CANADIAN COASTAL SHIPPING AND CETA: SOME LESSONS FROM FOUR MARKET DEREGULATION CASES

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Introduction

After several years of negotiation, Canada and the European Union have come to a final agreement on the Comprehensive and Economic Trade Agreement (CETA) and the text is currently going through ratification process. The paper seeks to highlight some possible CETA's consequences for domestic Canadian shipping markets. It uses industrial economics analytical tools drawn from a Structure-Conduct-Performance (SCP) paradigm. From a literature review, it reconstructs four cases of past coastal shipping deregulation that occurred internationally: Philippine, Greece, Taiwan and New Zealand. The observed transformations are then characterized in terms of the SCP lens. The approach does not claim to forecast market transformations in Canada's coastal trade but to underline some common trends reported in different coastal shipping markets after a deregulation process.

The Canadian Cabotage Regime under the Comprehensive and Economic Trade Agreement

Maritime cabotage, may generally be defined as a protectionist regime for the movement of goods or passengers between two ports within the same State. In Canada, the current *Coasting Trade Act* came into force in 1992, and reserved the coasting trade to Canadian flag, duty paid ships. With the passage of the *Coasting Trade Act*, Canada reaffirmed "*the same protectionist philosophy that has existed ever since Canada inherited its coasting trade regime from Britain"* (Hodgson and Brooks, 2004). Nevertheless, foreign flag vessels can enter the Canadian domestic trades when no suitable Canadian flag ship can be found. This possibility is truly thought of as an exception in the regime and requires that the shipper/carrier apply for a temporary license. In such case, the Canadian Transportation Agency will review the case to access if indeed no suitable Canadian vessel is available before granting access to a foreign vessel. So, the domestic traffic is restricted to Canadian flag vessels if more than one Canadian port is to be incorporated into the route network (Brooks, 2009).

The Comprehensive and Economic Trade Agreement (CETA) is considered as the first free-trade agreement to specifically address the shipping industry (Canadian Sailing, 2015). For the Canadian coastal trade market it implies two specific changes to the current cabotage regime. Vessels registered in an EU-country will be allowed to reposition their empty containers between any ports in Canada on a non-revenue basis. Vessels registered in an EU-country will also be able to carry freight on a single route between Halifax and Montreal; both in bulk and containerized shipments (Government of Canada, 2015). Besides, under CETA, foreign dredging companies will be allowed to bid on federal or private dredging contracts. Indeed, the CETA will allow EU contractors to bid on any federally procured dredging contracts exceeding the procurement thresholds of eight million dollars for construction services, but also on private dredging contracts of any size. In essence, under CETA : "*European vessels are therefore allowed to ship cargo from Halifax to Montreal without any restrictions on origin of the crew, level of wages and/or working conditions. European operators will also be allowed to carry empty containers in Canadian waters and bid on dredging projects. Other provisions of existing cabotage rules in Canada are preserved by inclusion in Canada's list exemptions, although past experience indicates that once a partial*

liberalization is initiated through a trade agreement, pressure builds strongly for further and eventually complete liberalization" (Cobb, 2014). Indeed, although comparatively small these changes prompted concerns from Canadian-flag ships owners.

As to be expected, CETA is far from being a unanimous agreement among all the involved actors. Some see through CETA a great opportunity to increase trade exchange between Canada and European Union. This argument is widely advocated by the Canadian government. Indeed, CETA is expected to increase trade between Canada and EU by more than 20%. Besides, the Shipping Federation of Canada (SFC) which representing ocean carriers considers CETA as a great opportunity to boost the exchanges between the two continents, not only in terms of economic benefits but also in terms of connectivity and intermodal service provisions. At the opposite, many other maritime actors consider CETA as the "open-door" to unfair competition. First, the Canadian Ship-owners Association (CSA) argues that CETA will set unfair competition between the Canadian crews and the foreign ones. Indeed, CSA notices that Canadian marines possess unique local knowledge that ensures that Canadian waters are safely transited, respected and protected (Canadian Ship-owners Association, 2014). Besides, the Seafarers' International Union of Canada (SIU) shares the same concerns about CETA consequences on the maritime labour market (The Canadian Sailor, 2014). The association argues that CETA will probably have important negative effects on Canadian seafarers and over the maritime industry as whole. From an economic perspective, the Saint-Lawrence Ship-operators argues that the crews certified under the Canadian cabotage law imposes upper operating costs compared to the crews sailing under European flag (Les Affaires, 2014). Finally, CETA opponents emphasize on the social impacts and especially those related with the labour conditions and certifications. They advance that this trade agreement may have negative consequences on the Canadian marine transport sector such as lost jobs in domestic freighting.

If CETA is comprehensive by nature, most of its shipping applications concern a very specific route between Montreal and Halifax. The port of Montreal is located within Canada's Continental Gateway, which carries more than 80% of Canada's trade. Its facilities accommodate the three major cargo handling sectors: Containerized cargo, liquid bulk and dry bulk and allow it to handle nearly 30 million tons cargo annually. At last, the port of Montreal is the hub of a fully integrated intermodal transportation system. Its intermodal connections are a major advantage in a global trade environment that fosters competition among metropolitan cities (Port of Montreal, 2015). At the other side, the port of Halifax is ice free and located on the Atlantic Coast of Canada and has a strategic location approximately 100 kilometers from major shipping lanes to North America. This location enables Halifax to be the first inbound/last outbound port for marine transport between Europe, the Mediterranean and Asia. From 2008 to 2013, the Port of Halifax has generated a 13.1% increase in tonnage (containerized and non-containerized) at Halifax Port Authority facilities, and a 14.2% increase in container cargo as defined by twenty-foot equivalent units (TEUs) (Halifax Port Authority, 2015). It is worth noting that Montreal-Halifax route connects two of the most important Eastern Canada ports and the sole container ports of the region.
Currently there are no Canadian carriers offering direct liner services on this route. Oceanex does offer fixed-day sailings for containers and trailers but between Montreal and St. John's, Newfoundland for one service and between Halifax and St. John's on different service. They are three other Canadian carriers who are considered active in the Montreal-Halifax route: Algoma Central Corporation, Canada Steamship Lines and Groupe Desgagnés. They are three other Canadian carriers who are considered active in the Montreal-Halifax route: Algoma Central Corporation, Canada Steamship Lines and Groupe Desgagnés. These carriers can offer dry or liquid (for Algoma and Desgagnés) bulk shipments on demand. Considering the number of maritime carriers operating in the Montreal-Halifax route, the structure of this market seems to feature the characteristics of a "competitive oligopoly", where a few companies share the market as whole.

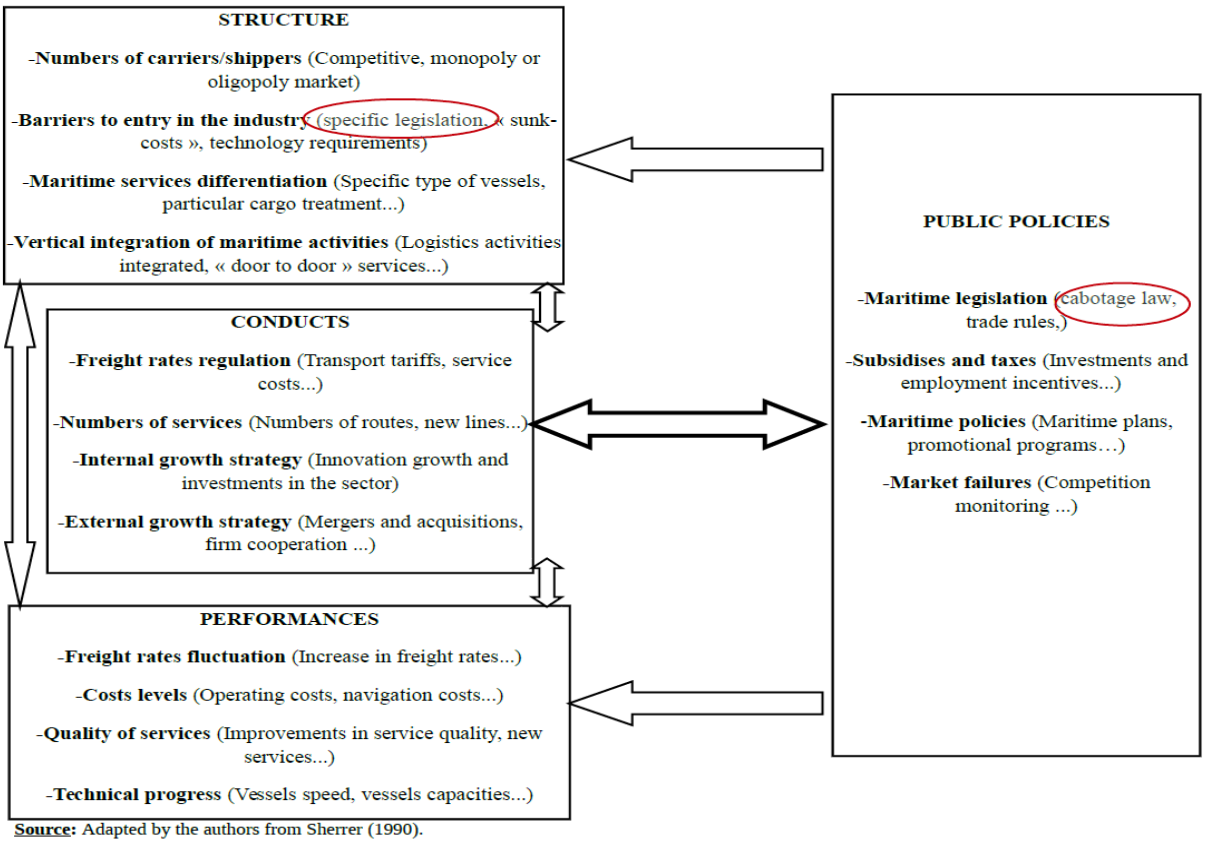
The Structure-Conduct-Performance Model

In 1959, Bain proceeded from Mason's researches and proposed the "Structure-Conduct-Performance (SCP) paradigm. The essence of this paradigm is that a firm's performance in the marketplace depends

critically on the characteristics of the industry environment in which it competes. According to Bain (1959) and Mason (1953), industry Structure determines Conduct (strategy), which in turn determines Performance of the firm in the marketplace**.** In other words, under the SCP paradigm, structural variables (such as firm concentration) affect conduct variables (such as collusion or competition) which in turn were to affect performance variables (such as profits). This model had success for explaining some empirical observations linking the number of firms with the profit level and the barriers to market access. Reaching the conclusion more entry-barrier implies a greater level of concentration (fewer firms in the market) and in turn a higher average profit rate for each of them. The SCP paradigm is a useful contribution to strategy formulation in an industry. It offers a systematic model for assessing the nature of competition in an industry. Nevertheless, Porter (1981) has identified some relevant limitations related to the SCP paradigm. First, the author pointed out that the model was a static one trying to explain the industry performance that resulted from a given industry structure. However, concentration rises and falls, as do entry barriers and the other measures of structure identified in the SCP paradigm. It is these structural changes that seem to raise the most fundamental strategic problems for firms in competition. Thus, what made structure what it was, and what did one do about changes in structure from a strategic standpoint? Secondly, the determinism was another problematic element of SCP model identified by Porter (1981). The author has underlined that the model took industry structure as exogenously given, and held that the firm's strategy and performance were fully determined by this structure. Thus, according to the author the firm was stuck with the structure of its industry and had no ability to alter the state of affairs. However, firms can fundamentally change the structure of their industries through their actions.

Among the most important adjustments elaborated on the SCP paradigm, those made by the Chicago School are particularly relevant ones. Spence (1979) and Porter (1981), have stated that the performances of a firm may influence the structure of the market. In other words, according to these authors, there are feedback effects of firm Conduct on market structure. The second series of adjustments came from the New Economic Organization (NEO) movement in the 1980s (Lancaster, 1979 and Tirole, 1989). This new approach emphasizes on the strategic aspect of the SCP paradigm, namely the Conduct or Strategy effects. By opposition to the SCP paradigm premises, the NEO focus much more over the organizational behavior of firms than the market structures. Those latter are considered as endogenous following this approach. A last series of adjustments were materialized by adding the crucial role of public policies. Scherer (1970) has added to the SCP scheme retroaction loops. In this last version, the Conduct may impact the firm Performances but also the market Structure. As well as the Performance may impact directly on the industry Structure without primarily impact on the firm’s strategy. Moreover, in this version the market Structure is not an exogenous component but could be determined either by the other components, namely Conduct and Performance, or the public policy (Arena and *al*, 1988). Generally, a public authority has the ability to determine the rules of the market through a package. Indeed, the government establishes policies allowing or not the competition in a specific market, and if so, the scope and boundaries of this competition. This kind of measures constitutes barriers of entry when they are implemented to restrain the competition and protect the market.

As illustrated in Figure 1, the SCP model can be applied to the maritime transport sector. First, the structure of the market is composed with all the variables allowing to identify if the market is a competitive or a concentrated one. Among these variables, we can mention the number of carriers operating in the market, the presence or not of barriers to entry, the product or service differentiation and the market integration activities. The more the number of carriers operating is high, the more the market is competitive and the less the market is dominated by few carriers.



Source: Adapted by the authors from Sherrer (1990).

Figure 1: SCP Model applied to the Maritime Transport

Methodology

We attempt in this paper to highlight on the potential implications of deregulation process within the Canadian cabotage market, more especially within the Montreal-Halifax market consecutively to the CETA implementation. To accomplish this task, the authors elected for a comparative analysis based on a documentary approach. So, we have reviewed in the literature case studies of deregulation in coastal shipping. This allowed to documented economic impacts of the deregulation in this sector and the subsequent transformations. By using industrial organization tools, such as the SCP paradigm, with its adjusted version, we have tried to apply this tool to explain the impacts of the deregulation process in coastal shipping sectors. A review has been done to identify the implications of deregulation especially within the cabotage market, by choosing four different cases of cabotage deregulation.

Case 1: Philippine

Deregulation of Philippine cabotage market began in the 1990's. This market has been deregulated and liberalized only for domestic operators; no foreign competitors were allowed to operate within it. The market regulation system which prevailed before deregulation era was characterized by a highly "regulated" market until policy reforms were instituted. Then, the Philippine government fixed the rates and tariffs. Besides, a deliberate policy of limiting competition by restriction entry. This regulation system features a set of drawbacks, such as the application of uniform-rate formula for all routes, no market segmentation between the different routes has been done. It implied a tendency of overload and especially poor quality services because of competition limitation. After the deregulation process the Philippine cabotage market became a highly "concentrated" one with big mergers process into the maritime industry. Substantial competition exists in only a small percentage of routes, so the greater majority of routes still monopolized (Austria, 2003). Besides, the top five companies in the industry dominate the major part of

the market. The observations mentioned in Table 1 emphasize the tendency to market concentrations which reflects the complete opposite from the deregulation process expectations. Despite, good performances related to the quality of service and the average age of vessels. The market still suffer from a lack of competition and a domination exerted on the market by a few companies.

Case 2: Greece

Deregulation of Greek cabotage market began in 2001-2002. The Greek market has been deregulated and liberalized just for some specific countries (EU member states). The system of inland maritime transport in Greece transited from a "protected" state to a "liberalized" one, where the provision of maritime transport services is open to all interested and eligible operators of other EU member states. Before the deregulation process, the market was characterized by number of "inefficiencies" on both the demand and supply sides. On the demand side, there was high seasonal variation in traffic volumes (more than 80% of the year's demand concentrated in the three months of the summer). On the supply side, there were low capacity utilization rates for vessels and low reliability of travel times and disruption of services (Giannopoulos, 2004). Besides, there were some inadequate port infrastructures and facilities, and in some cases low quality installations. Finally, there was a high age level of vessel, indeed, 70% of the vessels being more than 25 years old (Chlomoudis *et al*,2007). After the deregulation process of the Greek cabotage market, its structure seems to have led to a higher levels of concentration, higher fares and a lack of new entrants into the market. Despite, the increasing of demand for coastal services, once again, against all expectations, the number of companies per line has decreased between 2002 and 2008 (Lekakou *et al*, 2011). Moreover, the coastal shipping fares have increased during the same period because of lack of competition, as mentioned in Table 1.

Case 3: Taiwan

The first stage of the Taiwan cabotage's deregulation started in 1987 with the promotion of macroeconomic liberalisation by the successive governments. Then, the second stage followed in 1990 when Taiwan applying to rejoin World Trade Organization (WTO). The Taiwan cabotage market has been deregulated and fully opened to foreign competition. Prior to the deregulation process, the coastal shipping sector in Taiwan was a strongly supported by the different governments over the past 50 years (Chiu, 2007). The governments have made continuous efforts to provide shipping-friendly policies to help the development of its domestic maritime transport. So, this sector has been recognized a well-developed sector in Taiwan, with a great expansion of fleet and a great improving quality of national fleet. Finally, some concrete incentives for national shipping development and the sector drained numerous opportunities of investments. As mentioned in Table 1, the post-deregulation era is characterized by a strong setback of fleet expansion and a decline in national ship tonnage. This situation led to a weak attractiveness of the ship register system and moreover to a flagging-out problem.

Case 4: New Zealand

The deregulation of New Zealand's coastal shipping had taken place in 1995, following the comprehensive programme of economic reforms that had been undertaken in the country from 1984 and on. This deregulation allowed to open up New Zealand's coastal shipping trade to some international competition. Prior to 1994, foreign vessels could not uplift and discharge cargoes and passengers at ports along the NZ coast unless they received a permit from the Ministry of Transport to shift specified cargo for which there was no local vessel available (Cavana, 2004). After 1994, ships undergoing an international voyage where allowed to move domestic cargo between their ports of call within the country. Many transformations on the structure and the performance of the New Zealand's costal shipping market have occurred since the deregulation process implementation. In 2004, the coastal shipping market counted nine different NZ shipping operators transporting a range of general cargo and commodities along NZ's coasts. Furthermore, the crew number per vessel is doubled and then increased the people directly employed on NZ's coastal vessels due to new operators' entries. As shown in Table 1, we can notice some significant changes on the performance indicators of the NZ coastal shipping market. Since

the start of deregulation process, the international ship operators have captured a significant share of the domestic coastal container market, since it is common for international services to include two NZ's ports of call they can offer domestic shipment with a very small increase in operating cost. In this context, volumes of general and containerized domestic cargoes shipped have increased by about 5%. More importantly, the freight rates for containers and freight have dropped by up to 50% in some cases, due to the extra competition by the international ship operators.

These four cases are obviously different from each other. Transformations reported during and after deregulation present their own specificities in each case. However, our review suggests that the general proposition of the SCP model matches the reviewed cases. The entry of new firms competing in a given market following deregulation induces an initial diversification but the overall concentration trend prevails in the end.

Table 1: Deregulation Process Effects on some Cabotage Markets

	STRUCTURES	CONDUCTS	PERFORMANCES
Case 1	-The industry has been highly « regulated » until policy reforms were instituted. -The government fixed the tariffs. -A deliberate policy of limiting competition by restricting entry.	-The deregulation of coastal shipping has led to : -A large merger wave into the industry -Greater majority of routes still monopolized. -The top five companies in the industry dominate the different routes.	-Freight rates have increased in real terms. -The number of competitors per route has increased. -Improvements in the quality of services. -The average age of vessels has improved.
Case 2	-The system of inland maritime transport transited from a "protected" state to a "liberalized" one. -The provision of maritime transport services is open to all eligible operators of other EU member states.	The deregulation of coastal shipping has led to : -A higher levels of concentration. -Higher fares. -Lack of new entrants into the market.	-Increasing demand for coastal services. -The average age of the vessels has been substantially decreased. -The number of companies per line has decreased. -The coastal fleet has decreased. -The coastal shipping fares have increased.
Case 3	-The maritime-transport sector was strongly "supported" by the government over the past 50 years. -The government has made efforts to provide shipping-friendly policies to help domestic maritime transport.	The deregulation of coastal shipping has led to : -A higher level of competition. -The domestic shipping companies are strongly exposed to foreign competition.	-A strong setback of fleet expansion. -A decline in national ship tonnage. -Weak attractiveness of the ship register system. -Flagging-out problem
Case 4	-Coastal shipping was protected against foreign competition. -The government regulated the competition through permits provision to foreign carriers.	The deregulation of coastal shipping has led to : -A situation where international ship operators have captured about 10-15% of the domestic container market.	-The volumes of general and containerized cargoes shipped have increased. -In some cases, the freight rate has decreased significantly.

Source: From Austria (2003), Cavana (2004), Chloumoudis (2007), Lekakou and Vitsounis (2011), Chiu (2007), Giannopulous (2004).

A tendency to market concentration and some potential impacts on the Canadian's Coastal Shipping

The wave of deregulation within the coastal shipping industry has implied different changes regardless to the countries legislations and the market situation which prevailed before the deregulation process. Those transformations have been analyzed by using the SCP model and by comparing the situation before and after the deregulation process. Each country features its specificities, but some implications seem to be common to the four studied cases. So, we have addressed a particular attention to those common effects in order to set out some potential scenarios which could be applied to the Canadian case. Two distinctive periods have been identified during the post deregulation process. The first period was characterized by an increasing of competition, where new operators have accessed to the market. In the second period, the competition pressure prevailing within the market leads the companies to merger in order to reinforce the market domination through monopoly or oligopoly structures. This second period is characterized by barriers to entry and a lack of contestability in transport markets. In most of studied cases the structure of market passed from protected market to liberalized one, and then, from this latter to a concentrated one.

The Canadian cabotage market as well as the Montreal-Halifax route embodies all the characteristics of

an oligopoly market because of a few carriers are operating within this market (Oceanex, Desgagnés, CSL and Algoma). Besides, the market is protected against foreign competition through the Canadian's cabotage regime which obviously represents a barrier to entry for foreign competitors. From the different deregulation cases in coastal shipping reviewd, we can anticipated that even the very limited openning of the Canadian coastal market to the foreign competition will probably increase the number of foreign companies in the domestic shipping market. Modest size national maritime companies which have operate since a long time within the Montreal-Halifax area may be confronted with new entrants. Three general scenarios can be anticipated:

Scenario 1: Commercial collaborations can probably happen between the « traditional » Canadian carriers which possess a good knowledge of the market and the user needs, with the « new » entrant companies, namely the Europeans companies which possess a the advantage of lower operating costs. These low operating costs are essentially due to the large volume carried and the level of traffics which lead to significant scale economies; more flexible manning requirements as well as competitive fiscal treatment. This kind of commercial strategy refers to synergy of skills.

Scenario 2: Canadian ship-owners which are operating on the Montréal-Halifax route may trade with ships sailing under European flag. Indeed, the European flag vessels are used to operate within the international markets. It means that the European practices and routines match better with the international requirements. Furthermore, the European flag vessels have the possibility to minimise their average wages due to the international manpower crew's composition, unlike the Canadian flag vessels. This requires the set-up of a European branch by Canadian carriers.

Scenario 3: The Montreal-Halifax route could become dominated by some European mega-carriers, such as Maersk and CMA-CGM or MSC. Indeed, the mega-carriers due to the tremendous economies of scale and the scope of their networks may capture a large part of the market shares. Such situation may represent a real threat to Canadian carriers and force them to face important economics barriers, which in extreme cases, may force them to leave the market. This applies mainly to containerized trades and therefore would threaten above all the sole Canadian operator on that market segment: Oceanex.

This study does not allow for any detailed forecast of CETA's impacts on Canadian flag coastal carriers. Yet it is useful to reaffirm some fundamentals:

- Market deregulation can definitely favour entry of new firms in coastal shipping markets. Yet it is a sector where non-regulatory barriers to enter market are high and therefore it is prone to concentration and oligopolistic industrial structures.
- CETA's limited and particular deregulation of Canadian cabotage will put pressure on Canadian carriers but predictions that European flag operators will automatically capture all freight activity on the Montreal Halifax-route seems oversimplified.

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