Canadian Cruise Ship Industry

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I. Introduction

Cruising is the fastest growing vacation category in North America. It contributes to the Canadian economy and it has special significance to some provinces. Kevin Little from the Vancouver Port Authority stated "The cruise sector is an essential component of the B.C. economy and continues to hold promise for future job creation and economic renewal in our province."[1] Cheryl Bidgood of the Halifax Port Authority stated "Cruise is a Halifax success story ... Halifax has become the marquee port-of-call in the Atlantic region."[2]

The focus of this paper is to review the cruise ship industry in Canada. In Part II, the structure of the industry is examined namely its significance, growth, areas of operation and firms in the industry. In Part III, the contribution of the industry to the Canadian economy is examined. In Part IV, regulations affecting the cruise ship industry will be noted and competition faced from US ship cruise industry will be examined. In Parts V and VI, the merger between two cruise lines, the marketing characteristics of the ship cruise industry and the future of the Canadian cruise industry are reviewed. Finally, a few concluding remarks are made.

II. The structure of the Cruise Ship Industry in Canada

There are two types of ship cruises: 1) river cruises and 2) extended cruises. The latter is divided into 'luxury cruises' and 'pocket cruises' distinguished by vessel capacity of more or less than 150 passengers. River cruises (i.e., less than 24 hour cruises of habours, whale-watching, etc.) are offered by local operators and extended cruises by foreign-based companies. U.S. cruise companies dominate the pocket cruise industry and foreign non-US cruise companies dominate the luxury cruise industry.[3]

a) The significance of the cruise ship industry

The significance of the cruise ship industry can be seen in the following magnitudes: passengers traveling on cruises, direct expenditures

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* *The views expressed here are those of the authors and are not purported to be those of the Commissioner or the Competition Bureau, Industry Canada.*

on cruises and direct employment in the cruise industry.

Passengers: In 2004, as many as 1.38million passengers went on international ship cruises compared to .48million passengers in 1990. This is shown in Table 1. The above statistics does not include cruise ship traffic at the port of Victoria and other ports which would increase the above number of passengers by 15% to 20% (i.e., approximately 1.59million to 1.66 million).[4]

Table 1 - International Cruise Ship Traffic at Major Canadian Ports 1990-2004 (Passenger)

Year	Major Canadian Ports	5 Year Change (%)
1990	480, 146	
1995	705, 572	46.9
2000	1, 354, 767	92.01
2002	1, 457, 821	7.6
2004	1, 382, 598	187.9 (1990-2002)

Source: Compiled from various Transport Canada Annual Reports.

Expenditures: In 2003, direct spending by the cruise ship industry was estimated to be $965 million.[5] The major components of it were expenditures by cruise lines; passengers; and crew.

Employment: In 2003, the employment in the cruise ship industry accounted for 8, 696 full and part time jobs. Wages and salaries were estimated to be $294 million. [6]

The total contribution of the ship cruise industry to the economy is examined in greater detail in section II.

b) The cruise ship industry area of operation in Canada

There are two major areas of international cruise ship operation in Canada at the present time: 1) Western Canada and 2) Eastern Canada. In Western Canada the two major routes are: i. the Inside Passage terminating before the Glacier Bay, and ii. the Inside Passage which goes into the Gulf of Alaska. In Eastern Canada the three major routes are: i. the Eastern Seaboard and St. Lawrence River up to Montreal; ii. the Montreal, St.-Pierre and Miquelon and Quebec City; and iii. the New York to Saint John and Halifax. Vancouver is primarily a port of embarkation and disembarkation. Halifax and Saint John are primarily destinations along the Canada/New England cruise itineraries that originate in the northeastern United States. The areas of international cruise ship operation differ from the areas of operation of pocket cruises. The Western Canada region is considered the third popular cruise area of operation after the Carribean and Europe.

c) Growth of the cruise ship industry

The international cruise ship industry has witnessed a remarkable overall growth since the 1990s averaging an annual increase of 13.4%. This is shown in Table 2 for passengers. For each of the major ports: Vancouver, Halifax, Saint John, Quebec City and Montreal, the overall growth is 139%, 768%, 7830%, 78% and 30% for the period 1990-2004. This represents an annual increase of 9.9%, 54.9%, 559%, 5.6% and 2.1.9% for each of the 14 years. It should be noted that these statistics exclude an important centre for cruises, the Port of Victoria.[7] The dramatic and steady increase has also been commented on by Statistics Canada. It stated "... [cruises] are becoming the new highways for

Table 2 -International Cruise Ship Traffic at Major Canadian Ports 1990-2004 (Passenger)

Year	Vancouver	Halifax	Saint John	Québec City	Montreal
1990	388, 323	24, 423	1, 748	34, 783	30, 869
1995	596, 724	30, 257	12, 226	38, 981	27, 384
2000	1, 053, 989	138, 313	101, 410	35, 855	25, 200
2002	1, 125, 252	157, 036	71, 168	66, 365	38, 000
2004	929, 976	212, 000	138, 622	62, 000	40,000

Source: Transport Canada Annual Report, Transport Canada, TP 13198E, (Various Issues).

international tourism traffic to Canada – cruise ships sailing the Atlantic and Pacific Oceans are bringing international visitors to Canada in unprecedented numbers. ...The continued expansion and innovation by cruise lines coupled with a broadening consumer base should bode well for the development of cruise travel to Canada."[8]

d) Firms in the Canadian cruise ship industry

In 2004, the major cruise line operators in Western Canada were:

Table 3 - International Cruise Ship Passenger (Voyages) 2004

Cruise Lines	Vancouver	Halifax	Saint John	Montreal
Holland America Line	86 (29.55%)	27 (21.42%)	9 (15.25%)	8 (22.22%)
Carnival Cruise Line		23 (18.28%)	13 (22.03%)	
RCCL	48 (16.49%)	20 (15.87%)	19 (32.20%)	
Princess Cruises	45(15.46%)	12 (9.52%)	12 (20.34 %)	
Norwegian Cruise Line	26 (8.9%)			
Lindos Maritime				6 (16.7%)
Radisson SSC				4 (11.11%
Clipper Cruise				4 (11.11%)
TOTAL CRUISES (Voyages)	**291**	**126**	**59**	**36**

Source: Compiled from Schedules of Cruise Ships advertised by Ports.

Holland America Line, Royal Carribean Cruise Lines and Princess Cruises. In Eastern Canada, the major cruise line operators were: Holland America Line, Carnival Cruise Line, and Royal Carribean Cruise Lines (Halifax); Royal Carribean Cruise Lines, Carnival Cruise Line and Princess Cruises (Saint John); and Holland America Line, Lindos Maritime and Radisson SSC (Montreal). The market share of the largest four companies ranges from 60% to 90%. This is shown in Table 3. It should be noted that the indicator of voyages is a reasonable measure for size, though occasionally it may be misleading. For example, if one cruise ship is four times the size of another cruise ship, one voyage by the large ship is equivalent to four voyages of the smaller ship (eg. Montreal). The ranking of the importance of cruise companies over a ten year period has changed slightly. In 1994, the major cruise line operators (based on a measure of voyages and capacity) in Western Canada were: Princess Cruises and Holland America Line. In Eastern Canada, the major cruise line operators were: Carnival Cruise Line and Regency Cruises (Halifax-Saint John route); and Regency Cruise and OdessAmerica Cruises (Quebec City-Montreal route).

e) World cruise ship industry

The world cruise ship industry in 2004 is estimated to be approximately 13million (i.e. m) passengers. The major ten world cruise markets account for 95% of capacity. These are as follows: 1) Caribbean/ Bahamas (50%); 2) Mediterranean (15%); 3) Alaska (6.7%); 4) Mexican Riviera (6.6%); 5) Western and Northern Europe (5%); 6) Asia/Pacific (5%); 7) Hawaii (1.9%); 8) Bermuda (1.8%); 9) East Coast of North America (1.6%); and 10) Trans-Atlantic (1.3%).

Approximately sixty-nine percent of these passengers were carried under the following cruise line brands in 2003: Carnival Cruise Lines 2.7m (20.8%), Royal Caribbean International 2.4m (18.5%), Princess Cruises 1.1m (8.5%), Norwegian Cruise Line .75m (5.8%); Holland America Line .69m (5.3%); Celebrity Cruises .637m (4.9%); and Costa Crociere .625m (4.8%). Ownership of some of these cruise lines brands are by the same company, as a result the market shares of the largest companies are much higher. Therefore, the three largest cruise companies: Carnival Corporation, Royal Caribbean Cruises and the Star Group (i.e., Norwegian Cruise) control about 80% of the worldwide cruise market.

f) Canadian market shares and US market shares

The market shares of the cruise ship industry for 2004 are presented in Table 4. It covers all cruises that include a United States port of call with certain exceptions (such as foreign departure ports, round-the-world cruise and segments that do not begin or end in the U.S.) and is based on a coverage of seventeen cruise lines.

Table 4 - Cruise Passenger Statistics 2004 ('000)*

West Coast Ports	No. of Cruises	No. of Passengers	East-South Coast Ports	No. of Cruises	No. of Passengers
Vancouver	241 (22.35)	436.2 (20.2%)	Miami	641 (20.8%)	1,682.8 (24.3%)
Los Angeles	193 (17.9%)	434.4 (20.16%)	Ft. Lauderdale	637 (20.7%)	1.237.2 (17.9%)
Long Beach	166 (15.4%)	401.3 (18.6%)	Port Canaveral	466 (15.1%)	1,230.1 (17.8%)
Seattle	135 (12.5%)	290.9 (13.5%)	San Juan	322 (10.5%)	676.6 (9.8%)
San Diego	104 (9.6%)	172.6 (8.0%)	New York	252 (8.2%)	546.7 (7.9%)
Honolulu	90 (8.3%)	170.9 (7.9%)	Galveston	208 (6.8%)	433.4 (6.3%)
Whittier	42 (3.9%)	88.3 (4.1%)	Tampa	198 (6.4%)	399.2 (5.8%)
San Francisco	54 (5.0%)	84.9 (3.9%)	New Orleans	178 (5.8%)	395.8 (5.7%)
Seward	53 (4.9%)	75.0 (3.5%)	Jacksonville	65 (2.1%)	113.7 (1.6%)
			Baltimore	55 (1.8%)	104.6 (1.5%)
			Houston	55(1.8%)	90.5 (1.3%)
Total	1078 (100%)	2154.5 (100.%)		3077 (100%)	6910.6 (100.0%)

Source: MARAD (www.marad.dot.gov). * All other ports are excluded which accounts for 3.3% of passengers.

The statistics have been presented by West Coast and East/South coast ports. The market shares are calculated for the two coasts based on the assumption that for the cruise industry, ports on the West coast do not compete with ports on the east/south coast of North America. The West coast market shares reveal that Vancouver is the leading port with 22.3% of all west coast cruises or 20.2% of cruise passengers. The second port is Los Angeles with 17.9% of all west coast cruises or 20.16% of cruise passengers. However, it is generally believed that Seattle provides more competition to Vancouver than Los Angeles. The East coast market shares indicate that Miami is the leading port for cruises with 20.8% of all East coast cruises or 24.3% of cruise passengers with Fort Lauderdale the second. Canadian ports that offer cruises on the East coast do not appear in the Table as they do not include a US port of call. If they were included, it would account for a market share of about 6% to 7%.

In sum, the cruise ship industry has witnessed remarkable overall growth since the 1990s. In Canada, the two major areas of cruise operation are Western Canada and Eastern Canada, which is dominated by four companies having a market share of 60% to 90%. Vancouver is the leading port for cruises in Western Canada followed by Los Angeles.

III. Contribution of the Industry to the Canadian Economy [9]

The cruise ship industry has a direct economic and indirect economic impact on the Canadian economy. The significance of this impact is not even across all provinces having the greatest impact on British Columbia, Nova Scotia and New Brunswick, all with a significant coastline.

a) Direct economic impact

The direct economic impacts of the cruise ship industry in Canada in 2003 were on: spending; wages and salaries; and employment. The magnitude of these variables shown in table 5 are: $965 million; $294 million; and 8,696 full and part time jobs. The first (i.e., spending) is a sum of expenditures by cruise lines; passengers; and crew. Their share of the total is 64%; 31%; and 5%.

Table 5 - Statistics on direct economic impact in the ship cruise industry (2003)

	Canada	British Columbia	Quebec	Atlantic Canada	Rest of Canada
Passenger Traffic	1, 553, 289	1, 122, 211	92, 995	338, 083	NA
Direct Spending ($ million)	965	660	71.3	67.5	166.2
Wages and Salaries ($ million)	294	197	22.1	16.1	58.8
Indirect Business and Income Taxes ($ million)	91	63	7	7.7	13.3
Employment	8, 696	6, 013	667	530	1, 486

Source: BREA October 2004, p. 3.

The direct impact by province/region is also shown in table 5. British Columbia benefits the most where the share of direct spending is 68% followed by Quebec with 7% and Atlantic Canada with 7%.

b) Indirect economic impact

The indirect economic impacts of the cruise ship industry in Canada in 2003 were on: spending; wages and salaries; and employment. The magnitude of these variables shown in table 6 are: $886 million; $245 million; and 6,266 full and part time jobs. The first (i.e., spending) is a sum of expenditures in the goods producing sector; and service producing sector. Their share of the total is 38.8% and 61.2%.

The impact by province/region is also shown in table 6. British Columbia benefits the most where the share of direct spending is 65.6% followed by Quebec with 7.1% and Atlantic Canada with 7.1%.

Table 6 - Statistics on indirect economic impact in the ship cruise industry (2003)

	Canada	British Columbia	Quebec	Atlantic Canada	Rest of Canada
Direct Spending ($ million)	886	581	62.9	62.7	179.4
Wages and Salaries ($ million)	245	177	18.2	32.4	33.3
Indirect Business and Income Taxes ($ million)	91	63	7.5	5.7	14.8
Employment	6, 266	4, 387	511	474	854

Source: Calculated from BREA October 2004, p. 3.

In sum, the total economic impact is a sum of the direct and indirect economic impacts. The industry generated $1.8 billion expenditures, $539 million in wages and salaries, 14,922 in full and part-time jobs (or the equivalent of 9,738 full time jobs) and $182 million revenue to the government.[10] The cruise industry is particularly important to the Pacific and Atlantic regions.

IV. Regulations Affecting the Canadian Cruise Ship Industry and Competition Faced from US Cruise Ships

Certain aspects of economic regulation will be examined in greater length though it should be noted that other aspects of regulation are also important.

a) Canadian regulations affecting the cruise ship industry in Canada

The *Canadian Coasting Trade Act* - 1. Does not permit foreign ships without a licence to embark passengers at a Canadian port on a 'voyage to nowhere' (eg. Montreal to Montreal). It would require a licence and no intermediate stops are permitted. 2. Foreign ships may cruise between Canadian and foreign or US ports without a licence, including temporary stops depending on whether the port of origin is from a lake or river. a) In case of cruises from a lake or river port, the cruises may not disembark any passengers at an in-transit Canadian port and passengers cannot be returned to any Canadian port.[11] b) In case of cruises not from a lake or river port or from a Canadian port on the St. Lawrence River northeast of the St. Lambert locks, the cruises may disembark any passengers at an in-transit Canadian port but only temporarily and must return them by the vessel to the port of embarkation.[12] 3. Foreign ships without a licence may travel to and from a Canadian port on the St. Lawrence River northeast of St. Lambert or a port not on a river or lake, provided they make a call at a foreign or US port.[13] In addition, the situation described in 2b above also holds here.

There are no regulations affecting route licencing, frequency of cruises, filing of prices for cruises or approval of these prices. There are laws (consumer protection) affecting the sale of these cruises by travel agents and wholesalers such as the Ontario *Travel Industry Act, 2002.* Regulations also exist for gaming operations. International cruise lines cannot operate their on-board casinos until five nautical miles from a Canadian port of call. The laws of general application such as the competition laws, custom and immigration laws continue to apply. Besides the above regulations affecting coastwise trade there are regulations affecting operations (with regard to hiring of crew), safety and insurance.

b) U.S. regulations affecting the cruise ship industry in the US

The *US Passenger Services Act* - 1. Permits foreign ships to embark passengers at a US port on a 'voyage to nowhere'. Such a voyage cannot include any stops, even temporarily, at another US port.[14] However, an itinerary that includes a foreign port call with embarkation and disembarkation in the same US port is permitted though this does not fall under the meaning of 'voyage to nowhere'. 2. Foreign ships may cruise between US and Canadian ports, including temporary stops at additional US ports (passengers that go must return).[15] Foreign ships may travel from a US port to a final destination of another US port as long as the cruise includes travel to a distant foreign port.[16] Customs regulations provide a procedure whereby an interested party may request in advance a ruling whether a certain itinerary meets the requirements of US law.

c) Comparison of Canadian and US legislation

The *US Passenger Services Act* prohibits foreign-flag vessels from carrying passengers between US ports (i.e., embarking passengers at one US port and disembarking them at another). In 1994, US Representative Jolene Unsoeld introduced a bill in Congress to modify this cabotage provision if vessels are built in the US. The bill was stalled and later Ms. Unsoeld was defeated in her bid for re-election. Before 1999, the growth of the cruise industry on the east coast and Great Lakes was inhibited by laws restricting the operation of gaming facilities in Canadian waters. It also provided a competitive edge to states in the US that permitted it. "In March 1999, amendments to Canada's Criminal Code came into effect, easing restrictions on casino gambling aboard cruise ships. International cruise lines are now able to operate their on-board casinos until they are five nautical miles from a Canadian port of call. Previously, vessels had to close casinos as soon as they reached Canadian territorial waters." [17]

" .. On small vessels the Canadian standards are more stringent, particularly with respect to lifesaving equipment and fire protection. US vessels which call at Canadian ports are not subject to the same standards, which translates into an advantage of lowering operating costs."[18]

d) Do the Canadian and US ship cruises compete?

One can begin this exercise by assuming that the Western North American cruise market (i.e. Vancouver vs. Seattle) and Eastern North American cruise market (Halifax-Montreal vs. New York)are treated as separate markets.[19] Within these broad markets, cruises compete if the services that they offer are substitutable and if the price of these services and the markets that they serve are comparable. In other words, is there direct evidence (i.e., statistical evidence of buyer price sensitivity and anecdotal evidence); and indirect evidence (i.e., practical indicia, such as functional interchangeability and industry views/behaviour)?[20] Indicators of statistical evidence are price correlations, price similarity, elasticity of demand, etc. Indicators of functional interchangeability of service in the case of ports depend upon: *natural endowment factors* (i.e., tourist attractions); *infrastructure factors* (i.e., docks and air port or bus connections to cruise ports); *human factors* (i.e., labour harmony, productivity and legislative environment); and *locational factors* (i.e., distance from major cruise ports, number of cruises and distance from markets being served).

Regarding statistical evidence, in a recent investigation, the Federal Trade Commission found that short run elasticities for ship cruises of different cruise lines from the same port were greater than 2.[21] This implies that these services are substitutable (since the elasticity is greater than 1, the demand for ship cruises is relatively elastic). This means that cruises from the Vancouver or Seattle ports are substitutes if prices of Canadian and US cruises per day to the same destination are the same and if transportation costs to either port are negligible or absorbed by the cruise lines. This is generally true for the Vancouver/Seattle market, implying that ship cruises from these ports are substitutes.

Regarding functional interchangeability, ship cruise lines in Vancouver and Seattle have access to the same tourist attractions such as Vancouver, Victoria, Nanaimo, the inside passage or the glacier route, Prince Rupert, Ketchikan, Sitka, Juneau, Skagway and Glacier Bay (i.e., *natural endowment factors*) though US customs may prevent Canadians from embarking at US ports without proper documentation. Cruise ships from Vancouver and Seattle face similar *infrastructure factors* with Vancouver having a slight advantage. Vancouver has five cruise berths (three at Canada Place and two at Ballantyne Pier) and Seattle has two (at Terminal 30). Both have ample parking spaces and excellent connections to international airports. Cruise ships from Vancouver and Seattle face similar *human factors* (i.e., labour harmony, productivity and legislative environment); and *locational factors* (i.e., distance from major cruise ports, number of cruises and distance from markets being served).

Regarding industry views/behaviour, the industry believes that at least from some port cruises are competitive. Captain Gordon Houston, President and CEO, Vancouver Port Authority states: "We face stiff competition from our U.S. competitors, who are aggressively going after our business. To date, this region has lost $150 million in economic benefits because of lost business to Seattle."[22] "Ultimately, it's about being competitive, ... "We can't afford to stand still and rest on our laurels in British Columbia. We must continue to develop new cruise capacity, new itineraries and new experiences to develop and diversify our sector."[23] Similar views were provided by Vancouver Port Authority senior vice-president business development, Kevin Little, who indicated that "We should be concerned, our seven-day round-trip business is very exposed, ... Seattle's growth as an Alaska base since 1999 has diverted $150 million in business away from Vancouver and officials concede that further erosion is possible."[24] The same sentiments were voiced by Industry officials who indicated that "Seattle's rapid growth is partly at Vancouver's expense.[25]

In sum, a review of the regulations in the cruise industry do not indicate that Canadian regulations affecting the industry place them at a competitive disadvantage to the US cruise ship industry nor have their been any complaints to that effect. The evidence also suggests that ship cruises from the ports of Seattle and Vancouver are competitive as they are considered to be substitutable.

V. The Merger between Carnival Corporation and P&O Princess and Marketing Characteristics of the Ship Cruise Industry.[26]

a) The merger - antitrust review

The likely effect of this merger was considered under unilateral effects analysis and co-ordinated effects analysis by the antitrust authorities in the US.[27] The Federal Trade Commission (i.e., FTC) findings that the estimated demand elasticities were greater than two and a substantial number of ships would be needed to achieve a significant price increase, led to a concentration on co-ordinated effects analysis.[28]

The incentives for co-ordinated effects or collusive behaviour are most likely to occur under the following conditions: a. high level of concentration; b. homogeneous products; c. high entry barriers; and d. sellers are able to accurately monitor each other's behaviour in the market. In support of collusive effects of mergers on incentives to collude various theories were considered by the FTC (*Small Numbers Theory*, *Price Discrimination Theories*, *Capacity Theories* and *Maverick theory*).

Small Numbers Theory: According to this theory, the fewer the number of competitors or a reduction in the number of competitors the greater is the likelihood that the results predicted by theory [transition from competition (large number of producers) to monopoly (one producer)] will hold. For instance, a reduction in number of competitors will cause prices to go up, etc.

To test for this theory, the relationship between measures of concentration or presence of particular competitors and measures of price were undertaken. The FTC did not find any credible relationship to indicate that this theory was applicable.

Price Discrimination Theories: These theories indicate that the possibility (i.e., consumers must have different elasticities of demand), the profitability (i.e., arbitrage must not be possible), and the potentiality (i.e., power to set price and separate consumers) for a firm to practice price discrimination must be there.[29] If it occurs, it indicates a high level of concentration and barriers to entry, suggesting increased potential for collusive behaviour.

To test for this theory, evidence was searched for the existence of effective price discrimination **by cabin type** or **time of booking** or **relationship of 'early' and 'later' prices** to learn if coordination was possible. First, the transaction data by cabin (category and type) indicate that there is a substantial difference between the price of an inside vs. an outside cabin. The outside and leading outside cabins are much higher priced than their inside counterparts. Second, the timing of booking displays variability in booking patterns indicating that there was no coordination of timing of discounts. Third, the relationship between 'early' and 'later' transaction prices paid by passengers were tabulated for consecutive sailings for one ship for category 1 cabins, for identical sailings in three years for category 1 cabins, and for all cabins for all cruises. The first two reveal considerable variability and the third reveals that there is a systematic relationship between 'early' and 'later' transaction prices paid by passengers. Given these findings, it was not possible to draw any conclusion whether coordination could be possible because of price discrimination.

Capacity Theories: Traditionally, the potential for collusive behaviour depends on the ability of a firm to expand its output. If a firm is capacity constrained, its potential for collusive behaviour is increased as its capability of cheating is limited. If price was to be affected, capacity has to be substantially affected. In other words, the traditional view suggests a negative correlation between collusion and excess capacity.[30]

To test for this theory, the capability of firms increasing their capacity was examined. The FTC noted that ships to be delivered in next three to four years equal a very substantial increment to current capacity. This also applies to fringe competitors. This would suggest that the conditions required for a collusive agreement are unlikely to be strong.

Maverick Theory: This theory basically advances the notion that the elimination of a vigorous and effective firm through a merger could prevent or lessen competition to some degree as the firm makes an important contribution to a higher level of competition.

To test for this theory, information on list price announcements were gathered and analyzed to determine who were the leaders and whether competitors followed. The lack of consistency of any pattern led to the conclusion that there was no obvious maverick.

The ultimate conclusion the FTC came to was that the pricing was so unpredictable and unsystematic that co-ordination on pricing would be difficult, if not impossible. Therefore, the FTC allowed the merger between Carnival Corporation (Carnival Cruise Lines) and P&O Princess Cruises (Princess Cruises) even though it significantly elevated the concentration levels in the industries, reducing the effective number of competitors to two major players - Carnival and Royal Carribean Cruises.

b) Marketing characteristics of the ship cruise industry

A review of this case revealed a number of marketing characteristics of the ship cruise industry in the US. These are briefly described, since they are also likely to hold for Canadian shipping cruises.

Relationship between 'early' and 'later transaction prices: An examination of the marketing practices in the ship cruise industry reveals that there is a systematic relationship between 'early' and 'later' transaction prices paid by passengers for all cabins for all cruises. For 82% of the sailings, the prices are lower than the average prices for sales before 120 days of the sailing date; and for 18% of the sailings, the prices are higher than the average prices for sales within 120 days of the sailing date.

Variations in pricing and booking across sailings of the same ship: Variations in pricing and booking across sailings of the same ship, on the same itinerary for four consecutive sailings were examined. This was done by calculating the average price paid for a cabin category (30 days before sailing) and number of cabins booked. It was found that there was no substantial variation in pricing (only 8 of the 56 observations deviate from the trend line significantly).

Relationship of pricing over the booking cycle for head-to-head cruises: Transaction data on prices (for each 30 day period before sailing for a cabin category) paid by four competing ships that sailed from the same port in the same week with a similar itinerary were examined. The examination reveals that there is a substantial variation in pricing of different ships over the 13 month period. The difference was the largest in the seventh month. A large portion of the bookings were concentrated in the first two months followed by the 5th, 4th and 3rd months.

In sum, the FTC allowed the merger between Carnival Corporation and P&O Princess as various theories to indicate the potential for co-ordinated or collusive action were not successful even though the merger significantly elevated the concentration levels. Further, it revealed a number of marketing characteristics of the cruise ship industry.

VI. The Future of the Ship Cruise Industry in Canada

A bright future for the cruise ship industry is suggested by two factors: prediction based on past extrapolation; and initiatives by ports.

Prediction based on past extrapolation: The cruise industry has to date been a vital contributor to the economies of Vancouver, Victoria, Halifax and Saint John. Extrapolation based on the past fifteen years would suggest continued growth in this industry. There has also been an increasing demand for leisure activities as the Canadian population matures.

Initiatives by ports: First, ports have increased their investment in infrastructure. Second, plans have been put into motion to stimulate demand. Vancouver put into motion plans to promote demand and offset increased competition from the Port of Seattle. The BC Cruise Initiative was set up in 2002 and considered strategies relating to marketing, infrastructure and capacity and regulatory requirements. In 2003-2004, it undertook projects in four areas: communications, marketing, governance and business case competitive analysis. A prime outcome of this Initiative has been the development of a BC branded cruise product created to offer travellers a “BC experience” to satisfy the expectations of foreign travellers with a particular and unique experience.[31] At the start of 2005, the Vancouver Port Authority with the International Airport Authority launched the ‘US Direct’ program for American Cruise ship passengers aimed at: streamlining passenger processing from airport to cruise terminal without clearing customs and reducing transit times.

Victoria has undertaken a sustained campaign to attract larger cruise ships and its success appears nothing short of phenomenal. Its involvement in the BC Cruise Initiative has helped it to develop Canada’s Inside Passage, a distinctive cruise destination. It has opened Ogden Point Cruise Ship terminal and the increase in traffic could result in the opening of a fourth berth.

Halifax has in 2004 expanded a fully-operational cruise pavillion; built a new gangway; and undertook significant investment in fendering and bollards to handle the world’s largest vessels. It has also enhanced security by developing plans and services such as the Cruise Ship Facility Plan, On-site Halifax Regional Police, New Public Restriction Zones and Co-ordination (through the Cruise Ship Coordinator).

In sum, extrapolation based on the past and the pursuit of proactive solutions to operate in an increasingly competitive market together with the increasing demand for leisure activities and investment in infrastructure suggest bright prospects for the industry. As stated in the *Cruise Industry News* “Without a doubt, the vast majority of stateside and Canadian ports ... are finding that business is booming - and most predict that it’s only going to keep getting better as the industry continues to crank out ever-larger ships and create itineraries that continue to excite and allure an ever-more sophisticated passenger."[32]

VII. Conclusion

The ship cruise industry is a relatively new dynamic industry. It has witnessed remarkable overall growth since the 1990s averaging an annual increase of 13.4 percent. The cruise ship industry has an impact on: spending; wages and salaries; and employment. Its impact on the service producing sector is more significant than the goods producing sector. It is a vital contributor to the economies of British Columbia and the Atlantic provinces.

In Canada, the cruise line industry is dominated by four companies: Holland America Line, Royal Carribean Cruise Lines, Princess Cruises and Carnival Cruise Line. These four companies have a market share of 60% to 90%. An examination of market shares on the west coast of Canada and the US indicates that Vancouver is the leading port for cruises closely followed by Los Angeles. The industry appears to be very competitive on price, costs, quality, capacity utilization, deployment and expansion. The main driver of this competitive activity is industry growth. Cruises from Vancouver and Seattle are competitive as they are considered to be substitutable. An examination of industry views on regulations pertaining to cruises from Canada and US do not indicate that US regulations provide the US cruise industry with a competitive edge. However, it has been pointed out in a general way that unless changes are made to the *Canada Marine Act*, which affect the competitiveness of Canadian ports, Canada will lose its ability to compete with US ports.

Following the merger between Carnival Corporation and P&O Princess, the FTC examined a number of marketing characteristics of the ship cruise industry in the US to determine if they provide any indication of potential co-ordinated interaction. They found that pricing was so unpredictable and unsystematic that co-ordination on pricing would be difficult if not impossible and allowed the merger though it significantly elevated the concentration level and reduced the effective number of competitors.

During the last couple of years, traffic from the Port of Vancouver declined from its peak in 2002. Part of this decline, besides the impact of world events, may have resulted from the dramatic growth of cruises from

Seattle from six cruises in 1999 (carrying 7,000 passengers) to 150 cruises in 2005 (carrying 685,000 passengers). Perhaps, this will be offset by the results of marketing and other strategies proposed by *Cruise BC Initiative*. The Minister of Industry, the Honourable David Emerson, is optimistic about the potential to build on the success of B.C.'s cruise industry. He stated "there remains untapped potential to grow the business and I look forward to working with the industry, ports and the provincial government to ensure these opportunities are fully explored. We need to ensure that Canada's west coast cruise gateway remains competitive, not just in terms of berth capacity, but also in terms of air access and other contributing factors."[33]

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1. *Transportation in Canada*, Annual Report (Various Issues).
2. *Transportation Trends & Issues*, 1994 Annual Report, Transportation Agency of Canada, pp. 170-182.
3. *Cruise Investigation: Empirical Economic & Financial Analyses*, Bureau of Economics, Federal Trade Commission, FTC Presentation, November 2002.
4. Scheffman, David and Mary Coleman, *Empirical Analyses of Potential Coordinated Effects from a Merger*, FTC, January 2003.
5. *Cruise Industry News*, No. 7, Vol. 19, April 17, 2003, pp. 1/4.
6. *Cruise Industry News Annual*, 2004.
7. *The Contribution of the International Cruise Industry to the Canadian Economy in 2003*, Business Research & Economic Advisors, October 2004.

Endnotes

1. Port of Vancouver welcomes Island Princess at historic christening, CNW, July 11, 2003.

2. Port of Halifax to pursue continued growth in cruise business, Press Release, May 30, 2003.

3. *Transportation Trends & Issues*, 1994 Annual Report, Transportation Agency of Canada, p. 170.

4. BREA indicates that in 2003 there were 880 cruise ship calls at Canadian ports generating 1.55 million passengers. The passengers at these ports were: Vancouver - 936, 233 (61%); Victoria - 185, 978 (12%); Halifax - 170, 425 (11%); Saint John - 83, 300 (5%); Quebec 59, 568 (4%); Montreal - 33, 427 (2%); and Other Ports - 84, 358 ((5%). See *The Contribution of the International Cruise Industry to the Canadian Economy in 2003*, Business Research & Economic Advisors, October 2004, p. 2.

5. See BREA, p. 3.

6. See BREA, p. 3.

7. In 2004, there were 139 cruise ship visits carrying 262, 000 passengers. These cruises are basically pocket cruises. Since 1999, the number of cruise ship visits has gone up 409 per cent and the passenger count an amazing 670 per cent, according to Westcan Terminals Ltd. See *2004 Record Cruise Year*, www.victoriaharbour.org

8. Canada benefiting from cruising boom, Travel-log, Spring 2001, Vol. 20, no 2.

9. This section is based on the statistics and findings of BREA.

10. See BREA, p. 7.

11. For example, a cruise from Toronto-Chicago cannot stop at Hamilton and all passengers embarked in Toronto cannot be returned.

12. For example, a cruise from Montreal-Quebec City-New York permits disembarkation at intermediate ports i.e. Quebec City.

13. For example, a ship could take passengers and leave Montreal, go to New York or Chicago, take on

passengers, and/or disembark passengers and/or let passengers ashore for a short while, and then return to Montreal to disembark all passengers.

14. See *US Passenger Services Act* 480a(b)1.

15. See *US Passenger Services Act* 480a(b)2. For example, a cruise from Chicago-Toronto with intermediate points such as Duluth.

16. See *US Passenger Services Act* 480a(b)3. For example, a cruise from Duluth-Toronto-Hamburg (Germany)-Chicago.

17. *Transportation in Canada*, Annual Report 1999, Transport Canada, p. 127.

18. *Transportation Trends & Issues*, 1994 Annual Report, Transportation Agency of Canada, p. 173.

19. Assuming that the Western and Eastern markets are not competitive due to transportation costs and duration to get to these markets.

20. See *Canada (Director of Investigation and Research) v. Southam Inc.*

21. *Cruise Investigation: Empirical Economic & Financial Analyses*, Bureau of Economics, Federal Trade Commission, FTC Presentation, November 2002, p. 7.

22. *Port of Vancouver celebrates two decades of consecutive growth in the cruise sector*, November 2, 2002.

23.*Vancouver cruise traffic declines in 2003, VPA says competitiveness is key*, October 20, 2003.

24.*Cruise news: there's good and bad Seattle cuts deeper into Vancouver's share of West Coast cruise industry*, Alan Daniels, Vancouver Sun, Saturday, July 12, 2003.

25. Id.

26. Carnival Corp. Includes Holland America Line, P&O/Princess Cruises, Costa Cruises, Seabourn Cruises, Windstar Cruises and Cunard Line.

27. See FTC Presentation, November 2002 and Scheffman, David and Mary Coleman, *Empirical Analyses of Potential Coordinated Effects from a Merger*, FTC, January 2003.

28. If there is a substantial lessening of competition because the parties to the merger are vigorous competitors then an important basis for a unilateral effects case exists. If the potential for collusive behaviour is increased as a result of the merger between Carnival Corporation and P&O Princess, a co-ordinated effects case could be made to prevent the merger especially if enforcement of conscious parallelism or collusion were unlikely to succeed in the future. The likely effects of horizontal mergers on collusive behaviour was largely considered under the co-ordinated effects analysis until the mid 1980s. However, since there is no one theory of collusive behaviour that gives sharp predictions about the likely effects of mergers, the FTC and the Department of Justice have focussed their attention on unilateral effects analysis of mergers since the 1990s. See *Industrial Organization*, J. Church and R. Ware, 2000, p. 725. Recently, there appears to be a revival in the analysis of coordinated effects.

29. There are three types of price discrimination: first degree; second degree and third degree. Its basic economic rationale is: to increase profits; to achieve economies of scale; to increase sales; to meet competition; to prevent entry (barriers, signalling, entry deterrence); and to eliminate a competitor.

30. The game-theoretic view suggests a positive correlation between collusion and excess capacity. See *Industrial Organization*, J. Church and R. Ware, 2000, pp. 345-346.

31. B.C. sets a Course for made-in-B.C. Cruises: Cruise Sector Growing, *Canada Ports Magazine*, 2003, pp. 28-29 and Moving 'Cruise BC' to the next level, Canada Ports Magazine 2004, pp. 32-33.

32. Winter 04-05: North American Ports: Business is Booming, *Cruise Industry News*, January 3, 2005.

33. *New figures confirm economic magnitude of cruise industry in Canada, B.C. Co-operation to grow business, retain market share key to future success*, October 29, 2004, www.portvancouver.com