Agricultural trade in North America: Trade creation, regionalism and regionalisation*

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Trade creation in agricultural products is defined as a statistically significant positive break in the trend function of the growth in exports and imports between member countries. The present study attempts to determine the time of any break in the trend of real exports and imports between the Canada–USA Free Trade Agreement (CUSTA) and the North American Free Trade Agreement (NAFTA) member countries for the years 1980:I through 1999:II, and document the scale of the phenomenon. The present study finds trade creation only occurs in USA agricultural exports to Canada because of CUSTA. The results confirm the theory that the regionalism of NAFTA did not lead to regionalisation or an increasing share of intraregional international trade.

1. Introduction

Historically, Preferential Trade Areas (PTA) were mainly limited to arrangements within Western Europe, arrangements among developing countries in Latin America and Africa, and trade preferences by developed to developing countries.[1] Because the developing-country arrangements were largely ineffective and trade preferences by developed to developing countries limited, effective PTA were confined to the two arrangements in Western Europe: the European Community (EC) and European Free Trade Area. The limited role for PTA meant that the architects of the global trading system, the

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[1] A PTA is a union between two or more countries in which goods produced within the union are subject to lower trade barriers than the goods produced outside the union. A Free Trade Area (FTA) is a PTA in which member countries do not impose any trade barriers on goods produced within the union but do so on those produced outside the union.

General Agreement on Tariffs and Trade (GATT), did not have to fear that regional arrangements might undermine the multilateral process of trade liberalisation (Panagariya 1998a).

Until recently, the USA championed a non-discriminatory global trade regime based on the Most Favoured Nation clause in Article I of the GATT which forbids member countries from pursuing discriminatory trade policies against one another. During the 1980s the situation changed. The USA felt that the EC was stalling the multilateral trade negotiations process and decided that PTA were the only means left for keeping the process of trade liberalisation afloat. In 1985 the USA went on to conclude a PTA with Israel and in 1989 a PTA with Canada – the Canada–USA Free Trade Agreement (CUSTA). Although the Uruguay Round of GATT negotiations was launched in the meantime, the USA went ahead in 1994 with yet another PTA, this time jointly with Canada and Mexico – the North American Free Trade Agreement (NAFTA).[2] Now that the Uruguay Round has been successfully concluded and the multilateral process is working well (or seemed to be until the WTO conference in Seattle in late 1999), the original rationale for the USA pursuit of PTA has disappeared. However, what was originally viewed as a temporary diversion to force the EC to the negotiating table has turned into a race for securing preferential access to one's neighbours' markets for one's exports.

The effects of regional trade agreements on union members have been studied mostly in the context of Vinerian, namely trade creating versus trade diverting, static welfare analysis (e.g., Wonnacott and Lutz 1989; Jacquemin and Sapir 1991; Summers 1991; Bhagwati 1995; Bhagwati and Panagariya 1996; Panagariya 1996; Spilimbergo and Stein 1996; Bhagwati *et al.* 1998; Robinson and Thierfelder 2002), the implications of differences in transport costs across potential union members (e.g., Krugman 1991; Frankel *et al.* 1995; Frankel and Wei 1997), the implications of the rules of origin (e.g., Krueger 1993; Krishna and Krueger 1995), and non-traditional gains including guaranteed market access, shelter from contingent protection, the locking-in of reforms and dispute settlement (e.g., Panagariya 1998b, 1996). Measuring all of these effects of a PTA on its member countries is impossible, partly because some benefits/costs simply cannot be measured. However, it is reasonable to assume that creating a PTA is governed by an idea of easing trade barriers and increasing trade flows among the member countries. In other words, a country will enter a regional trade agreement having expectations of increased trade with its new union partners.

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[2] The NAFTA is not a non-discriminatory free trade area. For instance, in NAFTA, antidumping measures can be used by member countries against one another.

Many studies were conducted to investigate if the PTA are building-blocks or stumbling-blocks to multilateral liberalisation (e.g., Findlay 2002; Robinson and Thierfelder 2002). Results of these studies do not offer a consensus on this topic, either among academics or among politicians (Findlay 2002).

Creation of CUSTA and, especially, NAFTA was a subject of bitter discussions and division among both politicians and economists in the USA. Both trade agreements were expected to create new trade between the USA and Canada and between the USA, Canada and Mexico, respectively. Considerable concern was expressed, not about the increased trade among member countries, but rather about the welfare implications of that increase. Agriculture was one of the sectors in which there was considerable concern about the potential effects of these agreements on domestic producers and consumers. However, no recent papers have addressed the question of whether new trade in agricultural products has been created at all.[3] Moreover, it is important to address the issue of how much of any trade growth has been a result of trade liberalisation mandated by NAFTA obligations. Experts conducting a study about NAFTA effects on USA trade volume on behalf of the Clinton administration acknowledged the difficulty of isolating the NAFTA effect, particularly in the light of the peso crisis and sharp Mexican recession in 1995–1996, the concurrent implementation of tariff cuts negotiated in the Uruguay Round, and the robust growth of the USA economy during the 1990s (Bergsten and Schott 1997). They also speculate that the effects of the peso depreciation and the relatively faster growth of the USA economy were much more important than NAFTA trade reforms in explaining the increase in post-NAFTA trade.

We define trade creation in agricultural products as a statistically significant positive break in the trend function of the growth in exports and imports between member countries. We determine the time of break, providing one exists, in the post second oil-shock growth trend of real exports and imports between CUSTA and NAFTA member countries for the years 1980:I through 1999:II, and document the scale of the phenomenon. We further discuss why there is or is not trade creation in agricultural commodities caused by the signing of CUSTA or NAFTA in the light of trade theory and policy, and political economy arguments.[4]

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[3] Papers by Karamera and Koo (1994), and Uhm and Koo (1990) addressed the issue of trade creation and diversion (defined in Vinerian fashion) of agricultural and industrial goods in CUSTA.

[4] It should be noted that our present econometric model simply tests for trade creation because of NAFTA and CUSTA. This model makes no attempt to address the structural factors, such as the peso devaluation, phasing-in of tariffs, announcement effect, etc., that

2. Determination of the break period: Method

In the present study, we use recent research on structural change in time-series econometrics that enables us to be explicit about the timing and the significance of the purported breaks. While earlier work imposed restrictive assumptions such as identically- and independently-distributed, non-trending, or stationary data, these restrictions have been successfully relaxed. The breaks in the present study are determined using tests developed by Vogelsang (1997) for detecting shifts in the trend function of a dynamic time series. These tests, which allow for serial correlation and have good finite sample power, remain valid whether or not the series is characterised by a unit root. An application of these tests can be found in Ben-David and Papell (1998).

It is useful to know whether a break period (quarter) i even exists, and to the extent that it does, to determine when it occurs. This is done here for total USA agricultural exports to Canada and to Mexico, and for total USA agricultural imports from Canada and from Mexico. Furthermore, this procedure is repeated for a number of agricultural products based on a two-digit Standard International Trade Classification (SITC) classification.[5] The determination of a break date then facilitates a more accurate appraisal of the existence (absence) of trade creation caused by signing CUSTA or NAFTA or by some other events preceding or following the signing of these trade agreements.

We begin by examining total USA agricultural exports and imports to and from Canada and Mexico (in levels), which we define as the logarithms of real exports and imports. As exports and imports are clearly trending, structural change involves a break in the linear deterministic trend. The Vogelsang tests, which will be used to determine the existence and timing of the trend breaks, are valid whether or not a unit root is present in a series. However, the critical values of the test statistics depend on whether the

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(*continued*) – lead to the presence or absence of trade creation. If one were to estimate a structural model of the factors affecting trade flows in North America, the factors could be identifiable, but it would not answer the question of, if there was a statistically significant increase in exports (imports) because of NAFTA or CUSTA and when it occurred. The structural break model used in the present paper addresses this issue. Further, we believe this model helps in identifying potential factors that do affect trade flows for future research.

[5] Quarterly data on USA agricultural exports and imports to and from Canada and Mexico for period 1980:I through 1999:II are obtained from the USDA Economic Research Service (Foreign Agricultural Trade of the United States data base) as a courtesy of Carolyn Whitton. Nominal values are deflated by using the USA Consumer Price Index (CPI) (CPI source: the International Financial Statistics of the International Monetary Fund).

series is stationary or contains a unit root. Therefore, the unit root question must be resolved first, and then the focus can shift to an investigation of trend breaks.

It is well known that the non-rejection of the unit-root hypothesis can be caused by misspecification of the deterministic trend. Perron (1989) developed tests for unit roots which extend the standard Dickey-Fuller procedure by adding dummy variables for different intercepts and slopes, assuming that the break dates are known a priori. These tests were extended by Banerjee *et al.* (1992) and Zivot and Andrews (1992) to the case of unknown break dates.

We use a variant of these tests developed in Perron (1997) which allows for a change in both the intercept and the slope at time T_B. The sequential trend break tests involve regressions of the following form:

$$\Delta X_t = \mu + \theta DU_t + \beta t + \gamma DT_t + \delta D(T_b)_t + \alpha X_{t-1} + \sum_{j=1}^{k} c_j \Delta X_{t-j} + \varepsilon_t \quad (1)$$

where X is the log of real exports and ΔX is the first difference.[6] The period at which the change in the parameters of the trend function occurs will be referred to as the time of break, or T_B. The break dummy variables have the following values: $DU_t = 1$ if $t > T_B$, 0 otherwise; $DT_t = t - T_B$ if $t > T_B$, 0 otherwise; and $D(T_b)_t = 1$ if $t = T_B + 1$, 0 otherwise. Equation (1) is estimated sequentially for $T_B = 2, \ldots, T - 1$, where T is the number of observations after adjusting for those 'lost' by first-differencing and incorporating the lag length k.

The time of break for each series is selected by choosing the value of T_B for which the Dickey-Fuller t-statistics (the absolute value of the t-statistic for α) is maximised. The null hypothesis, that the series $\{X_t\}$ is an integrated process, is tested against the alternative hypothesis that $\{X_t\}$ is trend stationary with a one-time break in the trend function that occurs at an unknown time.

There is considerable evidence suggesting that data-dependent methods for selecting the value of the lag length k are superior to making an a priori choice of a fixed k. We follow the procedure suggested by Campbell and Perron (1991), and Ng and Perron (1995) by starting with an upper bound of k_{max} on k. If the last lag included in equation (1) is significant, then the choice of k is k_{max}. If the lag is not significant, then k is reduced by 1. This process continues until the last lag becomes significant and k is determined. If no lags are significant, then k is set to 0. Initially, k_{max} is set at 16, and a

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[6] M would denote the log of real imports in an equivalent formulation for the imports.

Table 1 Sequential trend break tests (levels) – total agricultural exports and imports

$$X_t = \mu + \theta DU_t + \beta t + \gamma DT_t + \sum_{j=1}^{k} c_j X_{t-j} + \varepsilon_t$$

Country	Unit root	Break year	Sup F_T
USA exports to Canada	−6.61^^^	1989:3	21.40***
USA imports from Canada	−3.41	1989:1	8.66
USA exports to Mexico	−3.76	1989:1	5.38
USA imports from Mexico	−3.46	1990:3	7.76

^^^statistical significance for unit root test (Perron 1997, p. 362) at 1 per cent level (critical values are −6.07, −5.33 and −4.94 at 1, 5 and 10 per cent, respectively). ***, ** and * statistical significance either using stationary critical values at the 1 per cent (17.51), 5 per cent (13.29) and 10 per cent (11.25) levels or using unit root critical values at the 1 per cent (30.36), 5 per cent (25.10) and 10 per cent (22.29) levels (Vogelsang 1997, pp. 824–825).

10 per cent critical value from the normal distribution is used to assess the significance of the last lag.[7]

The null hypothesis of a unit root is rejected if the *t*-statistic for α is greater (in absolute value) than the appropriate critical value. Perron (1997, p. 362) provides finite-sample critical values for the lag length selection method described. The unit root null can be rejected for USA total agricultural exports to Canada at the 1 per cent significance level, while for the other series the null cannot be rejected at any standard significance levels (i.e., 1, 5 or 10 per cent). This finding is reported in the first column of table 1.

We now proceed to test for structural change. Among all the tests that Vogelsang (1997) develops in his paper, only the sup Wald (or sup F_t) test provides estimates of the break date. Vogelsang extends the sup Wald test of Andrews (1993) and the mean and exponential Wald tests of Andrews and Ploberger (1994) to permit trending regressors and unit-root errors. The test for trending data consists of estimating the following equation:

$$X_t = \mu + \theta DU_t + \beta t + \gamma DT_t + \sum_{j=1}^{k} c_j X_{t-j} + \varepsilon_t. \tag{2}$$

Equation (2) is estimated sequentially for each break quarter with 15 per cent trimming, for $0.15T < T_B < 0.85T$, where T is the number of observations.[8]

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[7] Ng and Perron (1995) use simulations to show that these sequential tests have an advantage over information-based methods as the former produces tests with more robust size properties without much loss of power.

[8] Vogelsang (1997) reports critical values for both 1 per cent and 15 per cent trimming. The 15 per cent trimming was used in the present study because it has greater power to detect breaks near the middle of the sample.

Sup F_t is the maximum, over all possible trend breaks, of two times the standard F-statistic for testing $\theta = \gamma = 0$. It is important to understand that the break periods are determined endogenously, with no ex ante preferences given to any particular quarter.[9]

The results of the sup F_t tests are summarised in Table 1. As indicated, Vogelsang tabulates critical values for both stationary and unit-root series. We use the stationary critical values for those countries for which the unit-root null can be rejected at the 10 per cent level by the Perron (1997) tests, and the unit-root critical values otherwise. The no-trend-break null hypothesis is rejected in favour of the broken trend alternative for USA agricultural exports to Canada only, at the 1 per cent significance level. The parameter is positive, confirming the evidence of an increase of USA agricultural exports to Canada after the break.[10]

Moreover, the results in Table 1 should come as no surprise if we look at agricultural exports and imports data among NAFTA countries plotted in figures 1–4.

Vogelsang shows that if a series contains a unit root, power can be improved by conducting tests in first differences. We therefore proceed to examine exports (imports) growth (the first differences of the logarithms of real exports and imports) for the three series for which the unit root null cannot be rejected by the Perron (1997) tests.[11] As exports (imports) growth is non-trending, structural change involves a break in the mean of the growth rate. This is done by using the sup F_T test for non-trending data, which consists of estimating the following equation:

$$\Delta X_t = \mu + \theta DU_t + \sum_{j=1}^{k} c_j X_{t-j} + \varepsilon_t. \qquad (3)$$

Equation (3) is estimated sequentially for each break period with 15 per cent trimming and sup F_T is the maximum, over all possible trend breaks, of the standard F-statistic for testing $\theta = 0$.

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[9] These tests allow for only one break. While it would be desirable to use the methods developed by Bai and Perron (1998) to investigate multiple structural changes, relatively short time span of data (78 observations) makes this problematical. In addition, their tests are restricted to stationary and non-trending data.

[10] Note that negative value of parameter would indicate a slowdown in USA agricultural exports after the break.

[11] We do not perform structural change test on the series for which the unit root null is rejected because, if a series is trend stationary with a break in trend, the tests for structural change have no local asymptotic power.
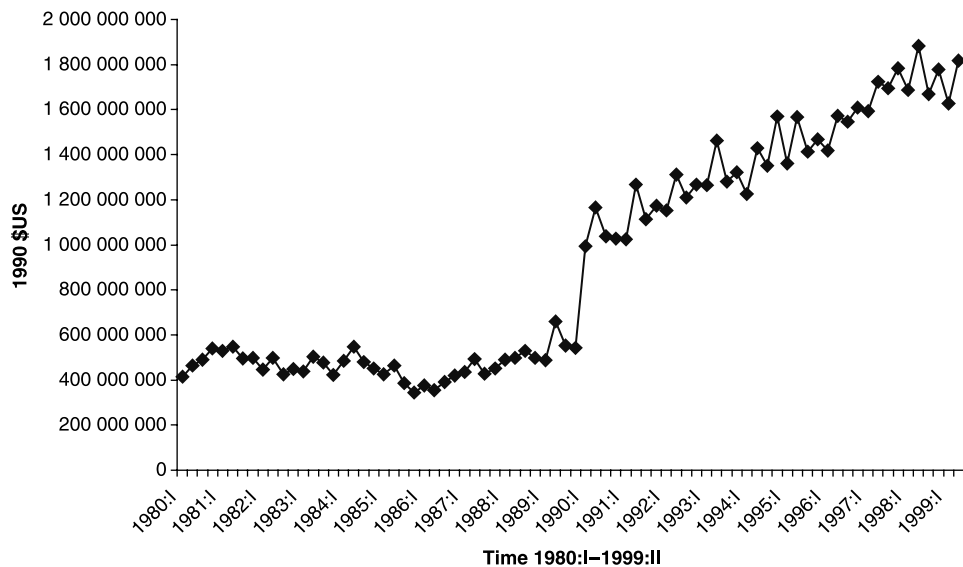
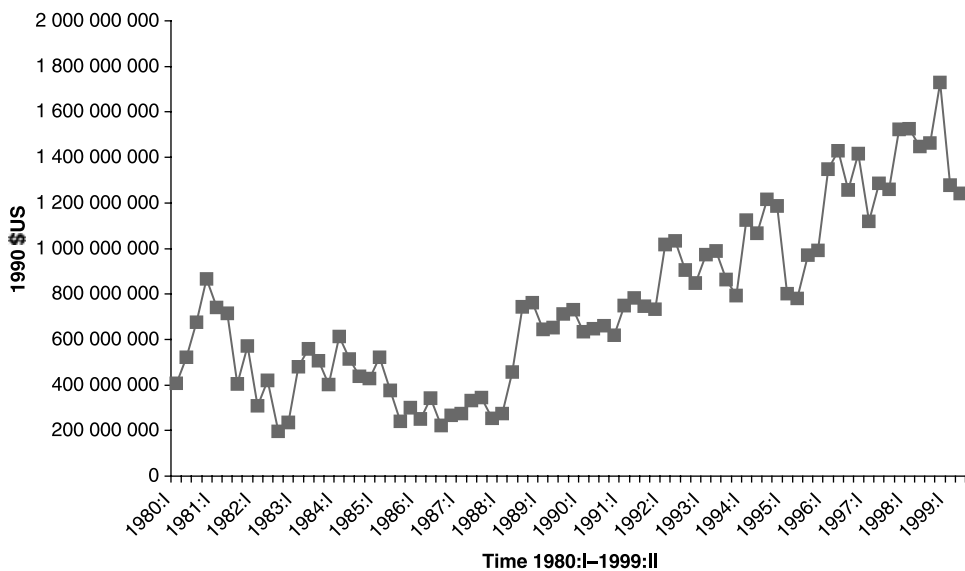**Figure 1** Total USA agricultural exports to Canada, series 1.

Figure 2 Total USA agricultural exports to Mexico, series 2.
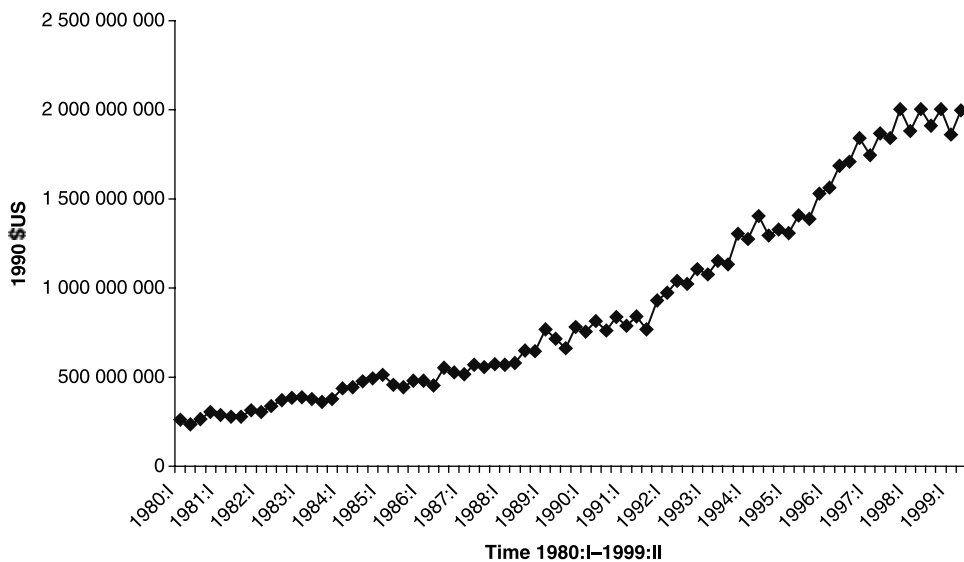
Figure 3 Total USA agricultural imports from Canada, series 1.
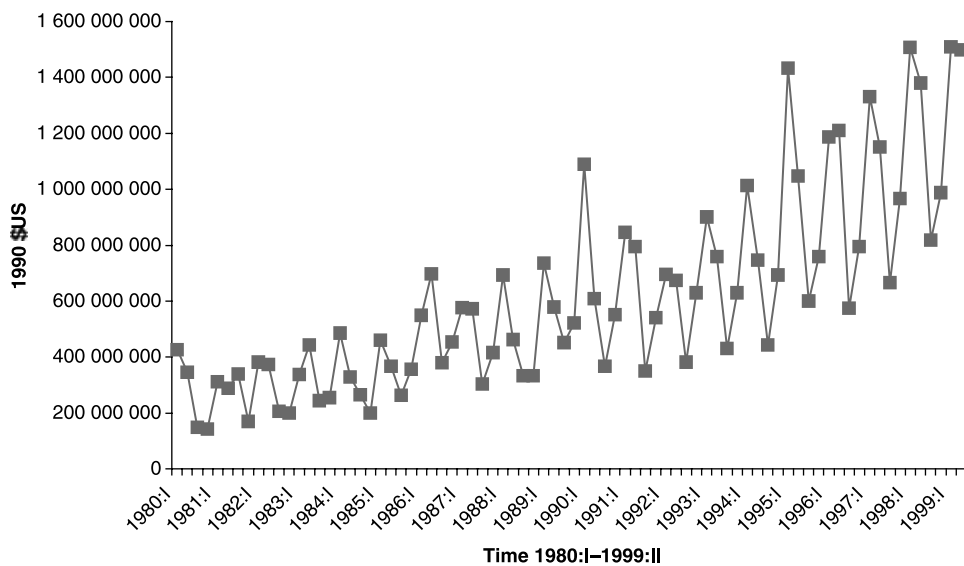

Figure 4 Total USA agricultural imports from Mexico, series 2.

Table 2 Sequential trend break tests (first differences) – total agricultural exports and imports

$$\Delta X_t = \mu + \theta DU_t + \sum_{j=1}^{k} c_j X_{t-j} + \varepsilon_t$$

Country	Break year	Sup F_T
USA imports from Canada	1991:I	6.73
USA exports to Mexico	1988:I	1.52
USA imports from Mexico	1989:I	0.18

Stationary critical values are 13.02, 9.00 and 7.32 at 1, 5 and 10 per cent, respectively (Vogelsang 1997, p. 824).

The results of the sup F_T tests are summarised in table 2. Assuming that output contains at most one unit root, output exports (imports) growth will not contain a unit root and stationary critical values can be used. The no-trend-break null hypothesis could not be rejected in any of the three remaining cases at any standard level of significance (1, 5, and 10 per cent).

3. What happened to trade creation?

Our present results clearly indicate that there was no statistically significant break and increase in trade in three out of four cases tested. Then whatever in the world happened with the trade flows between the USA and Canada and Mexico? Viner (1950) noted that as PTA liberalise trade preferentially, they create new trade between union members. We can see, however, that USA agricultural imports from Canada and both exports and imports to and from Mexico follow the same (positive) trend over the period under consideration and that no new trade was created as a result of CUSTA or NAFTA.

First we should note that we ran the same model for total USA agricultural exports and imports during the same period and that results indicate that there was no statistically significant break in the trend of agricultural exports or imports. Sup F_T test results for agricultural exports and imports in first differences (both series have a unit root in levels) are 3.007 and 5.357, respectively. Therefore our results reported in Table 1 and Table 2 are not affected significantly by some global movement such as the GATT or the WTO Agreement.

Opponents of NAFTA in the USA suggested that Mexico will be a major beneficiary of the Agreement for several reasons. First, NAFTA would guarantee Mexican access to the large USA market, namely the agreement ensures Mexico that if the USA becomes protectionist in the future, its access to the USA market will be preserved. It seems, however, that Mexican

access to the USA market is guaranteed by WTO agreements anyway. In other words, if the USA commitment to WTO is credible, this argument is rather weak.

Second, it was believed that Mexico may escape antidumping and safeguards measures by the USA to which other trading partners can be subjected. In practice, however, Mexico experienced administered protection by the USA in a number of cases affecting actual or potential Mexican exports to the USA. Examples relevant for agriculture include special agreements on sugar and orange juice, and subsequent restrictions on Mexican tomatoes that allow for the play of administered protection in the event of import surges from Mexico in these sectors. Sup F_T test results for the value of USA imports of fruits from Mexico (1.238) indicate that there was no statistically significant break in trend. Sup F_T test result for the value of USA imports of sugar and vegetables from Mexico (25.976 and 9.298, respectively) suggest the existence of a break in trend. However, these breaks in trend occurred during the third quarter of 1989 and 1988, respectively, namely long before the NAFTA was signed. Results for fruits, sugar, and vegetables are in first differences because of the existence of a unit root in levels of these series. Also, side agreements on the environment and labour standards give the USA new powers to subject Mexico to dispute settlement procedures that can lead to fines of up to 20 million USA dollars. Results for all agricultural commodities imported to the USA from Mexico are in accord with the 2-digit SITC classification (table 3).[12]

Many believed that NAFTA would lock the reforms in Mexico, making it very difficult for more protection-minded future governments to reverse the actions of their predecessors. This means, among other things, that in the case of NAFTA there is a more effective dispute settlement process available to private parties such as business groups and activists or labour unions. The WTO dispute settlement process, by contrast, is available to the governments of member countries only. However, shortly after signing NAFTA it became obvious that it is impossible to lock-in all reforms in Mexico. The peso crisis showed that NAFTA does not and cannot guarantee macroeconomic stability. Of course, this crisis became a major concern to USA exporters, and also brought some smiles to the faces of those who lobbied for introducing the side agreements to protect certain sectors from import surges from Mexico (e.g., sugar and orange juice). The main area where the lock-in argument may apply is trade policy. However, Mexico could have

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[12] As Vogelsang test reveals only one, statistically most significant, break in trend we tested all series where a break in trend was determined according to Vogelsang test for a break in trend exogenously imposed in 1995:I, 1995:II, 1995:III, 1995:IV. This was done using Perron's test (1989). No breaking trend was found in any of the series tested.

Table 3 Sequential trend break tests (levels and first differences) – USA agricultural imports from Mexico using 2-digit SITC system

Product	Unit root	Break year	Sup F_T	First difference Sup F_T
Animals	−5.356^^	1988:1	5.918	na
Grains	−4.493	1986:3	4.001	1.230
Fruits	−3.075	1986:3	3.632	1.238
Nuts	−5.281^	1983:3	33.451***	na
Oilseeds	−7.905^^^	1988:3	3.200	na
Vegetables	−3.291	1988:3	2.319	9.298**
Essential oils	−7.815^^^	1988:3	1.636	na
Seeds	−6.150^^^	1988:3	0.523	na
Sugar	−4.329	1989:3	8.664	25.976***
Other	−6.068^^	1988:4	33.293***	na
Nursery products	−4.058	1983:1	15.348**	9.356**
Beverages	−3.734	1988:3	10.361	7.011

^^^statistical significance for unit root test (Perron 1997, p. 362) at 1 per cent level (critical values are − 6.07, −5.33 and −4.94 at 1, 5 and 10 per cent, respectively). ***, ** and * statistical significance either using stationary critical values at the 1 per cent (17.51), 5 per cent (13.29) and 10 per cent (11.25) levels or using unit root critical values at the 1 per cent (30.36), 5 per cent (25.10) and 10 per cent (22.29) levels (Vogelsang 1997, pp. 824–825). ***, ** and * also denote statistical significance using stationary critical values at the 1 per cent (13.02), 5 per cent (9.00) and 10 per cent (7.32) in first differences (Vogelsang 1997, p. 824). na, not applicable.

just as easily locked in its trade reforms on a multilateral basis by committing itself to binding tariffs with WTO at the applied rates. Instead, it chose to bind tariffs at levels much higher than applied rates. Recognising that it will not be feasible to raise tariffs on the bulk of imports coming from the USA, Mexican authorities may have decided to leave themselves considerable room in the choice of external tariffs in case pressures from domestic industry necessitate a rolling back of trade liberalisation. As it turned out, this flexibility was used after the peso crisis with tariffs on 503 items rising from less than 20 per cent to 35 per cent (Panagariya 1998a). As for the argument that the dispute settlement process was more effective because of its availability to private parties, Levy (1997) shows that the access of private parties can lead governments not to sign agreements that are otherwise beneficial.

Finally, it is known that when agreements are between a high-tariff country such as Mexico and a low-tariff country such as the USA, the PTA may cause considerable losses to the former. In other words, if a country forms a PTA with another country with substantially lower tariffs than its own, its losses are larger the more it imports from the partner (Bhagwati 1993, 1995; Panagariya 1998a). Panagariya (1997) estimated that the redistributive effect because of NAFTA may be costing Mexico as much as 3.25 billion USA dollars per year.

When we summarise all of the above it is clear that there was no trade creation in agricultural products as a result of NAFTA between the USA and Mexico. It seems that the USA recognised the potential pitfalls of this agreement for its agriculture, and protected itself well in advance. While low labour costs, macroeconomic instability and the peso crisis caused USA agricultural producers to be very nervous, side agreements were designed to protect them from such adverse occurrences. And while Mexico had to rely heavily on the USA as the market for its agricultural products, the USA could maintain its rather marginal trade flows with Mexico or turn to a number of larger and more stable markets.[13] In terms of unrealised opportunity benefits, it seems that Mexico is on the losing side of the deal. However, the fact is that NAFTA necessarily has a very small impact on the American economy. The addition of Mexico to the CUSTA essentially expanded the USA free trade area by 4 per cent – the ratio of Mexico's GDP to the USA GDP. Any impact is therefore inherently modest. 'NAFTA amounted to a 4 per cent expansion of the American economy, to include a country that accepted virtually every demand placed upon it in the negotiations and which made virtually all the concessions.' (Bergsten 1997, p. 26). It seems that the deep integration of NAFTA led to a greater payoff to the side with more bargaining power, in this case the USA.[14]

In the case of trade creation between the USA and Canada, the situation is somewhat different. First, there was trade creation in agricultural commodities going one way only, from the USA to Canada. Canada represents the third largest export market for USA agricultural products (Japan and the rest of Pacific Rim are the two largest export markets). After the signing of CUSTA more than one half of Canadian agricultural imports were coming from the USA.[15] Although many of the same issues as in the case of Mexico apply to the Canadian case, the major difference is the internal stability of the Canadian economy and its high national income (actual and potential). Canada has not recently experienced any macroeconomic crisis

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[13] To clarify this point one should know that approximately a half or more of agricultural imports of Mexico were coming from the USA; that represents between 5 and 8 per cent of the total USA agricultural exports. By the same token, less than 10 per cent of agricultural imports come to the USA from Mexico.

[14] Deep integration is the term introduced by Lawrence (1997). In addition to the liberalisation of trade among members, it involves coordination, or sometimes complete harmonisation, of other policies including competition policies, product standards, regulatory regimes, environmental policies, labour standards, investment codes and so on.

[15] Notice that NAFTA did not change significantly the relationship established between the USA and Canada by CUSTA. That is why we refer to CUSTA primarily when talking about the USA–Canada trading relationship.

or breakdown as serious as Mexico. Its currency has been relatively stable for a long time. Also, national income and market potential in that sense are much higher in Canada than in Mexico. This was a perfect situation for generally risk averse USA agricultural producers and exporters to use the advantages that a PTA brings along.

However, Canadian agricultural exports in the post-CUSTA era continued to follow the same, pre-CUSTA trend, namely no structural break occurred. Approximately 10 per cent of USA agricultural imports come from Canada. There might be several possible answers to the question as to why there was no trade creation from Canada to the USA and we will offer two of them. One answer might be that some of the major Canadian agricultural export commodities such as wheat or barley are produced and exported from the USA as well. The reason for that might be similar climate and quality of soil. These commodities are produced mostly in the provinces of Alberta, Saskatchewan, and Manitoba, which neighbour the states of Montana, North Dakota and Minnesota, the largest producers of these commodities in the USA. Another reason might be differing food safety standards and the unresolved issue of technical barriers, primarily sanitary and phytosanitary measures. This may be most relevant in the trade of meats. Notice that this is a politically sensitive issue: 'Sovereignty over food safety is a very sensitive political issue. Breakdowns in food safety tend to become extremely emotive consumer issues over which politicians feel particularly vulnerable.' (Kerr 1999, p. 1, chapter 9)

4. Regionalism, regionalisation and NAFTA: concluding remarks

The previous discussion seems to illustrate pretty well the difference between the regionalism and regionalisation that are often believed to represent the same thing. Regionalism is the notion of specific regional policies enacted by governments to promote trade and economic integration. Regionalisation is the notion of an increasing share of intraregional international trade arising as a result of 'natural' economic and market forces. The NAFTA should be listed under the category of regionalism (Baier and Bergstrand 1997). The important thing is that regionalism does not imply regionalisation. Regionalism is most often politically motivated, sometimes disregarding economic incentives that agents in an economy may have. A key USA strategic goal was to promote pluralism and democratisation in Mexico, in the belief that this would enhance both political and economic stability in Mexico over the long term. A central Mexican goal, strongly shared by the USA, was to lock in de la Madrid-Salinas reforms against the risk that future Mexican governments would undo them. Such policy renewals have occurred frequently in Mexican history and could resurface

in the future in the light of the increasing democratisation of the Mexican political system. Obligations of NAFTA raise the cost of such a policy backlash (Bergsten and Schott 1997; Hufbauer and Schott 2003).

Any concern that agricultural producers might have had in North America because of NAFTA or CUSTA is only partially justified. USA agricultural producers are well protected from potential adversity caused by import surges from Mexico via a number of side agreements, while they benefited directly from the expanded exports to Canada. However, potential benefits to agricultural producers in Mexico and Canada through trade creation were never realised.

The primary difference between NAFTA and other PTA is that the USA clearly determined outcomes (trading rules) in NAFTA. Other unions, such as the European Union (EU), have a large number of members where no single member dominates the rest of the union. There the rules are set, in most cases, in a way that accommodates more the process of regionalisation itself rather than any single country in particular. It will be interesting to see how USA engagement and performance in NAFTA will be perceived by the EU countries, Japan and possibly China, as major players in future multilateral trade negotiations.

Considering the lack of trade creation in NAFTA, it would be interesting to add to the debate on whether Australia should be forming a FTA with the USA. There are a couple of areas of concern for Australia in such a deal. First, the NAFTA experience suggests a lack of trade creation while we know a little about trade diversion. According to some prominent economists (e.g., Summers 1991) the risk of trade diversion is minimal when union members are 'Natural Trading Partners', namely when they already trade a lot with each other and are geographically proximate. Australia and the USA are not geographically proximate. In addition, trade diversion is a marginal concept and therefore has nothing to do with the initial level of trade. While the scope for trade diversion may depend on the extent of intra-union trade, the actual trade diversion depends entirely on the response of a partner country's exports to the tariff preference at the margin. Second, any FTA between Australia and the USA should also be considered in light of the hub-and-spoke issue (Wonnacott 1996). For instance, if Australia and the USA negotiate a bilateral FTA, this would overlap with the existing NAFTA, and the USA would become a hub with Australian, Canadian, and Mexican spokes. The problem here is that each spoke thinks it is participating in regional trade liberalisation – and it is, but only with the hub! Over the rest of the region, the spoke becomes an outsider, facing damaged trade with other spokes.

We conclude by stating that our findings are in accord with conclusions made by the second Clinton Administration and some of the economists

who participated very closely in creating and implementing NAFTA. We will quote here C. Fred Bergsten (Director) and Jeffrey J. Schott (Senior Fellow) from the Institute for International Economics in Washington, DC:

> Total trade with our NAFTA partners increased by 43.3 per cent since 1993 (the year before NAFTA took effect), significantly faster than USA trade with the rest of the world (32.4 per cent) over the period 1993–1996. … *This growth continues a trend that preceded the NAFTA trade reforms*. During the 3-year period prior to NAFTA, USA trade with Mexico and Canada also grew much faster than our trade with other countries (25.5 per cent vs. 14.9 per cent). What this means is that the economic integration of the North American economies had been advancing long before the NAFTA, spurred by the new trade and investment opportunities created by the domestic economic reforms in Mexico since the mid-1980s and the inflation and budget-cutting initiatives in the USA and Canada. The NAFTA reinforced this trend, but regional trade and investment would have continued to expand even if NAFTA had never been broached.
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> (Bergsten and Schott 1997, p. 5)

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