Perspective on Ship Acquisition in Canada

Introduction & Methodology

The Eastern Canadian domestic marine transportation industry is composed of very distinct fleets operated according to the specific realities of the regions within which they sail. Factors such as market dynamics, client industries, environmental and geographical conditions, extent of the surface transportation network and available marine infrastructure vary considerably from region to region (Pelletier & Alix, 2008). These fleets play a significant role in domestic and cross-border trades as well as support activities, notably to the offshore industry in the Atlantic region. Since the opening of the Seaway in 1959, until the mid-1980s, the Canadian fleet was built around the transportation requirements of large industrial groups and energy production needs. At the end of this period, Canadian shipyards launched their last ships and the government ended all direct subsidies for the construction of ships. In the context where the tariff barrier of 25% on the importations of ships is widely contested, this paper aims to bring further insight into ship acquisition strategies used by Eastern Canadian ship owners/operators in the past 20 years. How have ship operation and acquisition strategies evolved in the Canadian regulatory framework and in relation to the international competitive environment? What are the incidents resulting from constraints and what opportunities can be developed in respect to future needs and Canadian policy on shipping? Based on the Canadian Ship Registry System, the introduction of new units to the Eastern Canadian cargo carrying fleet is analysed in order to understand where owners/operators source their ships.

The first part of this paper presents the structural and political factors linked to the evolution of the Eastern Canadian fleet over two separate

periods; 1959-1985 and 1985-2006. The second part is dedicated to the presentation of the principal changes that occurred in the industry and leads to a discussion pertaining to some elements to take into consideration when it comes to shaking up Canada's shipping system to meet future needs.

Methodologically, the data used comes from the Canadian Ship Registry System (CSRS) which contains information pertaining to individual ships and particulars such as name, year built, type, physical and engine characteristics, builder, owner and authorised representative. This information was compiled in a spreadsheet containing a total of 213 ships. After this operation, each ship was categorised according to the year at which it entered the Canadian fleet. For virtually all ships built in Canada, this operation was quite straightforward and consisted essentially in allocating the year built to the introductory year. For foreign-built ships, the introductory year used corresponds to the year at which they were registered in Canada. Unless otherwise mentioned, the fleet analysed concerns only Eastern Canadian self-propelled cargo carrying vessels (bulkers, tankers and general cargos) of 1,000 gross tons (GT) and over which have sailed under the Canadian flag between 1987 and 2006 inclusively.

The Development of the Eastern Canadian Fleet – 1959 to 1985

Although the development of the Eastern Canadian shipping industry dates back much earlier in time, the opening of the Seaway in spring 1959 until the mid 1960s was a decisive period in the expansion and establishment of the modern fleet. With the new trading opportunities offered by the Seaway, Canadian operators significantly modernised their fleets to take advantage of available capacity in the locks.

To facilitate this modernisation, the Canadian Government introduced in 1961 direct subsidies to ship construction at a rate of 40%. This subsidy was progressively reduced by 1% every year until 1981[1] but some incentives remained until 1985 (Brooks, 2006). Before this, other incentives found in programs such as the *Canadian Vessel*

[1] Trebilock *et al.* 1990: 91 *in:* Brooks, 2006.

Construction Act of 1949 and the amendments made to it in 1957 (angel plan) are considered to have had a significant impact on fleet expansion[2]. By way of tax exemptions on the proceeds of the sale of ships for replacement and accelerated depreciation measures, ship owners/operators invested heavily in the fleet. The fact that the angel plan made these incentives available to non-shipping interests also gave large shippers an incentive to invest in vessels. According to the US General Accounting Office (1986), the angel plan enabled non-shipping interests to purchase ships which were subsequently chartered to operators. After having depreciated them over a 3-year period, ships were then sold to the operators. Citing Transport Canada registry information, the US General Accounting Office explains that between 1961 and 1966, 12 bulkers were thus transferred from non shipping interests to vessel operators after their third navigation season.

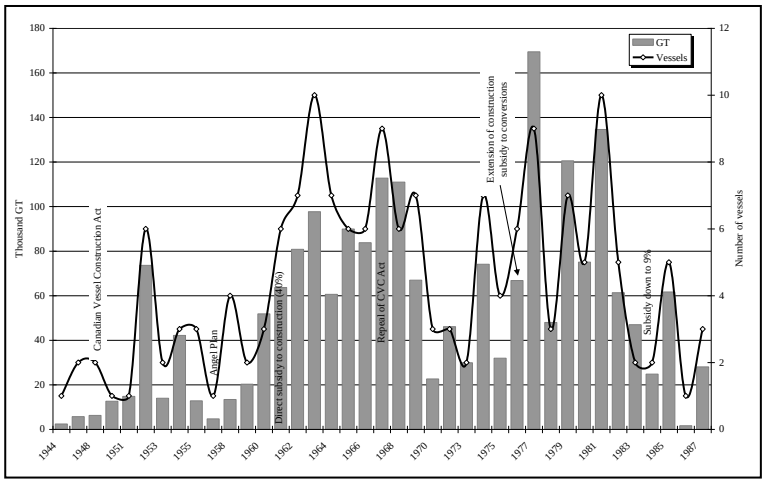
To summarize, combined with incentives, the necessity for the shipping industry to upgrade the fleet in order to benefit from the full economic potential of the new Seaway had a tremendous impact on the Canadian fleet. Gross tonnage (GT) figures of the Canadian Transportation Agency notably reveal that the Canadian fleet grew by 107% from 1959 to 1984 and reached 2.64 million GT. In the case of Great Lakes and Seaway operators represented by the Canadian Shipowners Association, a modern fleet of 137 units totalled 1.96 million GT in 1984[3].

CSRS data on the active fleet for 1987 was used in order to give an insight into the number of vessels that entered the Eastern Canadian fleet during these two decades of intensive ship acquisition. Figure 1 illustrates the 1987 fleet according to the year in which vessels entered Canadian registry by number of units and corresponding GT. It also presents implementation/repeal years for various Canadian subsidy programs. Although this figure only gives a partial view of real

[2] US General Accounting Office, 1986.
[3] *Source:* Canadian Shipowners Association *in:* T-Facts (http://www.tc.gc.ca/pol/fr/T-Facts3/main.htm)

additions to the fleet during the 1944-1987 period, it illustrates the dynamic nature of those years and the constant reshaping of the shipping industry.

Figure 1
Eastern Canadian Fleet Profile in 1987 by Ship Registry Year



Sources: CSRS, General Accounting Office (1986) and Brooks (2006)

At least 111 vessels totalling 1.43 million GT entered the Canadian fleet during the 1960s and 1970s. The GT figure represents nearly two thirds of the active fleet in 1987. By 1997, vessels built in the 1960s and 1970s still represented 67% of the active GT and by 2006 this proportion was 46%. Eastern Canadian ship owners/operators essentially resorted to the domestic shipbuilding industry for their requirements and governmental aid appears to have played a significant role in vessel acquisition decisions. From the implementation of the angel plan in 1958 until the repeal of the *Canadian Vessel Construction Act* in 1967, 56 Canadian-built ships entered the fleet. This was followed by a clear-cut reduction in capacity addition until 1976 when subsidies for the construction of ships were extended to conversions. Canadian ship owners/operators

appear to have immediately reacted to this new program by introducing 9 units in 1977 of which five were second-hand foreign-built vessels. Before the mid-1980s, very few foreign-built units had entered the Canadian fleet even if some measures enabled vessels to be imported without being subject to the 25% duty as was the case with vessels built in Commonwealth States[4].

The Development of the Eastern Canadian Fleet – 1985 to present

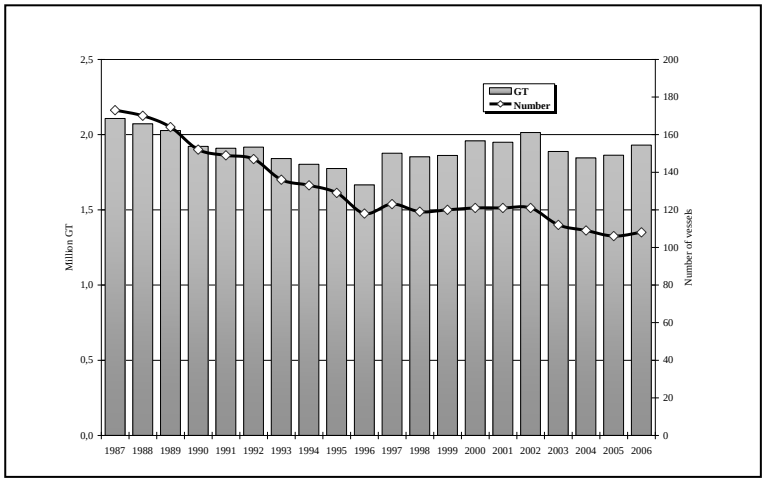
As governmental aid to ship construction steadily continued to decrease and to finally be abolished, owners/operators also virtually stopped acquiring vessels in Canadian yards in 1985 when the *Pineglen* and the *Atlantic Erie* were launched from Collingwood. With the exception of Canada Steamship Lines' (CSL) modernisation program, it then took 15 years before a containership, the *Kent Sprint*, was built in the Atlantic and briefly entered the Canadian registry. According to CSRS data, 44 vessels entered the Eastern Canadian fleet from 1987 to 2006. After the acquisition spree that took place until the mid-1980s, ten years passed before a first US-built selfunlaoder was added to the fleet in 1995 and it was not until 2000 that units regularly entered to replace decreasing capacity. Although CSL's fleet modernisation program that took place between 1998 and 2005 and by which new forebodies were installed on existing engine-room sections could be assimilated in the introduction of new vessels, CSRS data considers these vessels to be rebuilt existing units. In fact, the *CSL Niagara*, the *RT. HN. Paul Martin*, the *CSL Laurentien* and the *CSL Assiniboine* all have maintained the original official Transport Canada and International Maritime Organisation (IMO) numbers. In line with this observation, these vessels are thus considered here to be existing units even if their life expectancy has been considerably lengthened.

Figure 2 presents an overview of the Eastern Canadian fleet profile from 1987 to 2006. Although the total Eastern Canadian fleet appears to have remained relatively stable in GT terms and lost only 8% of its capacity over 20 years, very significant changes have taken place.

[4] Côté, 2008.

Analysis of the CSRS data underlying the figure reveals that the industry continually modernised its fleet with larger and more efficient vessels. The average GT notably grew by 6% for bulkers and 53% for general cargo ships while the tanker fleet has literally exploded with the introduction of shuttle tankers. The reduction in numbers is more apparent in the first decade as the remaining smaller units built in the 1950s and early 1960s were progressively sold/dismantled. With the departure of these ships, the industry gained in productivity and aligned itself with the declining volumes of the grain trades.

Figure 2
Eastern Canadian Fleet Profile
1987-2006



Source: CSRS

In the case of bulkers, fundamental changes took place in this market and in 2006, only 3 companies were left from the original owners/operators present at the end of the 1980s. With less grain to carry, many companies concentrating on this trade progressively left the shipping business. For example, Pioneer Shipping ceased its operations during the 1990s. Their vessels were under the

management of Misener Steamship and serviced the grain trades and port terminals held by Pioneer Shipping's parent company, James Richardson & Sons. Misener Steamships began its operations in 1914 and expanded its fleet to 34 ships to eventually cease operations in 1994. P & H Shipping (Division of: Parrish & Heimbecker Ltd.) and Paterson & Sons Limited are two other examples. P & H Shipping was established in 1982 and a large portion of the fleet capacity served the parent company's grain elevators. In summer 2001, CSL purchased the assets of P & H Shipping. In the case of Paterson, the Marine Division which notably provided transportation services to the Grain Division was active from 1915. In March 2002, CSL also purchased N.M. Paterson's shipping assets. The 1987-2006 period also witnessed various pooling agreements such as Seaway Bulk Carriers, Great Lakes Bulk Carriers and Seaway Self Unloaders which finally became Seaway Marine Transport in 2000. Demand reduction for specific trades, changes in industry structure and resource optimisation gained through common fleet deployment resulted in a progressive and steady loss of 31 units and of 474,000 GT.

The concentration of the Eastern Canadian shipping industry is in line with similar processes that have been observed in international markets, notably in liner shipping. Nonetheless, some companies such as Voyageur Marine Transport (VMT) managed to penetrate the industry in 2005 with the acquisition and upgrade of two laid-up gearless bulkers which had been serving as grain storage barges. They were positioned in dedicated niche markets. VMTs fleet was expanded in 2006 with the addition of another vessel which had been active in foreign trades for several years but was originally built for Canadian interests[5].

The Eastern Canadian tanker industry and fleet also underwent significant changes between 1987 and 2006. By 1996, the total GT of this fleet had reduced by 30% compared with 1987 figures. For various reasons ranging from bankruptcy to the simple alienation of

[5] In August 2007, two of VMTs vessels were sold to Lower Lakes Towing and the third was chartered to the same company.

transportation assets, many owners/operators such as Socanav, Imperial Oil and Enerchem all ceased their activities. Rigel Shipping, Petro-Nav and Alogoma Tankers progressively took over the operational and commercial activities of the Eastern Canadian tanker fleet which traditionally occupies the refined products distribution segment. At the end of the 1990s, the beginning of extraction activities in the Atlantic opened up a whole new market segment for tanker operators and the first shuttle tankers servicing the offshore petroleum industry entered. Although it could have been expected that existing Canadian tanker operators would have taken this opportunity to position themselves in this market that reached 16.5 million tonnes of crude oil shipped from the Grand Banks to Newfoundland and New Brunswick in 2003[6], it was not the case. This new segment of Canadian tanker market was essentially filled by a mix of foreign and Canadian experience/interests. Finally, in spite of the continuing reduction in lakers and the phasing-out of single hull tankers in the past 10 years, the addition of these vessels ranging between 58,000 and 81,000 GT had an immediate impact on the overall GT capacity of fleet.

Ship Acquisition Strategies

Put as simply as possible, it can be said that the ship acquisition process comes down to finding an asset which will enable a shipping company to obtain a satisfactory return on investment by answering to a specific transportation requirement defined in terms of price, level of service and quality. Until 1985, the previous discussion revealed that Eastern Canadian ship owners and operators were able to reach this objective by purchasing new capacity in Canadian yards. According to CSRS data, it is clear that this is no longer the case because only one out of the 44 vessels which entered the Canadian fleet in the past twenty years was built in a domestic yard. This being said, where precisely did Eastern Canadian ship owners source their vessels and what were their main characteristics?

[6] *Source:* Statistics Canada data. Note that the total amount of petroleum products (all types) carried in Canadian domestic trades in 2003 was of 26.4 million tonnes.

One of the first characteristics that the CSRS data reveal is that Eastern Canadian ship owners and operators have more often opted for buying used vessels rather than new units. In fact, nearly 7 out of 10 vessels that entered the fleet were second-hand tonnage. While explanations for this situation remain speculative, many assumptions can be made. Second-hand tonnage is usually less capital intensive than newbuilds and in trades such as dry and liquid bulks, there already exists a large international market for such capacity.

Eastern Canadian trading conditions nonetheless pose some restrictions that require a certain level of specialisation for the vessels that will enter the trades. It is thus interesting to note that amongst the 8 second-hand bulkers that entered the Eastern Canadian fleet recently, all of them were specifically built for Great Lakes trades. Moreover, five of them, the *Cuyahoga*, the *Saginaw*, the *Missisagi*, the *Michipicoten* and the *Voyageur Independent* were built in the United States and thus not subject to the 25% import duty because they were purchased according to the *Canada-US Trade Agreement.* In the case of the three other bulkers, the *Spruceglen*, the *Birchglen* and the *Voyageur Pioneer*, they were all built in Scotland in the early 1980s and were amongst the first specifically designed "salty lakers" capable of offering the best use of lock constraints as well as ocean-going capacity. Having already been operated on the Great Lakes with Canadian crews and under the Canadian flag, these ships were "duty-paid" before reintegrating the Eastern Canadian fleet and benefited from the *Customs and Excise Offshore Application Act*. These examples reveal that in the present regulatory and operational context, the Canadian shipping industry has most probably been able to source the least expensive vessels for their requirements. Considering the fact that the US Great Lakes fleet is also considerably ageing, this strategy certainly has its limits. In the case of the Scottish vessels, although they were amongst the first "salty lakers", they were certainly not the last ones to be built.

In the case of the 13 second-hand tankers that entered the Eastern Canadian fleet in the past 20 years, two were built in the US. Owners and operators nonetheless appear to prefer tankers previously operated

in Nordic conditions and thus reflecting Canadian navigation conditions. Half of these 13 tankers were built in Scandinavian yards and two other in Germany.

The development of the offshore industry in the Atlantic also generated a completely new practice in terms of ship acquisition for domestic use. The Atlantic offshore industry has managed to fill its needs for shuttle tankers by chartering on the international market vessels built specifically for the trades they are in. Although there does not exist a unique strategy, some ships are owned by international "marine midstream" suppliers (or their affiliates) and then long-term chartered to oil companies who depend on the owner (or a partnership between the owner and a Canadian manager) for the operation of the vessel. The fact that importing vessels into Canada implies the payment of a considerable duty seems to make it preferable to use long-term chartering agreements rather than short-term agreements because there is longer to obtain the return on the investment made in the duty. An example of this is the two shuttle tankers recently chartered by Husky Oil to service the *SeaRose* Floating Production, Storage and Offloading (FPSO) unit. The first to be delivered was flagged Canadian right away and was chartered for 10 years while the second was flagged on Norway's international register and chartered for 5 years[7]. The second vessel is apparently servicing the US East Coast but when the requirements are there, it can always apply for a temporary coasting trade licence for servicing Canadian destinations, as was done in 2007[8].

Until the implementation of offshore extraction activities, the Eastern Canadian shipping industry was evolving in a closed environment with its own cycles, constraints and advantages. For the first time in Canadian shipping history, the domestic industry has had to integrate itself in the global shipping market and adopt funding and operational strategies required in this capital intensive activity.

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[7] *Source:* Husky Oil, 2005, *Naming Ceremony for Husky Energy's First White Rose Shuttle Tanker.* http://www.huskyenergy.ca/news/newsrelease.asp?NewsReleaseID=93

[8] *Source:* http://www.cta-otc.gc.ca/rulings-decisions/decisions/2007/W/50-W-2007_f.html

Discussion

In its 2006 annual report, the CSA states that "[*t*]*here is an urgent need for renewal of a significant portion of the CSA fleet..."* and estimates "…*that up to $1 Billion in newbuilds will be required in the foreseeable future*".

In the context where:

- the bulker fleet averages 30 to 40 years[9];
- owners/operators are penalised by a protectionist duty;
- there has virtually not been any cargo carrying vessel built in Canada for domestic use since 1985;
- in the majority of cases, owners/operators depend on the international second-hand market for their capacity requirements, and;
- foreign experience/interests were required to match the requirements of the Atlantic offshore industry.

The present situation can reasonably raise questions on how the domestic shipping industry will meet future needs.

After many years of market share erosion in the transportation sector (Pelletier and Alix, 2006), favourable conditions are now in place for the Eastern Canadian shipping industry to expect a sustainable growth. Congestion in surface transportation networks, forecasts of growth in the demand for transportation services accompanied by the necessity to implement low carbon solutions for the carriage of goods make it reasonable to conclude that marine transportation needs should increase in the coming years (Comtois and Slack, 2005).

Promotional campaigns such as Highway H_2O, and other initiatives such as the television campaign in Québec certainly have the merit of boosting the shipping industry's image at the general public level but these efforts do not make new ships available to carry any eventual cargo. Because subsidies and incentives such as the ones in place

[9] CSA (2007)

before 1985 cannot realistically be expected to rehabilitate the Canadian fleet, novel solutions will have to be implemented and these will need drastic policy changes (*ECORYS Transport, 2005; USMMA, 2004; Commission Européenne, 2006).* When observing policy and operational strategies that have been implemented for a decade in Europe and how these measures have enabled the modernisation of the fluvial/river transport industry, such changes can definitively make the difference (Browning, 2005; Paquin and Alix, (2006), Alix and Pelletier (2006)).

The repeal of the 25% duty demanded by the Canadian Shipowners Association is just one of the actions that have to be taken in order to revitalise the fleet. With investments reaching $1 Billion in the foreseeable future, how will the remaining historic Canadian owners/operators manage to fund their capacity requirements? In the past 20 years, they have essentially proceeded by acquisition of new tankers for emerging markets or second-hand tonnage for existing trades. With seemingly positive results in the development of the shuttle tanker fleet in the Atlantic, facilitating access to the international charter market for Canadian operators and to non-shipping interests can certainly be envisaged. Accessing foreign experience/interests/capital is also an idea that has been making its way in the Atlantic for many years now with companies like Rigel in Shediak, Norbulk in Bayside and Canship-Ugland in Saint John's as well as the Washington Marine Group and Smit International on the Pacific coast. As it was the case with the so-called "angel plan" and similar to what is asked by the Shipbuilding Association of Canada, implementing flow-through provisions to the accelerated capital cost allowance for non-shipping interests certainly has the potential to help finance future ship requirements.

For many years now, Canadian owners/operators have also resorted to the use of dual-flag vessels. Groupe Desgagnés for example uses this strategy for part of its general cargo fleet. Other companies such as Atlantic Towing, CSL and Secunda International also have vessels which are occasionally transferred from Canadian flag to another registry when favourable conditions make this choice financially

profitable. As well as reducing the risk of depending exclusively on domestic trades, these vessels provide operational flexibility to their owners. Policies facilitating dual-flag registry can also become options which have the potential of developing the fleet.

Canada's engagement in free trade agreements has impacts on where new vessels added to the Canadian fleet will be constructed and this has certainly been the case in the past when some Commonwealth vessels were exempt from the 25% duty.

In recent years, the free trade agreement signed with Chile resulted in the abolition of the 25% duty on imported vessels. In 2004 and 2005, two offshore tugs and one harbour tug were imported from Chile. These were the first ever new vessels imported from Chile. As stated by the Canadian Shipowners Association (2005), free trade negotiations with South Korea and the eventual repeal of the 25% duty on vessels imported from this country will potentially have a considerable impact. It is also reasonable to think that this will also impact the origin of new capacity added to the Canadian fleet. Other negotiations with the European Union would also bring fundamental changes in the accessibility of new tonnage for Canadian ship owners and operators. The free trade negotiations can also impact investment decisions and even delay replacement decisions. For example, if a ship owner has already determined that one of his vessels has to be replaced, the uncertainties related to the parameters of application of this agreement will certainly encourage him to wait and see the results of the negotiations before initiating investment. Before investing in a $ 40 million new building which would generate an import duty of $ 10 million, it is certainly a good precaution to wait a year or two before ordering.

Conclusion

The Canadian shipping industry has evolved in a closed environment, protected from external competition. Various federal subsidies and incentives to shippers, ship owners/operators and yards appear to have created excellent conditions for investment in shipping assets until the mid-1980s. In the same way as for singular subspecies found on

isolated islands, this resulted in a highly specialised and efficient fleet. Paradoxically, shipping is fundamentally a global industry but as the Canadian economy entered the globalisation process, the Canadian shipping industry remained fundamentally domestic. Being isolated from external market conditions in an international industry can understandably pose some problems when the inputs to the production of a given service must be sourced in the external market.

This paper has illustrated that after having built an efficient and modern domestic fleet, the Eastern Canadian shipping industry was literally able to go through two decades without serious fleet renewal needs. Efficiency was gained through consolidation, innovation and never-before-seen strategies to prolong the lifespan of assets. Obsolete units which had been laid-up for many years and destined for dismantling were resurrected and came back to trading. This finally resulted in a situation where the Eastern Canadian shipping industry is now facing enormous investment requirements if it wants to meet future needs. According to the shipping industry, in the current environment, this will be difficult to attain.

While the globalisation process continues, the Canadian shipping industry will inevitably have to find ways to integrate the international shipping market if it wants to offer the best service/quality mix to shippers and consequently insure its future. It has to be proactive and rebuild itself in order to become efficient and a true solution for shippers. Should the Canadian shipping industry open itself further to foreign ownership and competition? Is there another way out of the present situation? One thing remains certain, status quo is not an option and all possibilities need to be discussed.

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