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The Canadian Chicken Industry

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Prepared by
Vincent Iacobucci, Poultry Market Analyst
David Surprenant, Market Development Officer
Réjean Gaumond, Senior Market Development Advisor
Agriculture and Agri-Food Canada
Animal Industry Division
Poultry Section

1341 Baseline Road
Tower 7, 7th Floor
Ottawa, Ontario
K1A 0C5

Telephone: (613) 759-6284
Fax: (613) 759-6313

Web site: <http://www.agr.gc.ca/poultry/>

E-mail: poultrymi@agr.gc.ca

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1. Introduction

1.1. Supply Management

Over the years, the Canadian chicken industry evolved through changing political landscapes and economic conditions. In order to understand the evolution of the Canadian chicken industry it is important to place it into its historical context. Since 1979, the Canadian chicken industry has operated under a supply management system. This supply management system had its origin in the establishment of the Chicken Farmers of Canada (CFC) was created in 1978 under the Farm Products Agencies Act. The CFC is the national agency that monitors and assures that Canadian chicken producers supply a sufficient quantity of product to ensure that the domestic market meets Canadian consumer demand.

Some could argue that the first principles of supply management are rooted in the *British North America Act* (BNA) of 1867. The BNA set out provincial and federal jurisdictions giving provincial governments the authority over production and marketing of goods and services within their own boundaries, and the federal government jurisdiction over inter-provincial and international trade. Others claim that the roots of the system are an extension of the various provincial marketing boards that have been part of Canadian farming since 1927, when the first marketing board was introduced in British Columbia for tree fruits. For provinces, strengthening the bargaining power of farmers became a priority after the Great Depression beginning with British Columbia in 1936, where all provincial governments passed legislation enabling marketing boards on a local and provincial basis.

Another view on the origins of supply management deems the establishment of the *Agricultural Products Marketing Act* (AMPA) in 1949 as the starting point of supply management in Canada. The AMPA provided the federal Minister of Agriculture with the ability to delegate federal powers to regulate inter-provincial and export trade to provincial agricultural marketing boards, provided they have the same powers provincially to regulate intra-provincial trade. However, the board's jurisdictions were limited at the provincial border. Without inter-provincial and international controls, farm products crossed from province to province, undermining a provincial board's effort to control supply. This became apparent in the 1960s, when various provinces started restricting each others products in order to protect their own producers from a market that would frequently enter into a position of overproduction, which in turn, would trigger a sharp decline in producer prices. The climate of provincial confrontation culminated in the so called 'Chicken and Egg War' of 1971, in which various provinces, especially Ontario and Québec, used their legislation to retaliate against each other's products. The *National Farm Products Marketing Agencies Act* arose from this situation and provided an essential structure at the federal level to harmonize existing provincial plans.

Supply management is a marketing system that regulates domestic production and imports to ensure that the supply of a product matches the demand for it and that the prices paid to agricultural producers are steady over time and provide the producers with fair returns. Processors and consumers are guaranteed a consistent supply of top-quality products at reasonable prices. Provincial marketing boards balance the supply and demand of each supply-managed commodity in each province. The supply of a commodity is regulated using a quota system. Thus regulated chicken producers must hold quota in order to ship their

product to the market¹. When the system was put in place, quota was given to producers who were in the business at that time. But new entrants to the industry must purchase quota to the provincial marketing boards that regulate the supply management system in each province.

In addition to provincial marketing boards, there is a federal marketing agency (Chicken Farmers of Canada) which monitors and allocates provincial quota allocations, and the inter-provincial or market development trade of chicken.

Until 1994, it was the federal marketing agency that determined the volume of total chicken production and distributed global quotas to provincial marketing boards. The provincial boards then allocated the quotas to individual producers in their respective province (top-down approach). In 1995, a new approach was put in place to allocate quota: the bottom-up approach. Under this approach provincial marketing boards negotiate with provincial processors to determine their provincial requirements. Production quotas at the national level then become the aggregate of the individual provincial requirements.

In order for a supply management system to be sustainable three pillars are required: import control, production discipline and stable producer pricing. To maintain the stability of supply in Canada, the supply management model limits imported products to ensure Canadian market requirements are primarily met by Canadian production. The volume of the commodities imported into Canada is limited by tariff rate quotas (TRQ)², under which high tariffs are applied on imports above a specific level of access to the national market. Secondly, a control of the supply is required and producers chose to work within a quota system, where each producer supplies a given share of the Canadian market. Every year, quotas are readjusted to take into consideration population growth and consumption trends in order to ensure that the products are produced in sufficient quantities and do not lead to surpluses. Finally, the system contains mechanisms that provide producers with a stable price for the product. Provincial commodity boards negotiate their selling price with processors based on a cost of production formula.

1.2. Legislative Framework

In Canada, supply management is governed by provincial and federal legislations as well as federal-provincial agreements. Some important provincial and federal initiatives are discussed below.

For instance, in British Columbia in the 1950s broiler production increased and by the 1960s prices began to decline. In May 1961, BC chicken production had reached new highs and the broiler association was looking for a way to control production and stabilize prices. The association received a mandate from its members to draft a marketing plan that would correct the situation. Later the association asked the BC Minister of agriculture to hold a plebiscite on the marketing plan. The plebiscite was approved. A Broiler Board was proclaimed in December 1961 and began operation in January 1962.

In Ontario, 1965 was an important year for the creation of marketing boards. Long lasting problems occurring in the broiler chicken industry led to the establishment of the Ontario

¹ However, according to the 2001 Federal-Provincial Agreement for chicken, unregulated chicken producers such as hobby farmers can produce between 50 and 6000 chickens annually depending on provincial exemptions.

² A tariff rate quota is a trade policy tool used to protect a domestically-produced commodity or product from competitive imports.

Broiler Chicken Producers Marketing Plan. This was the first plan in the province under the *Farm Products Marketing Act* to apply quotas to a food product.

Since 1971, the Québec chicken producers have had a joint marketing plan under the *Loi sur la mise en marché des produits agricoles, alimentaires et de la pêche* (L.R.Q., c. M-35.1).

At the federal level, the starting point of the contemporary model for supply management transpired with the enactment of the federal *Farm Products Agencies Act* (FPAA) in 1972. Various federal initiatives are presented in the following subsections.

1.2.1 *Farm Products Marketing Agencies Act (FPAA)*

The *Farm Products Marketing Agencies Act* (1970-71-72, c. 65, s. 1) was enacted in 1972 to establish the National Farm Products Marketing Council and to authorize the creation of national farm products marketing agencies. The Act was subsequently replaced by the *Farm Products Agencies Act* (FPAA) (R.S. 1985, c. F-4).

With the inception of the FPAA, the act founded the National Farm Products Council (NFPC) and national marketing agencies. These marketing agencies are assigned authority to implement and administer national marketing plans, allocate quota and market share and generate revenue through levies. The NFPC was then placed in charge of overseeing these agencies and administering FPAA legislation.

1.2.2 *National Farm Products Council (NFPC)*

The NFPC reports to Parliament through the Minister of Agriculture and Agri-Food. Its mission is to promote the efficiency and competitiveness of Canada's agriculture. The NFPC also helps to improve the marketing of agricultural products between the provinces and territories but also at the international level. In addition, it supervises the activities of four Canadian marketing agencies, including the Canadian Broiler Hatching Egg Marketing Agency (CBHEMA) and the Chicken Farmers of Canada (CFC). The NFPC is composed of at least three members, and may have up to nine. At least half the Council's members must be primary producers. The Council's responsibilities are as follows:

- to advise the Minister on all matters relating to the establishment and operation of marketing agencies established under the Act, with a view to maintaining and promoting an efficient and competitive agriculture industry;
- to review the operations of agencies to ensure that they are functioning in accordance with the objects set out in section 21 of the Act;
- to work with agencies in promoting more effective marketing of farm products in inter-provincial and export trade.

In 1978, national marketing agencies were established for poultry (CFC) and in 1986 for chicks (CBHEMA). These agencies oversee the marketing and quota systems of their respective products. Legally, quotas are retained by the marketing board, which reserves the right to make small adjustments. Quotas are bought and sold in each province; they may also be willed or passed on. Based on cost of production figures, chicken prices are set to give farmers a fair return. Regulation of price is achieved by negotiations between marketing

boards and processors. Producers pay a uniform fee (a levy) on all products produced to finance the agency's administration and marketing expenses.

1.2.3 *Chicken Farmers of Canada (CFC)*

The CFC is the national agency that oversees the orderly marketing of chicken in Canada. The CFC was established in 1978 under the *Farm Products Marketing Agencies Act* and an agreement between the federal government, provincial agriculture ministers and chicken producers in member provinces.

The CFC Board of Directors comprises:

- one national chairperson elected from among the chairs of the provincial marketing boards;
- ten members representing the producers of each provincial marketing board;
- two processors chosen by the Canadian Poultry and Egg Processors Council (CPEPC) to represent the interests of primary producers;
- a further processor chosen by the Further Poultry Processors Association of Canada (FPPAC) to represent the interests of independent further processors;
- a restaurateur chosen by the Canadian Restaurant and Foodservices Association (CRFA) to represent the interests of the food services sector.

The CFC has the authority to regulate chicken production in Canada under a system of supply management. It does this pursuant to two national agreements: the Operating Agreement and the Market Development Policy.

The CFC is wholly funded by dues paid by producers based on the amount of chicken marketed.

1.2.4 *Canadian Broiler Hatching Egg Marketing Agency (CBHEMA)*

The CBHEMA was established in 1986 under the authority of the *Farm Products Agencies Act* to reflect the terms of an agreement between the federal government, provincial agriculture ministers and broiler hatching egg producers in member provinces. It is the national agency which oversees the orderly marketing of broiler hatching eggs in Canada. Member provinces are British Columbia, Alberta, Manitoba, Ontario and Québec.

The CBHEMA Board of Directors comprises:

- five producer members: one from each of the signatory member provinces;
- two members appointed by Order in Council: one to represent the interests of consumers and the other to represent the interests of hatcheries;
- one chairperson: elected from the producer board membership who remains neutral on all issues (with a provincial alternate voting for the province).

The CBHEMA has the authority to regulate broiler hatching egg production in Canada under the supply management system. The CBHEMA is funded by levies paid by producer members based on the quantities of eggs sold.

1.2.5 Federal Provincial Agreement for Chicken (FPA)

Along with the various pieces of federal legislation, the Federal Provincial Agreement for Chicken (FPA) is an agreement struck in 2001 between the federal and provincial ministers of agriculture, provincial agricultural supervisory boards, the provincial chicken marketing boards, and the national Agency, Chicken Farmers of Canada (CFC). The Agreement provides for the continuance of the supply management system for chicken in which all ten provinces are signatories.

Under the Agreement, the CFC and the provincial chicken marketing boards have agreed to maintain a coordinated system of quota allocation and quota allotment. The Agreement allows the CFC to devolve to each of the ten provincial commodity boards the functions of allotting and administering both marketing quotas on behalf of CFC.

1.2.6 Export and Import Permits Act

In Canada, the Export and Import Controls Bureau of the Department of Foreign Affairs and International Trade is responsible for administering the Export and Import Permits Act (EIPA) that provides to the Governor in Council the powers to regulate the importation and exportation of designated products. This is an important piece of legislation for commodities under supply management as it provides import control, one of the main three pillars of supply management. The EIPA provides that the Governor-in-Council may establish lists known as: the *Import Control List* (ICL), the *Export Control List* (ECL), and the *Area Control List* (ACL). With regards to agricultural products under supply management such as poultry and eggs products the ICL portions of the act and regulations are the most pertinent. In order to import products under the ICL, permits are required for the importation of goods. The ICL is presented in Annex A.

1.3. International Trade Agreements

The International trading system changed drastically in the 1980's and 1990's. The implementation of the Canada-US Free Trade Agreement (CUSTA), the North America Free Trade Agreement (NAFTA) and the outcome of the Uruguay Round negotiations that led to the creation of the World Trade Organization (WTO) not only influence the world economy but it also impacted Canadian supply management policy. This section provides a quick overview of these important international agreements and some implication on supply management.

1.3.1. Canada-United States Free Trade Agreement (FTA) and North American Free Trade Agreement (NAFTA)

The Canadian/United States Free Trade Agreement (FTA) was signed in 1988 and implemented in 1989. Under the FTA all tariffs were to be phased out over a 10-year-period, from 1988 to 1998. The objective was to create a Canadian/U.S. free trade area so trade between the two countries would be uninhibited by border measures with the exception of certain commodities such as Canadian dairy and poultry products that had previously been protected by Article XI of the General Agreement on Tariffs (GATT).

The FTA agreement was expanded to include Mexico in 1994 which led to creation of the North American Free Trade Agreement (NAFTA). The NAFTA called for immediately eliminating duties on half of all U.S. goods exported to Mexico and gradually phasing out other tariffs over a period of 14 years. NAFTA did not affect the phasing-out of tariffs agreed in the FTA which was completed

January 1, 1998³. NAFTA removed restrictions on many categories of products, protected intellectual property rights and favored investment. Supplemental agreements were added later to NAFTA to include provisions regarding workers and the environment.

Regarding agriculture, it has been a controversial topic within NAFTA, as it has been with previous agreements. Agriculture is the only section of the agreement that was not negotiated trilaterally. Three separate agreements were signed for agriculture in which Canada negotiated bilateral agreements with the U.S. and Mexico to preserve border controls for its supply managed commodities. In the U.S., tariffs remain in place for certain products such as sugar, dairy, peanuts and cotton. On January 1 2003, the final tariff reduction between Canada and Mexico was completed.

For chicken, the Canadian market access level provided to Canadian importers is the higher limit between the levels negotiated under NAFTA or the WTO Uruguay Round Agreement. Currently, the chicken TRQ access stands at 7.5% of previous year's production. For 2005, the TRQ was set at 72.5 million kilograms based on the previous year's production. With regards to hatching eggs and chicks, the NAFTA levels are set at 21.1% of anticipated current year's production or approximately 142 million eggs.

1.3.2. The General Agreement on Tariffs and Trade (GATT), the Uruguay Round and the World Trade Organization (WTO)

General Agreement on Tariffs and Trade (GATT) history begins in 1948 as part of a larger plan for economic recovery after World War II. The countries highly involved in world trade signed an agreement known as the GATT that was developed through a series of eight trade negotiations or rounds (Geneva 1947 to the Uruguay Round in 1986-1994). The GATT's main purpose was to reduce barriers to international trade. This was achieved through the reduction of tariff barriers, quantitative restrictions and subsidies on trade through the various agreements or trade rounds. Early GATT rounds provided special treatment for agriculture that virtually absolved agriculture from most disciplines applied to industrial trade. It is only during the Uruguay Round that agriculture has been fully integrated into the international trading system.

The Uruguay Round of negotiations under the GATT commenced in September 1986 and was finalized in December 1993. The intent of the trade round was to expand the competence of the GATT to new areas such as services, capital, intellectual property, and agriculture. The affirmation of the Uruguay Round in December led to the "Marrakesh Declaration" of April 15, 1994 which confirmed that the results of the Uruguay Round would "strengthen the world economy and lead to more trade, investment, employment, and income growth throughout the world"⁴. On January 1, 1995 the GATT made its official transformation into a formal international body known as the World Trade Organization (WTO).

Under the terms of the Uruguay Round, quotas on agricultural imports had to be converted into TRQ's (tariff equivalents) by 1 July 1995 and tariffs reduced over a six-year period commencing in 1995 by a minimum rate of 15% per product. Overall, tariffs on agricultural goods, including tariff equivalents, must be decreased by 36% over the six years. To fulfill its obligations under the GATT/WTO agreement, the Canadian government replaced its system of import quotas for poultry, eggs and dairy products with tariff rate quotas (TRQ's).

³ The phasing-out of FTA tariffs was completed on January 1, 1998. Some tariffs remain in place for certain products in Canada's supply-managed sector (e.g. eggs, dairy and poultry products).

⁴ http://www.wto.org/gatt_docs/English/SULPDF/92150207.pdf

Also it was agreed by WTO members that the minimum access within a TRQ would increase from 3 percent of domestic consumption to 5 percent over the implementation period. Currently, under the WTO agreement, Canada has allowed for an access level of 39.9 million kilograms of chicken (eviscerated weight) or 95.4 million eggs for hatching eggs and chicks. Since NAFTA figures for market access of 7.5% of previous year's chicken production and 21.1% of anticipated current year's hatching eggs and chicks production are greater than WTO commitments, the NAFTA TRQ levels take precedent. For 2005, the import access level under NAFTA commitments was 72,538,098 for chicken and 142,085,974 for hatching eggs (24,915,550 for chicks and 117,170,424 for hatching eggs).

Other areas where there were significant results in the Uruguay Round negotiations in agriculture were: domestic support, export subsidies, sanitary and phyto-sanitary measures, biotechnology and improvement in WTO dispute settlement process.

In 2000, new trade talks started at the WTO. These talks have now been incorporated into a broader work program, the Doha Development Agenda (DDA) launched at the fourth Ministerial Conference in Doha, Qatar, in November 2001. Discussions toward a new WTO agreement are still ongoing.

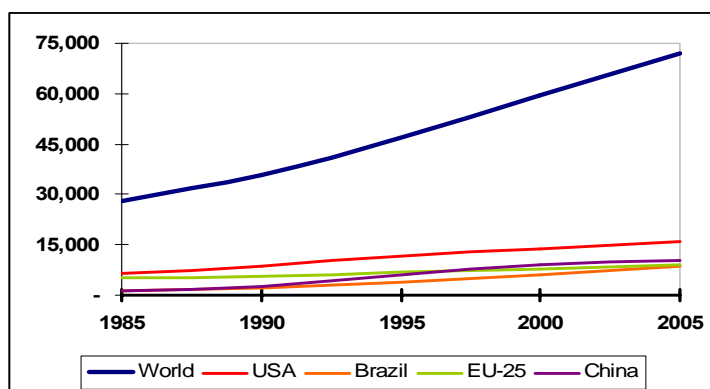
2. World Chicken Production and Trade

2.1. International Chicken Production

According to the United Nations Food and Agriculture Organization (FAO), world chicken production was an estimated 71,851,372 tonnes in 2005, up 3% from the previous year. It is interesting to note that chicken production has been growing steadily worldwide since the early 1990s. From 1985 to 2005, 158% growth was recorded: this increase is attributable to a number of factors, including surging production in emerging markets such as Brazil and Thailand, and greater demand in Western countries for high-protein, low-carbohydrate products. For example, over that period all major producing countries or emerging ones increased their production importantly: China (+591%) and Brazil (+482%) increased the most their production followed by the United States (+147%), Thailand (+141%) and the EU-25 (+73%). In the mean time, Canada's production which mostly meet the Canadian demand increased by 98%.

In regional terms, most of the chicken meat is produced in Asia (32.2%), followed by North America (26.9%) and South and Central America (20.4%). Europe accounted for 15.9% of the production while Africa represented 4.5%. Since 1985, the South and Central America regions increased their share of World production by 7.6% mainly to the detriment of Europe and to a lesser extent of Africa.

Figure 1 - Evolution of World Chicken Meat Production from 1985 to 2005 (000 tonnes)



Source: United Nations Food and Agriculture Organization (FAO).

Currently, the leading chicken-producing countries are the United States, China, the EU-25 and Brazil. In 2005, those four countries or group of countries accounted for about 61% of world chicken production, as shown in Figure 1 below. Canada was the thirteenth-largest chicken-producing country in that year with 981.2 million kilograms representing 1.4% of the world's production. Table 1 presents the leading producing countries.

Table 1 – The 15 Leading Chicken Producers (000 tonnes – eviscerated)

Country	1985	1990	1995	2000	2005
United States of America	6,407	8,667	11,486	13,944	15,869
China	1,474	2,692	6,097	9,075	10,196
EU-25 ⁵	5,132	5,625	6,703	7,883	8,894
<i>United Kingdom</i>	715	790	1,077	1,214	1,331
<i>France</i>	938	1,049	1,232	1,242	1,122
<i>Spain</i>	796	807	904	965	1,047
<i>Poland</i>	249	301	347	560	980
Brazil	1,490	2,356	4,050	5,980	8,668
Mexico	551	750	1283	1825	2436
India	161	342	578	1,080	1,900
Japan	1,425	1,462	1,317	1,255	1,338
Indonesia	346	560	961	904	1,400
Russian Federation	---	---	859	754	1,345
Canada	505	555	720	880	981
Thailand	393	575	910	1,091	950
Turkey	273	401	490	643	936
South Africa	339	572	641	868	978
Malaysia	239	377	712	690	913
Iran	235	380	637	803	825
WORLD TOTAL	27,840	35,805	46,987	59,430	71,851

Source: United Nations Food and Agriculture Organization (FAO) and Chicken Farmers of Canada.

2.2. International Trade in Chicken

In 2005, according to the Global Trade Atlas database, world exports of chicken meat and edible offal reached \$8.3 billion dollars⁶. Most of the exports are from Brazil (\$4 billion), the United States (\$2.6 billion) and the EU-25 (\$823.2 million). Within the EU-25, the main exporters are the Netherlands, Belgium, France and Germany. When we consider all countries including the ones constituting the EU-25, Canada is ranked 15th in world exports.

On the import side, the largest importers of chicken meat in 2005 are: Japan (\$1 billion), Russia (\$943.3 million), Germany (\$800.6 million) and Hong Kong (\$598.8 million)⁷. In 2005, the EU-25, as a

⁵ Ten countries joined the EU-15 to form the EU-25 in 2004.

⁶ EU-25 exports are compiled as trade outside the European Union only. Exports of chicken products compiled are meat and edible offal of chickens, not cut in pieces, fresh or chilled (HS 020711), meat and edible offal of chickens, not cut in pieces, frozen (HS 020712), chicken cuts and edible offal fresh or chilled (HS 020713) and chicken cuts and edible offal frozen (HS 020714).

⁷ Special administrative region of the People's Republic of China

whole, imported approximately \$690 million of chicken meat. Canada is ranked 11th in the world for imports.

2.3. World Future Outlook of the Chicken Meat Market

According to the OECD Agricultural Outlook 2006-2015, consumers and retailers will continue to increase their demand for a broader diversity and higher quality of meat. With the outbreak of avian influenza (AI) in late 2003, meat safety will be an increasingly important factor in future meat consumption and production⁸. Between December 2003 and February 2004, AI outbreaks caused by the H5N1 virus were reported in eight Asian nations. AI then moved westward into some countries in Europe, the Middle-East and Africa. The potential impact of animal diseases, like AI, on chicken can negatively impact demand due to decrease in consumption, price volatility, as well as decreases in supply in the form of culled stocks.

Another factor that will impact future trends in chicken consumption and production involves the rapid development and industrialization of countries in Asia and Africa. Income and population growth as well as demographic changes, urbanization and healthier lifestyle changes in these regions will ultimately increase the demand for chicken and chicken products. According to the OECD, between 2006 and 2015, the following consumption growth in poultry meat is forecasted: Eastern Europe and Russia (between 3.1% and 3.6%), Africa (2.9%), Asia (2.8%), Latin America (2.73%) and North America (1.85%).

Over the 2006-2015 projection period, world poultry meat production is set to rise by 2.31 percent. The highest production growth should come from Eastern Europe/Russia (3.22% to 4.48%), Latin America (3.13%), Asia (2.70%), Africa (2.38%) and North America (1.79%).

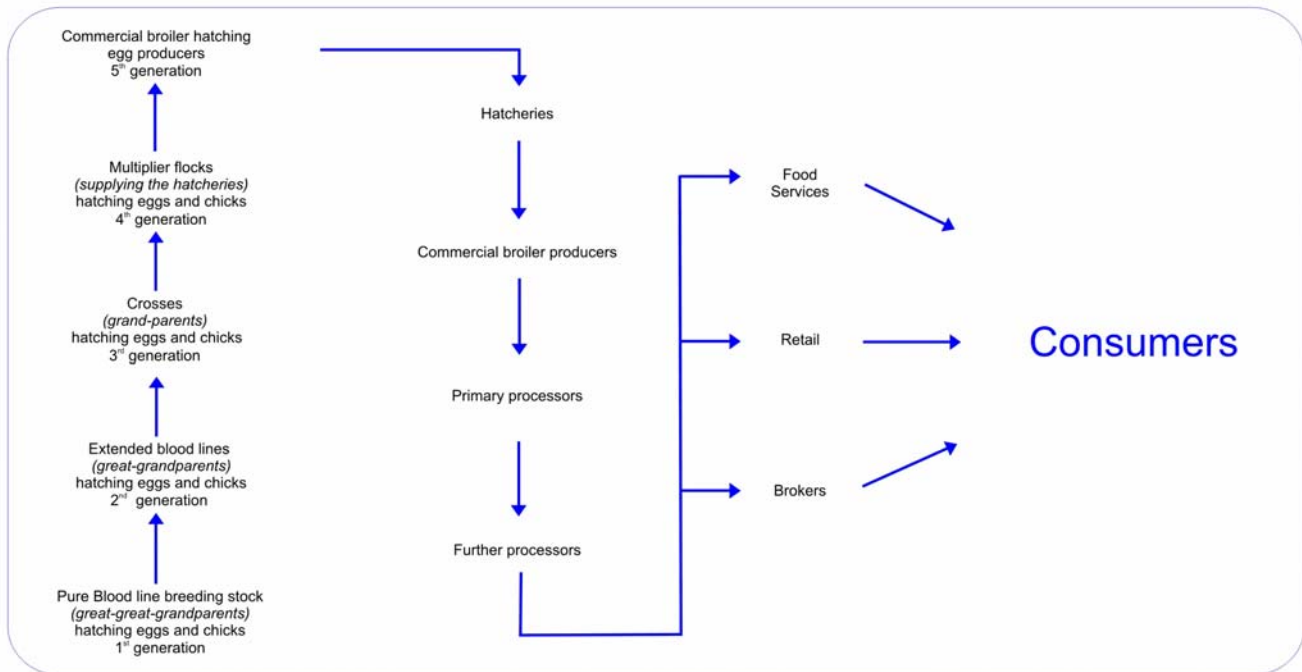
On the trade side, the regions that will obtain the highest export growth will be Latin America (5.25%) and Africa (5%). During the period, Brazil is expected to expand its exports significantly going from an average of 2.8 million tons in 2003-05 to 4.8 million tons in 2015.

3. Broiler and Hatching Egg Segment of the Industry

Over the last few decades the Canadian chicken industry has been growing steadily. In Canada, all components of the Canadian chicken industry are important in order to have a strong and profitable industry. The chicken value chain is comprised of multiple components: broiler and hatching egg producers, hatcheries, broiler chicken producers, processors, further processors, wholesalers, retailers and finally consumers. Figure 2 presents the structure of the Canadian chicken industry. The contribution of various components within the industry to the Canadian economy will be presented in the following sections.

⁸ OECD-FAO Agricultural Outlook 2006-2015, pg. 80.

Figure 2 - Components of the Canadian chicken industry



3.1. Breeding stock in the World

The functions of the primary or basic breeder are to maintain pure blood lines, expand pure designated blood lines, and develop cross-bred blood lines. The primary breeder engineers development of the first three generations of birds which commercial growers ultimately market as fifth generation. Primary breeders usually offer Grandparent, Parent, hatching eggs and day-old chicks. The function of the multiplier breeder is to multiply the parent flocks (fourth generation) which produce eggs for commercial growers.

There has been a consolidation in all phases of the world poultry industry, including breeders. Over the past few decades, there have been many amalgamations and acquisitions as more and more competition-driven establishments move toward larger, concentrated operations that share expertise and expenses to serve national and world markets.

Broiler chicken producers rely on safe deliveries from hatcheries of day-old chicks. As illustrated in figure 2, the links between chick sources and their customers is multi-layered because of reproductive multiplication required to meet the chick volume demanded by chicken broiler producers, and commercial industries in Canada or around the world. Of the total estimated global population of poultry (~18 billion), breeding stock represent no more than 3% (Emsley, 2006). In industrial integrated system with high level of biosecurity and in commercial poultry production system with moderate to high biosecurity, the relationship between the buyer and the seller of breeding stock is vertically aligned through contractual agreements (Emsley, 2006). These systems of production that are in place in many countries around the world would include, in several species, major primary breeders owning pure lines (PL) and Great-Grandparent (GGP) stock and their Grandparent (GP) customers. GP flock customers may also be integrated or vertically aligned with parent stock (PS) flocks, hatcheries and commercial production units in a grouping of economically-dependent operations. Major primary breeders are presented in box 1.

Box 1. World major primary breeding companies and their brands

Cherry Valley

Cobb-Vantress

- Cobb, Cobb-Avian

Erich Wesjohann Group

- Hyline, Lohmann Tierzucht, H&N International
- Aviagen (Ross, Nicholas, Turkey, British United Turkeys, Arbor Acres, L.I.R., C.W.T.)

Euribrid

- Hybro, Hybrid, Plumex

Groupe Grimaud

- Hubbard, Grimaud Freres

Hendrix Genetics

- ISA, Babcock, Shaver, Hisex, Bovans, Dekalb

Maple Leafs Farms

Perdue Farms

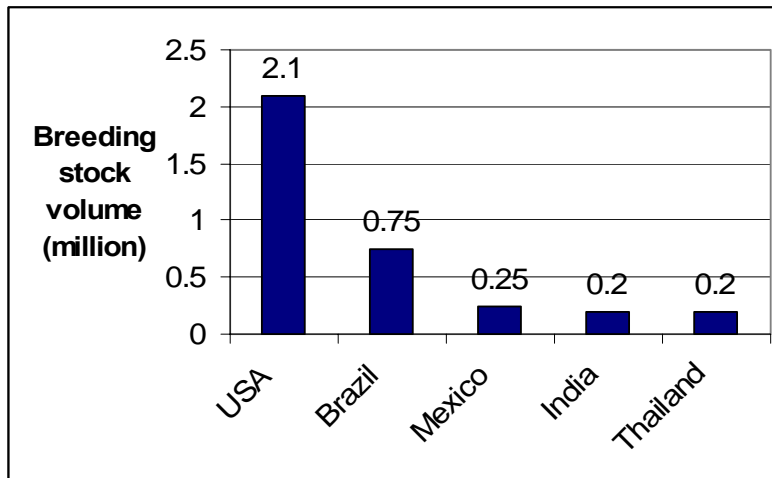
- Perdue, Heritage

PureLine Genetics

Source: Emsley, 2006.

The principal points of origin for shipments of day-old GGP and GP chicks around the world are North America (principally the USA), Western Europe and Brazil. The world estimated GP volumes (females-line females) are 8.7 million. The USA would supply 2.1 million in breeding stock volume for GP's.

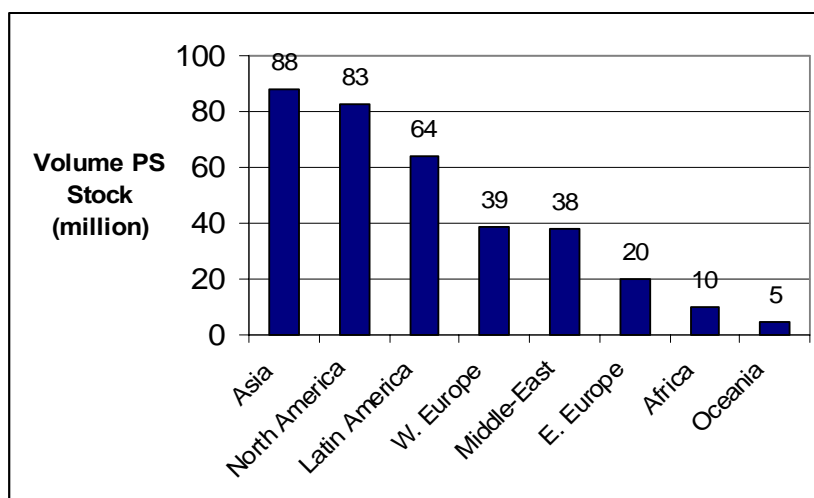
Figure 3 - World estimate of GP breeding stock volume (heads)



Source: Emsley, 2006

Regarding parent stocks, the total world market volume is estimated at 350 million. Most of the stock originates from Asia (88 million), North America (83 million) and Latin America (64 million).

Figure 4 - World estimate of parent stock volume (heads)



Source: Emsley, 2006

3.2. Canadian broiler and hatching egg market

In 2005, the Canadian Broiler Hatching Egg Marketing Agency (CBHEMA) represented 270 farmers from British Columbia, Alberta, Manitoba, Ontario and Québec⁹ under the supply management system. The total egg sets incubated in Canada for broiler stock reached 793.1 million eggs in 2005. Out of that number, 675.2 million eggs were produced in Canada for a value of 188.3 million dollars.

The broiler and hatching egg production is concentrated in Ontario and Québec which combine for approximately 58% of the production. Table 2 presents the production in the various regions of the country.

Table 2 – Annual Broiler Hatching Egg Production (thousands of eggs)

	2000	2001	2002	2003	2004	2005
<i>B.C.</i>	105,416	113,318	113,766	110,705	65,896	89,275
<i>Alberta</i>	72,258	75,006	74,632	73,511	75,296	75,277
<i>Saskatchewan</i>	14,105	17,167	15,999	25,129	25,540	25,426
<i>Manitoba</i>	26,585	26,298	30,718	28,922	31,161	32,415
<i>Ontario</i>	192,969	203,762	213,822	208,170	221,225	207,473
<i>Québec</i>	186,325	187,347	185,279	184,760	185,804	187,521
<i>Atlantic Provinces</i>	53,424	55,512	53,136	55,024	59,148	57,833
TOTAL	651,084	678,411	687,352	686,220	662,070	675,220

Sources: CBHEMA, Canadian Food Inspection Agency (CFIA) and *Institut de la statistique du Québec* (ISQ) / Compiled by the AAFC Poultry Section.

The allocation of hatching eggs, under the supply management system, relies on both domestic production and a predictable level of imports under a TRQ. In 2005 the TRQ import level allowed for

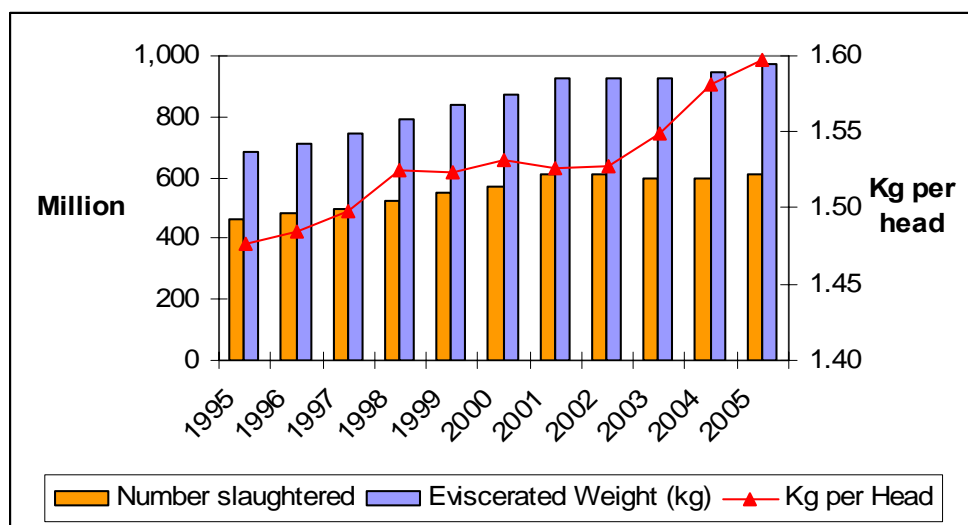
⁹ According to the Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec, there are 46 broiler hatching egg producers.

an access amount of 142.1 million egg equivalent into the Canadian market. The level of access corresponds to 21.1% of the anticipated current year's production. A custom tariff of 238% but not less than 2.91 per dozen is applied to imports that would exceed the level of access provided for the Canadian market.

The broiler hatching egg allocation under supply management is determined on a basis of chick requirements which in turn relies on the amount of chicken meat demand within the market place. The allocation of quota to each province is based on the provincial share of national production.

In 2005, the allocation method that determined the number of hatching eggs to be produce in Canada was based on a meat-to-egg ratio that took into account the mean eviscerated weight of a chicken for meat production. However, there are currently some discussions to change the allocation method to a bird-to-egg ratio because the average bird weight has increased significantly in recent years going from 1.47 kg per bird in 1995 to 1.59 kg per bird in 2005. In a period of increasing bird weight, a meat-to-egg ratio can potentially lead to excess hatching egg allocations. Figure 5 illustrates the increase eviscerated kilograms of chicken, the stabilization of number of chicken slaughtered and the evolution of average bird weight during the 1995-2005 period.

Figure 5 - Chicken slaughtered in Canada and mean weight of chicken slaughtered (1995 to 2005)



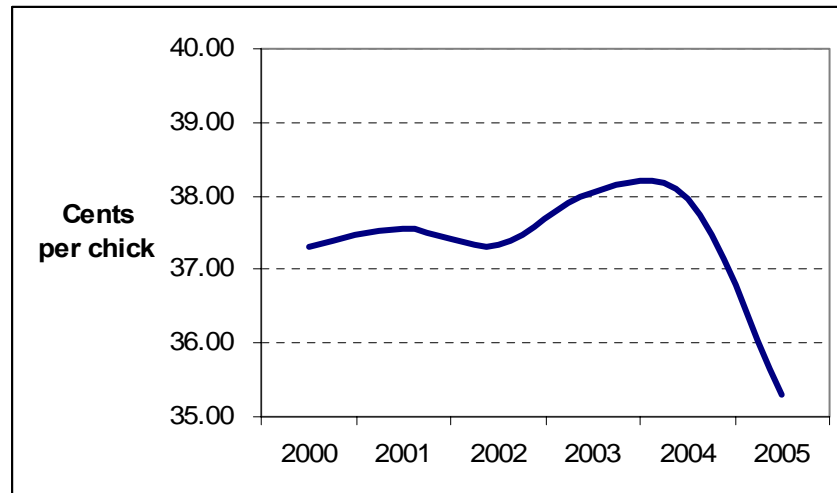
Source: AAFC-AAC

3.3. Pricing

In 2004, the average price paid for hatching eggs in Canada increased in response to a shortage in British Columbia due to a small and controlled AI outbreak in the province. In 2005, the average annual price paid to producers was 35.30 cents per chick. This represents a decrease in the price of 7% compared to 2004 due to factors such as lower feed prices, higher hatchability (higher supply) and a quick response to the avian influenza outbreak in BC.

In provinces under supply management, provincial prices are negotiated 6 to 7 times a year and are linked to the allocation periods of broiler chicken. In Ontario and other provinces, the price is negotiated provincially based on a cost of production formula that takes into account various factors such as feed prices and transportation costs. Figure 6 illustrates the evolution of the average price to hatching egg producers of saleable chick in Canada between 2000 and 2005.

Figure 6 - Average Price Paid to Hatching Eggs Producers in Canada



Source: CBHEMA annual reports

3.4. Inter-provincial Movements

Inter-provincial movements allow for balance and ensure an effective supply of hatching eggs and chicks for broiler production within Canada. In 2005, the total inter-provincial movements in Canada of chicken hatching eggs represented 15.9 million eggs or 2% of the total egg set for broiler stock. During the same period, inter-provincial movements of chicks for broiler production reached 32.1 million chicks or 5% of the placements of chicks in Canada¹⁰.

Table 3 - Inter-provincial Movements of Hatching Eggs and Chicks for Broiler Production in 2005

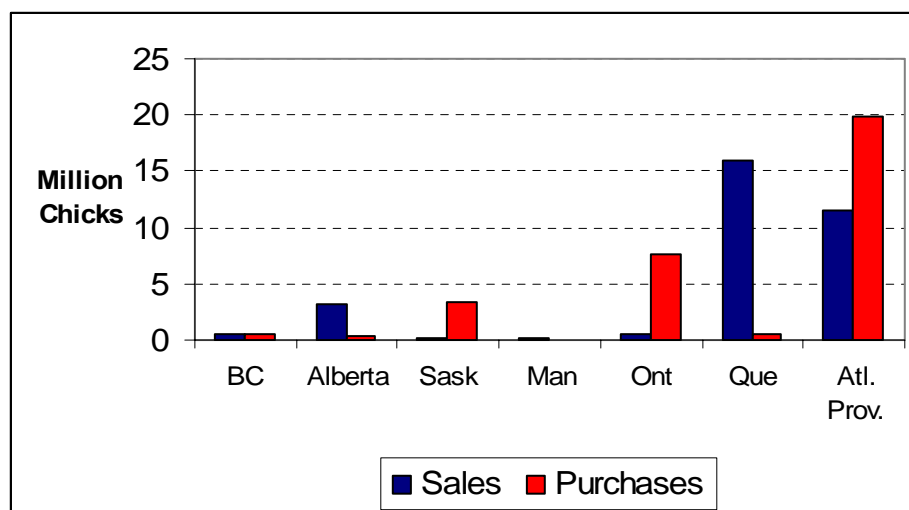
Movements/Placement	Quantity	Inter-provincial movements as a percentage of total placement
Inter-provincial Movements of Chicken Hatching Eggs	15.9 million	2.0%
Total Egg Set for Broiler Stock	793.8 million	
Inter-provincial Movements of Chicks for Broiler Production	32.1 million	5.0%
Placement of Broiler and Roster Chicks	641.2 million	

Source: Bureau de la Statistique du Québec, Canadian Broiler Hatching Egg Marketing Agency

In 2005, Québec supplied the most chicks for broiler production to other provinces, followed by the Atlantic provinces and Alberta. The Atlantic provinces, Ontario and Saskatchewan purchased the most chicks inter-provincially.

¹⁰ Excluding small lots

Figure 7 - Inter-provincial Movements of Chicks for Broiler Production in 2005



Source: AAFC-AAC

3.5. Canadian trade of hatching eggs and chicks

Hatching eggs and chicks for broiler chickens were first added to the import control list on May 8, 1989. The combined import quota was based on the average volume of imports between 1984 and 1988. At first, the import quota corresponded to 16.3% of the national production. However, in 1990, the calculations to determine the import quota were changed and the quota level was set at 19.07% of the national production. In November 1990, following the completion of the Canada-U.S. agreement on imports of hatching eggs and chicks for broiler chickens the import quota was increased to 21.1% of the current year national production. The import quota has been subdivided for hatching eggs and chicks. The level attributed to hatching eggs correspond to 17.4% of the national production while the one for chicks represent 3.7%. Since 1990, the market access level of 21.1% as not changed.

In 2005, there were 26 quota holders for broiler hatching eggs and chicks sharing a tariff rate quota of 142.1 millions egg equivalent. A custom tariff of 238% but not less than 2.91 per dozen is applied to imports that would exceed the level of access provided for the Canadian market.

In 2005, there were 121.5 million hatching eggs imported for commercial broiler production. There were also 4.6 million hatching eggs imported for the production of broiler breeders. It is noteworthy to specify that one broiler chick imports is equivalent to 1.27 eggs.

Table 4 – Canadian Imports of Broiler Hatching Eggs for Commercial Broiler Production (thousands eggs)

	2000	2001	2002	2003	2004	2005
<i>B.C.</i>	19,328	17,879	19,871	20,369	47,888	45,702
<i>Alberta</i>	8,326	11,094	8,901	4,189	7,966	3,334
<i>Saskatchewan</i>	7,179	7,881	8,253	1,039	4,642	3,226
<i>Manitoba</i>	7,784	10,766	6,469	6,803	7,172	6,210
<i>Ontario</i>	36,133	32,975	26,897	23,616	17,686	28,729
<i>Québec</i>	23,702	36,358	35,343	29,971	36,218	31,467
<i>Atlantic Provinces</i>	4,438	3,979	8,059	5,250	3,758	2,883
TOTAL	106,891	120,932	113,795	91,239	125,332	121,549

Sources: CBHEMA, CFIA and ISQ / Compiled by the AAFC Poultry Section.

During the same year, 12.9 million chicks were imported for commercial broiler production and 3.6 million chicks imported for the production of broiler breeders.

Table 5 – Canadian Imports of Chicks for Commercial Broiler Production (thousands chicks)

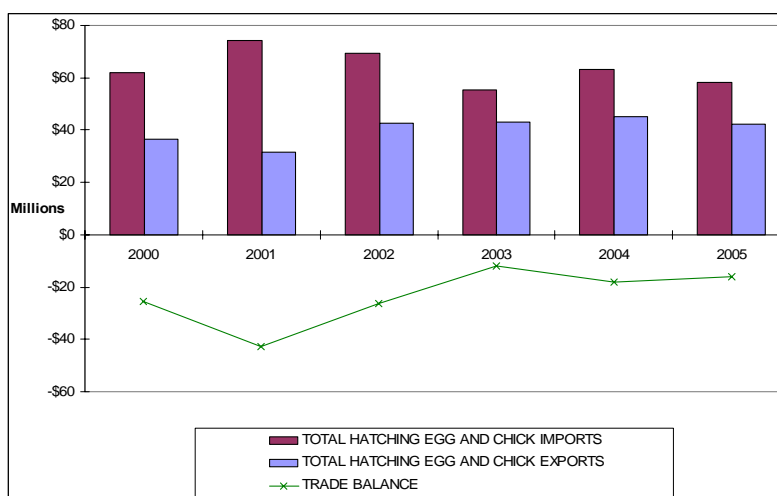
	2000	2001	2002	2003	2004	2005
<i>B.C.</i>	2,889	2,672	3,398	3,188	2,180	147
<i>Alberta</i>	191	0	0	1	0	0
<i>Saskatchewan</i>	213	0	0	0	160	100
<i>Manitoba</i>	1,434	1,301	287	76	166	294
<i>Ontario</i>	6,615	8,910	7,531	5,284	5,440	7,455
<i>Québec</i>	4,580	4,852	4,242	4,870	4,978	4,967
<i>Atlantic Provinces</i>	805	931	869	410	180	35
TOTAL	16,727	18,667	16,326	13,828	13,104	12,988

Sources: CBHEMA, CFIA and ISQ / Compiled by the AAFC Poultry Section.

On the export side, 7.7 million chicks were exported for a value of 8.5 million dollars. There were also 37.3 million hatching eggs of all types¹¹ exported for a value of 33.8 million dollars. Overall the Canadian exports of chicks and hatching eggs reached 42.3 million dollars.

The overall trade balance in hatching eggs and chicks has increase over the 2000 to 2005 year period and stabilized between 2003 and 2005. Over the period, the largest deficit recorded was in 2001 at -\$42.6 millions. From this low point, the trade balance improved by approximately 38% in 2002. In 2005, the trade balance stood at -\$16 millions.

Figure 8 - Canadian Trade Balance of Chicken Hatching Eggs and Chicks in Canada (2000-2005)



Source: Statistics Canada and AAFC compilations

¹¹ These include turkey, chicken, geese, and duck.

3.6. Hatcheries

Hatcheries are an integral link in the chicken supply chain. They come between two producer groups governed by supply management: the broiler hatching egg producers led by CBHEMA, and the broiler producers led by the CFC.

More numerous than layer hatcheries, most broiler hatcheries are dedicated solely to hatching broiler chicks.

In September 2006, there were 66 hatcheries in Canada, of which 20 were mixed, i.e. producing both broiler and layer chicks. The main companies that are active in broiler hatching eggs and chicks are: Maple Leafs Foods Incorporated, Lilydale Hatchery, Maple Lodge, Couvoir Boire & Frères Inc. and Western Hatchery Limited.

Table 6 – Number of Hatcheries in Canada (2006)

	Broiler	Layer	Mixed	TOTAL
British Colombia	8	1	1	9
Alberta	8	7	7	8
Saskatchewan	3	2	2	3
Manitoba	7	3	0	10
Ontario	13	8	3	18
Québec	10	5	4	11
New Brunswick	2	3	2	3
Nova Scotia	3	1	1	3
Prince Edward Island	0	0	0	0
Newfoundland and Labrador	1	0	0	1
TOTAL	55	30	20	66

Source: CFIA / Compiled by the AAFC Poultry Section

Fertile broiler hatching eggs are sent to hatcheries, where they hatch into broiler chicks 21 days later. The chicks are subsequently shipped to chicken farmers, who raise them into chickens for human consumption.

The percentage of hatching eggs that actually hatch varies (depending on fertility and a number of other factors having to do with the environment in which the eggs are kept), but as a rule is in the vicinity of 80% to 85%. In 2005, 793,779 broiler hatching eggs were incubated and 645,178 of them hatched, for a hatching rate of 81.2%.

4. Chicken production in Canada

4.1. Production in Canada

In 2005, chicken production in Canada reached 981.2 million kilograms and was up 3.7% from the previous year. One factor behind this year's increase was a resurgence of chicken production in

British Columbia after an outbreak of avian influenza in that province in 2004. British Columbia alone accounted for 28.2% of the overall increase in the Canadian chicken production in Canada from 2004 to 2005.

Over the last fifteen years, Canadian production under supply management increased by 77%. This can be explained by a higher consumer demand for non red meat products during the last few decades.

In 2005, the majority of the production (60.1%) was produced in Ontario and Québec. The third-largest producing province was British Columbia. Together, these three leading provinces account for over three quarters of Canada's total chicken production. Since 1995, the provinces that have seen their production increase the most are Saskatchewan (+131%), British Columbia (+121%) and Prince Edward Island (+119%).

Table 7 – Annual Chicken Production (thousands of kg, eviscerated weight)

	1990	1995	2000	2005	Change 1995 to 2005 (%)
<i>B.C.</i>	69,896	99,204	138,217	154,446	+121%
<i>Alberta</i>	44,521	59,739	81,351	86,839	+95%
<i>Saskatchewan</i>	14,058	15,504	24,100	32,525	+131%
<i>Manitoba</i>	21,293	25,160	36,715	40,463	+90%
<i>Ontario</i>	193,453	231,141	285,055	325,143	+68%
<i>Québec</i>	168,444	199,759	246,202	264,936	+57%
<i>New Brunswick</i>	15,147	18,304	24,145	26,754	+77%
<i>Nova Scotia</i>	19,470	24,449	30,646	33,311	+71%
<i>Prince Edward Island</i>	1,668	2,650	3,238	3,657	+119%
<i>Newfoundland & Labrador</i>	7,183	9,985	11,069	13,195	+84%
CANADA	555,133	685,894	880,738	981,268	+77%

Source: Chicken Farmers of Canada (CFC).

4.2. Production versus allocation

Each province in Canada obtains a share of the national quota. This quota allocation is set periodically every 6 or 7 weeks depending on the year of production. Each province commits to produce a quantity corresponding to its periodic quota allocation without exceeding it. In 2005, there were 7 allocation periods (A-63 to A-69). Overall, national production in Canada exceeded the national quota allocation by 0.8% in 2005.

Table 8 - Percentage of quota utilization in Canada per period (production versus quota allocation in 2005)

Period	British Columbia	Western Canada	Ontario	Québec	Atlantic Provinces	Canada
A-63	100.7	97.9	101.5	100.4	99.6	100.3
A-64	102.1	102.5	102.5	101.0	104.1	102.1
A-65	99.1	99.1	100.0	99.8	97.3	99.5
A-66	98.1	95.9	95.2	97.0	102.3	96.8
A-67	100.2	100.6	101.3	99.4	99.5	100.4
A-68	102.5	101.3	106.9	103.5	106.0	104.3
A-69	105.8	103.5	103.2	100.7	98.3	102.6

Source: Chicken Farmers of Canada and AAFC calculations

4.3. Number of farms in Canada and farm size

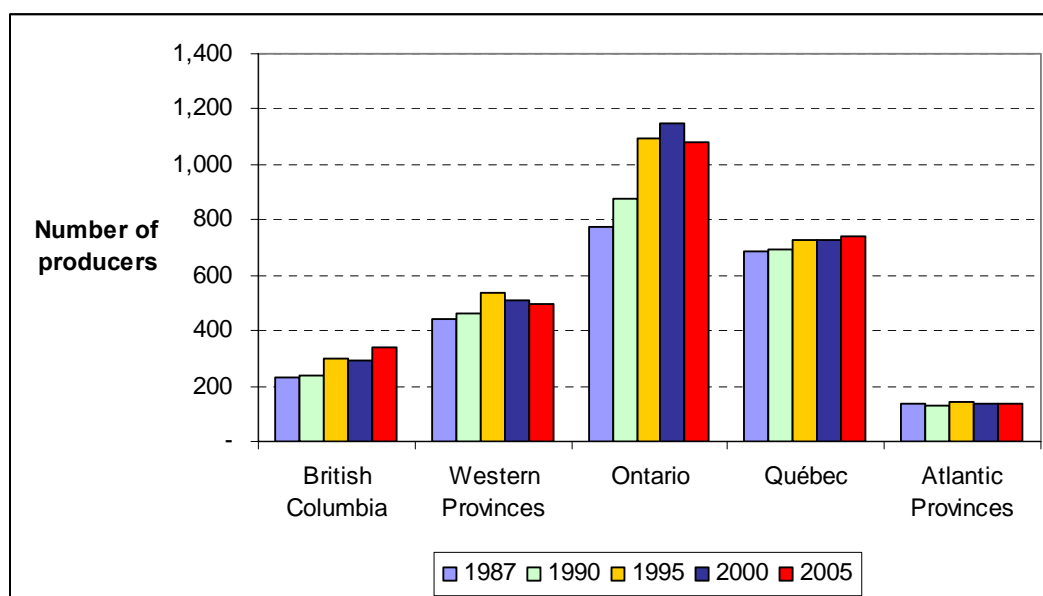
While there was a slight decline in 2005, Canadian chicken farmers have been increasing in numbers since the early 1990s. Canada had 2,394 producers in 1990; by 2005 the total had grown to 2,786, a 16% increase.

The province with the most chicken producers is Ontario with 39% followed by Québec (26.5%) and British Columbia.

The reasoning behind the increase in the number of producers is primarily due to the fact that chicken consumption rose in Canada but also because it is a profitable sector of production.

Farms have also become larger: over the same period, average production per farm grew by 66%, from 315,000 kg (live weight) in 1990 to 478,000 kg (live weight) in 2005.

Figure 9 - Number of chicken producers in Canada



Source: Chicken Farmers of Canada

4.4. Price mechanism and price paid to producers

In Canada, prices are negotiated at the provincial level. In each province, the minimum price per kg that processors will pay to producers is set periodically through negotiations between the province's processors and the provincial marketing board representing the producers. From 1992 to 2003, farm prices were set through negotiations between marketing boards and processors in each province. Negotiated prices in Ontario are generally used as a benchmark when conducting price negotiations in other provinces. Since May 2003, the chicken pricing process in Ontario has changed and moved to a formula-based live price negotiated. The price is established by taking into account the current market conditions, input costs based on a cost-of-production formula, prices set in neighbouring provinces, and various other factors.

In Ontario, Chicken Farmers of Ontario (CFO) has price-negotiating authority. It negotiates the base price paid by primary processors for live chicken with primary processors. The live chicken price is determined by a "live price formula" established by the Agriculture, Food, and Rural Affairs Appeals Tribunal that includes the price of chicks, feed and producer margin. The live price is adjusted every quota period for changes in feed and chick costs. The producer margin is re-negotiated once every six quota periods (every year) and if an agreement cannot be reached, the issue goes to the Agriculture, Food, and Rural Affairs Tribunal of Ontario. The price negotiated in Ontario sets a reference price for other provinces since Ontario is the biggest producer.

Since 1971, chicken production in Québec has been subject to a joint marketing plan under the *Loi sur la mise en marché des produits agricoles, alimentaires et de la pêche* (L.R.Q., c. M-35.1). The *Fédération des producteurs de volailles du Québec (FPVQ)* is the board responsible for administering the plan. This plan provides power to the FPVQ to negotiate prices and sales conditions with accredited organizations. The *Régie des marchés agricoles et alimentaires du Québec (RMAAQ)* acts as an arbitrator in case no agreement is reached.

In 2005, the average price to producers for broiler chicken was 119.5 cents per kg (figure 10). Provincial prices tend to follow the same trend over time. During the same year, prices were 118.1 cents per kg in Montréal while it was 118.4 cents in Toronto and 130.0 cents in Vancouver.

For roaster chicken the price paid to producers follows the trend of broiler chicken prices. In Montréal the price was 119.9 cents per kg compared to 123.5 cents in Toronto and 135.1 cents in Vancouver (figure 11).

Figure 10 - Average annual producer prices for broilers (under 2.3 kg)

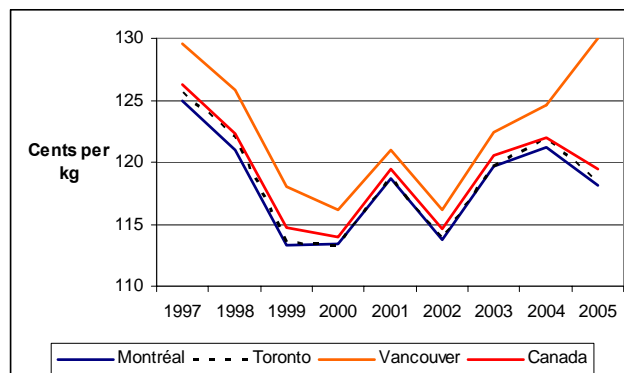
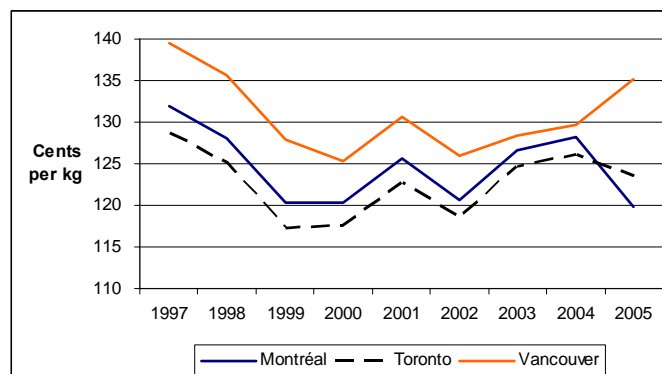


Figure 11 - Average annual producer prices for roasters (more than 2.3 kg)



Source: AAFC poultry section

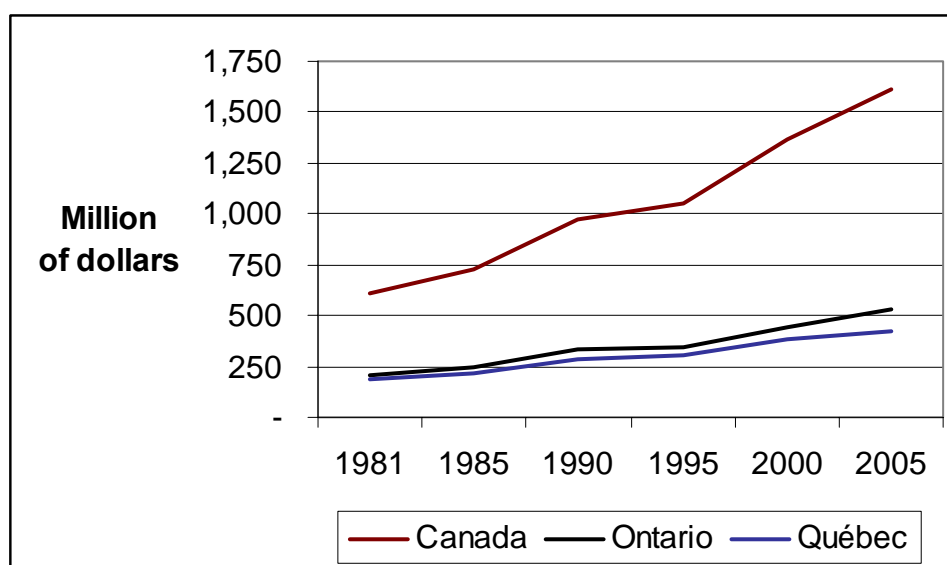
4.5. Farm cash receipts

Farm cash receipts measure the gross revenue of farm businesses in current dollars. They include sales of crops and livestock products (except sales between farms in the same province) and program payments. Receipts are recorded when the money is paid to farmers before any expenses are paid.

According to Statistics Canada, supply-managed commodities accounted for almost 40% of total livestock revenue in 2005. Receipts for chicken and turkey grew, while revenues from eggs declined. In 2005, Canadian chicken farmers generated farm cash receipts of \$1.6 billion an increase of 2.3% compared to the previous year.

Farm cash receipts were \$526.7 million in Ontario followed by Québec (\$427 million), British Columbia (\$273 million) and Alberta (\$141.9 million).

Figure 12 - Hens and chickens farm cash receipts, 1981 to 2005



Source: Statistics Canada – Catalogue no. 21-011

4.6. Farm financial situation

In 2004, the number of farm operators in the poultry and eggs sector totalled 6,790. Despite the downward drop in number of farm operators in 2004, the overall off-farm and on-farm net income continues on a healthy upward trend. The average net off-farm income increased 17.6% over the 2000-2004 period while average net operating income increased 29.5% over the same period. Overall, the total net income increased from \$82,855 in 2000 to \$104,604 in 2004 or an increase of approximately 26.2% over the period. In 2004, the average off-farm income reached \$40,343 which represents about 39% of the average total income.

Table 9

Table 9 - Average off-farm income, net operating income and total income of poultry and egg producers in Canada

		2000	2001	2002	2003	2004
Number of Farm Operators	Number	6,450	6,580	7,100	7,090	6,790
Number of Farms	Number	4,275	4,205	4,465	4,470	4,245
Average off-farm income ¹²	\$	33,253	36,649	36,935	39,297	40,343
Average net operating income ¹³	\$	49,602	51,327	51,102	50,616	64,261
Average Total Income	\$	82,855	87,975	88,037	89,913	104,604

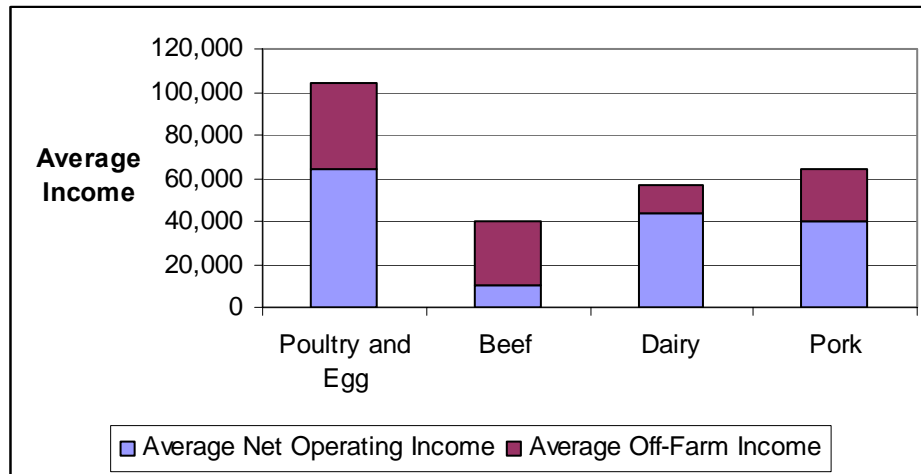
Source: Statistics Canada, «Statistics on Income of Farm Operators», Catalogue no. 21-206-XIE, Table 2-10.

In 2004, when compared to other livestock sectors (i.e. beef, dairy, and pork), the poultry and egg industry was the healthiest with regards to total income for the average operator. The average net operating income coming from farm operations is also the highest in the poultry and egg industry. The second highest average total income reported is found in the pork industry, with an average total income of \$63,984.

¹² **Off-farm income:** the sum of six sources of income: wages and salaries, net off-farm self-employment income, investment income, pension income, government social transfers (excluding pension amounts) and other off-farm income.

¹³ **Net operating income:** the profit or loss of the farm operation measured by total operating revenues (agricultural sales, program payments and insurance proceeds as well as custom work and machine rental, rental income and miscellaneous revenues including inter-farm sales) less total operating expenses (the business costs incurred by a farm operation in the production of agricultural commodities. Inter-farm purchases are included in these costs but capital cost allowance is excluded), excluding capital cost allowance, the value of inventory adjustments and other adjustments, for tax purposes.

Figure 13 - Average Farm Income in the main livestock sectors



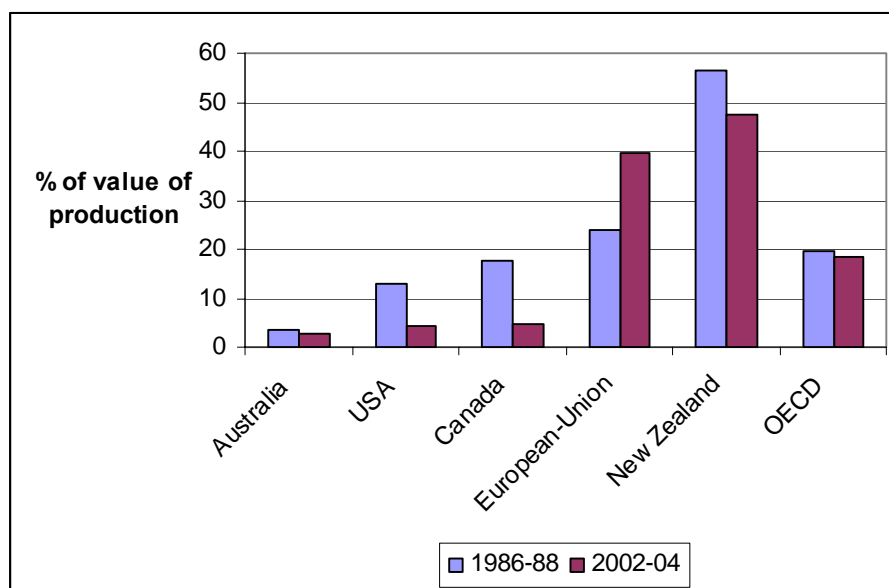
Source: Statistics Canada, «Statistics on Income of Farm Operators», Catalogue no. 21-206-XIE, Table 2-7, 2-8, 2-9 and 2-10.

4.7. Producer support estimates

The Organisation for Economic Co-operation and Development (OECD) Producer Support Estimate (PSE) is an indicator of the annual monetary value of gross transfers from consumers and taxpayers to support agricultural producers, measured at farm gate level, arising from policy measures which support agriculture, regardless of their nature, objectives or impacts on farm production or income. In other words the PSE is the support to producers with regards to the total value of production.

According to the OECD, between 1986-88 and 2002-04 the producer support to the poultry sector in Canada went from 18% to 5%. In 2002-04, the OECD countries that provided the most support to their poultry producers were in order: Switzerland (85%), Norway (73%) and the Czech Republic (50%). The United States which is a major player on World markets for poultry products had a PSE of 4%.

Figure 14 - Producer Support Estimate (PSE) for Selected Countries, 1986-88 versus 2002-04



Source: OECD, PSE/CSE database 2005.

5 Processing and further processing

5.1. Industry structure and establishments

Canada has 191 primary poultry processing plants (46 federally registered and 146 provincially registered). The five largest firms in the chicken sector are, in order: *la Coopérative fédérée de Québec* (three plants in Québec), Lilydale Poultry Co-operative (one plant in British Columbia, three in Alberta and one in Saskatchewan), Maple Leaf Poultry (two plants in Ontario, one in Alberta and one in Nova Scotia), Exceldor (two plants in Québec) and Maple Lodge Farms (one plant in Ontario).

Table 10 - Chicken Processing Plants by Province (2005)

	Federally registered	Provincially registered	TOTAL
British Columbia	8	3	11
Alberta	4	72 ¹	76
Saskatchewan	1	1	2
Manitoba	3	2	5
Ontario	13	45	57²
Québec	13	6	19
New Brunswick	1	5	6
Nova Scotia	2	7	9
Prince Edward Island	0	0	0
Newfoundland and Labrador	1	5	6
TOTAL	46	146	191

1- Including Alberta's 68 Hutterite plants.

2- One Ontario plant is both federally and provincially registered.

Source: CFIA / Data compiled by the AAFC Poultry Section.

Within the co-operative movement, there were five poultry co-operatives among Canada's 50 largest non-financial co-operatives in 2004¹⁴. The would be *La Coopérative fédérée de Québec* (Québec) which is ranked second amongst all co-operatives with revenues of \$2.9 billion dollars, followed by Lilydale Co-operative Ltd (Alberta) ranked 7th with revenues of \$517 millions and *Exceldor coopérative avicole* (Québec) ranked 11th, with revenues of \$217.6 millions. Furthermore, Granny's Poultry Co-operative (Manitoba) is ranked 26th and generates revenues of \$109.1 million while A.C.A Co-operative Limited (Nova Scotia) who is ranked 32nd with revenues of \$97 millions.

Canadian processors are represented at the national by the Canadian Poultry and Egg Processors Council (CPEPC). CPEPC represents some of the largest agri-food corporations and its 170 members process over 90% of Canada's chicken, turkey; eggs and hatching eggs. The CPEPC's mandate is to identify and represent the collective goals and interests of the processing industry, develop appropriate action plans, and conduct activities that will best achieve those goals.

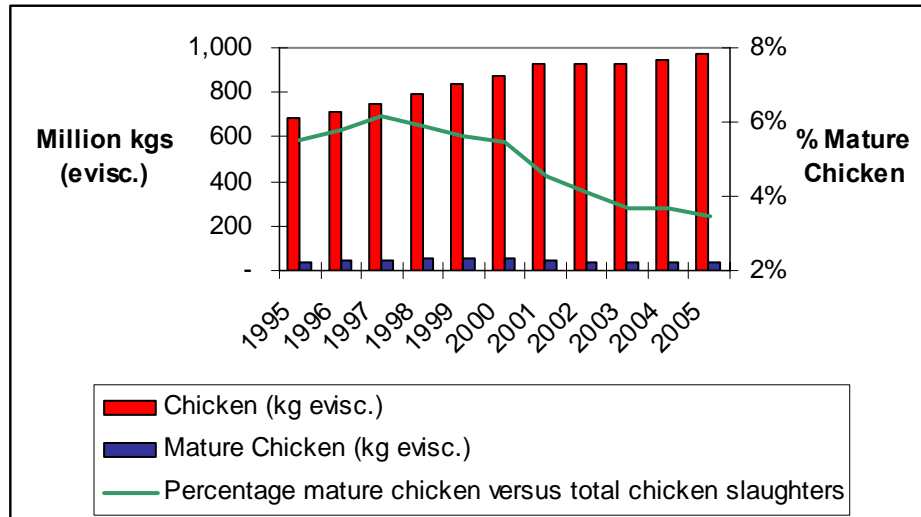
5.2. Slaughters

Since 1995 the total chicken slaughters increased from 726.8 million kilograms to more than 1 billion kilograms (eviscerated). In 2005, chicken slaughters represented 973.9 million kilograms while the mature chicken slaughters represented 35.2 million kilograms or about 3.5 percent of the total

¹⁴ <http://www.agr.gc.ca/policy/coop>

Canadian slaughters. The mature chicken is not subject to the supply management system. The mature chicken market consists of chicken meat such as old layers moved out of laying facilities for slaughter purposes.

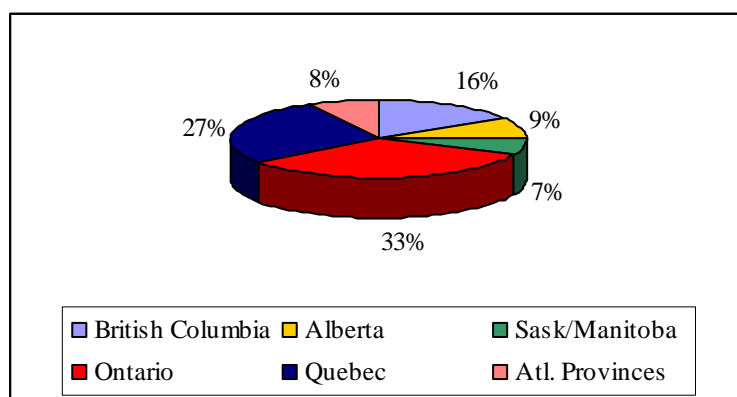
Figure 15 - Chicken and mature chicken slaughters in Canada (1995 to 2005)



In 2005, Canadian slaughters were higher during the months of May and August with slaughters close to 89 million kilograms but lower in the months of February and December with slaughters under 80 million kilograms. However, quarterly slaughter distribution were allocated evenly during the years with a slaughter share percentage that varies from a low of 24.3% (October to December) to a high of 25.6% (April to June).

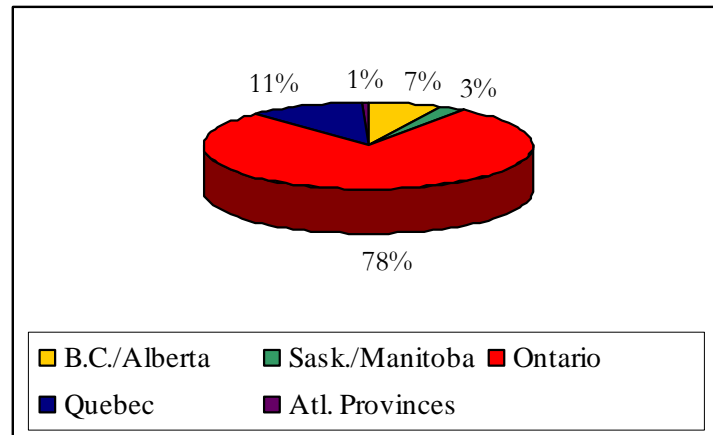
Since the 1950-60's, chicken quality changed dramatically. In the past most of the chicken meat was coming from mature hens but this situation changed over time with young chicken being slaughtered for meat consumption. In 2005, it is the province of Ontario that had the biggest share of chicken slaughters with 33% followed by Québec (27%) and British Columbia (16%). These include slaughters that come from Canadian chicken supplies and imports.

Figure 16 - Provincial Shares of Chicken Slaughters in Registered Stations, 2005



As indicated earlier, mature chicken slaughters represent about 3.5% of the total slaughters in Canada. In 2005, the province of Ontario slaughtered 78% of the mature chicken followed by Québec (11%) and British Columbia/Alberta (7%).

Figure 17 - Provincial Shares of Mature Chicken Slaughters in Registered Stations, 2005



5.3. Further processing

5.3.1 Further Poultry Processors Association of Canada (FPPAC)

The FPPAC is a trade association that provides manufacturers of value-added poultry products with an opportunity to share visions and concerns. The association was founded by three independent further processors in August 1985. The common cause that brought members together then was the concern about adequate supplies of raw material, and this today remains a key issue. Members are engaged in adding value to chicken, turkey, and fowl meat by way of sizing, marinating, breading, cooking, forming and adding other ingredients to make ready-to-eat or cooked products and meals.

Currently, the association is made up of 42 further processors (and 10 associate/supplier members), most of them based Ontario, where over half of Canada's further processing capacity is located. FPPAC members account for about \$1.3 billion in sales and employ over 4,200 full-time positions.¹⁵

5.3.2 Further Processing Plants

As of September 2006, there were 376 federally registered further processing plants for poultry meat in Canada. These plants are engaged in canning, boning and cutting, and other similar activities. It should be noted that some further processing plants also engage in primary processing. As well, a large number engage in more than one type of further processing operation.

¹⁵ Information taken from the FPPAC Web site.

* Since many of the plants in the "Other" category undertake more than one processing operation, the overall total is calculated in order to denote unique sites and eliminate double counting.

Table 11 – Federally Registered Further Processing Plants for Poultry (2006)

	Boning and cutting	Canning	Others	TOTAL
British Columbia	20	1	28	33
Alberta	16	1	31	32
Saskatchewan	2	0	5	5
Manitoba	5	0	10	11
Ontario	57	5	134	153
Québec	70	6	116	127
New Brunswick	1	1	7	7
Nova Scotia	5	0	6	7
Prince Edward Island	0	0	0	0
Newfoundland and Labrador	1	0	1	1
TOTAL	177	14	338	376*

Source: Canadian Food Inspection Agency (CFIA) database on licensed plants.

5.4. Economic importance of the industry

The Canadian Poultry and Egg Processors Council (CPEPC) has a further poultry processing sub-sector that represents chicken and turkey further processing plants across Canada. This group has reported over \$300 million in plant and equipment investment, and employs more than 3,500 people. It is supplied by primary processors, and transforms raw chicken meat into a variety of innovative foods for the retail and food services markets.

In 2005, the number of Canadian regulated chicken producers was 2,786, and generated farm cash receipts of \$1.6 billion in 2005. Broiler hatching egg production is comprised of approximately 270 producers and generates an approximate income of \$188.3 million dollars in 2005.

5.4.1 Poultry Processing Revenue, Wage, and Employment Figures

Statistics Canada figures show that in 2004 approximately \$5.2 billion out of the \$20.8 billion meat product manufacturing industry in Canada was generated by poultry processing, or 24.81%. The largest poultry processing region in Canada was in Ontario which accounted for near half of Canada's entire poultry processing revenues.

Table 12 – Canadian Meat Manufacturing and Poultry Processing Revenue Figures (2004)

	Meat Product Manufacturing Revenue (x \$1,000)	Poultry processing (x \$1,000)	Poultry Processing as a % of total Meat Manufacturing (x \$1,000)
Atlantic Region	652,258	317,778	48.72%
Québec	4,557,938	1,071,899	23.52%
Ontario	6,664,792	2,359,268	35.40%
Prairie Region	7,559,024	676,274	8.95%
British Columbia	1,445,425	754,095	52.17%
CANADA	20,879,437	5,179,314	24.81%

Source: Statistics Canada, Table 301-0006**

In 2004, the total salaries and wages generated by both direct and indirect labour in the poultry processing industry was \$652.2 millions. During the same year, the total number of employees in the poultry processing sector was approximately 20,000. Based on these figures, the average annual wage is approximately \$32,000.

Table 13 – Poultry Processing Wage and Worker breakdown in Canada (2004)

Production workers wages, direct labour (x \$1,000)	\$515,104	Number of production workers, direct labour (persons)	17,771
Non-manufacturing employees salaries, indirect labour (x \$1,000)	\$137,049	Number of non-manufacturing employees, indirect labour (persons)	2,561
Total salaries and wages, direct and indirect labour (x \$1,000)	\$652,153	Total number of employees, direct and indirect labour (persons)	20,332

Source: Statistics Canada, Table 301-0006**

**Table 301-0006 publishes principal statistics for businesses above certain revenue thresholds that vary by province and by industry. Below these thresholds are the smallest manufacturing businesses which are excluded from the ASML survey in order to reduce response burden.

5.5. Concentration in the Industry

Like many sectors of the agri-food economy, the poultry industry has become concentrated over the years. The table below exhibits the various concentration ratios within the poultry industry across selected years ranging back to 1965. Concentration Ratio (CR) measures have traditionally been measured on the basis of sales but employment, capacity, value added, or physical outputs have also been used to determine market shares.

The concentration ratio is effective in showing the dominance of the top firms, but it does not address the rest of the market nor does it account for the influence of a single firm¹⁶. For this example, the difference between an establishment and a firm is that a firm may own a number of establishments under various names in differing provinces across Canada. In other words, the firm can be considered the 'parent' company of the establishment.

The most common measure is the CR4. For chicken, the CR4 measurement shows an increasing trend since the mid 1960s. In 2005 the top four firms (Coop Fédérée, Maple Leaf/Prime, Lilydale, and Maple Lodge) accounted for 45.8% of the poultry processed in Canada an increase of 70.3% from its 1965 figure.

The evolution in the total number of firms and establishments over the forty year timeframe provides an overall indication of the level of concentration in the industry. As mentioned above, while the CR4 ratio has increased over 70% since 1965, the overall number of firms in the industry has decreased 116% from 136 to 63 in 2005. The same trend is evident in the total number of establishments which fell 97% over the same period.

Although there are fewer firms and establishments in the poultry industry today, the overall quantity of poultry processed has increased dramatically over the forty year period. This trend implies that the average establishment and firm are processing a much larger amount of poultry than was the case at any point in the past forty years. The CR20 lends further support to this point by showing that the top

¹⁶ Harrison, Darryl and James Rude. (2004) Measuring industry concentration in Canada's food processing sectors. Agriculture and Rural Working Paper Series Working Paper No. 70.
<http://dsp-psd.pwgsc.gc.ca/Collection/Statcan/21-601-MIE/21-601-MIE2004070.pdf>

20 firms account for nearly 93% of the chicken processed in 2005 compared to just over 65% in 1965 and 74.5% in 1980. Over the years, chicken operations have become more specialized as the whole-bird consumption pattern has shifted toward more convenient products and specialized cuts. While the concentration ratio has stabilized in the recent years, concentration in the industry might continue to occur in the future.

Table 14 - Total Number of Firms and Concentration Ratios of the Largest Firms in the Poultry Processing Industry in Canada (Selected years, 1965 to 2005)

Year	Number of Firms	Establishments	Total Amount Processed (Evis) kg	CR4	CR8	CR12	CR16	CR20
1965	136	150	*	26.9%	40.3%	51.3%	60.0%	65.5%
1970	86	102	*	37.0%	53.3%	65.7%	74.9%	79.8%
1976	68	87	*	39.0%	54.7%	66.7%	74.5%	80.0%
1980	71	90	*	36.3%	50.6%	61.1%	68.4%	74.5%
1985	68	96	*	36.0%	54.0%	N/A	N/A	N/A
2000	74	90	875,030,971	47.1%	67.7%	80.0%	87.7%	93.2%
2005	63	76	973,931,641	45.8%	66.2%	79.1%	87.2%	92.8%

* Data collected was calculated in the dollar value of chicken shipments and not in overall quantity (kg).

Source: Data for the years 1965 to 1980 are from Statistics Canada, Catalogue no. 31-402. 1985 data is from M.E. Fulton and Y. Tang, 1999. Testing the Competitiveness of a Multistage Food Marketing System: The Canadian Chicken Industry. Canadian Journal of Agricultural Economics 47: 25-250. 2000 and 2005 data is derived from calculations from the AAFC Poultry Section based on quantity (kg).

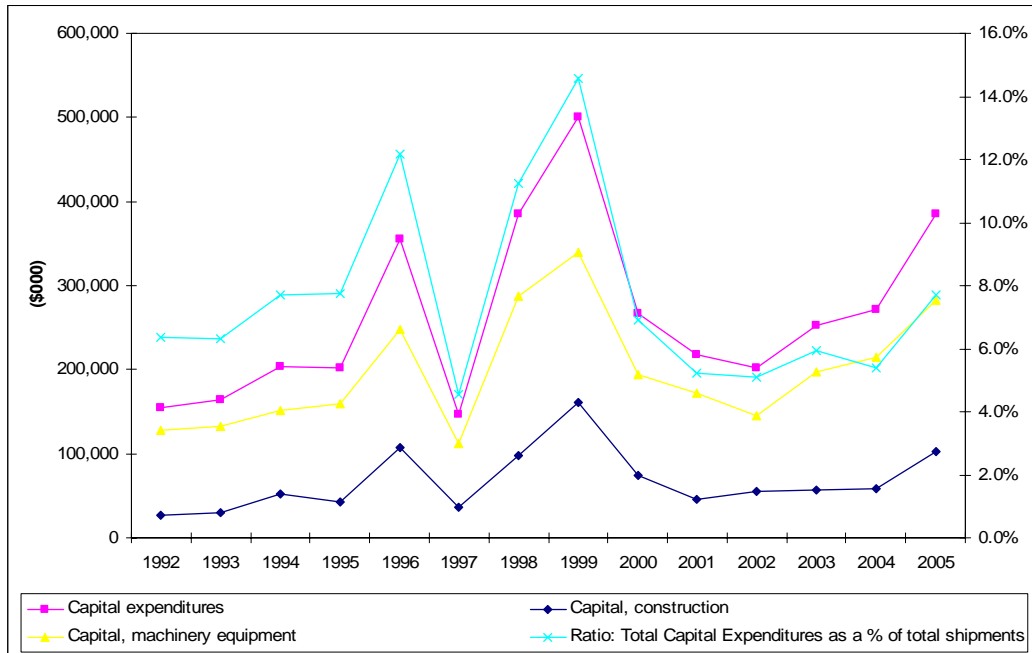
5.6. Investments in the Industry

The figure below provides a breakdown of capital expenditures as well as expenditures as a percentage of total poultry shipments within the poultry processing industry since 1992.

The general trend to note is that capital expenditure in machinery equipment has consistently been higher than capital expenditures in construction. This trend, along with the concentration ratio data, further suggests that individual establishments are expanding in size and efficiency (through newer, more modern machinery) rather than increasing the overall total amount of establishments.

Throughout the fourteen year period, the average total annual capital expenditures as a percentage of total poultry shipments stand at approximately 7.5%. 1996 and 1999 are years of above average capital expenditures with 12.2% and 14.6% of total poultry shipments respectively.

Figure 18 - Breakdown of Capital Expenditures in the Poultry Industry (1992 – 2005)



Source: Statistics Canada, table no. Table 029-0009 & Table 304-0014

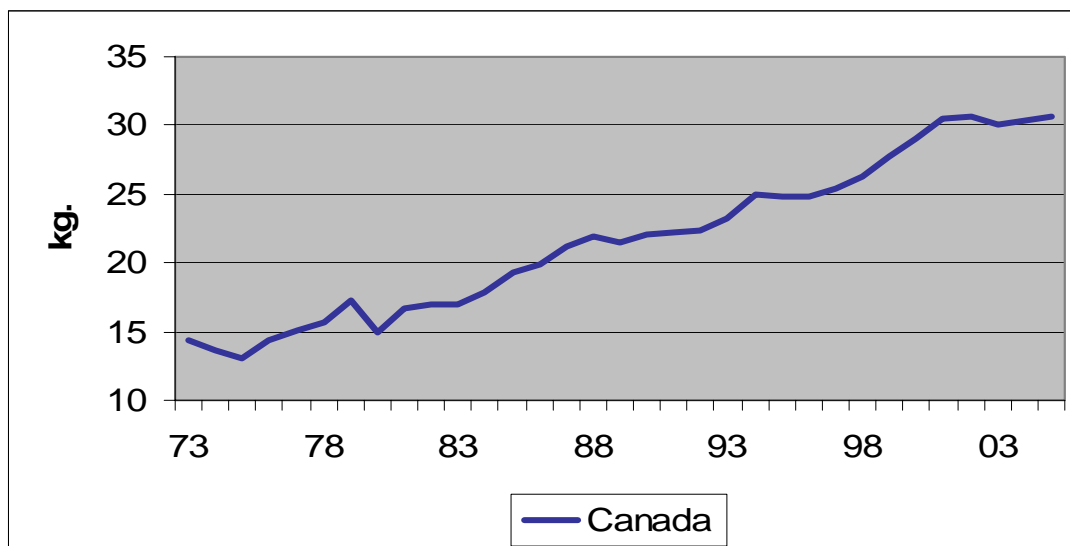
6 The Canadian Chicken Market

6.1. Domestic Chicken Consumption in Canada

As the figure below shows, per-capita chicken consumption has soared in the past 30 years, from 13 kg in 1975 to 30.7 kg in 2005, an increase of 136%. By way of comparison, per-capita beef and pork consumption declined by 35% and 4% respectively over the same period.

Other factors contributing to this trend have included an ongoing consumer preference for time-saving, easy-to-prepare and ready-to-eat chicken-based products and advertising campaigns stressing the health benefits of eating chicken.

Figure 19 - Per-capita Consumption of Chicken in Canada – 1973-2005 (eviscerated weight)



Source: Statistics Canada.

Between 1985 and 2005, the average Canadian consumed from 90 to 98 kg¹⁷ of meat annually. The total quantity of meat consumed was very stable, with increases in the consumption of one type of meat being offset, as a rule, by declines in the consumption of some other type. Accordingly, it is noteworthy that increased consumption of chicken (and poultry in general) in Canada has occurred just as beef consumption has been declining.

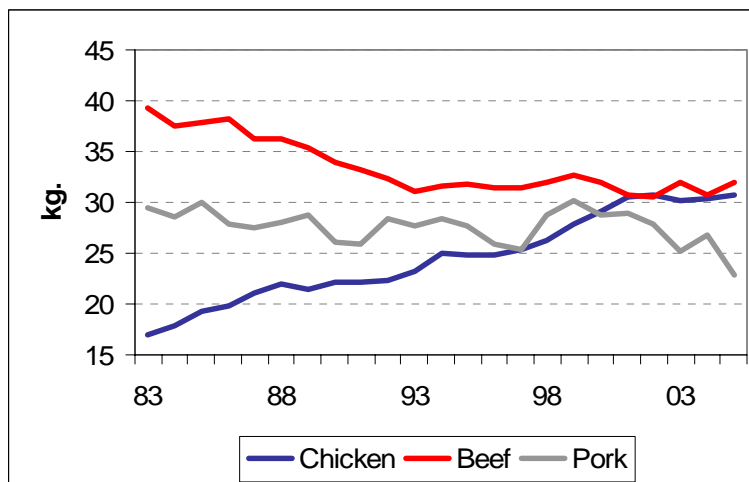
Beef consumption peaked in the mid-1970s and has been declining steadily ever since (between 1985 and 2005, per-capita beef consumption fell by 16%). Pork consumption has been fairly stable since the mid-1970s, albeit with some fluctuations. Conversely, as we have seen, poultry consumption per capita has grown substantially during these years.

In 2005, the various meats ranked by per-capita consumption were as follows: chicken, 30.7 kg; beef, 31.9 kg; pork, 22.9 kg; turkey, 4.3 kg; mature chicken, 1.7 kg; veal 1.1 kg; mutton and lamb, 1.1 kg. The data on consumption used for purposes of these comparisons are expressed in terms of eviscerated weight in the case of poultry and carcass weight for beef, pork, veal and lamb.

The graph below shows per-capita consumption of chicken compared to other leading meats.

¹⁷ Calculated on the basis of carcass weight in the case of red meats and eviscerated weight in the case of poultry (excluding fish).

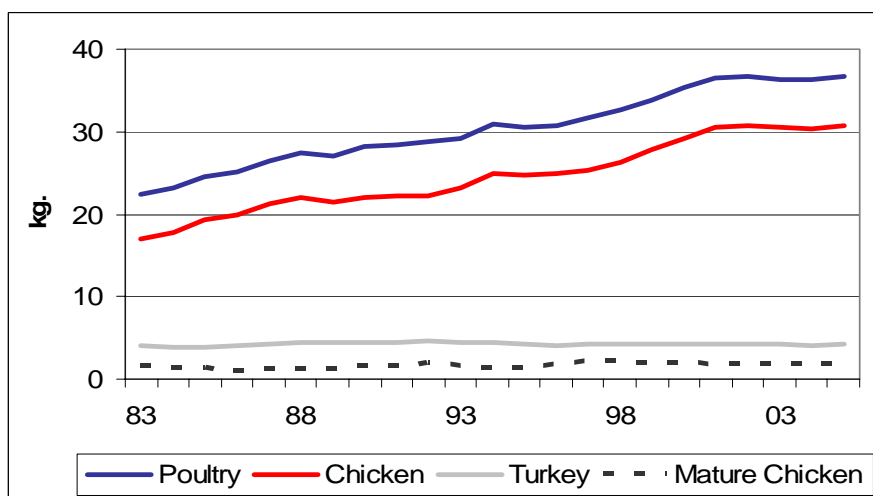
Figure 20 - Consumption of Chicken versus Other Meats (per capita – Canada)



Source: Statistics Canada, catalogue Nos. 23-202 and 23-010.

A comparison of chicken with other poultry meats reveals that per-capita consumption of turkey remained in the 3.9-4.5 kg range between 1985 and 2005, with annual per-capita consumption averaging 4.2 kg. Similarly, mature chicken consumption remained stable, and has even declined slightly in recent years: between 1985 and 2005, per-capita consumption of mature chicken remained in the 1.0-2.0 kg range, with annual average consumption at 1.6 kg. The graph below shows the growth in various types of poultry consumption over the past 20 years.

Figure 21 - Consumption of Chicken and Other Poultry Meats (per capita – Canada)



Source: Statistics Canada, Catalogue No. 21-020.

6.1.2. Market Sector Consumption of Chicken

Chicken and chicken products can be directly purchased at the farm gate; however the large majority of chicken and chicken products reach the consumer from the retail, fast food, full service restaurant, or hotel and institution market sector.

In 2005, the majority of chicken consumed in the market sector was utilized by the retail sector (i.e. grocery, and butcher shops) (62%) or approximately 625,000,000 kg with fast food consumption a distant second utilizing 231,000,000 kg of chicken. The sector with the largest growth between 2004

and 2005 was full service restaurants which saw consumption of chicken and chicken products increase from 92,000,000 kg in 2004 to 97,000,000 in 2005, and increase of 5.4%.

Table 15 - Chicken Consumption by Market Sector (000 000 kg)

	2001	2002	2003	2004	2005
Retail	597	608	595	611	625
Fast Food	203	211	213	221	231
Full Service Restaurants	92	94	90	92	97
Hotel and Institutions	54	54	53	54	55
Total	946	967	951	978	1008

Source: Further Poultry Processors Association of Canada

6.2. Factors Influencing the Canadian Demand

Chicken consumption has been growing steadily for the past 20 years: total domestic consumption was 989,800,000 kg in 2005, compared to 501,350,000 kg in 1985. This 97% increase has been due in part to the country's population growth, but another factor has been chicken's increasing popularity among Canadians during this period.

Overall, Canadian's tastes have changed towards chicken primarily due to an increase in health awareness and the overall health benefits chicken provides. Compared to red meats, chicken is perceived as much leaner and therefore healthier. There is also an increased presence of substitute products containing chicken (i.e. chicken burgers), often seen as a healthier choice compared to its red meat alternative. The increase consumption of these chicken alternatives is also strongly related to the shift towards healthier choices made by Canadian consumers.

6.3. Inter-provincial Trade in Chicken

Inter-provincial movement of chicken in Canada is integral to the dynamic of supply and demand of chicken across the various regions in Canada. In 2005, the total inter-provincial movement of chicken in Canada totalled approximately 40.3 million kg which represents 4.1% of the total amount of chicken produced in Canada in 2005.

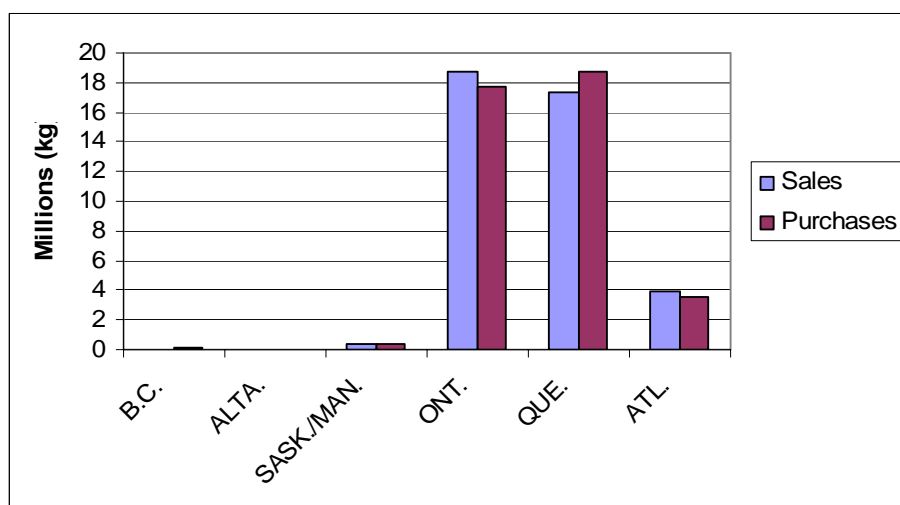
Table 16 - Inter-provincial Movements of Chicken in 2005

Movements	Quantity (kg evis.)	Inter-provincial movements as a percentage of total production
Inter-provincial Movements of Chicken	40.3 million	4.1%
Total Chicken Production	981.3 million	

Source: Source: Chicken Farmers of Canada (CFC), Canadian Food Inspection Agency, as compiled by AAFC, AID, Poultry Section

In 2005, Ontario supplied the largest amount of chicken for inter-provincial trade purposes providing 18,710,661 kg to Québec which in turn allowed Québec to become the largest purchaser of inter-provincial chicken for the year.

Figure 22 - Inter-provincial Movement of Live Chicken for Slaughter (2005)



Source: Canadian Food Inspection Agency, as compiled by AAFC, AID, Poultry Section

6.4. Canadian Imports of Chicken Meat and Chicken Products

Companies wishing to export chicken and their products to Canada are governed primarily by two trade agreements: the North American Free Trade Agreement (NAFTA) and the World Trade Organization (WTO). The import access levels set by NAFTA are higher than those of the WTO, and thus the former takes precedence over the latter. Under NAFTA, the annual import access level for chicken is calculated at 7.5% of the previous year's domestic chicken production (which comprises regulated domestic, export and non-regulated production) as reported by Statistics Canada.

Chicken imports are divided into products that are on the Import Control List (ICL) and products not on this list (non-ICL): the first group is subject to tariff rate quotas (TRQs), while the other group is not. Chicken was first placed on the ICL on October 22, 1979. (For a complete list of chicken products listed on the ICL as well as products on non-ICL, please refer to Annex A)

A TRQ has three main components: a low rate of duty, a minimum access level (or "import access quantity") for entry at the low entry rate, and a high rate of duty.

The import access level benefiting from the reduced rates of duty, or "within access commitment" rates of duty, is allocated to businesses located in Canada. Businesses with the authority to import can apply for import permits (or "specific import permits"), which are usually issued on demand to quota holders up to their import quota limits. Applications for "within access commitment" import permits from businesses that have no import quota are usually refused.

There are four groups, or pools, of importers that maintain import permits (quota holders). Three of these pools, food services, distributors, and processors, all maintain quota for the ICL products while the remaining pool (Non-ICL – FTA Portion) hold quota for non-ICL products. In 2005 there were 48 permit holders in the food services pool, 200 in the distributor pool, 214 in the processor pool and 66 in the non-ICL- FTA Portion pool.

For further information about the rules and procedures governing the importing of chickens into Canada, please consult the Web site of the Export and Import Controls Bureau, International Trade Canada, at the following address: <http://www.dfait-maeci.gc.ca/trade/eicb>.

Imports of chicken into Canada totalled 88.7 million kg (actual weight) in 2005, or 107.2 million kg if further processed chicken products are included. The tables below show the types of chicken

products imported during the 2000-2005 period in terms of actual weight (except imports of live chickens, for which eviscerated weight is used).

Table 17 - Imports of Chicken (Excluding mature chicken) (kg)

	2000	2001	2002	2003	2004	2005
Live (evisc. weight)	710,334	122,327	75,148	226,471	211,168	89,956
Whole carcasses	221,046	152,909	469,662	448,450	8,797,274	886,880
Parts						
Breasts (bone in)	16,734,255	13,721,274	20,995,298	17,739,654	15,073,431	13,872,894
Legs (bone in)	177,111	130,597	782,208	116,422	190,343	759,454
Pieces (bone in)	6,427,567	9,317,447	5,712,426	3,849,536	1,855,620	5,515,777
Wings (bone in)	18,470,976	19,128,866	17,917,378	17,916,843	23,225,847	16,373,791
Boneless breasts	10,372,791	8,665,052	11,820,926	11,269,565	17,116,537	21,717,629
Boneless pieces	2,492,445	6,173,837	3,241,589	5,724,100	9,010,218	8,584,824
Prepared						
Cooked (bone in)	1,124,954	3,298,057	5,338,975	4,713,277	3,661,004	4,442,735
Cooked (boneless)	3,648,205	7,685,800	7,747,191	8,574,515	7,732,724	7,804,931
Other						
Other (bone in)	3,002,067	4,798,243	5,415,572	9,519,144	4,108,027	8,264,604
Other (boneless)	6,571,739	976,308	314,755	28,072	26,612	455,188
TOTAL	69,953,490	74,170,717	79,831,128	80,126,049	91,008,805	88,768,663

Source: CFIA / Compiled by the AAFC Poultry Section.

Table 18 - Further Processed Chicken Products Imported into Canada (kg)

	2000	2001	2002	2003	2004	2005
Dinners and pies	13,464,670	13,139,350	12,386,271	11,097,904	12,433,311	13,731,644
	N/D	4,700	0	16	0	0
Rolls	N/D	1,419,197	1,499,529	1,423,661	1,837,358	2,301,007
Soups	N/D	862,559	974,815	1,457,314	2,055,849	2,479,594
Other						
TOTAL	13,464,670	15,425,806	14,860,615	13,978,895	16,326,518	18,512,245

Source: CFIA / Compiled by the AAFC Poultry Section.

6.5. Canadian Exports of Chicken Meat and Chicken Products

Canadian exports of chicken have increased significantly from 1993 to 2003, from 1.3 million kg to 85.7 million kg.¹⁸ This jump could partly be attributed to the WTO agreement on agriculture that came into effect on January 1, 1995, opening up a number of markets that had traditionally been closed. Another factor has been an effort to find new markets for dark meat, which is demanded less in

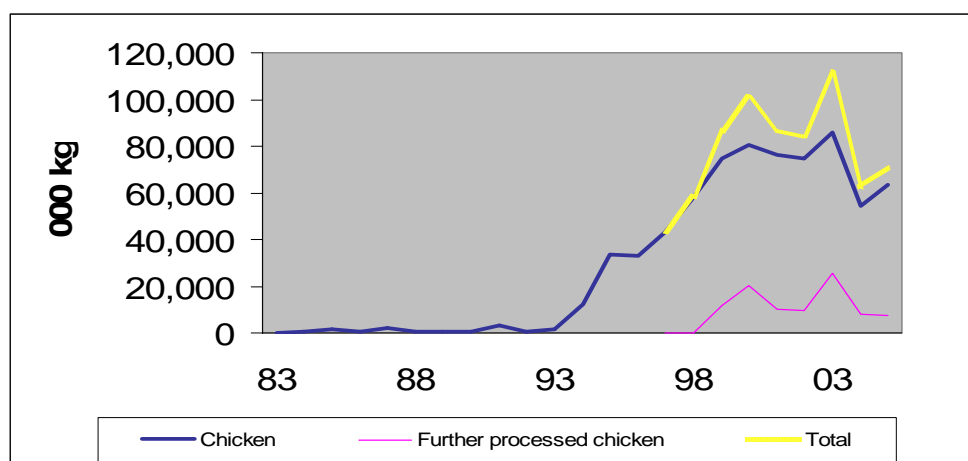
¹⁸ Exclusive of further processed chicken products.

Canada. The export levels for chicken in 2005 were 26% lower (63,468,000 kg) than in 2003 due to the negative impacts of importation bans introduced by other countries on Canadian chicken during the avian influenza outbreak in 2004.

Figure 5 shows the changes in the exportation levels of chicken over a 22 year period. Beginning in 1997, data on further processed chicken products were added to the chicken export number allowing for a more comprehensive breakdown of the Canadian chicken export market.

Although the avian influenza had a negative impact on the exportation of Canadian chicken, the graph does show a reversal of the negative trend and a return to export growth in 2005.

Figure 23 - Changes in Canadian Exports of Chicken



Source: CFIA / Compiled by the AAFC Poultry Section.

Canada exports a variety of chicken products; as indicated in the table below, however, cuts (i.e. legs, and wings) account for over 75% of the total. This is attributable to the fact that Canadian consumers tend to prefer white meat, and as a result dark meat excess is sold on the international market.

Table 19 - Canadian Exports of Chicken Products – 2000-2005 (kg)

Products (kg)	2000	2001	2002	2003	2004	2005
Whole carcasses	3,784,979	5,425,416	5,146,860	4,405,785	4,975,043	7,624,795
Cuts	55,199,573	62,478,291	78,234,901	63,884,096	57,878,028	79,187,801
Livers/Paste	288,567	241,108	99,661	356,957	233,680	3,319,432
Prepared Meals	2,911,928	2,486,869	3,961,243	3,501,825	3,492,357	3,303,550
Meat	2,135,021	4,629,962	4,583,793	6,804,456	8,458,810	8,645,645
TOTAL	64,320,068	75,261,646	92,026,458	78,953,119	75,037,918	102,081,223

Source: CFIA / Compiled by the AAFC Poultry Section.

6.6. Trade balance in Chicken

The table and graph below illustrate the overall value of imports, exports and trade balance of chicken and chicken products during the 2000-2005 timeframe. Imports of chicken and chicken products were valued at \$427,573,798 in 2004, up 26.2% from 2003. This large increase reflects the additional product required to supply the domestic market as a result of avian influenza in British Columbia in early 2004. This spike in import demand was reversed in 2005 when import levels dropped 18% to \$350,836,893 bringing import levels back in line with 2001 through 2003 figures.

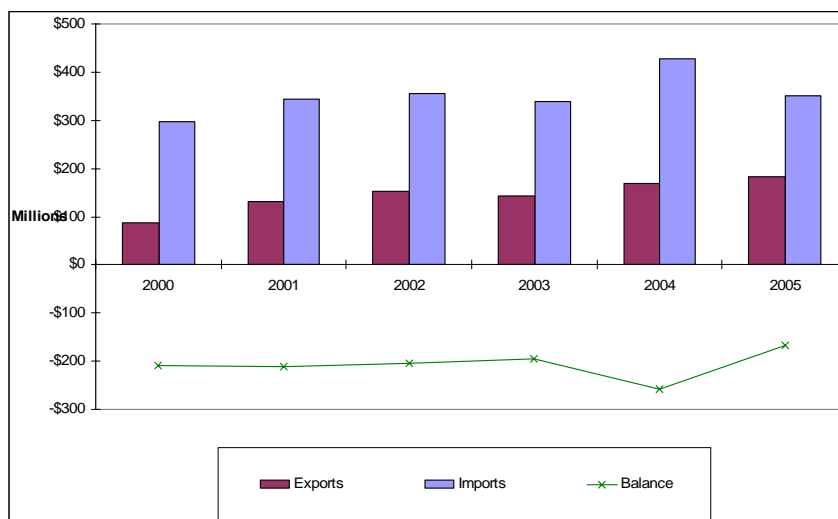
With regards to imports the overall trend has been increasing since 2000. In 2000, exports were valued at only \$87,575,122 and have increased an average of 17% per year up to 2005 levels of \$183,630,685.

While imports have remained stable and exports progressively increasing, the overall trade balance remains negative. Before the AI outbreak in 2004, the trade balance remained constant at approximately \$-205,000,000 a year. With the outbreak in 2004, the trade deficit shot up to over \$-250,000,000 only to decrease sharply below 2000-2003 levels in 2005 to only \$-167,206,208.

Table 20 – Import, Export and Trade Balance Figures for Canadian Chicken and Chicken Products (2000-2005) (\$)

	2000	2001	2002	2003	2004	2005
Exports	87,575,122	131,740,598	151,588,235	143,301,694	168,922,466	183,630,685
Imports	296,340,279	343,812,886	356,504,121	338,593,689	427,573,798	350,836,893
Balance	-208,765,157	-212,072,288	-204,915,886	-195,291,995	-258,651,332	-167,206,208

Figure 24 - Canadian Trade Balance for Chicken and Chicken Products (2000-2005) (\$)



Source: Statistics Canada and AAFC compilations

Annex A

The Import Control List

Chicken Items on the ICL

- 96.** Live fowls of the species *Gallus domesticus* (other than those for breeding purposes and other than started pullets and spent fowls), weighing more than 185 g, that are classified under tariff item Nos. 0105.92.91, 0105.92.92, 0105.93.91 or 0105.93.92 in the List of Tariff Provisions set out in the schedule to the *Customs Tariff*;
- 97.** Meat and edible offal of fowls of the species *Gallus domesticus*, fresh, chilled or frozen, not cut in pieces (other than spent fowls), that are classified under tariff item Nos. 0207.11.91, 0207.11.92, 0207.12.91 or 0207.12.92 in the List of Tariff Provisions set out in the schedule to the *Customs Tariff*;
- 98.** Cuts of meat and edible offal, including livers, of fowls of the species *Gallus domesticus*, fresh, chilled or frozen (other than spent fowls), that are classified under tariff item Nos. 0207.13.91, 0207.13.92 (bone in), 0207.13.93 (boneless), 0207.14.21, 0207.14.22, 0207.14.91, 0207.14.92 (bone in) or 0207.14.93 (boneless) in the List of Tariff Provisions set out in the schedule to the *Customs Tariff*;
- 99.** Fat of fowls (not rendered or otherwise extracted) of the species *Gallus domesticus*, fresh, chilled or frozen, salted, in brine, dried or smoked, that is classified under tariff item Nos. 0209.00.21 or 0209.00.22 in the List of Tariff Provisions set out in the schedule to the *Customs Tariff*;
- 100.** Meat of fowls of the species *Gallus domesticus*, salted, in brine, dried or smoked, that is classified under tariff item Nos. 0210.99.11, 0210.99.12 (bone in) or 0210.99.13 (boneless) in the List of Tariff Provisions set out in the schedule to the *Customs Tariff*;
- 101.** Sausages and similar products, made from meat, meat offal or blood of fowls of the species *Gallus domesticus*, and food preparations based on those products (other than in cans or glass jars or made from spent fowls), that are classified under tariff item Nos. 1601.00.21 or 1601.00.22 in the List of Tariff Provisions set out in the schedule to the *Customs Tariff*;
- 102.** Prepared or preserved liver paste, made from fowls of the species *Gallus domesticus* (other than in cans or glass jars), that is classified under tariff item Nos. 1602.20.21 or 1602.20.22 in the List of Tariff Provisions set out in the schedule to the *Customs Tariff*;
- 103.** Prepared meals, made from fowls of the species *Gallus domesticus* (other than specially defined mixtures and meals made from spent fowls), that are classified under tariff item Nos. 1602.32.12, 1602.32.13 (bone in) or 1602.32.14 (boneless) in the List of Tariff Provisions set out in the schedule to the *Customs Tariff*;
- 104.** Prepared or preserved meat or meat offal of fowls of the species *Gallus domesticus* (other than prepared meals, fowls of the species *Gallus domesticus* in cans or glass jars, specially defined mixtures and products made from spent fowls) that is classified under tariff item Nos. 1602.32.93, 1602.32.94 (bone in) or 1602.32.95 (boneless) in the List of Tariff Provisions set out in the schedule to the *Customs Tariff*.

Source: International Trade Canada.

Chicken Items not on the ICL

- Generally, chicken products that are identified as "specially defined mixtures" of tariff Nos. 1602.32.11 and 1602.32.92 are exempted from the ICL. Examples of such products include: chicken cordon bleu, breaded breast of chicken cordon bleu, chicken Kiev, breaded breast of chicken Kiev, boneless Rock Cornish hen with rice, stuffed Rock Cornish hen, boneless chicken with apples and almonds, chicken Romanoff Regell, chicken Neptune breast, boneless chicken Panache and chicken TV dinners;
- Chicken products produced from old roosters and spent fowl, commonly called "stewing hens," are also not on the ICL, but are not eligible for a share of the non-ICL portion of the chicken TRQ;
- Mechanically separated meat (MSM) used in the manufacture of non-ICL products is not normally eligible for non-ICL quota. In the event MSM is not available domestically at US competitive prices, the Minister may authorize supplementary imports for MSM;
- In addition to "specially defined mixtures," chicken products are considered non-ICL products if they are classified under headings Nos. 19.02 (pasta), 19.04 (rice-based preparations), 19.05 (pastry), 20.04 (other vegetables prepared or preserved, frozen), 20.05 (other vegetables prepared or preserved, not frozen), 20.06 (fruits and vegetables preserved by sugar), 21.03 (sauces and preparations), 21.04 (soups) and 21.06 (food preparations). Processors of these products may be eligible for a share of the non-ICL portion of the chicken TRQ.

Additional information

- Chicken products that are simply cooked and/or marinated and/or spiced are on the ICL;
- For non-ICL products that include marinated chicken, the weight of the chicken before marinating must be used;
- Skin of natural origin or added skin does not count toward the weight of non-ICL chicken products;
- Added fat does not count toward the weight of non-ICL chicken products.

Source: International Trade Canada.

Bibliography

Agriculture and Agri-Food Canada, Economic Backgrounder: Changing Trends in the agri-food chain. November 2006.

Agriculture and Food Policy. <http://www.the.canadianencyclopedia.com/>

British Columbia Chicken Marketing Board. 2007.
<http://www.bcchicken.ca/history/?PHPSESSID=b9d3190319e9240f4976110da27>

Canadian Broiler Hatching Egg Marketing Agency (CBHEMA)
<http://www.cbhema.com>

Chicken Farmers of Canada (CFC)
<http://www.chicken.ca>

Emsley, Alan. November 2006. The Risk of AI Transmission through Breeding Stock. Presented at the Markets and Trade Dimensions of Avian Influenza Prevention and Control of the Food and Agriculture Organization Symposium in Rome.

Fulton, M. and Tang, Y. 1999. Testing the Competitiveness of a Multistage Food Marketing System: The Canadian Chicken Industry. *Canadian Journal of Agricultural Economics* 47: 225-250.

Harrison, Darryl and James Rude. (2004) Measuring industry concentration in Canada's food processing sectors. Agriculture and Rural Working Paper Series Working Paper No. 70.
<http://dsp-psd.pwgsc.gc.ca/Collection/Statcan/21-601-MIE/21-601-MIE2004070.pdf>

Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec. Profil sectoriel de l'industrie bioalimentaire au Québec (Édition 2006). Janvier 2007. 122 pages

Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec. Portrait sommaire de l'industrie de la volaille au Québec. June 2006. 32 pages.

Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec. État de situation dans l'industrie du poulet et du dindon au Québec. June 2001. 86 pages.

National Farm Product Council
<http://nfpc-cnpa.gc.ca/>

OECD-FAO Agricultural Outlook 2006-2015. 2006. 206 pages.

Ontario Farm Products Marketing Commission, 2000. Fact Sheet - A History of Agricultural Marketing Legislation in Ontario.

Price Waterhouse, October 1987. Final report to the Steering Committee. Review of Supply Management in Chicken, Eggs and Turkey.

Statistics Canada, Poultry and Egg Statistics. July to September 2006. Catalogue no. 23-015-XIE

2001 Federal-Provincial Agreement for Chicken.