



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*



The Estey Centre Journal of
**International Law
and Trade Policy**

Technical Annex

**The Prophecies of the Naysayers – Assessing the
Vision of the Protectionists in the U.S.-Canada Debate
on Agricultural Reciprocity, 1846-1854**

W.A. Kerr

Van Vliet Professor, University of Saskatchewan, Saskatoon, Canada

Robert J. Forgrave

*Research Associate, Department of Economics, University of Calgary, Calgary,
Canada*

This document is the technical annex to the full paper “The Prophecies of the Naysayers – Assessing the Vision of the Protectionists in the U.S.-Canada Debate on Agricultural Reciprocity, 1846-1854” which is available separately.

The liberalization of agricultural trade is one of the most contentious issues in public policy. Trade policies that protect agricultural producers are often central components of nations’ rural strategies and, hence, their removal can have wide ranging implications for policy formulation. Agricultural lobbies are an important political force. It is no accident that, for the most part, agricultural commodities were exempt from the General Agreement on Tariffs and Trade’s rules of trade which apply to non-agricultural products until the Uruguay Round negotiations that ended in 1994. In 1854 the United States and the provinces of British North America, however, successfully negotiated an agreement to liberalize trade over a wide range of agricultural commodities. The agreement remained in force until 1866. Of course, the initiative was hotly debated on both sides of the border. Those advocating

continued protection painted vivid pictures of the economic mayhem that would follow reciprocity. The aim of this study is to compare the predictions of the protectionists against the events as they unfolded in the subsequent period of reciprocity.

Any proposed change in the arrangements by which economic actors conduct their external trade will be the subject of extensive, and often heated, debate. Such debates are carried on at a number of levels - the abstract logic of alternative economic theories, ideological visions of alternative states of the future and more basically, blatant self-interest. Consensus on such issues is almost impossible to achieve. Given the complexity of the economic adjustments which will follow any major change to trade policy, it is exceedingly difficult to formally assess the results *ex ante* to the change. Those who join the debates, however, have an expectation regarding the economic consequences that will arise. It is possible, of course, to evaluate the effects *ex post* and the question arises as to whose vision of the future was more accurate.

This is particularly important because the pleadings of special interest groups are often major determinants of public policy, especially in the area of international trade in agricultural commodities. Mark Twain's "theorem" generally holds; to wit: "the free traders win the debates, but the protectionists always get the votes."¹ If those who are proponents of the status quo are more persuasive and no new arrangements arise, it is not possible to assess the accuracy of the vision of either of the contenders. On the other hand, if a change is implemented, the prophecies can be evaluated. In this study, an evaluation is undertaken of the prophecies of those who opposed the reciprocity agreement between the provinces of British North America and the United States. The opponents were chosen because their arguments were, for the most part, based on the perceived detrimental economic effects of the proposed treaty. The treaty itself had wider political facets, especially in the United States, and many of the proponents argued on political rather than commercial criteria. The analysis presented here is undertaken for the specific agricultural commodities included in the treaty and, hence, provides an examination of the correctness of the arguments at the most basic level of economic "self-interest."

The Era of Reciprocity, 1846-1866

The first serious calls for a reciprocal trade agreement between the British North American Colonies and the United States occurred as Canadian farmers reacted with alarm to the repeal of the British Corn Laws in 1846.² Canadian breadstuffs, which

had previously enjoyed preferential duties, were suddenly unable to compete with European grain on the British market. A new market to the south was sought for Canadian natural products. Negotiations for a reciprocity treaty began in Washington in 1847 and continued intermittently until an agreement was reached in 1854.

The political situation in *ante bellum* United States made negotiations difficult. The southern states were concerned that reciprocity was a step towards annexation, an event that would alter the balance in the slavery debate between the North and South.³ Strong protectionists sentiments were expressed between 1849 and 1853.⁴ This contributed to the delay in reaching agreement.

Agreement was finally reached in August, 1854. The success of the negotiations was not solely the result of perceived reciprocal economic benefits for the United States and the British North American Colonies, but also the manifestation of a need to settle differences between Britain and the United States in an increasingly tense international environment. Public opinion was generally favourable to the reciprocity treaty by 1854.⁵ Further, the southern senators were becoming less convinced that reciprocity meant annexation. The final impetus for agreement, however, was the dispute over east-coast fisheries - specifically over the interpretation of the *three mile limit*. In May 1852, the British government sent a small fleet to protect the colonies' fishing rights. The government of the United States reacted by dispatching warships to the area. Armed conflict was avoided but the seriousness of the dispute compelled the British government to seek a negotiated solution to the fisheries dispute. The outbreak of the Crimean War in March of 1854 put further pressure on the British government to forestall any possibility of conflict in North America.

The treaty, as finally agreed upon, included a settlement of the fisheries dispute as well as reciprocity in a long list of natural products. Articles I and II of the treaty granted fishermen from the United States the right to fish along the eastern coast of British North America. Similarly, fishermen from the colonies would have the right to take fish from United States waters north of the 36th parallel. The natural products for which there would be reciprocal free trade included: grains and flour of all kinds, animals, animal products, fish, coal and timber among others.⁶ Article IV of the treaty gave ships from the United States right of passage for the St. Lawrence at the same toll rates as British vessels. The treaty was to remain in place for ten years, after which either party could terminate it by giving twelve months notice.⁷

The advent of the treaty was marked by significant increases in cross-border trade. However, this was not entirely due to the treaty and, as a result, its actual benefit to either Canada or the United States has been a question of historical debate.⁸ Over

time, opposition to the Reciprocity Treaty grew in the United States. Farmers as well as iron, lumber and coal interests all voiced their disapproval.⁹ In Canada, growing protectionist sentiment from manufacturing interests and an economic downturn in 1857, which left the government short of revenues, led to the imposition of an increased tariff on some manufactured articles entering the Province of Canada.¹⁰

It was the United States, however, that abrogated the treaty. The Civil War contributed to the abrogation by instilling anti-British sentiment in the North as a result of British relations with the Confederacy. The principle reason behind the notice of abrogation by the United States was a resurgence of protectionism in the northern states. The period of reciprocity ended on March 17, 1866 with unilateral abrogation by the United States.

Prior to its implementation, however, the proposed treaty was the subject of much debate over not only its political but also its economic merits. There were economic opponents on both sides of the border, often arguing against the inclusion of the same commodity. The questions arise as to what was the rationale of such opposition and was it justified? The usual rationale for opposition to trade liberalization at the commodity level is that the proposed change will decrease the economic welfare of those currently producing the commodity. Whether the opposition was justified, even on the basis of self-interest, depends on the *ex ante* perception of the relative states of the two economies and the fundamental economic constraints which determine the magnitude of the responses of the various sectors to the changes. It is to those considerations that we now turn.

The Economics of Trade Liberalization

On the basis of theory, economists, in general, tend to support the abstract concept of *free trade*. Such support is not unqualified, however, and the free trade world of the theoretical economist is not expected to actually be manifest in a real world situation. In essence, this theoretical concept is a world without the restrictions of government regulation, taxes, monopolies or any constraint other than existing technology, available resources and transportation charges. Such a world never has, and likely never will, exist. If such real world restrictions are placed on the theoretical construct, the benefits from free trade cannot be unambiguously proven for the general case.¹¹ Hence, it becomes an empirical question as to whether the benefits can actually be expected. Accurately assessing the empirical evidence is virtually intractable due to what economists term the *general equilibrium* nature of the problem; that is, the complexity caused by the innumerable interrelationships in the

economy. This is especially true before the event takes place. Even with the relatively sophisticated computer technology available today, it is not possible to completely determine the effects of trade liberalization.¹²

It is customary to perceive that the benefits from trade for any particular nation arise from increased exports. Trade liberalization is, however, a two way street with both increased exports and increased imports. In theory, the gains from trade arise from the movement of resources - land, labour, capital, raw materials - out of the production of those commodities which are produced relatively inefficiently in one country and into the production of those commodities which are produced relatively efficiently. This leads to increased production in the efficient sectors, part of which is exported. However, there is a decline in production from inefficient industries which is made up by increased imports. The real gains from trade arise from the movement of resources from inefficient to efficient industries so that, over all, society has more production at its disposal. Given that both the resources required after liberalization and the rate at which these resources are able to move to new uses are virtually impossible to predict, any gains from trade are very difficult to accurately estimate. If there are restrictions or rigidities in the economies, beyond those of technology and available resources, then material gains cannot be assured. The reason for this rather lengthy digression is to indicate that those on either side of the debate could not have had an accurate empirical assessment of the long run benefits or costs of trade liberalization prior to actual implementation.

Since accurate information on the effects is not available beforehand, agricultural protectionism based on an expectation of financial loss¹³ must be the result of an assessment of the differences between the two economies prior to liberalization. Perhaps the most obvious basis for an assessment of this nature is the relative prices of similar agricultural commodities in the two countries. One would expect that those producing a commodity available in the market would have an idea of the difference in prices. The evidence from the reciprocity debate seems to support this hypothesis.

The protectionist's vision is that, as he is in the *high priced* country, there will be a flood of cheap imports and prices will fall as a result. Farms will be driven out of business and the industry will shrink. On the surface this appears logical and consistent. It also makes an excellent argument with which to lobby politicians who are concerned with retention of jobs and economic activity (i.e. the survival of farms).¹⁴

The protectionist vision may, however, be incorrect for five major reasons. The first is that the relative prices may not be as perceived. That is, the protectionist has

imperfect information and he does not live in the high cost country once prices plus transportation costs are accurately assessed.

A second reason concerns the implicit assumption that the *low cost* country can increase its production sufficiently at current costs to flood the importer's market and drive prices down.¹⁵ It is equally possible that it is very expensive for the exporting country to bring additional resources into the *low cost* industry. In this case, rather than large amounts of increased exports, the "low cost" industry finds that prices rise.¹⁶ Producers in the exporting country benefit at the expense of their consumers. The effect on the importing country is then very small as there is a price convergence rather than a price decline. Of course, this has a time dimension which will vary from commodity to commodity. For example, for poultry the increased production maybe manifest very quickly as each hen lays many eggs and the generation interval is very short. Hence, large increases in production can be forthcoming in a fairly short period.¹⁷ It takes between five to seven years to get any major increases in output in the beef cattle industry¹⁸ and in the short run supplies may be reduced as additional breeding stock is initially retained for subsequent herd expansion.¹⁹ In the case of tree fruits, the lag is even longer.

A third reason why the protectionist expectation of bankruptcy and job loss is likely to be incorrect occurs if the goods are not competitively priced in the importing country. That is, the prices in the importing country reflect not only costs but also an additional premium due to the existence of monopoly power. In this case a reduction in tariffs may lead to a decrease in price²⁰ and a reduction in, but not necessarily elimination of profits. There will be no exit of firms or major loss of jobs in this case. Although the individual motive for protecting ones income is still valid, the basis on which it is put to legislators may not be entirely correct and, hence, the rationale for public action lessened.

The fourth reason stems from the faulty perception that the envisioned differences in costs apply to the entire range of commodities produced by an industry and that these differences will not change over time. While it is the specialization in production that provides the gains from trade, it is often perceived that this will occur through the wholesale bankruptcy of entire industries (e.g. that the meat packing industry will disappear). In many cases, however, it is the specialization within an industry's range of goods where the gains from trade can be made. For example, in a protected environment, firms typically make a wide variety of goods for domestic consumption. If the market for each good is relatively small, there will be no economies of scale in production and high production costs per unit will result. In a

post tariff world, firms may find that they can specialize in a few selected commodities. They can produce larger quantities, partly for export to the other country, and achieve the economies of scale required to reduce costs. Neither firm bankruptcies nor changes in employment are likely to be significant.

The fifth and final reason why the protectionist vision may be incorrect is that there can be sufficient market expansion occurring to accommodate both domestic and extra foreign supplies. While the protectionists cannot be criticized for faulty analysis in cases where such growth could not be predicted, if the market was exhibiting rapid growth before the treaty, such a result could be anticipated. In this case the domestic industries may grow less than if they were protected but there would be no significant loss of existing jobs or farm bankruptcies.

Hence, there are several reasons why the protectionist vision may be wrong. Of course, the vision may also turn out to be correct. *Ex post*, once an agreement has been implemented, the resulting changes in economic activity will either support or reject the initial stance. In the latter case, each of the possible reasons why the protectionists vision was wrong would be supported by different economic events. The possible combinations of *ex ante* reasons and *ex post* evidence are outlined in Table 1. In a following section each of the commodities included in the Reciprocity Treaty will be investigated to determine into which of the categories it falls. Subsequently, these will be compared to the statements of various protectionist individuals and groups that opposed reciprocity on financial grounds to determine if their visions were correct. First, however, a brief review of previous assessments which have been made regarding the treaty is presented for comparative purposes.

Table 1 Theoretical Assessment of Protectionists Predictions

Vision	Reason for Wrong Interpretation	Evidence After Agreement
Correct	--	Firm Bankruptcies, Reduced Employment and Reduced Output in the Importing Country
Incorrect	Imperfect Information on Price Relationships	No significant change in trade or changes which are contrary in direction to those predicted by protectionists
Incorrect	Exporting country cannot increase production without increasing costs	Price increases in the exporting country. No major price decrease in the importing country
Incorrect	Goods not priced at cost in the importing country	Decrease in price in importing country but no major decrease in employment, no increase in firm bankruptcies and no decrease in production
Incorrect	Increased within industry specialization	Increased trade volumes within the commodity group. No decrease in employment, no increase in firm bankruptcies and no decrease in production in the protectionists' country
Incorrect	General market expansion overcompensates for initial trade disadvantage	Market growth in importing country exceeds increase in imports

Assessments of Reciprocity

Opinions of historians, economists and the media concerning reciprocity have evolved over the last 140 years. From simple speculation about the beneficial effects of reciprocity to modern trade theory, the historiography of the reciprocity era follows a line of increasing economic sophistication. Some of the first assessments, done prior to the implementation of the treaty, were generally favourable. One, published in the United States in 1852, noted there would be no ultimate winners and losers as “no commercial arrangement can be permanently advantageous to one party without being so to both.”²¹ Another assessment, published on the announcement of the signing of the treaty, called the document “one of the wisest arrangements ever made between commercial states.”²² It was also predicted that annexation would soon

follow closer commercial ties.²³ This generally favourable opinion carried on through the immediate post-ratification period.

One of the first formal assessments was a United States House of Representatives Committee report published in 1862. It states:

A great and materially beneficial increase in our commerce with Canada was the natural and primary result of the Treaty.²⁴

A similar Canadian opinion was expressed in an 1872 review of Canada-United States commercial relations which suggested the treaty gave trade “a great impetus forward.”²⁵ In general, opinions published in the nineteenth century were supportive of the view that the effects of the 1854 treaty had been mutually beneficial.

Over time, however, opinion has changed. Some of the first evidence of this shift in opinion is contained in two scholarly articles by S.A. Saunders on the effect of the Reciprocity Treaty on the Canadian Maritime Provinces.²⁶ The first concludes that much of the increase in Maritimes-United States trade during the reciprocity period took place during the Civil War and would likely have occurred in any event.²⁷ The second article, analysing the overall effects from a regional perspective, concluded that, contrary to common belief, the Maritime provinces did not fare as well as the Province of Canada.²⁸

The standard reference on the treaty is a major work produced by Donald Masters in 1937, *The Reciprocity Treaty of 1854*. He relied almost exclusively on primary research, exploring the treaty negotiations and execution in some detail. Discussing the net effects of the treaty, he states:

The interplay of other forces, economic and political, during the operation of the treaty, makes it extremely difficult to estimate the effects of reciprocity upon the colonies.²⁹

Masters elaborated by identifying a large number of factors that complicate an analysis of the overall effects of the treaty, including rapid expansion of world trade, the effect of the British and other European markets, the Crimean War and the Civil War.³⁰ Nonetheless, Masters does state that this was a period of “phenomenal development” for both countries,³¹ even though he repeats Saunders in suggesting that “a marked growth of commerce between the U.S. and the Colonies would have occurred even had there been no treaty.”³² Similar qualifying factors were set forth by R.L. Jones in the *History of Agriculture in Ontario* published in 1946. However, the author is unqualified in his enthusiasm for the economic benefits that had accrued to

agriculture in Upper Canada, particularly in the wheat, cattle, horse, wool and feeder hogs sectors.³³

The most recent series of studies began in 1968 with the publication of an article by Lawrence H. Officer and Lawrence B. Smith.³⁴ Their stated purpose was to question the “classic” (Masters/Saunders) position on reciprocity using “an aggregative approach.” They sought to test three hypotheses: “(1) The treaty cannot be conclusively said to have benefited Canada; (2) reciprocity alone did not appreciably increase Canadian trade; and (3) what increase did occur contributed to a new pattern of trade which was not entirely beneficial from the standpoint of Canadian welfare.”³⁵ Overall, their conclusions are not substantially new.³⁶ Using “modern trade theory,” they determined that the treaty had “significant, once-and-for-all, trade creating effects for both imports and exports.”³⁷ They concluded that: the net effects of the treaty were ambiguous; the Civil War and railway construction were the “really dynamic forces” and; the Reciprocity Treaty overall “seems to have done very little.”³⁸ This work was expanded by Robert Ankli.³⁹ Officer and Smith had attempted to show that Canada’s aim in reciprocity was to increase exports but not imports and, while the aggregate data shows that the expansion of exports exceeded that for imports, Ankli also demonstrates that this was not necessarily the result of Canadian commercial policy but, rather, “real” forces in the economy.⁴⁰

In summary, it seems increasing economic sophistication has altered the initial opinions of the 1854 Reciprocity Treaty. From the simple view that an increase in trade is good for all, thoughts on the treaty era evolved to where, in the 1930’s, Saunders and Masters speculated that the treaty may not have had all the beneficial effects once attributed to it. Officer, Smith and Ankli, using more sophisticated economic techniques, provide substantial additional evidence for the Saunders and Masters hypothesis. Thus, to this point, it has been concluded that: (1) the net effect of reciprocity on the Canadian economy is difficult, if not impossible, to determine; (2) whatever effects the treaty had were of a one-shot nature and occurred solely during the first years of the treaty; and (3) reciprocity, by itself, cannot be said to have significantly benefited the Canadian economy.

Changes in Commodity Trade

The major analyses regarding the reciprocity agreement have, to date, been conducted at a high degree of aggregation. The intent, of course, has been to determine whether or not the agreement was of net benefit to one country or the other. As pointed out above, the major points of argument revolve around how much of the

change in volume and direction of trade can be explained by the removal of tariffs associated with the treaty and how much is the result of other events. Isolating the effects attributable to reciprocity alone is an exceedingly difficult task in retrospect. Even today, with much improved data and computer assisted modeling, this inability provides the fuel for continuing debates on the merits of trade liberalization.⁴¹ Our purposes here are much more modest as we are only concerned with whether or not the protectionist vision was correct.

However, an examination of the changes in trade on a disaggregate basis may provide considerable additional insights into the nature of the effects of reciprocity on agricultural trade patterns. Of course, the longer the treaty is in effect, the more pronounced the affect of other events, which also alter the flow of trade, will become - the most obvious example in this case being the Civil War. Therefore, the major effect of the agreement on the direction or value of trade flows should be manifest immediately after the removal of tariffs. As a result of the abrupt policy shift and decline in government interference in the marketplace, the economic dislocation and accompanying shifts in trade flows are most dramatic in the immediate post tariff period.

In this analysis, the value rather than the volume of trade flows will be considered since the latter will generally underestimate the true effect of tariff reduction. For example, in the longer run, once there has been adequate time for adjustment, additional resources may be committed to an export industry when the price of the good in the other country is sufficiently high to warrant it. These additional resources will provide increased output for shipment to the export market. The opposite will occur in the importing country with a movement of resources away from that industry and, consequently, a decline in production. Once these adjustments have been made, there should be not only increased trade flows but a long term decline in the price of the commodity in the importing country (from its initial high levels) and a long term rise in the exporting country (from its initial lower levels).

These changes will not, however, occur in the short run. Resources are not immediately mobile and there will be no immediate increase in production. Rather, the increased demand from the higher price country will drive up the price in the exporting country. Producers will now export some of their production rather than sell domestically. Hence, trade volumes will rise. However, the use of volume figures alone underestimates the real affect on the exporter because they do not reflect the higher price received. Therefore, the value rather than volume of trade will more closely measure the true extent of trade liberalization. Fortunately, quite complete

data exists in the *Journal of the Legislative Committee of United Canada* and in the Papers of the Colonial Office for the value of trade in individual commodities specified in the treaty.

The data examined are the imports and exports of the Province of Canada, now the Canadian provinces of Ontario and Quebec. While the reciprocity treaty also encompassed the other British colonies of Nova Scotia, New Brunswick and Prince Edward Island, these have been omitted due to the lack of complete data on a disaggregate basis. The subsequent examination of protectionist sentiments will also be confined to the pronouncements on trade between the Province of Canada and the United States.

Table 2 provides a complete list of the products included in the reciprocity treaty. The average annual values of trade are presented for the periods 1851 - 1854, before the treaty came into effect and 1855 - 1857, the period immediately after the treaty. The entire period was a relatively quiet era in terms of external economic shocks in that the colony had completed the major adjustments resulting from the repeal of the British *Corn Laws* and the United States was not yet embroiled in the Civil War conflict. Although the Crimean War would have an effect on the general level of economic activity, since both the United States and Canada exported a similar range of products to Britain, the differential effect on the two economies was minimal. Further, the period is sufficiently short that any additions to rail links would have been sufficiently iterative to have no general effect. Average figures for the two periods are used in order to remove the considerable yearly fluctuations in the values of trade so that the changes in trade patterns can be discerned. The percentage changes between the two periods are also presented.

Table 2 Trade by Commodity, 1851-1857

Commodity	1851-1854 (Annual Average)			1855-1857 (Annual Average)			Percentage Change (1851-1854 to (1851-1857)		
	Value of Canadian Exports (£)	Value of U.S. Exports (£)	Total Value of Trade (£)	Value of Canadian Exports (£)	Value of U.S. Exports (£)	Total Value of Trade (£)	Canadian Exports	U.S. Exports	Total Value of Trade
1. Grain	474,425	17,568	491,993	1,459,241	719,465	2,178,706	+208	+3,995	+343
2. Flour	587,428	2,002	589,430	1,060,362	307,247	1,367,609	+81	+5,016	+132
3. Animals of all Kinds	110,484	12,066	122,550	274,818	97,652	372,470	+149	+709	+204
4. Meats	6,752	60,291	67,043	23,539	234,482	258,021	+249	+289	+285
5. Cotton Wool	0	4,145	4,145	0	3,062	4,145	0	-26	-26
6. Seeds	11,923	18,203	30,126	23,345	26,020	49,365	+96	+43	+64
7. Vegetables	562	853	1,415	7,901	9,308	17,209	+1,258	+991	+1,116
8. Fruit – Dried	0	15,467	15,467	0	7,562	15,467	0	-51	-51
9. Fruit – Undried	913	5,729	6,642	901	36,479	37,380	-1	+537	+463
10. Fish of all Kinds	15,716	13,022	28,738	34,529	31,902	66,431	+120	+145	+131
11. Fish Products	N.A.	N.A.	–	0	383	383	–	–	–
12. Poultry	0	284	284	2,654	1,410	4,064	–	+396	+1,331
13. Eggs	10,235	0	10,235	19,197	2,581	21,778	+88	–	+113

Table 2 Cont'd

Commodity	1851-1854 (Annual Average)			1855-1857 (Annual Average)			Percentage Change (1851-1854 to (1851-1857)		
	Value of Canadian Exports (£)	Value of U.S. Exports (£)	Total Value of Trade (£)	Value of Canadian Exports (£)	Value of U.S. Exports (£)	Total Value of Trade (£)	Canadian Exports	U.S. Exports	Total Value of Trade
14. Hides and Pelts	3,284	58,775	62,059	43,185	36,575	79,760	+1,215	-38	+29
15. Furs, Skins, or Tails – Undressed	16,784	2,094	18,878	19,022	13,863	32,885	+13	+562	+74
16. Marble Blocks – Unpolished	3,935	5,163	9,098	0	12,251	12,251	-100	+137	+35
17. Slate	N.A.	N.A.	–	0	5,560	5,560	–	–	–
18. Butter	17,890	109	17,999	59,869	9,220	69,089	+235	+8,359	+284
19. Cheese	138	5,755	5,893	206	34,159	34,365	+49	+494	+483
20. Tallow	881	70,976	71,857	729	88,312	89,041	-17	+24	+24
21. Lard	452	5,742	6,194	5,009	24,367	29,376	+1,009	+324	+374
22. Horns	196	0	196	797	0	797	+306	0	+306

Table 2 Cont'd

Commodity	1851-1854 (Annual Average)			1855-1857 (Annual Average)			Percentage Change (1851-1854 to (1851-1857))		
	Value of Canadian Exports (£)	Value of U.S. Exports (£)	Total Value of Trade (£)	Value of Canadian Exports (£)	Value of U.S. Exports (£)	Total Value of Trade (£)	Canadian Exports	U.S. Exports	Total Value of Trade
23. Manures	1,652	4,867	6,519	0	3,294	3,294	-100	-32	-49
24. Ores of Metals of all Kinds	12,129	0	12,129	20,693	1,526	22,219	+71	-	+83
25. Coal	0	41,075	41,075	0	92,680	92,680	0	+126	+126
26. Pitch and Tar	0	3,064	3,064	0	2,215	2,215	-	-28	-28
27. Turpentine	N.A.	N.A.	-	0	2,636	2,636	-	-	-
28. Ashes	54,492	857	54,349	66,786	2,372	69,158	+23	+177	+25
29. Timber and Lumber	452,886	10,377	463,243	720,559	39,082	759,641	+71	+277	+64
30. Firewood	N.A.	N.A.	-	5,213	12,971	18,184	-	-	-
31. Plants, Shrubs, and Trees	0	12,499	12,499	0	12,693	12,693	0	+2	+2
32. Pelts – Wool	21,054	0	21,054	71,570	0	71,570	+240	0	+240
33. Fish Oil	103	5,118	5,221	2,465	49,239	51,704	+2,293	+862	+890

Table 2 Cont'd

Commodity	1851-1854 (Annual Average)			1855-1857 (Annual Average)			Percentage Change (1851-1854 to (1851-1857))		
	Value of Canadian Exports (£)	Value of U.S. Exports (£)	Total Value of Trade (£)	Value of Canadian Exports (£)	Value of U.S. Exports (£)	Total Value of Trade (£)	Canadian Exports	U.S. Exports	Total Value of Trade
34. Rice	0	7,373	7,374	0	8,734	8,734	0	+18	+18
35. Broom Corn	0	3,564	3,564	0	8,364	8,364	0	+135	+135
36. Bark	0	595	595	0	915	915	0	+54	+54
37. Gypsum – Ground or Unground	N.A.	N.A.	–	0	2,182	2,182	–	–	–
38. Burr and Grind – stones, Henn, Wrought or Unwrought	0	1,609	1,609	0	4,638	4,638	0	+188	+188
39. Dyestuffs	0	7,304	7,304	0	3,954	3,954	0	-46	-46
40. Flax, Hemp and Tow – Undressed	0	22,187	22,187	0	18,807	18,807	0	-15	-15

Table 2 Cont'd

Commodity	1851-1854 (Annual Average)			1855-1857 (Annual Average)			Percentage Change (1851-1854 to (1851-1857)		
	Value of Canadian Exports (£)	Value of U.S. Exports (£)	Total Value of Trade (£)	Value of Canadian Exports (£)	Value of U.S. Exports (£)	Total Value of Trade (£)	Canadian Exports	U.S. Exports	Total Value of Trade
41. Tobacco – Unmanufactured	296	3,091	3,387	344	10,200	10,544	+16	+230	+211
42. Rags	3,892	0	3,892	3,991	328	4,319	+3	–	+11
TOTAL	1,808,502	421,824	2,230,326	3,926,925	1,978,690	5,905,615	+117	+369	+165

If one compares the average annual total value of trade between the two periods, clearly the period after the treaty exhibited considerably more activity. The value of trade increased more than 150 percent from approximately £2.2 to £5.9 million. Both countries had increases in exports. The United States had the larger percentage increase, over 350 percent, while Canadian exports had the larger growth in terms of absolute value - an increase of over £2 million compared to the figure from the United States of £1.5 million. The balance of trade in Canada's favour fell from approximately 4.25:1 to 2:1.

A closer examination of the individual commodities reveals considerably more insights than the aggregate figures. Of the forty-two commodity groups listed, the total value of trade, either before or after the treaty, did not exceed £10,000 per year for fifteen - cotton wool, fish products, poultry, slate, horns, manures, pitch and tar, turpentine, rice, broom corn, bark, gypsum, grindstones, dyestuffs and rags. These may be considered extremely minor commodities and changes in the value of trade would hardly be of great significance. In the post treaty period, these commodities, together, constituted only one percent of the total value of trade.

It is interesting to note that eleven of these fifteen are goods for which Canada shows no exports before the treaty (including gypsum although the records are incomplete). The list in Table 2 is in the order that the commodities are presented in the treaty. If one considers commodities thirty-four through forty-two, eight of them are goods which Canada did not export prior to the treaty. The one exception is tobacco but, upon closer examination of the primary data, this trade occurred only in 1854 and its magnitude or existence would not have been known to the negotiators prior to the signing of the treaty in that year. The trade in these commodities was also not that important for the United States. Prior to the treaty, only flax and hemp had trade values in excess of £10,000. After the treaty only tobacco and flax surpassed this mark. In view of the relative unimportance of these goods to trade, it is interesting to speculate whether these commodities were added late in the negotiations to make the treaty more politically palatable in the United States. There is limited evidence of dissatisfaction in the United States with the initial list of products. As early as 1849 amendments were proposed in Congress to add "cotton, sugar and tobacco" to the list.⁴² Given the inconsequential nature of trade in these products, their grouping suggests some form of *window-dressing*. Unfortunately no explanation comes to mind for the apparent inconsistency in the inclusion of rags as a final commodity. Its trade value was trivial and it may just have been an afterthought

responding to some particular special interest. Strictly speaking, rags would not have qualified under the general treaty terms that restricted liberalization to natural products, since at least at some stage, they are clearly a manufactured product.

Of the twenty-seven commodities with trade values in excess of £10,000, only dried fruit and flax exhibit a decline in the aggregate value of trade. Of the remaining twenty-five, fifteen had a more than two fold increase in total value. This suggests that the effect of the reciprocity treaty was relatively widespread rather than confined to a few commodities.

The effect upon the individual countries also appears to be quite diverse and not confined to particular commodity groupings. If significant is defined as a total value of trade exceeding £10,000, twenty-six commodities qualify. For the Canadian export case, only three of these showed a decline in value between the two periods. Fifteen exhibited increases greater than 50 percent and all of the minor commodities - those with no pre-treaty exports - subsequently exceeded an export value of £2,000. For the United States, again only three of the categories showed value decreases and, of these, only *hides and pelts* might be considered important in a wider sense. Further, seventeen of the remaining commodities had increases in value that exceeded 50 percent. In fifteen commodities both countries showed increases in the value of exports with the individual increases exceeding 50 percent for ten of these.

Such bi-national patterns of trade expansion provides strong evidence for the types of increased economic activity suggested by the underlying international trade theory. Significant co-expansion of exports implies either intra-product specialization or regional geographic specialization. It is from such changes in economic activity that the perceived gains from trade are expected to arise.⁴³ It would appear, then, that reciprocity achieved what its proponents had hoped, at least in direction if not in total magnitude, since there was growth in trade and economic activity across a wide range of commodities. It would also appear that, given such extensive co-expansion of exports, no sector in either country experienced a significant decline in its fortunes.⁴⁴

Of course, not all commodities were equally important in the trade between the two countries. The five most important commodities (by value) in the post-treaty period account for eighty-four percent of total trade - grain 37 percent, flour 23 percent, timber and lumber 13 percent, animals 6 percent and meats 5 percent. The next five together account for seven percent, and the following five, for five percent. The remaining twenty-seven only account for four percent. Of the five most important commodities, four show an increase in value exceeding 100 percent. In absolute terms, Canada was the net beneficiary in four of these commodities: grain

with a net increase in value of £984,816 vs. the United States gain of £701,897; flour (£572,934 vs. £305,245); timber and lumber (£267,673 vs. £28,705) and; animals (£164,334 vs. £85,586). The United States was the net beneficiary in meats with £174,197 compared to Canada's £16,787. For the five commodities in aggregate, the ratio of net benefits was 1.5:1 in Canada's favour. The figure for all forty-two commodities is 1.3:1, a total gain to Canada of £2,118,423 compared to £1,556,866 for the United States. For commodities six through forty-two, ranked by importance, the net benefit was with the United States with a ratio of 1.23:1.

The trade statistics suggest that the reciprocity treaty was to the benefit of the trade of both countries and that no major industry on either side of the border suffered any significant decline in activity. This does not imply, however, that opportunities for individual industries might not have been greater in the protected state. Protectionists, however, should be concerned with absolute declines as freer trade is to the general benefit. In other words, protectionist politicians should not be particularly perturbed with industries which maintain their absolute levels of activity when new opportunities present themselves in other industries as a result of trade liberalization. A closer examination of the protectionist vision is hence suggested.

The Protectionist Vision

The period in which the United States-Canada reciprocity debate took place was, in the continuing world-wide debate on the subject, an era when the free trade advocates were in the ascendancy. On the intellectual front, the pro-free trade faction had sharpened its arguments in the process of swaying sufficient opinion to cause the repeal of the Corn Laws in Britain. In terms of the debate on reciprocity, those arguing for liberalization on both sides of the border benefited greatly from being able to re-articulate arguments from the British debate. Empirically, not only was there the obvious success, for Britain, of the reduction of the tariffs on breadstuffs, but the benefits of the German Zollverein were becoming very obvious.⁴⁵ In fact, the Zollverein was expanded to include the Steuerverein in 1851 and a reciprocity treaty between the Zollverein and Austria was signed in January 1854. Of course, this was at the height of the North American debate. Still, protectionist sentiments in Canada and the U.S could run very strong at times. For example, a protectionist petition with over 4000 names was assembled in Montreal in February 1849⁴⁶ and, in the province as a whole a total of 12,600 signatures appear to have been collected.⁴⁷ There are also frequent references in the United States to meetings and delegations.

The pro-free trade argument was particularly strong in the case of the reciprocity items that were, for the most part, agricultural commodities and raw materials. At this point in time, the intellectual basis for the protectionist case was confined primarily to the need to protect domestic manufactures. To generalize, this argument suggested that, in order to reduce unemployment and/or to increase the wages of the working poor, it was necessary to protect *home* manufacturers. High domestic prices meant labour could be paid higher wages and, hence, they would be better off. Cheap imported manufactured goods prevented such improvement. The net benefit of workers, however, could only be ensured under two conditions. First, raw materials had to be cheap - so manufacturers could afford to pay higher wages. Second, the price of food needed to be kept low so that workers would not have to spend all of their extra wages on food - with nothing left over to spend on manufacturers. Thus, duties had to be kept low on raw materials and agricultural products - the items in the reciprocity treaty. The system to protect domestic manufactures was also expected to benefit existing farmers, even though low-priced food was imported, by encouraging increased migration to cities. This increased the home market for food, reduced the number of persons working the land and, therefore, lessened the competition for domestically produced but less traded agricultural products. The argument is well summarized in a trade debate in the House of Representatives by a Mr. Hampton of Pennsylvania:

I have shown conclusively, I trust, that without protection, all other things being equal, the great difference between the price... must forever prevent a successful competition for the home market, drive capital into other channels, break down every branch of American manufacturers, injure the farmer by increasing the number of producers and destroying his home market.⁴⁸

In general, then, the debate for the protectionist was, due to the nature of the products involved, usually reduced to commodity specific speculations regarding the relative competitiveness of producers on either side of the border. However, protectionist debaters also ventured into areas not specifically limited to commercial matters. At the time of the debate, a large part of public revenues came from the collection of tariffs and reciprocity, it was argued, would lead to government bankruptcy or increased tariffs on other goods. As the treaty had ramifications for trade flows, the effects upon middlemen and transportation revenues were hotly debated. Protectionists in Canada also feared that reciprocity was the first step toward annexation by the United States:

On the other hand, it is evident that the social and moral effects of such a state of things as the treaty will bring about cannot but tend to make us one people, and absorb us, irresistibly, although insensibly, to each other. A people so identified, it is argued, cannot long remain politically separated but must be united by annexation.⁴⁹

In addition, the old arguments relating to the *drain of specie* as a result of increased imports were periodically aired.⁵⁰ The protectionists could also, at times, appeal poetically to the emotional aspects of nationalism:

The free trade which Great Britain desires to force upon this Government and which it is evident some Americans aim to establish, is only the adoption and adaptation of the chirurgical (sic) process by which medical gentlemen transfer the blood of a healthy young animal into the veins of a decayed and diseased debauchee. Additional vitality is, indeed, gained by receivers, but weakness, atrophy, and disease are the consequences to the imparting power.⁵¹

Grains, as the most important commodity, received the most attention. Protectionists on both sides of the border were predicting the ruination of producers in their jurisdiction. For example:

The bill proposes to allow the importation into the United States from Canada free of duty, of wheat and breadstuffs generally... upon conditions that similar articles, the products of the United States, may be imported into Canada free of duty. Now, sir, there really is no reciprocity in all this: the bill is delusive. If it passes, not a dollar's worth of any of these products will be exported from the United States to Canada... Canada is not, and cannot be a market for such products of the United States while the direct effect of the bill is to give her a participation in our home market. So that there will be no equivalent afforded to us, certainly not to the great grain-growing interest, which is mostly concerned....⁵²

and:

It is not improbable that some... inconveniences may follow from the free competition of provincial products. This is particularly true in respect to coarser grains.⁵³

or:

There seems to be an impression in some sections of the country that the wheat growing interests may be injuriously affected by this measure.⁵⁴

Further:

To what extent this measure will affect the price of flour and injure the agriculturalists of our Union, I will not venture to predict. But I am very

sure that the introduction of even a million bushels of wheat in a market already overstocked... must necessarily reduce the value of the article. Besides, such legislation on our part, will stimulate the production of wheat in Canada, and make that colony an increasingly formidable rival in this respect. I will not consent, therefore to throw away the advantages which nature and the ordinary legislation of the country give us.⁵⁵

and still further:

We are informed that the influx of Canadian grain will be so great (should the bill pass) that our growers will be forced out of the markets....⁵⁶

and finally:

...all the protection that is now afforded to the agricultural and great farming interests of the middle states is taken away by the provisions of the bill. It is taken away, because we let in the only rival from whom we have much to fear - Canada, on our northern frontier.⁵⁷

Canadian arguments tended to be of two types, long term and short term. The long term arguments centered on the belief that Canada's ability to produce grain was inferior to that of the United States due to the poorer Canadian climate and soil:

...Canada always had the disadvantage for the simple reason that the Canadian climate was not the American climate, and that Legislative measures (the proposed reciprocity treaty) could not make disappear.⁵⁸

...corn is not adapted well to our climate, as to that of the United States.⁵⁹

...our (grain) farmers are not in equally good position with those in the United States, and second, that their inequality was caused by want of protection.⁶⁰

For the shorter term, the concern related to the relative prices:

At present they (coarse grains) were consumed by the brewer and distiller - the farmer found a ready market and obtained cash for his produce, but if this resolution went into effect that market will close against him (the Canadian farmer) at once. He would tell the hon. gentlemen, in confirmation of his opinion, that when the duty on all grains was seven pence sterling per bushel, the Americans brought immense quantities of oats into the Upper Canada markets, and sold them at fifteen pence per bushel, after paying the duty. What would have been the effect of such a duty, of 7d per bushel? Why the Canadian would have been driven out of the field by underselling.⁶¹

Two-thirds of their (Canadian) produce which would not bear transportation even if there was a market for it, which there was not; corn was lower in the United States than in this country.⁶²

On coarse grain, an article which we never could send to the other side. In what, then did (sic) this reciprocity consist in nothing but theory, for we being unable to transport the bulk of our produce to the distant market, all the advantages would be on the other side, that is to say if this miss-named Reciprocity Bill was ever passed.⁶³

Some of the arguments against allowing free trade in grain were, however, more circuitous:

Observe the effect already produced by the... schemes (repeal of the British Corn Laws) in driving the trade of Upper Canada to New York instead of Montreal, and then say whether they ever disposed to vote for this (the reciprocity) resolution, which would complete the destruction already begun. The fact is that if they are driven to the New York market to sell their produce, they will most probably there make their purchases, and the whole of that trade will, as a matter of course, be lost to the Colony, and it must also be naturally expected that where people accustomed to deal, then sympathies will gradually be interested also.⁶⁴

The empirical evidence presented in the previous section would suggest the Canadian protectionist vision was incorrect since Canada received the greatest benefit from reciprocity in grains. The reason for this error in perception appears to be Reason 1 of the five reasons discussed earlier - imperfect information on price relationships. Some of this was evident even during the debate. For example, there is a reply in the debate by Mr. Wetenhall:

Last year when he returned home, he met one of the largest wheat growers, living in his country, who had just returned from Rochester, who told him that his brother-in-law, who resided there had sold his wheat from 10s6d (York) in Rochester, which made a difference of 3s6d (York) per bushel, or 2s3d currency, than if he sold it in Canada, and this had occurred to all the wheat growers in his part of the country; upward of 200,000 bushels of wheat found its way to the American market.⁶⁵

or:

Mr. Young replied that the hon. member for Lincoln said that wheat on the (sic) side of the Niagara river sells at three shillings and on the other at four shillings.... If he were to look into any current prices (in New York) he would find American wheat and Canadian wheat quoted at the same rate. He could not understand how the hon. member could make such

statements which were contrary to fact, and he would defy any move to show that they were not.⁶⁶

The fact that Canadian prices were lower is borne out by the relative Canada-United States grain prices reported in Michelle.⁶⁷ The only exception is oats and although there was some price differential, it was insufficient to offset transportation costs.

Over the longer term, the Canadian protectionist vision appears equally incorrect. The perceived inability of Canadian coarse grains to compete in the market in the United States (once cost of transportation was included) is not supported by the evidence. On the contrary, there is considerable evidence that Canadian grain was generally available in the New York market after the treaty. There is consistent mention of, not only Canadian wheat, but also barley and rye in the *New York Daily Times*. As to Canadian grain farmers being driven out of business by competition, according to the Canadian census, the number of farms increased 22 percent from 1851 to 1861 (195,700 to 237,650). Total wheat acreage rose 36 percent (1,192,300 to 1,631,100) and total production increased 73 percent (15 to 26 million bushels).

The fears of protectionists in the United States turned out to be empty as well. There was no reduction in grain production or increased incidents of farm bankruptcies. In the states most affected by Canadian trade, the number of farms increased consistently over the period 1850 – 1860.⁶⁸ Further, the average farm value increased.⁶⁹ Production of wheat increased from 100 to 173 million bu. from 1849 - 1859; oats 147 - 173 m.bu.; barley 5 - 16 m.bu. and; rye 14 - 21 m.bu.⁷⁰ New entrants, increased value of farmland and expanding output are not conditions associated with depressed economies.

Clearly there was sufficient growth in both economies to offset any trade disruptions (Reason 5). It does appear that trade became somewhat more specialized, with Canada shipping grain to the urban market along the eastern seaboard while the United States shipped additional coarse grains (particularly corn) from the mid-west into the western portion of Canada.⁷¹ In essence, this was the trade enhancement expected from specialization. Such specialization was not taken into account by the protectionists on either side of the border (Reason 4).

Another commodity that provoked strong Canadian protectionist sentiment was flour.⁷² Again, however, there was a continual expansion of trade over the period. The absence of reduced economic activity in the face of falling prices may have been the result of lack of competition in the protected era. That is, there was a sufficient cushion of profits in the milling, transportation and distribution system to reduce the

direct effect of the removal of duties on farmers (Reason 3). Some hint of this lack of competition can be found in discussions of previous changes in export prices:

The farmers have hitherto escaped with less loss than others, from the fact of losses on agricultural products having hitherto fallen altogether on the millers and exporters....⁷³

This point is also made by Jones.⁷⁴

The two way expansion of the flour trade was also a function of specialization (Reason 4). Again, according to Jones:

Yet the north and south trade in articles which were statistically the same when entered at a customs port was often based on differences in quality, on times of harvesting, or on local market demands.⁷⁵

and for flour specifically:

At the same time, the free entry of American wheat encouraged the expansion of the milling industry. Millers imported spring wheat from the American northeast and made cheap flour from it for consumption in Lower Canada, as they did from Upper Canada spring wheat. Till 1858, moreover, they were able to mill American wheat and export flour to the United States. Many of the cheaper grades of this flour were re-imported from the United States to the Maritimes and elsewhere. On the other hand, Canadian Extra flour was said to be gradually replacing the famous Genesee Valley flour in New York and was sent direct from Upper Canada to regular customers there, in Boston, and other manufacturing towns of New England.⁷⁶

Another product of grave concern in the Canadian debates was live animals. It was felt that the United States had a considerable advantage and, therefore, animals should be exempted from any treaty. For example:

He was of the opinion that they could not compete with them in... beef.⁷⁷

This measure (the reciprocity treaty) was not objected to by those representing Quebec interests, with the exception of the articles of animals.⁷⁸

Hitherto when there were no duties on agricultural produce, our market had been swamped with cattle from the adjoining portions of the States of New York and Vermont... underselling the Canadian farmers; whereas since duties had been imposed on agricultural produce from the States, the Canadians had a good and prosperous market. The theory... might be a good one, but when put in practice, in the case of cattle, it was a most injurious one. For one, he was opposed to making experiments whilst the

markets were already good, and the farmers in the article of cattle were doing well.⁷⁹

and:

...in reference to the article of cattle. Now, the United States drover could, by his easier mode of communication come into the markets of Canada so quickly as to drive out the Canadian farmer.⁸⁰

If the French Canadian farmer required protection on this article (cattle), it was their own fault, and that they should try to adopt improvements which would enable them to do.⁸¹

or:

Now, all that is required in Canada, is that the people should get a better breed of cattle, feed them better, and take better care of them, to enable us to compete successfully with any people on that article.⁸²

Again it would appear that the protectionists had not correctly identified the relevant relative prices (Reason 1). The reply of Mr. Wetenhall in the debate is illustrative:

Two years ago saw some cattle on their way to the Boston market, the persons in charge of which told him they were already sold in the Boston market at eight dollars per one hundred lbs. He stated that the cost of transport from 50 miles west of Buffalo to Boston, with his expenses there and returning would amount to about one dollar per 100 lbs., so that in fact he received for his cattle seven dollars per 100 lbs.; whereas the same period, cattle fetched in the Toronto and Hamilton markets only four dollars and a half; so that if the Canadian farmer had been able to make use of the Boston market, he could send his cattle quite as cheaply as the farmer living fifty miles from Buffalo, and instead of receiving four dollars and a half, would receive seven dollars which made a great difference to the farmer.⁸³

Further, although the evaluation of stock is essentially subjective, the perceived inferiority of Canadian stock was, at best, questionable. Again, according to Mr. Wetenhall:

At the agricultural fair at Buffalo at which he was present, he had no hesitation in stating that the stock exhibited by Canadians, with the exception of horses, was not inferior to the Americans. At the fair at Cobourg the president of the New York Agricultural Society told them that it was no use to cross the lines to get stock for we have better stock than they have.⁸⁴

Within the overall increased trade in animals, there appeared to be considerable cross-border specialization with, for example, Canadians producing feeder cattle for the market in the United States and specialized breeds of horses.⁸⁵ Such gains from specialization again do not seem to have been accounted for by the protectionists (Reason 4).

In meats, the controversy centered around pork. *Mess* pork provided the main protein source for Canadian lumbermen engaged in harvesting timber. Given that much of this work was undertaken in the winter, a cheap source of storable meat was required. Canadians were of two minds on the issue. Pro-free traders and some protectionists wanted reduced duties on pork so that the cost of Canadian timber could be kept down, fostering exports of lumber. Other protectionists wished to stimulate pork production in Canada and, hence, advocated protecting the market with high duties. A similar logic was followed by protectionists in the United States. They realized that retaining the duty on pork increased the cost of feeding Canadian woodsmen, which in turn increased the price of lumber and provided protection for United States lumber interests. In general, however, pork was seen as the one major meat item where Canada could not compete - an idea reiterated by protectionists in a number of places.⁸⁶

Consequently, the increase in exports of meat from the United States to Canada as a result of the reciprocity treaty was not unexpected. However, contrary to the protectionist view, the increase was not particularly damaging to the Canadian agricultural community. The primary reason appears to be that there was little response by hog farmers to the resulting change in price. In essence, the imposition of the duty had not brought forth large production increases and, therefore, its reduction also had little effect.

This is supported by the statement of Mr. Boulton:

He now came to Salt, Beef and Pork. He saw no reason to keep them out for it was hard that a duty on manufactured... timber should be laid on it to protect a few farmers in Upper and Lower Canada, who would not use his grain to feed his pigs, in order that they might produce pork for the lumberer....⁸⁷

In fact, as reported in the Census, the pig population increased nearly 200,000 between 1851 and 1861. Canadian hog farmers found it profitable to produce more gilts and ship them to the United States for fattening than to fatten them themselves.⁸⁸ Again, there was increased specialization as a result of the treaty and growth in both countries (Reason 4).

There was also some discussion in the Canadian debates regarding butter. According to Mr. Stevenson:

He could recollect the time when the whole frontier was flooded with American butter, and our farmers could not find a market for their butter....⁸⁹

Again there seems to have been a lack of current price information (Reason 1) by those advocating the protection of butter:

Butter is made in the Eastern Townships cheaper than in the United States, it was selling in Montreal 10 and 12 per (sic) cents, while in Boston it was worth 17 to 25 cents.⁹⁰

or:

Butter has been sold during the year in New York, at an average price of 12 to 20 cents per lb., while in Montreal it has not averaged more than 10 cents.⁹¹

Canadian concern was also expressed over the possible negative effects of competition in the cheese market and calls were made for its continued protection.⁹² As subsequent events showed, while there was a four fold increase in exports from the United States, there was sufficient increase in market activity to offset the effect of imports (Reason 5). Cheese prices in Canada increased thirty-four percent over the period 1855 to 1857. During the same period, the prices for cheese in New York were virtually constant according to the price reports of the *New York Daily Times*.

In the United States there was some pressure for the increased protection of coal⁹³ as evidenced by the report of eleven petitions from groups in Pennsylvania:

Praying that Congress may take action on the subject of the revenue laws of the country, and so modify them as to afford such incidental protection as revenue measures may properly afford to the great interests embarked in the... mining of coal.⁹⁴

As can be seen from Table 2, the protectionists' worries in the United States were unfounded since reciprocity did nothing to stimulate Canadian coal exports. In fact, the price of imported coal rose thirteen percent in the eastern United States in the period immediately after the signing. Although the existence of considerable deposits of Canadian coal was known before the treaty, it would appear that the price increase was insufficient to induce the commitment of additional resources to exploit such deposits. This is suggested by the 1861 census where only 379 persons were listed as

miners for the whole of Canada. Protectionists in the United States apparently failed to judge that the Canadian costs curve were quite steep (Reason 2).⁹⁵

Finally, there was also some concern expressed by Canadian protectionists regarding wool. Mr. Smith, for example, stated:

He would have been happy to hear that the hon. member explains what effect this resolution would have on creating a market for wool, a most important matter to the agriculturalist... he was convinced it would bring our agriculturalist in competition with farmers of the United States - a competition which could not be anything but ruinous.⁹⁶

The Canadian worry appeared to center on the fear that, with the removal of tariffs, low quality Canadian wool would be replaced by better quality wool from the United States. According to Mr. Boulton:

He now came to wool. The wool of this country was, as is well known, peculiarly adapted to coarse cloth, and although not in favour of much protection, he would have almost been in favour of some protection.⁹⁷

and Mr. Hincks, who usually was no protectionist:

We are exporting the coarsest description of wool and importing the fine.⁹⁸

The protectionists again failed to grasp the concept that there could be cross-border trade based on within-product specialization (Reason 4). Canada had a comparative advantage in the production of wool from the Leicester breed of sheep. This advantage meant increased production of this commodity with the advent of free trade. That is:

The Reciprocity Treaty stimulated the export trade in wool from Upper Canada to the United States. Before 1855 the quantity exported from the province of Canada seldom exceeded \$100,000 in value. Beginning in 1855 it ranged between about \$300,000 and \$400,000. The increased demand for Leicester wool was paralleled by one for Leicester mutton.⁹⁹

Except for some vague references to the minor commodities of tobacco,¹⁰⁰ broom corn¹⁰¹ and bark¹⁰² the protectionist lobby seems to have been silent on the remainder of the commodities included in the treaty. Of course, no research on such a subject can be exhaustive and in many cases the objections raised for minor commodities may not have been reported.

Assessment

The arguments and evidence put forward by the agricultural protectionists, on both sides of the border, appear to have been ill-informed and ill-conceived. There are

two possible reasons for this. The first reason may be that it was an attempt to provide evidence to support an ideological aversion to free trade. This may be especially true in the Congressional and Legislative debates. As the theoretical arguments for free trade were widely accepted during the period, one might expect attacks on the position to be in an empirical vein. Indeed, this is borne out by the repeated references by the protectionists to specific examples where trade flows had been detrimental to producers. It is interesting that protectionist references to current price relationships were few. This implies that the protectionists were required to search for justification for their arguments.

The second reason for the type of evidence presented by the protectionists in support of their argument may be that the individual protectionists represented specific or local interests. Again there appears to be little evidence that there were perceived differential effects, say between Upper and Lower Canada. There was a more regional aspect to the debate in the United States with some accusations that the treaty would serve the interests of the eastern seaboard but not the mid-west. Again, however, all areas appear to have benefited from the treaty. Special pleading might have been expected for particular commodities from areas particularly close to the border. The arguments presented were, however, of a general nature and little localized special pleading put forth. In the debates in the United States there is an absence of comment from representatives from New York and other border states.

The protectionist vision was flawed in all of the ways suggested in Table 1. Poor understanding of price relationships was manifest for grain, live animals and butter. The inability of a country to increase production without increasing costs (coal) and non-competitive pricing (flour) were also not recognized. Failure to identify benefits from specialization was apparent for grain, live animals, flour, meat and wool while general market expansion was not predicted in the cases of cheese and grain. Of course, after the start of the Civil War in the United States and the resulting rapid increases in government generated demand in the United States, all predictions regarding market expansion were no longer valid.

The two major weaknesses of the protectionists' vision appear to be a failure to correctly perceive existing relative prices and a failure to recognize that gains from specialization would arise. The reasons for the first are rather hard to understand. Major newspapers in Canada reported prices of local commodities and, often, prices in New York. It was also common for them to report the prices received for Canadian goods in New York. Transportation costs would not have been that difficult to obtain. The only conclusions that one can arrive at are: either the protectionists were so

convinced of the philosophical correctness of their position that it was not worth the effort to ascertain correct price information or; false price relationships were deliberately put forward for the purpose of misleading and, hence, persuading those uncommitted or opposed. It is not possible to ascertain which of these views is correct. No doubt, each applies to particular individuals at different points in time.

The failure to perceive gains from within product specialization may be easier to comprehend. The complexities involved in the multiple resource movements which arise from trade liberalization are virtually impossible for economists to identify today.¹⁰³ Trade theory in the 19th century, and indeed today, suggests that, in short run, there will be winners and losers as a result of liberalization - losers in the sense that the process of specialization will reduce the returns in some lines of production. The extent of this loss, however, depends on the mobility of the inputs to the productive process among lines of production. In other words, it depends upon the ease with which capital, labour, land and raw materials can move from those products where returns are declining to those which are expanding.

The technical structure of farms in the northern states and Canada in the mid-1850s was characterized by considerable resource mobility, especially if specialization were to take place within product lines. Most enterprises were mixed farms, implying that the capital equipment was not, for the most part, product specific. Cattle were multiple use dairy-beef breeds, sheep were multiple use wool-meat breeds, hogs required only the simplest capital in the form of penning and horse breeding practices could be easily altered. Crop production could easily be varied among grains since equipment was sufficiently flexible to be used interchangeably among the crops. As most production was undertaken on mixed farms there was little specialization of human capital and the management of alternative enterprises would not have been foreign to farm operators. Similarly, farm labour was not particularly specialized and, hence, could be moved to most other endeavors with little required training or few losses arising from *learning by doing*.

The protectionist concern, of course, is with the plight of the losers. The *devastating consequences* for this or that industry simply did not arise as the protectionists envisioned. This is partially a function of perception. Trade theory has, since its inception, been expressed and taught in terms of abstract goods - guns and butter, food and clothing, etc. In a non-mathematical world, discussion and numerical examples are most often restricted to two goods. Simple trade models, then, put forward the concept that specialization from trade leads to the reduction in the welfare, in one country, of those who produce one commodity - say clothing. It would

appear from their statements that the protectionists were expecting the devastation of the local cattle or flour milling industry, as they had been taught to expect. Specialization within product lines simply did not occur to them.¹⁰⁴

In deference to the protectionist argument, however, resource movements between entire industries are likely to be much more difficult than movements within industries. Thus, the short term costs of trade liberalization in the former case are likely to be considerably higher. Consequently, since within industry specialization was not expected by the protectionists, the low cost of resource transfer was also not expected. Hence, the vision of considerable losses in the agricultural protectionists argument was misplaced. In the context of the Reciprocity Treaty, had they won the day, there would have been a reduction in economic welfare both in the United States and Canada.

Conclusions

The history of international relations between the United States and Canada has had, as a continuing theme, disagreements over the consequences of changing the way in which trade is conducted. Such discussions are continuing today. Elections in Canada have been fought over the issue of increasing or decreasing barriers to trade. Negotiations have been conducted on a number of occasions and agreements-in-principle to reductions in trade barriers reached but seldom ratified.

The Reciprocity Treaty of 1854 represents an example of one formal agreement for a major, although only partial,¹⁰⁵ movement to free trade. In general, the protectionist forces have carried the day in United States - Canada trade relations. In Canada, this has had a significant effect on the shaping of the economic development of the country. The *national policy* of Sir John A. MacDonald, the first prime minister of Canada, was a protectionist platform which fostered a pattern of economic activity which continued until the signing of the Canada-U.S. Trade Agreement in 1989.

The Reciprocity Treaty is interesting because it provides a means to evaluate the *protectionist vision*. As suggested above, it is not possible to assess this vision if there is no liberalization as trade patterns and economic activity will remain unchanged. It is also not possible to assess the free-traders vision in the absence of change. The examination of the protectionist view in the period before the Reciprocity Treaty of 1854 suggests that it was considerably flawed. The primary reason for the flawed vision appears to have been faulty information on the true price relationships and a failure to recognize the possibility of intra-industry specialization. Empirically, the results suggest that considerable intra-industry specialization occurred resulting in

sizeable gains for most industries on both sides of the border. This was not as the protectionists expected.

The fact that the treaty lasted only until 1866 can be attributed to a number of causes including the political fall-out from the British position vis-a-vis the Confederate States in the Civil War. The abrogation of the treaty by the United States was, however, in part a result of Canada's unwillingness to extend the Reciprocity Treaty to manufactures. Arguments in favour of the protection of manufacturing were better articulated and more readily accepted. The correctness of that vision, of course, cannot be assessed. It did set the stage for the international trading relationships between Canada and the United States that continued until the last years of the 20th century.

Endnotes

1. M. Twain, *Letters to Earth*, quoted in T. Borcharding and G.W. Dorosh, *The Egg Marketing Board* (Vancouver: Fraser Institute, 1981): 44.
2. D.C. Masters, *The Reciprocity Treaty of 1854* (Toronto: McClelland and Stewart, 1963): 2.
3. C.C. Tansill, *The Canadian Reciprocity Treaty of 1854* (Johns Hopkins University Studies in Historical Political Science, Series 11, No. 2, 1922).
4. See, for example, the *Congressional Globe*, 8 Jan. 1849, 182-190.
5. Masters, *The Reciprocity Treaty of 1854*, 40.
6. Article III, "Treaty Regarding North Atlantic Fisheries, Commercial Reciprocity etc., between Great Britain and the United States, signed at Washington, 5 June 1854," from *The Consolidated Treaty Series*, 112 (New York, 1969): 35.
7. Article IV, "Treaty Regarding North Atlantic Fisheries, Commercial Reciprocity etc., between Great Britain and the United States, signed at Washington, 5 June 1854," from *The Consolidated Treaty Series*, 112 (New York, 1969): 36.
8. For a brief discussion see L.H. Officer and L.B. Smith, "The Canadian American Reciprocity Treaty of 1855 to 1866," *Journal of Economic History* 28 (1968): 598-623.
9. D.C. Masters, *Reciprocity 1846-1911* (Ottawa: Canadian Historical Association, 1961): 10.
10. Masters, *The Reciprocity Treaty of 1854*, 64-66.
11. For a more complete discussion of the underlying theory see M.G. Allingham and G.C. Archibald, "Second Best and Decentralization," *Journal of Economic Theory* 10 (1975): 157-173.
12. W.A. Kerr, "Assessing the Complexities of Free Trade," *Western Economic Review* 5 (1986): 1-2.
13. As opposed to protectionism based on political arguments such as maintenance of political independence or political economy arguments such as food security and domestic production of goods essential for defence etc.
14. These might be termed legitimate political concerns. It may be that politicians also wish to maintain monopoly profits of firms. This is acting in the name of special interests and not necessarily in the public interest.
15. In economists' terminology, the supply curve of the exporting country is very elastic.
16. In economists' terminology, the case of a relatively inelastic supply curve.
17. W.A. Kerr, "The Supply of New Germ Plasm to the Canadian Beef Cattle Industry," *Technological Forecasting and Social Change* 21 (1982): 103-138.
18. W.A. Kerr, "The Livestock Industry and Canadian Economic Development," *Canadian Journal of Agricultural Economics* 32 (1985): 64-104.
19. C. Gracy, *The Cattle Cycle* (Calgary: Canadian Cattleman's Association, n.d.).

-
20. In economists' terms, the assumption is that the supply curve in the exporting country is relatively elastic.
 21. *North American Review* 74 (1852): 196.
 22. *North American Review* 79 (1854): 465.
 23. *Ibid.*, 483.
 24. U.S. Congress, House of Representatives, Report no. 22, 37th Cong., 2nd sess., 1862, quoted from "Dispatch from Lord Lyons Respecting the Reciprocity Treaty," in *British Parliamentary Papers, Colonies, Canada* 24 (Shannon: Irish University Press, 1969): 342.
 25. *The Canadian Monthly and National Review* 1 (1872): 216.
 26. S.A. Saunders, "The Maritime Provinces and the Reciprocity Treaty of 1854," *The Dalhousie Review* 14 (1934-35): 355-371 and S.A. Saunders, "The Reciprocity Treaty of 1854: A Regional Study," *The Canadian Journal of Economics and Political Science* 2 (1936): 41-53.
 27. Saunders, "The Maritime Provinces and Reciprocity," 355.
 28. Saunders, "The Reciprocity Treaty of 1854: A Regional Study," 53.
 29. Masters, *The Reciprocity Treaty of 1854*, 103.
 30. *Ibid.*, 104-106.
 31. *Ibid.*, 103.
 32. *Ibid.*, 106.
 33. R.L. Jones, *History of Agriculture in Ontario* (Toronto: University of Toronto Press, 1946): 190-193.
 34. Officer and Smith, "The Canadian American Reciprocity Treaty of 1855 to 1866," 598-623.
 35. *Ibid.*, 599.
 36. Officer and Smith felt that their conclusions in support of points (1) and (2) were "different from those expounded by Masters and Saunders." Not all agree, a point further discussed in R.E. Ankli, "Canadian American Reciprocity: A Comment," *Journal of Economic History*, 30 (1970): 427-431.
 37. Officer and Smith, "The Canadian American Reciprocity Treaty of 1855 to 1866," 605.
 38. *Ibid.*, 623.
 39. R.E. Ankli, "The Reciprocity Treaty of 1854," *Canadian Journal of Economics* 4 (1971): 1-20.
 40. *Ibid.*, 13.
 41. See for example W.A. Kerr, S.E. Cullen and M.S. Sommerville, *Trade Barriers and the Western Canadian Livestock Industry* (Working Paper 11/86, Marketing and Economics Branch, Agriculture Canada, 1986) or S.E. Cullen and W.A. Kerr, "Free Trade: The Implications for Canadian Agriculture," *Earthkeeping* 2 (1986): 8-11.

-
42. Amendment of Mr. Davis of Mississippi in the Senate, *The Congressional Globe*, 8 Jan. 1849, 30th Cong., 2nd sess., 185.
 43. In theory there is a third possibility, inter seasonal complementarity. Such cases arise from, for example, two producers of temperate products which are on opposite sides of the equator. Hence, Australia ships fruit to the northern hemisphere in its summer. Trade flows in the opposite direction in the Australian winter. As both countries in this case have similar climates it is unlikely that such gains from trade would have arisen.
 44. Of course, this may not be true for some local areas.
 45. For evidence that both sides were well informed of these developments see "Report of the Committee of the House of Representatives on the Reciprocity Treaty." A copy of this document was enclosed in a dispatch from Lord Lyons to Earl Russell, see above n. 24.
 46. *The Globe*, Toronto, 17 February, 1849.
 47. *The Montreal Gazette*, 12 February, 1849.
 48. Speech by Mr. Hampton of Pennsylvania on "The Tariff Question" in the House of Representatives, *Appendix to the Congressional Globe*, 29 Jan., 1851, 31st Cong., 2nd sess., 100.
 49. *North American Review* 79, 483.
 50. For a particularly articulate presentation of this fallacious argument see "Benefits of a Dollar Under the Protective System," *The Montreal Gazette*, 16 Feb. 1849.
 51. Speech by the Hon. J.R. Chandler of Pennsylvania on "The Danger of Centralization, and the Importance of Protection" in the House of Representatives, *Appendix to the Congressional Globe*, 21 Aug. 1852, 32nd Cong., 1st sess., 1061.
 52. Statement by Mr. Pearce in the debate on Reciprocity with Canada in the Senate, *The Congressional Globe*, 8 Jan. 1849, 30th Cong., 2nd sess., 183.
 53. "Reciprocal Trade with Canada," *New York Daily Times*, 14 Feb. 1853.
 54. Statement by Mr. Duer on Canadian Reciprocity in the House of Representatives, *The Congressional Globe*, 28 Feb. 1851, 31st Cong., 2nd sess., 750.
 55. Pearce, 183.
 56. Letter to the editor of the *New York Herald*, 28 Jan. 1849 reported in "The Canadian Reciprocity Bill," *Daily British Whig*, Kingston, 29 Jan. 1849.
 57. Statement by Mr. Hunter in the Debate on Reciprocity with Canada in the Senate, *The Congressional Globe*, 8 Jan. 1849, 30th Cong., 2nd sess., 184.
 58. Statement by Dr. Lateriere in the debate on reciprocity, 2 Feb. 1849 in Gibbs, E. (ed.), *Debates of the Legislative Committee of United Canada* (Montreal: Centre de estude du Quebec, 1970): 456.
 59. Statement by Mr. Wilson in the debate on reciprocity, 2 Feb. 1849 in Gibbs, 463, see above n. 58.
 60. Statement by Mr. Gamble in the debate on Resolutions on Commercial Policy, 28 Oct. 1852 in Gibbs, 1297, see above n. 58.

-
61. Statement by Mr. Smith in the debate on reciprocity, 2 Feb. 1849 in Gibbs, 448, see above n. 58.
 62. Statement of Mr. Stevenson in the debate on reciprocity, 2 Feb. 1849 in Gibbs, 457, see above n. 58.
 63. *Ibid.*, 457.
 64. Statement by Mr. Smith in the debate on reciprocity, 2 Feb. 1849 in Gibbs, 448-449, see above n. 58.
 65. Statement by Mr. Wetenhall in the debate on reciprocity, 2 Feb. 1849 in Gibbs, 463, see above n. 58.
 66. Statement by Mr. Young in the debate on Resolutions on Commercial Policy, 28 Oct. 1852 in Gibbs, 2487, see above n. 58.
 67. H. Michelle, "Notes on Prices of Agricultural Commodities in the United States and Canada, 1850 - 1854," *The Canadian Journal of Economics and Political Science* 1 (1935): 269-279.
 68. New Hampshire 29,000 up to 31,000; Vermont 30,000 - 32,000; New York 171,000 - 197,000; New Jersey 24,000 - 28,000; Pennsylvania 123,000 - 156,000; Ohio 368,000 - 587,000; Illinois 76,000 - 143,000; Michigan 34,000 - 62,000; and Wisconsin 20,000 - 69,000. *Historical Statistics of the United States, Colonial Times to 1970, Part I* (Washington: U.S. Department of Commerce, 1975): 459.
 69. N.H. \$1890 - \$2285; Vt. \$3202 - \$3462; N.Y. \$3280 - \$4078; N.J. \$5030 - \$6520; Pa. \$3197 - \$4234; Ohio \$2495 - \$3770; Ill. \$1261 - \$2854; Mich. \$1522 - \$2577; and Wis. \$1414 - \$1893. *Ibid.*, 459.
 70. *Ibid.*, 512-514.
 71. See, for example, the discussion in Jones, *History of Agriculture in Ontario*, 190-193.
 72. See for example the statement by Mr. Robinson in the debate on the Navigational Act, 6 June 1851 in Gibbs, 268, see above n. 58.
 73. *The Montreal Gazette*, 7 Feb. 1849.
 74. Jones, *History of Agriculture in Ontario*, 176.
 75. *Ibid.*, 190-191.
 76. *Ibid.*, 192.
 77. Statement of Mr. Seymore in the debate on the removal of duty on agricultural products, 15 July 1847 in Gibbs, 918, see above n. 58.
 78. Statement by Mr. Merritt on the debate on Productions of the United States, 27 Feb. 1849 in Gibbs, 447, see above n. 58.
 79. Statement by Mr. Brooks in the debate on the Productions of the United States, 2 Feb. 1849 in Gibbs, 448, see above n. 58.
 80. Statement by Mr. McConnell in the debate on Productions of the United States, 6 Feb. 1849 in Gibbs, 497, see above n. 58.

-
81. Statement by Mr. Watts in the debate on Productions of the United States, 6 Feb. 1849 in Gibbs, 507, see above n. 58.
 82. Statement by Mr. Wilson in the debate on reciprocity, 2 Feb. 1849 in Gibbs, 463, see above n. 58.
 83. Statement by Mr. Wetenhall in the debate on reciprocity, 2 Feb. 1849 in Gibbs, 464, see above n. 58.
 84. *Ibid.*, 464.
 85. For an excellent discussion of this specialization see Jones, *History of Agriculture in Ontario*, 192-194.
 86. See for example *The Montreal Gazette*, 5 Feb. 1849; the statement by Mr. Seymore in the debate on removal of duty on agricultural products, 15 July 1847 in Gibbs, 918 and the statement by Gen. Hincks in the Debate on Productions of the United States, 6 Feb. 1849 in Gibbs, 509, see above n. 58.
 87. Statement by Mr. Boulton in the debate on Productions of the United States, 2 Feb. 1849 in Gibbs, 460, see above n. 58.
 88. Jones, *History of Agriculture in Ontario*, 195.
 89. Statement by Mr. Stevenson in the debate on reciprocity, 2 Feb. 1849 in Gibbs, 195, see above n. 58.
 90. Statement by Mr. McConnell in the debate on Productions of the United States, 6 Feb. 1849 in Gibbs, 497, see above n. 58.
 91. Statement by Mr. Richards in the debate on Productions of the United States, 6 Feb. 1849 in Gibbs, 510, see above n. 58.
 92. See for example the statement by Mr. Smith in the debate on reciprocity, 2 Feb. 1849 in Gibbs, 448 and the statement by Mr. Stevenson in the debate on reciprocity, 2 Feb. 1849 in Gibbs, 457, see above n. 58.
 93. See for example the speech of Mr. Hampton on the Tariff Question in the House of Representatives, *Appendix to the Congressional Globe*, 22 Jan. 1851, 31st Cong., 2nd sess., 102.
 94. Speech of Mr. Cooper on the Tariff Question in the House of Representative, *The Congressional Globe*, 13 Jan. 1851, 31st Cong., 2nd sess., 230.
 95. The major U.S. fear was over coal from Nova Scotia rather than Canada and the major objections were directed against Nova Scotia coal, see for example Tansill, *The Canadian Reciprocity Treaty of 1854*, 36.
 96. Statement by Mr. Smith in the debate on reciprocity, 2 Feb. 1849 in Gibbs, 449, see above n. 58.
 97. Statement by Mr Boulton in the debate on Productions of the United States, 2 Feb. 1849 in Gibbs, 459, see above n. 58.
 98. Statement by Mr. Hincks in the debate on the Production of the United States, 2 Feb. 1849 in Gibbs, 470, see above n. 58.
 99. Jones, *History of Agriculture in Ontario*, 194.

-
100. Statement by Mr. Gamble in the debate on Resolutions on Commercial Policy, 28 Oct. 1852 in Gibbs, 1298, see above n. 58.
 101. *Journals of the Legislative Committee of United Canada*, 1846, 61.
 102. *The Montreal Gazette*, 12 Feb. 1849.
 103. See for example, Kerr, "Addressing the Complexities of Free Trade," 1.
 104. To be fair it does not appear to have occurred to the pro-reciprocity groups either. Reading their arguments suggests that they also thought only in terms of entire industries.
 105. Remembering that manufactured goods were not included.