government action. This group is a good one to take the lead in the development of a sound, intellectually honest research and education program that will address the promising but puzzling world that lies ahead.

CLOSING COMMENTS

Tom Richardson

A lot of information and analysis has been raised and discussed formally and informally over the past few days. In trying to think about what I heard and what it implies I found it useful to start with the following matrix.

	Border Tariff Measures	Export Subsidies	Internal Support	Health Standards	Production Environment Processes
Commodities					
Beef					
Hogs					
Grains					
Agri-food Products					

Each of the boxes in the matrix can be filled with information as to what specific measures are in place now, what has been recently eliminated or is in the process of being eliminated or being harmonized or "converged".

While this conference focussed on the sensitive areas, my guess is that overall this matrix is not as "dense" as some might think it is when it comes to measures which may be severely restricting competitive trade and economic growth. Therefore, I think a key question is to look at what is in each box and try to get an objective economic measure of its importance. A number of speakers have made it clear that in many situations perception over-rides our understanding of the economic reality.

This leads to the idea that better information and analysis can, and will, over time deal to perception problems and focus on the really key economic and social issues that need to be negotiated if countries are to get greater degrees of harmonization or convergence.

A number of speakers noted the concern that negotiating time is precious and tilting at irrelevant windmills is not productive so, are we satisfied that we have the right economic performance measures and the analysis to understand what matters. I think there is lots to do on that front. A corollary question is what relations there are between the rows (or columns) Dan Sumner suggests, for example, that if one can make substantial progress on border and export measures that domestic supports will adjust accordingly. Are there other economic/strategic ways to think about how one goes at this matrix? Is it one at a time or can one have some approaches which lead to more effective results?

An interesting conclusion for me was the observation noted by a number of speakers that the assumed process solution of a nation-to-nation political negotiation was, in fact, not the only way in which harmonization and convergence would be achieved. Market forces through which retailers/consumers would insist on certain product features, were seen to have the potential to eliminate concerns about different/restrictive production practices perceived as barriers to trade. A number of speakers noted multinational organizational structure across borders as being another way in which pressure would be brought on border measures. At least one author hypothesized that it was easier to deal with foreign affairs departments which were accustomed to negotiating international deals, hence progress on tariffs was going reasonably well. Whereas, health or domestic inspection departments may be more domestically focussed and less oriented to deal to border issues. The generalization of this hypothesis is that we need to understand better how institutional groups (political, bureaucratic, industry, and commodity) are able to interact to resolve issues.

If a central idea is that better information and analysis of issues and processes is necessary for progress, how best to do it. We heard a number of specific suggestions like government appointed "blue ribbon" panels, more industry-to-industry discussions on different sides of a border, and better information on the economic impacts of various measures. Clearly academics play a role in all of this as they did in the last trade round. Mike Gifford referred to the critical importance of intellectual capital in bringing underlying principles to bear on what can be quite precarious political discussions. A message that I heard was that a number of the outstanding issues may be more conducive to multidisciplinary activity i.e., economics plus plus trade low plus competition policy plus natural resource/environmental low plus political economy etc.

Finally, in looking at the original matrix many authors are asking what is the definition of progress i.e., is the end-goal harmonization in all cases or just convergence, at what rate or is it just some degree of coordination? Whether we answered that question is probably not so important as the idea: everyone seems to indicate that there has been some progress in answering that question. David Hegwood mused that the goal of agriculture essentially being folded in to the S & C text of the World Trade Organization (WTO) text should not be discounted as an ultimate goal. But even if one were to attain that in the next 10 to 20 years, many of the issues around the environment and production practices (not all or not mostly coverd by WTO) may well continue to be serious barriers. Biotechnology was noted in this regard and these areas may set agrifood apart from other industrial products.

The trade negotiatiors probably felt that more progess was made in the last round than at the other meeting (nothing like being there!) The implementation of the round has been

aided remarkably by generally good commodity prices and governments desire to cut budgets across the board, not just in agriculture. The coincidence of these events has certainly eased the transition.

Can we go backwards? Certainly any economic downturn will weaken political resolve, and if as in Canada budget deficits come under control, there may be a capacity to spend. Are the next round issues harder? Time will tell.