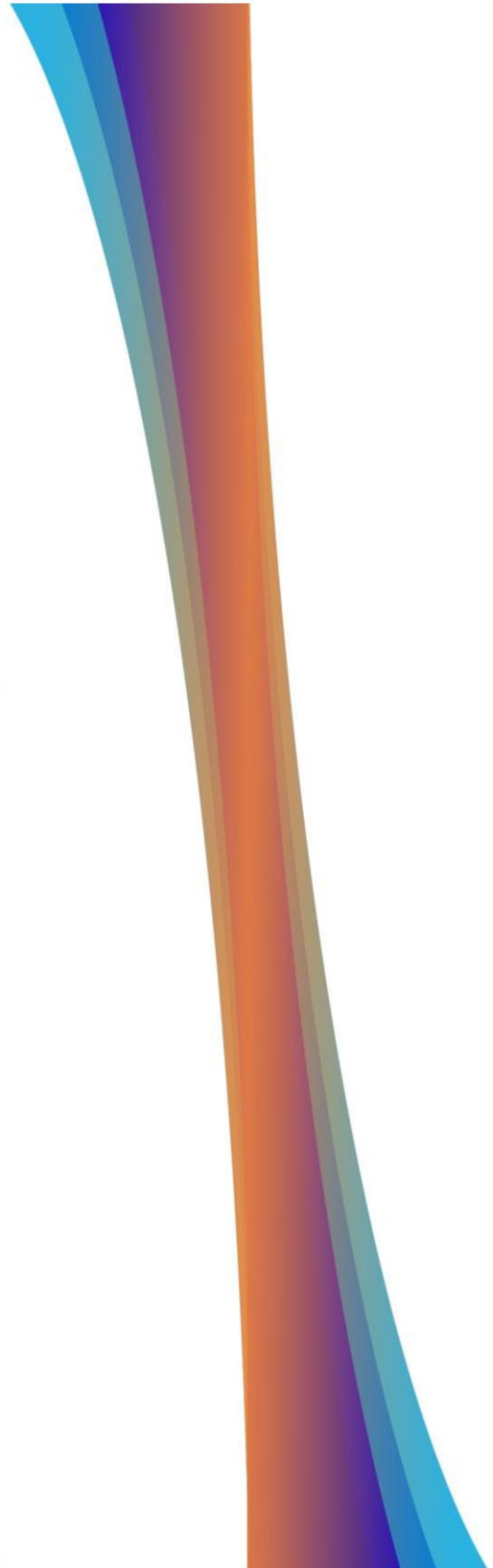

Working Paper

Quantifying the Termination of NAFTA

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Abstract: This paper quantifies the trade and economic impacts of the US terminating its NAFTA commitments under three alternative scenarios: NAFTA lapses with all three trading relationships reverting to WTO rules; NAFTA lapses but Canada and the United States retain bilateral free trade under the Canada-US FTA (CUSFTA); and Canada and Mexico trade remains under their bilateral NAFTA commitments. The impacts are evaluated using a computable general equilibrium model and takes into account the implications of imposing new tariff walls and removing the services and investment commitments under the NAFTA.

Keywords: NAFTA, Canada, Mexico, United States, computable general equilibrium, CGE modelling

JEL Codes: F13, F15

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1 INTRODUCTION

The United States request to renegotiate the North American Free Trade Agreement (NAFTA) has opened up the possibility of talks breaking down and the trade agreement lapsing. This note considers what this might mean for NAFTA trade and the Canadian, US and Mexican economies. In particular, we evaluate the trade and economic impacts of the United States walking away from the NAFTA under three alternative scenarios regarding the reaction of Canada and Mexico.

- (a) First, we show the implications of the three Parties reverting to World Trade Organization (WTO) rules for trade amongst themselves, including the imposition of most-favoured national (MFN) tariffs to all intra-NAFTA trade. This implies the United States walks away from the Canada-US FTA (CUSFTA) as well as from NAFTA.
- (b) Second, we show the implications of the NAFTA lapsing but the CUSFTA remaining in force between Canada and the United States.
- (c) Third, against the backdrop of Scenario (b), we show the implications of Canada and Mexico retaining bilateral free trade under NAFTA terms between themselves.

We observe that WTO rules for preferential trade rules would require Canada and Mexico to raise tariffs on the United States to MFN levels if the latter withdraws from the NAFTA. NAFTA tariffs could only be maintained vis-à-vis the United States if Canada and Mexico also lowered tariffs to comparable levels vis-à-vis every other supplier. Non-retaliation is not an option.

In terms of shocks, we focus on the tariff implications, but also take into account the impact of removing NAFTA provisions facilitating services market access, including the implications of increased uncertainty concerning whether US might revert from current applied practice to the minimum requirements under the WTO General Agreement on Trade in Services (GATS). Finally, we include a shock to investment, focussing on the implications of heightened uncertainty about future market access for cross-border trade, given the renewed risk of unilateral US trade actions.

There are numerous important caveats to any quantitative simulation exercise such as undertaken in this study.

First, the scenarios presented are illustrative of the size of the shock to NAFTA trade in the long run after all the dust has settled and do not take into account adjustment costs, which would like be not inconsiderable.

Second, the dynamics of separation and divorce are likely to be different than the dynamics of deepening ties. In the deepening ties scenario, there is the positive prospect of still greater improvement in the future to amplify positive impacts on trade through “animal spirits” effects; the estimates are more likely to understate than overstate the (positive) impacts. In the separation scenario, there are the hard feelings associated with defection and the uncertainty about what comes next. The risks would be that the estimates understate the (negative) impacts.

Third, the disruption to Mexico’s maquiladora trade could be substantially greater than implied by the tariff shock alone since the impact of imposing tariffs on cross-border value chains cannot be fully taken into account. Tariffs on intermediate inputs are taken into account in the modelling

framework at least to some extent: for example, Mexican tariffs on US auto parts that go into vehicles assembled for shipment back to the United States work to raise the price of the assembled vehicle and also drive substitution by the Mexican assembly plant from US suppliers to domestic sources and/or third-party imports. However, this may not capture fully the build up of tariffs when intermediate goods cross the border several times. As well, it may not capture corporate decisions to restructure production arrangements by consolidating marginal activities behind one border or the other, causing cascading changes through supply relationships. Finally, where tariffs are high, such as the 25 percent MFN tariff on light trucks into the United States, assembly in Mexico for sale to the United States would likely cease; the modelling results likely understate the trade impact here. We anticipate, accordingly, that cross-border value chains would unravel, creating greater trade destruction than can be captured by models.

Fourth, and more subtly, the scenarios do not take into account the emergence of new frictions to goods trade. For example, a follow-on reaction to the lapsing of NAFTA between the United States and Mexico would likely make the border region less attractive on both side resulting in the relocation of some productive resources within Mexico and the United States away from the border. Thus, the two countries would grow further apart in a physical sense as the centres of economic gravity of each shift away from each other. Distance translates into cost and so US-Mexico trade would grow more expensive.

Fifth, labour market effects such as skill mis-matches with the lapse of NAFTA provisions empowering labour mobility could have negative productivity and production cost impacts on all the parties. While the database for the model distinguishes between skilled and unskilled labour, the full negative effects of heightened skill mis-matching cannot be captured.

Finally, it is important to observe that in areas where the NAFTA required parties to amend domestic legislative and regulatory frameworks – as in the adoption of intellectual property laws or signing onto international conventions – the lapsing of NAFTA would not automatically result in reversion to the state of affairs pre-NAFTA. The legacy of NAFTA would live on in these measures. This is a second general reason why the effects of NAFTA being adopted and NAFTA lapsing are asymmetric, albeit with generally positive results in this case.

Accordingly, these scenarios represent a starting point and provide a quantitative frame of reference for discussing the implications of NAFTA lapsing; they do not purport to be comprehensive bottom lines on these impacts.

The rest of this note is organized as follows. Section 2 discusses the background and context for the US shift on NAFTA. Section 3 reports the results of the simulations. Section 4 concludes. Annex A provides the detailed sectoral results. Annex B provides a technical description of the GTAP-FDI model used for the simulations. Annex C describes the construction of the various policy shocks and the supporting evidence for the assumptions made.

2 BACKGROUND AND CONTEXT

The NAFTA re-negotiations are like no other in the postwar period. Up to now, multilateral, regional and bilateral agreements have aimed at reducing barriers to trade and investment, both at the border and inside the border. In recent decades, there has been an explicit focus on enabling so-called “deep economic integration”, reflecting a consensus on the mutual benefits of doing so. The NAFTA talks, however, feature a shift to an emphasis on the larger partner raising barriers to access to its own market, while requiring the two smaller economies to lower theirs. Moreover, whereas trade agreements have included mechanisms to reduce uncertainty for trading and investing firms, the negotiating position of the United States would increase uncertainty by weakening or removing binding dispute settlement provisions.

There is an important historical arc here, however, which sheds light on what is at play in terms of the reach of measures in trade agreements and as regards the timing of the US request. Trade imbalances and the nature of US trade interests play a key role.

The early postwar multilateral negotiations under the General Agreement on Trade and Tariffs (GATT), which came into effect in 1948, focussed primarily on tariffs and other border measures that constituted non-tariff barriers (NTBs) to market entry. However, talks quickly expanded to cover so-called “inside the border” measures that were seen as impediments to trade. Indeed, the first attempt to address inside the border measures was made as early as the Kennedy Round of GATT negotiations in the 1960s. Those talks addressed, inter alia, issues such as the American Selling Price valuation system that protected some sensitive import items by imposing import duties based on the basis of the (higher) domestic selling price – unsuccessfully as it turned out at the time because Congress, ever mindful of its sovereignty over economic policy, declined to adopt the measures (Curtis, 2002).

However, the Tokyo Round (1973-1979) featured a spate of supplementary agreements that addressed behind-the-border issues – anti-dumping, subsidies, government procurement, standards, as well as strengthened procedures that substantially expanded GATT's role in resolving trade disputes. What changed? The Tokyo Round was negotiated in the context of Japan's surging presence in global trade – “Red Sun Rising” read the headlines of the day. Japan's trade surplus soared in the late 1970s and the United States, which had been consistently in current account surplus during the postwar period, found itself with a rapidly rising deficit. The United States saw Japan's economic practices as the source of its surpluses and its own deficits and pressed for strengthened trade rules, including rules that aimed to reach well inside the border – the Japanese border (Curtis, 2002).

The Uruguay Round (1986-1994), which created the World Trade Organization (WTO), introduced still deeper constraints on domestic regulation with the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and a much-strengthened dispute settlement mechanism, the adoption of whose recommendations could not be defeated by a single member's veto. Timing and context again are instructive. The launch of the round followed hot on the heels of the Plaza Accord on exchange rates, which devalued the US dollar in an attempt to correct US trade imbalances with Germany and Japan. The Plaza Accord failed to immediately resolve matters

as imbalances continued to widen in 1986; as Curtis (2002) writes: “The US deficit sank to a new annual record of almost \$150 billion (US) while Japan’s surplus soared to \$86 billion (US) and Germany’s to \$41 billion (US). The focus shifted [from exchange rates] to trade and the road led to Punta del Este” where the Uruguay Round was launched on 15 September 1986.

In addition, the United States moved unilaterally through the Omnibus Trade and Competitiveness Act of 1988, which strengthened the Executive Branch’s Section 301 powers to retaliate unilaterally against trading partners for “unfair trade practices”. The justification for “Super 301” was that US competitiveness was being undermined by policies and practices that GATT rules did not adequately address (King, 1991; 246). The United States also directly targeted Japan’s surpluses with the 1989 Structural Impediments Initiative (SII).

The evolving nature of US trade interests also led to a further widening of the issues addressed in trade agreements. Concern about US innovation in the face of Japan’s technological challenge led the Carter Administration to adopt the Patent and Trademark Law Amendments Act, otherwise known as the Bayh–Dole Act, signed into law on 12 December 1980. The Economist (2002) provides the following retrospective on this initiative:

“Remember the technological malaise that befell America in the late 1970s? Japan was busy snuffing out Pittsburgh's steel mills, driving Detroit off the road, and beginning its assault on Silicon Valley. Only a decade later, things were very different. Japanese industry was in retreat. An exhausted Soviet empire threw in the towel. Europe sat up and started investing heavily in America. Why the sudden reversal of fortunes? Across America, there had been a flowering of innovation unlike anything seen before ... More than anything, this single policy measure helped to reverse America's precipitous slide into industrial irrelevance.”

The identification by the United States of its economic interests with intellectual property protection led to the inclusion of an intellectual property chapter in the 1989 Canada-US Free Trade Agreement, which in turn served as the model for US proposals in the Uruguay Round. Notably, this still deeper intrusion of trade rules required policy changes on the part of the US’ main trading partners, but not to its own policies.

Trade imbalances also appear to have continued to play a role in driving US trade policy. As in the Tokyo Round, as the US external deficit shrank from a peak in 1987 and indeed flipped into surplus in 1991, progress on the Uruguay Round was halting and indeed stalled at the failed Brussels Ministerial of 1990:

“With the pressures on the United States dissipating, if not entirely defused, pressure on the trade negotiators eased. While it would be a stretch to draw a cause and effect relationship between any of these developments and the failure to conclude the round on time, it is noteworthy that the context was not exactly propitious for success.” (Curtis, 2002)

The next strong push by the United States on trade only came under the Clinton Administration which coincided with the US slide into external deficit as the US recovery from the 1991 recession took hold. The Clinton Administration’s push on trade was nothing short of a full-court press, including the endorsement of the report of the Asia Pacific Economic Cooperation (APEC)

forum's Eminent Persons Group to achieve free trade in the Asia Pacific at the 1993 meeting of Asia Pacific Economic Cooperation (APEC) leaders at Seattle, the signing of the NAFTA, which entered into force on 1 January 1994, the signing of the APEC Bogor Agreement for Asia-Pacific Free Trade adopted in November 1994, and implementation of the WTO Agreement, which entered into force on 1 January 1995.

The trade agreements failed to arrest the growth of US deficits, however, which exploded after the Asian and Emerging Market Crisis of 1997-1998, when developing countries en masse flipped from running large external deficits to running current account surpluses to protect themselves from destabilization by hot money flows. With its economy buoyed by the technology boom of the late 1990s and the bubble economy of the 2000s, the US external deficit soared to as high as \$800 billion (US) or 5.8 percent of GDP in 2006. The new focus of US trade policy became China, which came under pressure for its trade surplus and currency policy.

The US directly pressured China on its currency policies, backed by the threat of imposing across-the-board tariffs as retaliation for currency manipulation. However, the main element in the US pivot to Asia under the Obama Administration took the form of the TPP, an agreement that pointedly aimed to write the rules of trade in the Asia Pacific in opposition to China. The TPP reached deep behind the border of its signatories, with measures targeting state-owned enterprises, government procurement, labour and environmental rules, stronger rules on intellectual property and on the new emerging area, the digital economy, and even exchange rates. Notably, the United States negotiated one-on-one with TPP parties, including on the controversial rules of origin, the agreement on which was concluded behind closed doors by the United States and Japan and presented to the other parties as a *fait accompli*.

As can be seen, US concerns about bilateral trade imbalances and attempts to address them with direct bilateral initiatives or more generally through changing trade rules are not exactly new. Neither are bilateral approaches in a regional negotiation or the assertion of Congressional sovereignty over international trade rules.

What *is* new seems to be the perception that the outward-oriented approach adopted by previous administrations, which included making concessions to trading partners and complying with the rules-based system, has failed the United States. Not only have trade deficits persisted, but America has de-industrialized, and rivals are closing the gap on technology. The “globalist” approach is perceived by a significant minority of Americans – and more to the point at the highest levels of the current Administration – as not working. The reflexive move is to seek a return to the looser trade rules regime of the 1980s, if not all the way back to the reciprocal bilateralism of the 1930s.

The withdrawal from the TPP, the status quo-minus offers and status quo-plus demands that the United States has made in the NAFTA talks, the insistence on dropping the Chapter 19 binational panel review of the Parties' anti-dumping and countervailing duty decisions, and the doubling down on “Buy America” procurement are not the only evidence for this.

It is also evident in the launch of a Super 301 investigation of China on 18 August 2017. This measure has rarely been used since the WTO Agreement came into force. As Bown (2017) describes, in using the archly unilateral Super 301:

“The US government acted as police force (identifying the foreign government’s crime), prosecutor (making the legal arguments), jury (ruling on the evidence), and judge (sentencing the foreigner to US retaliatory punishment). And sometimes cases would involve issues without internationally agreed upon rules!”

It is also signalled by the pre-emptive strike against Bombardier’s C-Series, a class of airplane that US rival Boeing does not produce (but might both fear and want to emulate, given Bombardier’s superior technology and lower operating costs).

And, perhaps most ominously, it is signalled by blocking of appointments to the WTO Appellate Body, which WTO Director General Roberto Azevêdo has called a “threat to trade peace”.

How far this retrenchment in US policy thinking will go and what it portends for the global trading system are open questions.

On ex ante considerations alone, there is no obvious “landing zone” for the current NAFTA negotiations that can deliver on the stated US goal of rebalancing bilateral trade, while leaving the Agreement largely intact as a free trade agreement. For example, the US bilateral goods trade deficit with Mexico cannot be corrected by further Mexican liberalization – Mexico has minimal trade barriers in place facing US goods under the NAFTA. Seeking to reduce the US deficit through protection, as opposed to via sensible policies promoting US competitiveness, exports and savings, would entail levels of US protection that likely would herald a sharp decline in international business, at significant costs to US and global standards of living. This lack of congruence points to a breakdown of talks rather than a new deal. The concern is that this is the outcome the anti-globalist faction in the United States wants. In which case, the scenarios become a point of departure for discussing the post-NAFTA world rather than cautionary tales designed to avert a costly divorce. Read on.

3 SIMULATION RESULTS

The NAFTA scenarios are simulated using a multi-sector, multi-region computable general equilibrium (CGE) model. We employ a dynamic version of the widely used Global Trade Analysis Project (GTAP) model modified to directly represent foreign-owned firms in each sector of the economy to capture the impact on trade conducted through foreign affiliates. A detailed non-technical description of the model and modeling protocols is provided in Appendix B.

To simulate the NAFTA scenarios, we establish a baseline projection to 2023. The results reported are difference between the outcomes with the NAFTA shocks and the baseline. The reported impacts in 2023 may be interpreted as the permanent change in the level of output of the economy, once full equilibrium has been restored following the policy shocks, including the reallocation of capital and labour across sectors in response to the changed opportunities following the policy shocks.

The policy shocks include tariffs, non-tariff barriers affecting services, and non-tariff measures affecting investment. Appendix C describes the construction of the policy shocks in detail.

We report impacts in US dollars at 2017 prices. The original GTAP data are in US dollars at 2011 prices. These data can be converted to current values in the three NAFTA currencies at 2017 prices using the following conversion factors, which are calculated on the basis of:

- (a) IMF estimates of inflation in US dollar prices as measured by the US GDP deflator in the IMF World Economic Outlook database of April 2017, which are used to convert USD 2011 prices to USD 2017 prices
- (b) Exchange rate conversions to CAD 2017 prices and MXN 2017 can be made based on annual averages for 2017, as follows:

The conversion factors are as follows:

	2017 Exchange Rate	Conversion Factor
USD 2011 to USD 2017		1.09724
USD 2011 to CAD 2017	1.2984	1.4247
USD 2011 to MXN 2017	18.884	20.7203

Source: International Monetary Fund, World Economic Outlook Database; Federal Reserve Board, Foreign Exchange Rates - G.5A <http://www.federalreserve.gov/releases/g5a>, calculations by the study team.

3.1 Regional Impacts

3.1.1 Trade Impacts

A full reversion to WTO rules for the NAFTA parties as per Scenario (1) results in a decline of total NAFTA exports of goods and services to the NAFTA region of about \$122 billion (US) or 8.65 percent by 2023 when the full impacts of the policy shocks have been absorbed. Taking into account trade deflection, total NAFTA exports of goods and services to the world fall by about \$86 billion (US) or about 2.2 percent by 2023 (Table 1) as about \$36 billion (US) in foregone NAFTA exports is redirected to third markets. Simply put, the new trade barriers within NAFTA drive firms to seek sales in more distant markets, absorbing higher trade costs in so doing.

The negative impacts on trade are substantially softened if the CUSFTA holds (Scenario 2) and if a Canada-Mexico FTA (CMFTA) replaces NAFTA (Scenario 3); the reduction in intra-NAFTA trade narrows to the \$67-70 billion (US) range or on the order of 5 percent of baseline intra-NAFTA exports.

Throwing up trade barriers within the NAFTA region also leads to import diversion as each NAFTA party replaces NAFTA imports with third-party imports (Table 13). The EU28 and China stand to benefit substantially in terms of export gains to the NAFTA zone, as indeed does the rest of the world in total. Non-NAFTA parties pick up close to \$27 billion (US) in additional exports to the NAFTA zone under scenario (1).

While the higher trade barriers do reduce US imports from NAFTA parties to the tune of \$60 billion (US), this does nothing to help the US bilateral trade balance within NAFTA since exports

to NAFTA partners fall by about \$62 billion (US), in good measure due to the higher MFN tariffs that Mexico applies compared to the MFN tariffs in the United States.

For Canada, taking into account the redirection of Canadian exports to third parties, total exports would decline by about \$20 billion (US) or a 2.8 percent – significant but not a trade apocalypse. For Mexico, the decline is about \$25 billion (US) or 4.4 percent of its total exports. If the Canada-US FTA remains in place, Canada's trade is essentially saved harmless – the estimates suggest minor trade gains, largely at Mexico's expense. If Canada and Mexico maintain free trade under a CMFTA, Canada sees its NAFTA exports grow by \$3.3 billion (US) – this time at the expense of the United States.

Table 1: Trade Impacts: Exports to NAFTA Partners and to the World, USD at 2017 prices

	(1) NAFTA Lapses		(2) CUSFTA Holds		(3) CMFTA	
	USD millions	% change	USD millions	% change	USD millions	% change
Exports to NAFTA Parties						
Canada	-25,830	-6.15	541	0.13	3,335	0.79
United States	-62,095	-10.66	-35,574	-6.11	-37,443	-6.43
Mexico	-34,107	-8.37	-35,282	-8.65	-33,052	-8.11
China	3,339	0.37	2,426	0.27	2,406	0.27
EU28	7,189	0.95	3,734	0.50	3,652	0.48
ROW	16,619	0.99	9,292	0.55	8,989	0.53
Memo: NAFTA	-122,032	-8.65	-70,316	-4.99	-67,160	-4.76
Exports to the World						
Canada	-19,852	-2.80	403	0.06	2,357	0.33
United States	-40,772	-1.50	-23,217	-0.85	-24,268	-0.89
Mexico	-25,137	-4.44	-25,840	-4.56	-24,202	-4.27
China	2,397	0.06	1,424	0.03	1,415	0.03
EU28	7,050	0.07	3,521	0.04	3,485	0.04
ROW	10,594	0.08	5,457	0.04	5,412	0.04
Memo: NAFTA	-85,761	-2.15	-48,654	-1.22	-46,114	-1.15

Source: Calculations by the authors. Note: ROW indicates Rest of the World.

Table 2: Trade Impacts: Imports from NAFTA Partners and the World, USD at 2017 prices

	(1) NAFTA Lapses		(2) CUSFTA Holds		(3) CMFTA	
	USD millions	% change	USD millions	% change	USD millions	% change
Imports from NAFTA						
Canada	-27,438	-7.31	476	0.13	3,187	0.85
United States	-60,501	-7.25	-32,790	-3.93	-34,896	-4.18
Mexico	-41,118	-14.62	-42,244	-15.02	-39,514	-14.05
China	5,290	1.51	3,156	0.90	3,057	0.87
EU28	10,961	1.42	6,298	0.82	6,113	0.79
ROW	22,056	1.49	13,462	0.91	13,079	0.88
Memo: NAFTA	-129,057	-8.65	-74,558	-5.00	-71,223	-4.78
Imports from World						
Canada	-22,016	-3.20	573	0.08	2,823	0.41
United States	-47,568	-1.26	-26,800	-0.71	-28,195	-0.75
Mexico	-31,021	-6.18	-32,067	-6.39	-30,016	-5.98
China	4,730	0.13	2,912	0.08	2,860	0.08
EU28	11,203	0.11	6,148	0.06	6,022	0.06
ROW	18,954	0.14	10,941	0.08	10,705	0.08
Memo: NAFTA	-100,604	-2.03	-58,293	-1.18	-55,388	-1.12

Source: Calculations by the authors. Note: ROW indicates Rest of the World.

3.1.2 Impacts on GDP and Economic Welfare

The simulations suggest that real GDP and economic welfare will fall in all the NAFTA countries. Pulling out of NAFTA costs the United States about \$20 billion (US) in welfare foregone and results in a decline in real GDP of about -0.09 percent. Mexico suffers the largest declines in welfare, \$24 billion (US) and in real GDP (close to -1.2 percent), while Canada comes out with the smallest decline in welfare, \$15 billion (US) and a loss of real GDP of -0.55 percent.

If the CUSFTA holds, Canada makes modest real GDP and welfare gains at Mexico's expense; if Canada and Mexico maintain free trade under a CMFTA, Canada's gains expand by about 0.08 percent in real GDP and \$3.1 billion (US) in additional household welfare.

Table 3: GDP and Economic Welfare Impacts, 2023, USD at 2017 prices/percent

	(1) NAFTA Lapses		(2) CUSFTA Holds		(3) CMFTA	
	Real GDP (% change)	Welfare (USD Millions)	Real GDP (% change)	Welfare (USD Millions)	Real GDP (% change)	Welfare (USD Millions)
Canada	-0.545	-15,100	0.028	1,433	0.080	3,146
United States	-0.091	-19,894	-0.043	-8,781	-0.047	-10,383
Mexico	-1.162	-23,621	-1.217	-25,066	-1.146	-23,527
China	0.026	5,663	0.018	3,678	0.017	3,602
EU28	0.027	8,159	0.016	4,875	0.016	4,676
ROW	0.032	17,116	0.020	10,308	0.020	10,095
Memo: NAFTA	-0.225	-58,614	-0.132	-32,413	-0.123	-30,765

Source: Calculations by the authors.

From scenarios (1) and (2), we can work out the net benefit to Canada presently of the CUSFTA: a gain of about 0.57 percent and economic welfare of about \$16.5 billion (US). This is substantially smaller than estimates of the original gain under the CUSFTA. This is not unexpected since the NAFTA today represents much less of an improvement over the trade regime under WTO rules than it originally did. Canada has lowered its applied MFN rates since the CUSFTA was signed, including under the WTO Agreement and unilaterally by eliminating tariffs on production inputs.

It is of interest to compare the NAFTA lapsing scenario for Canada to the Brexit impact on the UK. These are roughly comparable events – the lapsing of a long-standing free trade arrangement with each country's main trading partner. Applying the same model and the same modelling protocol (see Ciuriak et al., 2017), the impact of Brexit on the UK is a decline in real GDP from tariffs, services and FDI shocks of about -0.94 percent (US). This is larger than the impact of bilateral free trade with the United States lapsing on Canada of -0.57 percent. However, the simple average MFN applied tariff for the EU currently, which would apply to UK-EU27 trade in both directions under Brexit, is 5.2 percent. By comparison, the United States currently has a simple average applied MFN tariff of 3.5 percent (WTO, 2017), with 46 percent of applied MFN tariffs set at zero. Comparable figures for Canada are 4.1 percent and 75.6 percent respectively. Moreover, the areas where Canada maintains significant protection –supplied managed dairy and poultry – are not impacted by NAFTA lapsing. The major difference between NAFTA lapsing and Brexit is that the latter event also results in the emergence of a new hard customs border, which creates additional trade costs across the board.

3.1.3 Sources of the Impacts

Table 4 decomposes the impacts in 2023 by policy shock: (a) tariff impacts; (b) new services NTBs; and (c) new barriers to FDI. Tariffs account for close to 90 percent of the total impact on NAFTA welfare for the three parties combined. For Canada, the tariff share is only about 78 percent. Services and FDI NTBs contribute smaller negative impacts; these are attributable mainly to the greater uncertainty about future market access from the removal of NAFTA commitments.

Table 4: Decomposition of Impacts by Policy, Cumulated Change in 2035

	Tariffs	Services NTBs	FDI NTBs	Total	Tariffs	Services NTBs	FDI NTBs	Total
	Real GDP (% Change)				Welfare (USD millions at 2017 prices)			
NAFTA Lapses								
Canada	-0.425	-0.119	-0.002	-0.545	-11,759	-3,297	-44	-15,100
United States	-0.077	-0.013	-0.001	-0.091	-17,036	-2,708	-150	-19,894
Mexico	-1.131	-0.017	-0.014	-1.162	-23,065	-317	-239	-23,621
CUSFTA Holds								
Canada	0.029	0.000	0.000	0.028	1,433	2	-2	1,433
United States	-0.042	-0.001	0.000	-0.043	-8,517	-248	-16	-8,781
Mexico	-1.185	-0.018	-0.014	-1.217	-24,502	-328	-236	-25,066
CMFTA								
Canada	0.080	0.000	0.000	0.080	3,133	14	-2	3,146
United States	-0.046	-0.001	0.000	-0.047	-10,117	-252	-14	-10,383
Mexico	-1.116	-0.017	-0.013	-1.146	-22,993	-315	-220	-23,527

Source: Calculations by the authors.

The tariff effects would vary across product groups. This reflects the large number of tariff lines that are set at zero on an MFN basis by both Canada and the United States. For those product groups for which NAFTA does matter, the lapsing of NAFTA would actually partly reduce trade costs by removing the need for rules of origin certification, not to mention freeing up supply chain sourcing to seek out the global best buy over potentially higher-cost NAFTA suppliers. While this effect is only partly captured in the model, which implies an over-statement of tariff impacts, the modelling also does not take into account the heightened uncertainty about access to the US market in the absence of NAFTA disciplines, which would work to deepen the negative tariff impacts. On balance, we expect the tariff shock understates the impact of NAFTA lapsing on goods trade.

As regards investment, analyzed in a formal model, the small impacts from the changes in the FDI regime reflect the fact that NAFTA legal measures reduce investment incentives only marginally. Moreover, less FDI from the United States into Canada creates room for domestic investors and economic theory suggests they will take up that room, in the fullness of time. The difference between FDI and domestic investment is in efficiency – foreign investment is done by firms that are more productive than the average domestic firm,¹ hence less capital is required to achieve the same level of output. By the same token, a reduction of inward FDI requires a larger amount of domestic investment to restore equilibrium in rates of return.

¹ Helpman, Melitz and Yeaple (2004) show that, just as exporters have a productivity advantage over non-exporters, multinational firms have a productivity advantage (estimated at about 15 percent) over non-multinational exporters; they observe that this result is consistent with the usual finding that foreign-owned affiliates are more productive than domestically owned producers.

The overall level of foreign investment in the NAFTA lapsing scenario would of course be lower by a greater amount than the reduction due to the new disincentives for FDI. This would reflect the reduced incentives for investment in Canada given the lower real GDP and export levels. However, this would be a macroeconomic effect, not the effect of the changes due to the lapsing of the NAFTA investment regime, and thus is not attributed to the changes in the FDI regime.

A larger concern would be corporate decisions on using Canada for North American and global product mandates; uncertainty about future market access in the United States could tilt such decisions to choosing US locations. Accordingly, the present simulations likely understate the negative impact from investment – although not necessarily because of the lapsing of formal NAFTA investment disciplines.

That being said, for Canada, these risks would be at least partially offset by other features of US policy not covered in the present study – in particular the receptiveness to movement of persons. Especially for technology investment, a liberal, welcoming policy framework in Canada would attract global firms seeking to access North American technology expertise, for which greater freedom of movement of personnel might be decisive.

3.2 Macroeconomic Impacts by NAFTA Party

Table 5 reports the main macroeconomic aggregates for **Canada** relative to the baseline in 2023 for the three scenarios. Canada absorbs a significant decline in real GDP of -0.55 percent and a decline in welfare of \$15 billion (US). Reflecting a significant decline in Canada's terms of trade the decline in the value of GDP is greater at about 0.95 percent or about \$25 billion (US).

Table 5: Macroeconomic Summary for Canada

	NAFTA Lapses	CUSFTA Holds	CMFTA
Major aggregates			
Economic welfare (USD millions at 2017 prices)	-15,100	1,433	3,146
GDP value (USD millions at 2017 prices)	-25,102	3,558	7,034
GDP value (% change)	-0.948	0.135	0.266
GDP volume (% change)	-0.545	0.028	0.080
GDP deflator (% change)	-0.405	0.106	0.186
CPI (% change)	-0.251	0.075	0.134
National Accounts Aggregates			
Consumption (% change)	-0.745	0.066	0.147
Government expenditure (% change)	-0.440	0.057	0.106
Investment (% change)	-0.862	0.073	0.187
Total exports of goods & services (% change)	-2.418	0.001	0.219
Total imports of goods & services (% change)	-3.107	0.140	0.480
Trade balance (USD millions at 2017 prices)	1,972	-156	-422
Terms of trade (% change)	-0.292	0.112	0.183
Factor Markets			
Capital stock (% change)	-0.248	0.020	0.052
Real wage of unskilled labour (% change)	-0.456	0.021	0.074
Real wage of skilled labour (% change)	-0.447	0.021	0.065
Check Ratios			
Ratio: Real GDP to total trade	0.20	0.40	0.23
Ratio: Labour productivity (real GDP/worker) to real wages	0.91	1.07	0.85

Source: Calculations by the study team.

The negative impacts on Canadian macroeconomic performance are led by investment and real exports, resulting in lower productivity. Productivity falls by less than real wages which is symmetric with the case when output and productivity are rising: real wages tend to lag behind productivity growth.

If CUSFTA holds, Canada comes out ahead, in part due to gaining some market share in the United States at Mexico's expense. The value of Canada's GDP rises by about \$3.6 billion, mainly due to price effects; real GDP edges up by 0.028 percent and welfare by \$1.4 billion (US).

If Canada and Mexico continue their free trade relationship through a bilateral FTA, Canada makes about \$7 billion (US) in gains in terms of the value of GDP, primarily due to improved terms of trade, and this time partly at the expense of the United States. Real GDP rises by 0.08 percent and welfare by \$3.1 billion (US).

The decline in real GDP in the NAFTA lapsing scenario is in a reasonable range compared to the real decline in two-way trade. This ratio is also about one-fifth in the CMFTA scenario, consistent with historical outcomes and within reasonable bounds in the CUSFTA holds scenario.

The macroeconomic impacts on the **United States** are relatively small in percentage terms, reflecting the comparatively small share of goods trade in US GDP and the smaller exposure the United States has to Canada and Mexico when compared to its global trade. The impact of NAFTA lapsing is, however, negative across the board, with the one exception that the US trade balance does improve on a global basis. This, however, is not due to improving its trade balance with NAFTA partners, but by virtue of shrinking the economy and thus shrinking total import demand.

Table 6: Macroeconomic Summary for the United States

	NAFTA Lapses	CUSFTA Holds	CMFTA
Major aggregates	% change	% change	% change
Economic welfare (USD millions at 2017 prices)	-19,894	-8,781	-10,383
GDP value (USD millions at 2017 prices)	-52,620	-25,304	-29,124
GDP value (% change)	-0.248	-0.119	-0.137
GDP volume (% change)	-0.091	-0.043	-0.047
GDP deflator (% change)	-0.157	-0.076	-0.090
CPI (% change)	-0.146	-0.075	-0.085
National Accounts Aggregates			
Consumption (% change)	-0.119	-0.053	-0.062
Government expenditure (% change)	-0.063	-0.025	-0.031
Investment (% change)	-0.191	-0.102	-0.113
Total exports of goods & services (% change)	-1.339	-0.760	-0.787
Total imports of goods & services (% change)	-1.171	-0.638	-0.688
Trade balance (USD millions at 2017 prices)	6,238	3,265	3,644
Terms of trade (% change)	-0.067	-0.020	-0.042
Factor Markets			
Capital stock (% change)	-0.044	-0.023	-0.026
Real wage of unskilled labour (% change)	-0.086	-0.045	-0.049
Real wage of skilled labour (% change)	-0.070	-0.035	-0.038
Check Ratios			
Ratio: Real GDP to total trade	0.07	0.06	0.06
Ratio: Labour productivity (real GDP/worker) to real wages	0.86	0.78	0.79

Source: Calculations by the study team.

The main observations on the nature of the shocks to the US economy are similar to those regarding Canada. Real GDP declines by -0.09 percent but, due to declining terms of trade, the value of GDP falls by substantially more, -0.25 percent, equivalent to about \$53 billion (US). The decline in the US terms of trade is due to the reciprocal nature of the tariff shock (and in particular the high tariffs imposed by Mexico). Welfare falls by a relatively modest \$20 billion (US). US producers would feel the impact of NAFTA lapsing more than US consumers.

The negative impacts on US macroeconomic performance are led by investment and exports, resulting in lower productivity. Real wages fall somewhat more than productivity.

If the CUSFTA hold, the US cuts its losses in half, which suggests that the benefits to the United States of the NAFTA are roughly equally due to trade with Canada and trade with Mexico.

The decline in real GDP in the NAFTA lapsing scenario is small compared to the real decline in two-way trade (ratio of about 0.07 compared to a benchmark of about 0.20). This would allow the inference that the model results might be understating somewhat the real GDP decline in the United States and that the actual decline would be closer to that recorded for the value of GDP.

If Canada and Mexico agree to continue with bilateral free trade under a CMFTA, the US losses widen marginally. For the most part, the US would be indifferent to whether or not Canada and Mexico continue with free trade.

Mexico is hardest hit of the NAFTA parties. The decline in GDP in value terms of about -2.5 percent, equivalent to about \$47 billion (US), is considerably larger than the decline in volume terms of about -1.2 percent. Welfare declines by about \$24 billion (US).

Table 7: Macroeconomic Summary for Mexico

	NAFTA Lapses	CUSFTA Holds	CMFTA
Major aggregates	% change	% change	% change
Economic welfare (USD millions at 2017 prices)	-23,621	-25,066	-23,527
GDP value (USD millions at 2017 prices)	-46,869	-50,375	-47,144
GDP value (% change)	-2.523	-2.711	-2.537
GDP volume (% change)	-1.162	-1.217	-1.146
GDP deflator (% change)	-1.360	-1.495	-1.392
CPI (% change)	-0.990	-1.093	-1.021
National Accounts Aggregates			
Consumption (% change)	-1.479	-1.566	-1.468
Government expenditure (% change)	-0.870	-0.938	-0.883
Investment (% change)	-3.264	-3.472	-3.244
Total exports of goods & services (% change)	-3.378	-3.412	-3.195
Total imports of goods & services (% change)	-6.051	-6.280	-5.862
Trade balance (USD millions at 2017 prices)	5,292	5,604	5,208
Terms of trade (% change)	-0.981	-1.098	-1.015
Factor Markets			
Capital stock (% change)	-0.864	-0.922	-0.863
Real wage of unskilled labour (% change)	-1.017	-1.054	-0.985
Real wage of skilled labour (% change)	-0.933	-0.972	-0.910
Check Ratios			
Ratio: Real GDP to total trade	0.25	0.25	0.25
Ratio: Labour productivity (real GDP/worker) to real wages	1.19	1.20	1.21

Source: Calculations by the study team.

Investment and real exports lead the decline and Mexico's global trade balance improves due to the compression of imports. If CUSFTA holds, the impacts on Mexico deepen with GDP falling in value terms by -2.7 percent and in volume terms by -1.22 percent. These losses are clawed back under the CMFTA scenario, but the losses from lapsing free trade with the United States remain.

The macroeconomic scenarios accord with expectations concerning the ratio of real growth to two-way trade, and in terms of the relationship between productivity and real wages.

3.3 Labour Markets

The CGE model generates an impact on the total labour input in the economy. This labour input can be interpreted as productivity changes or as changes in the number of jobs or as some combination of both. Modern trade theory demonstrates that trade liberalization transfers market share from less productive firms to more productive firms, and that the more productive firms pay higher wages. Accordingly, in a trade liberalization event, we would expect wages and productivity to rise in tandem.

If labour markets eventually clear, the change in jobs would be due not to unemployment (although unemployment would undoubtedly rise as labour is reallocated across sectors and firms), but to changes in labour force participation. Changes in labour force participation would reflect changing real wages. In a NAFTA lapsing scenario, where real wages fall, it would be expected that some marginally attached workers would drop out of the labour market and choose leisure instead. This would lead to a lower total employment, even when labour markets have cleared.

While the model itself does not shed light on the split between productivity and wages, it is possible to estimate the order of magnitude of these impacts. We provide two estimates: one is based on an estimate of the wage elasticity of employment – that is, of the responsiveness of labour supply to changes in real wages. For the latter parameter, we use an estimate of 0.3 based on Evers et al. (2008). We note that the USITC (2016) uses an estimate of 0.4 from its study of the TPP impact on US jobs. The second is based on an assumption that half the net labour input reduction under the NAFTA lapsing scenario is in productivity and the other half in jobs.

To develop these estimates, we first project total employment for Canada, the United States and Mexico in 2023, based on the IMF World Economic Outlook population projection and estimates of the employment/population ratio. For Canada and the United States, the IMF provides an estimate of this ratio for 2018; we extend this to 2023. For Mexico, we draw on OECD estimates of the labour force and unemployment rate for 2016 and calculate an employment-to-population ratio using the resulting employment total and the IMF 2016 estimate of Mexico's population.

For the first estimate, we multiple the average decline in real wages for skilled and unskilled labour by the assumed wage elasticity of 0.3 to generate the estimate of the percentage change in jobs and apply that to the level of employment in 2023 to generate the job loss estimate on this basis. For the second estimate, we use CGE model estimates for real GDP, assuming an equal contribution from employment and productivity, to generate the percentage change in employment. This is applied to the level of employment in 2023 to generate a job loss estimate.

Comparing the results, the 50 percent assumption is found to be consistent with a wage elasticity of labour supply of about 0.6, which is well within the range of estimates for this parameter. Table 8 provides the alternative estimates for the three NAFTA parties for the three scenarios.

Table 8: Scope of Possible Job Impacts

	Canada			United States			Mexico		
	NAFTA lapses	CUSFTA holds	CMFTA	NAFTA lapses	CUSFTA holds	CMFTA	NAFTA lapses	CUSFTA holds	CMFTA
Jobs 2023	19,541,572			159,540,000			52,913,000		
Jobs (1)	-26,469	1,217	4,076	-37,337	-19,146	-20,853	-154,764	-160,769	-150,417
Jobs (2)	-53,273	2,780	7,831	-72,454	-34,324	-37,745	-307,494	-321,894	-303,081

Source: Calculations by the study team.

For Canada, the implication of NAFTA lapsing would be a job loss in the 25-50 thousand range; for the United States, in the 35-70 thousand range; and for Mexico, in the 150-300 thousand range. Under the CUSFTA holds and CMFTA scenarios, Canada would stand to make modest job gains, while the United States would cut its job losses roughly in half. Mexico's job impacts differ little across the scenarios because almost all of the impact comes from the lapse of the bilateral free trade relationship with the United States.

It is important to emphasize that these estimates are for the new equilibrium when labour markets have cleared – i.e., there is no involuntary unemployment generated by the NAFTA shocks. The adjustment period could feature larger unemployment totals and these might indeed persist for more than the five years assumed here for equilibrium to be re-established. Notably, Ciuriak (2010), reviewing the impacts of the original CUSFTA/NAFTA on Canada's labour markets found that Canada did not return to full employment for a decade after the initial shock, and the restoration of the discouraged worker effect on labour participation of women took the better part of a second decade. Accordingly, for a generation, there was a permanent loss of jobs.

3.4 Sectoral Impacts

This section reviews the sectoral impacts. We focus on the NAFTA lapsing, which generates the largest sectoral shocks. For Canada, the CUSFTA holds and CMFTA scenarios generate small sectoral gains. For the United States, the sectoral impacts are attenuated significantly if CUSFTA holds. For Mexico, the impacts are little changed from the NAFTA lapsing scenario.

For **Canada**, NAFTA lapsing means billion-dollar hits to exports of a number of sectors. The hardest hit of these, however, is business services, which not only suffers a drop of \$2.7 billion (US) in exports to NAFTA partners but also has to contend with reduced domestic sales due both to intermediate inputs in exports and to reduced domestic sales due to income effects. All in all, business services see a decline in total sales of \$7.2 billion (US).

The chemicals, rubber and plastics complex and automotive sectors experience large declines in bilateral exports to NAFTA partners, which are partly compensated by re-orientation towards third markets and to the domestic market, in part filling gaps resulting from declining bilateral imports.

Machinery and equipment, food products, and textiles and clothing suffer lesser but still significant export declines and similarly pick up some domestic market share from imports as Canadian tariffs go up.

Table 9: Canadian Sectoral Impacts from Export Declines

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Sales	Total Sales
Chemicals, Rubber, Plastics	-5,980	-4,676	-5,255	-3,548	961	-4,294
Automotive	-5,716	-7,989	-5,739	-5,419	2,067	-3,672
Fossil Fuels	-2,922	-2,033	-2,184	-1,787	-167	-2,351
Business Services	-2,719	-66	-2,036	-597	-5,184	-7,221
Metal Products	-2,320	-1,076	-1,301	-1,311	-476	-1,778
Machinery and Equipment	-1,538	-1,589	-1,026	-1,691	245	-781
Food Products	-1,199	-1,728	-1,165	-1,182	439	-726
Textiles and Apparel	-1,080	-1,509	-1,048	-919	260	-788

Source: compiled by the study team. USD millions at 2017 prices.

Sectors that are little affected by export declines but still experience significant negative impacts from the income effects of NAFTA lapsing are “other services”, which include public services, trade, and construction. Financial services and communications also experience relatively large drops in total sales, primarily stemming from declines in domestic demand.

Table 10: Canadian Sectoral Impacts from Domestic Income Effects

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Sales	Total Sales
Other Services	55	-849	150	-591	-9,731	-9,581
Trade	30	-37	129	-158	-6,034	-5,904
Construction	-3	0	10	-15	-5,502	-5,492
Financial Services	97	-486	224	-461	-1,971	-1,748
Communications	-99	-12	-32	-75	-1,094	-1,126

Source: compiled by the study team. USD millions at 2017 prices.

The most affected agricultural sector is beef. Exports drop by over half a billion USD (although this might vary depending on how Canadian exporters fare under US MFN beef quotas). While Canadian beef producers would capture some of the Canadian domestic market share left by declining NAFTA imports, the modelling results suggest that total sales would still fall appreciably. “Other agricultural products”, which include a variety of other crops, fare similarly, with the decline in domestic demand compounding an overall decline in exports. Dairy also experiences a fairly significant decline in sales, entirely due to lower domestic demand.

Table 11: Canadian Agricultural Sector Impacts

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Sales	Total Sales
Beef	-593	-909	-567	-595	414	-154
Oilseeds and Vegetable Oils	-421	-124	-157	-110	13	-144
Other Agriculture	-312	-382	-256	-123	-11	-267
Wheat and Cereals	-114	-7	20	-9	-65	-45
Fruit and Vegetables	-167	-278	-120	-143	92	-26
Pork and Poultry	-94	-77	-8	-78	22	14
Dairy	14	-1	30	-14	-263	-234

Source: compiled by the study team. USD millions at 2017 prices.

For the **United States**, we consider first the sectors that benefit most from a decline in import competition – this being the stated objective of countering unfair trade within NAFTA. By far and away, the greatest decline in NAFTA-sourced imports would be in the automotive sector. The modelling results suggest that US imports would decline by over \$22 billion (US). However, despite picking up considerable market share in the domestic market, an increase of over 7.7 billion (US), the reduction of exports to NAFTA parties and the overall negative impact on domestic demand results in the auto industry experiencing the greatest decline in total sales of these industries.

The chemical, rubber and plastics complex gets the benefit of protection, with a decline in NAFTA-sourced imports of \$8.1 billion (US); however, this is more than offset by a decline in bilateral exports to NAFTA partners of over \$10 billion (US). Taking into account some pick-up in market share by third parties (e.g., the EU and China), notwithstanding an increase in domestic sales, the sector comes out with a decline in total sales of over \$5.9 billion (US).

With variations in the details, similar stories emerge for other import-competing industries like textiles and apparel, metal products and food products.

Other sectors, although not much affected by trade measures, lose sales due to a decline in demand. For example, fossil fuels languish because of general weakness in the North American economy.

Table 12: US Sectoral Impacts from Reduced Imports from NAFTA Partners

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Sales	Total Sales
Automotive	-14,474	-22,397	-14,027	-13,063	7,756	-6,271
Chemicals, Rubber, Plastics	-10,219	-8,177	-6,867	-5,871	1,013	-5,854
Machinery and Equipment	-7,150	-5,770	-2,628	-6,079	1,385	-1,243
Textiles and Apparel	-3,858	-4,942	-3,621	-3,202	826	-2,795
Fossil Fuels	-3,155	-4,603	-1,895	-3,465	-286	-2,181
Metal Products	-3,251	-3,687	-2,036	-3,028	71	-1,965
Food Products	-3,757	-2,652	-3,507	-1,771	-424	-3,930

Source: compiled by the study team. USD millions at 2017 prices.

A number of sectors that do not have a problem with import competition get sideswiped by the NAFTA lapsing due to indirect domestic income effects. Income effects drive reductions on spending on public services by over \$25 billion (US). Other sectors experiencing significant declines in total sales include trade (\$12.7 billion), construction (\$8.7 billion), and financial services (\$8.4 billion).

Business services, which see a decline in import competition from NAFTA partners, see any benefit from that quarter erased by a steeper decline in domestic sales. The overall result is a \$4.6 billion (US) decline in total sales.

Wood products, which benefits from anti-dumping and countervailing duties (not modelled in these scenarios), lose export markets and suffer a decline in domestic demand. This sector's total sales fall by \$3.7 billion (US).

Table 13: US Sectoral Impacts from Domestic Income Effects

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Sales	Total Sales
Other Services	-1,008	101	-88	-226	-25,250	-25,337
Trade	-82	72	145	-169	-12,853	-12,708
Construction	0	-7	102	-34	-8,847	-8,745
Financial Services	-656	166	8	-504	-8,387	-8,380
Recreation	-593	99	-245	-53	-4,923	-5,168
Business Services	-105	-2,964	1,068	-1,557	-5,695	-4,627
Wood Products	-1,553	-303	-1,019	-1,003	-2,648	-3,667

Source: compiled by the study team. USD millions at 2017 prices.

Turning to agricultural sectors, US agricultural export interests are hit relatively hard with billion-dollar export declines in pork and poultry, beef and dairy. While there is some modest offset from decreased imports from NAFTA partners, the combination of weaker exports and weaker domestic demand results in still larger declines in total sales. Only the fruit and vegetables sector parlay a decline in imports of \$1.3 billion (US) into a gain, albeit a modest one, of \$30 million (US) in total sales. The heavily protected sugar sector sees a decline in total sales of \$145 million (US).

Table 13: US Agricultural Sector Impacts

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Sales	Total Sales
Pork and Poultry	-2,593	-157	-2,265	-140	-443	-2,708
Beef	-1,548	-967	-1,402	-625	-330	-1,731
Dairy	-1,147	-131	-992	-123	-1,039	-2,031
Oilseeds and Vegetable Oils	-680	-801	-250	-467	239	-11
Beverages and Tobacco	-590	-75	-541	-154	-543	-1,084
Other Agriculture	-567	-402	34	-346	-1,706	-1,673
Wheat and Cereals	-560	-44	-46	-49	-718	-763
Fruit and Vegetables	-492	-1,261	-395	-833	425	30
Sugar	-12	31	-9	-26	-135	-145

Source: compiled by the study team. USD millions at 2017 prices.

Mexico, the main target of the NAFTA complaint in the United States, will lose markets in the United States, but will also claw back domestic market share in some major agricultural sectors where the United States made impressive gains following the implementation of NAFTA.

Table 14: Mexican Sectoral Impacts from Export Declines

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Sales	Total Sales
Automotive	-17,395	-8,919	-14,994	-6,693	826	-14,169
Machinery and Equipment	-4,073	-5,860	-2,713	-4,131	645	-2,069
Textiles and Apparel	-3,819	-2,861	-3,653	-2,074	396	-3,258
Chemicals, Rubber, Plastics	-1,882	-6,559	-1,222	-4,251	1,941	719
Fossil Fuels	-1,492	-1,284	-720	-1,464	-311	-1,031
Food Products	-1,333	-2,552	-1,279	-1,693	566	-713
Metal Products	-1,208	-2,317	-114	-2,220	-189	-304

Source: compiled by the study team. USD millions at 2017 prices.

Automotive, machinery and equipment, and textiles and apparel absorb the largest export reductions; none of these sectors makes up lost ground by picking up market share at the expense of NAFTA imports, and experience significant declines in total sales. The automotive sector would

likely see the complete loss of the light truck assembly business given the 25 percent tariff that would apply upon NAFTA lapsing. Only the chemicals, rubber and plastic sector is able to parlay a steep decline in imports into improved domestic sales and come out ahead on total sales.

Apart from automotive, the sectors suffering the largest declines are predominantly services industries that suffer a drop in sales because of declining domestic demand driven by falling incomes. Public services, construction, and trade lead the decline.

Table 15: Mexican Sectoral Impacts from Domestic Income Effects

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Sales	Total Sales
Other Services	45	-159	97	-246	-13,564	-13,468
Construction	-3	0	100	-10	-11,565	-11,465
Trade	44	-44	102	-138	-11,293	-11,192
Business Services	-248	-43	-132	-102	-5,647	-5,779
Transportation Services	261	-78	553	-287	-4,816	-4,263
Recreation	87	-64	225	-114	-4,390	-4,165
Mineral Products	-248	-362	-45	-449	-1,892	-1,937
Communications	-16	-63	19	-41	-1,654	-1,635
Financial Services	63	-177	340	-221	-1,888	-1,548

Source: compiled by the study team. USD millions at 2017 prices.

Mexico accepted major import penetration in its highly protected agricultural sector to get the NAFTA in the first place. NAFTA lapsing claws back domestic markets for Mexican agricultural producers. The largest import declines are in pork and poultry, dairy, beef, and cereal grains. All four sectors see significant boosts to total sales by Mexico's domestic producers due to declining imports and rising domestic sales. The only Mexican agricultural sector that suffers a loss in total sales due to declining exports is the export-oriented fruit and vegetables sector.

Table 16: Mexican Agricultural Sector Impacts

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Sales	Total Sales
Pork and Poultry	-23	-2,618	-55	-1,703	1,909	1,855
Dairy	-129	-1,215	-125	-836	501	376
Beef	-323	-736	-406	-454	421	15
Wheat and Cereals	-2	-685	-26	-461	594	567
Oilseeds and Vegetable Oils	-48	-396	-60	-158	81	22
Fruit and Vegetables	-782	-379	-755	-139	41	-714
Beverages and Tobacco	-35	-374	-24	-266	-275	-298
Other Agriculture	-127	-304	-155	-198	956	800

Source: compiled by the study team. USD millions at 2017 prices.

Primary sectors (forestry, fishing and mineral products) are little affected by NAFTA lapsing in any of the three NAFTA parties as tariffs in these sectors are generally very low. We note that this analysis does not take into account the impact of US anti-dumping and countervailing duties on softwood lumber from Canada or on other product groups from NAFTA partners.

4 DISCUSSION AND CONCLUSIONS

This study provides some quantitative estimates of the implications of fundamental changes in North American trade in the event that the United States withdraws from NAFTA. We report three scenarios – NAFTA lapsing, NAFTA lapsing but CUSFTA holding, and NAFTA lapsing but CUSFTA holding and a continuation of Canada-Mexico free trade under a separate agreement with NAFTA terms (CMFTA).

The simulations take explicit account of shocks to tariffs, services NTBs and investment NTBs. We do not explicitly take into account the fact that NAFTA preferences are not 100 percent utilized or the heightened uncertainty about access to US markets generated both by the lapsing of the NAFTA commitments and by the rhetoric of protectionism that colours the negotiations; in our view, these omissions work in opposite directions, the former implying an overstatement of the tariff impacts, the latter implying an understatement. In our view, the uncertainty factor likely dominates and the net effect is an expected understatement of the scale of the negative effects of new border protection. We do not factor into the analysis impacts on trade facilitation as regards border measures and government procurement, in good measure because WTO rules under the Trade Facilitation Agreement supersede the older NAFTA measures; and because regulatory cooperation goes on amongst the parties through mechanisms outside of the NAFTA framework.

The simulations estimate the impact of the policy shocks “once the dust has settled” and do not shed light on the path to that end-point. That path can feature quite disruptive developments, so there might be quite a lot of dust to settle. With regard to investment in particular, in a context where FDI tends to “crowd out” domestic investment, the withdrawal of FDI implies a “crowding in” of domestic investment. In the fullness of time, this may indeed occur as economic models expect. However, the impact on local economies of factories packing up and leaving, or of particular markets drying up, is not revealed or even hinted at in these results.

With these caveats, we draw the following conclusions about the impact of NAFTA lapsing and trade arrangements in North America partially or completely reverting to WTO rules.

Canada is the least affected of the three parties. In good measure this reflects the fact that about three-quarters of Canada’s applied MFN tariffs are zero and the most protected areas – the supply-managed dairy and poultry sectors – are not subject to NAFTA in the first place. Significant sectoral impacts from loss of export markets are therefore limited to a handful of sectors, most notably the automotive and chemicals-rubber-plastics sectors. If the CUSFTA holds, Canada stands to make some gains in the United States by diverting trade away from Mexico. If Canada and Mexico continue free trade under a CMFTA, Canada makes gains in the Mexican market, largely at the US expense.

The scale of the impact of NAFTA lapsing is considerably smaller than estimates of the gain from CUSFTA and NAFTA when these agreements were originally signed. This asymmetry is plausible: since the time the agreements were originally signed, the benefits of North America preferences have been substantially eroded by multilateral, regional and unilateral liberalization. Moreover, progress at the WTO and through the work of the World Customs Organization has

caught up with and indeed superseded the NAFTA in border trade facilitation. Similarly, the WTO Government Procurement Agreement (GPA) and WTO dispute settlement understanding (DSU) now provide multilateral regimes that make NAFTA's mechanisms largely redundant or strongly complement them.

Simply put, NAFTA now has much less influence over the direction and depth of trade between Canada and the United States than the CUSFTA had a quarter of a century ago.

The **United States** is exposed to trade with Canada and with Mexico in roughly equal measure: dropping free trade with either is damaging in roughly equal measure. For the US economy, the impacts would not be particularly large, but they are concentrated in two key areas: the automotive sector and agricultural exports to the Mexican market. Large, concentrated negative impacts represent something of a political "poison pill" – as the Canadian experience with attempts at dairy sector reform demonstrates. Industry and farm lobbies and Congress, which might tolerate more diffuse negative impacts, would likely rally against NAFTA termination because the pain would be sharply and quite narrowly felt. This battle will be fought within the United States, between US stakeholders, Congress and the White House, not for the most between Canada and Mexico and the Trump Administration. By the same token, this understanding undercuts the Trump Administration's threat to terminate NAFTA and indeed makes it look like a bluff.

The United States does not achieve its stated goal of balancing NAFTA trade – its exports to NAFTA partners go down by about the same amount as its imports from NAFTA partners. Ironically, the United States does stand to improve its external trade balance by withdrawing from NAFTA – however, this is not because of improved trade balances with its NAFTA partners, but because the negative impact on its economy drives down overall imports from all sources compared to exports. Recessions tend to improve trade balances, and essentially that is how the NAFTA lapsing scenario suggests the Trump Administration would achieve its stated bottom line objective.

Mexico is by far the most exposed economy to NAFTA lapsing. Mexico put its economic eggs in the NAFTA basket and thus faces outsized risks from losing its gamble. That being said, the Mexican agricultural sector, which absorbed deep market share cuts from NAFTA, would come out ahead if NAFTA lapses, easing Mexico's internal adjustment challenges. Further, apart from the automotive sector, Mexico's most affected sectors are all domestically oriented services sectors. A fiscal stimulus program aimed at domestic demand would be an available tool for Mexico to soften the blow there, without reaching for trade measures.

The automotive sector, and particularly light truck assembly, would be very hard hit in Mexico. Light truck assembly would likely immediately pack up and move into the United States to avoid the 25 percent tariff, if NAFTA lapses. This would cause dislocation to auto firms, but they could scarcely compete in the US market from a Mexican base under those tariff conditions, and so would have to bite the bullet and move. Mexico's Plan B would have to focus on re-orienting its auto exports to third markets, including possibly to the TPP region and south into Latin and South America.

While the CMFTA represents only a small offset to the NAFTA lapsing, it would be part of Mexico's Plan B and would likely involve no additional negotiating costs beyond what has already been expended in reviving the TPP by the eleven remaining parties. For Canada-Mexico trade, the TPP would be the CMFTA.

While the quantitative estimates presented in this study likely understate the actual impacts and are incomplete because they are not able to take into account a number of important features of the NAFTA, they serve to bring out a critical feature of the current state of affairs: as NAFTA preferences have eroded over time, NAFTA's effective impact on trade has become sectorally and regionally concentrated. This increases the political difficulty of change and ironically works to ensure the NAFTA's survival.

For the negotiators, this sets the stage for protracted talks, since the basis of a deal is not on the table and threat to terminate the talks by pulling the plug on NAFTA is likely a political bridge too far.

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APPENDIX A: SECTORAL IMPACTS

Table A1: Canadian Sectoral Impacts: NAFTA Lapses

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Shipments	Total Shipments	Bilateral Exports %	Bilateral Imports %	Total Shipments %	Value-added share %
Rice	-2.3	1.6	1.4	-2.5	1.0	-1.1	-31.44	0.55	-0.22	0.001
Wheat and Cereals	-114.3	-7.0	-65.0	19.8	-8.3	-45.2	-4.94	-1.13	-0.25	0.337
Fruit and Vegetables	-166.9	-277.6	92.6	-119.3	-143.2	-26.7	-9.17	-3.90	-0.33	0.179
Oilseeds and Vegetable Oils	-421.0	-123.7	12.8	-156.5	-109.4	-143.7	-5.63	-6.14	-0.45	0.499
Sugar	-8.9	-10.5	-12.0	-9.6	-10.7	-21.5	-2.89	-14.11	-0.70	0.039
Other Agriculture	-311.1	-381.5	-11.1	-255.9	-122.8	-267.0	-11.01	-32.39	-1.27	0.314
Dairy	14.0	-0.9	-263.6	29.3	-14.1	-234.2	7.38	-0.27	-0.71	0.367
Forestry	-0.7	-3.9	-28.0	19.5	-4.3	-8.5	-0.38	-0.76	-0.04	0.467
Fishing	-9.0	-25.9	-36.7	-2.7	-26.4	-39.5	-0.67	-3.06	-0.71	0.127
Fossil Fuels	-2,922.3	-2,033.1	-167.2	-2,183.9	-1,787.5	-2,351.1	-3.06	-8.12	-0.83	5.411
Mineral Products	-86.9	-246.9	-412.7	96.5	-318.4	-316.1	-1.68	-2.52	-0.39	1.494
Beef	-592.0	-908.0	413.2	-567.3	-594.9	-154.1	-32.53	-69.28	-0.54	0.324
Pork and Poultry	-94.1	-76.5	21.8	-7.2	-77.5	14.6	-5.72	-3.44	0.08	0.184
Food Products	-1,199.7	-1,728.6	439.4	-1,165.8	-1,181.5	-726.3	-9.39	-13.85	-1.04	0.908
Beverages and Tobacco	-39.8	-290.7	-136.4	-35.8	-220.5	-172.3	-2.55	-8.57	-0.66	0.503
Textiles and Apparel	-1,080.0	-1,508.5	260.0	-1,047.8	-919.4	-787.9	-40.80	-40.19	-3.34	0.416
Leather Products	-77.4	-99.8	9.9	-73.9	-72.3	-64.0	-58.14	-44.71	-3.93	0.028
Wood Products	-385.2	-943.3	-200.5	11.0	-847.5	-189.5	-1.43	-5.06	-0.12	2.548
Chemicals, Rubber, Plastics	-5,979.6	-4,676.2	961.6	-5,254.7	-3,548.2	-4,293.1	-11.38	-9.04	-2.42	2.285
Metal Products	-2,319.4	-1,076.1	-476.3	-1,301.6	-1,311.1	-1,777.9	-5.72	-3.61	-0.94	2.326
Automotive	-5,715.5	-7,989.5	2,066.7	-5,738.9	-5,418.7	-3,672.2	-7.48	-10.59	-2.48	1.461
Transport Equipment	-144.3	-695.9	169.6	-33.2	-334.7	136.4	-1.19	-7.39	0.40	0.593
Electronic Equipment	1.2	-301.2	49.6	105.1	-419.1	154.6	0.02	-2.65	0.52	0.425
Machinery and Equipment	-1,538.2	-1,588.7	244.5	-1,026.3	-1,691.4	-781.8	-5.28	-2.48	-0.79	1.682
Other Manufacturing	-46.8	-358.8	-723.1	76.7	-337.9	-646.4	-0.67	-13.44	-0.64	2.302
Other Services	54.9	-849.3	-9,731.3	150.1	-591.2	-9,581.2	1.54	-9.08	-0.96	28.265
Construction	-3.2	-0.1	-5,501.0	9.8	-15.0	-5,491.2	-37.77	-0.67	-1.31	7.941
Trade	29.1	-37.5	-6,033.8	129.3	-157.6	-5,904.5	1.25	-1.18	-1.09	13.805
Transportation Services	42.0	-104.1	-1,039.7	255.7	-329.3	-783.9	0.88	-1.72	-0.54	2.563
Communications	-98.4	-11.8	-1,093.6	-32.2	-74.2	-1,125.7	-7.62	-0.95	-1.02	2.790
Financial Services	96.9	-485.9	-1,971.0	223.6	-460.8	-1,747.4	1.12	-4.92	-0.69	5.815
Business Services	-2,718.8	-65.9	-5,184.8	-2,036.4	-596.4	-7,221.1	-27.88	-1.35	-1.50	11.665
Recreation Services	7.5	-531.8	-383.3	122.2	-272.5	-261.0	0.38	-8.64	-0.30	1.939

Source: Calculations by the study team. USD millions at 2017 prices.

Table A2: Canadian Sectoral Impacts: NAFTA Lapses but CUSFTA Holds

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Shipments	Total Shipments	Bilateral Exports %	Bilateral Imports %	Total Shipments %	Value-added share %
Rice	0.0	0.8	0.2	0.0	0.2	0.2	-0.35	0.29	0.03	0.001
Wheat and Cereals	-94.8	1.4	-14.2	-75.5	0.8	-89.7	-4.10	0.22	-0.51	0.337
Fruit and Vegetables	29.7	-30.6	9.0	25.1	-17.9	34.1	1.63	-0.43	0.43	0.179
Oilseeds and Vegetable Oils	185.0	17.3	21.8	121.5	16.4	143.4	2.47	0.86	0.45	0.499
Sugar	-6.4	0.8	1.7	-6.0	-0.8	-4.3	-2.07	1.09	-0.14	0.039
Other Agriculture	-66.7	9.3	3.7	-60.9	-1.9	-57.3	-2.36	0.79	-0.27	0.314
Dairy	8.4	5.5	27.6	8.1	3.8	35.8	4.44	1.67	0.11	0.367
Forestry	-0.9	0.1	-21.0	3.5	-0.2	-17.4	-0.50	0.01	-0.08	0.467
Fishing	-5.3	0.8	0.6	-4.0	0.4	-3.4	-0.39	0.10	-0.06	0.127
Fossil Fuels	-0.6	68.8	-73.3	-10.2	15.8	-83.4	0.00	0.27	-0.03	5.411
Mineral Products	-8.4	16.1	15.8	0.2	12.4	16.0	-0.16	0.16	0.02	1.494
Beef	30.3	14.2	23.9	31.7	10.4	55.7	1.66	1.08	0.19	0.324
Pork and Poultry	21.0	20.0	-13.9	25.1	13.9	11.2	1.28	0.90	0.06	0.184
Food Products	39.2	7.8	41.4	39.7	11.5	81.0	0.31	0.06	0.12	0.908
Beverages and Tobacco	-9.3	6.6	24.2	-9.1	7.5	15.0	-0.60	0.20	0.06	0.503
Textiles and Apparel	-21.4	-145.7	54.7	-22.5	-22.3	32.2	-0.81	-3.88	0.14	0.416
Leather Products	-1.0	-9.9	2.3	-1.0	2.2	1.3	-0.76	-4.44	0.08	0.028
Wood Products	-164.6	43.6	-11.6	-158.7	23.1	-170.3	-0.61	0.23	-0.11	2.548
Chemicals, Rubber, Plastics	-241.1	125.7	-48.9	-221.3	34.5	-270.2	-0.46	0.24	-0.15	2.285
Metal Products	-80.0	199.9	9.6	-72.8	92.3	-63.2	-0.20	0.67	-0.03	2.326
Automotive	1,348.3	-231.4	403.2	1,301.2	91.0	1,704.4	1.76	-0.31	1.15	1.461
Transport Equipment	-101.7	-10.6	5.0	-89.3	-15.6	-84.3	-0.84	-0.11	-0.25	0.593
Electronic Equipment	-28.5	-95.8	24.4	-37.5	-16.4	-13.2	-0.52	-0.84	-0.04	0.425
Machinery and Equipment	-109.0	286.9	-63.8	-102.3	85.3	-166.1	-0.37	0.45	-0.17	1.682
Other Manufacturing	-46.7	6.2	50.6	-47.5	10.8	3.1	-0.67	0.23	0.00	2.302
Other Services	-13.5	34.8	1,373.0	-21.4	31.6	1,351.6	-0.38	0.37	0.14	28.265
Construction	0.0	0.2	556.8	-0.1	1.5	556.7	-0.37	0.96	0.13	7.941
Trade	-10.9	15.8	700.5	-13.8	19.7	686.6	-0.47	0.50	0.13	13.805
Transportation Services	-20.7	22.2	84.6	-29.7	28.4	54.8	-0.43	0.37	0.04	2.563
Communications	-4.2	7.0	112.8	-7.5	8.4	105.2	-0.32	0.56	0.10	2.790
Financial Services	-43.3	40.1	242.3	-56.8	41.7	185.5	-0.50	0.41	0.07	5.815
Business Services	-25.7	27.6	528.1	-50.2	63.8	477.9	-0.26	0.56	0.10	11.665
Recreation Services	-16.4	20.6	88.6	-26.4	21.0	62.3	-0.84	0.34	0.07	1.939

Source: Calculations by the study team. USD millions at 2017 prices.

Table A3: Canadian Sectoral Impacts: NAFTA Lapses but CUSFTA Holds and CMFTA Adopted

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Shipments	Total Shipments	Bilateral Exports %	Bilateral Imports %	Total Shipments %	Value-added share %
Rice	0.0	0.9	0.1	0.0	-67.7	0.1	0.15	0.31	0.03	0.001
Wheat and Cereals	125.9	6.5	22.2	20.5	-50.3	42.8	5.44	1.05	0.24	0.337
Fruit and Vegetables	81.7	17.2	-8.6	60.1	-2,104.4	51.5	4.49	0.24	0.64	0.179
Oilseeds and Vegetable Oils	196.5	21.8	22.0	91.7	-188.2	113.7	2.63	1.08	0.36	0.499
Sugar	-6.8	0.9	5.2	-6.9	-87.2	-1.6	-2.22	1.22	-0.05	0.039
Other Agriculture	-29.9	19.0	231.2	-54.4	-229.9	176.8	-1.06	1.62	0.84	0.314
Dairy	7.1	7.1	67.1	3.7	-29.7	70.8	3.76	2.17	0.21	0.367
Forestry	0.3	0.3	-23.8	3.1	-64.5	-20.8	0.17	0.05	-0.10	0.467
Fishing	-5.1	2.8	8.2	-4.6	-160.1	3.6	-0.39	0.33	0.06	0.127
Fossil Fuels	-45.5	79.2	-30.9	-63.4	-2,347.3	-94.3	-0.05	0.32	-0.03	5.411
Mineral Products	-10.4	37.4	46.5	-17.7	-2,614.3	28.7	-0.20	0.38	0.04	1.494
Beef	452.1	39.3	196.7	430.3	-52.2	627.0	24.84	3.00	2.18	0.324
Pork and Poultry	321.1	54.6	77.8	274.1	-104.4	351.9	19.54	2.46	2.00	0.184
Food Products	151.3	72.9	115.7	139.1	-1,431.4	254.7	1.18	0.58	0.37	0.908
Beverages and Tobacco	-3.5	13.2	53.8	-3.9	-514.7	49.9	-0.22	0.39	0.19	0.503
Textiles and Apparel	20.7	68.1	10.7	17.9	-1,006.3	28.5	0.78	1.81	0.12	0.416
Leather Products	-0.1	2.1	0.7	-0.5	-197.0	0.2	-0.08	0.92	0.02	0.028
Wood Products	-176.9	129.5	30.9	-223.7	-2,628.9	-192.8	-0.66	0.70	-0.12	2.548
Chemicals, Rubber, Plastics	-10.9	296.3	-27.1	-63.4	-4,345.3	-90.4	-0.02	0.57	-0.05	2.285
Metal Products	-83.6	277.7	73.7	-182.3	-2,537.2	-108.6	-0.21	0.93	-0.06	2.326
Automotive	2,708.4	947.8	165.6	2,654.4	-3,104.2	2,820.0	3.55	1.26	1.90	1.461
Transport Equipment	-71.6	56.3	-11.6	-82.9	-320.5	-94.4	-0.59	0.60	-0.28	0.593
Electronic Equipment	-16.2	218.9	-47.5	-29.8	-567.0	-77.4	-0.29	1.92	-0.26	0.425
Machinery and Equipment	-18.6	521.5	-105.7	-67.0	-3,810.5	-172.7	-0.06	0.81	-0.17	1.682
Other Manufacturing	-46.7	29.7	128.1	-61.1	-399.7	67.0	-0.67	1.11	0.07	2.302
Other Services	-23.7	57.3	2,796.5	-45.5	61.4	2,750.9	-0.67	0.61	0.27	28.265
Construction	-0.1	0.2	1,321.7	-1.7	3.7	1,320.0	-0.62	1.20	0.32	7.941
Trade	-17.6	24.4	1,536.0	-34.2	43.1	1,501.8	-0.76	0.77	0.28	13.805
Transportation Services	-28.1	32.6	220.0	-59.9	65.8	160.2	-0.59	0.54	0.11	2.563
Communications	-6.6	9.7	244.2	-18.1	17.9	226.2	-0.51	0.78	0.21	2.790
Financial Services	-60.0	64.1	544.3	-91.8	88.6	452.5	-0.70	0.65	0.18	5.815
Business Services	-47.7	41.3	1,149.5	-147.8	140.9	1,001.7	-0.49	0.84	0.21	11.665
Recreation Services	-20.4	36.6	-49.3	44.5	182.3	133.0	-1.04	0.60	0.15	1.939

Source: Calculations by the study team. USD millions at 2017 prices.

Table A4: US Sectoral Impacts: NAFTA Lapses

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Shipments	Total Shipments	Bilateral Exports %	Bilateral Imports %	Total Shipments %	Value- added share %
Rice	-2.7	-3.6	-10.4	31.3	-8.3	20.9	-0.36	-28.07	0.16	0.021
Wheat and Cereals	-559.1	-43.7	-717.5	-45.5	-49.6	-763.0	-7.97	-2.29	-0.58	0.320
Fruit and Vegetables	-492.0	-1,261.2	424.7	-395.5	-832.8	29.3	-8.53	-7.95	0.03	0.243
Oilseeds and Vegetable Oils	-680.6	-800.5	238.7	-249.7	-467.7	-11.0	-11.19	-12.25	-0.01	0.204
Sugar	-12.4	30.4	-135.3	-9.2	-26.1	-144.5	-4.33	1.17	-0.59	0.033
Other Agriculture	-567.7	-401.9	-1,706.6	33.5	-345.6	-1,673.1	-16.63	-8.41	-0.91	0.300
Dairy	-1,147.0	-131.0	-1,038.7	-992.1	-123.4	-2,030.9	-64.71	-33.40	-1.05	0.223
Forestry	-13.8	-1.8	-88.2	22.2	-4.9	-66.0	-2.71	-0.68	-0.20	0.079
Fishing	-25.7	-8.2	-62.3	-17.0	-33.0	-79.2	-3.58	-0.46	-0.71	0.035
Fossil Fuels	-3,154.1	-4,602.9	-286.2	-1,895.3	-3,464.6	-2,181.6	-5.19	-3.20	-0.15	1.652
Mineral Products	-511.6	-372.0	-531.2	-389.2	-464.0	-920.4	-4.55	-3.31	-0.31	0.693
Beef	-1,548.3	-966.3	-329.8	-1,401.9	-624.9	-1,731.7	-41.78	-45.00	-1.07	0.206
Pork and Poultry	-2,592.2	-156.7	-443.3	-2,265.0	-140.7	-2,708.3	-54.84	-8.96	-2.05	0.170
Food Products	-3,757.2	-2,651.9	-424.0	-3,506.7	-1,771.1	-3,930.7	-24.71	-12.26	-0.75	0.924
Beverages and Tobacco	-590.3	-75.0	-542.8	-541.4	-153.8	-1,084.2	-13.65	-1.21	-0.51	0.352
Textiles and Apparel	-3,858.1	-4,942.0	825.9	-3,620.4	-3,201.3	-2,794.5	-44.80	-43.09	-0.76	0.586
Leather Products	-251.5	-446.8	76.4	-205.0	-292.2	-128.6	-43.37	-46.79	-0.62	0.038
Wood Products	-1,552.2	-302.8	-2,647.9	-1,019.4	-1,003.3	-3,667.3	-6.09	-0.74	-0.33	2.474
Chemicals, Rubber, Plastics	-10,218.9	-8,177.1	1,013.0	-6,867.0	-5,871.2	-5,854.0	-10.83	-11.78	-0.40	2.680
Metal Products	-3,251.7	-3,686.9	71.1	-2,036.0	-3,027.9	-1,964.9	-7.02	-5.14	-0.19	1.836
Automotive	-14,473.7	-22,396.9	7,756.9	-14,027.6	-13,062.3	-6,270.7	-15.17	-13.86	-0.74	0.970
Transport Equipment	-801.1	102.1	-168.3	573.1	-360.5	404.8	-7.60	0.60	0.11	0.777
Electronic Equipment	-1,522.3	-873.8	866.3	-275.3	-2,214.8	591.1	-8.75	-1.21	0.09	0.446
Machinery and Equipment	-7,149.9	-5,770.4	1,384.6	-2,627.9	-6,078.4	-1,243.4	-7.04	-5.06	-0.08	3.509
Other Manufacturing	-657.0	-215.7	-1,299.5	-235.5	-879.7	-1,535.0	-16.58	-2.44	-0.22	1.422
Other Services	-1,008.2	100.7	-25,249.1	-87.9	-225.8	-25,337.1	-7.69	2.32	-0.27	31.815
Construction	-0.2	-6.5	-8,846.5	101.9	-34.0	-8,744.6	-1.14	-36.81	-0.34	6.777
Trade	-82.0	72.8	-12,852.8	145.1	-168.7	-12,707.7	-1.95	2.27	-0.29	12.853
Transportation Services	-183.2	302.8	-3,313.1	366.1	-408.6	-2,947.1	-2.21	2.64	-0.21	2.923
Communications	-75.1	-114.8	-1,911.3	63.5	-115.0	-1,847.7	-5.36	-7.01	-0.23	2.102
Financial Services	-656.3	165.9	-8,387.3	8.0	-504.0	-8,379.3	-5.54	1.64	-0.26	9.694
Business Services	-105.8	-2,963.6	-5,694.1	1,067.4	-1,556.8	-4,626.7	-2.12	-27.67	-0.15	10.348
Recreation Services	-592.4	98.3	-244.8	-52.9	-4,923.6	-5,168.4	-7.25	2.45	-0.28	3.297

Source: Calculations by the study team. USD millions at 2017 prices.

Table A5: US Sectoral Impacts: NAFTA Lapses but CUSFTA Holds

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Shipments	Total Shipments	Bilateral Exports %	Bilateral Imports %	Total Shipments %	Value-added share %
Rice	-4.2	-1.0	-7.8	17.7	-4.7	9.9	-0.55	-7.87	0.08	0.021
Wheat and Cereals	-560.9	-16.7	-582.9	-136.9	-24.2	-719.8	-7.99	-0.88	-0.55	0.320
Fruit and Vegetables	-248.2	-1,005.4	376.8	-196.7	-650.8	180.1	-4.30	-6.33	0.20	0.243
Oilseeds and Vegetable Oils	-531.2	-95.2	-70.1	-123.5	-104.1	-193.6	-8.73	-1.46	-0.19	0.204
Sugar	-3.6	42.4	-108.4	-1.3	-9.8	-109.8	-1.26	1.63	-0.45	0.033
Other Agriculture	-216.1	-138.3	-1,419.5	205.9	-185.8	-1,213.5	-6.33	-2.89	-0.66	0.300
Dairy	-1,143.6	-135.6	-809.7	-1,026.1	-113.3	-1,835.7	-64.52	-34.57	-0.95	0.223
Forestry	-10.2	-1.9	-41.5	11.1	-3.1	-30.4	-2.01	-0.73	-0.09	0.079
Fishing	-2.8	-4.3	-25.4	0.8	-13.6	-24.6	-0.39	-0.24	-0.22	0.035
Fossil Fuels	-1,266.3	-1,601.3	-439.4	-725.5	-1,467.7	-1,165.0	-2.08	-1.11	-0.08	1.652
Mineral Products	-301.4	-264.8	-247.7	-234.0	-298.1	-481.8	-2.68	-2.36	-0.16	0.693
Beef	-672.8	-320.2	-419.7	-575.4	-236.1	-995.2	-18.15	-14.91	-0.62	0.206
Pork and Poultry	-2,458.1	-32.5	-352.7	-2,214.4	-50.6	-2,567.1	-52.00	-1.86	-1.94	0.170
Food Products	-2,158.3	-1,350.0	-291.9	-2,010.3	-929.6	-2,302.2	-14.19	-6.24	-0.44	0.924
Beverages and Tobacco	-316.9	-33.3	-272.7	-289.4	-83.5	-562.2	-7.33	-0.54	-0.27	0.352
Textiles and Apparel	-2,593.1	-3,811.6	805.4	-2,459.3	-2,166.1	-1,653.9	-30.11	-33.23	-0.45	0.586
Leather Products	-169.0	-363.7	59.0	-140.5	-187.7	-81.5	-29.15	-38.08	-0.39	0.038
Wood Products	-666.1	-8.1	-1,435.2	-351.8	-435.7	-1,787.0	-2.61	-0.02	-0.16	2.474
Chemicals, Rubber, Plastics	-5,822.3	-2,017.7	-386.8	-3,775.9	-2,281.0	-4,162.7	-6.17	-2.91	-0.28	2.680
Metal Products	-2,123.0	-1,388.2	-141.5	-1,414.1	-1,438.0	-1,555.6	-4.58	-1.94	-0.15	1.836
Automotive	-6,454.3	-15,596.3	6,112.5	-6,367.9	-8,825.3	-255.5	-6.77	-9.65	-0.03	0.970
Transport Equipment	-120.5	183.4	-104.1	602.7	-123.6	498.6	-1.14	1.08	0.14	0.777
Electronic Equipment	-1,398.0	-754.6	390.1	-693.3	-1,555.6	-303.2	-8.03	-1.04	-0.04	0.446
Machinery and Equipment	-5,522.9	-4,040.7	1,121.2	-2,900.7	-3,953.5	-1,779.6	-5.44	-3.54	-0.12	3.509
Other Manufacturing	-313.5	-204.6	-635.2	-89.2	-478.7	-724.3	-7.91	-2.31	-0.10	1.422
Other Services	-140.8	37.4	-12,250.1	364.2	-115.5	-11,886.0	-1.07	0.86	-0.13	31.815
Construction	0.1	-3.2	-4,675.9	55.5	-18.3	-4,620.3	0.38	-18.48	-0.18	6.777
Trade	-34.5	38.4	-6,443.0	90.9	-86.9	-6,352.1	-0.82	1.20	-0.15	12.853
Transportation Services	-67.3	270.3	-1,788.0	228.5	-179.0	-1,559.4	-0.81	2.36	-0.11	2.923
Communications	-57.5	-20.4	-989.2	21.6	-49.0	-967.6	-4.11	-1.24	-0.12	2.102
Financial Services	-138.5	37.2	-4,149.5	221.5	-279.6	-3,928.0	-1.17	0.37	-0.12	9.694
Business Services	-13.0	-277.2	-3,895.5	675.1	-437.2	-3,220.4	-0.26	-2.59	-0.10	10.348
Recreation Services	-45.1	87.8	-2,414.8	146.9	-14.2	-2,267.8	-0.55	2.19	-0.12	3.297

Source: Calculations by the study team. USD millions at 2017 prices.

Table A6: US Sectoral Impacts: NAFTA Lapses but CUSFTA Holds and CMFTA Adopted

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Shipments	Total Shipments	Bilateral Exports %	Bilateral Imports %	Total Shipments %	Value-added share %
Rice	-3.8	-1.0	-8.5	18.9	-122.8	10.3	-0.50	-7.63	0.08	0.021
Wheat and Cereals	-717.2	-31.6	-613.6	-215.2	-177.3	-828.8	-10.22	-1.66	-0.63	0.320
Fruit and Vegetables	-336.4	-1,039.0	377.5	-271.6	-7,689.3	105.9	-5.83	-6.55	0.12	0.243
Oilseeds and Vegetable Oils	-537.5	-109.3	-58.6	-110.6	-1,140.7	-169.2	-8.84	-1.67	-0.16	0.204
Sugar	-3.1	38.4	-106.1	-0.8	-458.1	-107.0	-1.10	1.47	-0.44	0.033
Other Agriculture	-247.1	-178.6	-1,523.4	207.3	-2,078.9	-1,316.1	-7.24	-3.74	-0.71	0.300
Dairy	-1,140.9	-137.2	-841.0	-1,018.2	-236.3	-1,859.2	-64.36	-34.97	-0.96	0.223
Forestry	-10.4	-2.3	-42.2	11.7	-85.7	-30.4	-2.04	-0.85	-0.09	0.079
Fishing	-1.2	-5.4	-24.5	2.3	-713.0	-22.2	-0.16	-0.30	-0.20	0.035
Fossil Fuels	-1,224.2	-1,693.8	-397.2	-668.6	-24,462.3	-1,065.8	-2.01	-1.18	-0.07	1.652
Mineral Products	-288.3	-278.6	-263.2	-217.0	-6,621.9	-480.3	-2.56	-2.48	-0.16	0.693
Beef	-963.5	-344.3	-459.3	-857.5	-573.0	-1,316.9	-26.00	-16.03	-0.81	0.206
Pork and Poultry	-2,502.4	-54.5	-360.1	-2,238.9	-249.5	-2,599.0	-52.94	-3.12	-1.96	0.170
Food Products	-2,178.2	-1,389.3	-350.7	-2,023.2	-6,062.1	-2,374.0	-14.32	-6.42	-0.45	0.924
Beverages and Tobacco	-314.1	-38.4	-300.9	-285.7	-2,108.7	-586.6	-7.26	-0.62	-0.28	0.352
Textiles and Apparel	-2,606.9	-3,860.1	786.1	-2,466.8	-12,367.8	-1,680.8	-30.27	-33.66	-0.46	0.586
Leather Products	-169.6	-359.9	58.9	-140.0	-3,262.3	-81.1	-29.24	-37.68	-0.39	0.038
Wood Products	-661.2	-115.2	-1,483.8	-324.7	-13,811.6	-1,808.5	-2.59	-0.28	-0.16	2.474
Chemicals, Rubber, Plastics	-5,866.3	-2,206.6	-400.4	-3,728.6	-21,249.5	-4,129.0	-6.22	-3.18	-0.28	2.680
Metal Products	-2,078.3	-1,567.3	-177.1	-1,321.6	-11,867.7	-1,498.7	-4.49	-2.19	-0.15	1.836
Automotive	-7,784.2	-15,993.0	6,053.7	-7,660.6	-19,986.0	-1,606.9	-8.16	-9.90	-0.19	0.970
Transport Equipment	-154.1	121.1	-91.1	614.3	-2,197.4	523.2	-1.46	0.72	0.14	0.777
Electronic Equipment	-1,454.0	-1,041.0	499.6	-712.4	-10,210.2	-212.8	-8.36	-1.44	-0.03	0.446
Machinery and Equipment	-5,513.3	-4,415.6	1,177.3	-2,755.5	-24,953.2	-1,578.2	-5.43	-3.87	-0.10	3.509
Other Manufacturing	-309.1	-239.9	-696.5	-71.2	-6,064.3	-767.7	-7.80	-2.71	-0.11	1.422
Other Services	-107.0	23.6	-14,038.6	432.9	-130.1	-13,605.8	-0.82	0.54	-0.15	31.815
Construction	0.1	-3.3	-5,184.7	58.8	-19.9	-5,125.9	0.66	-18.74	-0.20	6.777
Trade	-22.2	27.9	-7,310.4	111.7	-101.1	-7,198.7	-0.53	0.87	-0.17	12.853
Transportation Services	-51.4	243.0	-1,916.6	265.2	-204.5	-1,651.4	-0.62	2.12	-0.12	2.923
Communications	-54.6	-24.7	-1,119.6	30.8	-54.6	-1,088.8	-3.90	-1.51	-0.14	2.102
Financial Services	-112.8	8.9	-4,678.6	279.1	-319.9	-4,399.5	-0.95	0.09	-0.14	9.694
Business Services	0.8	-305.5	-4,348.9	738.5	-481.9	-3,610.4	0.02	-2.85	-0.11	10.348
Recreation Services	-30.3	76.3	-2,739.4	177.6	-22.9	-2,561.8	-0.37	1.91	-0.14	3.297

Source: Calculations by the study team. USD millions at 2017 prices.

Table A7: Mexican Sectoral Impacts: NAFTA Lapses

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Shipments	Total Shipments	Bilateral Exports %	Bilateral Imports %	Total Shipments %	Value-added share %
Rice	-0.9	-4.5	-4.6	-0.8	-4.9	-5.5	-21.71	-0.81	-0.67	0.028
Wheat and Cereals	-2.2	-684.8	593.5	-26.0	-460.6	567.5	-9.36	-8.91	6.04	0.425
Fruit and Vegetables	-782.1	-378.8	40.3	-754.6	-139.7	-714.3	-7.68	-21.35	-3.37	1.059
Oilseeds and Vegetable Oils	-48.1	-395.7	81.6	-60.1	-158.2	21.5	-25.89	-5.71	0.35	0.029
Sugar	32.8	-4.1	-138.5	35.5	-8.6	-103.0	1.58	-1.50	-0.76	0.374
Other Agriculture	-127.3	-303.6	955.3	-155.0	-197.9	800.3	-7.39	-11.52	2.75	0.950
Dairy	-129.6	-1,214.8	501.3	-125.2	-836.1	376.1	-66.81	-77.02	1.23	0.659
Forestry	-1.9	-12.5	-1.8	-0.5	-8.4	-2.3	-3.05	-20.75	-0.03	0.338
Fishing	-0.4	-4.2	-61.5	3.4	-3.7	-58.0	-0.30	-24.74	-1.90	0.108
Fossil Fuels	-1,492.6	-1,284.2	-310.9	-720.2	-1,463.4	-1,031.1	-3.49	-3.20	-0.63	2.270
Mineral Products	-248.3	-361.9	-1,891.2	-44.9	-448.8	-1,936.1	-5.49	-8.97	-2.48	2.224
Beef	-322.7	-735.8	421.3	-406.3	-454.4	15.0	-55.65	-24.20	0.15	0.174
Pork and Poultry	-22.8	-2,617.5	1,909.3	-54.3	-1,703.0	1,855.0	-19.36	-90.79	13.52	0.203
Food Products	-1,332.9	-2,552.6	565.8	-1,279.2	-1,693.5	-713.4	-18.16	-54.71	-0.72	2.319
Beverages and Tobacco	-35.3	-374.2	-275.1	-23.7	-265.3	-298.8	-0.84	-23.60	-0.90	0.751
Textiles and Apparel	-3,819.0	-2,860.0	395.6	-3,653.1	-2,073.8	-3,257.5	-44.47	-48.58	-9.90	0.693
Leather Products	-360.2	-178.9	-174.6	-374.4	-120.9	-549.1	-44.96	-43.08	-4.63	0.232
Wood Products	59.5	-818.1	55.6	145.6	-693.0	201.1	0.50	-7.01	0.40	1.011
Chemicals, Rubber, Plastics	-1,882.3	-6,559.8	1,940.7	-1,221.9	-4,250.9	718.8	-13.53	-12.66	0.54	2.550
Metal Products	-1,208.4	-2,316.9	-189.0	-114.5	-2,219.3	-303.5	-3.79	-10.22	-0.22	2.792
Automotive	-17,394.6	-8,919.4	826.1	-14,994.3	-6,692.7	-14,168.2	-19.33	-24.26	-7.61	3.380
Transport Equipment	119.7	-230.0	-209.5	197.2	-312.4	-12.4	2.29	-9.79	-0.06	0.493
Electronic Equipment	-1,064.7	-1,454.2	247.7	59.7	-1,126.0	307.4	-1.52	-12.67	0.28	2.702
Machinery and Equipment	-4,072.7	-5,860.2	644.6	-2,714.0	-4,131.6	-2,069.4	-4.75	-12.43	-1.59	2.946
Other Manufacturing	-202.5	-361.7	-913.5	-152.4	-394.6	-1,065.9	-11.02	-23.05	-1.58	1.094
Other Services	45.3	-159.4	-13,564.0	96.1	-245.4	-13,467.9	5.71	-4.24	-2.94	22.667
Construction	-3.2	0.0	-11,564.4	99.7	-10.1	-11,464.7	-30.27	-5.67	-4.81	6.767
Trade	43.8	-44.3	-11,293.2	101.6	-138.4	-11,191.6	4.93	-4.25	-3.25	14.521
Transportation Services	261.5	-78.4	-4,815.3	552.5	-287.9	-4,262.8	3.85	-3.33	-2.22	6.307
Communications	-16.2	-63.0	-1,653.9	19.1	-40.7	-1,634.7	-4.27	-33.64	-2.57	2.152
Financial Services	62.6	-176.9	-1,888.6	340.6	-220.3	-1,548.0	3.88	-8.54	-1.76	3.028
Business Services	-248.3	-43.3	-5,647.6	-131.1	-102.4	-5,778.8	-25.26	-37.58	-2.73	8.380
Recreation Services	87.2	-64.2	-4,389.7	224.5	-114.1	-4,165.2	4.05	-3.02	-2.74	6.373

Source: Calculations by the study team. USD millions at 2017 prices.

Table A8: Mexican Sectoral Impacts: NAFTA Lapses but CUSFTA Holds

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Shipments	Total Shipments	Bilateral Exports %	Bilateral Imports %	Total Shipments %	Value-added share %
Rice	-4.2	-1.0	-7.8	-0.8	-5.8	-8.6	-0.55	-7.87	-0.10	0.028
Wheat and Cereals	-560.9	-16.7	-582.9	-23.1	-476.1	-606.0	-7.99	-0.88	-0.71	0.425
Fruit and Vegetables	-248.2	-1,005.4	376.8	-826.0	-141.9	-449.2	-4.30	-6.33	-0.54	1.059
Oilseeds and Vegetable Oils	-531.2	-95.2	-70.1	-67.6	-164.1	-137.7	-8.73	-1.46	-0.27	0.029
Sugar	-3.6	42.4	-108.4	44.0	-9.8	-64.5	-1.26	1.63	-0.25	0.374
Other Agriculture	-216.1	-138.3	-1,419.5	-159.5	-208.4	-1,579.0	-6.33	-2.89	-1.01	0.950
Dairy	-1,143.6	-135.6	-809.7	-123.9	-842.1	-933.6	-64.52	-34.57	-0.50	0.659
Forestry	-10.2	-1.9	-41.5	-0.5	-8.4	-42.0	-2.01	-0.73	-0.15	0.338
Fishing	-2.8	-4.3	-25.4	4.7	-3.8	-20.7	-0.39	-0.24	-0.21	0.108
Fossil Fuels	-1,266.3	-1,601.3	-439.4	-736.9	-1,545.7	-1,176.3	-2.08	-1.11	-0.09	2.270
Mineral Products	-301.4	-264.8	-247.7	-23.5	-467.4	-271.3	-2.68	-2.36	-0.10	2.224
Beef	-672.8	-320.2	-419.7	-419.7	-458.7	-839.4	-18.15	-14.91	-0.55	0.174
Pork and Poultry	-2,458.1	-32.5	-352.7	-48.4	-1,708.6	-401.1	-52.00	-1.86	-0.34	0.203
Food Products	-2,158.3	-1,350.0	-291.9	-1,334.5	-1,707.4	-1,626.4	-14.19	-6.24	-0.33	2.319
Beverages and Tobacco	-316.9	-33.3	-272.7	-18.2	-268.1	-290.9	-7.33	-0.54	-0.15	0.751
Textiles and Apparel	-2,593.1	-3,811.6	805.4	-3,646.1	-2,094.5	-2,840.8	-30.11	-33.23	-0.80	0.693
Leather Products	-169.0	-363.7	59.0	-371.6	-127.3	-312.5	-29.15	-38.08	-1.67	0.232
Wood Products	-666.1	-8.1	-1,435.2	180.6	-716.9	-1,254.6	-2.61	-0.02	-0.12	1.011
Chemicals, Rubber, Plastics	-5,822.3	-2,017.7	-386.8	-1,270.6	-4,388.4	-1,657.4	-6.17	-2.91	-0.15	2.550
Metal Products	-2,123.0	-1,388.2	-141.5	-111.2	-2,305.4	-252.6	-4.58	-1.94	-0.03	2.792
Automotive	-6,454.3	-15,596.3	6,112.5	-16,126.4	-7,009.7	-10,013.9	-6.77	-9.65	-1.27	3.380
Transport Equipment	-120.5	183.4	-104.1	214.8	-331.5	110.7	-1.14	1.08	0.04	0.493
Electronic Equipment	-1,398.0	-754.6	390.1	228.4	-1,150.1	618.5	-8.03	-1.04	0.10	2.702
Machinery and Equipment	-5,522.9	-4,040.7	1,121.2	-2,478.8	-4,282.2	-1,357.6	-5.44	-3.54	-0.11	2.946
Other Manufacturing	-313.5	-204.6	-635.2	-140.3	-410.8	-775.4	-7.91	-2.31	-0.12	1.094
Other Services	-140.8	37.4	-12,250.1	104.0	-263.6	-12,146.2	-1.07	0.86	-0.13	22.667
Construction	0.1	-3.2	-4,675.9	103.7	-10.7	-4,572.2	0.38	-18.48	-0.18	6.767
Trade	-34.5	38.4	-6,443.0	110.0	-147.6	-6,333.0	-0.82	1.20	-0.15	14.521
Transportation Services	-67.3	270.3	-1,788.0	598.1	-306.4	-1,189.9	-0.81	2.36	-0.09	6.307
Communications	-57.5	-20.4	-989.2	22.0	-42.2	-967.3	-4.11	-1.24	-0.12	2.152
Financial Services	-138.5	37.2	-4,149.5	369.4	-233.6	-3,780.1	-1.17	0.37	-0.12	3.028
Business Services	-13.0	-277.2	-3,895.5	-131.2	-107.5	-4,026.7	-0.26	-2.59	-0.13	8.380
Recreation Services	-45.1	87.8	-2,414.8	243.2	-122.2	-2,171.6	-0.55	2.19	-0.12	6.373

Source: Calculations by the study team. USD millions at 2017 prices.

Table A9: Mexican Sectoral Impacts: NAFTA Lapses but CUSFTA Holds and CMFTA Adopted

	Bilateral Exports	Bilateral Imports	Total Exports	Total Imports	Domestic Shipments	Total Shipments	Bilateral Exports %	Bilateral Imports %	Total Shipments %	Value-added share %
Rice	-3.8	-1.0	-8.5	-0.8	-63.8	-9.4	-0.50	-7.63	-0.11	0.028
Wheat and Cereals	-717.2	-31.6	-613.6	-20.3	-1,120.9	-633.9	-10.22	-1.66	-0.74	0.425
Fruit and Vegetables	-336.4	-1,039.0	377.5	-750.3	-473.7	-372.9	-5.83	-6.55	-0.45	1.059
Oilseeds and Vegetable Oils	-537.5	-109.3	-58.6	-66.6	-1,194.0	-125.2	-8.84	-1.67	-0.25	0.029
Sugar	-3.1	38.4	-106.1	40.7	-52.1	-65.4	-1.10	1.47	-0.25	0.374
Other Agriculture	-247.1	-178.6	-1,523.4	-149.7	-399.9	-1,673.1	-7.24	-3.74	-1.07	0.950
Dairy	-1,140.9	-137.2	-841.0	-124.7	-909.8	-965.7	-64.36	-34.97	-0.52	0.659
Forestry	-10.4	-2.3	-42.2	-1.0	-15.1	-43.1	-2.04	-0.85	-0.15	0.338
Fishing	-1.2	-5.4	-24.5	4.4	-8.1	-20.0	-0.16	-0.30	-0.20	0.108
Fossil Fuels	-1,224.2	-1,693.8	-397.2	-791.8	-4,120.1	-1,189.0	-2.01	-1.18	-0.09	2.270
Mineral Products	-288.3	-278.6	-263.2	-31.9	-1,416.3	-295.1	-2.56	-2.48	-0.11	2.224
Beef	-963.5	-344.3	-459.3	-389.4	-582.9	-848.8	-26.00	-16.03	-0.55	0.174
Pork and Poultry	-2,502.4	-54.5	-360.1	-45.7	-1,635.5	-405.8	-52.94	-3.12	-0.35	0.203
Food Products	-2,178.2	-1,389.3	-350.7	-1,283.8	-2,117.0	-1,634.5	-14.32	-6.42	-0.33	2.319
Beverages and Tobacco	-314.1	-38.4	-300.9	-19.6	-459.7	-320.5	-7.26	-0.62	-0.16	0.751
Textiles and Apparel	-2,606.9	-3,860.1	786.1	-3,475.6	-2,828.1	-2,689.6	-30.27	-33.66	-0.76	0.693
Leather Products	-169.6	-359.9	58.9	-351.0	-282.2	-292.1	-29.24	-37.68	-1.57	0.232
Wood Products	-661.2	-115.2	-1,483.8	210.1	-2,315.0	-1,273.7	-2.59	-0.28	-0.12	1.011
Chemicals, Rubber, Plastics	-5,866.3	-2,206.6	-400.4	-1,241.7	-9,003.9	-1,642.1	-6.22	-3.18	-0.15	2.550
Metal Products	-2,078.3	-1,567.3	-177.1	-217.2	-4,411.9	-394.3	-4.49	-2.19	-0.04	2.792
Automotive	-7,784.2	-15,993.0	6,053.7	-14,582.1	-8,334.4	-8,528.4	-8.16	-9.90	-1.08	3.380
Transport Equipment	-154.1	121.1	-91.1	264.9	-465.2	173.7	-1.46	0.72	0.07	0.493
Electronic Equipment	-1,454.0	-1,041.0	499.6	237.3	-2,112.7	736.9	-8.36	-1.44	0.11	2.702
Machinery and Equipment	-5,513.3	-4,415.6	1,177.3	-2,590.8	-7,451.5	-1,413.5	-5.43	-3.87	-0.12	2.946
Other Manufacturing	-309.1	-239.9	-696.5	-131.8	-705.0	-828.4	-7.80	-2.71	-0.12	1.094
Other Services	-107.0	23.6	-14,038.6	97.8	-246.1	-13,940.8	-0.82	0.54	-0.15	22.667
Construction	0.1	-3.3	-5,184.7	96.1	-10.0	-5,088.6	0.66	-18.74	-0.20	6.767
Trade	-22.2	27.9	-7,310.4	102.0	-137.9	-7,208.3	-0.53	0.87	-0.17	14.521
Transportation Services	-51.4	243.0	-1,916.6	559.5	-286.8	-1,357.1	-0.62	2.12	-0.11	6.307
Communications	-54.6	-24.7	-1,119.6	18.2	-40.3	-1,101.4	-3.90	-1.51	-0.14	2.152
Financial Services	-112.8	8.9	-4,678.6	346.0	-219.4	-4,332.7	-0.95	0.09	-0.14	3.028
Business Services	0.8	-305.5	-4,348.9	-142.2	-100.2	-4,491.1	0.02	-2.85	-0.15	8.380
Recreation Services	-30.3	76.3	-2,739.4	232.3	-114.1	-2,507.1	-0.37	1.91	-0.14	6.373

Source: Calculations by the study team. USD millions at 2017 prices.

APPENDIX B: METHODOLOGY

This appendix provides a non-technical overview of the modelling methodology used to generate the simulations.

B1 General Background on CGE Models

We apply a recursive-dynamic variant of the standard Global Trade Analysis Project (GTAP) computable general equilibrium (CGE) model which incorporates foreign direct investment (FDI) to assess the impacts of the policy shocks.

CGE models integrate a number of accounts to provide a complete description of an economy:

- The standard national income and expenditure accounts;
- A breakdown of industry by sector that reflects inter-sectoral input-output links, which take into account internationally-sourced intermediate goods and services (in all, the GTAP dataset allows for the representation of up to 57 sectors, 43 of which are goods);
- A production function for each sector that combines sector-specific inputs of capital, skilled and unskilled labour, and intermediate inputs; and
- A trade account that models the international linkages for each sector of the economy.

The CGE framework generates impact results for the following aggregates:

- National accounts (consumption, investment, government expenditure, real exports, and real imports);
- Economic welfare (equivalent variation);
- Sectoral production, imports, exports, and domestic shipments;
- Impacts on capital formation and labour (skilled and unskilled);
- Price impacts (consumer prices and terms of trade); and
- Government revenue.

On the production side, the model evaluates efficiency gains from reallocation of factors of production across sectors. In the first stage, land, labour (skilled and unskilled), and capital substitute for one another to generate domestic value added by sector; intermediate inputs, which include imported intermediates, substitute for domestic value added in a second stage.

On the demand side of the model, an aggregate Cobb-Douglas utility function allocates expenditures to private consumption, government spending, and savings so as to maximize per capita aggregate utility. Following a shock, the changes in consumption are allocated across these three aggregates based on their income shares in each region. Private household demand responds to changes in prices and income based on the standard Constant Difference of Elasticities demand system in the GTAP model.

The trade module assumes imperfect substitution based on product differentiation across regions. The key parameter determining the scale of impacts on trade from a tariff shock is the elasticity of substitution – a high elasticity of substitution generates relatively large trade impacts for a given

size of tariff shock. Note that the GTAP sectors reflect relatively large aggregates of individual products; accordingly, substitution elasticities are lower than they would be for product categories that are defined more narrowly and, thus, are more substitutable for each other.

Economic welfare is based on “equivalent variation”, the lump sum payment at pre-shock prices that would have to be made to households to leave them as well off as in the post-shock economy.

We use a perfect competition specification of the GTAP model. Some models incorporate imperfect competition for industrial goods sectors, introducing price mark-ups that represent monopolistic pure profits in equilibrium. These price mark-ups are reduced by intensified competition under trade liberalization, generating additional welfare gains.² A number of recent models incorporate features of heterogeneous firms, which generate productivity gains from reallocation of market shares to more productive firms under trade liberalization.³ The key distinction across modelling approaches is how they address the relationship between trade and productivity. We address this issue through the modelling protocol, as described below in the discussion of closures, rather than through the specification of the model itself. An appropriate test for reasonableness of the estimates of economic gains is the comparison of the impacts on two-trade in real terms and the change in GDP. Another key benchmark for reasonableness is the relationship between real wages and productivity. When these relationships are broadly aligned with historical experience, there is greater confidence that the estimates are in a reasonable zone.

For a technical description of the basic GTAP model, see Hertel (1997); for a discussion of the degree of confidence in CGE estimates, see Hertel et al. (2003). The specifics of the GTAP-FDI model are described in Annex 2 to this study.

B2 Closures

In CGE simulations, there is a limit to the number of variables that can be calculated endogenously; the others must be set exogenously by assumption. In performing simulations, the modeller decides which variables in the model are to be exogenous (i.e., fixed at predetermined values specified by the modeller) and which are to be endogenous (i.e., the values that are solved by the model). These decisions define the “closure” of the model. CGE models can be simulated with various alternative closures; the choice influences the results significantly (Ciuriak and Chen, 2008).

Under the GTAP model’s default microeconomic closure, the factor endowments (i.e., the total supply of labour, both skilled and unskilled, as well as of capital and land) are fixed; factor prices (i.e., wages and return to capital and land) adjust to restore full employment of the factors of production in the post-shock equilibrium.⁴ Under alternative microeconomic closures that are sometimes used, the return to capital or to labour can be fixed and the supply of capital and/or

² See Roson (2006) for a review of the issues raised by this methodology.

³ These include Zhai (2008); Dixon et al. (2013); Balistreri and Rutherford (2013); Oyamada (2013); and Itakura and Oyamada (2013). See Roson and Oyamada (2014) for a review.

⁴ This is sometimes described as reflecting a medium-term time horizon in which labour supply is relatively “sticky”.

labour adjusts to restore equilibrium.⁵ Each of these closure rules makes an extreme assumption about the supply of labour and/or capital: it is either perfectly elastic or perfectly inelastic. The reality is likely to be somewhere in between.

Allowing for some response of labour supply to the wage rate generates “endowment” effects – i.e., the effective supply of labour changes. There are two options for the interpretation of the labour endowment impact: as jobs impact (i.e., head count); or as productivity gains driven by trade, including by the reallocation of market share to more competitive firms in line with modern heterogeneous firms’ theory (Melitz, 2003; and others).

Rising wages impact on labour supply in terms of inducing new entrants into the labour force. Evers et al. (2008) provide a meta-analysis of the labour supply elasticity literature; this study concludes the elasticity is about 0.1 for men and 0.6 for women, or about 0.3 on average.

As regards the productivity impacts, Meager and Speckesser (2011) show that there is strong evidence for a positive relationship between the growth of productivity and the growth of wages at the national level. Using data for 25 countries for the years 1995-2009, their fitted line suggests that wages grow marginally less than proportionately to productivity (measured as GDP per hour worked). This observed empirical association between wages and productivity is consistent with traditional microeconomic theory that wages are closely related to marginal productivities. It is also consistent with the heterogeneous firms trade literature, which demonstrates that trade liberalization raises productivity by reallocating market share to higher productivity firms. Since higher productivity firms also pay higher wages, real wages and productivity should rise more or less in tandem, as elaborated in Ciuriak and Xiao (2016).

We adopt a labour supply elasticity of 1.3, which would reflect an increase in the effective quantity of labour through a heterogeneous firms effect of reallocation of market share to higher productivity firms which also pay higher wages, together with an allowance for some response of labour supply to rising wages.

Given that we use a dynamic version of the GTAP model, capital responds to changes in the ROR on capital. Both labour and capital are assumed to be mobile across all sectors within a country.

As regards GTAP’s macroeconomic closures, two approaches are available. First, the current account can be fixed. This assumes that the external balance is determined entirely by domestic investment-savings dynamics. When trade policy shocks result in unbalanced changes in imports and exports, the original trade balance is restored by implicit exchange rate adjustments. Alternatively, the current account can be allowed to adjust to the trade shock. The change in the current account then must be offset by equivalent changes in capital flows. In reality, unbalanced trade impacts are likely to have both effects: induce subsequent exchange rate adjustments and offset capital flows. The choice of macroeconomic closure can have significant implications for the model

⁵ The closure in which the rate of return to capital is fixed is sometimes described as reflecting “steady-state” growth. For an example, see Gilbert (2004), who reports net economic welfare gains in a GTAP simulation of a Korea-US FTA (KORUS) that are 2.7 times larger for Korea and 2.4 times larger for the US with this closure compared to the standard closure. For an example of the labour market closure with the wage rate fixed, see Francois and Baughman (2005).

outcomes (Gilbert, 2004). We necessarily adopt the closure where the current account adjusts; this reflects the active role of FDI in our model.

This external closure also allows the model to provide insights into the ability of the US to affect its external balance through the policy measures, which is one of the Administration's key stated goals.

B3 Baseline Preparation

The database for the simulations is the GTAP V9 dataset with a base year of 2011. For the simulations, the database is extrapolated to 2023 using GTAP dynamic tools and drawing on the International Monetary Fund's World Economic Outlook database (October 2016) for guidance as to growth rates for the projection period.

The shock is implemented in 2018; the results are based on the full effect of the impacts once equilibrium has been restored in 2023.

B4 Sectoral and Regional Aggregation

We simulate the NAFTA scenarios with the following regional/sectoral aggregations. We report the impacts for a subset of the regions in the model.

Table B1: Sectors in the Modelling Framework

Agriculture and Food	Forestry, Fishing, Mining	Industry and Manufacturing	Services
Rice	Forestry	Textiles and Apparel	Construction
Wheat and Cereals	Fishing	Leather Products	Trade
Fruit and Vegetables	Fossil Fuels	Wood Products	Transport
Oil Seeds and Vegetable Oils	Mineral Products	Chemicals, Rubber, and Plastics	Communication
Sugar		Metals and Metal Products	Financial Services
Dairy		Automotive	Business Services
Beef		Transport Equipment	Recreation
Pork and Poultry		Electronic Equipment	Other Services
Other Agriculture		Machinery and Equipment	
Food Products		Other Manufactures	
Beverages and Tobacco			

Source: Compiled by the authors.

Table B2: Regions in the Modelling Framework

Canada
Mexico
United States
China
EU28
Rest of the World

Source: Compiled by the authors.

APPENDIX C: POLICY SHOCKS

C1 The tariff shock

To develop the policy shock, we construct MFN tariff walls that would come into force upon NAFTA lapsing. We start with the GTAP-concorded MFN tariffs calculated for the UN TRAINS system. For the most part, we apply 2017 tariffs to the annual trade patterns in each GTAP sector at the HS 6-digit level for the years 2011-2016. We then take the five-year period average as this tends to correct for the year-to-year fluctuations in the composition of trade, which can be quite sharp at the HS 6-digit level. For sectors that do not feature specific tariffs and/or tariff rate quotas (TRQs), for which the NAFTA features tariff-free trade this is a good approximation of the likely tariff shock.

The use of simple averages to calculate tariffs at the HS 6-digit level does not capture variation in product weights at the 8- and 10-digit levels. As well, the weighted averages at the GTAP product category reflect historical patterns of imports, which may not reflect future patterns. For example, GM is reportedly planning to assemble light trucks at its Oshawa plant; this would raise the MFN tariff level applying to US imports from Canada in the automotive sector due to the 25% tariff applied by the United States to light trucks.

For sectors which NAFTA does not affect – such as dairy trade between Canada and the United States and between Canada and Mexico, we leave the original GTAP tariff in the GTAP V9 data base and thus impose no shock. We observe in this regard that the GTAP V9 tariff is generally different than the trade-weighted MFN tariff based on the most recent structure of trade flows and the 2017 tariffs. However, we do not adjust the tariff to update it as this would add no value to the simulation results.

For sectors where there are TRQs that are not likely to be binding – for example, Canada's TRQs for wheat and barley which are typically far from being fulfilled – we assume there will be no tariff impact.

The impact of NAFTA in binding most tariffs at zero, including those that are unilaterally set at levels below the bound rates under the WTO Agreement, is not taken into account. NAFTA reduces uncertainty, which acts as a trade cost and reduces imports. Accordingly, the tariff shock understates the like impact of NAFTA lapsing on goods trade.

NAFTA prohibits export taxes on energy products. We do not impose any shock in this area – although the energy security provisions of the CUSFTA lapse under two of the scenarios.

We construct the tariffs at the full GTAP disaggregation of 42 sectors, then aggregate to the sectors reported in the study. Tables 3 to 5 summarize our calculation of the tariff shock at the GTAP 42 goods sector level.

C2 Goods Non-Tariff Barriers

The NAFTA border facilitation measures have been reinforced by the WTO Trade Facilitation Agreement (TFA). Hence we do not include a goods NTB shock that applies to all sectors for customs procedures, technical barriers to trade and sanitary and phytosanitary standards.

Regulatory cooperation has taken place largely through other instruments than NAFTA. In the Canada-US context, current activity in this area is carried out by the Canada-United States Regulatory Cooperation Council (RCC) which has a mandate to align regulatory approaches, reduce duplicative requirements, and reduce trade costs in areas relating to health, safety, and environmental protection. The Joint Statement of 13 February 2017 issued by Prime Minister Trudeau and President Trump expressed strong support for the work of the RCC, which comprises some 23 technical work plans coordinated and monitored by the RCC Secretariat, which is composed of the Treasury Board Secretariat's Regulatory Cooperation Directorate (TBS-RCD) and the U.S. Office of Information and Regulatory Affairs (OIRA). Accordingly, we do not incorporate a shock for more restrictive practices that might emerge in the absence of NAFTA disciplines in areas such as conformity assessment or regulatory cooperation.

C3 Rules of Origin Compliance Costs

Preference utilization under the NAFTA is high for products that have tariff preferences. However, it is not 100 percent and varies by product, size of shipment, and the size of the preference margin (see, e.g., Keck and Lendle, 2012). Accordingly, some products still pay tariff in crossing NAFTA borders. By the same token, the tariff shock would not represent 100 percent of the MFN tariff, but only about 90 percent or so on average, with likely close to full utilization in areas such as autos as well as in bulk agricultural products, but lower utilization in consumer products with complex supply chains that stretch outside the NAFTA region. We take this into account in the discussion of the shocks but do not explicitly introduce a discount on the tariff shock in the estimates.

C4 Trade Remedies and Uncertainty about Market Access

A major motivation for Canada in negotiating the CUSFTA was to eliminate the application of anti-dumping (AD) and countervailing duties (CVD) in Canada-US trade. Canada failed to obtain that concession but did obtain US agreement to the Chapter 19 mechanism, which provides for binational panel review of measures as an alternative to judicial review within each party's legal system. While recourse to Chapter 19 has diminished since the 1990s, it is considered to have tempered the use of AD/CVD in intra-NAFTA trade and its presence thus boosts confidence in market access. The loss of Chapter 19 would still leave recourse to national legal systems; however, there would be some reduction of confidence about future market access, which in turn would act as a non-tariff barrier to bilateral trade within the NAFTA region.

A similar type of effect would emerge from the loss of NAFTA Chapter 8 which provides exemptions for NAFTA parties from global safeguards actions if imports from the NAFTA party, considered individually, do not account for a substantial part of the supply of the product in question and do not "contribute importantly" to injury. Normally, a NAFTA party would not be considered to supply a substantial share of total imports if it were not among the top five suppliers. This measure thus reduces the likelihood of incidence of application of temporary duties within NAFTA and its loss represents an increase in uncertainty about future market access.

We do not explicitly attempt to quantify the impact of this additional uncertainty. However, we observe that it tends to offset the understatement of the MFN tariffs effect due to ROOs under-

utilization. On balance, the uncertainty effect is likely to be greater than the reduction in the de facto tariff shock due to some goods paying MFN tariffs even under NAFTA.

C5 Government Procurement

Canada-US procurement is covered by the WTO Government Procurement Agreement (GPA) and the Canada-U.S. Agreement on Government Procurement, in addition to the NAFTA measures. There is, accordingly, no appreciable NAFTA shock in this bilateral relationship.

Mexico is not a party to the GPA and hence the NAFTA lapsing might impact on cross-border trade driven by procurement. However, we do not attempt to quantify this impact on grounds that the vast majority of procurement is conducted on the basis of local presence – even in the European Union’s Single Market (Cernat and Kutlina-Dimitrova, 2015).

C6 The Services Shock

To quantify the services NTB shock, we take into account both the reversion of service market access conditions to the level accorded by the parties on an applied MFN basis, and the impact of the lapsing of NAFTA bindings on existing market access. To implement this approach, we draw on the OECD’s Services Trade Restrictiveness Index (STRI) and the corresponding GATS Trade Restrictiveness Index (GTRI). Both indexes are measured on the same template, with the former providing a read-out on a country’s services trade restrictiveness on an applied basis and the latter on a bound basis (i.e., the commitments made by the parties under the WTO GATS). The difference between the two readings is “water” – that is unilateral liberalization that can be withdrawn by the country without penalty at the WTO. Water is a proxy for uncertainty as it measures the extent to which a country’s effective restrictiveness could increase relative to the status quo.

To develop the shock for cross-border services trade, we first construct the NAFTA template and apply this to each party’s scores under the STRI. The difference between this NAFTA score and the actual OECD score represents the impact of NAFTA on applied services market access.

Typically, services market access is more liberal on an applied basis than on a bound basis. This creates uncertainty for trading firms since it means that countries can make their services market access regime more restrictive without penalty by reverting to GATS bindings. This freedom is considered valuable by countries: for example, in the TPP, the United States and several other TPP parties included an “escape clause” that allowed them to revert to WTO GATS level market access, notwithstanding anything else in the TPP text.

The NAFTA does not include such an escape clause. Hence lapsing of the NAFTA would enable reversion by the parties to their GATS level access commitments. The difference between NAFTA bound measures and GATS bound measures captures the degree of uncertainty about future market access. This can be straightforwardly calculated as the difference in the bound levels before and after the NAFTA.

These index changes must next be converted to trade cost equivalents. Estimates of these trade cost equivalents are available from CEPII (Fontagné et al. 2016) for each GTAP services sector. We observe that these trade cost equivalents reflect both the effect of actual restrictions and of

uncertainty. Hence it is appropriate to combine the reduction in actual barriers and the reduction of “water” into a composite non-tariff barrier (NTB). Following Ciuriak and Lysenko (2016), we assign water half the restrictiveness power actual restrictions; thus the NTB is calculated as

$$\text{NTB} = \text{STRI} + 0.5 * \text{Water}$$

The percentage change in this combined NTB that is due to the lapsing of NAFTA is then multiplied by the ad valorem equivalents estimated by CEPII (Fontagné et al. 2016) for each GTAP services sector to generate estimates of the trade cost increases by GTAP services sector. The resulting trade cost reductions are implemented as a trade technology shock in the model simulations.⁶

Tables 6-8 provide the calculations for the impact of NAFTA lapsing by service sector. Note that the Canadian elaboration of the STRI is more detailed than that available for the United States and Mexico. The detailed sectoral shocks are averaged to obtain the GTAP sectoral shocks that are deployed in the model.

C7 The FDI Shock

For the services sectors, the shocks for FDI NTBs are based on each NAFTA country’s scores on an expanded version of the OECD’s Foreign Direct Investment Restrictiveness Index (FDIR). We follow the same protocol as in modelling services, namely using the NAFTA template as the basis for identifying elements in each country’s FDI frameworks that the NAFTA impacts and recalculate the scores.

As with cross-border services trade, we treat improvement in GATS mode 3 services bindings that reduce the amount of water as reducing uncertainty and thus creating a more conducive environment for FDI. We follow the services model for constructing the combined NTB consisting of actual FDI barriers and uncertainty. Tables 9 through 11 provide the calculations.

For goods sectors, the NAFTA has no impact on the Canadian or Mexican regimes for inward FDI and only appears to impact electricity generation in the United States. Given that utility-scale electricity generation is considered “critical infrastructure” in the United States, any investment in this sector would require review on national security grounds with or without NAFTA. We do not introduce a shock for FDI in the goods sector.

⁶ Technically, this is implemented by shocking the Iceberg Trade Costs “ams” import-augmenting “tech change” variable in the GTAP modelling framework. This technique is widely used to simulate efficiency improvements such as customs automation or e-commerce.

Table C1: Tariff Shock – Canada

GTAP Code	GTAP Sector Name	GTAP US	GTAP Mexico	Post- NAFTA US	Post-NAFTA Mexico
1	Paddy Rice	0.00	0.00	0.00	0.00
2	Wheat	0.00	0.00	0.00	0.00
3	Cereal Grains	0.00	0.00	0.00	0.00
4	Vegetables, Fruits Nuts	0.00	0.00	3.61	3.40
5	Oil Seeds	0.00	0.00	0.00	0.00
6	Sugar Cane, Sugar Beet	0.00	0.00	0.00	0.00
7	Plant-Based Fibers	0.00	0.00	0.00	0.00
8	Crops N.E.C.	0.00	0.00	1.91	0.48
9	Bovine Cattle, Sheep and Goats, Horses	0.00	0.00	0.00	0.00
10	Animal Products N.E.C.	19.42	0.00	46.62	0.02
11	Raw Milk	0.00	0.00	0.00	0.00
12	Wool, Silk-Worm Cocoons	0.00	0.00	0.00	0.00
13	Forestry	0.00	0.00	0.19	2.23
14	Fishing	0.00	0.00	1.53	0.02
15	Coal	0.00	0.00	0.00	0.00
16	Oil	0.00	0.00	0.00	0.00
17	Gas	0.00	0.00	0.00	0.00
18	Minerals N.E.C.	0.00	0.00	0.05	0.06
19	Bovine Meat Prods	0.45	0.00	24.22	25.23
20	Meat Products N.E.C.	57.91	0.02	59.08	2.16
21	Vegetable Oils and Fats	6.53	0.00	9.06	6.68
22	Dairy Products	178.09	170.31	178.09	170.31
23	Processed Rice	0.00	0.00	0.00	0.00
24	Sugar	0.00	2.70	3.36	2.70
25	Food Products N.E.C.	11.94	13.61	18.84	23.04
26	Beverages and Tobacco Products	4.56	0.13	10.00	0.72
27	Textiles	0.00	0.00	6.05	12.55
28	Wearing Apparel	0.00	0.00	15.23	16.35
29	Leather Products	0.00	0.00	7.80	8.11
30	Wood Products	0.00	0.00	2.32	0.91
31	Paper Products, Publishing	0.00	0.00	0.72	1.11
32	Petroleum, Coal Products	0.00	0.00	1.31	1.66
33	Chemical, Rubber, Plastic Products	0.00	0.00	2.17	2.33
34	Mineral Products N.E.C.	0.00	0.00	1.20	3.09
35	Ferrous Metals	0.00	0.00	0.02	0.01
36	Metals N.E.C.	0.00	0.00	0.00	0.00
37	Metal Products	0.00	0.00	1.83	2.03
38	Motor Vehicles and Parts	0.00	0.00	4.50	4.64
39	Transport Equipment N.E.C.	0.00	0.00	1.59	2.80
40	Electronic Equipment	0.00	0.00	0.21	1.20
41	Machinery and Equipment N.E.C.	0.00	0.00	0.50	0.71
42	Manufactures N.E.C.	0.00	0.00	2.76	3.95

Source: GTAP database; calculations by the study team

Table C2: Tariff Shock – United States

GTAP Code	GTAP Sector Name	GTAP Canada	GTAP Mexico	Post-NAFTA Canada	Post-NAFTA Mexico
1	Paddy Rice	0.00	0.00	1.14	1.14
2	Wheat	0.00	0.00	1.10	1.30
3	Cereal Grains	0.00	0.00	0.08	0.19
4	Vegetables, Fruits Nuts	0.00	0.00	3.65	3.92
5	Oil Seeds	0.00	24.06	0.11	24.13
6	Sugar Cane, Sugar Beet	0.00	0.00	0.03	0.00
7	Plant-Based Fibers	0.02	0.00	0.31	0.24
8	Crops N.E.C.	0.00	0.00	8.83	2.11
9	Bovine Cattle, Sheep and Goats, Horses	0.00	0.00	0.16	0.16
10	Animal Products N.E.C.	0.00	0.00	0.26	0.77
11	Raw Milk	0.00	0.00	0.00	0.00
12	Wool, Silk-Worm Cocoons	0.00	0.00	0.57	1.20
13	Forestry	0.00	0.00	0.07	0.85
14	Fishing	0.00	0.00	0.06	0.46
15	Coal	0.00	0.00	0.00	0.00
16	Oil	0.00	0.00	0.00	0.00
17	Gas	0.00	0.00	0.00	0.00
18	Minerals N.E.C.	0.00	0.00	0.01	0.04
19	Bovine Meat Prods	0.00	0.00	8.51	9.78
20	Meat Products N.E.C.	0.00	0.00	1.46	2.18
21	Vegetable Oils and Fats	0.08	0.00	4.23	4.92
22	Dairy Products	14.33	0.07	14.33	17.27
23	Processed Rice	0.00	0.00	5.83	5.89
24	Sugar	3.82	0.00	3.82	0.00
25	Food Products N.E.C.	2.62	0.32	5.75	6.35
26	Beverages and Tobacco Products	0.07	0.00	1.16	0.67
27	Textiles	0.00	0.00	6.53	8.88
28	Wearing Apparel	0.00	0.00	12.21	10.61
29	Leather Products	0.00	0.00	11.81	7.29
30	Wood Products	0.00	0.00	0.38	0.13
31	Paper Products, Publishing	0.00	0.00	0.39	1.23
32	Petroleum, Coal Products	0.00	0.00	5.07	6.18
33	Chemical, Rubber, Plastic Products	0.00	0.00	2.41	2.96
34	Mineral Products N.E.C.	0.00	0.00	1.57	3.55
35	Ferrous Metals	0.00	0.00	0.13	0.20
36	Metals N.E.C.	0.00	0.00	1.40	1.65
37	Metal Products	0.00	0.00	2.03	2.24
38	Motor Vehicles and Parts	0.00	0.00	2.10	6.79
39	Transport Equipment N.E.C.	0.00	0.00	0.13	0.33
40	Electronic Equipment	0.00	0.00	0.29	0.77
41	Machinery and Equipment N.E.C.	0.00	0.00	1.02	1.57
42	Manufactures N.E.C.	0.00	0.00	1.34	2.53

Source: GTAP database; calculations by the study team

Table C3: Tariff Shock – Mexico

GTAP Code	GTAP Sector Name	GTAP Canada	GTAP US	Post-NAFTA Canada	Post- NAFTA US
1	Paddy Rice	0.00	0.00	0.00	0.00
2	Wheat	0.00	0.00	7.27	7.24
3	Cereal Grains	0.00	0.00	10.93	6.90
4	Vegetables, Fruits Nuts	0.00	5.11	21.83	28.49
5	Oil Seeds	0.00	0.00	0.01	5.35
6	Sugar Cane, Sugar Beet	0.00	0.00	0.00	0.00
7	Plant-Based Fibers	0.00	0.00	0.00	0.00
8	Crops N.E.C.	0.00	0.00	44.42	11.04
9	Bovine Cattle, Sheep and Goats, Horses	0.00	0.00	1.77	12.01
10	Animal Products N.E.C.	0.53	0.00	7.46	4.90
11	Raw Milk	0.00	0.00	0.00	0.00
12	Wool, Silk-Worm Cocoons	0.00	0.00	0.00	0.00
13	Forestry	0.00	4.00	12.72	11.88
14	Fishing	0.00	0.00	17.02	12.45
15	Coal	0.00	0.00	0.00	0.00
16	Oil	0.00	0.00	0.00	0.00
17	Gas	0.00	0.00	0.00	0.00
18	Minerals N.E.C.	0.00	0.00	0.00	0.02
19	Bovine Meat Prods	10.79	0.00	26.87	19.66
20	Meat Products N.E.C.	0.60	0.00	19.19	71.12
21	Vegetable Oils and Fats	0.00	0.00	4.11	4.01
22	Dairy Products	40.29	0.00	40.29	31.44
23	Processed Rice	0.00	0.00	0.00	0.34
24	Sugar	41.94	0.00	41.94	0.00
25	Food Products N.E.C.	0.11	2.71	20.15	35.62
26	Beverages and Tobacco Products	0.00	0.19	42.09	19.21
27	Textiles	0.00	0.20	10.13	10.19
28	Wearing Apparel	0.00	0.00	22.17	21.12
29	Leather Products	0.00	0.00	18.78	7.72
30	Wood Products	0.00	0.13	2.18	3.43
31	Paper Products, Publishing	0.00	0.44	1.62	1.78
32	Petroleum, Coal Products	0.00	0.00	0.47	0.20
33	Chemical, Rubber, Plastic Products	0.00	0.11	4.02	3.55
34	Mineral Products N.E.C.	0.00	0.03	2.13	4.24
35	Ferrous Metals	0.00	0.00	0.13	0.11
36	Metals N.E.C.	0.00	0.00	0.30	1.97
37	Metal Products	0.00	0.11	3.56	2.87
38	Motor Vehicles and Parts	0.00	0.00	13.51	6.64
39	Transport Equipment N.E.C.	0.00	0.00	1.17	1.08
40	Electronic Equipment	0.00	0.00	0.22	1.95
41	Machinery and Equipment N.E.C.	0.00	0.09	1.82	2.34
42	Manufactures N.E.C.	0.00	0.00	8.57	6.04

Source: GTAP database; calculations by the study team.

A4: Cross-border services shock - Canada

Sectors	GTAP	GTAP Sectors	NAFTA		Current		NTB Before	NTB After
			STRI	GTRI	STRI	GTRI		
Construction	46	Construction	0.144	0.160	0.144	0.175	0.152	0.160
Distribution	47	Trade	0.041	0.041	0.041	0.041	0.041	0.041
Courier	48	Transport nec	0.099	0.108	0.099	0.108	0.103	0.103
Rail freight transport	48	Transport nec	0.000	0.010	0.000	0.010	0.005	0.005
Road Transport	48	Transport nec	0.018	0.018	0.018	0.018	0.018	0.018
Cargo-handling	48	Transport nec	0.132	0.355	0.132	0.355	0.243	0.243
Custom brokerage	48	Transport nec	0.045	0.045	0.045	0.045	0.045	0.045
Freight forwarding	48	Transport nec	0.023	0.023	0.023	0.075	0.023	0.049
Storage and warehouse	48	Transport nec	0.070	0.213	0.070	0.254	0.142	0.162
Maritime Transport	49	Water transport	0.093	0.155	0.093	0.173	0.124	0.133
Internal Waterways	49	Water transport	0.093	0.257	0.093	0.301	0.175	0.197
Air Transport	50	Air transport	0.182	0.336	0.182	0.336	0.259	0.259
Broadcasting	51	Communication	0.000	0.037	0.000	0.037	0.019	0.019
Motion Pictures	51	Communication	0.026	0.116	0.026	0.116	0.071	0.071
Sound Recording	51	Communication	0.060	0.117	0.060	0.117	0.089	0.089
Telecommunications	51	Communication	0.069	0.069	0.069	0.069	0.069	0.069
Commercial banking	52	Financial services nec	0.073	0.073	0.073	0.073	0.073	0.073
Insurance	53	Insurance	0.103	0.103	0.103	0.103	0.103	0.103
Accounting	54	Business services nec	0.087	0.095	0.087	0.116	0.091	0.101
Architecture	54	Business services nec	0.098	0.148	0.098	0.165	0.123	0.132
Computer	54	Business services nec	0.047	0.062	0.047	0.062	0.054	0.054
Engineering	54	Business services nec	0.074	0.134	0.074	0.168	0.104	0.121
Legal Services	54	Business services nec	0.052	0.147	0.052	0.215	0.099	0.134
Urban Planning	54	Business services nec	0.081	0.132	0.081	0.165	0.106	0.123
Midwives, nurses, physiotherapists etc.	54	Business services nec	0.047	0.096	0.047	0.153	0.071	0.100
Rental & Leasing without Operators	54	Business services nec	0.016	0.016	0.016	0.016	0.016	0.016
Building-cleaning Services	54	Business services nec	0.047	0.062	0.047	0.062	0.054	0.054
Photographic Services	54	Business services nec	0.047	0.096	0.047	0.153	0.071	0.100
Packaging Services	54	Business services nec	0.047	0.062	0.047	0.062	0.054	0.054
Real Estate Services	54	Business services nec	0.047	0.062	0.047	0.078	0.054	0.062
Research and Development	54	Business services nec	0.016	0.125	0.016	0.169	0.071	0.093
Tourism and Travel Related Services	55	Recreational and other services	0.016	0.028	0.016	0.055	0.022	0.036
Recreational, Cultural and Sporting	55	Recreational and other services	0.016	0.129	0.016	0.162	0.073	0.089
Educational Services	56	Pub. Admin., Defense, Ed. Health	0.016	0.185	0.016	0.185	0.101	0.101

Source: GTAP database; calculations by the study team

Table A5: Cross-border services shock – United States

Sectors	GTAP	GTAP Sectors	NAFTA		Current		NTB Before	NTB After
			STRI	GTRI	STRI	GTRI		
Construction	46	Construction	0.073	0.089	0.060	0.076	0.068	0.081
Distribution	47	Trade	0.030	0.039	0.030	0.039	0.035	0.035
Courier	48	Transport nec	0.135	0.144	0.135	0.144	0.139	0.139
Rail freight transport	48	Transport nec	0.015	0.025	0.015	0.025	0.020	0.020
Road Transport	48	Transport nec	0.060	0.077	0.060	0.077	0.069	0.069
Maritime Transport	49	Water transport	0.154	0.178	0.154	0.178	0.166	0.166
Air Transport	50	Air transport	0.176	0.345	0.176	0.345	0.261	0.261
Broadcasting	51	Communication	0.019	0.019	0.019	0.019	0.019	0.019
Motion Pictures	51	Communication	0.013	0.039	0.013	0.026	0.019	0.026
Sound Recording	51	Communication	0.020	0.060	0.020	0.060	0.040	0.040
Telecommunications	51	Communication	0.041	0.041	0.041	0.041	0.041	0.041
Commercial banking	52	Financial services nec	0.037	0.037	0.037	0.037	0.037	0.037
Insurance	53	Insurance	0.104	0.104	0.104	0.104	0.104	0.104
Accounting	54	Business services nec	0.066	0.183	0.066	0.136	0.101	0.124
Architecture	54	Business services nec	0.078	0.210	0.078	0.156	0.117	0.144
Computer	54	Business services nec	0.035	0.052	0.035	0.052	0.044	0.044
Engineering	54	Business services nec	0.094	0.189	0.058	0.134	0.096	0.142
Legal Services	54	Business services nec	0.039	0.183	0.039	0.145	0.092	0.111

Source: GTAP database; calculations by the study team

Table A6: Cross-border services shock - Mexico

Sectors	GTAP	GTAP Sectors	NAFTA		Current		NTB Before	NTB After
			STRI	GTRI	STRI	GTRI		
Construction	46	Construction	0.096	0.113	0.096	0.113	0.105	0.105
Distribution	47	Trade	0.022	0.031	0.022	0.031	0.027	0.027
Courier	48	Transport nec	0.145	0.154	0.145	0.154	0.150	0.150
Rail freight transport	48	Transport nec	0.028	0.108	0.028	0.108	0.068	0.068
Road Transport	48	Transport nec	0.028	0.060	0.028	0.060	0.044	0.044
Maritime Transport	49	Water transport	0.032	0.145	0.032	0.145	0.088	0.088
Air Transport	50	Air transport	0.186	0.345	0.186	0.345	0.266	0.266
Broadcasting	51	Communication	0.019	0.045	0.019	0.045	0.032	0.032
Motion Pictures	51	Communication	0.064	0.077	0.064	0.102	0.070	0.083
Sound Recording	51	Communication	0.018	0.076	0.018	0.076	0.047	0.047
Telecommunications	51	Communication	0.139	0.139	0.139	0.139	0.139	0.139
Commercial banking	52	Financial services nec	0.135	0.344	0.135	0.370	0.239	0.252
Insurance	53	Insurance	0.090	0.340	0.090	0.347	0.215	0.218
Accounting	54	Business services nec	0.095	0.165	0.095	0.213	0.130	0.154
Architecture	54	Business services nec	0.117	0.268	0.117	0.286	0.193	0.202
Computer	54	Business services nec	0.017	0.035	0.017	0.035	0.026	0.026
Engineering	54	Business services nec	0.029	0.166	0.029	0.232	0.098	0.130
Legal Services	54	Business services nec	0.210	0.267	0.210	0.267	0.238	0.238

Source: GTAP database; calculations by the study team

Table A7: FDI shock - Canada

Sectors	GTAP	GTAP Sectors	NAFTA		Current		NTB Before	NTB After
			STRI	GTRI	STRI	GTRI		
Construction	46	Construction	0.099	0.130	0.099	0.176	0.114	0.137
Distribution	47	Trade	0.197	0.242	0.197	0.272	0.219	0.234
Courier	48	Transport nec	0.226	0.239	0.226	0.265	0.233	0.246
Rail freight transport	48	Transport nec	0.146	0.161	0.146	0.207	0.154	0.177
Road Transport	48	Transport nec	0.099	0.125	0.099	0.254	0.112	0.176
Cargo-handling	48	Transport nec	0.068	0.420	0.068	0.645	0.244	0.356
Custom brokerage	48	Transport nec	0.092	0.140	0.092	0.187	0.116	0.140
Freight forwarding	48	Transport nec	0.077	0.077	0.077	0.142	0.077	0.110
Storage and warehouse	48	Transport nec	0.071	0.071	0.071	0.131	0.071	0.101
Maritime Transport	49	Water transport	0.081	0.337	0.081	0.628	0.209	0.354
Internal Waterways	49	Water transport	0.081	0.458	0.081	0.695	0.269	0.388
Air Transport	50	Air transport	0.346	0.664	0.346	0.664	0.505	0.505
Broadcasting	51	Communication	0.371	0.812	0.371	0.812	0.591	0.591
Motion Pictures	51	Communication	0.201	0.684	0.201	0.684	0.443	0.443
Sound Recording	51	Communication	0.072	0.472	0.072	0.472	0.272	0.272
Telecommunications	51	Communication	0.238	0.244	0.238	0.292	0.241	0.265
Commercial banking	52	Financial services nec	0.040	0.040	0.052	0.052	0.040	0.052
Insurance	53	Insurance	0.066	0.066	0.072	0.072	0.066	0.072
Accounting	54	Business services nec	0.115	0.115	0.115	0.163	0.115	0.139
Architecture	54	Business services nec	0.075	0.087	0.075	0.136	0.081	0.106
Computer	54	Business services nec	0.124	0.124	0.124	0.139	0.124	0.132
Engineering	54	Business services nec	0.066	0.079	0.066	0.116	0.073	0.091
Legal Services	54	Business services nec	0.071	0.390	0.071	0.661	0.231	0.366
Urban Planning	54	Business services nec	0.075	0.087	0.075	0.124	0.081	0.099
Midwives, nurses, physiotherapists etc.	54	Business services nec	0.124	0.628	0.124	0.847	0.376	0.486
Rental & Leasing without Operators	54	Business services nec	0.058	0.070	0.058	0.070	0.064	0.064
Building-cleaning Services	54	Business services nec	0.124	0.139	0.124	0.155	0.132	0.140
Photographic Services	54	Business services nec	0.124	0.610	0.124	0.844	0.367	0.484
Packaging Services	54	Business services nec	0.124	0.139	0.124	0.155	0.132	0.140
Real Estate Services	54	Business services nec	0.124	0.124	0.124	0.139	0.124	0.132
Research and Development	54	Business services nec	0.056	0.282	0.056	0.534	0.169	0.295
Tourism and Travel Related Services	55	Recreational and other services	0.056	0.111	0.056	0.184	0.084	0.120
Recreational, Cultural and Sporting	55	Recreational and other services	0.058	0.484	0.058	0.817	0.271	0.437
Educational Services	56	Pub. Admin., Defense, Education, Health	0.052	0.788	0.052	0.788	0.420	0.420

Source: GTAP database; calculations by the study team

Table A8: FDI shock – United States

Sectors	GTAP	GTAP Sectors	NAFTA		Current		NTB Before	NTB After
			STRI	GTRI	STRI	GTRI		
Construction	46	Construction	0.085	0.171	0.085	0.154	0.119	0.128
Distribution	47	Trade	0.042	0.107	0.042	0.091	0.067	0.075
Courier	48	Transport nec	0.235	0.263	0.235	0.263	0.249	0.249
Rail freight transport	48	Transport nec	0.106	0.162	0.106	0.147	0.127	0.134
Road Transport	48	Transport nec	0.081	0.158	0.081	0.134	0.107	0.120
Maritime Transport	49	Water transport	0.229	0.649	0.229	0.649	0.439	0.439
Air Transport	50	Air transport	0.364	0.655	0.364	0.655	0.510	0.510
Broadcasting	51	Communication	0.278	0.349	0.278	0.349	0.313	0.313
Motion Pictures	51	Communication	0.048	0.199	0.048	0.199	0.123	0.123
Sound Recording	51	Communication	0.029	0.118	0.029	0.118	0.074	0.074
Telecommunications	51	Communication	0.083	0.209	0.083	0.141	0.112	0.146
Commercial banking	52	Financial services nec	0.094	0.107	0.094	0.094	0.094	0.101
Insurance	53	Insurance	0.119	0.127	0.119	0.119	0.119	0.123
Accounting	54	Business services nec	0.081	0.181	0.081	0.145	0.113	0.131
Architecture	54	Business services nec	0.085	0.170	0.085	0.170	0.127	0.127
Computer	54	Business services nec	0.117	0.199	0.117	0.199	0.158	0.158
Engineering	54	Business services nec	0.105	0.191	0.105	0.191	0.148	0.148
Legal Services	54	Business services nec	0.101	0.177	0.101	0.177	0.139	0.139

Source: GTAP database; calculations by the study team

Table A9: FDI shock - Mexico

Sectors	GTAP	GTAP Sectors	NAFTA		Current		NTB Before	NTB After
			STRI	GTRI	STRI	GTRI		
Construction	46	Construction	0.065	0.115	0.065	0.149	0.090	0.107
Distribution	47	Trade	0.054	0.070	0.054	0.070	0.062	0.062
Courier	48	Transport nec	0.213	0.275	0.213	0.275	0.244	0.244
Rail freight transport	48	Transport nec	0.201	0.334	0.201	0.488	0.268	0.344
Road Transport	48	Transport nec	0.077	0.257	0.077	0.577	0.167	0.327
Maritime Transport	49	Water transport	0.000	0.276	0.000	0.490	0.138	0.245
Air Transport	50	Air transport	0.184	0.582	0.184	0.582	0.383	0.383
Broadcasting	51	Communication	0.305	0.729	0.305	0.729	0.517	0.517
Motion Pictures	51	Communication	0.100	0.155	0.100	0.191	0.128	0.146
Sound Recording	51	Communication	0.067	0.252	0.067	0.324	0.160	0.196
Telecommunications	51	Communication	0.189	0.223	0.189	0.238	0.206	0.213
Commercial banking	52	Financial services nec	0.195	0.415	0.195	0.538	0.305	0.366
Insurance	53	Insurance	0.118	0.416	0.118	0.560	0.267	0.339
Accounting	54	Business services nec	0.014	0.103	0.014	0.103	0.059	0.059
Architecture	54	Business services nec	0.013	0.216	0.013	0.346	0.114	0.180
Computer	54	Business services nec	0.078	0.095	0.078	0.095	0.086	0.086
Engineering	54	Business services nec	0.029	0.245	0.029	0.365	0.137	0.197
Legal Services	54	Business services nec	0.079	0.245	0.079	0.387	0.162	0.233

Source: GTAP database; calculations by the study team.

APPENDIX D

This appendix sets out in detail the research underpinning the construction of the tariff shock for each of the NAFTA parties against each of the other parties. The tariff shock is constructed for the full 42-sector GTAP dataset, then aggregated to the study sectors reported in the main text.

Variation in the composition of each product group causes variation from year-to-year in the weighted MFN tariff, even with constant tariff structures. Accordingly, any figure based on historical trade weights will be an imperfect predictor of the impact of NAFTA lapsing in a future year. We use the period average for the NAFTA lapsing shock.

Importantly, the NAFTA lapsing tariff shock is not distorted to any significant extent by the impact of existing tariffs on trade flows. Accordingly, we do not have to deal with the problem of endogeneity of protection⁷ – in other words, the use of trade-weighted average tariffs is reasonable and more sophisticated methods designed to deal with the endogeneity problem are not required in the present instance.

The MFN rates that were used in the calculations were for the most part the 6-digit HS product level rates reported by ITC's Market Access Map: 2016 rates for Canada; 2014 rates for Mexico; and 2017 rates for US. These rates were applied to total reported volumes of imports at the 6-digit HS product level and a weighted average MFN rate was calculated for the GTAP grouping. These tariffs may not reflect the weighting of trade flows at the more detailed 8- or 10-digit HS code levels.

In several cases where tariff protection is high, we examined the more detailed level of trade flows to develop more accurate measures of the weighted average tariff. For example, the Mexican wheat tariff is either 45% or zero depending on the category of wheat. The HS 6-digit tariff from the International Trade Centre is the simple average of 22.5%. However, we ascertained that the vast bulk of the imports entered Mexico under the zero tariff, resulting in a tariff on the order of 7%. Given time and resource constraints, this level of investigation could not be applied to all the import flows. Accordingly, the tariff shocks reported here can be improved upon with further research.

⁷ The endogeneity problem arises from the fact that a high tariff may result in no trade at all in that product category, resulting in a zero weight being assigned to that tariff. The areas where there are high tariffs in NAFTA trade such as Canada's supply managed sectors were not liberalized by NAFTA and so will not experience a NAFTA shock if the agreement lapses.

D1 The Canadian Tariff Shock by GTAP Sector

GTAP Sector 1: Paddy Rice

Canada's imports from the United States have been relatively stable and are virtually non-existent from Mexico. Canada is a negligible producer and exporter of commodity rice, tariffs are zero. There is no tariff shock from NAFTA lapsing.

GTAP 1: Paddy Rice	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from US ('000 USD)	36,573	36,147	37,799	42,009	31,808	29,977	
Imports from Mexico ('000 USD)	0.11	0.01	0.44	-	-	-	
Imports from World ('000 USD)	41,626	41,740	44,945	50,583	40,476	37,251	
NAFTA as a % Imports from World	87.9%	86.6%	84.1%	83.1%	78.6%	80.5%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 2: Wheat

Canada is a wheat producer and exporter but nonetheless maintains protection against imports. Canada applies a global tariff rate quota (TRQ) administered on a first come, first served basis for wheat that is set at 226,883 tonnes for 2016/17. Out of quota tariffs are high and likely prohibitive: 49% for durum wheat and 76.5% for non-durum wheat. Within quota tariffs are zero. NAFTA preferences apply and allow out-of-quota imports from the United States and Mexico at zero tariffs. Canada does import some wheat from the United States but none from Mexico. Canada's global imports have averaged under 100,000 tonnes since 2011, even with the US having a preferential tariff of zero, meaning the quota is far from fully utilized. Accordingly, it is likely that there would be no effective tariff shock from NAFTA lapsing. We apply no NAFTA tariff shock.

GTAP 2: Wheat	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	65.25%	64.32%	74.65%	74.08%	73.69%	75.14%	No shock
MFN Applied Tariff Mexico	53.58%	49.00%	49.11%	0.00%	76.50%	76.50%	No shock
Imports from US ('000 USD)	21,941	32,980	16,569	18,670	12,734	19,518	
Imports from Mexico ('000 USD)	0.05	1	1	-	0.00	0.04	
Imports from World ('000 USD)	21,991	33,234	19,655	31,891	35,105	33,072	
NAFTA as a % Imports from World	99.8%	99.2%	84.3%	58.5%	36.3%	59.0%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 3: Cereal Grains

This sector includes barley, buckwheat, maize, millet, oats, rye, sorghum, and other cereal grains. As regards barley, Canada is a producer and exporter and maintains some protection against imports. Canada applies a global TRQ administered on a first come, first served basis, set at 399,000 tonnes for 2016/17. Out-of-quota tariffs on barley seed for malting are set at 94.5%; for barley seed for other purposes at 21.0%. Within quota tariffs are zero. NAFTA out-of-quota tariffs for the United States and Mexico are zero. Canada's imports from the world have increased in recent years, averaging about 140,000 tons since 2011, but still well under the global quota. Other cereal grains face a zero tariff in Canada and these account for about 98% of imports in this sector.

Accordingly, there is no prospect of a tariff shock from NAFTA lapsing in respect of cereal grains imports, since the barley quota is not binding. We apply no NAFTA tariff shock.

GTAP 3: Cereal Grains	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	1.72%	0.19%	0.39%	0.58%	1.89%	1.08%	No shock
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	No shock
Imports from US ('000 USD)	356,775	315,710	292,131	388,659	375,098	304,441	
Imports from Mexico ('000 USD)	32	27	144	123	92	313	
Imports from World ('000 USD)	376,898	352,659	368,602	498,535	454,552	379,929	
NAFTA as a % Imports from World	94.7%	89.5%	79.3%	78.0%	82.5%	80.2%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 4: Vegetables, fruits and nuts

Canada is a major importer of fruits, vegetables and nuts and also a producer of many products in this group. Canada applies relatively high seasonal MFN tariffs on fruits and vegetables produced in Canada, while others come in under zero MFN tariffs. Flows are quite stable. Mexican tomatoes and chili peppers facing MFN tariffs of 7.33% and 4.25% respectively are major contributors to the tariff shock. For US imports it is lettuce at 9.67% and strawberries at 5.67% The tariff shock applied is the average for 2011-2016, or 3.61% for US imports and 3.41% for Mexican imports.

GTAP 4: Vegetables, Fruits Nuts	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	3.57%	3.62%	3.66%	3.56%	3.64%	3.61%	3.61%
MFN Applied Tariff Mexico	3.72%	3.36%	3.35%	3.34%	3.30%	3.41%	3.40%
Imports from US ('000 USD)	3,475,855	3,571,531	3,869,698	3,911,958	3,820,428	3,730,775	
Imports from Mexico ('000 USD)	935,124	957,328	1,089,516	1,154,924	1,153,412	1,317,799	
Imports from World ('000 USD)	6,220,343	6,358,842	6,873,004	7,031,491	6,973,949	7,100,486	
NAFTA as a % Imports from World	70.9%	71.2%	72.2%	72.1%	71.3%	71.1%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 5: Oil Seeds

Canada's tariffs are zero and there is no tariff shock from NAFTA lapsing. Imports from the United States have been relatively stable. Imports from Mexico are marginal.

GTAP 5: Oil Seeds	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from US ('000 USD)	340,730	372,380	310,965	364,601	300,097	327,076	
Imports from Mexico ('000 USD)	946	2,216	7,224	6,542	2,866	2,101	
Imports from World ('000 USD)	448,476	519,494	462,189	518,459	455,933	475,714	
NAFTA as a % Imports from World	76.2%	72.1%	68.8%	71.6%	66.4%	69.2%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 6: Sugar Cane, Sugar Beet

Canada's imports from both the United States and Mexico are virtually non-existent. Canada is a small producer with a low volume of exports to the United States. Tariffs are zero and there is no tariff shock from NAFTA lapsing.

GTAP 6: Sugar Cane, Sugar Beet	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from US ('000 USD)	-	0.02	0.10	0.02	-	-	
Imports from Mexico ('000 USD)	-	-	-	-	-	-	
Imports from World ('000 USD)	4	3	0.43	0.02	-	-	
NAFTA as a % Imports from World	0.0%	0.6%	22.2%	100.0%	0.0%	0.0%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 7: Plant Based Fibres

Canada's imports from the United States are small and have been declining over time. Imports from Mexico are virtually non-existent. Globally imports have also been declining over the period 2011-2016. Canada is a small producer with minor volumes of exports to the United States and Mexico. Tariffs are zero and there is no tariff shock from NAFTA lapsing.

GTAP 7: Plant-Based Fibres	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from US ('000 USD)	4,366	2,009	1,777	1,314	1,049	983	
Imports from Mexico ('000 USD)	0.11	-	9	52	6	6	
Imports from World ('000 USD)	10,608	9,537	8,841	7,809	7,490	7,498	
NAFTA as a % Imports from World	41.2%	21.1%	20.2%	17.5%	14.1%	13.2%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 8: Crops N.E.C.

This sector is comprised mainly by coffee, tea, spices and products like ginger and turmeric etc. NAFTA accounts for a modest but stable share of Canada's imports. Canada has some exports to the United States and Mexico on a scale similar to its imports in this sector. Mexican fresh cut flowers and vegetable seeds facing MFN tariffs of 6% and 2.75% respectively are major contributors to the tariff shock. For US imports it is live plants including roots and mushroom spawn and cuttings at 3% and vegetable seeds at 2.75%. Tariffs are low; the tariff shock from NAFTA lapsing based on the average over 2011-2016 is 1.91% for US imports and 0.48% for Mexican imports.

GTAP 8: Crops N.E.C.	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	2.09%	1.95%	1.95%	1.86%	1.82%	1.79%	1.91%
MFN Applied Tariff Mexico	0.41%	0.54%	0.39%	0.45%	0.60%	0.55%	0.48%
Imports from US ('000 USD)	327,655	340,919	373,085	359,003	352,779	372,381	
Imports from Mexico ('000 USD)	41,399	39,466	41,409	34,797	26,345	29,931	
Imports from World ('000 USD)	1,876,125	1,720,094	1,624,037	1,842,034	1,789,658	1,814,952	
NAFTA as a % Imports from World	19.7%	22.1%	25.5%	21.4%	21.2%	22.2%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 9: Bovine Cattle, Sheep and Goats, Horses

Canada's imports from the United States account for the majority of Canada's imports in this sector. Imports from Mexico are sporadic and negligible. Globally imports have declined over the reporting period. Canada has comparative advantage in this sector and is a large exporter to the United States – shipping almost US 3 billion to the US in 2015, with the amount tripling over the period 2011-2015. Mexico's imports from Canada are smaller but have also been increasing over this period. Canada's tariffs are zero and there is no tariff shock from NAFTA lapsing.

GTAP 9: Bovine Cattle, Sheep & Goats, Horses	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from US ('000 USD)	96,779	80,720	70,121	68,705	72,717	74,580	
Imports from Mexico ('000 USD)	492	-	51	-	196	-	
Imports from World ('000 USD)	112,141	100,654	104,300	92,798	105,092	97,108	
NAFTA as a % Imports from World	86.7%	80.2%	67.3%	74.0%	69.4%	76.8%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 10: Animal Products N.E.C.

This GTAP sector includes miscellaneous animal products, ranging from some poultry products (including live turkeys, which attract a 4% MFN tariff) to animal skins. About a third of the imports from the US are products where the weighted average of the MFN rate ranges from 78% to 200% - primarily in eggs both fertilized for incubation and fresh bird's eggs. These sizeable MFN rates are driven by imports exceeding access commitments. This is offset by two-thirds of the volume attracting no tariffs. Trade with Mexico is minimal and in categories that attract negligible tariffs. The level of Canada's imports is relatively modest but there would be a sizeable percentage shock to trade from the US in this sector. The tariff shock from NAFTA lapsing would be 46.62% for US imports and 0.02% for Mexican imports.

GTAP 10: Animal Products N.E.C.	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	27.45%	42.50%	43.22%	47.21%	63.91%	46.55%	46.62%
MFN Applied Tariff Mexico	0.92%	0.01%	0.00%	0.00%	0.00%	0.01%	0.02%
Imports from US ('000 USD)	288,267	344,387	404,857	502,573	465,210	370,459	
Imports from Mexico ('000 USD)	66	152	905	862	918	1,430	
Imports from World ('000 USD)	428,374	496,711	707,437	948,632	821,538	666,120	
NAFTA as a % Imports from World	67.3%	69.4%	57.4%	53.1%	56.7%	55.8%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 12: Wool, Silk-Worm Cocoons

There is negligible trade and tariffs are zero in this sector. There is no NAFTA shock.

GTAP 12: Wool, Silk-Worm Cocoons	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from US ('000 USD)	110	102	95	124	133	150	
Imports from Mexico ('000 USD)	-	0.02	-	-	-	0.001	
Imports from World ('000 USD)	647	184	190	278	459	228	
NAFTA as a % Imports from World	17.0%	55.5%	49.9%	44.4%	29.0%	65.6%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 13: Forestry

The majority of Canada's global imports in this sector are from the United States with a small volume of imports from Mexico. Tariffs are applicable to imports of cut plants and plant parts only. Imports of foliage of the sort used in bouquets and for other ornamental purposes face an MFN tariff of 3% and are a major contributor to the tariff shock for both imports from Mexico and the US. Over 94% of US imports do not attract a duty hence the weighted MFN rate is low. In the case of Mexican imports almost 70% of imports would face a duty ranging from 3-4%. The tariff shock from NAFTA lapsing would be 0.19% for US imports and 2.23% for Mexican imports.

GTAP 13: Forestry	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	0.20%	0.19%	0.19%	0.19%	0.17%	0.18%	0.19%
MFN Applied Tariff Mexico	2.15%	2.16%	2.30%	2.35%	1.95%	2.47%	2.23%
Imports from US ('000 USD)	306,670	330,147	342,135	344,857	358,699	316,908	
Imports from Mexico ('000 USD)	1,039	1,081	1,332	1,170	1,343	1,348	
Imports from World ('000 USD)	324,000	348,393	363,853	365,567	379,827	340,718	
NAFTA as a % Imports from World	95.0%	95.1%	94.4%	94.7%	94.8%	93.4%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 14: Fishing

The majority of Canada's imports in this sector are from the United States with a much smaller volume from Mexico. MFN tariffs are only applicable to imports of lobster, crab, and oysters and it is the American lobsters attracting an MFN rate of 2% and Mexican crabs at 5% that are major contributors to the tariff shock. Less than 1% of imports from Mexico attract a tariff hence the overall impact is small. The tariff shock from NAFTA lapsing would be 1.53% for US imports and 0.02% for Mexican imports.

GTAP 14: Fishing	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	1.38%	1.46%	1.47%	1.64%	1.63%	1.58%	1.53%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	0.04%	0.04%	0.05%	0.02%
Imports from US ('000 USD)	493,369	477,352	495,111	554,740	525,725	586,602	
Imports from Mexico ('000 USD)	4,162	4,865	5,568	5,143	5,064	5,803	
Imports from World ('000 USD)	581,676	569,235	608,032	678,313	628,911	688,754	
NAFTA as a % Imports from World	85.5%	84.7%	82.3%	82.5%	84.4%	86.0%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 15: Coal

The majority of Canada's imports in this sector are from the United States with a negligible volume from Mexico. Tariffs are zero and there is no tariff shock from NAFTA lapsing.

GTAP 15: Coal	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from US ('000 USD)	725,879	840,506	533,414	524,417	532,377	376,011	
Imports from Mexico ('000 USD)	0.45	1.06	2.17	0.86	2.74	1.10	
Imports from World ('000 USD)	972,037	1,007,518	713,163	679,574	684,613	491,638	
NAFTA as a % Imports from World	74.7%	83.4%	74.8%	77.2%	77.8%	76.5%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 16: Oil

US share of Canada's imports in this sector increased over the period 2011-2016 and those from Mexico have disappeared. Tariffs are zero and there is no tariff shock from NAFTA lapsing.

GTAP 16: Oil	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from US ('000 USD)	1,409,308	2,336,744	4,907,326	11,420,842	7,800,785	5,563,768	
Imports from Mexico ('000 USD)	744,496	790,459	874,280	674,803	0.08	-	
Imports from World ('000 USD)	28,824,434	29,924,415	26,245,553	21,699,319	13,161,657	10,895,285	
NAFTA as a % Imports from World	7.5%	10.5%	22.0%	55.7%	59.3%	51.1%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 17: Gas

The majority of Canada's imports in this sector are from the US with no imports from Mexico. Tariffs are zero and there is no tariff shock from NAFTA lapsing.

GTAP 17: Gas	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from US ('000 USD)	3,968,851	2,870,130	3,859,580	4,607,680	2,213,871	1,599,125	
Imports from Mexico ('000 USD)	-	-	-	-	-	-	
Imports from World ('000 USD)	4,446,934	3,061,647	4,021,597	4,891,371	2,373,156	1,669,230	
NAFTA as a % Imports from World	89.2%	93.7%	96.0%	94.2%	93.3%	95.8%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 18: Minerals N.E.C.

The majority of Canada's imports in this sector are from the United States with a much smaller volume from Mexico. MFN tariffs are only applicable to salt and peat. The tariff shock from NAFTA lapsing would be 0.05% for US imports and 0.06% for Mexican imports.

GTAP 18: Minerals N.E.C.	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	0.03%	0.04%	0.04%	0.05%	0.06%	0.07%	0.05%
MFN Applied Tariff Mexico	0.06%	0.07%	0.07%	0.08%	0.05%	0.06%	0.06%
Imports from US ('000 USD)	2,483,274	2,219,983	2,128,072	2,456,085	1,960,762	1,798,733	
Imports from Mexico ('000 USD)	172,350	318,366	316,239	281,921	389,545	298,077	
Imports from World ('000 USD)	4,413,605	4,390,531	4,166,758	4,363,717	3,607,091	3,342,412	
NAFTA as a % Imports from World	60.2%	57.8%	58.7%	62.7%	65.2%	62.7%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 19: Bovine Meat Products

The majority of Canada's imports in this sector are from the United States with a much smaller but growing volume from Mexico. Over 90% of the imports from the US attract a weighted average MFN rate of 26.5% - and 80% of this is in boneless bovine meat. The majority of imports from Mexico also face an MFN rate of 26.5% - although imports are split between boneless cuts and those with bone in. The MFN tariff shock from NAFTA lapsing would take the rate to 24.22% for US imports and from nil to 25.23% for Mexican imports.

GTAP 19: Bovine Meat Products	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	23.99%	24.38%	24.55%	24.24%	24.10%	23.86%	24.22%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	25.49%	25.89%	25.06%	25.23%
Imports from US ('000 USD)	935,684	1,053,991	1,039,147	866,812	730,967	625,031	
Imports from Mexico ('000 USD)	2	134	67	5,891	9,430	14,986	
Imports from World ('000 USD)	1,263,471	1,392,826	1,367,361	1,334,662	1,242,542	1,040,112	
NAFTA as a % Imports from World	74.1%	75.7%	76.0%	65.4%	59.6%	61.5%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 20: Meat Products N.E.C.

GTAP 20 covers Canada's supply-managed poultry sector as well as pork. The majority of Canada's imports in this sector are from the United States with minimal volumes from Mexico. Fresh, chilled or frozen cuts of chicken, sausages and prepared food such as baby food made with chicken are major contributors to the tariff shock that applies to imports from the US. The tariff in the GTAP database facing the United States is 57.91%; we increase this to 59.08%, The rate for Mexico rises to 2.16%.

GTAP 20: Meat Products N.E.C.	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	56.54%	60.64%	62.15%	58.36%	61.67%	55.94%	59.08%
MFN Applied Tariff Mexico	2.31%	2.31%	2.53%	2.19%	1.39%	1.58%	2.16%
Imports from US ('000 USD)	1,481,835	1,768,303	1,823,034	1,912,047	1,816,766	1,708,229	
Imports from Mexico ('000 USD)	6,757	11,700	9,439	6,004	3,298	7,116	
Imports from World ('000 USD)	1,690,599	2,035,566	2,090,839	2,192,212	2,090,992	2,033,162	
NAFTA as a % Imports from World	88.1%	87.4%	87.6%	87.5%	87.0%	84.4%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 21: Vegetable Oils and Fats

The majority of Canada's imports in this sector are from the United States with only minimal volumes from Mexico. The average tariff for this GTAP sector is influenced by the over-access tariff on margarine (part of the dairy supply management policy) 82.28 ¢/kg, which converts to about 51% ad valorem. Canada also levies tariffs on many varieties of imported vegetable oils, which would be imposed on imports from the United States with NAFTA lapsing, including on soy (9.5%), peanut (9.5%), sunflower (11%), cottonseed (9.5%), canola (11%), and linseed (8%). Olive oil and tropical oils (palm, coconut) come in duty free. Oilcake for animal feed which accounts for about 47% of US imports is in this GTAP category comes in duty free. The tariff shock from NAFTA lapsing boosts the rate by 2.53% to 9.06% for US imports from the GTAP rate of 6.53% (which reflects the effective protection for margarine alone) and to 6.68% for Mexican imports.

GTAP 21: Vegetable Oils and Fats	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	9.54%	8.42%	9.19%	9.03%	9.79%	10.06%	9.06%
MFN Applied Tariff Mexico	9.33%	8.14%	6.64%	6.63%	6.25%	6.55%	6.68%
Imports from US ('000 USD)	860,125	1,014,863	923,384	921,329	643,886	580,036	
Imports from Mexico ('000 USD)	1,319	1,702	3,832	7,107	9,222	12,221	
Imports from World ('000 USD)	1,254,266	1,400,407	1,324,722	1,370,405	1,091,881	1,052,483	
NAFTA as a % Imports from World	68.7%	72.6%	70.0%	67.7%	59.8%	56.3%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 22: Dairy Products

We do not apply a shock for the dairy products sector as it was excluded from the NAFTA

GTAP 22: Dairy Products	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	198.96%	186.22%	177.67%	178.07%	187.29%	205.89%	No shock
MFN Applied Tariff Mexico	198.59%	24.03%	60.34%	99.46%	142.03%	73.11%	No shock
Imports from US ('000 USD)	198,694	197,216	241,283	264,395	211,776	245,291	
Imports from Mexico ('000 USD)	536	393	965	965	57	1,312	
Imports from World ('000 USD)	497,693	483,506	526,344	574,825	494,874	528,072	
NAFTA as a % Imports from World	40.0%	40.9%	46.0%	46.2%	42.8%	46.7%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 23: Processed Rice

The majority of Canada's imports in this sector are global but the United States has a significantly larger share of these imports than Mexico which has a negligible volume. Tariffs are zero and there is no tariff shock from NAFTA lapsing.

GTAP 23: Processed Rice	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from US ('000 USD)	118,002	119,005	123,652	134,675	122,099	113,654	
Imports from Mexico ('000 USD)	4	2	2	4	3	3	
Imports from World ('000 USD)	265,528	262,449	283,873	303,019	295,720	252,507	
NAFTA as a % Imports from World	44.4%	45.3%	43.6%	44.4%	41.3%	45.0%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 24: Sugar

The United States and Mexico have a very small share of Canada's imports in this sector, with Mexico's share usually being negligible. Canada applies a \$24.69/tonne tariff on raw beet sugar equivalent to about 4.28% ad valorem, and a \$22.05/tonne tariff on raw cane sugar that is in solid form without flavouring equivalent to about 1.16% ad valorem, except for sugar imported for wine-making (sadly, if it says so in the tariff code, it must be true, wine lovers – Canadian wine producers add cane sugar to their wines). Other raw cane sugars attract no tariffs and it is this type of cane sugar that accounted for 94% of Mexico exports. Tariffs on refined sugar are \$30.86/tonne or about 1.05% ad valorem. Maple sugar comes in tariff free. Tariffs on imports of molasses are set at 12.5%. The main imported item is glucose which attracts a tariff of 3.5%. The tariff shock from NAFTA lapsing for imports from the United States would be about 3.36% compared to a GTAP tariff of zero. The GTAP tariff for Mexican imports is 2.7% as Canada was not part of the NAFTA sugar deal. There is no shock on imports from Mexico accordingly.

GTAP 24: Sugar	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	3.37%	3.62%	3.47%	3.54%	3.17%	3.10%	3.36%
MFN Applied Tariff Mexico	2.31%	2.25%	0.15%	0.02%	0.33%	3.13%	No shock
Imports from US ('000 USD)	36,745	33,268	35,163	35,633	37,516	43,739	
Imports from Mexico ('000 USD)	1,683	68	10,889	50,482	18,685	743	
Imports from World ('000 USD)	855,900	662,561	553,191	569,059	410,201	526,582	
NAFTA as a % Imports from World	4.5%	5.0%	8.3%	15.1%	13.7%	8.4%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 25: Food Products N.E.C.

The majority of Canada's imports in this sector are from the United States with a smaller volume from Mexico. The current GTAP tariff for imports from the United States is 11.94% and from Mexico 13.64%, as this sector contains products using dairy and sugar. Chocolate with an MFN tariff of 135.5% (over commitment rate), frozen strawberries (10.5%) and sweet biscuits (2.83%) are major contributors to the tariff shock for imports from Mexico. Chocolate (135.5%) and other food preparations (46.3%) are the categories with a major impact on the tariff shock for imports from the US. We calculate the MFN tariff as boosting these rates to 18.84% and 23.05% for the United States and Mexico respectively.

GTAP 25: Food Products N.E.C.	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	19.48%	18.71%	18.90%	18.35%	18.60%	19.08%	18.84%
MFN Applied Tariff Mexico	23.87%	23.27%	21.64%	21.09%	25.37%	22.95%	23.04%
Imports from US ('000 USD)	8,225,512	8,988,802	9,336,294	9,563,551	9,535,370	9,435,765	
Imports from Mexico ('000 USD)	168,368	178,790	207,507	262,534	276,777	296,668	
Imports from World ('000 USD)	12,806,804	13,759,794	14,246,169	14,680,767	14,360,947	14,360,630	
NAFTA as a % Imports from World	65.5%	66.6%	67.0%	66.9%	68.3%	67.8%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 26: Beverages and Tobacco Products

The United States is a major supplier of beverages and tobacco products. The baseline tariff in the GTAP database is 4.56% under NAFTA rules, which reflects some dairy beverages included in this GTAP category. Water and other non-alcoholic beverages with an MFN tariff of 38.9% and ethyl alcohol and denatured other spirits (4.13%) are major contributors to the tariff shock for imports from the US. Some spirits, liqueurs and other spirituous beverages (0.74%), water (11%) and other non-alcoholic beverages (38.95%) are major contributors to the tariff shock for imports from Mexico. Imports from Mexico are modest and the baseline GTAP tariff is 0.13%. The tariff shock from NAFTA lapsing would raise these to 10.00% for US imports and 0.72% for Mexican imports which are above the current GTAP tariffs.

GTAP 26: Beverages and Tobacco Products	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	8.40%	9.13%	9.44%	10.15%	11.26%	11.58%	10.00%
MFN Applied Tariff Mexico	0.50%	0.55%	0.66%	0.78%	1.07%	0.74%	0.72%
Imports from US ('000 USD)	2,096,469	2,276,167	2,413,211	2,508,643	2,267,387	2,163,382	
Imports from Mexico ('000 USD)	127,338	134,071	131,569	127,786	144,850	163,749	
Imports from World ('000 USD)	4,960,249	5,220,974	5,411,941	5,412,598	4,966,254	4,886,079	
NAFTA as a % Imports from World	44.8%	46.2%	47.0%	48.7%	48.6%	47.6%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 27: Textiles

The majority of Canada's imports in this sector are global but the United States has a significantly larger share of these imports than Mexico which has a small volume. Over half of imports from the US do not attract a tariff. Carpets with an MFN rate of 11.25 %, textiles (12.28%) and bedding (14%) are major contributors to the tariff shock for imports from the US. T-shirts with an MFN rate of 18 %, socks (16%) and textiles (12.8%) are major contributors to the tariff shock for imports from Mexico. The tariff shock from NAFTA lapsing would be 6.05% for US imports and 12.55% for Mexican imports.

GTAP 27: Textiles	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	5.97%	6.01%	6.12%	6.14%	6.11%	5.97%	6.05%
MFN Applied Tariff Mexico	12.08%	12.58%	12.44%	12.74%	13.12%	12.38%	12.55%
Imports from US ('000 USD)	2,357,079	2,384,891	2,314,228	2,307,204	2,101,538	2,017,143	
Imports from Mexico ('000 USD)	189,557	184,893	205,099	194,306	186,291	185,860	
Imports from World ('000 USD)	7,163,305	7,185,787	7,332,984	7,368,296	7,054,798	6,956,743	
NAFTA as a % Imports from World	35.6%	35.8%	34.4%	33.9%	32.4%	31.7%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 28: Wearing Apparel

More than 90% of Canada's imports in this sector are global. Women's trousers with an MFN rate of 17 %, jump suits (10.5%) and men's trousers (17%) are major contributors to the tariff shock for imports from the US. Men's trousers with an MFN rate of 17 %, women's trousers (17%) and men's track suits (12.5%) are major contributors to the tariff shock for imports from Mexico. The tariff shock from NAFTA lapsing would be 15.23% for US imports and 16.35% for Mexican imports.

GTAP 28: Wearing Apparel	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	15.26%	15.27%	15.12%	15.10%	15.30%	15.40%	15.23%
MFN Applied Tariff Mexico	16.28%	16.34%	16.43%	16.26%	16.38%	16.40%	16.35%
Imports from US ('000 USD)	325,202	355,045	337,572	309,986	282,934	251,876	
Imports from Mexico ('000 USD)	224,811	233,737	234,918	235,698	205,282	174,570	
Imports from World ('000 USD)	6,845,098	6,760,518	7,174,315	7,298,454	7,188,096	6,944,808	
NAFTA as a % Imports from World	8.0%	8.7%	8.0%	7.5%	6.8%	6.1%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 29: Leather Products

As with Sector 28, more than 90% of Canada's imports in this sector are global. Imports from Mexico are much smaller than those from the United States. Cases and containers (travelling bags insulated food or beverage bags etc. with plastic or textile outer surface) with an MFN rate of 5.67%, and footwear (18%) are major contributors to the tariff shock for imports from the US. Footwear with an MFN rate of 18%, and cases and containers (travelling bags, shopping or tool bags etc. with an outer surface of vulcanised fibre or paperboard) (3.5%) are major contributors to the tariff shock for imports from Mexico. The tariff shock from NAFTA lapsing would be 7.80% for US imports and 8.11% for Mexican imports.

GTAP 29: Leather Products	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	7.36%	7.59%	7.72%	8.08%	7.95%	8.08%	7.80%
MFN Applied Tariff Mexico	9.02%	7.62%	8.00%	7.61%	8.62%	8.24%	8.11%
Imports from US ('000 USD)	153,152	184,946	190,632	189,795	169,996	162,753	
Imports from Mexico ('000 USD)	24,673	43,492	51,940	47,808	45,706	43,698	
Imports from World ('000 USD)	3,413,703	3,562,118	3,746,367	3,950,358	3,952,056	3,840,575	
NAFTA as a % Imports from World	5.2%	6.4%	6.5%	6.0%	5.5%	5.4%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 30: Wood Products

About 44% Canada's imports in this sector are from the United States with a smaller volume imported from Mexico. Just over 85% of imports from Mexico do not attract a tariff. Some metal furniture with an MFN rate of 8%, and upholstered seats (4.75%) are major contributors to the tariff shock for imports from the US. Some types of mattresses with an MFN rate of 9.5%, and some seats used in motor vehicles (6%) are major contributors to the tariff shock for imports from Mexico. The tariff shock would be 2.32% for US and 0.91% for Mexican imports.

GTAP 30: Wood Products	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	2.48%	2.35%	2.40%	2.30%	2.26%	2.13%	2.32%
MFN Applied Tariff Mexico	0.86%	0.85%	0.94%	0.94%	0.98%	0.89%	0.91%
Imports from US ('000 USD)	3,829,816	4,039,645	4,050,437	4,138,064	3,904,947	3,779,857	
Imports from Mexico ('000 USD)	791,379	966,310	928,384	933,841	901,326	1,058,628	
Imports from World ('000 USD)	8,626,764	9,223,829	9,224,300	9,437,494	8,966,822	9,067,582	
NAFTA as a % Imports from World	53.6%	54.3%	54.0%	53.7%	53.6%	53.4%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 31: Paper Products, Publishing

The majority of Canada's imports in this sector are from the US with a significantly smaller volume of imports from Mexico. Items in this sector face no tariffs with the exception of textile wall coverings (9.5%) and sanitary towels, pads, tampons and napkins (10.2%) which comprise 7% of the value of imports from the US and 11% from Mexico. The tariff shock from NAFTA lapsing would be 0.72% US imports and 1.11% for Mexican imports.

GTAP 31: Paper Products, Publishing	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	0.57%	0.72%	0.74%	0.74%	0.81%	0.76%	0.72%
MFN Applied Tariff Mexico	0.75%	0.84%	0.72%	1.05%	1.39%	2.22%	1.11%
Imports from US ('000 USD)	7,705,949	7,650,839	7,644,748	7,407,208	6,996,746	6,649,729	
Imports from Mexico ('000 USD)	89,946	124,639	146,481	133,878	111,164	90,966	
Imports from World ('000 USD)	9,505,939	9,471,330	9,531,963	9,263,852	8,820,575	8,402,109	
NAFTA as a % Imports from World	82.0%	82.1%	81.7%	81.4%	80.6%	80.2%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 32: Petroleum, Coal Products

The majority of Canada's imports in this sector are from the US with a small volume from Mexico. Two types of petroleum oils and oils from bituminous minerals account for 83% of the value of imports from the US and 99% from Mexico. These two categories attract MFN tariff rates of 1.67% and 1%. The tariff shock would be 1.36% for US imports and 1.66% for Mexican.

GTAP 32: Petroleum, Coal Products	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	1.16%	1.26%	1.39%	1.36%	1.31%	1.38%	1.36%
MFN Applied Tariff Mexico	1.63%	1.67%	1.67%	1.67%	0.54%	1.67%	1.66%
Imports from US ('000 USD)	10,185,985	10,913,309	13,887,756	14,531,023	9,699,088	8,331,514	
Imports from Mexico ('000 USD)	670,564	372,461	624,037	258,158	416	278,324	
Imports from World ('000 USD)	18,387,626	16,993,293	18,744,113	19,175,600	12,917,101	11,911,194	
NAFTA as a % Imports from World	59.0%	66.4%	77.4%	77.1%	75.1%	72.3%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 33: Chemical, Rubber, Plastic Products

The majority of Canada's imports in this sector are from the US with a small volume from Mexico. Washing and cleaning preparations (6.5%) and rubber tires used on cars and buses or trucks (7%) are major contributors to the tariff shock for imports from the US; hair preparations (6.5%), recorded optical media (3%) and rubber tires used on cars (7%) for imports from Mexico. The tariff shock would be 2.17% for US imports and 2.33% for Mexican.

GTAP 33: CRP Products	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	1.93%	2.09%	2.18%	2.21%	2.29%	2.34%	2.17%
MFN Applied Tariff Mexico	2.24%	2.35%	2.33%	2.45%	2.36%	2.25%	2.33%
Imports from US ('000 USD)	36,239,204	36,982,688	36,942,565	37,577,216	34,719,910	33,295,535	
Imports from Mexico ('000 USD)	777,993	897,336	1,007,697	996,611	1,039,413	1,099,833	
Imports from World ('000 USD)	59,220,407	60,582,489	60,894,958	61,250,299	56,911,429	54,897,313	
NAFTA as a % Imports from World	62.5%	62.5%	62.3%	63.0%	62.8%	62.7%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 34: Mineral Products N.E.C.

The majority of Canada's imports in this sector are from the US with a significantly smaller volume of imports from Mexico. Asphalt or similar material (2.5%) and plaster or plaster compositions (6%) and cellulose fibre-cement products (5%) are a major part of the tariff shock for imports from the US. Porcelain or china sinks, wash basins, sanitary fixtures etc. (7.5%) and these products that are made of materials other than porcelain or china (7.5%) contribute to the tariff shock for imports from Mexico. The tariff shock would be 1.20% for US imports and 3.09% for Mexican.

GTAP 34: Mineral Products N.E.C.	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	1.21%	1.19%	1.19%	1.21%	1.22%	1.21%	1.20%
MFN Applied Tariff Mexico	2.99%	3.40%	3.27%	3.12%	3.02%	2.78%	3.09%
Imports from US ('000 USD)	3,195,360	3,432,327	3,479,833	3,477,506	3,356,068	3,270,832	
Imports from Mexico ('000 USD)	144,057	152,016	151,674	163,626	175,224	163,885	
Imports from World ('000 USD)	5,383,732	5,769,004	5,892,441	5,965,873	5,797,593	5,671,840	
NAFTA as a % Imports from World	62.0%	62.1%	61.6%	61.0%	60.9%	60.6%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 35: Ferrous Metals

The majority of Canada's imports in this sector are from the US with a significantly smaller volume of imports from Mexico. Items in this sector face no tariffs with the exception of stainless steel pipe or tube fitting and steel switchblades, crossing frogs, point rods and other crossing pieces. The tariff shock would be 0.02% for US imports and 0.01% for Mexican.

GTAP 35: Ferrous Metals	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	0.02%	0.02%	0.02%	0.02%	0.03%	0.03%	0.02%
MFN Applied Tariff Mexico	0.01%	0.01%	0.00%	0.00%	0.01%	0.01%	0.01%
Imports from US ('000 USD)	8,352,689	8,339,753	7,820,910	7,835,815	5,662,785	5,030,049	
Imports from Mexico ('000 USD)	311,207	395,341	294,730	336,565	171,216	161,289	
Imports from World ('000 USD)	13,276,176	13,615,530	11,938,196	13,287,796	9,673,726	8,283,679	
NAFTA as a % Imports from World	65.3%	64.2%	68.0%	61.5%	60.3%	62.7%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 36: Metals N.E.C.

The majority of Canada's imports in this sector are global with the US the source for about a third of total imports. Mexico is the source for significantly smaller volumes. There is no tariff shock from NAFTA lapsing in this sector.

GTAP 36: Metals N.E.C.	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from US ('000 USD)	7,198,836	6,819,510	6,114,748	5,341,824	5,410,656	5,173,095	
Imports from Mexico ('000 USD)	800,633	680,016	527,517	304,356	52,643	76,526	
Imports from World ('000 USD)	22,182,523	19,450,223	17,875,843	16,952,288	15,236,656	14,073,480	
NAFTA as a % Imports from World	36.1%	38.6%	37.2%	33.3%	35.9%	37.3%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 37: Metal Products

About half of Canada's imports in this sector are from the US with a significantly smaller volume of imports from Mexico. Iron or steel articles (3.25%), aluminium casks, drums, cans, boxes (6.5%), and prefabricated buildings (6.5%) are a major part of the tariff shock for imports from the US. Razors (7.5%), mountings, fittings and similar articles of base metal, suitable for buildings (1.75%), and iron or steel articles (3.25%) contribute to the tariff shock for imports from Mexico. The tariff shock would be 1.83% for US imports and 2.03% for Mexican.

GTAP 37: Metal Products	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	1.82%	1.85%	1.86%	1.89%	1.80%	1.77%	1.83%
MFN Applied Tariff Mexico	2.03%	1.98%	2.03%	2.01%	2.09%	2.00%	2.03%
Imports from US ('000 USD)	7,325,806	7,827,084	7,748,566	7,846,274	6,895,126	6,159,545	
Imports from Mexico ('000 USD)	289,652	319,802	343,325	338,861	335,083	327,022	
Imports from World ('000 USD)	12,717,366	13,960,324	13,972,724	13,879,454	12,916,059	11,964,905	
NAFTA as a % Imports from World	59.9%	58.4%	57.9%	59.0%	56.0%	54.2%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 38: Motor Vehicles and Parts

Almost 70% of Canada's imports in this sector are from the US with smaller volume of imports from Mexico – but still accounting for about 12% of total imports. The tariff shock from NAFTA lapsing would be 4.50% for US imports and 4.64% for Mexican imports.

GTAP 38: Motor Vehicles and Parts	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	4.47%	4.42%	4.52%	4.55%	4.53%	4.48%	4.50%
MFN Applied Tariff Mexico	4.53%	4.63%	4.70%	4.77%	4.68%	4.54%	4.64%
Imports from US ('000 USD)	45,140,095	49,263,625	50,291,852	49,949,368	47,007,019	48,260,435	
Imports from Mexico ('000 USD)	7,796,697	8,190,529	7,997,215	8,774,881	8,629,326	8,783,152	
Imports from World ('000 USD)	66,753,248	73,891,140	74,070,503	73,172,650	69,946,232	71,570,820	
NAFTA as a % Imports from World	79.3%	77.8%	78.7%	80.3%	79.5%	79.7%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 39: Transport Equipment N.E.C.

Just over half of Canada's imports in this sector are from the US with smaller volume of imports from Mexico –accounting for about 3% of total imports. Tank wagons and the like (11%), motorboats (9.5%), and yachts and other vessels (4.75%) are a major part of the tariff shock for imports from the US. Tank wagons and the like (11%), motorboats (9.5%), and parts for railway or tramway rolling stock (6.5%) are a major part of the tariff shock for imports from Mexico. The tariff shock from NAFTA lapsing would be 1.59% for US imports and 2.80% for Mexican imports.

GTAP 39: Transport Equipment	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	2.08%	1.83%	1.78%	1.54%	1.12%	1.44%	1.59%
MFN Applied Tariff Mexico	0.83%	1.65%	2.09%	1.85%	4.70%	3.41%	2.80%
Imports from US ('000 USD)	6,582,456	6,497,150	7,157,415	8,562,013	8,993,163	8,061,178	
Imports from Mexico ('000 USD)	231,544	292,502	444,301	445,992	653,469	451,840	
Imports from World ('000 USD)	12,202,542	12,036,818	13,615,753	14,649,875	16,184,887	13,763,244	
NAFTA as a % Imports from World	55.8%	56.4%	55.8%	61.5%	59.6%	61.9%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 40: Electronic Equipment

The majority of Canada's imports in this sector are global. The US is the source for about 18% of imports and Mexican imports comprise about 12% of the total. Monitors and projectors (rates across several sub-categories vary from 1-3.7%), microphones, headphones, earphones, amplifier equipment (rates across several sub-categories vary from 1.5-6.5%) contribute to the tariff shock for imports from Mexico and the US. The tariff shock from NAFTA lapsing would be 0.21% for US imports and 1.20% for Mexican imports.

GTAP 40: Electronic Equipment	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	0.18%	0.19%	0.21%	0.23%	0.23%	0.20%	0.21%
MFN Applied Tariff Mexico	1.27%	1.38%	1.18%	1.19%	1.05%	1.02%	1.20%
Imports from US ('000 USD)	6,169,134	5,855,739	5,826,733	5,655,934	4,848,716	4,746,125	
Imports from Mexico ('000 USD)	4,953,297	4,151,160	4,099,583	3,777,573	3,273,086	3,122,281	
Imports from World ('000 USD)	34,487,364	32,558,848	32,343,529	30,876,094	28,952,808	27,517,978	
NAFTA as a % Imports from World	32.3%	30.7%	30.7%	30.6%	28.1%	28.6%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 41: Machinery and Equipment N.E.C.

About half of Canadian imports in this sector are from the United States. Mexican imports comprise about 7% of the total. Tractors (3%), refrigerators and freezers (4%), and air heaters and hot air distributors (5%) contribute to the tariff shock for imports from Mexico. Refrigerators and freezers (4%), chandeliers and other electric ceiling or wall light fittings (7%), and ovens, cookers, cooking plates, boiling rings, grillers and roasters for domestic use (5.33%) contribute to the tariff shock for imports from the US. The tariff shock from NAFTA lapsing would be 0.50% for US imports and 0.71% for Mexican imports.

GTAP 41: Machinery and Equipment	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	0.48%	0.48%	0.52%	0.50%	0.51%	0.52%	0.50%
MFN Applied Tariff Mexico	0.68%	0.69%	0.72%	0.70%	0.70%	0.74%	0.71%
Imports from US ('000 USD)	42,799,876	46,019,087	44,053,509	44,457,381	40,386,532	36,388,165	
Imports from Mexico ('000 USD)	4,860,949	5,566,146	5,633,821	5,918,192	5,761,329	5,858,908	
Imports from World ('000 USD)	82,649,900	87,845,362	86,642,752	88,078,815	81,800,509	79,629,236	
NAFTA as a % Imports from World	57.7%	58.7%	57.3%	57.2%	56.4%	53.1%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 42: Manufactures N.E.C.

The majority of Canadian imports in this sector are global. US imports comprise about a quarter of imports and Mexican imports are about 3% of the total. Jewellery (5.75%), wheeled toys like tricycles, dolls, puzzles (4%), and worn clothing and other worn articles (9%) contribute to the tariff shock for imports from the US. Jewellery (5.75%), wheeled toys like tricycles, dolls, puzzles (4%) and ball point pens (7%) contribute to the tariff shock for imports from Mexico. The tariff shock from NAFTA lapsing would be 2.76% for US imports and 3.95% for Mexican imports.

GTAP 42: Manufactures	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff US	2.95%	2.89%	2.87%	2.50%	2.67%	2.74%	2.76%
MFN Applied Tariff Mexico	3.79%	3.84%	3.95%	3.84%	4.04%	4.21%	3.95%
Imports from US ('000 USD)	1,968,064	2,210,659	2,196,356	2,473,086	2,004,003	1,906,929	
Imports from Mexico ('000 USD)	147,093	214,772	225,050	253,522	247,431	237,938	
Imports from World ('000 USD)	7,553,518	7,778,254	7,848,843	8,303,786	7,712,738	7,359,945	
NAFTA as a % Imports from World	28.0%	31.2%	30.9%	32.8%	29.2%	29.1%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

The US Tariff Shock by GTAP Sector

GTAP Sector 1: Paddy Rice

US imports from Canada have been growing but are negligible from Mexico. Tariffs are specific tariffs that convert in 2017 to about 1.14%. Husked brown rice facing a tariff of 1.14% accounts for the tariff shock. We apply a tariff shock from NAFTA lapsing of 1.14% for Canadian imports and 1.14% for Mexican imports.

GTAP 1: Paddy Rice	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	1.14%	1.14%	1.14%	1.14%	1.14%	1.14%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	1.14%	0.00%	1.14%
Imports from Canada ('000 USD)	9	41	16	21	400	
Imports from Mexico ('000 USD)	-	-	-	3	-	
Imports from World ('000 USD)	67,481	60,173	65,970	81,299	67,505	
NAFTA as a % Imports from World	0.01%	0.07%	0.02%	0.03%	0.59%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 2: Wheat

The United States imports some wheat from Mexico but the majority is imported from Canada. The US MFN tariff on its main imported wheat (durum) is 1.3%. We calculate a tariff shock from NAFTA lapsing of about 1.10% for Canadian imports and 1.30% for Mexican imports.

GTAP 2: Wheat	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	1.42%	1.03%	1.03%	1.04%	1.06%	1.10%
MFN Applied Tariff Mexico	1.31%	1.32%	1.29%	1.29%	1.29%	1.30%
Imports from Canada ('000 USD)	634,752	773,816	1,055,041	998,702	701,717	
Imports from Mexico ('000 USD)	10,662	5,786	1,743	4,113	12,179	
Imports from World ('000 USD)	661,564	831,705	1,063,653	1,027,242	730,415	
NAFTA as a % Imports from World	97.56%	93.74%	99.35%	97.62%	97.74%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 3: Cereal Grains

The United States imports little cereal grains from Mexico, mostly maize, which attracts a tariff of about 0.28%. The US imports a wider mix of cereal grains from Canada, including some maize and barley (which attracts a tariff of about 0.25%). Oats, which come in MFN duty free account for half of the US imports from Canada. The tariff shock from NAFTA lapsing would be 0.08% for Canadian imports and 0.19% for Mexican imports.

GTAP 3: Cereal Grains	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.07%	0.09%	0.11%	0.06%	0.07%	0.08%
MFN Applied Tariff Mexico	0.18%	0.17%	0.18%	0.21%	0.21%	0.19%
Imports from Canada ('000 USD)	699,303	891,935	1,036,514	818,326	666,252	
Imports from Mexico ('000 USD)	5,319	30,887	16,091	24,693	20,783	
Imports from World ('000 USD)	970,638	1,634,679	2,289,488	1,596,995	1,281,775	
NAFTA as a % Imports from World	72.59%	56.45%	45.98%	52.79%	53.60%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 4: Vegetables, fruits and nuts

The United States imports just over half of the commodities in this sector from North America with the majority from Mexico. Tomatoes (2.36%) and chili peppers (1.63%) and cucumbers and gherkins (4.07%) are major contributors to the tariff shock for imports from Canada. Tomatoes (2.36%) avocados (5.93%) and chili peppers (1.63%) for imports from Mexico. The tariff shock from NAFTA lapsing would be 3.65% for Canadian imports and 3.92% for Mexican imports.

GTAP 4: Vegetables, Fruits Nuts	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	3.61%	3.62%	3.64%	3.63%	3.75%	3.65%
MFN Applied Tariff Mexico	3.88%	3.80%	4.07%	3.88%	3.94%	3.92%
Imports from Canada ('000 USD)	1,382,715	1,381,072	1,576,060	1,653,039	1,671,487	
Imports from Mexico ('000 USD)	7,165,812	7,240,534	8,152,008	9,439,010	10,208,541	
Imports from World ('000 USD)	17,052,284	15,924,912	17,705,526	20,948,791	22,456,606	
NAFTA as a % Imports from World	50.13%	54.14%	54.94%	52.95%	52.90%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 5: Oil Seeds

The share of United States imports from North America has been declining over the period 2011-2014 with a small uptick in 2015. Canada is a major source of imports in this sector. Rape or colza seed (0.13%) and linseed (0.35%) are major contributors to the tariff shock for imports from Canada. Several categories of ground nuts which face tariffs of 67.18-84.26% contribute to the tariff shock for imports from Mexico. The US tariff facing Mexico in the GTAP data base is 24.06%, which reflects US protection for its peanut sector. The tariff shock from NAFTA lapsing would be 0.11% for Canadian imports and an increase to 24.13% (by 0.07%) for Mexican imports.

GTAP 5: Oil Seeds	2011	2012	2013	2014	2015	2016	NAFTA
MFN Applied Tariff Canada	0.12%	0.11%	0.09%	0.10%	0.10%	0.12%	0.11%
MFN Applied Tariff Mexico	17.97%	32.21%	14.96%	12.88%	10.48%	17.97%	24.13%
Imports from Canada ('000 USD)	758,685	679,282	836,808	964,481	652,280	652,280	
Imports from Mexico ('000 USD)	8,755	14,528	25,681	22,361	17,908	17,908	
Imports from World ('000 USD)	1,038,238	1,095,434	1,641,953	2,292,356	1,320,426	1,320,426	
NAFTA as a % Imports from World	73.92%	63.34%	52.53%	43.05%	50.76%	50.76%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 6: Sugar Cane, Sugar Beet

US imports from Canada are negligible and non-existent from Mexico. The tariff shock from NAFTA lapsing would be 0.03% for Canadian imports and 0.0% for Mexican imports.

GTAP 6: Sugar Cane, Sugar Beet	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.03%	0.03%	0.03%	0.00%	0.03%	0.03%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from Canada ('000 USD)	21,313	19,926	5,273	-	3,070	
Imports from Mexico ('000 USD)	-	-	-	-	-	
Imports from World ('000 USD)	21,326	19,929	5,273	119	3,161	
NAFTA as a % Imports from World	99.94%	99.99%	100.00%	0.00%	97.12%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 7: Plant Based Fibres

The majority of US imports in this sector are global. Cotton which is not carded or combed faces a tariff of 8.31% and contributes to the tariff shock for imports from both Mexico and Canada. The tariff shock from NAFTA lapsing would be 0.31% for Canadian imports and 0.24% for Mexican imports

GTAP 7: Plant-Based Fibres C.	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.00%	0.42%	2.44%	0.00%	0.00%	0.31%
MFN Applied Tariff Mexico	0.00%	0.00%	1.41%	0.01%	0.07%	0.24%
Imports from Canada ('000 USD)	17	15	6	12	22	
Imports from Mexico ('000 USD)	108	58	205	507	459	
Imports from World ('000 USD)	51,802	31,513	23,743	37,932	51,410	
NAFTA as a % Imports from World	0.24%	0.23%	0.89%	1.37%	0.94%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 8: Crops N.E.C

The majority of US imports in this sector are global. Tobacco (45.25%), live plants (1.68%) and cut flowers (6%) contributes to the tariff shock for imports from Canada. Plants and parts used primarily in perfumery, in pharmacy or for insecticidal, fungicidal or similar purposes (1.26%), and cut flowers (6%) contributes to the tariff shock for imports from Mexico. The tariff shock from NAFTA lapsing would be 8.83% for Canadian imports and 2.11% for Mexican imports.

GTAP 8: Crops N.E.C.	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	10.27%	10.05%	9.34%	8.12%	6.42%	8.83%
MFN Applied Tariff Mexico	2.05%	1.85%	2.12%	2.45%	2.19%	2.11%
Imports from Canada ('000 USD)	472,852	511,785	516,048	539,740	521,081	
Imports from Mexico ('000 USD)	555,498	549,858	445,290	415,363	355,554	
Imports from World ('000 USD)	12,756,796	11,288,713	10,579,074	11,943,505	12,098,161	
NAFTA as a % Imports from World	8.06%	9.40%	9.09%	8.00%	7.25%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 9: Bovine Cattle, Sheep and Goats, Horses

The United States imports just over 80% of the commodities in this sector from North America with the majority from Canada. Live cattle (0.17%) and other live bovine animals (0.12%) contribute to the tariff shock for imports from Canada and Mexico. The tariff shock from NAFTA lapsing would be 0.16% for Canadian imports and 0.16% for Mexican imports.

GTAP 9: Bovine Cattle, Sheep and Goats, Horses	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.17%	0.16%	0.16%	0.16%	0.16%	0.16%
MFN Applied Tariff Mexico	0.13%	0.17%	0.17%	0.17%	0.17%	0.16%
Imports from Canada ('000 USD)	926,168	1,138,327	1,363,225	1,872,366	1,435,406	
Imports from Mexico ('000 USD)	622,122	719,612	511,119	744,104	890,874	
Imports from World ('000 USD)	1,843,548	2,127,523	2,160,529	2,963,185	2,796,709	
NAFTA as a % Imports from World	83.98%	87.33%	86.75%	88.30%	83.18%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 10: Animal Products N.E.C.

The United States imports over 60% of the commodities in this sector globally. Natural honey (0.46%) and unspecified animal products (0.80%) contribute to the tariff shock for imports from Mexico and Canada. Whole hides and skins facing a tariff of 2.14% also contribute to the Canadian tariff shock. The tariff shock from NAFTA lapsing would be 0.26% for Canadian imports and 0.77% for Mexican imports.

GTAP 10: Animal Products N.E.C.	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.30%	0.28%	0.27%	0.23%	0.25%	0.26%
MFN Applied Tariff Mexico	0.76%	0.73%	0.78%	0.77%	0.80%	0.77%
Imports from Canada ('000 USD)	677,647	745,873	764,196	923,126	815,430	
Imports from Mexico ('000 USD)	62,607	84,635	97,915	117,179	121,965	
Imports from World ('000 USD)	1,922,532	2,024,399	2,249,365	2,651,078	2,579,877	
NAFTA as a % Imports from World	38.50%	41.02%	38.33%	39.24%	36.33%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 12: Wool, Silk-Worm Cocoons

The United States imports the majority of the commodities in this sector globally. Mexican imports are negligible. Shorn wool (0.45%) and wool, greasy and not carded or combed (1.78%) contribute to the tariff shock for imports from Mexico and Canada. The tariff shock from NAFTA lapsing would be 0.57% for Canadian imports and 1.20% for Mexican imports.

GTAP 12: Wool, Silk-Worm Cocoons	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.47%	0.64%	0.44%	0.59%	0.60%	0.57%
MFN Applied Tariff Mexico	0.77%	1.78%	1.66%	0.84%	1.04%	1.20%
Imports from Canada ('000 USD)	899	2,069	965	1,633	1,601	
Imports from Mexico ('000 USD)	50	65	66	81	108	
Imports from World ('000 USD)	21,648	18,074	14,296	11,295	11,437	
NAFTA as a % Imports from World	4.38%	11.81%	7.21%	15.17%	14.94%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 13: Forestry

The United States imports almost 60% of the commodities in this sector globally. Vegetable products (0.61%) and foliage for bouquets and other ornamental purposes (2.33%) contribute to the tariff shock for both Canada and Mexico. Natural gums, resins, gum-resins and oleoresins (0.5%) also are a factor for the Canadian tariff shock. The tariff shock from NAFTA lapsing would be 0.07% for Canadian imports and 0.85% for Mexican imports.

GTAP 13: Forestry	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.08%	0.07%	0.08%	0.07%	0.06%	0.07%
MFN Applied Tariff Mexico	0.82%	0.89%	0.92%	0.87%	0.78%	0.85%
Imports from Canada ('000 USD)	120,280	134,099	131,394	138,119	139,054	
Imports from Mexico ('000 USD)	38,877	41,101	42,192	52,783	54,745	
Imports from World ('000 USD)	370,399	391,310	419,450	439,260	459,303	
NAFTA as a % Imports from World	42.97%	44.77%	41.38%	43.46%	42.19%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 14: Fishing

The United States imports almost half of the commodities in this sector globally. A subset of fish types - fresh or chilled face a tariff of 1.5% and in a couple of cases tariffs of 0.5% and 0.04%. Crabs attract a tariff of 3.5%. Most of the categories are the same for imports from both Canada and Mexico. Alaska pollack, catfish and carp are included in the products incorporated into the Canadian tariff shock while seabass is included in the Mexican calculations. The tariff shock from NAFTA lapsing would be 0.06% for Canadian imports and 0.46% for Mexican imports.

GTAP 14: Fishing	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.09%	0.07%	0.05%	0.06%	0.06%	0.06%
MFN Applied Tariff Mexico	0.79%	0.39%	0.43%	0.37%	0.38%	0.46%
Imports from Canada ('000 USD)	1,000,538	1,025,228	1,054,024	1,099,590	1,259,664	
Imports from Mexico ('000 USD)	83,702	79,874	92,644	104,190	107,439	
Imports from World ('000 USD)	2,021,111	1,894,808	2,054,735	2,432,892	2,614,583	
NAFTA as a % Imports from World	53.65%	58.32%	55.81%	49.48%	52.29%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 15: Coal

The United States imports about 80% the commodities in this sector globally. Tariffs are zero and there is no tariff shock from NAFTA lapsing.

GTAP 15: Coal	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from Canada ('000 USD)	441,837	204,805	162,414	138,404	140,953	
Imports from Mexico ('000 USD)	50	14	-	10	54	
Imports from World ('000 USD)	1,454,041	887,298	742,961	997,674	886,065	
NAFTA as a % Imports from World	30.39%	23.08%	21.86%	13.87%	15.91%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 16: Oil

The United States imports almost half the commodities in this sector globally. Tariffs are zero and there is no tariff shock from NAFTA lapsing.

GTAP 16: Oil	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from Canada ('000 USD)	69,158,455	72,879,664	76,657,221	85,663,685	49,887,130	
Imports from Mexico ('000 USD)	39,992,264	37,217,067	31,940,287	28,115,660	12,794,763	
Imports from World ('000 USD)	342,814,177	315,839,837	273,840,507	253,245,950	132,595,766	
NAFTA as a % Imports from World	31.84%	34.86%	39.66%	44.93%	47.27%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 17: Gas

United States imports the majority of the commodities in this sector from Canada. Mexican imports are very small. Tariffs are zero and there is no tariff shock from NAFTA lapsing.

GTAP 17: Gas	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff Mexico	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from Canada ('000 USD)	11,541,810	7,502,540	9,167,657	14,499,453	8,394,451	
Imports from Mexico ('000 USD)	17,546	10,477	14,618	41,142	17,084	
Imports from World ('000 USD)	13,696,000	8,621,801	10,308,807	15,731,133	9,477,557	
NAFTA as a % Imports from World	84.40%	87.14%	89.07%	92.43%	88.75%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 18: Minerals N.E.C.

The United States imports almost 70% of the commodities in this sector globally. Mineral substances (0.67%) and natural barium sulphates (0.46%) are major contributors to the tariff shock for imports from Mexico. Mineral substances (0.67%) and monumental or building stone (3%) are major contributors to the tariff shock for imports from Canada. The tariff shock from NAFTA lapsing would be 0.01% for Canadian imports and 0.04% for Mexican imports.

GTAP 18: Minerals N.E.C.	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.01%	0.01%	0.01%	0.01%	0.02%	0.01%
MFN Applied Tariff Mexico	0.01%	0.02%	0.04%	0.06%	0.08%	0.04%
Imports from Canada ('000 USD)	1,986,665	1,710,041	1,540,100	1,850,375	1,558,470	
Imports from Mexico ('000 USD)	616,612	413,207	344,521	454,450	364,735	
Imports from World ('000 USD)	7,620,678	6,522,365	5,865,026	7,079,482	6,241,586	
NAFTA as a % Imports from World	34.16%	32.55%	32.13%	32.56%	30.81%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 19: Bovine Meat Products

The United States imports almost 70% of the commodities in this sector globally. The United States has a quota for a number of categories in beef products. Canada and Mexico have an unlimited access to import in these categories under NAFTA. Imports from Mexico and Canada face an MFN rate of 10.1% for cuts of meat with bone in and 10.12% for boneless cuts. These are major contributors to the tariff shock. The tariff shock from NAFTA lapsing would be 8.51% for Canada imports and 9.78% for Mexico.

GTAP 19: Bovine Meat Products	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	8.62%	8.34%	8.32%	8.47%	8.72%	8.51%
MFN Applied Tariff Mexico	9.81%	9.80%	9.77%	9.80%	9.77%	9.78%
Imports from Canada ('000 USD)	1,060,141	974,976	979,211	1,319,758	1,306,241	
Imports from Mexico ('000 USD)	333,392	526,941	562,408	829,629	1,069,411	
Imports from World ('000 USD)	3,957,880	4,322,868	4,400,468	6,633,849	7,600,260	
NAFTA as a % Imports from World	35.21%	34.74%	35.03%	32.40%	31.26%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 20: Meat Products N.E.C.

The United States imports over 45% of the commodities in this sector globally. Swine meat (0.25%) and hams, shoulders and cuts with bone in (0.22%) and chicken meat and edible offal (7.12%) are major contributors to the tariff shock for imports from Canada. Frozen swine meat (0.19%) and meat preparations; sausages and similar products (2.04%) and chicken meat preparations (6%) are major contributors to the tariff shock for imports from Mexico. The tariff shock from NAFTA lapsing would be 1.46% for Canadian imports and 2.18% for Mexican imports.

GTAP 20: Meat Products N.E.C.	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	1.41%	1.52%	1.46%	1.33%	1.60%	1.46%
MFN Applied Tariff Mexico	2.38%	2.30%	2.40%	2.01%	1.93%	2.18%
Imports from Canada ('000 USD)	1,208,314	1,195,994	1,335,036	1,563,266	1,489,080	
Imports from Mexico ('000 USD)	47,247	52,675	54,226	62,670	66,536	
Imports from World ('000 USD)	2,228,733	2,221,237	2,454,877	2,838,869	2,934,956	
NAFTA as a % Imports from World	56.34%	56.22%	56.59%	57.27%	53.00%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 21: Vegetable Oils and Fats

The United States imports over half of the commodities in this sector globally. Rape, colza or mustard oil (6%), oil-cake and other solid residues (0.48%) are major contributors to the tariff shock for imports from Canada. Sun-flower seed, safflower or cotton-seed (crude at 4.37% and non-crude at 4.25%) and edible mixtures or preparations of animal or vegetable fats or oils (10.01%) are major contributors to the tariff shock for imports from Mexico. The tariff shock from NAFTA lapsing would be 4.23% for Canadian imports and 4.92% for Mexican imports.

GTAP 21: Vegetable Oils and Fats	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	4.89%	4.37%	4.07%	3.77%	4.10%	4.23%
MFN Applied Tariff Mexico	5.35%	5.50%	5.13%	4.63%	4.13%	4.92%
Imports from Canada ('000 USD)	2,872,020	3,051,737	3,015,865	3,073,670	2,792,281	
Imports from Mexico ('000 USD)	101,511	117,581	119,064	127,511	126,619	
Imports from World ('000 USD)	7,272,655	6,788,334	6,795,625	7,286,616	6,965,507	
NAFTA as a % Imports from World	40.89%	46.69%	46.13%	43.93%	41.91%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 22: Dairy Products

The US maintains import quotas in two categories of milk products (040410 and 040390-4110) of 296,000 kg in total. The first 224,981 kg requires an agricultural license and a second tranche of 71,019 kg does not (subject to first-come, first-served quota fill). Canada has negligible shipments in this category – about 23,000 kg per annum and Mexico exports an average of 300 kg per annum. This quota should not have any impact on imports in this sector.

In addition, the US maintains an import quota in another two categories of milk products (040221 and 040390-6100) of 99,500 kg in total. Canada has negligible shipments in this category – about 180 kg per annum and Mexico exports an average of 4,250 kg per annum. This quota should not

have any impact on imports in this sector. There is a specific carve-out for Mexican imports from this quota limit so Mexico will need to make a special application to be included.

There is an additional quota for cheese in the following categories (0406.10.2400, 0406.20.3190, 0406.20.6500, 0406.30.2400, 0406.30.6500, 0406.90.0890, 0406.90.7600). Canada has a quota of 833,417 kg and Mexico shares the 139,889 kg allocated for other countries.

The United States imports over 90% of the commodities in this sector globally. Yoghurt (30.18%), whey (22.07%) and cheese (18.3%) are major contributors to the tariff shock for imports from Canada. Milk and cream without sweeteners (11.8%) and with sweeteners (14.74%) and cheese (18.3%) are major contributors to the tariff shock for imports from Mexico. The tariff shock from NAFTA lapsing would be 14.33% for Canadian imports and 17.27% for Mexican imports. Given the low base levels of trade, this will not have material implications for the simulations.

GTAP 22: Dairy Products	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	20.96%	20.96%	21.47%	21.53%	21.35%	14.33%
MFN Applied Tariff Mexico	15.81%	16.26%	16.81%	17.42%	19.19%	17.27%
Imports from Canada ('000 USD)	93,034	106,764	101,713	110,433	83,615	
Imports from Mexico ('000 USD)	73,776	80,163	84,590	94,623	96,073	
Imports from World ('000 USD)	2,063,719	2,138,018	2,193,004	2,504,224	2,552,072	
NAFTA as a % Imports from World	8.08%	8.74%	8.50%	8.19%	7.04%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 23: Processed Rice

The United States imports almost all of the commodities in this sector globally. Semi-milled or wholly milled rice (5.99%) and broken rice (0.69%) are major contributors to the tariff shock for imports from both Canada and Mexico. The tariff shock from NAFTA lapsing would be 5.83% for Canadian imports and 5.89% for Mexican imports.

GTAP 23: Processed Rice	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	5.88%	5.63%	5.84%	5.89%	5.87%	5.83%
MFN Applied Tariff Mexico	5.99%	5.99%	5.99%	5.47%	5.99%	5.89%
Imports from Canada ('000 USD)	3,828	4,041	5,868	7,445	4,587	
Imports from Mexico ('000 USD)	1,191	827	852	1,023	1,387	
Imports from World ('000 USD)	618,823	599,142	669,403	753,398	724,714	
NAFTA as a % Imports from World	0.81%	0.81%	1.00%	1.12%	0.82%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 24: Sugar

Mexico and the United States struck a deal outside of the NAFTA regime for sugar and there is no shock applied to US imports of sugar from Mexico. Canada was excluded from the NAFTA sugar deal but does get some preferences from the United States. The GTAP tariff facing Canada is 3.82%. We apply no shock on the assumption that there is no material shock from NAFTA lapsing.

GTAP 24: Sugar	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	7.69%	6.76%	5.50%	5.57%	5.74%	No shock
MFN Applied Tariff Mexico	26.82%	28.52%	31.58%	28.92%	34.73%	No shock
Imports from Canada ('000 USD)	180,789	177,326	181,086	187,244	191,757	
Imports from Mexico ('000 USD)	1,307,857	837,841	1,127,859	808,387	835,942	
Imports from World ('000 USD)	3,212,006	2,609,205	1,913,521	2,045,411	2,156,792	
NAFTA as a % Imports from World	46.35%	38.91%	68.41%	48.68%	47.65%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 25: Food Products N.E.C.

The United States maintains protection in products in areas such as dairy, sugar and peanuts:

- Infant formula (190110-1100 and 190110-3300) of 100,000 kg in total. The US has not reported any shipments from Mexico and there was only a very small shipment valued at USD \$11,661 reported for 2011. This quota should not impact on imports in this sector.
- Sugar quotas in HS 170290 and 210690, which are included in the US TRQ for sugar are included into this GTAP category.
- The peanut butter quota (200811-0500) falls into this sector. Canada has an allocation of 14,500,000 kg.
- There is also a quota for mandarin/satsuma (200830-4600, 200830-4290) of 40,000,000 kg, which is of relevance to Mexico.

The United States imports over half of the commodities in this sector globally. Food preparations (10.5%), potatoes (7%) and baker's food preparations (2%) are major contributors to the tariff shock for imports from Canada. Baker's food preparations (2%), sugar confectionery not including cocoa (11.55%) and frozen vegetables (7.97%) are major contributors to the tariff shock for imports from Mexico. We calculate an increase in US tariffs to 5.75% for Canadian imports and to 6.35% for Mexican imports.

GTAP 25: Food Products N.E.C	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	5.59%	5.82%	5.85%	5.77%	5.72%	5.75%
MFN Applied Tariff Mexico	6.31%	6.52%	6.34%	6.35%	6.26%	6.35%
Imports from Canada ('000 USD)	9,159,892	9,377,055	9,880,498	10,372,309	10,800,037	
Imports from Mexico ('000 USD)	4,379,037	4,360,407	4,581,918	4,815,250	5,185,523	
Imports from World ('000 USD)	43,850,946	45,546,243	45,565,172	50,690,062	49,584,127	
NAFTA as a % Imports from World	30.87%	30.16%	31.74%	29.96%	32.24%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 26: Beverages and Tobacco Products

The United States maintains an import quota for some categories of tobacco products (240110, 240120, 240130, 240311, 240391, and 240399). Canada had negligible shipments in category 240399 (manufactured tobacco & manufactured tobacco substitutes, n.e.s.) in 2013 and 2014. Mexico had small shipments in category 240399 and 240391 (homogenised/reconstituted tobacco). This quota should not have any impact on imports in this sector. The United States imports just over three quarter of the commodities in this sector globally. Unroasted malt (0.33%), mineral and aerated waters (0.18%) and cigarettes (8.4%) are major contributors to the tariff shock for imports from Canada. Mineral and aerated waters (0.18%), cigarettes (8.4%) and non-alcoholic beverages (8.4%) are major contributors to the tariff shock for imports from Mexico. We calculate a NAFTA tariff shock of 1.16% for Canadian imports and 0.67% for Mexican imports.

GTAP 26: Beverages and Tobacco Products	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.96%	1.02%	1.27%	1.19%	1.32%	1.16%
MFN Applied Tariff Mexico	0.40%	0.42%	0.96%	0.79%	0.67%	0.67%
Imports from Canada ('000 USD)	1,074,424	1,114,290	1,187,066	1,153,397	1,089,715	
Imports from Mexico ('000 USD)	2,824,046	2,919,836	3,291,787	4,168,093	4,449,372	
Imports from World ('000 USD)	19,658,235	20,908,420	21,617,540	22,719,037	23,815,412	
NAFTA as a % Imports from World	19.83%	19.29%	20.72%	23.42%	23.26%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 27: Textiles

The United States imports over 90% of the commodities in this sector globally. Synthetic yarns (8%), textiles coated with poly vinyl chloride (4.17%) are major contributors to the tariff shock for imports from Canada. T-shirts (cotton 16%, other textiles 13.75%) and textile made up articles (including dress patterns) (3.4%) are major contributors to the tariff shock for imports from Mexico. The tariff shock from NAFTA lapsing would be 6.53% for Canadian imports and 8.88% for Mexican imports.

GTAP 27: Textiles	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	6.72%	6.55%	6.48%	6.49%	6.40%	6.53%
MFN Applied Tariff Mexico	9.02%	8.88%	8.86%	8.83%	8.81%	8.88%
Imports from Canada ('000 USD)	1,602,484	1,604,382	1,516,718	1,466,943	1,435,615	
Imports from Mexico ('000 USD)	2,634,095	2,487,865	2,538,517	2,668,520	2,661,675	
Imports from World ('000 USD)	50,813,576	48,464,350	50,421,405	54,733,082	56,789,212	
NAFTA as a % Imports from World	8.34%	8.44%	8.04%	7.56%	7.21%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 28: Wearing Apparel

The United States imports about 95% of the commodities in this sector globally. Products in the category of men's and boy's suit ensembles, jackets, blazers, trousers which face tariffs of 12%, 17%, and 12.25% are major contributors to the tariff shock for imports from Canada. Products in the category of men's and boy's suit ensembles, jackets, blazers, trousers which face tariffs of 12.7%, 8.67% and women's trousers and overalls (7.86%) are major contributors to the tariff shock for imports from Mexico. The tariff shock from NAFTA lapsing would be 12.21% for Canadian imports and 10.61% for Mexican imports.

GTAP 28: Wearing Apparel	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	11.93%	12.09%	12.34%	12.30%	12.34%	12.21%
MFN Applied Tariff Mexico	10.66%	10.55%	10.64%	10.64%	10.54%	10.61%
Imports from Canada ('000 USD)	466,427	462,671	481,828	542,300	548,577	
Imports from Mexico ('000 USD)	3,094,136	3,030,436	3,000,633	3,038,349	2,937,946	
Imports from World ('000 USD)	62,283,801	59,873,397	62,199,412	65,831,553	68,861,697	
NAFTA as a % Imports from World	5.72%	5.83%	5.60%	5.44%	5.06%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 29: Leather Products

The United States imports over 95% of the commodities in this sector globally. Products in the category of leather footwear facing tariffs of 5.75% and 6.33%, plastic footwear (23.42%), and parts of footwear like removeable soles (12.44%) are major contributors to the tariff shock for imports from Mexico. Products in the category of cases and containers; which face tariffs of 14.17%, 20% and 11.8%, and waterproof footwear (13.67%) are major contributors to the tariff shock for imports from Canada. The tariff shock from NAFTA lapsing would be 11.81% for Canadian imports and 7.29% for Mexican imports.

GTAP 29: Leather Products	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	11.80%	11.99%	11.76%	11.99%	11.55%	11.81%
MFN Applied Tariff Mexico	7.71%	7.40%	7.24%	7.22%	7.03%	7.29%
Imports from Canada ('000 USD)	119,284	121,061	108,989	130,547	154,045	
Imports from Mexico ('000 USD)	539,513	718,274	785,086	786,575	800,310	
Imports from World ('000 USD)	34,440,998	35,124,053	36,679,718	39,977,544	42,272,565	
NAFTA as a % Imports from World	1.91%	2.39%	2.44%	2.29%	2.26%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 30: Wood Products

The United States imports almost 70% of the commodities in this sector globally. Windows, doors and builders joinery (3%, 4%, and 1.5% MFN rates respectively) and wood articles (2.31%) are major contributors to the tariff shock for imports from Canada. Wood articles (2.31%) cellular rubber or plastic mattresses (3%) and coniferous wood pieces (0.78%) are major contributors to the tariff shock for imports from Mexico. The tariff shock from NAFTA lapsing would be 0.38% for Canadian imports and 0.13% for Mexican imports.

GTAP 30: Wood Products	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.40%	0.38%	0.36%	0.36%	0.39%	0.38%
MFN Applied Tariff Mexico	0.15%	0.14%	0.14%	0.13%	0.12%	0.13%
Imports from Canada ('000 USD)	8,629,538	9,471,324	11,062,064	12,196,097	12,172,369	
Imports from Mexico ('000 USD)	5,325,175	6,475,904	7,048,216	7,895,056	8,743,823	
Imports from World ('000 USD)	45,688,335	47,096,146	51,646,213	60,509,592	65,378,044	
NAFTA as a % Imports from World	30.54%	33.86%	35.07%	33.20%	31.99%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 31: Paper Products, Publishing

The United States imports just over half of the commodities in this sector globally. The majority of commodities within this category face no tariffs. Residual lyes from wood manufacturing (1.5%) and sanitary towels, pads, tampons and napkins (7.2%) are major contributors to the tariff shock for imports from Canada and Mexico. The tariff shock from NAFTA lapsing would be 0.39% for Canadian imports and 1.23% for Mexican imports.

GTAP 31: Paper Products, Publishing	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.0004%	0.37%	0.39%	0.43%	0.45%	0.39%
MFN Applied Tariff Mexico	1.21%	1.11%	1.05%	1.22%	1.48%	1.23%
Imports from Canada ('000 USD)	11,581,272	10,229,158	10,315,013	10,829,813	10,096,255	
Imports from Mexico ('000 USD)	1,301,343	1,326,231	1,410,318	1,590,698	1,693,495	
Imports from World ('000 USD)	25,683,887	23,650,094	24,265,368	26,387,788	25,986,234	
NAFTA as a % Imports from World	50.16%	48.86%	48.32%	47.07%	45.37%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 32: Petroleum, Coal Products

The United States imports almost three quarters of the commodities in this sector globally. Medium oils and preparations (5.94%) and light oils and preparations (7%) are major contributors to the tariff shock for imports from both Canada and Mexico. The tariff shock would be 5.07% for Canada, and 6.18% for Mexico.

GTAP 32: Petroleum, Coal Products	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	5.00%	5.10%	5.14%	4.90%	5.24%	5.07%
MFN Applied Tariff Mexico	6.28%	6.09%	6.27%	6.11%	5.94%	6.18%
Imports from Canada ('000 USD)	19,641,436	20,651,456	20,586,426	18,052,842	13,360,909	
Imports from Mexico ('000 USD)	4,351,735	2,593,354	2,822,591	2,541,062	1,168,012	
Imports from World ('000 USD)	101,325,913	95,587,522	91,385,868	84,243,746	54,564,389	
NAFTA as a % Imports from World	23.68%	24.32%	25.62%	24.45%	26.63%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 33: Chemical, Rubber, Plastic Products

The United States imports just over 80% of the commodities in this sector globally. New pneumatic rubber tires (3.5%), plastic articles (3.88%) and polyethylene terephthalate in primary forms (6%) are major contributors to the tariff shock for imports from Mexico. Ethylene polymers (5%), polyethylene with a specific gravity greater or equal to 0.94 (6%) and new pneumatic rubber tires (3.5%) are major contributors to the tariff shock for imports from Canada. The tariff shock would be 2.14% for Canadian imports and 2.96% for Mexican imports.

GTAP 33: Chemical, Rubber, Plastic Products	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	2.35%	2.34%	2.43%	2.50%	2.42%	2.14%
MFN Applied Tariff Mexico	2.90%	2.88%	2.94%	3.01%	3.05%	2.96%
Imports from Canada ('000 USD)	35,456,694	33,672,661	33,853,801	34,749,097	33,158,673	
Imports from Mexico ('000 USD)	8,861,147	9,449,809	9,994,169	11,060,871	11,274,180	
Imports from World ('000 USD)	254,953,895	247,002,026	246,054,555	267,517,522	276,516,775	
NAFTA as a % Imports from World	17.38%	17.46%	17.82%	17.12%	16.07%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 34: Mineral Products N.E.C.

The United States imports almost 80% of the commodities in this sector globally. Glazed ceramic flags and tiles (9.2%), glass containers (1.75%) and ceramic sinks, baths, and sanitary fixtures (5%) are major contributors to the tariff shock for imports from Mexico. Slag-wool, rock-wool and similar mineral wools (3%), articles of asphalt (2%), and glass fibre webs, mattresses, boards and similar nonwoven products (4%) are major contributors to the tariff shock for imports from Canada. The tariff shock would be 1.57% for Canadian imports and 3.55% for Mexican imports.

GTAP 34: Mineral Products N.E.C.	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	1.58%	1.60%	1.56%	1.58%	1.52%	1.57%
MFN Applied Tariff Mexico	3.63%	3.66%	3.60%	3.50%	3.40%	3.55%
Imports from Canada ('000 USD)	1,733,915	1,740,747	1,780,144	1,879,303	1,934,382	
Imports from Mexico ('000 USD)	2,320,127	2,389,508	2,622,091	2,909,227	3,053,043	
Imports from World ('000 USD)	18,714,256	18,049,315	19,134,058	22,660,434	23,781,551	
NAFTA as a % Imports from World	21.66%	22.88%	23.01%	21.13%	20.97%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 35: Ferrous Metals

The United States imports almost 80% of the commodities in this sector globally. Ferro-silico-manganese (3%), tube or pipe fittings of iron or steel (5.5% for cast and 3.3% for non-cast) are major contributors to the tariff shock for imports from Mexico. Ferro-silicon (2%), ferro-niobium (5%) and tube or pipe fittings of iron or steel (3.33%) are major contributors to the tariff shock for imports from Canada. The tariff shock would be 0.13% for Canadian imports and 0.20% for Mexican imports.

GTAP 35: Ferrous Metals	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.11%	0.13%	0.14%	0.14%	0.16%	0.13%
MFN Applied Tariff Mexico	0.18%	0.23%	0.21%	0.17%	0.21%	0.20%
Imports from Canada ('000 USD)	7,667,764	7,419,997	6,774,277	7,660,245	6,106,128	
Imports from Mexico ('000 USD)	3,190,073	2,766,116	2,859,205	3,675,448	2,484,622	
Imports from World ('000 USD)	42,791,422	44,421,093	38,119,044	51,155,075	40,182,406	
NAFTA as a % Imports from World	25.37%	22.93%	25.27%	22.16%	21.38%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 36: Metals N.E.C.

The United States imports over half of the commodities in this sector globally. Gold products (2%), aluminium, not alloyed, unwrought (1%) and unwrought aluminium alloys (1.33%) are major contributors to the tariff shock from Canada. Silver products (1.5%), Gold products (2%), refined copper in the form of cathodes and sections of cathodes (1%) are major contributors to the tariff shock from Mexico. The tariff shock from NAFTA lapsing would be 1.40% for Canadian imports and 1.65% for Mexican imports.

GTAP 36: Metals N.E.C.	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	1.43%	1.40%	1.39%	1.38%	1.41%	1.40%
MFN Applied Tariff Mexico	1.69%	1.69%	1.65%	1.57%	1.62%	1.65%
Imports from Canada ('000 USD)	19,284,514	16,510,953	17,444,210	17,560,121	15,679,145	
Imports from Mexico ('000 USD)	11,592,705	11,431,314	8,440,795	7,295,243	6,547,629	
Imports from World ('000 USD)	65,684,242	60,651,187	57,537,100	56,998,587	49,458,469	
NAFTA as a % Imports from World	47.01%	46.07%	44.99%	43.61%	44.94%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 37: Metal Products

The United States imports almost 80% of the commodities in this sector globally. Articles of iron or steel (2.83%), aluminium structures and parts of structures (5%) and base metal mountings, fittings and similar articles suitable for motor vehicles (2.5%) are major contributors to the tariff shock for imports from Canada. Articles of iron or steel (2.83%), locks (5% for motor vehicles and 4% for other uses) are major contributors to the tariff shock for imports from Mexico. The tariff shock from NAFTA lapsing would be 2.03% for Canadian imports and 2.24% for Mexican imports.

GTAP 37: Metal Products	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	1.93%	1.96%	2.15%	2.05%	2.07%	2.03%
MFN Applied Tariff Mexico	2.15%	2.18%	2.29%	2.31%	2.28%	2.24%
Imports from Canada ('000 USD)	4,482,091	4,611,178	4,540,264	4,648,662	4,809,249	
Imports from Mexico ('000 USD)	4,379,844	4,901,540	4,893,323	5,189,168	5,459,815	
Imports from World ('000 USD)	41,871,002	44,623,517	44,803,371	49,097,191	51,669,428	
NAFTA as a % Imports from World	21.16%	21.32%	21.06%	20.04%	19.87%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 38: Motor Vehicles and Parts

The United States imports just over half of the commodities in this sector globally. The tariff shock from NAFTA lapsing would be 2.10% for Canadian imports and 6.79% for Mexican imports. Note that Mexico produces light trucks which attract a 25% MFN tariff in the United States. Canada is slated to start production of light trucks for the US market in 2018; this is not picked up in the tariff shock.

GTAP 38: Motor Vehicles and Parts	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	2.05%	2.07%	2.09%	2.14%	2.15%	2.10%
MFN Applied Tariff Mexico	6.39%	6.62%	6.67%	7.13%	6.96%	6.79%
Imports from Canada ('000 USD)	52,456,014	60,194,287	57,773,210	58,913,254	58,395,362	
Imports from Mexico ('000 USD)	51,228,562	58,785,071	65,494,732	74,770,975	81,392,055	
Imports from World ('000 USD)	215,496,705	249,274,039	258,106,816	276,879,850	294,958,384	
NAFTA as a % Imports from World	48.11%	47.73%	47.76%	48.28%	47.39%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 39: Transport Equipment N.E.C.

The United States imports almost 80% of the commodities in this sector globally. Hooks and other coupling devices and other parts for locomotives or rolling stock (2.5% each) and vessels for pleasure or sports (1%) are major contributors to the tariff shock for imports from Mexico. Two categories of motor cars and other vehicles (2% each) and parts and accessories for motor vehicles (1.5%) are major contributors to the tariff shock for imports from Canada. The tariff shock from NAFTA lapsing would be 0.13% for Canadian imports and 0.33% for Mexican imports.

GTAP 39: Transport Equipment N.E.C.	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.12%	0.14%	0.13%	0.15%	0.13%	0.13%
MFN Applied Tariff Mexico	0.34%	0.24%	0.27%	0.24%	0.50%	0.33%
Imports from Canada ('000 USD)	7,994,904	8,803,333	9,643,776	11,135,905	11,330,305	
Imports from Mexico ('000 USD)	1,253,474	1,526,314	1,665,142	2,112,078	2,247,187	
Imports from World ('000 USD)	43,047,454	49,010,621	54,536,726	61,284,269	64,824,556	
NAFTA as a % Imports from World	21.48%	21.08%	20.74%	21.62%	20.94%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 40: Electronic Equipment

The United States imports almost 85% of the commodities in this sector globally. Reception apparatus for television and other monitors (2.55% and 1.91% respectively), and loudspeakers (3%) are major contributors to the tariff shock for imports from Mexico. Transmission apparatus and parts for transmission and reception apparatus (1% and 1.85% respectively), and other projectors (2.85%) are major contributors to the tariff shock for imports from Canada. 14% of imports from Canada and 34% of imports from Mexico attract a duty; The tariff shock from NAFTA lapsing would be 0.29% for Canadian imports and 0.77% for Mexican imports.

GTAP 40: Electronic Equipment	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	0.29%	0.32%	0.27%	0.27%	0.29%	0.29%
MFN Applied Tariff Mexico	0.80%	0.76%	0.76%	0.80%	0.71%	0.77%
Imports from Canada ('000 USD)	4,292,789	3,796,216	3,739,900	3,882,336	3,477,208	
Imports from Mexico ('000 USD)	43,112,031	44,725,003	42,625,290	40,895,985	47,324,939	
Imports from World ('000 USD)	283,498,145	287,161,472	289,709,684	301,908,778	308,625,315	
NAFTA as a % Imports from World	16.72%	16.90%	16.00%	14.83%	16.46%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 41: Machinery and Equipment N.E.C.

The United States imports over three quarters of the commodities in this sector globally. Appliances for pipes, boiler shells, tanks etc. (3.5%), boards and cabinets for control or distribution of electricity (2%), and LCD devices (3.75%) are major contributors to the tariff shock for imports from Canada. Appliances for pipes, boiler shells, tanks etc. (3.5%), boards and cabinets for control or distribution of electricity (2%), and ignition wiring sets (5%) are major contributors to the tariff shock for imports from Mexico. The tariff shock would be 1.02% for Canadian imports and 1.57% for Mexican imports.

GTAP 41: Machinery and Equipment N.E.C.	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	1.02%	1.03%	1.02%	1.01%	1.03%	1.02%
MFN Applied Tariff Mexico	1.52%	1.56%	1.55%	1.59%	1.60%	1.57%
Imports from Canada ('000 USD)	22,862,979	23,642,552	22,826,709	23,461,822	22,707,517	
Imports from Mexico ('000 USD)	55,379,718	60,574,479	63,580,222	69,628,936	72,385,532	
Imports from World ('000 USD)	347,827,408	366,311,821	371,174,981	409,599,211	416,497,006	
NAFTA as a % Imports from World	22.49%	22.99%	23.28%	22.73%	22.83%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 42: Manufactures N.E.C.

The United States imports over 95% of the commodities in this sector globally. The US maintains an import quota of 1,457,736 units for category 9603.10 (brooms and brushes, consisting of twigs or other vegetable materials bound together, with or without handles). Sub category 9603.10.0500 has a quota of 739,860 units. Canada has negligible shipments in this category – average of 400 units per annum and Mexico exports an average of just over 10 thousand units. This quota should not have any impact on imports in this sector. Jewellery (5.33%), sports equipment (1.64%), and ball-point pens (6.85%) are major contributors to the tariff shock for imports from Mexico. Jewellery (5.33%), other articles of precious metals (2.5%), and sports equipment (1.64%) are major contributors to the tariff shock for imports from Canada. The tariff shock from NAFTA lapsing would be 1.34% for Canadian imports and 2.53% for Mexican imports

GTAP 42: Manufactures N.E.C.	2011	2012	2013	2014	2015	NAFTA
MFN Applied Tariff Canada	1.07%	1.24%	1.15%	1.33%	1.72%	1.34%
MFN Applied Tariff Mexico	2.99%	2.50%	2.46%	2.45%	2.34%	2.53%
Imports from Canada ('000 USD)	1,382,421	1,029,813	1,256,301	1,375,687	1,795,051	
Imports from Mexico ('000 USD)	1,505,028	1,825,065	1,844,065	1,967,845	1,991,789	
Imports from World ('000 USD)	79,775,195	75,638,141	80,761,602	86,303,053	91,337,245	
NAFTA as a % Imports from World	3.62%	3.77%	3.84%	3.87%	4.15%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

D3 Mexico's Tariff Shock by GTAP Sector

GTAP Sector 1: Paddy Rice

Mexico has negligible exports of commodity rice, MFN tariffs are zero and there is no tariff shock from NAFTA lapsing.

GTAP 1: Paddy Rice	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from Canada	-	-	-	-	
Imports from US	280,964	273,074	309,254	236,212	
Imports from World ('000 USD)	280,970	273,101	309,267	236,220	
NAFTA as a % Imports from World	100%	100%	100%	100%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 2: Wheat

Mexico imports some wheat from Canada but the majority is imported from the United States. The main traded product of non-durum wheat and meslin from both Canada and the US faces an MFN tariff of 7.24%, and other smaller volume categories face tariffs of 45% or 0%^s. The tariff shock is 7.27% for Canadian imports and 7.24% for US imports.

GTAP 2: Wheat	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	7.24%	7.24%	7.34%	7.24%	7.27%
MFN Applied Tariff US	7.24%	7.24%	7.24%	7.25%	7.24%
Imports from Canada	293,929	161,874	341,596	324,148	
Imports from US	1,027,903	548,797	951,493	872,957	
Imports from World ('000 USD)	1,321,835	741,551	1,354,472	1,334,937	
NAFTA as a % Imports from World	100.00%	95.84%	95.47%	89.68%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 3: Cereal Grains

Mexico imports some cereal grains from Canada but the majority is imported from the United States. Imports from North America declined over the period 2011-2013 and then increased about 10% in 2014 with all the growth coming from US imports. The tariff shock from NAFTA lapsing would be 10.93% for Canadian imports and 6.90% for US imports. The lower rate for the United States reflects the fact that the main Mexican import is maize under HS 10059, which has a weighted average MFN duty of 7% with other products facing a range of tariffs.

GTAP 3: Cereal Grains	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	11.62%	9.65%	10.54%	10.78%	10.93%
MFN Applied Tariff US	6.33%	6.60%	7.46%	7.50%	6.90%
Imports from Canada	79,941	28,285	36,682	31,008	
Imports from US	3,330,860	2,913,028	2,195,550	2,460,828	
Imports from World ('000 USD)	3,777,703	3,451,304	2,511,498	2,522,005	
NAFTA as a % Imports from World	90.29%	85.22%	88.88%	98.80%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 4: Vegetables, fruits and nuts

Mexico imports some volume in this sector from Canada but the majority is imported from the United States. Kidney beans (56.3%), apples (20%), and grapes (20%) are major contributors to the tariff shock for imports from the US. Kidney beans (56.3%), peas (5%), and lentils (10%) are major contributors to the tariff shock for imports from the Canada. The tariff shock would be 21.83% for Canadian imports and 28.49% for US imports.

GTAP 4: Vegetables, Fruits Nuts	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	16.25%	29.23%	24.88%	14.69%	21.83%
MFN Applied Tariff US	29.28%	30.63%	27.50%	26.75%	28.49%
Imports from Canada	51,673	60,985	46,246	42,627	
Imports from US	859,874	1,098,577	1,137,717	1,099,293	
Imports from World ('000 USD)	1,118,800	1,367,911	1,379,507	1,326,832	
NAFTA as a % Imports from World	81.48%	84.77%	85.83%	86.06%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 5: Oil Seeds

Mexico imports some volume in this sector from Canada but the majority is imported from the United States. In this sector Mexico applied tariffs in 2013 for soybeans (120190), poppy seeds (120791) and safflower (120760). The tariff shock would be 0.01% for Canadian imports and 5.35% for US imports, driven by tariffs on soybeans.

GTAP 5: Oil Seeds	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	0.00%	0.00%	0.00%	0.05%	0.01%
MFN Applied Tariff US	3.42%	3.38%	6.80%	6.85%	5.35%
Imports from Canada	949,194	913,161	808,204	694,139	
Imports from US	1,824,374	1,061,106	1,778,192	2,008,247	
Imports from World ('000 USD)	3,029,994	2,086,722	3,215,823	3,055,129	
NAFTA as a % Imports from World	91.54%	94.61%	80.43%	88.45%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 6: Sugar Cane, Sugar Beet

Mexico does not import in this sector from Canada or the United States. Tariffs are zero and there is no tariff shock from NAFTA lapsing.

GTAP 6: Sugar Cane, Sugar Beet	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from Canada	-	-	-	-	
Imports from US	-	-	-	-	
Imports from World ('000 USD)	-	-	-	-	
NAFTA as a % Imports from World	0.00%	0.00%	0.00%	0.00%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 7: Plant Based Fibres

Mexico imports most of the volume in this sector from the United States. Imports from Canada are negligible. Tariffs are zero and there is no tariff shock from NAFTA lapsing.

GTAP 7: Plant-Based Fibres	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from Canada	47	60	122	61	
Imports from US	821,815	443,000	456,080	422,165	
Imports from World ('000 USD)	844,142	463,267	468,831	436,142	
NAFTA as a % Imports from World	97.36%	95.64%	97.31%	96.81%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 8: Crops N.E.C.

Mexico imports some volume in this sector from both Canada and the United States. However, the majority of imports are global. The trade profile in this sector has been relatively stable and so the weighted tariffs in this sector have been relatively unchanged. Tobacco (45%), plants and parts used in perfumery, pharmacy etc. (10%), and live plants and roots (8.57%) are major contributors to the tariff shock for imports from Canada. Edible fruit or nut trees and shrubs and bushes (10%), seeds of forage plants for sowing (1.5%), and tobacco (45%) are major contributors to the tariff shock for imports from the Canada. The tariff shock from NAFTA lapsing would be 44.42% for Canadian imports and 11.04% for US imports.

GTAP 8: Crops N.E.C.	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	44.60%	44.50%	44.20%	44.34%	44.42%
MFN Applied Tariff US	13.74%	9.40%	11.28%	9.14%	11.04%
Imports from Canada	44,535	55,318	40,176	40,230	
Imports from US	293,856	241,069	241,696	237,669	
Imports from World ('000 USD)	864,147	753,724	809,929	960,788	
NAFTA as a % Imports from World	39.16%	39.32%	34.80%	28.92%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 9: Bovine Cattle, Sheep and Goats, Horses

Mexico imports some volume in this sector from Canada but the majority is imported from the United States. The main traded items are cattle, mules and horses with tariffs at 5%, 20% and 10% respectively. The tariff shock would be 1.77% for Canadian imports and 12.01% for US imports.

GTAP 9: Bovine Cattle, Sheep and Goats, Horses	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	1.45%	2.06%	0.97%	2.26%	1.77%
MFN Applied Tariff US	14.79%	16.70%	9.18%	9.28%	12.01%
Imports from Canada	6,948	5,523	5,977	11,060	
Imports from US	104,564	97,848	126,673	143,714	
Imports from World ('000 USD)	119,941	113,129	159,168	187,664	
NAFTA as a % Imports from World	92.97%	91.37%	83.34%	82.47%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 10: Animal Products N.E.C.

Mexico imports some volume in this sector from Canada but the majority is imported from the United States. Guts, bladders and stomachs (10%), animal products not for human consumption (6.67%), and live chickens (3.33%) are major contributors to the tariff shock for imports from Canada. Guts, bladders and stomachs (10%), bird's eggs (10.5%), and live chickens (3.33%) are major contributors to the tariff shock for imports from the Canada. The tariff shock would be 7.46% for Canadian imports and 4.90% for US imports.

GTAP 10: Animal Products N.E.C.	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	7.45%	7.71%	7.63%	7.18%	7.46%
MFN Applied Tariff US	6.31%	5.99%	4.06%	4.04%	4.90%
Imports from Canada	12,511	15,832	21,496	26,705	
Imports from US	349,322	402,210	529,090	559,696	
Imports from World ('000 USD)	399,415	458,580	601,368	655,629	
NAFTA as a % Imports from World	90.59%	91.16%	91.56%	89.44%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 12: Wool, Silk-Worm Cocoons

Mexico has negligible imports in this sector, and MFN tariffs are zero, so there is no tariff shock.

GTAP 12: Wool, Silk-Worm Cocoons	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from Canada	-	-	-	-	
Imports from US	48	17	-	-	
Imports from World ('000 USD)	48	23	3	-	
NAFTA as a % Imports from World	100.00%	74.34%	0.00%	0.00%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 13: Forestry

Mexico has low volumes of imports in this sector from Canada with the majority imported from the United States. Vegetable products (10%), foliage for bouquets and other ornamental purposes without flowers including mosses and lichens (16%) and hoopwood (5%) contribute to the tariff shock for imports from Canada. Fresh foliage for bouquets and other ornamental purposes with and without mosses and lichens (15% each) and natural gum Arabic (10%) contribute to the tariff shock for imports from the US. The Canadian weighted average tariff is volatile due to the low volumes. The period average is 12.72% for Canadian imports and 11.88% for US imports.

GTAP 13: Forestry	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	10.95%	12.77%	12.46%	15.97%	12.72%
MFN Applied Tariff US	12.09%	10.49%	12.53%	12.66%	11.88%
Imports from Canada	1,381	745	1,134	836	
Imports from US	27,953	34,026	28,806	29,777	
Imports from World ('000 USD)	43,947	50,145	42,739	40,769	
NAFTA as a % Imports from World	66.75%	69.34%	70.05%	75.09%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 14: Fishing

Mexico imports a small volume in this sector from Canada and the United States but the majority is imported globally. Lobsters (19%), seaweeds and other algae (10%), and pacific salmon (19%) contribute to the tariff shock for imports from Canada. Live ornamental freshwater fish (10%), seaweeds and other algae (10%), and fresh or chilled salmonidae (19%) contribute to the tariff shock for imports from the US. The tariff shock from NAFTA lapsing would be 17.02% for Canadian imports and 12.45% for US imports.

GTAP 14: Fishing	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	16.65%	17.06%	17.21%	17.33%	17.02%
MFN Applied Tariff US	11.89%	12.27%	13.00%	12.48%	12.45%
Imports from Canada	1,941	1,219	1,249	1,346	
Imports from US	7,708	4,498	8,814	6,188	
Imports from World ('000 USD)	29,242	32,920	61,023	40,335	
NAFTA as a % Imports from World	33.00%	17.37%	16.49%	18.68%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 15: Coal

Mexico imports from Canada and the United States in this sector have increased year over year with the US the largest source. Through this period total imports have declined by more than half. Tariffs are zero and there is no tariff shock from NAFTA lapsing.

GTAP 15: Coal	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from Canada	87,873	37,598	40,377	17,141	
Imports from US	387,844	378,500	487,353	430,309	
Imports from World ('000 USD)	1,251,987	960,271	761,077	718,842	
NAFTA as a % Imports from World	38.00%	43.33%	69.34%	62.25%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 16: Oil

Mexico imports in this sector are negligible from all sources. Tariffs are zero and there is no tariff shock from NAFTA lapsing.

GTAP 16: Oil	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from Canada	0.46	4.31	1.49	2.72	
Imports from US	10	10	10	3	
Imports from World ('000 USD)	11	15	92	6	
NAFTA as a % Imports from World	99.96%	94.45%	12.79%	99.90%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 17: Gas

The majority of Mexico imports in this sector are from the United States. Canada does not export gas to Mexico. Tariffs are zero and there is no tariff shock from NAFTA lapsing.

GTAP 17: Gas	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff US	0.00%	0.00%	0.00%	0.00%	0.00%
Imports from Canada	-	-	-	31,304	
Imports from US	2,078,311	1,735,132	2,584,230	3,346,238	
Imports from World ('000 USD)	2,619,815	2,154,951	4,024,212	5,206,117	
NAFTA as a % Imports from World	79.33%	80.52%	64.22%	64.88%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 18: Minerals N.E.C.

Mexico imports volume in this sector from North America and this has been growing over the period 2011 to 2014. Almost all imports in this sector enter Mexico without attracting a tariff. The tariff shock from NAFTA lapsing would be 0.00% for Canadian and 0.02% for US imports.

GTAP 18: Minerals N.E.	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff US	0.01%	0.02%	0.02%	0.02%	0.02%
Imports from Canada	55,199	37,616	41,805	75,142	
Imports from US	807,817	797,734	814,707	728,398	
Imports from World ('000 USD)	1,561,016	1,523,116	1,305,855	1,204,145	
NAFTA as a % Imports from World	55.29%	54.84%	65.59%	66.73%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 19: Bovine Meat Products

The majority of Mexico imports in this sector are from North America – with the US the major source of imports. Tallow of bovine animals, sheep or goats (10%), frozen edible bovine offal (20%) and boneless fresh or chilled bovine meat (20%) contribute to the tariff shock for imports from the US. Boneless fresh or chilled bovine meat (20%), frozen edible offal of swine (5%) and fresh or chilled edible offal of swine (15%) contribute to the tariff shock for imports from Canada. The tariff shock from NAFTA lapsing would be 26.87% for Canadian imports and 19.66% for US imports.

GTAP 19: Bovine Meat Products	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	25.01%	22.16%	31.49%	28.72%	26.87%
MFN Applied Tariff US	19.25%	19.14%	19.72%	20.45%	19.66%
Imports from Canada	210,859	167,823	161,925	236,867	
Imports from US	1,654,024	1,327,631	1,577,711	1,568,775	
Imports from World ('000 USD)	1,929,899	1,542,631	1,804,646	1,895,074	
NAFTA as a % Imports from World	96.63%	96.94%	96.40%	95.28%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 20: Meat Products N.E.C.

The majority of Mexico imports in this sector are from North America – with the US the major source of imports. Fresh or chilled hams, shoulders and cuts with bone in (20%), fresh or chilled chick cuts and edible offal (150%) and fresh or chilled turkey cuts and edible offal (150%) contribute to the tariff shock for imports from the US. Fresh or chilled hams, shoulders and cuts with bone in (20%), fresh or chilled swine meat (20%) and frozen swine meat (20%) contribute to the tariff shock for imports from Canada. The tariff shock from NAFTA lapsing would be 19.19% for Canadian imports and 71.12% for US imports. The high figure for the United States reflects a high MFN tariff on poultry of 150%.

GTAP 20: Meat Products N.E.C.	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	18.96%	18.60%	19.33%	19.42%	19.19%
MFN Applied Tariff US	71.48%	72.84%	72.90%	68.02%	71.12%
Imports from Canada	68,065	78,608	132,222	182,129	
Imports from US	2,074,960	2,311,019	2,587,761	3,020,274	
Imports from World ('000 USD)	2,245,208	2,490,054	2,830,336	3,356,285	
NAFTA as a % Imports from World	95.45%	95.97%	96.10%	95.42%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 21: Vegetable Oils and Fats

The majority of Mexico imports in this sector are from the US. Canada exports mainly canola oil, which attracts a zero MFN tariff, as well as some soy and some margarine (20%). Given the fluctuation in product mix, we go with the average of 4.11% for Canadian imports. The tariff shock would be 4.01% for US imports. This mainly reflects a 5% tariff on soy oil.

GTAP 21: Vegetable Oils and Fats	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	4.11%	7.38%	2.70%	1.61%	4.11%
MFN Applied Tariff US	5.74%	4.15%	3.62%	2.86%	4.01%
Imports from Canada	84,088	50,846	39,181	44,519	
Imports from US	966,211	1,115,239	1,113,481	1,204,330	
Imports from World ('000 USD)	1,754,472	1,862,217	1,774,972	1,881,909	
NAFTA as a % Imports from World	59.86%	62.62%	64.94%	66.36%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 22: Dairy Products

The majority of Mexico imports in this sector are from North America – with the US the major source of imports. However, about a quarter of imports are global, coming in under TRQs that feature higher out-of-quota tariffs. Canada exports to Mexico under the WTO TRQs and MFN tariffs while the United States has tariff free access under NAFTA. The tariff shock from NAFTA lapsing would be an increase to 31.44% for US imports. We apply no tariff shock for Canada beyond the protection already incorporated in the GTAP data base which features a 40.29% tariff.

GTAP 22: Dairy Products	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	33.65%	34.02%	34.03%	33.54%	No shock
MFN Applied Tariff US	30.26%	31.28%	32.03%	31.88%	31.44%
Imports from Canada	9,272	11,368	14,238	11,645	
Imports from US	1,143,580	1,238,348	1,451,097	1,563,069	
Imports from World ('000 USD)	1,798,299	1,752,291	1,949,657	2,058,788	
NAFTA as a % Imports from World	64.11%	71.32%	75.16%	76.49%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 23: Processed Rice

Global imports have been increasing over the period 2011-2014 while US imports have been averaging about USD \$75B. Canada does not have exports to Mexico in this sector. The tariff shock from NAFTA lapsing would be 0.00% for Canadian imports and 0.34% for US imports. The 5% tariff on broken rice contributes to this tariff. The effect is muted as imports of semi-milled or wholly milled rice account for 93% of imports with a 0% tariff.

GTAP 23: Processed Rice	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	0.00%	0.00%	0.00%	0.00%	0.00%
MFN Applied Tariff US	0.16%	0.29%	0.39%	0.51%	0.34%
Imports from Canada	-	-	-	-	
Imports from US	76,479	68,888	75,308	78,223	
Imports from World ('000 USD)	95,835	96,821	126,260	165,648	
NAFTA as a % Imports from World	79.80%	71.15%	59.65%	47.22%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 24: Sugar

Canada was excluded from the NAFTA sugar agreement and so faces no tariff shock from NAFTA lapsing. Mexico had tariff-free access to the US sugar market under NAFTA, but had to agree to an arrangement of quotas and price floors following an anti-dumping case brought by US sugar producers. As this agreement appears to supersede the NAFTA sugar agreement, we apply no tariff shock to Mexico's imports from the United States either

GTAP 24: Sugar	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	41.29%	41.37%	40.18%	14.91%	No shock
MFN Applied Tariff US	41.64%	41.51%	41.40%	41.17%	No shock
Imports from Canada	14,740	15,545	10,543	978	
Imports from US	153,038	143,102	117,543	80,589	
Imports from World ('000 USD)	283,996	272,795	135,927	88,661	
NAFTA as a % Imports from World	59.08%	58.16%	94.23%	92.00%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 25: Food Products N.E.C.

The majority of Mexico imports in this sector are from North America – with the US the major source of imports. However, between a quarter and a third of imports are global. Fructose in solid form and fructose syrup (150%), chocolates (20.4%) and food preparations (14.8%) contribute to the tariff shock for imports from the US. Chocolates (20.4%), waffles and wafers (10.7%) and potatoes (20%) contribute to the tariff shock for imports from Canada. The tariff shock from NAFTA lapsing would be 20.15% for Canadian imports and 35.62% for US imports.

GTAP 25: Food Products N.E.C.	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	23.10%	22.10%	19.24%	15.81%	20.15%
MFN Applied Tariff US	38.93%	39.08%	34.43%	30.40%	35.62%
Imports from Canada	220,848	211,573	228,886	197,706	
Imports from US	3,169,254	3,562,061	3,652,171	3,521,439	
Imports from World ('000 USD)	4,983,205	5,114,378	5,607,809	5,668,675	
NAFTA as a % Imports from World	68.03%	73.78%	69.21%	65.61%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 26: Beverages and Tobacco Products

Mexico's beverage tariffs are mainly 10 to 20% while tobacco tariffs are 45% for unprocessed and 67% for processed products. Malt, which now attracts a 60% tariff, rounds out the product basket. The product mix explains the variation between Canada and the United States. The tariff shock from NAFTA lapsing would be 42.09% for Canadian imports and 19.21% for US imports.

GTAP 26: Beverages and Tobacco Products	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	32.14%	36.99%	43.72%	47.10%	42.09%
MFN Applied Tariff US	17.09%	19.49%	19.56%	20.63%	19.21%
Imports from Canada ('000 USD)	14,988	22,884	27,497	44,042	
Imports from US ('000 USD)	971,800	995,054	970,216	1,012,000	
Imports from World ('000 USD)	1,513,358	1,592,561	1,639,997	1,677,269	
NAFTA as a % Imports from World	65.21%	63.92%	60.84%	62.96%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 27: Textiles

The majority of Mexico imports in this sector are from North America – with the US the major source of imports. However, just under a half of imports are global. Plastic coated textiles (10%), denim (10%) and made up articles of textiles (15%) contribute to the tariff shock for imports from the US. Nylon or polyamide yarns (5%), narrow woven fabrics from man-made fibres (10%) and polyvinyl coated textile (10%) contribute to the tariff shock for imports from Canada. The tariff shock from NAFTA lapsing would be 10.13% for Canadian imports and 10.19% for US imports.

GTAP 27: Textiles	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	10.08%	10.12%	10.20%	10.12%	10.13%
MFN Applied Tariff US	10.08%	10.13%	10.25%	10.31%	10.19%
Imports from Canada	112,467	136,344	156,731	146,277	
Imports from US	3,912,600	3,905,353	4,148,074	4,187,288	
Imports from World ('000 USD)	6,926,867	7,070,617	7,281,290	7,577,988	
NAFTA as a % Imports from World	58.11%	57.16%	59.12%	57.19%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 28: Wearing Apparel

The majority of Mexico imports volume in this sector are global. Women's or girl's overcoats and trousers (22.5% each), women's or girl's synthetic swim suits (25%) contribute to the tariff shock for imports from Canada. Women's or girl's blouses (22.5%), professional or sporting clothing (20%) and men's or boy's trousers (21.67%) contribute to the tariff shock for imports from the US. The tariff shock from NAFTA lapsing would be 22.17% for Canadian imports and 21.12% for US imports.

GTAP 28: Wearing Apparel	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	22.15%	22.24%	22.09%	22.23%	22.17%
MFN Applied Tariff US	21.16%	21.15%	21.14%	21.05%	21.12%
Imports from Canada	11,942	10,702	11,632	9,424	
Imports from US	276,015	271,274	273,046	292,649	
Imports from World ('000 USD)	1,937,384	2,097,759	2,276,906	2,552,427	
NAFTA as a % Imports from World	14.86%	13.44%	12.50%	11.83%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 29: Leather Products

The majority of Mexico imports in this sector are global. Travel bags (20% each), leather articles (13.3%) and footwear parts like insoles (3.33%) contribute to the tariff shock for imports from Canada. Travel bags (20%), leather articles (13.3%) and shoe parts (20%) contribute to the tariff shock for imports from the US. The tariff shock from NAFTA lapsing would be 18.78% for Canadian imports and 7.72% for US imports.

GTAP 29: Leather Products	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	17.89%	18.89%	18.87%	18.83%	18.78%
MFN Applied Tariff US	7.97%	7.81%	7.21%	7.93%	7.72%
Imports from Canada	6,322	20,118	25,991	25,933	
Imports from US	326,270	369,004	398,936	416,657	
Imports from World ('000 USD)	1,984,748	2,288,836	2,507,561	2,820,049	
NAFTA as a % Imports from World	16.76%	17.00%	16.95%	15.69%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 30: Wood Products

The majority of Mexico imports in this sector are from North America – with the US the major source of imports. However, just under half of imports are global. Coniferous wood (2%), wood fibreboard (5%) and metal office furniture excluding seats (15%) contribute to the tariff shock for imports from Canada. Coniferous wood (2%), wood strips (15%) and metal office furniture (7%) contribute to the tariff shock for imports from the US. The tariff shock from NAFTA lapsing would be 2.18% for Canadian imports and 3.43% for US imports.

GTAP 30: Wood Products	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	2.48%	2.32%	2.18%	1.91%	2.18%
MFN Applied Tariff US	3.83%	3.50%	3.04%	3.51%	3.43%
Imports from Canada	163,869	195,789	213,581	277,410	
Imports from US	1,495,895	1,837,556	2,167,074	2,090,426	
Imports from World ('000 USD)	3,151,656	3,587,108	4,083,406	4,253,739	
NAFTA as a % Imports from World	52.66%	56.68%	58.30%	55.66%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 31: Paper Products, Publishing

The majority of Mexico imports in this sector are from North America – with the US the major source of imports. However, about a quarter of imports are global.. Newsprint (5%), uncoated paper (5%) and folding cartons (5%) contribute to the tariff shock for imports from Canada. Uncoated paper (6.25%), folding cartons (5%) and paper rolls (3.44%) contribute to the tariff shock for imports from the US. 67% of imports from Canada and 65% of imports from the US face a 0% tariff. The tariff shock from NAFTA lapsing would be 1.62% for Canadian imports and 1.78% for US imports.

GTAP 31: Paper Products, Publishing	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	1.32%	1.44%	1.84%	1.91%	1.62%
MFN Applied Tariff US	1.75%	1.80%	1.79%	1.76%	1.78%
Imports from Canada	279,849	222,905	231,632	256,369	
Imports from US	5,202,920	5,202,131	5,274,439	5,354,827	
Imports from World ('000 USD)	6,938,328	6,922,130	7,135,913	7,362,938	
NAFTA as a % Imports from World	79.02%	78.37%	77.16%	76.21%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 32: Petroleum, Coal Products

The majority of Mexico imports in this sector are from North America – with the US the major source of imports. Less than 20% of imports are global. Medium oils and preparations with a tariff of 0.56% accounts for the majority part of the tariff shock from both Canada and the US. 28% of imports from the US and 66% of imports from Canada face a 0% tariff. The tariff shock from NAFTA lapsing would be 0.47% for Canadian imports and 0.02% for US imports.

GTAP 32: Petroleum, Coal Products	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	0.52%	0.31%	0.48%	0.55%	0.47%
MFN Applied Tariff US	0.19%	0.20%	0.20%	0.20%	0.02%
Imports from Canada	84,973	37,978	43,823	20,032	
Imports from US	25,272,011	24,611,884	22,916,950	22,762,446	
Imports from World ('000 USD)	31,037,374	29,859,423	27,740,816	27,149,305	
NAFTA as a % Imports from World	81.70%	82.55%	82.77%	83.92%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 33: Chemical, Rubber, Plastic Products

The majority of Mexico imports in this sector are from North America – with the US the major source of imports. Just under 40% of imports are global. Medications (91.84%), mixed alkylbenzenes and mixed alkyl naphthalenes (2%), and new pneumatic rubber tires (11.3%) contribute to the tariff shock for imports from Canada. Articles of plastic (6.67%), boxes and crates (15%) and polypropylene (6%) contribute to the tariff shock for imports from the US. 43% of imports from the US and 40% of imports from Canada face a 0% tariff. The tariff shock from NAFTA lapsing would be 4.02% for Canadian imports and 3.55% for US imports.

GTAP 33: Chemical, Rubber, Plastic Products	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	3.81%	3.97%	4.23%	4.05%	4.02%
MFN Applied Tariff US	3.54%	3.56%	3.52%	3.57%	3.55%
Imports from Canada	1,332,066	1,491,401	1,513,077	1,574,883	
Imports from US	31,936,769	33,882,854	35,081,327	36,105,856	
Imports from World ('000 USD)	52,280,053	55,610,630	57,334,929	60,256,455	
NAFTA as a % Imports from World	63.64%	63.61%	63.83%	62.53%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 34: Mineral Products N.E.C.

Global sources of Mexico imports volume in this sector have been increasing over the period 2011-2014. Refractory cements, mortars, concretes and similar compositions (1.88%), natural or artificial abrasive powder or grain, on a base of paper or paperboard only (5%), and laminated safety glass for vehicles (11.3%) contribute to the tariff shock for imports from Canada. Rear-view mirrors (1.88%), articles of graphite or other carbon (1%) and refractory cements, mortars, concretes and similar compositions (1.88%) contribute to the tariff shock for imports from the US. The tariff shock from NAFTA lapsing would be 2.13% for Canadian imports and 4.24% for US imports.

GTAP 34: Mineral Products N.E.C.	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	2.18%	2.17%	2.39%	1.83%	2.13%
MFN Applied Tariff US	4.07%	4.31%	4.33%	4.25%	4.24%
Imports from Canada	33,335	33,940	35,293	37,466	
Imports from US	1,378,066	1,437,327	1,398,061	1,523,627	
Imports from World ('000 USD)	2,701,629	2,848,206	2,854,547	3,212,788	
NAFTA as a % Imports from World	52.24%	51.66%	50.21%	48.59%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 35: Ferrous Metals

Global sources of Mexico imports volume in this sector have been increasing over the period 2011-2014. Three types of tubes, pipes and hollow profiles face tariffs of 0.91% and 0.45% and 1.67% and contribute to the tariff shock for imports from Canada. Casing and tubing (5%), and two types of tubes, pipes and hollow profiles facing tariffs of 0.45% and 1.67% contribute to the tariff shock for imports from the US. The shock would be 0.13% for Canadian imports and 0.11% for US imports.

GTAP 35: Ferrous Metals	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	0.09%	0.12%	0.14%	0.16%	0.13%
MFN Applied Tariff US	0.10%	0.12%	0.13%	0.10%	0.11%
Imports from Canada	549,644	640,000	577,854	585,992	
Imports from US	5,185,997	5,516,860	5,416,588	5,707,909	
Imports from World ('000 USD)	9,971,694	12,211,258	10,809,168	11,766,719	
NAFTA as a % Imports from World	57.52%	50.42%	55.46%	53.49%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 36: Metals N.E.C.

Mexico imports from NAFTA relatively stable over 2011-2014. Silver (5%), wire of non-alloy aluminium (4%), and aluminium alloy plates, sheets and strip (2.5%) contribute to the tariff shock for imports from Canada. Wire of refined copper (5%), aluminium alloy bars, rods and solid profiles (2.67%), and aluminium alloy plates, sheets and strip (2.5%) and contribute to the tariff shock for imports from the US. 43% of imports from the US and 91% of imports from Canada face a 0% tariff. The tariff shock from NAFTA lapsing would be 0.30% for Canadian imports and 1.97% for US imports.

GTAP 36: Metals N.E.C.	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	0.35%	0.26%	0.31%	0.28%	0.30%
MFN Applied Tariff US	2.03%	1.92%	1.94%	1.98%	1.97%
Imports from Canada	532,215	490,024	482,570	673,241	
Imports from US	4,815,062	4,883,409	4,862,973	5,000,173	
Imports from World ('000 USD)	8,878,832	8,067,963	7,287,776	7,823,179	
NAFTA as a % Imports from World	60.23%	66.60%	73.35%	72.52%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 37: Metal Products

Mexico imports from NAFTA relatively stable. Threaded screws (0.45%), hinges (10%) and base metal mountings, fittings and similar articles suitable for motor vehicles (15%) contribute to the tariff shock for imports from Canada. Threaded screws (0.45%), aluminium articles (4.44%) and base metal mountings, fittings and similar articles suitable for motor vehicles (15%) contribute to the tariff shock for imports from the US. The tariff shock from NAFTA lapsing would be 3.56% for Canadian imports and 2.87% for US imports.

GTAP 37: Metal Products	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	3.30%	3.51%	3.33%	4.10%	3.56%
MFN Applied Tariff US	2.73%	2.93%	2.93%	2.87%	2.87%
Imports from Canada	379,731	438,474	437,300	420,456	
Imports from US	6,045,017	6,829,752	6,917,463	7,059,548	
Imports from World ('000 USD)	11,166,056	12,495,031	12,911,231	13,526,689	
NAFTA as a % Imports from World	57.54%	58.17%	56.96%	55.30%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 38: Motor Vehicles and Parts

Canada has higher proportion of exports in higher-tariff HS codes. The tariff shock from NAFTA lapsing would be 13.51% for Canadian imports and 6.64% for US imports.

GTAP 38: Motor Vehicles and Parts	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	14.59%	14.31%	13.84%	11.38%	13.51%
MFN Applied Tariff US	7.30%	6.52%	6.76%	6.11%	6.64%
Imports from Canada	1,648,118	1,785,574	1,809,201	1,784,908	
Imports from US	21,154,520	23,913,910	24,533,703	26,280,161	
Imports from World ('000 USD)	35,895,852	40,627,199	41,415,019	44,513,563	
NAFTA as a % Imports from World	63.52%	63.26%	63.61%	63.05%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 39: Transport Equipment N.E.C.

Changing product profile in this category results in varying tariff. Helicopters based on weight (7.5% and 10%) and motor boats and motor yachts (15%) contribute to the tariff shock for imports from Canada. Railway or tramway maintenance or service vehicles (5%), vehicles pushed or drawn by hand and other vehicles not mechanically propelled (15%) and aeroplanes (6.67%) contribute to the tariff shock for imports from the US. The tariff shock from NAFTA lapsing would be 1.17% for Canadian imports and 1.08% for US imports.

GTAP 39: Transport Equipment N.E.C.	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	0.67%	0.84%	0.93%	2.21%	1.17%
MFN Applied Tariff US	1.19%	1.25%	0.97%	0.98%	1.08%
Imports from Canada	198,444	63,517	78,875	134,028	
Imports from US	1,356,543	1,514,127	1,662,208	2,103,786	
Imports from World ('000 USD)	2,451,367	2,846,224	2,663,072	3,522,957	
NAFTA as a % Imports from World	63.43%	55.43%	65.38%	63.52%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 40: Electronic Equipment

The majority of imports in this sector are global. Parts for transmission and reception apparatus (0.63%), video recording apparatus (3.33%), and telecommunications equipment (4.29%) contribute to the tariff shock for imports from Canada. Radio broadcast receivers (15%), television reception equipment (5% and 8.75%) contribute to the tariff shock for imports from the US. The tariff shock from NAFTA lapsing would be 0.22% for Canadian imports and 1.95% for US imports.

GTAP 40: Electronic Equipment	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	0.19%	0.35%	0.18%	0.19%	0.22%
MFN Applied Tariff US	1.49%	1.86%	2.10%	2.35%	1.95%
Imports from Canada	269,590	252,353	330,083	322,077	
Imports from US	8,298,910	8,610,738	8,029,521	8,356,905	
Imports from World ('000 USD)	54,347,791	56,713,430	59,964,937	61,116,098	
NAFTA as a % Imports from World	15.77%	15.63%	13.94%	14.20%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 41: Machinery and Equipment N.E.C.

The majority of imports in this sector are global although there are significant imports from the United States with a smaller volume from Canada. Instruments, appliances and machines for measuring or checking (2.5%), machines and mechanical devices (7.32%), and rotary positive displacement pumps for liquids (5%) contribute to the tariff shock for imports from Canada. Electrical apparatus for switching electrical circuits (0.17%), electric conductors (4.29%) and instruments and appliances used in medical, surgical or veterinary sciences (5.63%) contribute to the tariff shock for imports from the US. The tariff shock from NAFTA lapsing would be 1.82% for Canadian imports and 2.34% for US imports.

GTAP 41: Machinery and Equipment N.E.C.	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	1.86%	1.78%	1.81%	1.85%	1.82%
MFN Applied Tariff US	2.32%	2.29%	2.31%	2.41%	2.34%
Imports from Canada	1,552,994	1,772,361	1,658,839	1,533,309	
Imports from US	32,693,855	36,282,209	37,474,130	39,090,904	
Imports from World ('000 USD)	78,116,156	84,073,767	89,602,719	92,914,888	
NAFTA as a % Imports from World	43.84%	45.26%	43.67%	43.72%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team

GTAP Sector 42: Manufactures N.E.C.

The majority of imports in this sector are global. Tricycles, scooters, pedal cars and similar wheeled toys (10.5%), games with screens (10%), roundabouts, swings, shooting galleries and other fairground amusements (6.67%) contribute to the tariff shock for imports from Canada. Jewellery (10% and 3.75%), tricycles, scooters, pedal cars and similar wheeled toys (10.5%) contribute to the tariff shock for imports from the US. The tariff shock from NAFTA lapsing would be 8.57% for Canadian imports and 6.04% for US imports.

GTAP 42: Manufactures N.E.C..	2011	2012	2013	2014	NAFTA
MFN Applied Tariff Canada	8.18%	8.89%	8.64%	8.83%	8.57%
MFN Applied Tariff US	5.82%	6.24%	6.32%	5.83%	6.04%
Imports from Canada	49,999	31,809	30,792	25,060	
Imports from US	1,102,441	1,066,237	988,442	1,135,803	
Imports from World ('000 USD)	3,844,048	3,742,692	3,809,317	4,151,003	
NAFTA as a % Imports from World	29.98%	29.34%	26.76%	27.97%	

Source: World integrated Trade Solutions (WITS) Tariff and Trade Analysis UNCTAD TRAINS database; ITC Market Access Map; Calculations by the study team