PIIE PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS

POLICY BRIEF

17-24 Agriculture in the NAFTA Renegotiation

Cullen S. Hendrix
June 2017

Cullen S. Hendrix is nonresident senior fellow at the Peterson Institute for International Economics and associate professor at the Josef Korbel School of International Studies, University of Denver. He thanks Fred Bergsten, Chad Bown, Monica de Bolle, Gary Hufbauer, and Jeffrey Schott for comments on earlier versions.

Candidate Donald Trump's campaign promises to "renegotiate or rip up" the North American Free Trade Agreement (NAFTA) mostly focused on issues affecting manufacturing and border tax policy. Recent statements—like promises to "stand up for our dairy farmers"—signal that agriculture may be a significant issue as well, although it is one of the areas where the benefits of NAFTA for US producers and consumers have been most manifest.[1] Indeed, Agriculture Secretary Sonny Perdue and Commerce Secretary Wilbur Ross may have temporarily saved NAFTA—which President Trump claims he was "all set to terminate"—by showing the president a map of the heartland states and districts, most of them solidly red, that depend on agricultural exports and imports.[2]

Although the volume of intra-NAFTA agricultural trade is relatively high—the United States and Canada are among the world's top agricultural exporters and, with Mexico, among the largest importers—its contribution to total trade and resultant surpluses/deficits is relatively small (WTO 2016). Agriculture accounted for roughly 7 percent of US trade with Canada and with Mexico and 8 percent of US trade's modest surplus with Canada and deficit with Mexico in 2016 (table 1). These shares are small but significant. For select products, however, the shares are much higher: Mexico received 28 percent of the US maize crop and Canada and Mexico account for nearly a third of US beef exports. These market shares imply large potential for retaliation—as US losses—even if agriculture's contribution to intra-NAFTA trade is relatively minor.[3]

This Policy Brief makes four points related to the role of agricultural interests in any NAFTA renegotiation:

1. Despite agriculture's comparatively small contribution to GDP in all three countries, agricultural issues will be a thorny aspect of these negotiations—just as in other FTA negotiations.
2. US and Canadian agricultural producers like NAFTA and will fight hard to preserve it. Aside from some wrangling over market access issues for dairy, poultry, and eggs and recent spats over Canadian soft lumber, farm organizations in both countries view NAFTA positively. Public opinion in Mexico is more ambivalent, but NAFTA has created strong export-oriented agricultural interests in the country's north that balance more protectionist interests in the south.
3. Despite not being as extensive as those in other industries, NAFTA has created complex cross-border agricultural supply chains that create value added for the US economy, particularly in GOP-leaning states.
4. Disruptions to NAFTA could create big problems for Trump-voting states and states with GOP and split Senate delegations, especially those that rely heavily on agricultural exports and intra-NAFTA trade.

Given all of this, what would a productive conclusion of a NAFTA renegotiation look like? This Policy Brief

1. "Trump: Canada's dairy measures a 'disgrace,'" CNN, April 20, 2017, www.cnn.com/2017/04/20/politics/donald-trump-canada-dairy-farmers (accessed on May 7, 2017).

2. "The New Agriculture Secretary Helped Trump Change His Mind on NAFTA," Daily Caller, April 28, 2017, http://dailycaller.com/2017/04/28/the-new-agriculture-secretary-helped-trump-change-his-mind-on-nafta (accessed on May 9, 2017).

3. "US Corn Exports to Mexico Could be At Risk – DTN," AgFax, February 14, 2017, http://agfax.com/2017/02/14/u-s-corn-exports-to-mexico-could-be-at-risk-dtn (accessed on May 30, 2017); "Beef and Cattle Trade," USDA Economic Research Service, April 26, 2017, www.ers.usda.gov/topics/animal-products/cattle-beef/trade (accessed on May 30, 2017).

Table 1 US agricultural imports and exports with NAFTA partner countries, 2016 (billions of US dollars)

	Canada	Mexico
Imports	22	23
Exports	23	17.9
Surplus/deficit	1	–5.1
Total surplus/deficit	12.5	–63.2
Percent of bilateral surplus/deficit	8	8.1
Percent of total bilateral trade	7.2	7.1

Source: USTR (2017), author's calculations.

concludes with a consideration of this question. Ironically, it will probably look a lot like the agricultural and sanitary and phytosanitary standards (SPS) provisions of the Trans-Pacific Partnership (TPP), which addressed most of the issues and from which the Trump administration withdrew on its third day in office. However, there is considerable potential risk for agricultural producers—many concentrated in heavily GOP-leaning states—who saw large gains from NAFTA in terms of market access and the creation of cross-border supply chains. If agricultural interests in GOP strongholds are linked to negotiations over nonagricultural sectors/issues or sacrificed in favor of increasing market access for agricultural products from more electorally competitive states, the Trump administration may face an uphill battle in securing Senate approval for any deal.

AGRICULTURE WILL BE A SIGNIFICANT BONE OF CONTENTION

Despite agriculture's modest contributions to GDP and employment in upper- and upper-middle-income countries, it is often among the thorniest issues in negotiating free trade agreements. This was true of the original NAFTA negotiations—which took place when Mexico was a much more rural and agriculturally dependent economy—and will be of any future renegotiation (see table 2).

The reasons are several. First, agriculture makes intense use of a highly specific factor—rural land—that is effectively "stuck" in its present use (Alt et al. 1996). Farmers adjacent to urban areas may find lucrative opportunities to sell to real estate developers, but in the main agricultural interests face very high costs in adjusting to trade policy changes. Thus, they fight hard in the political arena to protect their interests—both via institutional channels and in the streets and jungles. Dairy farmers in Ontario and Quebec have repeatedly snarled traffic around Parliament Hill with cattle and tractors to protest proposed changes to Canada's dairy supply management system,[4] and in Mexico the rural, indigenous Zapatista National Liberation Army chose the day NAFTA went into effect, January 1, 1994, to launch its short-lived rebellion against the Mexican government. Among their grievances were opposition to the NAFTA-related initiatives like the repeal of indigenous land rights established by the Constitution of 1917 and fears that US corn producers would immiserate indigenous corn producers. Mexico still has a comparatively large share of employment in agriculture—13.4 percent versus 1–2 percent in the United States and Canada—and an anti- TPP march drew 65,000 to Mexico City in February 2014. Given that the TPP was branded "NAFTA on steroids" by opponents in all three countries, it is likely that popular mobilization around the NAFTA renegotiation will be at least as contentious.[5]

Second, agricultural interests tend to wield significant political clout in upper- and upper-middle-income economies. In the postwar era, many policy outcomes in the developing world have tended to be biased in favor of urbanites, including the use of marketing boards and other mechanisms to suppress farm-gate prices and transfer benefits to cities (Bezemer and Headey 2008). In more industrialized and service-oriented economies agriculturalists are fewer in number and have clear common interests. As food declines as a share of household expenditures the political salience of lower prices declines as well—people are generally well-off

4. "Tractors, cows take over Ottawa, Parliament Hill as dairy farmers protest TPP," CBC News, September 29, 2015, www.cbc.ca/news/canada/ottawa/trans-pacific-partnership-dairy-farmers-ottawa-protest-1.3248479 (accessed on March 7, 2017).

5. "Robert Reich on Trans-Pacific Partnership as 'NAFTA on steroids'," Business and Human Rights Resource Centre, https://business-humanrights.org/en/robert-reich-on-trans-pacific-partnership-as-nafta-on-steroids (accessed on March 13, 2017); "TPP set to worsen food insecurity in Mexico," Telesur, November 9, 2015, www.telesurtv.net/english/news/TPP-Set-to-Worsen-Food-Insecurity-in-Mexico-20151109-0030.html (accessed on March 13, 2017); "NAFTA on Steroids: With New Trade Deal, 'If You're Not at the Table, You're on the Menu'," Sierra Club Canada, April 21, 2016, www.sierraclub.ca/en/NAFTA-on-steroids-with-new-trade-deal-if-you-re-not-at-the-able-you-re-on-the-menu (accessed on March 13, 2017).

Table 2 Agriculture as share of GDP, employment, and exports in NAFTA countries

Partner	Value added (percent of GDP)	Employment (percent of total employment)	Raw materials share of merchandise exports (percent)	Food share of merchandise exports (percent)
Mexico	3.6 (2014)	13.4 (2013)	0.3 (2015)	6.9 (2015)
United States	1.3 (2014)	1.6 (2010)	2.3 (2015)	10.1 (2015)
Canada	1.8 (2012)	2.1 (2014)	4.6 (2015)	12.7 (2015)

Source: World Bank (2017). Most recent estimates used for each.

enough to afford agricultural protectionism (Anderson and Hayami 1986). All of this translates into outsized political clout evident in the significant programs of subsidies and tax incentives that increase developed-country producer prices above those that would obtain in free markets (Anderson, Rausser, and Swinnen 2013).

Third, NAFTA members' political institutions bias policy outcomes in favor of agricultural interests, endowing them with greater political clout than their contributions to either employment or GDP would suggest. All three NAFTA members have bicameral legislatures in which representation in the Senate is apportioned according to administrative units—states or provinces—rather than population.[6] This mode of apportionment significantly overrepresents rural interests. The 10 most populous US states[7]—representing 54 percent of US population—have the same number of senators as the 10 top per capita agriculture-exporting states, which account for 34 percent of US agricultural exports but only 8.5 percent of the population.[8] The smaller, agriculturally dependent states have less diverse economies and export bases, rendering their Senate delegations issue obsessionists when it comes to agricultural policy (Bellemare and Carnes 2015). These circumstances are not unique to the United States: Canada's Maritime Provinces have a total population of less than 2 million but the same size Senate delegation as Ontario (population 14.1 million), and the state of Mexico has seven times the population of agricultural powerhouse Sonora but the same representation in el Senado de la República.

For these reasons, agriculture is one of the few sectors that still benefits from large, complex systems of producer supports and both tariff and nontariff barriers in the NAFTA partner countries. Wrangling and hyperbole will likely play a larger role in agricultural trade negotiations than the sector's contributions to intra-NAFTA trade, overall employment, or GDP would suggest.

US AGRICULTURE LIKES NAFTA

Donald Trump's campaign rhetoric around NAFTA played well in the industrial upper Midwest and former textile powerhouses North and South Carolina, which experienced declines in manufacturing employment and wages after NAFTA's introduction (Hakobyan and McLaren 2016). But it has played less well in agricultural powerhouses like Iowa, Nebraska, and Kansas—and for good reason. NAFTA has been a significant boon to US agriculture, having produced broad benefits for Canadian and Mexican agricultural interests as well.

NAFTA has stimulated agricultural exports in all member countries. Table 3 presents data on NAFTA partner exports and export growth from 1991–93 to 2010–12, when the three countries' agricultural exports grew much faster than the price of either food or agricultural raw materials. Although prices rose, intra-NAFTA exports rose even more.

US exports to NAFTA partners grew significantly in absolute terms and much faster than exports to the rest of the world. Canada's exports to NAFTA partners grew at roughly the same rate as its exports to the rest of the world. While Mexico's exports outside of NAFTA grew more rapidly than intra-NAFTA exports, this is due in large part

6. Mexico's senate includes both directly elected senators (two per state and the Federal District, awarded by plurality), minority senators (one per state and the Federal District, awarded to the party with the second-highest vote total), and 32 at-large senators apportioned by proportional representation according to the national vote share. Canada's 105 Senate seats are allocated with 24 each going to the provinces of Ontario and Quebec, 24 each to the Western (Alberta, British Columbia, Manitoba, and Saskatchewan) and Maritime (New Brunswick, Nova Scotia, and Prince Edward Island) Provinces. The remaining 9 are apportioned to Newfoundland and Labrador as well as the three northern territories (Northwest Territories, Nunavut, and Yukon).

7. California, Florida, Georgia, Illinois, Michigan, New York, North Carolina, Ohio, Pennsylvania, and Texas (US Census Bureau 2016a).

8. Alaska, Delaware, Maine, Montana, New Hampshire, North Dakota, Rhode Island, South Dakota, Vermont, and Wyoming (US Census Bureau 2016a).

Table 3 NAFTA partners' intra-NAFTA and rest of world (ROW) exports, 1991–93 vs. 2010–12 (values in billions of US dollars)

Period	Food Price Index	Agriculture Raw Materials Index	USA-NAFTA	USA-ROW	MEX-NAFTA	MEX-ROW	CAN-NAFTA	CAN-ROW
1991–93	98.5	97.4	8.4	33.5	3.3	0.4	6.2	5.5
2010–12	169.1	137.5	36.1	95.1	17	4	23.4	20.2
Growth (percent)	71.7	41.2	329.8	183.9	415.2	900	277.4	267.3

Sources: IMF Commodity Price Statistics, 2017; author's calculations from Zahniser et al. (2015).

to the minimal contribution of non-NAFTA partner agricultural exports to total exports in the earlier period. Even Canada, the comparative laggard in terms of intra-NAFTA export growth, saw its exports to NAFTA countries nearly quadruple.

Of course, these benefits have not been spread equally across agricultural producers. Market integration has meant increased competition for less efficient producers and spurred some exit, mostly in the form of mid-size farm consolidation into larger, more competitive enterprises (MacDonald, Korb, and Hoppe 2013).[9] However, even for products like Mexican maize, where NAFTA has been identified as a major contributor to falling prices and declining smallholder livelihoods (de Janvry and Sadoulet 1995), the evidence for NAFTA *alone* as the culprit is weak (Yúnez-Naude 2002, Yúnez-Naude and Barceinas Paredes 2003, Puyana and Romero 2004). Other studies point to gains from trade as US corn (mostly yellow corn used for animal feed) complements Mexican domestic production of white corn for human consumption and reduces environmental impacts of farming (Eakin, Bausch, and Sweeney 2014; Martinez-Melendez and Bennett 2016).

These data are borne out in farmer sentiment in all three countries. The US Farm Bureau, the largest farm lobbying organization in the United States, is decidedly pro-NAFTA, arguing that "Any renegotiation [of NAFTA] must protect the gains achieved in agricultural trade and work to remove remaining barriers to trade with Canada and Mexico."[10] The National Cattlemen's Beef Association expressed a similar sentiment regarding prominent trade deals like TPP and NAFTA: "since NAFTA was implemented, exports of American-produced beef to Mexico have grown by more than 750 percent. We're especially concerned that the Administration is taking these actions without any meaningful alternatives in place that would compensate for the tremendous loss that cattle producers will face without TPP or NAFTA."[11] US farmers do not, in the main, want to curtail or roll back market access—they want to expand it.

The same is true by and large of Canadian and Mexican agriculture, though opinion in Mexico is more ambivalent. A sizable share of the Mexican workforce is still in agriculture and much of this employment is concentrated in Mexico's poorest southern states (Guerrero, Oaxaca, and Chiapas) that benefit the least from cross-border market integration and export-oriented agricultural employment. Moreover, Mexico still has pockets of chronic food insecurity in these southern states, with indigenous households bearing the brunt; as recently as 2012, 33 percent of the indigenous population was chronically undernourished (Secretario de Salud 2012). NAFTA has been a lightning rod for political concerns there about the loss of traditional rural livelihoods and uneven benefits and burdens from economic integration. But negative views in Mexico's south are offset by support in the north. Sinaloa, a northern agricultural powerhouse with access to abundant fisheries, employs almost as many (27,000) commercial agriculturalists as Guerrero and Chiapas combined (28,500).[12] The states of Baja California Norte and Sur, Sonora, and Sinaloa account for 54 percent

9. The number of small farms, which had been on the decline since the 1950s, actually increased from 2000 to 2013. This increase is being driven largely by part-time farmers engaged in specialized production of boutique products for local distribution. "Big Farms Are Getting Bigger And Most Small Farms Aren't Really Farms At All," FiveThirtyEight, November 17, 2016, https://fivethirtyeight.com/features/big-farms-are-getting-bigger-and-most-small-farms-arent-really-farms-at-all (accessed on May 1, 2017).

10. US Farm Bureau, "NAFTA Factsheet," February 2017, www.fb.org/files/Trade-NAFTA.pdf (accessed on March 17, 2017).

11. National Cattlemen's Beef Association, "Cattlemen Express Concerns with Trump Administration's Trade Action," January 23, 2017, www.beefusa.org/newsreleases1.aspx?NewsID=6166 (accessed on March 17, 2017).

12. Instituto Nacional de Estadística y Geografía (INEGI; National Institute of Statistics and Geography), Censos Económicos 2014: Resultados Definitivos, www.inegi.org.mx/est/contenidos/proyectos/ce/ce2014/default.aspx (accessed on April 4, 2017).

of Mexico's agricultural GDP, while the southern states account for less than 8 percent.[13]

In Canada, farmers' opinions of NAFTA are largely dependent on whether they are in competitive, export-oriented sectors or protected sectors like dairy and beef (see section on "What Would a Productive Renegotiation Look Like?" below). As recently as February 2017, however, the president of the Canadian Federation of Agriculture (CFA; Canada's largest farm organization), Ron Bonnett, noted that any NAFTA renegotiation would need to stay focused to avoid becoming derailed by discussions about nonagricultural issues, as NAFTA had "worked well" for agriculture in both the United States and Canada.[14]

NAFTA HAS CREATED CROSS-BORDER SUPPLY CHAINS IN AGRICULTURE

Market integration does not just mean more Mexican consumers eating US beef or Super Bowl parties serving Mexican avocado–based guacamole. NAFTA has created cross-border supply chains that would be significantly damaged by market deintegration, denying member-country producers access to inputs and member-country consumers access to a wider array of products. These cross-border supply chains are not as complex as those in the automotive industry, for example, but they are significant.

Consider pork. In 2014 the United States imported 4.9 million Canadian pigs, 3.9 million of which were feeders, 8- to 12-week old juvenile pigs weighing 10–60 pounds (USDA 2015). These pigs are birthed and weaned on Canadian farms before being exported to states such as Iowa, Minnesota, Illinois, and Indiana, where they can be finished—fed to eventual slaughter weight—on inexpensive US corn and soybean meal, and then slaughtered and processed in US facilities. The resulting pork products are then either consumed domestically in the United States or exported to the Canadian and Mexican markets. Thus a pork cutlet consumed in Toronto may have started life as a piglet on an Ontario farm before being exported to the United States and then reimported as a US-produced finished cut. Interrupting this supply chain would have adverse effects for both Canadian and US producers and consumers. Losing access to cheaper US-finished pork would result in either (or both) higher Canadian consumer prices or (and) reduced high-value Canadian exports to lucrative markets like Japan, where Canadian-raised and finished pork commands a significant market premium.[15] Similarly, US producers would face higher input costs in the form of more expensive feeder pigs. Mexico's pork industry has grown as well, buoyed by access to inexpensive feed from the US grain belt.

The pork industry is emblematic of a broader trend: From grains and oilseeds to processed foods and livestock, the North American market has become significantly more regionally integrated in both trade and investment. Of the six main agricultural subsectors,[16] only sugar and sweeteners remain characterized by low market integration—defined as the presence of substantial tariffs, quotas, and other trade restrictions—in large part due to the power of the US sugar lobby (see section on "What Would a Productive Renegotiation Look Like?" below). The other five sectors are marked by high levels of integration (Zahniser et al. 2015).

DISRUPTIONS TO US AGRICULTURAL TRADE WOULD DISPROPORTIONATELY AFFECT TRUMP SUPPORTERS

If the Trump administration's efforts to renegotiate NAFTA disrupt intra-NAFTA agricultural trade, the pain will be felt disproportionately in states that strongly supported Trump. For a host of complex reasons, there is a large rural/urban partisan gap in the United States, with rural voters—especially southern rural voters—favoring the Republican Party and urban voters predominantly voting Democratic (McKee 2008).[17] This pattern was borne out in the 2016 presidential election: President Trump carried 8 of the 10 least densely populated states, and Hillary Clinton 8 of the 10 most densely populated (including the District of Columbia).[18]

Agriculture tends to predominate in more land-abundant, rural states. Any disruption to agricultural trade and value chains brought about by the NAFTA renegotiation

13. Ibid., author's calculations.

14. "CFA President Discusses NAFTA in Washington," Steinbach Online, February 9, 2017, https://steinbachonline.com/ag-news/cfa-president-discusses-nafta-in-washington (accessed on April 4, 2017).

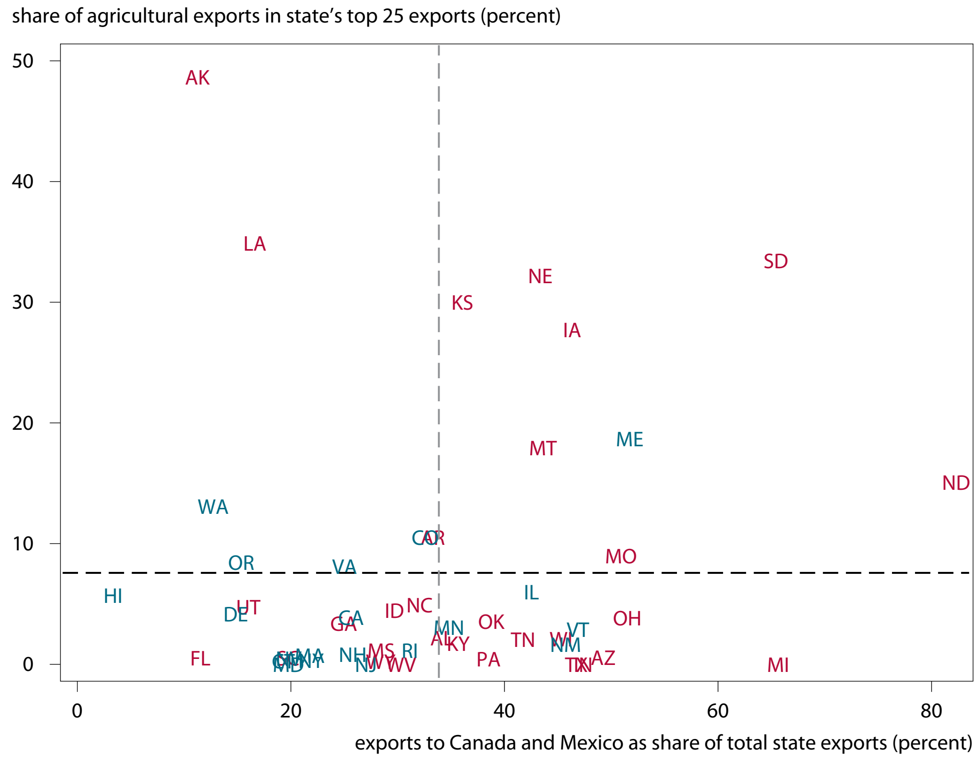
15. "Pampered Canadian Pigs Feed Japan's Hunger for Pricey Pork," Reuters, November 16, 2016, www.reuters.com/article/us-pork-japan-idUSKBN13B0EF (accessed on May 1, 2017).

16. Grains and oilseeds; livestock and animal products; fruits and vegetables; sugar and sweeteners; cotton, textiles, and apparels; and processed foods.

17. The gap is attenuated somewhat by "recreational rural" counties, like Teton County, Wyoming, home to the Jackson Hole ski resort and the Grand Teton and Yellowstone National Parks, that attract more young adults and retirees (Scala, Johnson, and Rogers 2015).

18. Least densely populated: Alaska, Idaho, Montana, Nebraska, North Dakota, South Dakota, Wyoming, and Utah (Clinton carried New Mexico and Nevada); most densely populated: Connecticut, Delaware, District of Columbia, Maryland, Massachusetts, New Jersey, New York, and Rhode Island (Trump carried Florida and Pennsylvania).

Figure 1 Agricultural shares of top 25 US state exports and NAFTA partner shares of state exports, 2013–16



Note: Blue denotes states carried by Hillary Clinton in the 2016 US presidential election. Red denotes states carried by Donald Trump. Black dashed horizontal line is the mean for agricultural share of state exports (7.7 percent); grey dashed vertical line is the mean for NAFTA share of state exports (33.6 percent).
Source: Author's calculations based on US Census (2016b).

Table 4 Partisan breakdown of votes on the Agricultural Act of 2014 in the US House of Representatives

Vote	Democrat	Republican	Total
Nay	103	63	166
	(53.7 percent)	(28.0 percent)	(39.8 percent)
Yea	89	162	251
	(46.4 percent)	(72.0 percent)	(60.2 percent)
Total	192	225	417

Source: US House of Representatives (2014).

will thus be felt first and hardest in the rural, agriculturally dependent states that Trump carried, often by large margins. Figure 1 plots each US state by agricultural exports as a share of the state's top 25 exports in 2013–16 against exports to NAFTA partner countries as a share of total state exports for the same period. Trump-voting states are both, on average, more dependent on agricultural exports (9.9 percent vs. 4.5 percent share of top 25 state exports) and more dependent on exports to NAFTA partners (38.2 percent vs. 26.9 percent). Of the states where agricultural exports accounted for more than 10 percent of the state's top 25 exports, only three (Colorado, Maine, and Washington) broke for Clinton; the remaining nine went for Trump.

Further evidence of the GOP's agricultural bent is evident in the roll call results for the Agricultural Act of 2014 (table 4), the most recent iteration of the "farm bill" that governs US agricultural and food policy and funds crop insurance and commodity price supports. GOP representatives voted "yea" by a nearly 3-1 margin, while the majority of Democrats (53.7 percent) voted against, even though the bill funds the Supplemental Nutrition Assistance Program (SNAP), which is included to address more urban interests and craft a majority voting coalition.

In the Senate, the voting pattern was the opposite of that in the House, with GOP senators lending only 22 of the 68 votes that secured passage. However, those 22 votes included both senators from Idaho, Mississippi, and Nebraska as well as Senate Majority Leader Mitch McConnell (KY), Appropriations Committee Chair Thad Cochran (MS), Budget Committee Chair Mike Enzi (WY), and Finance Committee Chair Orrin Hatch (UT) (US

Senate 2014). Agricultural states are well represented at the highest levels of Senate leadership.

Given the prevailing and historically unprecedented levels of partisanship in the Senate, President Trump cannot hope for successful ratification of a renegotiated NAFTA without the support of the heavily agricultural, highly intra-NAFTA trade–dependent delegations from the Dakotas, Iowa, Kansas, Missouri, Montana, and Nebraska. Reopening NAFTA entails mostly downside risk for these delegations, as the status quo favors their products. Meanwhile, industries such as US dairy—which still face significant market access issues in Canada (Hufbauer and Jung 2017)—are concentrated in swing states like Michigan, Pennsylvania, and Wisconsin and Democratic strongholds California and New York. These swing states may thus see their interests elevated in the coming renegotiations—potentially at the expense of agriculture interests in more "safe" GOP territory—via a hard push by US negotiators to secure greater access to the Canadian market.

If the Trump administration's efforts to renegotiate NAFTA disrupt intra-NAFTA agricultural trade, the pain will be felt disproportionately in states that strongly supported Trump.

WHAT WOULD A PRODUCTIVE RENEGOTIATION LOOK LIKE?

US Trade Representative Robert Lighthizer's May 18, 2017, letter to Congress notifying intent to open NAFTA renegotiations was very light on specific content, although it at least mentioned farmers and ranchers.[19] For guidance about specific content, however, then-acting US Trade Representative Stephen Vaughn's March 30, 2017, draft letter identified four priorities related to agriculture and sanitary and phytosanitary standards (Vaughn 2017, 3):

1. seek to reduce or eliminate nontariff barriers (NTBs) to US agricultural exports, including permit and licensing barriers, restrictive administration of tariff-rate quotas, unjustified trade restrictions that affect new US technologies, including biotechnology, and other restrictive trade measures,
2. maintain commitments to eliminate all export subsidies on agricultural products, while maintaining the right to provide bona fide food aid and preserving US agricultural market development and export credit programs,
3. seek to secure more open and equitable market access for agricultural products through robust rules on SPS measures and eliminate any SPS restrictions that are not based on science, and
4. seek to strengthen cooperation between US and NAFTA countries' SPS authorities.

If these are the main objectives the Trump administration would bring to a renegotiation, they will not have to look far for a blueprint: the moribund Trans-Pacific Partnership (TPP), the 12-country trade agreement from which the United States formally withdrew in January 2017. It addressed all four of these objectives, though there may have been less movement on issues related to NTBs and market access than the administration might have liked (more on that later). All three NAFTA partners were parties to the TPP negotiations and via those talks achieved agreement on a host of market access and SPS-related issues. Indeed, it would not be much of an overstatement to have called the TPP a NAFTA-Japan trade agreement, since the four countries accounted for 89 percent of total TPP GDP and 77 percent of TPP exports (author's calculations based on Petri and Plummer 2016).

The TPP would have required all members to abolish export subsidies, including Mexico's for wheat and Canada's for dairy products sold in the United States (USTR 2016). Regarding points 3 and 4, the SPS chapter of the TPP would have obligated member countries to use science-based risk analysis for evaluating SPS threats, effectively harmonizing these procedures to those of the United States, and would have established a rapid reporting system for all SPS-related detained shipments, a cooperative technical consultation system for SPS issues, and a dispute resolution mechanism for SPS-related issues (Hendrix and Kotschwar 2016). Finally, TPP Article 7.9 would have required that SPS measures conform to relevant international standards (the Codex Alimentarius and World Trade Organization's SPS agreement) and that deviations from these be undertaken only on the basis of "documented and objective scientific evidence" (USTR 2016, Article 7.9.2). This requirement would have addressed concerns of US purveyors of genetically modified organisms (GMOs) and biotechnology, as the World Health Organization (WHO), US American Medical Association, and EU Directorate-General for Research and

19. The letter is available at https://ustr.gov/sites/default/files/files/Press/Releases/NAFTA%20Notification.pdf (accessed on May 28, 2017).

Innovation have all indicated that GMOs are no more risky per se than conventionally bred organisms.[20]

Thus, a productive basis for the negotiation would simply revive these provisions of the TPP, with some room to negotiate regarding market access.

However, many of the market access issues that have come to the fore in the Trump administration's rhetoric around the NAFTA renegotiation—such as the Canadian dairy market—are unlikely to see much larger concessions. Despite pushing hard, US trade negotiators were able to achieve only modest concessions on Canadian dairy during the TPP negotiations because of the politicized nature of the Canadian dairy market, which is concentrated in highly competitive ridings (legislative districts) in Ontario and Quebec and makes Canada's supply management system—which establishes prices and restricts market access in the dairy, egg, and poultry industries—something of a "third rail" in Canadian politics. For similar reasons, Mexico's 166,000 sugar farmers have not been able to significantly increase their share of the US sugar and sweetener market because of effective lobbying from a US sugar industry that is highly concentrated in the swing state of Florida. The TPP set the bar for what could reasonably be expected from a productive renegotiation of NAFTA.

What would an unproductive renegotiation look like? It would likely take one of two forms. In the first, agricultural interests—especially those that are heavily concentrated in electorally "safe" blue or red states—get used as a bargaining chip in wrangling over nonagricultural issues like domestic content or the restriction of government procurement to national firms. One of the reasons trade agreements have increased in their complexity is that they contain myriad logrolls that make the agreement as a whole more palatable than any one section or chapter, and these logrolls often cross issue domains, trading concessions in one for gains in another (O'Halloran 1994). The Trump administration might, for example, wager that there is more political hay to make in crucial swing states like Michigan and Ohio by pushing issues like rules of origin and threatening loss of agricultural market access in order to force concessions from Canada and Mexico. Threats of reciprocal market access restrictions by Canada and Mexico could then make US agricultural exports a casualty of an argument over the auto industry, especially if Mexico can make good on threats to turn southward to Argentina and Brazil for corn and soy.[21] Of course, Senate delegations in agriculturally dependent, marginally industrialized states like the Dakotas, Nebraska, and Iowa would threaten to block any such agreement. However, if the Trump administration only secures market access concessions from trade partners and does nothing that requires new legislation, it will not have to seek congressional approval under the trade promotion authority (TPA) mechanism.

In the second, the Trump administration might seek to renegotiate many of the contentious issues that have been litigated via the World Trade Organization's dispute settlement mechanisms and reopen discussions around several issues that have flared up since Trump's election. Regarding the former, the list is significant and includes antidumping and country of origin labeling (COOL) issues. The United States has won or drawn often, but the losses—especially on COOL—have been bitter (Bown and Brewster 2016). Regarding the latter, ongoing disputes regarding Mexican tomatoes and sugar—which are currently under suspension agreements—will likely be discussed as well. US sugar is especially entrenched and politically influential, so this becomes a point of friction.

20. According to WHO, "GM foods currently available on the international market have passed safety assessments and are not likely to present risks for human health. In addition, no effects on human health have been shown as a result of the consumption of such foods by the general population in the countries where they have been approved. Continuous application of safety assessments based on the Codex Alimentarius principles and, where appropriate, adequate post market monitoring, should form the basis for ensuring the safety of GM foods" (see "Frequently asked questions on genetically modified foods," www.who.int/foodsafety/areas_work/food-technology/faq-genetically-modified-food/en [accessed on October 28, 2015]). The American Medical Association "recognizes the continuing validity of the three major conclusions contained in the 1987 National Academy of Sciences white paper 'Introduction of Recombinant DNA-Engineered Organisms into the Environment': 1. There is no evidence that unique hazards exist either in the use of rDNA techniques or in the movement of genes between unrelated organisms; 2. The risks associated with the introduction of rDNA-engineered organisms are the same in kind as those associated with the introduction of unmodified organisms and organisms modified by other methods; 3. Assessment of the risk of introducing rDNA-engineered organisms into the environment should be based on the nature of the organism and the environment into which it is introduced, not on the method by which it was produced"; see "H-480.958 Bioengineered (Genetically Engineered) Crops and Foods," www.ama-assn.org/ssl3/ecomm/PolicyFinderForm.pl?site=www.ama-assn.org&uri=/resources/html/PolicyFinder/policyfiles/HnE/H-480.958.HTM (accessed on October 28, 2015). The EU Directorate-General for Research and Innovation has stated that "The main conclusion to be drawn from the efforts of more than 130 research projects, covering a period of more than 25 years of research, and involving more than 500 independent research groups, is that biotechnology, and in particular GMOs, are not per se more risky than e.g. conventional plant breeding technologies"; see "A decade of EU-funded GMO research," https://ec.europa.eu/research/biosociety/pdf/a_decade_of_eu-funded_gmo_research.pdf (accessed on October 28, 2015).

21. "Reshaping NAFTA Could Benefit Mexico, Brazil and Argentina," *US News*, April 18, 2017, www.usnews.com/news/best-countries/articles/2017-04-18/reshaping-nafta-could-benefit-mexico-brazil-and-argentinas-economy (accessed on May 17, 2017).

CONCLUSION

Because of complex political economies, agricultural interests will likely loom larger in NAFTA renegotiations than their purely economic contributions to intra-NAFTA trade would suggest. NAFTA has created a large market for member-country agricultural products that has boosted exports and farm incomes in each country. A productive NAFTA renegotiation would essentially mimic the market access, export subsidy, and SPS agreements achieved in the TPP negotiations.

Given the Trump administration's dependence on agricultural states for political support and the Senate votes necessary to pass *any* renegotiated NAFTA, the status quo ex ante is likely to be preserved, and some TPP-related gains should be realized.

REFERENCES

Alt, James E., Jeffry Frieden, Michael J. Gilligan, Dani Rodrik, and Ronald Rogowski. 1996. The Political Economy of International Trade: Enduring Puzzles and an Agenda for Inquiry. *Comparative Political Studies* 29, no. 6: 689–717.

Anderson, Kym, and Yujiro Hayami. 1986. *The Political Economy of Agricultural Protection*. Sydney, Australia: Allen and Unwin.

Anderson, Kym, Gordon Rausser, and Johan Swinnen. 2013. Political Economy of Public Policies: Insights from Distortions to Agricultural and Food Markets. *Journal of Economic Literature* 51, no. 2: 423–77.

Bellemare, Marc F., and Nicholas Carnes. 2015. Why Do Members of Congress Support Agricultural Protection? *Food Policy* 50, no. 1: 20–34.

Bezemer, Dirk, and Derek Headey. 2008. Agriculture, Development, and Urban Bias. *World Development* 36, no. 8: 1342–64.

Bown, Chad, and Rachel Brewster. 2016. *US–COOL Retaliation: The WTO's Article 22.6 Arbitration.* PIIE Working Paper 16-13. Washington: Peterson Institute for International Economics.

de Janvry, Alain, and Elisabeth Sadoulet. 1995. NAFTA and Mexico's Maize Producers. *World Development* 23, no. 8: 1349–62.

Eakin, Hallie, Julia C. Bausch, and Stuart Sweeney. 2014. Agrarian Winners of Neoliberal Reform: The "Maize Boom" of Sinaloa, Mexico. *Journal of Agrarian Change* 14, no. 1: 26–51.

Hakobyan, Shushanik, and John McLaren. 2016. Looking for Local Labor Market Effects of NAFTA. *Review of Economics and Statistics* 98, no. 4: 728–41.

Hendrix, Cullen S., and Barbara Kotschwar. 2016. Agriculture. In *Assessing the Trans-Pacific Partnership, Volume I: Market Access and Sectoral Issues*. PIIE Briefing 16-1. Washington: Peterson Institute for International Economics.

Hufbauer, Gary Clyde, and Euijin Jung. 2017. *NAFTA Renegotiation: US Offensive and Defensive Interests vis-à-vis Canada.* PIIE Policy Brief 17-22. Washington: Peterson Institute for International Economics.

Martinez-Melendez, Luz A., and Elena M. Bennett. 2016. Trade in the US and Mexico Helps Reduce Environmental Costs of Agriculture. *Environmental Research Letters* 11: 055004.

McKee, Seth C. 2008. Rural Voters and the Polarization of American Presidential Elections. *PS: Political Science & Politics* 41, no. 1: 101–108.

O'Halloran, Sharyn. 1994. *Politics, Process, and American Trade Policy*. Ann Arbor: University of Michigan.

Petri, Peter A., and Michael G. Plummer. 2016. *The Economic Effects of the Trans-Pacific Partnership: New Estimates.* PIIE Working Paper 16-2. Washington: Peterson Institute for International Economics.

Puyana, Alicia, and José Romero. 2004. Evaluación integral de los impactos e instrumentación del capítulo agropecuario del TLCAN. Mimeograph. Facultad Latinoamericana de Ciencias Sociales (FLACSO) and El Colegio de México, Mexico City.

Scala, Dante J., Kenneth M. Johnson, and Luke T. Rogers. 2015. Red Rural, Blue Rural? Presidential Voting Patterns in a Changing Rural America. *Political Geography* 48: 108–18.

Secretario de Salud (Secretary of Health). 2012. *Encuesta Nacional de Salud y Nutrición 2012* [National Health and Nutrition Survey 2012]. Mexico City.

US Census Bureau. 2016a. Table 1: Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico, April 1, 2010 to July 1, 2016 (NST-EST2016-01). Washington.

US Census Bureau. 2016b. State Trade Data: State Trade by Commodity and Country. Washington. Available at www.census.gov/foreign-trade/statistics/state/index.html (accessed on April 7, 2017).

USDA (US Department of Agriculture). 2015. *Overview of the United States Hog Industry.* Washington.

US House of Representatives. 2014. Final Vote Results for Roll Call 31: To Provide for the Reform and Continuation of Agricultural and Other Programs of the Department of Agriculture Through Fiscal Year 2018, and for Other Purposes. Washington. Available at http://clerk.house.gov/evs/2014/roll031.xml (accessed on May 17, 2017).

US Senate. 2014. Roll Call Vote 113th Congress - 2nd Session: On the Conference Report (Conference Report to Accompany H.R. 2642). Washington. Available at www.senate.gov/legislative/LIS/roll_call_lists/roll_call_vote_cfm.cfm?congress=113&session=2&vote=00021 (accessed on May 17, 2017).

USTR (US Trade Representative). 2016. *The Trans-Pacific Partnership: National Treatment and Market Access for Goods.* Washington.

USTR (US Trade Representative). 2017. USTR Resource Center: Canada and Mexico. Washington. Available at https://ustr.gov/countries-regions/americas/canada; https://ustr.gov/countries-regions/americas/mexico (accessed on May 1, 2017).

Vaughn, Steven. 2017. Draft Letter to Congress, March 30. Available at https://home.kpmg.com/content/dam/kpmg/us/pdf/2017/03/tnf-draft-nafta-letter.pdf (accessed on May 1, 2017).

World Bank. 2017. *World Development Indicators.* Washington.

WTO (World Trade Organization). 2016. World Trade Statistical Review 2016: IX. Statistical Tables. Available at www.wto.org/english/res_e/statis_e/wts2016_e/wts16_chap9_e.htm (accessed on May 17, 2017).

Yúnez-Naude, Antonio. 2002. Lessons from NAFTA: The Case of NAFTA's Agricultural Sector. Mimeograph. Office of the Chief Economist for Latin America and the Caribbean. Washington: World Bank.

Yúnez-Naude, Antonio, and Fernando Barceinas Paredes. 2003. Mexican Agriculture after Ten Years of NAFTA Implementation. Mimeograph. Paper prepared for the Carnegie Endowment for International Peace, Washington.

Zahniser, Steven, Sahar Angadjivand, Tom Hertz, Lindsay Kuberka, and Alexandra Santos. 2015. *NAFTA at 20: North America's Free-Trade Area and Its Impact on Agriculture.* International Agriculture and Trade Outlook no. WRS-15-01. Washington: US Department of Agriculture, Economic Research Service.