ONTARIO-US TRADE IN GOODS AND FREIGHT SERVICES: TRENDS, KEY CHALLENGES/ISSUES AND POLICY CONSIDERATIONS[1]

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(The views expressed in this paper are those of the author)

Introduction

Proximity, transport infrastructure and government policies have all contributed to the close trading relationship between Ontario and the US. For more than a decade, the US has been the top trading partner with Ontario for both exports and imports.

- In 2016, the value of Ontario's total merchandise trade (exports plus imports) with the United States on a customs basis reached 395 billion, accounting for 68% of Ontario's total merchandise trade with the world ($583 billion)
- Ontario's merchandise exports to the United States totalled $206 billion in 2016 and imports were valued at $189 billion, accounting for 83% of Ontario's total international exports ($249 billion) and 56% of total international imports ($333 billion).

This paper focuses on the Ontario's merchandise exports to the US as exports affect domestic economic activities and identifies the trends and patterns, including the characteristics of Ontario-US merchandise trade by freight modes and with four key US states / markets. It also identifies the current key issues by mode and economic challenges, such as the recent US tax reform and related changes, the Canada-US tariff wars, the new trade deal between US, Mexico and Canada, which provide the context for freight transportation policy considerations. (Trade and economic data throughout the paper are derived from Statistics Canada: Table 36-10-0222-01 and ISED trade data online)

(I) Trends in Ontario's Merchandise Trade: International exports

Ontario's GDP (output) at market prices has grown steadily over the past 8 years. In 2016, Ontario's GDP amounted to approximately $794,835 million/794 billion. At the same time, the value of Ontario's **international** exports of goods has increased by almost 70% over the 8 years (x 1.68) from 147 to 249 billion. It now constitutes an increasingly important proportion of Ontario's GDP/output from 25% to 31%, between 2009 and 2016. It has also become a significant component of the total exports of goods (international and inter-provincial) from Ontario, from 79% in 2009 to 87% in 2016.

This recent exceptional growth in the proportion of Ontario's GDP represented by merchandise exports started right after the Great Recession that began in December 2007. The trend remains unmistakable and the export of goods is an increasingly important component of Ontario's output and therefore vital to the utilization of labour resources, especially when the multiplier effect is taken in account.

During the same period, the value of **Ontario's exports to the US**, now standing at 83% of total of Ontario's *international exports* in 2016, has also increased even more remarkably by almost 75% (x 1.75). Merchandise exports to US have increased both in absolute value as well as in terms relative to provincial GDP. As a percentage of Ontario's GDP, the value of these exports to the US has assumed

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greater significance, accounting for 20% of GDP in 2009 to 26% in 2016. It now constitutes an important proportion of Ontario's total exports of goods (international and inter-provincial), between 64-72%.

(II) Importance of the US: Export products and Markets, particularly the border states (3)

As noted earlier, the US has remained Ontario's most important international trading partner and customer over the last 8 to 10 years with the value of Ontario's exports to the US now standing at almost 83% of total of Ontario's *international exports* in 2016 and 2017. In terms of Ontario's export products, out of the top ten commodity types, for 2017, automotive and motor vehicle related products (auto, engines and motor vehicle parts) constitute about 31% of all exports.

- Since the US is the top market for Ontario's international export of goods, as would be expected, the export of automotive and motor vehicle related products to the US dominates Ontario's exports to the US and its exports of those products to the world. They constitute up to 37% of the value of all exports from Ontario to the US and up to 98% of all Ontario world export of those products.

Based on recent trade data, the following states are the top 10 destinations for Ontario's export of goods to the US in 2017 across all freight modes (% of all Ontario exports):

Michigan	23.57%
California	**12.33%**
New York	5.99%
Ohio	3.82%
Pennsylvania	3.40%
Illinois	3.28%
Texas	3.20%
Indiana	2.74%
New Jersey	1.81%
Washington	1.68%

Despite the apparent and rising importance of the California market (with large auto distribution centres), the four contiguous border states of Michigan, New York, Ohio and Illinois have continued to maintain their *historically strategic importance* as the top markets for Ontario's merchandise exports to the US (Pennsylvania and Indiana are two other increasingly important markets):

- Unlike with California (imports to Ontario has been only 2-3% of US total for the last 10 years), trade between Ontario and these adjacent states is decidedly two-way which underlines the strategic importance, in key economic terms, of these four states as trading partners of Ontario.

(III) Importance of freight modes in Ontario-US merchandise trade (4)

Road transport is the most important mode used in moving the growing Ontario international merchandise trade with US, including exports which constitute 52% of the cross-border trade (imports + exports) in 2016 (206,556M / 395,629M) and 83% of Ontario's all international exports.

- In 2017, the road mode represented 74% of total Ontario-US trade flows (by regions) in terms of value ($284,666M/386,641M), i.e. measured in value of cargo hauled, trucking hauls roughly 74% of Ontario's trade with the US, i.e. about 36% of Ontario GDP (2016)
- Ontario's **busiest** road border crossings (as gateway - ports of entry/exit for trade/imports and exports including value clearance) account for more than 60% of Canada-US road trade and the percentage has continued to grow since 2013 (from 63-65%).

As for other freight modes,

- The relative importance of rail transport to and from the US (in terms of value) varies by US region. In 2017, at the highest end was Western US which received 40% of the value of trade by rail.

- Marine transport mainly supports merchandise trade with Mid-west and Atlantic regions.
- Air transport plays a more important role in Ontario's trade flow with North-east region in the US.
- Both rail and air modes support auto trade with the US.

Trade with four key US states
Trade between Ontario and the adjacent regional states of Michigan, New York, Ohio and Illinois is decidedly two-way, underlining the strategic importance of these four states as key trading partners of Ontario. Of particular note, over the past 8 years, merchandise exports from Ontario to these four states are about 45% of the value of Ontario's exports to the US and about 36% of all Ontario international exports. As a proportion of GDP, Ontario's exports to these four states amount to about 10%.

Given the pre-eminence of auto trade between Ontario and the US, it is not surprising that automotive and motor vehicle part products also dominate and drive Ontario's trade with the four key trading partners, particularly Michigan.

- The strongest integration of auto industries is with Michigan which is the principal destination and origin of Ontario's auto trade with the United States, mostly motor vehicles or motor vehicle parts. In 2017, while exports to Michigan totalled in value $55 billion representing 22.9% of all Ontario exports to the United States, 69% of these exports consisted of motor vehicles and related products ($38 billion) which was about 52% of Ontario's auto exports to the US. (10)

Freight transport moves the merchandise trade through using the strategic transportation links with these four trading partners including some key border crossings or ports of entry/exit/clearance, such as Windsor's Ambassador Bridge and border crossings at Fort Erie and Sarnia. As expected, road transport/trucking is the most important mode used at these ports of entry/exit which in turn underlines the importance of the supporting / related transportation infrastructure, e.g. Hwy 401 and 3 for Windsor's bridge, QEW for Fort Erie's border crossing and Hwy 401 and 402 for Sarnia's border crossing.

It should be noted that the destinations of Ontario's exports as reported to Customs may not be their final destinations but merely as points for further redistribution. Nonetheless, it could safely be assumed that significant amounts of exports do end up in these four states.

(IV) <u>Key economic developments/challenges and issues by mode in cross-border transport</u>

1. Issues by mode

<u>Air freight mode</u>

- **Ontario's tax on aviation fuel** on trans-border and international flights, including the increases in recent years from 2.7 cents in 2014 to 6.7 cents per litre in 2017: Given the competition is for traffic against other international hubs in the US that are not subject to a similar tax, the existing aviation fuel tax may have a distortionary impact.
- **Air cargo screening**, especially cargoes carried in belly holds to US and other foreign destination which have been subject to enhanced security screening and custom inspections: These requirements were reported in previous studies to have resulted in delay and increased costs (cost of compliance) and led to modal competition/diversion, e.g. truck transport becomes in some cases as fast as and more economical than air, for domestic traffic.

<u>Marine freight mode</u>

One of the foremost cross-border marine trade issues raised by both the shippers and carriers relate to the ballast water regulations across the Great Lakes-St. Lawrence binational waterway. Ballast water is used by ships to maintain stability but it is also a potential pathway for aquatic invasive species. There is some disagreement between jurisdictions on how to manage these regulations in order to minimize impacts on Great Lake services and Ontario's marine trade.

Rail freight mode

- Need for **harmonization of safety regulations** in the rail sector: Freight and passenger railways in the United States, including United States-based subsidiaries of CN and CP, are required to implement an interoperable system of communications between railways and land-based stations called Positive Train Control, or PTC by 2018. Canada does not currently appear to be considering similar requirements. This is a potential area of joint collaboration: Canada-US harmonization of rail safety standards to enhance the safety as well as *efficiency* of the rail system and ensure its continuance as a vital mode of freight.
- Limitations of existing **rail infrastructure** at and leading to border crossings **for intermodal service for cross-border shipments**: intermodal service helps relieve some of the physical constraint of moving a huge volume of freight through a small number of choke points and lowers delays associated with clearance of people, as opposed to goods. A key opportunity could be the enhancement of existing rail infrastructure at the border crossing between Windsor, Ontario and Detroit, Michigan which is the most important portal for US-Canada trade and the largest land trade crossing (defined by value of goods traded) in the world. The rail tunnel in its current form cannot support double stack trains and as such a potential opportunity exists for improving COFC (container on flatcar) intermodal service.

Freight trucking mode

- **Competition with US operators**: Trucking companies from Ontario (and Canada as well) engaged in cross-border freight experience significant competition from U.S. operators. This is likely due to the tax and cost advantages as a result of the recent tax reform under the Trump administration. Changes to US safety regulations such as electronic logging devices (ELD) in December 2017 may also result in harmonization and efficiency issues (e.g. transit time and truck parking) affecting Canadian/Ontario carriers operating in the US market.
- **Infrastructure needs**: For Ontario's industries to compete successfully for market share in the North American supply chain and the preferred trucking mode to move goods and business inputs to cross-border markets efficiently and reliably, the infrastructure plays a vital economic role. While Ontario's extensive infrastructure and network have continued to facilitate industries' access to national and international markets, there are key capacity constraints and bottlenecks that may challenge connectivity and affect freight movements along the province's trade corridors to the US markets.
- **Border issues:** As trucking is the dominant mode for supporting merchandise trade with the US, especially auto-trade with the four adjacent US states, the speed and fluidity of cross-border freight traffic at busy crossings like Detroit-Windsor is of key and paramount importance for Ontario fleets, affecting their efficient and competitive access to the US markets. Studies have found that problems with border staffing levels, capacity and IT infrastructure at major ports of entry between Ontario/Canada and the US have impeded or restricted the movement of goods at the borders, causing delays, high business costs and loss in productivity with negative efficiency and competitive impacts for Ontario carriers engaged in cross-border markets, especially since 911 attacks.

2. Key challenges

A number of key economic developments have recently happened that further challenge the competitiveness and business opportunities of Ontario's freight transport industry:

US tax reform and related changes

Recent developments in the US, especially the tax reform and related changes, may undermine the business competitiveness of Canadian industries including Ontario's trucking industry with the potential impacts of diversion of freight traffic/business to US carriers and US routings:

- The US tax reform bill (Tax Cuts and Jobs Act/TCJA) reduces the statutory corporate tax rate from 35% to 21% a level that is roughly in line with the OECD average and slightly below Canada's. This bill also provides for the ability to fully expense equipment spending for 5 years or immediate write-offs for capital investments, such as heavy trucks and trailer purchases. (5)
- The US Federal Motor Carrier Safety Administration has issued a final rule that reduces annual registration fees collected the Unified Carrier Registration (UCR) Plan and Agreement for the 2018, 2019 and subsequent registration years.
- A bill was introduced in the US Senate on June 12, 2018 to repeal the12% federal excise tax on the sale of heavy-duty trucks and trailers.

US-Canada tariff war

On June 1, 2018, the US implemented Tariffs of 25% on selected steel products and 10% on selected aluminium products. In response, Canada imposed retaliatory tariffs on 229 US products, worth $12.6 billion, on July 2, 2018. The list of targeted products includes steel and aluminium as well as an assortment of other goods.

- Canada's steel and aluminum industries are key contributors to the Canadian economy, providing well-paying jobs and key inputs for other major industries. In 2017, about US$14 billion of steel was traded between Canada and the United States. About 84% of Canada's primary aluminum production is exported to the United States. (11)

In a global supply chain, it is not just trade in finished products but components and materials make up part of what is traded. Higher tariffs for imports mean a higher cost of production. The tariff war could have far-reaching impacts on the freight sector business:

- Higher costs are passed along to consumers and rising prices could reduce demand for many products, driving down volumes and cutting into business at the ports. The tariffs could drive down cargo volumes at the gateways and hit jobs and businesses that depend on the flow of goods across supply chains, from air transport to marine, trucking and rail. The potential negative impacts on cargo volumes could mean decreased market share or business opportunities for Ontario truck carriers in certain US markets affected by the tariffs.
- Vehicle makers, such as trailer and vocational truck manufacturers, would be hit particularly hard. The smaller businesses in the sector would not be able to sustain themselves in a protracted trade war especially as many steel and aluminum products – particularly specialty items used in the vehicle manufacturing – are currently sourced exclusively in the U.S. and no Canadian options are available.

New NAFTA agreement

The new trade deal with the US and Mexico is not expected to cause significant impacts on the economy and freight demand in Canada, at least in the near term. For example, for the automotive industry which is a key economic sector for Canada and Ontario, the new trade framework exempts Canadian products from future American levies under a side agreement but applies an auto quota system similar to the one accepted by Mexico.

While no substantial changes are expected to cargo volumes and freight demand or disruptions to the supply chains, there could be impacts on cross-border trade facilitation at various border crossing points as trucks continue to haul freight across the borders. Industry's initial analysis of certain sections of the agreement has identified some potential changes related to how goods cross the border which could affect deliveries by truck, including potential revisions to the temporary admission of goods as it relates to movements in-transit; changes to promote trade facilitation through electronic submissions and potential changes to warehousing rules; express shipments and changes to the monetary value of goods to which import duties apply; a single window that enables the electronic submission through a single-entry point of documents and data; potential changes to the administration of customs penalties and how they are imposed; facilitating trade through programs designed to improve the movement of goods through ports of entry(11)

(V) <u>Context for freight transport policy considerations</u>

Freight transport is critical for moving Ontario-US cross-border exports and imports by applicable or selected modes and plays a pivotal role in Ontario's trade relationship and economic competitiveness: ***facilitates trade and market opportunities, enables investment and business growth, creates jobs/employment and enhances economic performance and well-being.***

Transportation policy could affect physical infrastructure, ports and gateways, regulatory regimes and warehousing locations, which are integral to trade in goods and transport services and help enhance business opportunities for Canadian/Ontario carriers in the US market: (trucking examples provided below)

- Cost competitiveness; Regulatory harmonization; Border management; Infrastructure improvement

1. **Cost-competitiveness:** The federal Phase I and II GHG emissions and ELD regulations for heavy trucks both result in vehicle cost increases in the coming years and increase competitive pressures for the trucking industry that competes in the North-American market. According to federal impact statements / analyses for the two regulatory changes:
   - Industry feedback suggested that the costs of ELDs could range from $300 to $900, the associated installation cost is $220 per device. The ELD activation fee is a one-time only fee estimated at $15 per unit and the monthly monitoring service fee is estimated at $30 per month.
   - Estimated average incremental cost per MY2027 Phase 2 vehicle are as follows:

Vehicle category	Aggregate incremental costs for new MY2027 vehicles	MY2027 vehicle sales forecast	Average incremental cost per new vehicle	Average cost increase per new vehicle
Tractors	$452,524,543	31,758	$14,249	9%
Vocational vehicles	$100,464,843	32,855	$3,058	3%
Heavy-duty pick-up trucks and vans	$177,334,629	90,492	$1,960	4%
Trailers	$60,110,995	50,813	$1,183	4%

   Many US fleets already enjoy natural advantages related to economies of scale and US accelerated depreciation rates are far more advantageous, allowing US carriers to write down trucks in half the time and to free up capital to invest back into the company. This tax advantage for US trucking companies has been further widened by the recent corporate tax reductions.

   Reactions from the business community are mixed, with some suggesting lowering Canada's corporate tax rate to match the US tax cuts and others who reject that as an unsustainable. To narrow the gap, CTA/OTA had previously recommended the government provide an accelerated CCA rate for carbon-reducing trucking equipment. (1) It appears that the newly created Accelerated Investment Initiative (AII) recently introduced by the federal government, allowing for a typical first-year asset deduction for trucks to rise from 20 to 60%, has met their demand, based on their positive reaction.

2. **Regulatory harmonization:** In addition to the difference between Ontario and the US interstate truck weight allowances (trucks are allowed to operate in Ontario at 140,000 lb, similar to some US states: MI - 140,000 lb, NY ~135,000 lb, much higher than US-DOT Interstate weights allowance at 80,000 lbs.), it is the long-standing truck cabotage rules between the two countries that many studies have found to have had restricted market access and business opportunities for Canadian and Ontario carriers in cross-border freight movements.

   The motor carrier cabotage rules on both sides of the border govern cross-border services and allow "only persons of Canada/US, using Canadian/US--registered and either Canadian/US-built or duty-paid trucks and buses to provide services between points in the territory of Canada/US", i.e. not allowing intra-Canada/US deliveries – market/business opportunities. These rules have been preserved under trade agreements including WHO/GATS and NAFTA/USMCA. The result is that cross-border shipments are more likely to involve empty backhauls which are considered an extra-cost and carriers tend to charge more per kilometre than for domestic shipments.

3. **Border management:** Post-9/11, one of the main challenges to the cross-border freight system is enhanced border security. It has been estimated that it costs more to ship goods by truck across the border than to ship the equivalent goods by truck domestically. Cross-border trade costs more because of higher fixed costs per shipment, which is consistent with the costs of border delays and border-related compliance costs being passed on from trucking firms to their customers. It also costs more because of higher line-haul costs associated with greater difficulties obtaining backhauls, which, in turn, may be the result of regulations on cabotage rights (2). A 2003 study estimated an annual cabotage costs between $132 and $440 million to the trucking industry in Canada and US. (8) To improve efficiencies, carriers have already invested heavily in border innovations and the costs associated with border crossing have also been increasing. In June 2018, the federal government announced an investment of $2.4 million for three projects to improve border infrastructure at Fort Erie crossing and address capacity constraints to benefit this busiest land crossing.

4. **Multi-modal freight infrastructure improvement:** Ontario's economic prosperity in large part relies on the business success in the cross-border markets and freight transport which in turn depends on the transport infrastructure of utmost importance to the industry's efficiency and competitiveness.
   - Accordingly to 2017 CAA study (7), Canada's worst bottleneck is in Toronto – a 15 km stretch of Highway 401 between Highway 427 and Yonge Street. The bottleneck costs drivers over 3.2 million hours in lost time every year. Highways 401,402 and QEW are key routes with significant flows of ON/US traffic between the GTHA and the crossings.
   - The gravity of the issue is reflected by the findings of a recent study released by the American Transportation Research Institute, showing that congestion on the U.S. National Highway System added nearly $74.5 billion in operational costs to the trucking industry in 2016, a 0.5% increase over 2015. This equates to 425,533 commercial truck drivers sitting idle for a year (6).

   Since road transport is so vital to export movements including auto-trade, improvements to highway infrastructure along the province's trade corridor would help connecting business to the US markets.

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