The NAFTA Success Story

- **Over the 23 years since its January 1994 inception, NAFTA has been a major success for its three members: North American trade has more than tripled under the pact.**
- **NAFTA has ensured that North America has remained competitive in the race to attract capital and retain jobs. Millions of North Americans in every region now depend on NAFTA trade for their livelihood.**
- **NAFTA has not driven deindustrialization: technology, not trade, has cut manufacturing jobs around the world. Manufacturing's share of US GDP has been stable for decades.**
- **Updating NAFTA offers a win-win-win opportunity for the US, Canada, and Mexico.**

NAFTA HAS MADE NORTH AMERICA GREAT(ER)

Since it became effective in 1994, the North American Free Trade Agreement (NAFTA) has been a major success for its three member countries, the United States, Canada, and Mexico (i.e., the 'NAFTA-3'). NAFTA has expanded continental trade and investment, it has generated economic growth that has created jobs and boosted living standards, and it has improved the global competitiveness of North America's three largest economies. NAFTA has not been responsible for a net decline in manufacturing jobs in the United States (US) and Canada, nor has it led to a hollowing-out of labour, environmental, or intellectual property standards. This note lays out the key elements of NAFTA's success story.

I. THE NORTH AMERICAN FREE TRADE AGREEMENT: THE HIGHLIGHTS

The implementation of NAFTA on January 1, 1994 brought the immediate elimination of tariffs on more than one-half of Mexico's goods exports to the US and Canada, and more than one-third of US and Canadian goods exports to Mexico. The US, Canada, and Mexico agreed to eliminate all remaining bilateral tariffs over the ensuing 10 years except for tariffs on some agricultural goods trade with Mexico, which were phased out over 15 years. Agriculture is the only part of NAFTA that was not negotiated jointly amongst all three countries: tariff reductions were instead agreed under three bilateral accords. About 75% of US-Canada trade was already duty-free under the precursor 1989 Canada-US Free Trade Agreement (CUSFTA). Under CUSFTA, a timetable for the reduction of all remaining Canada-US tariffs was laid out; under NAFTA these tariff cuts were accelerated. Virtually all tariffs on Canada-US trade were eliminated by January 1, 1998.

NAFTA's provisions go far beyond tariff elimination to create a more level playing field for merchandise and services trade. NAFTA established principles for the non-discriminatory provision of services between NAFTA's member countries. NAFTA was also intended to eliminate non-tariff trade barriers between the three countries, to protect intellectual property rights on traded products, and to strengthen protective rules and procedures for cross-border investors. NAFTA additionally brought in a structured dispute-settlement mechanism for

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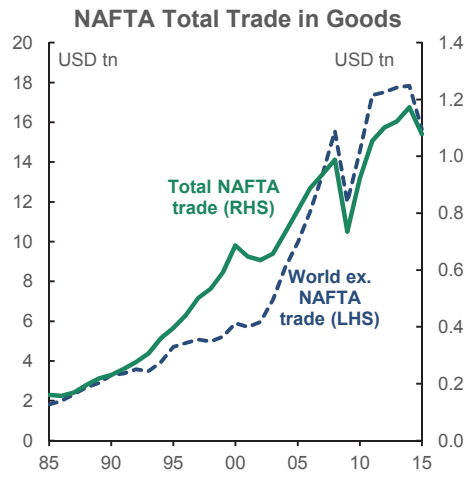
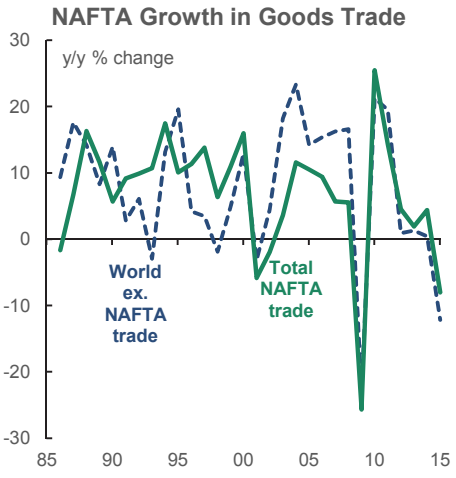
Chart 1



Sources: Scotiabank Economics, IMF.

Chart 2



Sources: Scotiabank Economics, IMF.

disagreements on trade and investment issues covered by the accord. Additional side agreements were designed to buttress environmental and labour standards in NAFTA's member countries—a first for an international free-trade agreement.

NAFTA has remained a living agreement: it has been modified and amended several times since 1994 to adapt it to new developments. The remainder of this paper details North America's advances under NAFTA.

II. TRADE HAS BOOMED UNDER NAFTA

Trade in goods amongst the NAFTA-3 has more than tripled since the pact's inception. In 2015, total trilateral goods trade, as measured by each country's imports from its other two NAFTA partners, came in at just over USD 1.0 tn, more than three times the nominal value of trilateral pre-NAFTA merchandise trade in 1993, which was about USD 306 bn (chart 1). Total trade in goods amongst the NAFTA countries grew more quickly than global trade throughout the 1990s, lagged global trends in the first decade of the 2000s, and has been in line with world trade expansion since 2008 (chart 2). Almost all of this growth reflects US trade with Canada and Mexico since Canada-Mexico commerce, while expanding, remains equivalent to only about 5% of the bilateral flows between the US and its two NAFTA partners (charts 3–5).

Trade balances between the US and its NAFTA partners have been relatively stable for over a decade. Total US-Canada trade in goods and services has been in near-balance since the 2008 financial crisis, with a US surplus in services offsetting a small deficit in goods (chart 4 again). With Mexico, the US has run a persistent overall deficit in recent years equivalent to around 0.3% of US gross domestic product (GDP) and about 10% of total trade in combined goods and services: as with Canada, the US runs a surplus in services trade, but unlike Canada this is more than offset by a deficit in merchandise trade (chart 3 again).

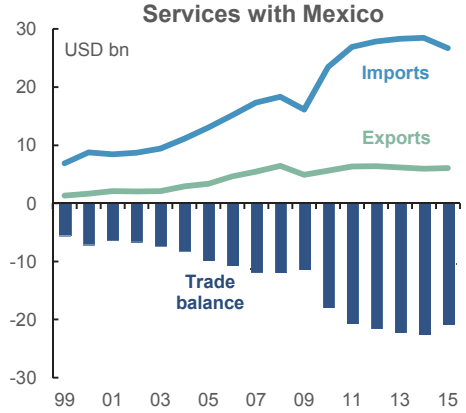
Chart 3

Sources: Scotiabank Economics, BEA.

Chart 4

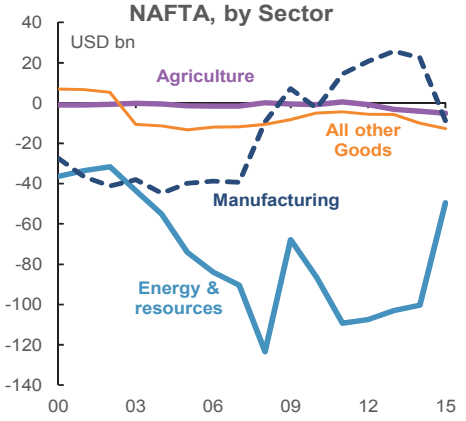
Sources: Scotiabank Economics, BEA.

Chart 5



Sources: Scotiabank Economics, OECD.

Chart 6



Sources: Scotiabank Economics, Census Bureau.

Table 1

US trade balances in goods with Canada and Mexico, 2009–15

	Average annual balance, USD bn	Cumulative 7-yr balance, USD bn	Cumulative 7-yr balance, % 2015 US GDP
I. US trade balances in goods with NAFTA			
Manufactured goods	11.3	79.0	0.4
Energy and resources	-89.1	-623.8	-3.5
Agriculture and food	-1.9	-13.6	-0.1
All other goods	-7.3	-51.3	-0.3
II. US trade balances in goods with Canada			
Manufactured goods	43.3	303.0	1.7
Energy and resources	-64.7	-452.7	-2.5
Agriculture and food	-0.3	-2.1	0.0
All other goods	-6.7	-47.0	-0.3
III. US trade balances in goods with Mexico			
Manufactured goods	-32.0	-223.9	-1.2
Energy and resources	-24.5	-171.2	-0.9
Agriculture and food	-1.7	-11.6	-0.1
All other goods	-0.6	-4.3	0.0

Sources: Scotiabank Economics, US Census Bureau.

US energy and resource imports—not manufacturing or services—drive the ongoing US trade deficit with its NAFTA partners (chart 6). In recent years the US has tended to run combined surpluses in manufactured goods with its NAFTA neighbours; small deficits in agricultural goods trade; and much larger deficits in energy and natural resources trade (table 1). US energy trade deficits with Canada and Mexico are set to widen with new pipelines from Canada and the liberalization of Mexico's energy sector, which NAFTA has helped to encourage. The US's overall trade deficits with its NAFTA partners are driven almost entirely by US business and consumers tapping relatively cheap sources of North American energy. Canada, in contrast, has provided the other side of this trade, with commodity exports financing imports of other goods; Mexico's mounting manufactured goods surpluses dominate its NAFTA trade.

Table 2

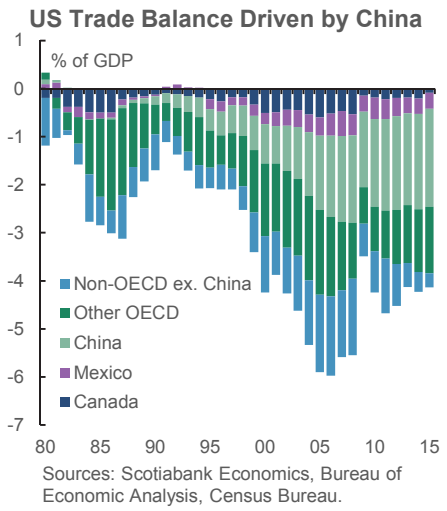
Intra-NAFTA Merchandise Trade: Shares of Totals and Rankings

	Partner	Canada		United States		Mexico	
		1993	2015	1993	2015	1993	2015
Country				*(% of total, ranking)*			
Canada	Exports			81% (#1)	77% (#1)	<1% (#9)	1% (#5)
	Imports			65% (#1)	53% (#1)	2% (#5)	6% (#2)
	Combined			73% (#1)	64% (#1)	1% (#6)	4% (#3)
United States	Exports	22% (#1)	19% (#1)			9% (#3)	16% (#2)
	Imports	19% (#1)	13% (#2)			7% (#3)	13% (#3)
	Combined	20% (#1)	15% (#2)			8% (#3)	14% (#3)
Mexico	Exports	3% (#2)	3% (#2)	83% (#1)	81% (#1)		
	Imports	2% (#5)	3% (#6)	71% (#1)	47% (#1)		
	Combined	1% (#4)	4% (#4)	73% (#1)	64% (#1)		

Sources: Scotiabank Economics, Bloomberg.

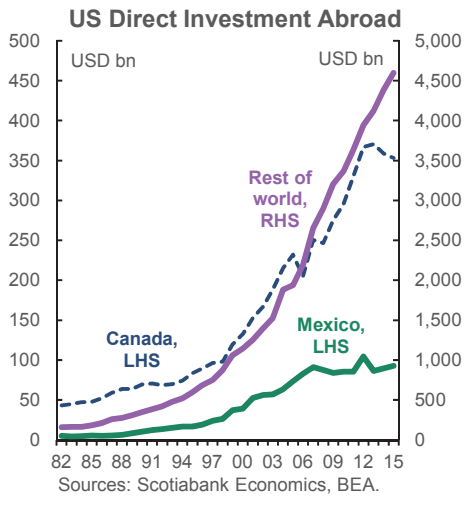
While North American trade has grown quickly under NAFTA, the combined importance of Canada and Mexico in US trade has remained remarkably steady since NAFTA's inception at just shy of 30% of total US trade (table 2)—twice as large as China's nearly 15% current share—and NAFTA trade has accounted for about 40% of US export growth. Within the US's imports and exports of NAFTA goods, Canada's total share has fallen and Mexico's risen, both by about 5½ percentage points. Although Canada remains the top purchaser of US exports, China has displaced Canada as the top supplier of US imports by a sufficiently large margin to knock Canada down to second place amongst US trade partners, as measured by the sum of bilateral imports and exports. Mexico remains the US's third largest trading partner, but integrated North American supply chains have pushed Mexico up to second place amongst US export destinations. The US remains the number one import, export, and overall trading partner for both Canada and Mexico.

Chart 7



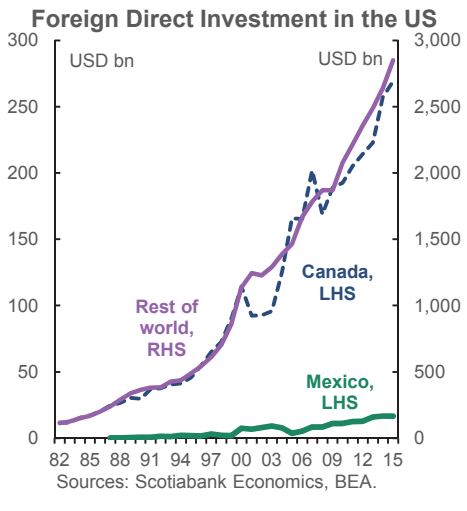
Sources: Scotiabank Economics, Bureau of Economic Analysis, Census Bureau.

Chart 8



Sources: Scotiabank Economics, BEA.

Chart 9



Sources: Scotiabank Economics, BEA.

The persistent economy-wide US trade deficit has been driven by China for over 20 years—not NAFTA (chart 7). In 2015, for instance, the US goods trade deficit stood at about USD 746 bn, while the combined trade deficit with Canada and Mexico amounted to roughly USD 76 bn, or around 10% of the total annual US trade deficit. In contrast, trade with China has generated more than 35% of the US annual trade deficit for much of the last two decades. But as we outline below, technological innovation—not trade, either within NAFTA or with China—has been the dominant force behind manufacturing jobs cuts in the US and Canada.

Table 3

Top US State Export Destinations, Import Sources, and Products

	# of states' top export destination	Top Products
Canada	35	Autos & parts, aerospace, electronics, agricultural products
China	5	Auto & parts, metals & minerals, electronics
Mexico	4	Aerospace, electronics & petroleum products
United Kingdom	2	Pharmaceuticals, gold
Australia	1	Aerospace
Brazil	1	Chemicals
France	1	Aerospace
Switzerland	1	Gold
United Arab Emirates	1	Machinery & equipment
	# of states' top import source	**Top Products**
China	22	Autos & parts, petroleum products
Canada	15	Autos & parts, petroleum products, agricultural products
Mexico	4	Aerospace, petroleum products, gold
Germany	3	Aerospace, autos & parts
Japan	2	Autos & parts
Belgium	1	Petroleum products
Indonesia	1	Petroleum products
Korea	1	Petroleum products
Saudi Arabia	1	Petroleum products
United Kingdom	1	Pharmaceuticals

Sources: Scotiabank Economics, US Census Bureau.

III. NOT JUST TRADE: INVESTMENT HAS EXPLODED TOO

Cross-border investment within North America has expanded massively under NAFTA. Foreign-direct investment (FDI) flows between the US and Canada have expanded in line with global investment flows (charts 8 and 9). This might seem unexceptional: the US and Canada, two mature economies, have one of the world's largest bilateral investment relationships in the world with a mutual FDI stock of around USD 650 bn. But trade and production integration under NAFTA have arguably sustained investment flows when they might have otherwise been redirected to emerging economies where the marginal return on capital would be expected to be higher. While the stock of US and Canadian FDI in Mexico is relatively small, freer capital flows under NAFTA have driven the stock of US investment in Mexico up six-fold since 1993, while Canadian investment in Mexico is up over twenty-five times, albeit from a much smaller base. The manufacturing, mining, and media sectors have led these investment flows into Mexico. US and Canadian capital accounts for over half of FDI into Mexico.

NAFTA helped facilitate a substantial opening up of the Mexican economy that likely would not have happened without the arrival of the continental free-trade agreement. Mexico liberalized its relatively tight restrictions on foreign investment and its exchange rate through the 1980s and 1990s in anticipation of possible negotiations on NAFTA. The ratification of NAFTA locked in these reforms and gave US and Canadian investors additional assurance that they would receive non-discriminatory treatment and protection under NAFTA's investor dispute-settlement mechanisms. Geronimo Gutierrez, managing director of the North American Development Bank (NADB), noted years after NAFTA's inception that "NAFTA has been the fundamental anchor for reforms that make Mexico a more modern economy and open society" (Wilson 2011).

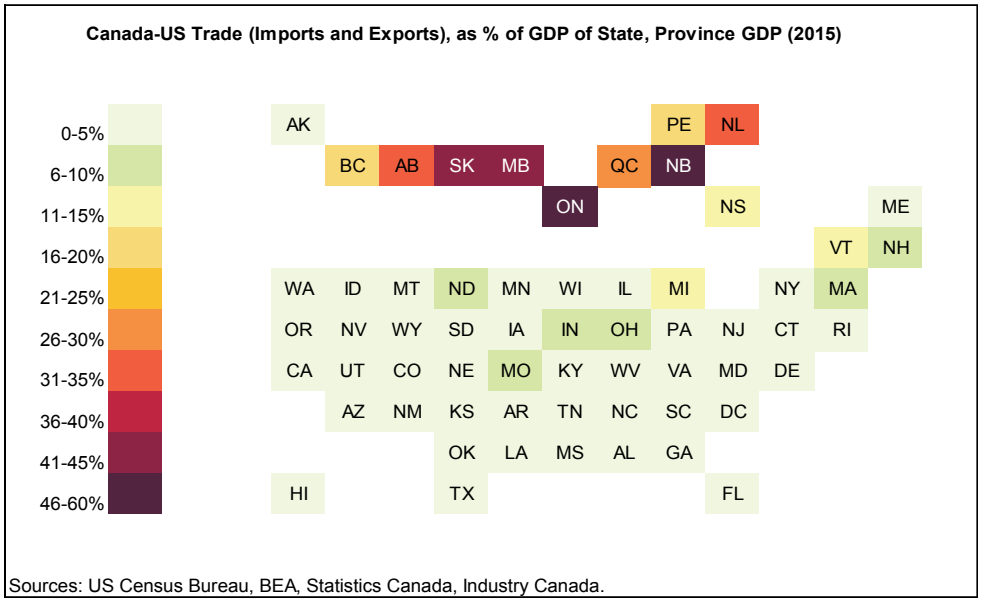
IV. NAFTA HAS BOOSTED NORTH AMERICAN GROWTH

NAFTA has helped North America punch above its weight in economic terms. NAFTA has facilitated sustained economic growth amongst its three member countries in what has arguably become the world's largest free trade area: the NAFTA zone accounts for nearly 28% of global nominal GDP in a region that has about 6.5% of global population (2015 data). This compares favorably with the European Union (EU) at nearly 24% of global nominal GDP and about a 6.9% share of global population. In PPP terms, the NAFTA zone accounts for 19.2% of GDP versus 16.9% in the EU.

National-level studies imply that NAFTA has had a positive marginal impact on US and Canadian GDP, but a relatively larger effect on Mexico's output (Villarreal 2016). For instance, the PIIE (2014) finds that the US has been USD 127 bn

richer each year thanks to "extra" trade growth fostered by NAFTA, with similar gains of USD 50 bn for Canada and USD 170 bn for Mexico. For the United States, with its population of 320 mn, the pure economic payoff has thus been about USD 400 per person each year on top of per capita GDP close to USD 50,000. Unlike the costs associated with trade, which tend to be concentrated in specific industries and regions, the benefits from NAFTA are distributed widely across the US. Model-based studies such as Dixon and Rimmer (2014) estimate that Canada-US trade is in some way responsible directly and indirectly for about USD 1 tn of annual US GDP or around 6% of US total annual income.

Figure 1

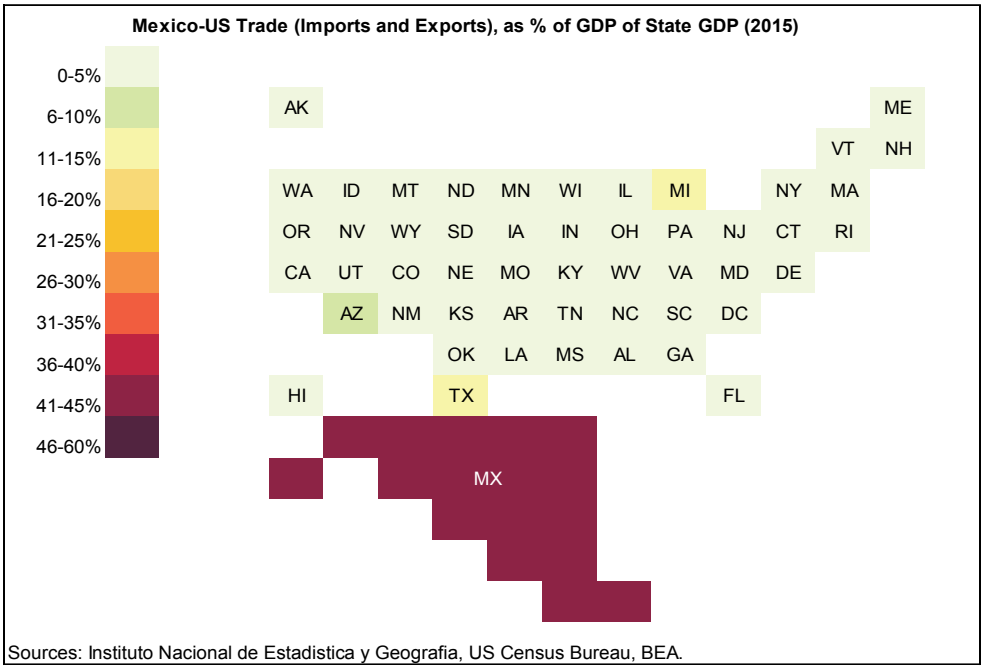


Sources: US Census Bureau, BEA, Statistics Canada, Industry Canada.

V. MILLIONS OF NORTH AMERICAN JOBS DEPEND ON NAFTA

Millions of Americans now depend on trade with Canada and Mexico for their jobs, but the estimates of the numbers vary widely and are, in some cases, contingent on the calibration of model-based simulations. To summarize:

Figure 2



Sources: Instituto Nacional de Estadistica y Geografia, US Census Bureau, BEA.

- US Department of Commerce business census data indicate that roughly 2.8 mn US jobs are directly supported by exports to Canada and Mexico. Canadian firms in the US directly also employ about 600,000 Americans;
- Wilson (2011) estimates that some 6 mn US jobs depend directly and indirectly on trade with Mexico alone (i.e., about 1 in 24 US workers), while some model-based estimates of NAFTA's impact find that up to 8.3 mn, or about 5% of all American jobs, depend in some way on trade with Canada (Dixon and Rimmer 2014); and
- Altogether, Wilson (2011) estimates that trade with Canada and Mexico supports nearly 14 mn US jobs, and that nearly 5 mn of these jobs were created and remain supported by the increase in North American trade generated by NAFTA.

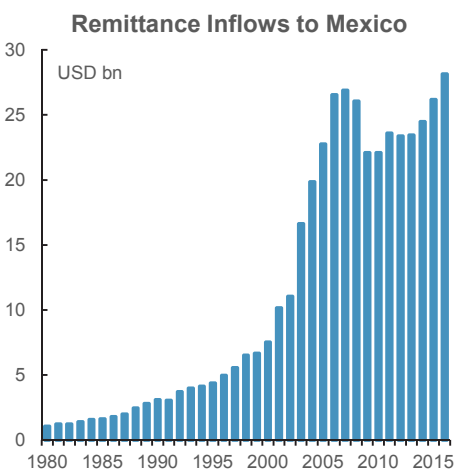
In net terms, NAFTA has created jobs across all three member countries. Throughout NAFTA's first decade, about 190,000 jobs were created in the US every year that were directly attributable to NAFTA; at the same time, somewhere around 60,000 jobs were lost, on average, for a net annual increase of about 130,000 US positions owing to NAFTA (Hufbauer and Schott 2007). On the job creation side, this was less than 10% of total jobs created in the US over the same period, and jobs lost amounted to less

than 1% of total jobs lost through turnover. Since then, NAFTA's impact on US formal job numbers has narrowed, but still remains a net contributor to US employment (PIIE 2014). Parsing NAFTA's impact on Canadian employment is less clear-cut owing to the relatively volatile value of the Canadian dollar. Formal employment in Mexico has expanded principally in its border states as a result of NAFTA.

VI. EVERY STATE AND PROVINCE IS TOUCHED BY NAFTA

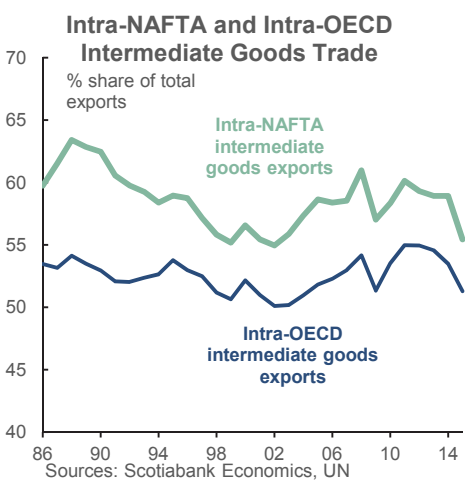
Nearly every US state and Canadian provincial economy's trade is touched significantly by NAFTA (table 3). Canada and Mexico are the top export destinations for 39 US states; in contrast, China is the leading purchaser of US exports for only five states. Canada or Mexico is one of the top two exports destinations for all but 7 US states. Canada appears in the top two export destinations for 42 US states, while China is the first or second largest export buyer for only 9 US states. On the import side, Canada and Mexico are together the most important sources of in-bound foreign goods for 19 US states, exceeded only by China which is the leading foreign supplier for 22 US states. Adding in second-place rankings, China is amongst the top two sources for imports for 38 US states, while 39 US states count Canada or Mexico as one of their top two import sources.

Chart 10



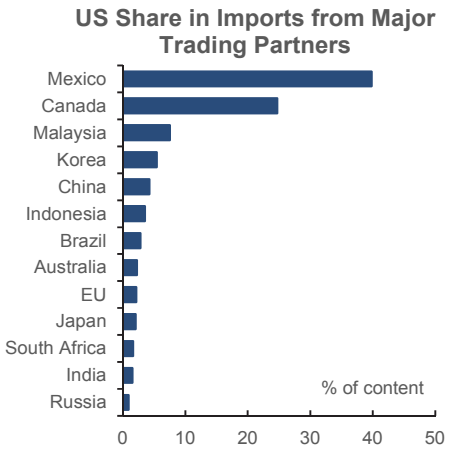
Sources: Scotiabank Economics, World Bank.

Chart 11



Sources: Scotiabank Economics, UN COMTRADE.

Chart 12



Sources: Scotiabank Economics, NBER.

Chart 13

Sources: Scotiabank Economics, Bloomberg.

NAFTA's ripples touch total output and income across the continent. Dixon and Rimmer (2014) find that Canada-US trade has a positive effect on growth in every US state and the District of Columbia, as well as in every Congressional district. Economic links between the states ensure that even those with little direct connection to Canada benefit from Canada-US trade. The importance of trade with Canada to the US is, however, spread thinly across all 50 states: for instance, there are only two US states (Michigan and Vermont) where total trade with Canada is worth more than 10% of state GDP and 10 states where total trade with Canada is equivalent to more than 5% of state GDP (figure 1). In contrast, total trade with the US is equal to double-digit shares of GDP in every Canadian province (figure 1 again). US trade with Mexico exceeds 10% of GDP in only two states (Michigan, again, owing to autos, and Texas), but is equal to 37% of Mexican GDP (figure 2). Additionally, annual remittances to Mexico, principally from the US, have sky-rocketed under NAFTA, rising nearly 20% from 2000 to 2015 (chart 10).

VII. MEXICO KEEPS NORTH AMERICAN MANUFACTURING COMPETITIVE

Intermediate goods dominate intra-NAFTA trade to a much greater extent than in trade between OECD countries as a whole, owing to North America's highly integrated and correlated production processes (chart 11). These intermediate goods pass back and forth across the borders of the NAFTA-3 several times on the way to the completion of a finished product. About 40% of the content of imports from Mexico to the US was "Made in the USA"; similarly, imports from Canada to the US

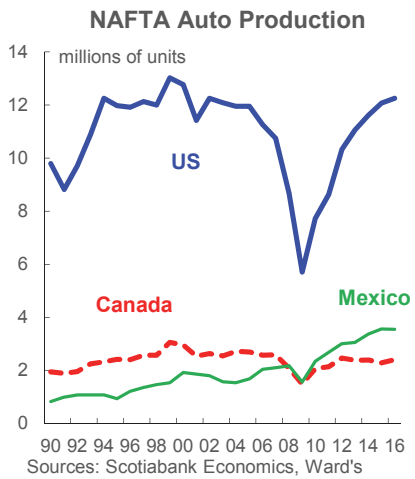
Box 1. Case Study in NAFTA Integration: the North American Auto Sector

The North American auto sector is amongst the best examples of how intensive intra-NAFTA integration has allowed the continent's manufacturers to maintain their global competitiveness.

- According to industry association estimates (CME 2011), some vehicle components cross NAFTA's borders up to six times before the finished automobile in which they're installed is sold to a consumer; others posit up to eight crossings for a typical auto part (Wilson 2011).
- The Detroit metro area exports more goods to Mexico than any other city in the US.
- Some 63% of the content of each assembled vehicle shipped to the US from Canada is made up of US content (EDC 2016) and, on average, about 75% of the content of cars produced within North America is local. For context, only 62.5% local content is required for finished vehicles to qualify for tariff-free movement between the NAFTA-3.
- Auto-sector employment in the US has increased by more than 5% annually since 2010, three times faster than the pace of overall US employment growth.
- North American automakers have added more than 1.5 mn units of new capacity since 2007, with much of the net additional post-financial crisis production focused on Mexico, more modest growth in the US, and somewhat lower production in Canada (chart A). Mexico has surpassed Japan as the second-largest auto exporter to the US.
- Vehicle production's share of manufacturing activity has grown in all three NAFTA countries since the global economic downturn (chart B), but despite a recent rebound in the US, remains down in both the US and Canada compared with the 1990s. This mirrors similar trends for auto manufacturing's share in GDP in both the US and Canada (chart C).
- North American vehicle exports to the rest of the world have increased by an annual average of 10% over the past decade, more than three times faster than the growth in vehicle shipments between the NAFTA-3 (chart D).

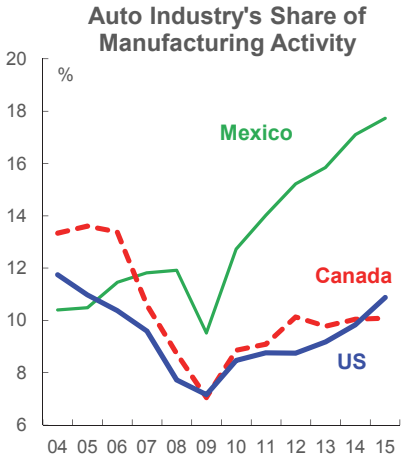
NAFTA has allowed North American, and more specifically US, auto production to maintain its global position, not retreat.

Chart A



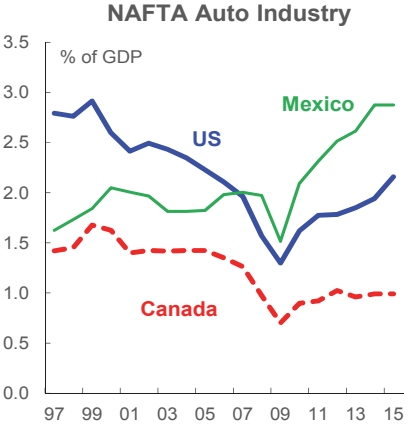
Sources: Scotiabank Economics, Ward's Automotive.

Chart B



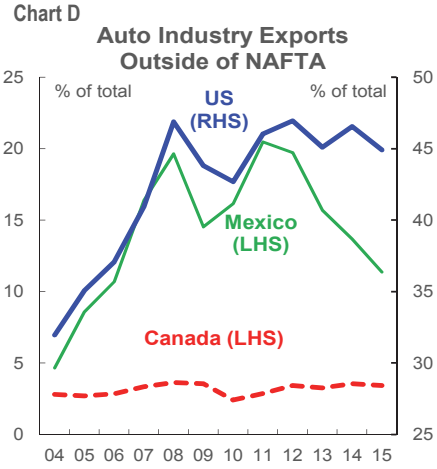
Sources: Scotiabank Economics, INEGI, BEA, Statistics Canada.

Chart C



Sources: Scotiabank Economics, Statistics Canada, BEA, INEGI.

Chart D



Sources: Scotiabank Economics, ITC.

contain roughly 25% US content (chart 12). Taken together, Canada and Mexico account for 75% of all the US domestic content that returns to the US as imports from around the world (Wilson 2011).

The integration of supply chains across NAFTA's countries has helped realize otherwise unattainable economies of scale and efficiencies that have made North American industry more globally competitive (see box 1 for a case study of the auto sector). The pursuit of these scale gains underpins some 33% of intra-NAFTA trade (Dixon and Rimmer 2014). Industrial production is now tightly linked across NAFTA (charts 13 and 14). Vertically integrated production ensures that NAFTA's workers complement rather than compete against each other. Although average Mexican wages are only 15% of those paid in the US (chart 15), Mexican workers generally occupy lower-skilled parts of production processes, while Canadian and American workers focus on higher-value added segments. This specialization and diversion of low-wage jobs to Mexico has likely kept some higher-value North American manufacturing jobs on-shore that otherwise would have decamped to other lower-cost economies on other continents.

Despite much higher wages, the US has broadly maintained its competitive position relative to Mexico since the advent of NAFTA (chart 16). In NAFTA's first years, Mexico's 1994–95 crisis slashed wages and unit labour costs plummeted. Since then, the US has deftly employed technology and best practices to push up productivity and bring relative labour costs down despite wages over six times higher than in Mexico. The depreciation of the Mexican peso since 2015 has only recently reversed this trend. Nevertheless, a survey of global CEOs ranked the US as the world's second most competitive economy behind China, but with an expectation that technological innovation and adoption will allow the US to move ahead of China by 2020 (table 4). Canadian competitiveness has not fared as well either within NAFTA (chart 16 again) or globally, but increased productivity—not trade restrictions—is the only way to address Canada's competitiveness gap. Even though direct Canada-Mexico trade remains relatively small, Canadian industry benefits from the cost-savings realized through its integrated supply chains with the US and Mexico. Without Mexico in NAFTA, Canada would become less globally competitive.

NAFTA's benefits aren't limited to continent-spanning supply chains and large corporations. The USC (2015b) finds that Canada and Mexico are the top two export destinations for US small and medium-size enterprises (SMEs). In recent years, more than 125,000 SMEs sold their goods and services to the US's NAFTA partners.

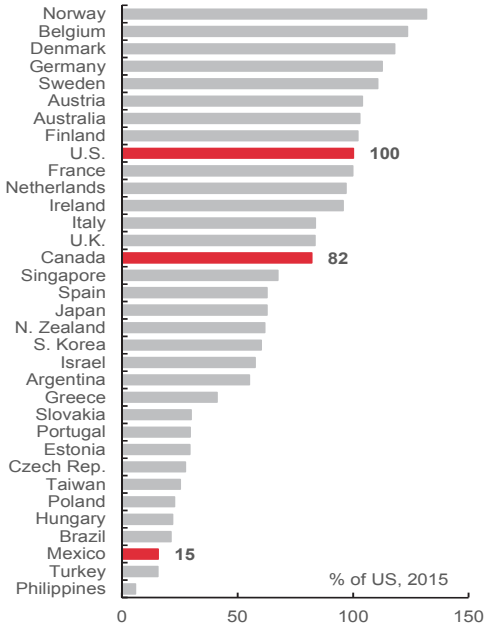
VIII. NAFTA HAS ADVANCED MORE THAN JUST TRADE

NAFTA's creation had knock-on effects that furthered global trade liberalization. NAFTA's entry into effectiveness in January 1994 provided a final nudge for the April 1994 conclusion of the Uruguay round of multilateral negotiations that led to the creation of the WTO in 1995. Buoyed by NAFTA's successes, Mexico, Canada, and the US have all gone on to sign scores of additional bilateral and regional trade agreements. Mexico has gone from being a relatively closed economy to a leader in signing trade deals.

Chart 14 Canada-US Industrial Production

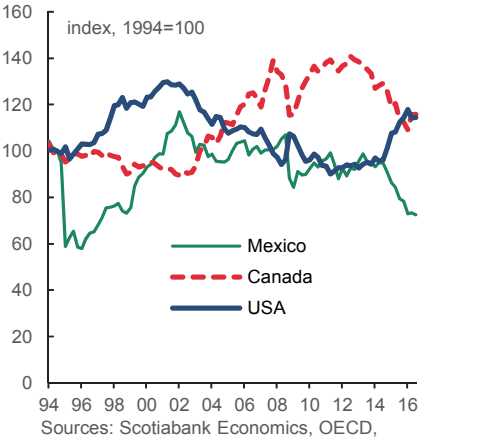
Sources: Scotiabank Economics, Bloomberg.

Chart 15 Hourly Compensation Costs in Manufacturing



Sources: Scotiabank Economics, US Conference Board.

Chart 16 NAFTA Unit Labour Costs



Sources: Scotiabank Economics, OECD, Bloomberg.

NAFTA was additionally a pioneering, precedent-setting free trade deal at its inception and it remains a path-breaking framework today. NAFTA's major trade provisions served as reference points for subsequent pacts and have been widely copied. NAFTA was the first regional trade agreement to feature side agreements to protect and advance environmental and labour standards. Both side pacts have raised and strengthened norms through enhanced cooperation. In subsequent agreements, environmental and labour standards have been incorporated at the core of the pacts rather than in codicils to ensure these agreements advance social progress as much as economic growth. NAFTA set the bar for these later accords.

NAFTA also set a new standard for a structured approach to dispute settlement between trading partners outside of the WTO. In another first for a regional agreement, NAFTA brought in comprehensive channels for the resolution of disagreements on investor rights, financial services, dumping, trade, labour standards, and environmental protections. Although NAFTA member governments, their companies, and their citizens have the option to take disputes to the WTO, they have generally preferred to settle their disagreements under NAFTA's structures.

IX. TECHNOLOGICAL INNOVATION, NOT TRADE, HAS CUT MANUFACTURING JOBS

Technological progress and enhanced productivity—not NAFTA nor liberalized trade more generally—has been responsible for the stagnation in absolute manufacturing employment numbers that the US has experienced over several decades (chart 17). The decline of manufacturing as a share of total US employment took hold in the 1950s, long before the rise of bilateral, regional, and multilateral trade agreements (chart 18). This long slide hasn't accelerated since the arrival of more open international trade: it has followed a straight line, unchanged by closer

Table 4

Global CEO Survey: 2016 Global Manufacturing Competitiveness Index Rankings

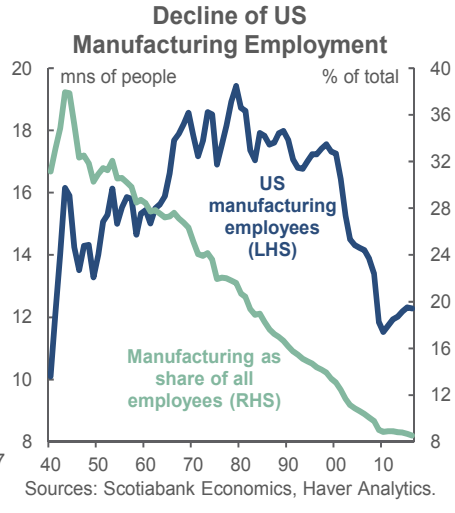
2016 (Current)			2020 (Projected)			
Rank	Country	Index score (100=High) (10 = Low)	Rank	2016 vs. 2020	Country	Index score (100=High) (10 = Low)
1	China	100.0	1	(▲ + 1)	United States	100.0
2	United States	99.5	2	(▼ - 1)	China	93.5
3	Germany	93.9	3	(↔)	Germany	90.8
4	Japan	80.4	4	(↔)	Japan	78.0
5	South Korea	76.7	5	(▲ + 6)	India	77.5
6	United Kingdom	75.8	6	(▼ - 1)	South Korea	77.0
7	Taiwan	72.9	7	(▲ + 1)	Mexico	75.9
8	Mexico	69.5	8	(▼ - 2)	United Kingdom	73.8
9	Canada	68.7	9	(▼ - 1)	Taiwan	72.1
10	Singapore	68.4	10	(▼ - 1)	Canada	68.1

Source: Deloitte 2016 Global Manufacturing Competitiveness Index.

Chart 17

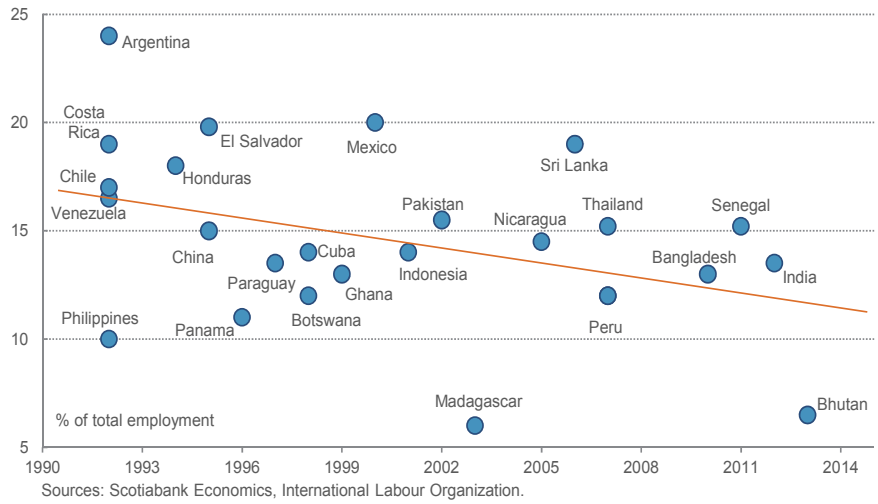
Sources: Scotiabank Economics, Institute for Supply Management, Bureau of Labor Statistics.

Chart 18



Sources: Scotiabank Economics, Haver Analytics.

Chart 19



Sources: Scotiabank Economics, International Labour Organization.

integration in Europe, the advent of NAFTA and the conclusion of the Uruguay Round of global trade negotiations in 1994, the 1995 creation of the World Trade Organization (WTO), and China's accession to the WTO in 2001. In absolute terms, manufacturing employment in the US peaked in 1979 and has slid by 37% since then back to the levels of the 1940s (chart 18 again) within an economy-wide labour force that is three times larger than 75 years ago. Hicks and Devaraj (2015) find that about 9 out of 10 manufacturing jobs lost in the US have been eliminated by mechanization, not trade.

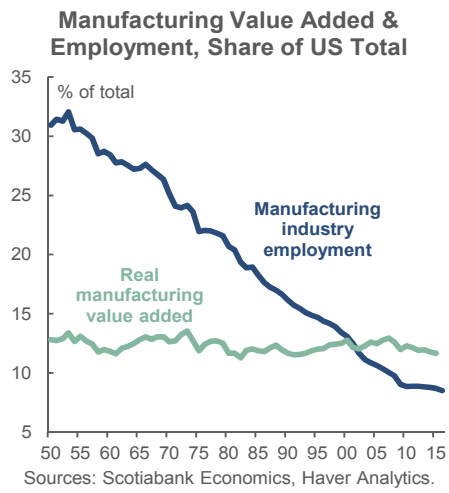
Manufacturing has seen a similar slide in employment shares across most high-income economies and even in developing countries (ILO 2015). Manufacturing employment shares are also falling in many middle-income and low-income countries, but from lower peaks than in the already high-income world: emerging and frontier markets are de-industrializing much earlier in their development processes than their rich-country counterparts (chart 19). Manufacturing jobs are disappearing everywhere: they're not shifting from high-wage to low-wage economies in a zero-sum game. Canada has mirrored this global trend (chart 20).

Despite this decline in manufacturing jobs, technological innovation and adoption is likely helping to retain industrial production in the US that has been lost elsewhere. Manufacturing has maintained a near-constant share of US GDP since the 1950s despite the unrelenting drop in manufacturing's share of total US employment (chart 21). In contrast, manufacturing's share

Chart 20

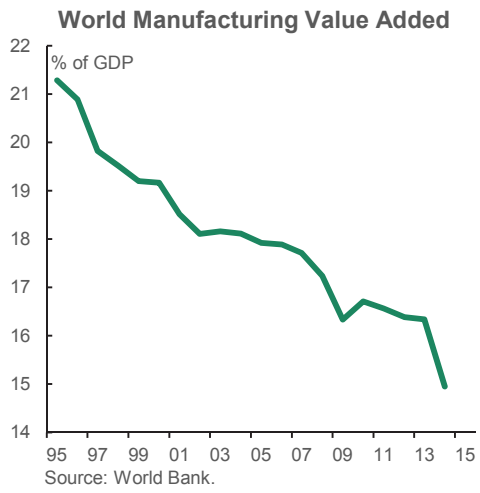
Sources: Scotiabank Economics, Haver Analytics.

Chart 21



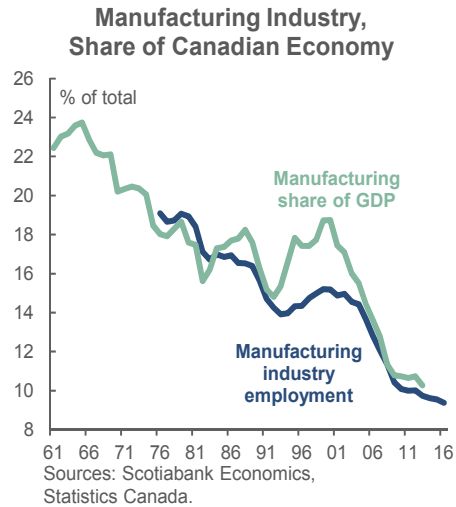
Sources: Scotiabank Economics, Haver Analytics.

Chart 22



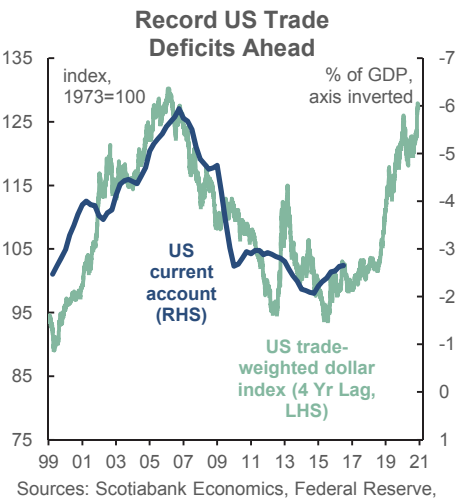
Source: World Bank.

Chart 23



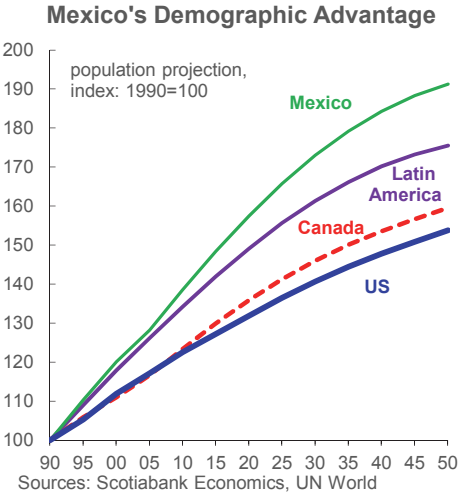
Sources: Scotiabank Economics, Statistics Canada.

Chart 24



Sources: Scotiabank Economics, Federal Reserve, Bloomberg.

Chart 25



Sources: Scotiabank Economics, UN World Population Prospects.

of GDP has plummeted from 30.9% in 1991 to 23.9% in 2013 across all high-income countries (chart 22), with Canadian manufacturing tracking the decline amongst its global peers (chart 23). Combined with similar declines in middle- and low-income economies, manufacturing's share has fallen from over 21% of world GDP in 1995 to about 15% in 2014.

X. RENEW NAFTA WITH A WIN-WIN-WIN DEAL

An "America First" reconsideration of NAFTA comes at the same time that US trade deficits are set to move to some of their widest levels in years (chart 24). As we detail in our most recent economic commentary on the US, United States economic growth is accelerating into 2017 with tight labour markets, increasing demand, and rising inflation. Our Q1 2017 Global Outlook outlines our expectation that the US Federal Reserve will raise its benchmark Fed funds rate three times in 2017 in response to the strengthening US economy and possible further fiscal stimulus from the new US administration. Higher interest rates would provide support to the already-strong USD, dampen US exports, and make other countries' goods and services more competitive in the US. Higher public spending and tax cuts are likely to push up US imports, while uncertainty about the White House's trade-policy intentions is likely to dampen investment spending and cut imports in other countries. US trade deficits with Canada, Mexico, and the rest of the world are set to worsen in the near term.

Wider US trade deficits within NAFTA could make a reopening of the agreement more challenging, but they should not prevent renewal of the pact in ways that could benefit all three countries. Updating NAFTA to cover the advent of e-commerce (which didn't exist in 1994), expanding trade in services, and improved protection for intellectual property is a win-win-win proposition. Similarly, the new US administration's apparent interest in revamping NAFTA's dispute settlement mechanisms may benefit both Canada and Mexico, which have fared relatively poorly compared with the US under the existing system. Furthermore, US efforts to enhance NAFTA's rules of origin come at a time when the local content in major lines of intra-North American trade is already above existing NAFTA-mandated thresholds for tariff-free movement within North America.

Re-opening NAFTA has the potential to improve the agreement for all three of its member countries, both now and in the future. Looking ahead only a few decades, the main question in North American trade may be less about preserving access to the rich but ageing US economy, and more about supplying goods and services to Mexico's young and growing middle class (chart 25).

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