

What's the Big Deal?

Understanding the
Trans-Pacific
Partnership

The Impact of TPP Tariff Removal on Canadian Trade

John Jacobs





CCPA

CANADIAN CENTRE
for POLICY ALTERNATIVES
CENTRE CANADIEN
de POLITIQUES ALTERNATIVES

ISBN 978-1-77125-278-2

This report is available free of charge at www.policyalternatives.ca. Printed copies may be ordered through the CCPA National Office for \$10.

PLEASE MAKE A DONATION...

Help us to continue to offer our publications free online.

With your support we can continue to produce high quality research—and make sure it gets into the hands of citizens, journalists, policy makers and progressive organizations. Visit www.policyalternatives.ca or call 613-563-1341 for more information.

The CCPA is an independent policy research organization. This report has been subjected to peer review and meets the research standards of the Centre.

The opinions and recommendations in this report, and any errors, are those of the authors, and do not necessarily reflect the views of the funders of this report.



ABOUT THE AUTHOR

John Jacobs is a PhD candidate in the School of Public Policy and Administration and the Institute of Political Economy, Carleton University. He is the author of numerous public policy publications, a former columnist with the *Chronicle Herald* and a research associate with the CCPA.

ACKNOWLEDGEMENTS

The author wishes to gratefully acknowledge, Nathalie Guay, Pierre-Yves Serinet and Scott Sinclair for their role in bringing this report to publication and for reviewing and providing constructive comments on drafts of the report. The author would also like to thank Angella MacEwen, Jim Stanford, Jean Dalcé, Colin L'Ériger and Normand Pépin for their reviews and suggestions on an earlier draft of this paper. Special thanks to Pierre-Yves Serinet for invaluable work in translating this report and to Stuart Trew for content and editorial suggestions. Thanks are also due to other staff at CCPA including Bruce Campbell, Kerri-Anne Finn, and Tim Scarth for his work on layout.

This paper was made possible thanks to the Réseau québécois sur l'intégration continentale (RQIC) and the financial support of some of its member organizations: Centrale des syndicats du Québec (CSQ), Confédération des syndicats nationaux (CSN), Fédération interprofessionnelle de la santé du Québec (FIQ), Fédération des travailleurs et travailleuses du Québec (FTQ) and Syndicat canadien de la fonction publique (SCFP). This is an independent study, the views expressed are those of the author and do not necessarily reflect those of the RQIC or the CCPA.

5	The Impact of TPP Tariff Removal on Canadian Trade
5	Introduction
6	Canada–TPP Trade by Numbers
8	Canada–TPP Trade Balance
10	Composition of Canada’s TPP Trade
13	Canada–TPP Tariff Rates
15	Canada–Japan Trade
16	Challenges of Resource-Driven Exports
18	Some Employment Implications
20	Conclusion
20	Notes

The Impact of TPP Tariff Removal on Canadian Trade

Introduction

The Trans-Pacific Partnership (TPP) is billed as a “21st century trade agreement” that will boost growth and expand trade between the 12 participating Asia-Pacific nations: Australia, Brunei, Canada, Chile, Japan, Peru, Mexico, Malaysia, New Zealand, Singapore, United States and Vietnam. The U.S. government has been open about the role it believes the TPP will play in containing the economic ambitions of China, and perhaps India and other BRICS nations. “The rules of the road are up for grabs in Asia,” says the United States Trade Representative (USTR). “If we don’t pass this agreement and write those rules, competitors will set weak rules of the road, threatening American jobs and workers while undermining U.S. leadership in Asia.”¹

The “rules of the road” in the TPP include a wide range of constraints on the policy flexibility of governments in areas such as finance, environmental protection, cultural promotion, intellectual property rights, public services and public health regulation, etc.² This has been the agenda of free trade agreements for some time, as tariffs are already at all-time lows globally. Still, it is a useful exercise to test the assertions of TPP proponents that benefits will automatically flow from the removal of remaining tariffs. The

reality is Canadians have, to date, not been provided with sufficient information to come to an informed assessment of the trade effects of the Pacific agreement, let alone its broader policy impacts.³

This paper seeks to fill some of the data gaps with respect to the potential benefits and risks to Canada of tariff removal within the TPP. It begins by assessing the scale of tariff removal that the TPP would provide for Canadian exports. The potential impact of the agreement is then determined by reviewing the quantity and product composition of Canada's current trade with TPP countries not covered by existing free trade agreements (i.e., excluding countries where tariffs have largely been eliminated already).

The paper concludes that despite the potential for the TPP to have a minimally positive effect on some Canadian exports, the agreement will very likely undermine Canada's trade balance, and our ability to generate employment and expand activity in the manufacturing and high-tech sectors. The TPP could prove to be a significant obstacle to the Trudeau government's commitment to diversify the Canadian economy beyond its current reliance on extraction and exports of primary goods.⁴

Canada–TPP Trade by Numbers

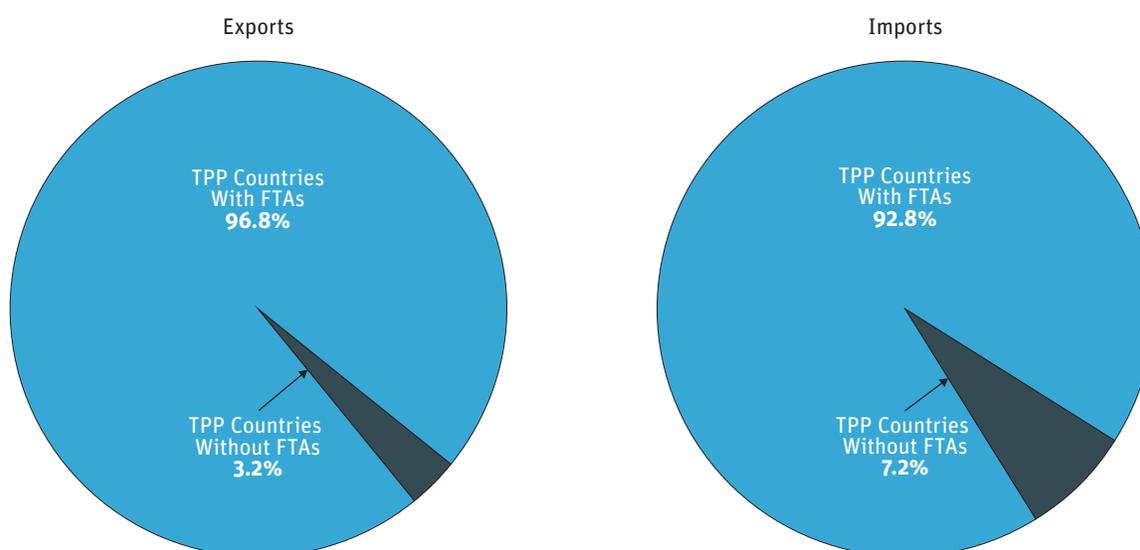
According to proponents of the TPP, tariff removal via the agreement will provide significant benefits to the Canadian economy, giving exporters preferential access to almost 40% of world trade and 800 million potential consumers.⁵ It is true the combined market share of TPP countries currently accounts for 36% of global GDP (it was 52% in 2000), but much of Canada's existing access to that market (76% of TPP GDP) is already tariff free, as we can see in *Table 1*.⁶ It is a vast overstatement to say the TPP grants Canada new access to fast-growing Pacific Rim economies.

Exports to TPP countries account for a significant portion (81%) of Canada's total exports (*Table 2*), though 94.6% of this trade is with the United States and covered by the North American Free Trade Agreement (NAFTA). When we add the other TPP countries with which Canada already has tariff-free access—Mexico, Chile, and Peru (through FTAs), and Singapore, which does not apply tariffs on imports—we see 96.8% of Canadian exports to the TPP region face no tariff barriers (see *Figure 1*).⁷ The remaining 3.2% of Canada's current regional exports go to prospective TPP countries where some tariffs still apply (i.e., where there is no FTA in place), but account for only 2.8% of Canada's total exports to the world.

TABLE 1 TPP GDP, Population and GDP per Capita (2014)

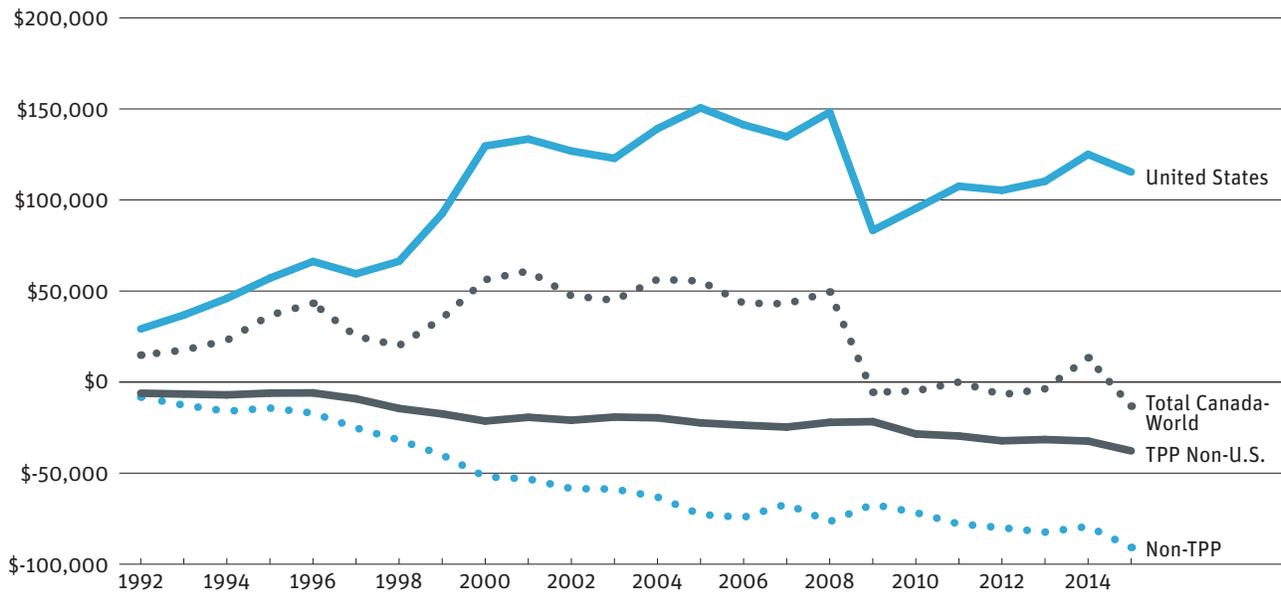
	GDP (\$US millions)	% of TPP GDP	Population (thousands)	Pop. as % of TPP	GDP per Capita (\$US)
Australia	1,474,849	5.2%	23,622	2.9%	62,414
Brunei	14,971	0.1%	417	0.1%	35,376
Japan	4,586,748	16.3%	126,795	15.5%	36,116
Malaysia	326,113	1.2%	29,902	3.7%	10,803
New Zealand	202,169	0.7%	4,495	0.6%	44,420
Viet Nam	186,599	0.7%	92,423	11.3%	2,016
TPP (non-FTA)	6,791,450	24.1%	277,655	34.0%	24,460
Canada	1,786,670	6.3%	35,544	4.4%	50,294
Chile	258,358	0.9%	17,763	2.2%	14,537
Mexico	1,279,305	4.5%	125,386	15.4%	10,334
Peru	201,251	0.7%	30,973	3.8%	6,541
Singapore	301,193	1.1%	5,507	0.7%	54,593
United States	17,526,951	62.3%	323,241	39.6%	53,702
TPP (Tariff-free)	21,353,728	75.9%	538,413	66.0%	39,660
TPP Total	28,145,178		816,068		34,403

Sources GDP & GDP per capita, UNCTADstat; population UNCTADstat and Statistics Canada. Author's calculations.

FIGURE 1 Canada-TPP Trade (2015)

Source Industry Canada,⁸ Trade Data Online (Singapore does not levy import tariffs and is therefore included in Canadian exports to TPP FTA countries).

FIGURE 2 Canadian Trade Balance (\$ millions)



Source: Industry Canada, Trade Data Online.

Proponents claim the TPP will provide access to 800 million consumers, but here, too, Canada already has preferential access to 66% (538 million) of these consumers. The difference between preferential access to 76% of TPP country GDP and 66% of consumers in the region is accounted for by the relatively lower income of more populous countries such as Vietnam and Malaysia, where per capita GDP is \$2,016 and \$10,803 respectively (the TPP average is \$34,400). *Table 1* shows that per capita GDP—an indicator of purchasing power—is 38% lower in TPP countries where Canada has no FTA than in its current FTA partners, throwing cold water on the idea that simply adding more potential consumers will automatically benefit Canadian exporters.

Canada-TPP Trade Balance

For some time, Canada's positive global trade balance has depended on a healthy trade surplus with the U.S., while our deficit has grown with the rest of the world (see *Figure 2*). In 2009, in the wake of the Great Recession, Canada posted its first global trade deficit in recent history. Since then, Can-

TABLE 2 Canada-TPP: Exports, Imports & Trade balance (2015) (\$ CAN millions)

Canada's TPP Negotiating Partners	Canadian Exports	% Canadian TPP Exports	Imports to Canada	% Canadian TPP Imports	Trade Balance
United States	400,306	94.5%	284,945	82.3%	115,361
Japan	9,755	2.3%	14,765	4.3%	-5,010
Mexico	6,574	1.6%	31,156	9.0%	-24,581
Australia	1,890	0.4%	1,680	0.5%	210
Singapore	1,507	0.4%	954	0.3%	553
Chile	791	0.2%	1,854	0.5%	-1,063
Malaysia	790	0.2%	2,637	0.8%	-1,847
Peru	858	0.2%	3,260	0.9%	-2,402
Vietnam	653	0.2%	4,089	1.2%	-3,436
New Zealand	475	0.1%	683	0.2%	-208
Brunei	3	0.0%	4	0.0%	-1
Total TPP	423,601		346,027		77,575
TPP without US	23,295	5.5%	61,082	17.7%	-37,786
TPP FTA	410,036	96.8%	321,215	92.8%	88,822
TPP non-FTA	13,565	3.2%	24,812	7.2%	(11,247)
		Exports		Imports	
Total Cdn Global Trade	521,922		535,156		-13,234
TPP % Cdn Total Trade		81.2%		64.7%	
TPP Without US (% of Cdn. Global Trade)		4.5%		11.4%	

Source Industry Canada, Trade Data Online, author's calculations.

Note Singapore is included in the TPP FTA category given its 0.0% average tariffs on imports.

Canada has had trade deficits in four of the past six years⁹ and posted a record-high trade deficit in 2015.¹⁰

The trend toward increased trade deficits is also evident in Canada's trade balance with TPP countries (see *Table 2* for 2015 data). When trade with the U.S. is removed from the equation, Canada has an overall trade deficit with TPP countries, and enjoys surpluses only with Australia and Singapore, which together account for a marginal 0.8% of Canada's exports to the TPP zone.

Canada imports significantly more from non-FTA TPP countries than it exports to them, leading to persistent trade deficits that reached a total of \$11.3 billion in 2015 (*Table 2*). In effect, Canada imported \$1.83 of goods for every \$1 it exported to non-FTA countries in the TPP. These trade deficits are indicative of Canada's imbalanced trade with the region: they represent

lost production opportunities and jobs for the Canadian economy, as a disproportionate quantity of products purchased in Canada are produced, and generate jobs, elsewhere.

The TPP would not correct this imbalance, and will likely worsen it, since a smaller portion of Canada's exports (3.2%) would become tariff free than imports (7.2%). To the degree that lowering tariffs increases trade in both directions, we should therefore expect Canada's imports to grow more than exports to TPP countries not already covered by an FTA. This is consistent with Canada's experience under other free trade agreements and is contributing to growing trade deficits with most countries other than the United States.¹¹

Composition of Canada's TPP Trade

Canada's trade with TPP countries not currently covered by a FTA exemplifies our general reliance on exporting primary commodities and importing more advanced manufactured goods. As we see in *Table 3*, about 90% of Canada's top 25 exports to these countries are primary or barely processed commodities, with the top five (copper, seeds, pork, coal, and lumber) making up 54% of the value in this category. Most of these exports (72%) are destined for Japan (see *Table 2*).

Agricultural products such as oilseeds, pork, and wheat account for a greater portion of Canada's exports to TPP countries not covered by FTAs (36% of the top 25 exports) when compared to Canada's global exports, which are dominated by petroleum products (46% of the top 25) and transportation manufactured goods (34% of the top 25).¹² Exports of non-renewable resources, such as coal, copper, gold, iron, and aluminum, nonetheless make up a large portion (35% of the top 25) of Canada's exports to the TPP FTA countries.

In the same table we can see that Canada's imports from TPP countries not covered by an existing FTA (non-FTA) are 93% comprised of more sophisticated manufactured goods. Japan alone accounts for 60% of Canadian imports from the TPP (non-FTA) economies (*Table 2*). A large portion of this TPP non-FTA trade (36% of the top 25 products) generated by the auto industry (24% autos, 12% auto parts). Also in the top five imports to Canada are transmission and drive train parts, telephone sets, and printing machinery. Not only is Canada–TPP trade imbalanced in a quantitative sense, in that it produces steady trade deficits, but it is also qualitatively

TABLE 3 Canadian-TPP (non-FTA countries) by Product (Top 25, HS4 product codes, 2015, \$CAD millions) (Australia, Brunei, Japan, Malaysia, New Zealand, Vietnam; Singapore is not included in Canadian Exports as it does not apply tariffs. Canadian Imports include Singapore as Canada does apply tariffs to imports from Singapore) **Primary or Basically Processed Products highlighted**

Canadian Exports		Canadian Imports	
Category (HS4)	Value (\$m)	Category (HS4)	Value (\$m)
2603 - Copper ores	1,118	8703 - Automobiles	3,208
1205 - Rape or Colza Seeds	1,058	8708 - Motor Vehicle Parts	1,520
0203 - Meat of Swine	977	8483 - Transmission Shafts and Cranks, Bearing	1,143
2701 - Coal	969	8517 - Telephone Sets	1,067
4407 - Lumber	893	8443 - Printing Machinery	757
1001 - Wheat	648	8429 - Earth moving vehicles	626
1201 - Soya Beans	468	8542 - Electronic Integrated Circuits	455
4703 - Chemical Woodpulp	388	4011 - New Pneumatic Tires of Rubber	436
3004 - Medications	362	8471 - Magnetic/Optical Readers	380
3104 - Fertilizers	342	8803 - Parts of Helicopters, Airplanes	378
2601 - Iron Ores	335	9403 - Furniture	341
8802 - Helicopters, Airplanes and Spacecraft	208	2204 - Grape Wines	336
0306 - Seafood	180	0202 - Meat of Bovine Animals - Frozen	327
8803 - Parts of Helicopters, Airplanes	140	8525 - Audio - visual Transmission Cameras	259
4403 - Wood in The Rough	139	3004 - Medicaments	217
8411 - Turbo-Jets, Turbo-Propellers, Turbines	130	7112 - Waste and Scrap of Precious Metals	217
2503 - Sulfur	126	8544 - Wire, Conductors, Optical Fibre Cables	206
1107 - Malt	110	6403 - Shoes, Boots, Sandals and Slippers	201
7601 - Unwrought Aluminum	110	9018 - Medical Instruments / Appliances	188
0303 - Frozen Fish (Excl. Fish Fillets)	99	8701 - Tractors	184
8483 - Transmission Shafts and Parts	94	0204 - Meat of Lamb, Sheep and Goats	182
7504 - Nickel Powders and Flakes	87	2844 - Uranium	147
8105 - Cobalt and Articles Thereof	86	7318 - Screws, Bolts, Nuts, Rivets, etc.	145
7502 - Unwrought Nickel	77	8504 - Electrical Transformers & Converters	142
0713 - Leguminous Vegetables	66	8413 - Pumps For Liquids; Liquid Elevators	140
Top 25 exports total	9,211	Top 25 imports total	13,203
Primary commodities top 25 (in bold)	8,277	Primary commodities top 25 (in bold)	872
# of primary products (of 25)	21	# of primary products (of 25)	4
Share of Top 25 Total Value	89.9%	Share of Top 25 Total Value	6.6%

Note Primary Commodities, Standard International Trade Classification (SITC 0 + 1 + 2 + 3 + 4 + 68 + 667+ 971)

Source Industry Canada Trade Data Online

TABLE 4 Sectoral Composition of Goods Exports (% of Total Exports)

	Food		Agricultural Raw Materials		Fuels		Ores and Metals		Manufactures	
	2000	2014	2000	2014	2000	2014	2000	2014	2000	2014
Canada	6.4	10.8	6.2	4.1	13.2	28.1	4.4	7.0	63.8	46.4
High income	6.1	9.2	1.7	1.6	11	10.6	2.8	3.9	73.6	70.1
Euro area	7.8	9.8	1.5	1.4	3.2	6.6	2.2	2.6	79.4	76.5
East Asia & Pacific	7.1	5.3	1.7	1	6.2	4.6	2.1	1.8	82.4	87.1
World	6.9	9.4	1.8	1.6	12	10.7	3.0	4.0	72.4	70.6

Note Merchandise export shares may not sum to 100 percent because of unclassified trade

Source World Bank Development Indicators

so, with exports dominated by resources, and imports by more highly processed manufactured goods.

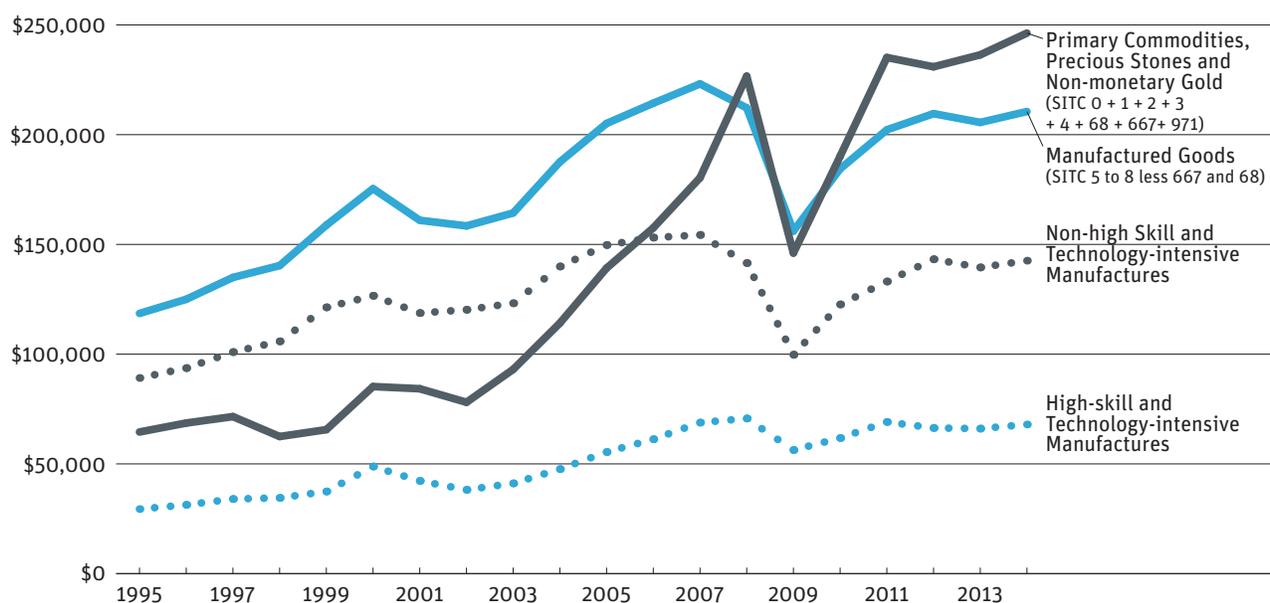
This pattern is indicative of Canada's integration into the international economy, which is increasingly characterized by an expansion of primary commodity exports and a decline in manufactured exports (see *Table 4*). Overall, Canada's global exports as a portion of GDP declined from 40% in 2000 to 32% in 2014.¹³ Between 2000 and 2014, manufactured goods declined from 64% to 46% of total exports. The export of primary commodities (unprocessed and basically processed goods) increased from 30% to more than 50% of total exports over the same period.

While many high-income economies have seen a decline in manufacturing as a portion of total exports, we can see from *Table 4* that Canada's experience is disproportionate. Meanwhile, East Asian and Pacific TPP economies have grown their share from 82% to 87%, often by specializing in high-tech industries.

The shift in Canadian exports is partially accounted for by the commodity price boom of the 2000s, which increased the total value of primary exports relative to non-primary exports. But as *Figure 3* indicates, since about 2005, Canadian manufactured exports have yet to recover from the recession and have stagnated in absolute, not just relative, terms. Between 2000 and 2014, primary commodity exports increased by 189% and manufactured goods by 20%.

The World Bank's export volume index (an indicator of the quantity of units traded) shows that while the value of Canada's exports increased by 66% between 2000 and 2013, the volume of exports declined by 4%. In other words, we have been exporting less but the products have been, until

FIGURE 3 Canadian Global Exports (\$US millions, nominal)



Source UNCTADstat, International Trade in Goods and Services, and author's calculations.

recently, worth more.¹⁴ During the same period, Canadian import volumes increased by 40% and the import values increased by 94%, indicating that Canada's exports have not kept pace with the increase in imports as measured by volume *and* value.¹⁵

Canada-TPP Tariff Rates

While applied tariffs are already low by historical standards, the removal of Canadian tariffs in several strategic sectors could undermine Canada's advanced manufacturing sectors and prospects for economic diversification. The average applied tariff rates of TPP countries are all below 5% except for those of Malaysia and Vietnam, reflecting their positions as developing countries making use of tariffs to support emerging manufacturing sectors.

Malaysia and Vietnam account for 1.7% of TPP GDP and will not provide game-changing market opportunities for Canada. Singapore does not apply tariffs, and for the remaining traders (without Malaysia and Vietnam) rates are very low. For the most part, Australia has the highest tariffs within this group, indicating some potential opportunities for Canadian exports when these come down. But here, and in general, the potential benefits of

TABLE 5 TPP (Non-FTA) Most Favoured Nation Applied Tariffs as % of the Value of Product Imported “Simple Average of Simple Average” and Weighted Averages, Non-agricultural Goods, 2015 (%)

Product Category		Manufactured Goods, Ores and Metals	Ores and Metals	Manufactured Goods	Chemical products	Machinery and Transport Equipment	Other Manufactured Goods
Australia	Average	3.2	1.24	3.33	1.68	2.85	4.19
	Weighted	2.91	1.49	2.93	1.58	3.26	3.18
Brunei	Average	1.85	0.0	1.9	0.45	3.72	1.43
	Weighted	1.54	0.0	1.54	0.37	1.85	1.09
Canada	Average	2.37	0.01	2.52	0.62	1.2	3.86
	Weighted	1.97	0.02	2.04	1.07	2.32	2.11
Japan	Average	2.33	1.23	2.4	2.64	0.03	3.33
	Weighted	0.86	0.11	0.98	1.1	0.0	2.32
Malaysia	Average	5.91	2.7	6.11	2.56	4.52	8.32
	Weighted	4.45	2.45	4.67	3.35	3.77	8.51
New Zealand	Average	2.42	0.81	2.51	0.74	2.86	3.04
	Weighted	2.67	0.99	2.71	1.58	3.12	2.4
Singapore	Average	0.0	0.0	0.0	0.0	0.0	0.0
	Weighted	0.0	0.0	0.0	0.0	0.0	0.0
Vietnam	Average	8.38	1.7	8.74	3.05	6.03	12.2
	Weighted	4.14	0.63	4.38	3.07	3.22	7.07
Avg. non Canada	Average	3.44	1.10	3.57	1.59	2.86	4.64
	Weighted	2.37	0.65	2.04	1.16	2.06	2.25
Average Not Including Malaysia and Vietnam	Average	1.96	0.66	2.03	1.10	1.89	2.40
	Weighted	1.60	0.52	1.63	0.93	1.65	1.80

Source UNCTADstat

Notes In simple average of simple average “the same weight is given to all products, without taking into account how much the products are traded.” In calculating weighted average, “more weight is given to products with larger import flows.”¹⁶

tariff removal must also take into account the comparatively higher transportation costs faced by Canadian exporters relative to those of other Asia-Pacific TPP partners.

Canada tends to apply higher average tariffs on imports of processed ores and metals, manufactured goods, and “other manufactured goods” than the TPP average when Malaysia and Vietnam are excluded (*Table 5*). This could indicate some small advantages for TPP exporters to Canada, but overall the differences between applied tariff rates are minimal.

Lowering or removing tariffs via the TPP could have indirect consequences for Canada’s exports to the U.S., which would become less com-

petitive relative to goods from TPP countries with lower production costs. This could, in turn, lead to a significant shifting of production away from North America generally, contributing to downward pressure on wages and employment in Canada and across the TPP zone.¹⁷

Canada–Japan Trade

Japan is by far the largest economy among TPP countries with which Canada has no FTA, accounting for 68% of GDP (*Table 1*) and 72% of Canadian exports (*Table 2*) to this group. Japan is a major global exporter of advanced manufactured goods, and the lowering or removal of tariffs on trade with Japan will have a far greater economic impact on Canada than trade liberalization with any of the other non-FTA TPP countries.

The tariff-free portion of agricultural imports are similar for Canada (51%) and Japan (47%), but the WTO tariff profiles indicate that, with the exception of dairy products, Japan is more protective of its agriculture sector than Canada is.¹⁸ It is possible there would be an increase in exports of Canadian agricultural products such as grains, oilseeds, and pork as Japanese tariffs are reduced through the TPP.¹⁹

The situation is quite different outside of agriculture: 83% of Canada's non-agricultural exports to Japan already face no tariffs, while the same can be said of 69% of imports from Japan. Canada's new export opportunities are therefore less relative to Japan in that Japanese exporters could benefit from tariff reductions on a further 31% of its current exports compared to 17% for Canadian exporters.²⁰

Canada's tariffs on imports of advanced manufactured goods, such as electrical and non-electrical machinery and transportation equipment, are higher than Japanese tariffs for these product groups (see *Table 6*). For example, Canada applies an average tariff rate of 5.8% on 59% of transportation equipment product groups, whereas Canadian transportation exports to Japan are not tariffed. Upon tariff removal, the cost of Japanese transportation exports to Canada could be reduced by 5.8% on average, whereas the cost of Canadian transportation exports to Japan would not be affected.

Given that Japan has no tariffs on most advanced manufactured imports, Canadian manufacturing firms have little to gain from the TPP. Conversely, Japanese exporters will benefit from tariff reductions on an average of 27% of the advanced manufacturing product groups imported to Canada.²¹ Consequently, the removal of tariffs on Canada–Japan trade could exacerbate

TABLE 6 Canada and Japan, Advanced Manufacturing Tariffs

Product Group	Canada			Japan		
	% Product Groups Tariff Free	Avg. Applied Duties (%)	Maximum Tariffs (%)	% Product Groups Tariff Free	Avg. Applied Duties (%)	Maximum Tariff (%)
Non-electrical machinery	93	0.4	9	100	0	0
Electrical machinery	83	1.1	9	98	0.1	5
Transport equipment	41	5.8	25	100	0	0

Source WTO Tariff profiles, Canada, Japan

Canada's current trade trajectory described above (i.e., toward the export of primary commodities and the decline in manufacturing exports).

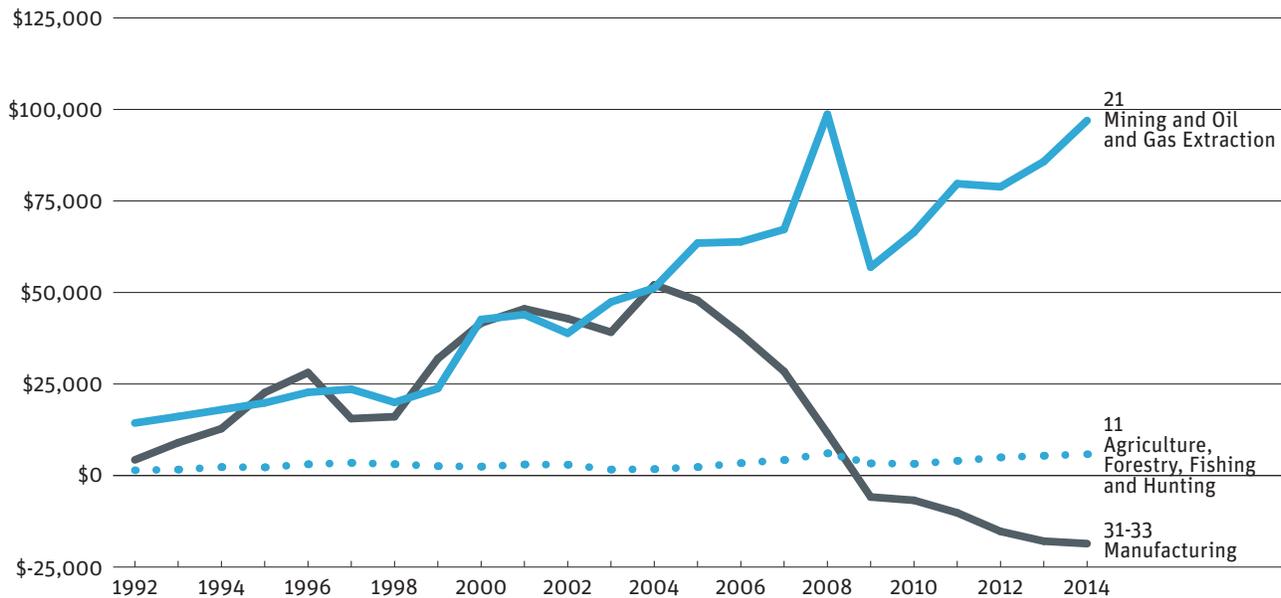
Challenges of Resource-Driven Exports

The main opportunities for Canadian exports generated by tariff elimination under the TPP appear to be in the provision of raw materials to be processed and transformed offshore, and possibly re-imported to Canada as value-added manufactured goods. This imbalanced trade can be seen in Canada's sectoral trade balances with TPP negotiating countries, as expressed in *Figure 4*, but it is also reflective of Canadian trade patterns in other parts of the world outside the U.S.

Exports from high-tech industries can play a leading role in facilitating innovation and productivity increases in the Canadian economy. But, as we saw in *Figure 3*, Canada's high-skilled and high-tech manufactured exports have declined as a portion of total goods exports, from 18.7% in 2000 to 14.9% in 2014, and high-tech exports are not keeping pace with growth in the Canadian economy, declining from a high of 6.6% of GDP in 2000 to 3.8% in 2014.²² These findings are confirmed by OECD reports that show Canada is a laggard in terms of business investment in research and development, and that we have a comparative disadvantage in high-technology and medium-high-technology manufacturing, but a comparative advantage in low and medium-low manufacturing.²³

The TPP would curtail Canada's ability to reverse this trend. Partly it would do this by removing important sector-development policy tools that have historically proven successful in the transition to a more diversified economy and the production and export of value-added high-tech products in advanced economies. We have seen this with respect to tariffs applied in

FIGURE 4 Canada's TPP Trade Balance by Sector, NAICS Codes (\$CAD millions)



Source: Industry Canada, Trade Data Online.

support of strategic sectors. But, like other free trade and investment agreement since the NAFTA, the TPP also prohibits an extensive list of performance requirements (technology transfers, domestic content or employment quotas, etc.) that states might reasonably wish to attach to foreign investment in non-renewable resource extraction.²⁴ The TPP procurement and state-owned enterprises chapters further limit the use of public spending and federal crown corporations to bolster local development.

These and other industrial policies, which violate free-trade orthodoxy, have been instrumental in enabling economies to move up the value chain in the context of economic globalization, as in the rapid industrialization of the East Asian economies.²⁵ China is successfully using strategic interventions to move from being a low-cost producer of labour-intensive exports into producing high-tech value-added products such as heavy construction machinery and aircraft.²⁶ Developed economies have also been contemplating sectoral development strategies as they seek to lift themselves out of the economic stagnation that has followed from the Great Recession.²⁷

Some Employment Implications

Canada's increasing reliance on primary commodities for its goods exports could impact employment creation prospects. Statistics Canada has noted that, in the 2000s, the extractives sector experienced the "longest and strongest cycle for resources in postwar history," which generated record levels of investment, doubled profits, and "lifted the stock market to record heights," but the sector has "not been a large source of jobs for Canadians."²⁸

Indeed, employment in the resource sector has been in decline as a portion of total employment in Canada—from 10% in 1990 to approximately 7% at the height of the commodity price boom in 2007.²⁹ This is partly due to employment growth in the service sector, but it is also indicative of the increasing capital intensity of the extractives industries.³⁰

Table 7 provides several measures of job creation associated with the mining, oil and gas, and manufacturing industries. Manufacturing is more employment intensive than the extractive industries, providing more jobs as a portion of GDP, exports, and value-added production. This stands to reason, given the high level of capital investment required to explore for, extract, and bring to market mineral deposits.

The extractives industries tend to pay higher wages on average, but offer far fewer employment opportunities.³¹ Statistics Canada's value-added exports data to 2011 (most recent for this data set) shows that manufacturing exports generated 612,000 direct value-added jobs (40% of all value-added export jobs) compared to 61,000 jobs (4% of export jobs) generated by mining and oil and gas industries, and 68,000 by crop and animal production (*Table 7*).³²

Add indirect jobs and we see manufacturing employs 1,321,700, mining, and oil and gas employs 276,700, while crop and animal production employs 128,700.³³ When indirect jobs are considered, the portion of value-added jobs in the extractives industries more than doubles (from 4% to 9%), but this is still less than one-quarter of the portion of value-added jobs created by the manufacturing sector. Agricultural production is more labour intensive and produces a disproportionate number of jobs relative to its contribution to exports.

The composition of Canadian primary commodity exports to the TPP non-FTA countries is (roughly) evenly divided between the renewable natural resource sectors (36% of top 25 exports: agriculture, forestry, and fishing) and the non-renewable extractives industries (35% of top 25)³⁴, whereas Canada's global trade is dominated by extractives. As noted above, tariff re-

TABLE 7 Employment Intensity Manufacturing and Mining and Oil and Gas

Industry	Goods Producing Industries (2014)		Jobs Per \$1 Billion Exports (2014)	Value-Added Exports (2011)		
	% of GDP	% of Employment		% of Exports	% of Jobs	% Direct & Indirect Jobs
Manufacturing	36%	52%	4668	52%	40%	45%
Mining & Oil & Gas	27%	8%	1525	21%	4%	9%
Crop & Animal Production				3%	4%	4%

Sources Statistics Canada (Tables 379-0031, 281-0024, 381-0032), Industry Canada Trade Data Online & author's calculations

Note Comparable data for % of GDP, % of employment and Jobs per 1 billion exports is not readily available.

duction in the TPP could provide opportunities for increased agricultural exports, but the impact on employment is likely to be small. The employment potential of increases in seed and pork exports must be weighed against the job losses following from increased Canadian dairy imports resulting from the TPP, and the aforementioned impacts on Canadian manufacturing.³⁵

In general, however, we can say that Canada is increasing exports of goods produced via resource extraction (low employment intensity) and imports of manufactured products (high employment intensity). In effect, Canada is exporting goods that create relatively few domestic jobs and importing goods that create more jobs elsewhere. This could account for some of the decline in manufacturing employment over the past decade, and points to long-term challenges for job-creation strategies and achieving full employment in Canada. The prioritization of resource extraction and export by the previous Conservative government can be seen as having sidelined job-creating, value-adding, and productivity-enhancing industries.

Reliance on the export of primary commodities also contributes to exchange-rate volatility and vulnerability as increases in commodity prices put upward pressure on the Canadian dollar. This volatility creates challenges for other exports. For example, a strong Canadian dollar increases the cost of manufactured goods for foreign buyers and thereby, as in the case of the commodity price boom of 2000s, contributes to a decrease in non-resource-sector exports, and job losses. Between 2001 and 2014, the Canadian economy lost 493,000 manufacturing jobs.³⁶ The inevitable decline in commodity prices from the record highs of the 2000s has also had adverse effects on economic growth and public finances, as evident from the fiscal challenges the federal and several provincial governments are currently facing.³⁷

Conclusion

The TPP would have broad impacts in a number of policy areas not described here but covered in other studies within the CCPA'S "What's the Big Deal" series on the Trans-Pacific Partnership. This report has examined the potential impacts of tariff reduction in the TPP on the Canadian economy. It finds that, far from automatically benefiting workers and consumers, the agreement will likely exacerbate Canada's reliance on low-employment-intensity primary commodity exports.

The potential for the TPP to open up opportunities in certain sectors, such as pork and seed exports, must be assessed against the increased imports of dairy products from the U.S., New Zealand and Australia, the likely increase in tariff-free imports of advanced manufactured products from Japan, and of non-advanced manufactured goods from lower-cost jurisdictions such as Malaysia and Vietnam. The Pacific deal not only removes tariffs but also many of the tools governments, including Canada, might reasonably wish to use to foster economic advancement and the growth of innovation-driven exports.

Notes

1 Quote taken from <https://ustr.gov/tpp> on March 9, 2016.

2 This paper is part of the CCPA series, What's the Big Deal: Unpacking the Trans-Pacific Partnership, which is comprised of a number of reports on the deal's likely impacts in these and other areas. See: www.policyalternatives.ca for more.

3 The governments of Canada and Japan released a "Joint Study" on trade liberalization in 2007 that was based on 2001 data and relied on the contentious computable general equilibrium (CGE) methodology. No recent studies have been made available by the Canadian government. For a critique of the CGE model see Jim Stanford, 'Out of Equilibrium: The Impact of EU-Canada Free Trade on the Real Economy' (Ottawa: Canadian Centre for Policy Alternatives, October 2010), 22–25, http://www.policyalternatives.ca/sites/default/files/uploads/publications/National%20Office/2010/10/Out_of_Equilibrium.pdf.

The author's enquiries as to the availability of data and documents to support claimed TPP benefits received the following response:

"As with any international trade initiative, Canada assessed the economic value of being in the TPP negotiations prior to entering and our analysis is ongoing as the negotiations progress. We consider, among other factors, the opportunity to deepen and modernize our trading relationships with countries with which we currently have FTAs (US, Mexico, Chile, Peru), as well as the chance to gain new market access in Asia, including Japan. All 11 of our TPP partners are listed as Priority Markets under the Global Markets Action Plan...In other words, the TPP is fully in line with Canada's economic plan and our trade policy agenda." Foreign Affairs, Trade and Development Canada, 'TPP Question', personal communication, 3 March 2015.

But no supporting documents have been provided.

- 4** Robert Fife, 'Trudeau Markets Canada as Tech Hub in Bid for Global Investment at Davos', *The Globe and Mail*, 20 January 2016, [http://www.theglobeandmail.com/news/world/justin-trudeau-to-talk-up-canada-when-he-takes-the-stage-at-davos/article28278339/..](http://www.theglobeandmail.com/news/world/justin-trudeau-to-talk-up-canada-when-he-takes-the-stage-at-davos/article28278339/)
- 5** 'Canadian Business Is United: It's Time for TPP · Canadian Chamber of Commerce', accessed 15 March 2016, [http://www.chamber.ca/media/news-releases/Canadian-business-is-united-time-for-TPP/.](http://www.chamber.ca/media/news-releases/Canadian-business-is-united-time-for-TPP/)
- 6** UNCTADstat, Gross Domestic Product, <http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx>
- 7** 99.2% of agricultural and 100% of non-agricultural product categories are tariffs free World Trade Organization (WTO) World Trade Organization (WTO), 'Trade Profiles - Singapore', accessed 25 January 2016, <http://stat.wto.org/CountryProfile/WSDBCountryPFView.aspx?Language=E&Country=SG>.
- 8** Under the Trudeau government Industry Canada has been renamed Innovation, Science and Economic Development Canada. This report uses Industry Canada as the trade data continues to be available via Industry Canada, Trade Data Online: <http://www.ic.gc.ca/eic/site/tdo-dcd.nsf/eng/Home>.
- 9** Industry Canada, Trade Data Online, Canadian Trade Balances, Total for All Industries (<https://www.ic.gc.ca/app/scr/tdst/tdo/crtr.html?naArea=9999&searchType=All&productType=NAICS&reportType=TB&timePeriod=10|Complete+Years¤cy=CDN&toFromCountry=CDN&countryList=specific&areaCodes=9&grouped=GROUPED&runReport=true>)
- 10** 'Report - Trade Data Online - Import, Export and Investment - Industry Canada'; Industry Canada Trade Data online for 2015 annual data and Greg Quinn, 'Canada Trade Deficit Unexpectedly Narrows on Surge in Exports', *Bloomberg.com*, accessed 22 February 2016, <http://www.bloomberg.com/news/articles/2016-02-05/canada-trade-deficit-unexpectedly-narrows-on-surge-in-exports..>
- 11** Stanford, 'Out of Equilibrium: The Impact of EU-Canada Free Trade on the Real Economy', 30. See also the predictions of increased trade deficits upon tariff removal in the Canada-EU study of the Comprehensive Economic and Trade Agreement (CETA) European Commission and the Government of Canada, European Commission and the Government of Canada, 'Assessing the Costs and Benefits of a Closer EU-Canada Economic Partnership', Joint Study (Ottawa: Department of Foreign Affairs and International Trade, 2008), 57.
- 12** Industry Canada Trade Data Online, top 25 total Exports by product, HS 4 codes, 2015.
- 13** 'World Development Indicators| World DataBank - Canada, Exports to GDP', accessed 4 December 2015, <http://databank.worldbank.org/data/reports.aspx?ReportId=30436&Type=Chart>.
- 14** World DataBank, World Development Indicators: <http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators&preview=on>
- 15** 'World Bank, 'World Development Indicators| World DataBank', accessed 3 November 2015, <http://databank.worldbank.org/data/reports.aspx?source=2&country=&series=TX.QTY.MRCH.XD.WD&period=&l=en..>
- 16** Simple and weighted average definitions taken from https://www.wto.org/english/res_e/statis_e/popup_indicator_help_e.htm
- 17** Alana Semuels, 'How the Trans-Pacific Partnership Threatens America's Recent Manufacturing Resurgence', *The Atlantic*, 8 October 2015, <http://www.theatlantic.com/business/archive/2015/10/trans-pacific-partnership-tpp-manufacturing/409591/>; Josh Bivens, 'The Trans-Pacific Partnership Is Unlikely to Be a Good Deal for American Workers', Briefing Paper (Washington: Economic Policy Institute, 16 April 2015), [http://www.epi.org/publication/tpp-unlikely-to-be-good-deal-for-american-workers/.](http://www.epi.org/publication/tpp-unlikely-to-be-good-deal-for-american-workers/)

- 18** Mary E. Burfisher et al., 'Agriculture in the Trans-Pacific Partnership' (Washington: United States Department of Agriculture, October 2014), 22–24, <http://www.ers.usda.gov/media/1692509/err176.pdf>. WTO, 'Trade Profiles - Canada, Japan', accessed 25 January 2016, <http://stat.wto.org/TariffProfile/WSDBTariffPFView.aspx?Language=E&Country=CA,JP>.
- 19** 'Report of the Canada-Japan Joint Study on Benefits and Costs of Further Promotion of Bilateral Trade and Investment' (Foreign Affairs, Trade and Development Canada, October 2007), 64, <http://www.international.gc.ca/trade-agreements-accords-commerciaux/agr-acc/japan-japon/canjap-report-rapport.aspx?lang=eng#chap1>; Burfisher et al., 'Agriculture in the Trans-Pacific Partnership', 22, 23.
- 20** WTO, 'Trade Profiles - Canada, Japan'
- 21** These findings are confirmed by a 2007 study (using 2001 data) on the liberalization of Canada-Japan trade which concluded that "In Japan, production in the manufacturing and services sectors would increase, but that of grains and meat products would decrease. In Canada, production in the agricultural and food sectors would increase, but that of most manufacturing sectors would decrease, although to a lesser extent" 'Report of the Canada-Japan Joint Study on Benefits and Costs of Further Promotion of Bilateral Trade and Investment', 64.
- 22** Source: UNCTADstat, GDP at current prices \$US and Merchandise Trade Matrix by product groups, \$US, author's calculations
- 23** OECD, 'STI Country Profiles: Canada', in *OECD Science, Technology and Industry Outlook 2014* (Paris: Organisation for Economic Co-operation and Development (OECD), 2014), 285, http://www.oecd-ilibrary.org/content/chapter/sti_outlook-2014-40-en; OECD, 'Moving Up the Value Chain: Staying Competitive in the Global Economy: Main Findings' (OECD, 2007), 20.
- 24** Suzy H. Nikiéma, 'Performance Requirements in Investment Treaties', IISD Best Practices Series (International Institute for Sustainable Development (iisd), December 2014), 2, <http://www.iisd.org/sites/default/files/publications/best-practices-performance-requirements-investment-treaties-en.pdf>. December 2014
- 25** Ha-Joon Chang, *The East Asian Development Experience: The Miracle, the Crisis and the Future* (Penang, Malaysia; London; New York; New York: Third World Network ; Zed, 2006).
- 26** Daniel Poon, 'A Pivot to Asia? Canada's "Real" Globalization', *Policy Options*, September 2012; Keith Crane et al., 'The Effectiveness of China's Industrial Policies in Commercial Aviation Manufacturing', Product Page, (2014), http://www.rand.org/pubs/research_reports/RR245.html.
- 27** The Economist, 'The Global Revival of Industrial Policy: Picking Winners, Saving Losers', *The Economist*, 5 August 2010, <http://www.economist.com/node/16741043>; Edward Luce, 'America Reassembles Industrial Policy', *Financial Times*, 8 April 2012, <http://www.ft.com/intl/cms/s/0/6cbeb150-7da4-11e1-bfa5-00144feab49a.html#axzz2C3zbVMA8>; Joseph E. Stiglitz, Joan Esteban, and Justin Lin Yifu, *The Industrial Policy Revolution I: The Role of Government Beyond Ideology* (Basingstoke, UK: Palgrave Macmillan, 2013).
- 28** Philip Cross, 'The Role of Natural Resources in Canada's Economy', *Canadian Economic Observer* 21, no. 11 (November 2008): 3.3, 3.7, 3.9.
- 29** Ibid., 3.7.
- 30** CSLS, 'Productivity Trends in Natural Resources Industries in Canada' (Ottawa: Centre for Study of Living Standards (CSLS), October 2004).
- 31** In 2014 the extractives sector paid on average \$41.08/hr. whereas manufacturing paid \$23.46/hr. Statistics Canada, Table 281-0030.

32 Statistics Canada Government of Canada, 'Contribution of Exports to Jobs, 2011', 30 July 2015, <http://www.statcan.gc.ca/daily-quotidien/150730/too2b-eng.htm>. This is the most recent data available for this Statistics Canada survey Table 381-0032. "The database measures the contribution of exports to gross value added or GDP by removing the value of the imported intermediate inputs (non-capital purchases from other industries) embodied in exported products. This method provides a measure of the contribution of exports to the GDP of each industry and of the total economy" <http://www.statcan.gc.ca/daily-quotidien/150730/dq150730b-eng.htm>.

33 Statistics Canada, Table 381-0032

34 See Table 3, Canadian - TPP (non-FTA countries) by Product

35 Canadian Press, 'TPP Could Harm Canada's Dairy More than Expected, Expert Says', accessed 14 November 2015, <http://www.cbc.ca/news/canada/montreal/tpp-dairy-imports-effects-1.3308877>.

36 Statistics Canada Table 281-0024

37 'Economic Mood Darkens as Rout Spreads beyond Oil Patch', *The Globe and Mail*, accessed 24 February 2016, <http://www.theglobeandmail.com/report-on-business/economy/businesses-outside-oil-patch-now-feeling-sting-of-commodity-price-rout-boc/article28105709/>; 'UPDATE 3-Canada Government Warns of Big Budget Deficits, Growth Forecast Cut', *Reuters*, 22 February 2016, <http://www.reuters.com/article/canada-budget-idUSL2N1610YX>.



CCPA

CANADIAN CENTRE
for POLICY ALTERNATIVES
CENTRE CANADIEN
de POLITIQUES ALTERNATIVES