

MANITOBA PIG AND PORK INDUSTRY 2015



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Data Sources:

Agriculture and Agri-Food Canada
Bank of Canada
Canadian Food Inspection Agency
Manitoba Agriculture, Food and Rural Development
Manitoba Pork Council
Statistics Canada
United States Department of Agriculture

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Manitoba Pig and Pork Industry

Statistical History

Pre-World War II:

Manitoba farmers have been raising pigs since the province was first settled. Early statistics collected by the *Dominion Bureau of Statistics* show that Manitoba farmers had 17,000 pigs on farms in 1881, but increased their inventories to between 200,000 and 400,000 pigs in the 1920s and 1930s. The need for more pork and beef during World War II led pork production in the province to triple between 1938 and 1943, when the pig inventory rose to 668,000 head.

Post-World War II:

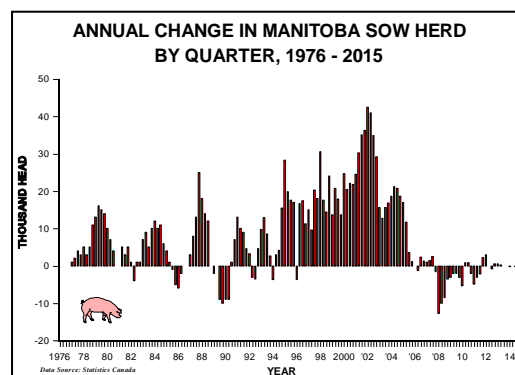
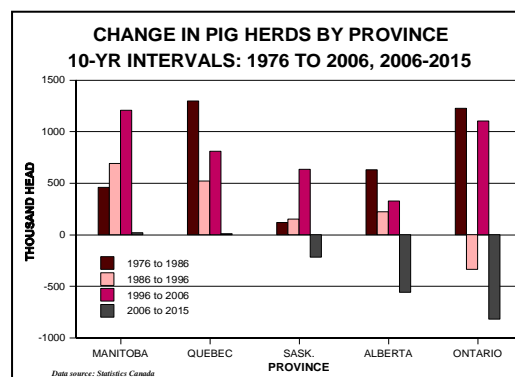
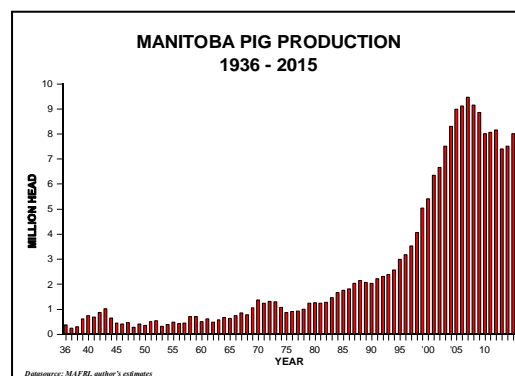
After the war, the number of pigs declined to the pre-war level and did not surpass the war time inventory until 1970, when excess Prairie grain supplies lowered feed costs, encouraging Manitoba farmers to increase pig production once again.

1970 to 1990:

More recent growth in the swine industry initially began in the late 1970s after Manitoba lost its cattle feeding and slaughter industry to Alberta. The province expanded its hog industry, utilizing feed crops produced in the province as well as providing new jobs in pig production, pork processing and other value-added activities, such as construction and transportation.

1990s to early 2000s:

A portion of the last pig industry expansion from 1990 to 2007 can be attributed to both the anticipation of the elimination and the end of the Crow's Nest Pass grain transportation subsidy in 1995 and depressed grain prices from 1985 to 2006. In addition, part of the industry expansion since the mid-1990s was in response to an open market and new slaughter facilities in the province and part to increased demand for high-quality feeder pigs and weanlings in the American Corn Belt, where some states had seen a reduction in smaller producers due to programs to control swine diseases. Improved pig-production efficiency in Manitoba as well as an expanding market for weanling pigs in the United States virtually eliminated the four-year production cycle in Manitoba. Historically, the cycle was due to farmers expanding pig inventories when prices rose only to contract production when hog prices fell. The swine industry grew significantly from the mid-1990s to the early 2000s, but growth started to slow after 2003. The average annual rate of growth in production from 1995 to 2004 was 12.6% compared to an average increase of 4.6% for the previous decade. Annual production growth fell from 12.8% in 2003 to 1.4% in 2006. Annual pig production reached a record 9.45 million head in 2007, more than ten times the level thirty years earlier in 1977.



Unprecedented adverse market conditions led to a total herd reduction of 330,000 pigs from July 1, 2007 to July 1, 2009. Although the total herd began to increase due to fewer weanling exports, sow numbers continued to decline in the next two years to 308,900 in July, 2011. The sow herd then rose slowly to 314,600 head by July 1, 2013, and again to 315,700 head on July 1, 2015, which was almost 15% below the July 1, 2007 record. After decreasing to about 7.5 million head in 2014, annual pig production rose to about 8.0 million head in 2015 or close to 30% of national pig production.

Future:

The positive impact of the weaker Canadian dollar and lower feed costs on pig production profits in 2015 could mean the Manitoba sow herd will increase further in 2016. Previously limited American market access for Canadian pig exports may be expanded in 2016.

Number of Pig Farms, Type and Location

Number of farms:

According to *Statistics Canada*, the number of farms with pigs in Manitoba decreased from 14,200 in 1971 to 1,710 in July 2001, falling each year to 565 in July 2013. The number of farms declined again to 550 on July 1, 2015 with an average of 5,445 pigs per farm.

There were 222 levy paying producers with a total of 611 CQA registered sites at the end of 2015. The increase in the number of registered sites is due largely to the reactivation of previously retired sites as contract locations by either HyLife or Maple Leaf Foods.

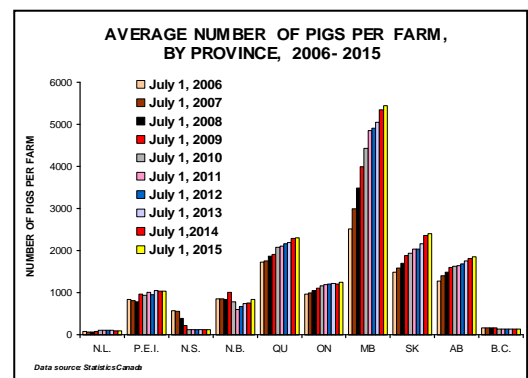
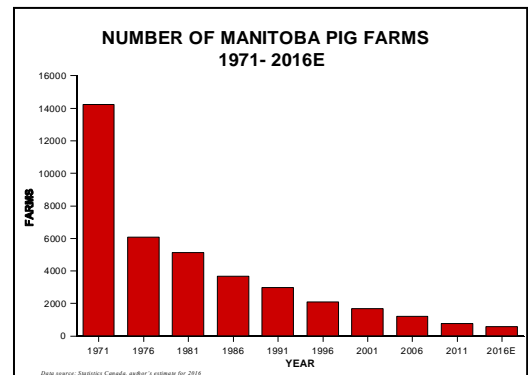
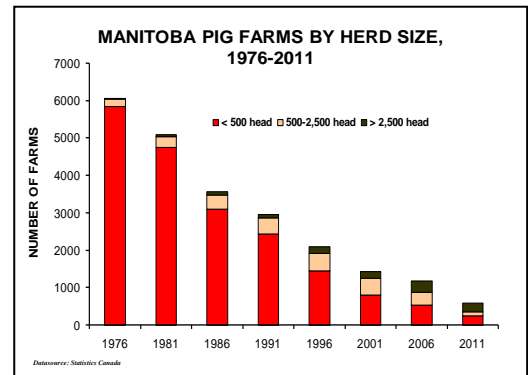
Pig farm type in 2011:

The Manitoba swine industry has a much higher percentage of farms which produce only weanling pigs (those under 20kg) than do other provinces.

The latest available data from *Statistics Canada's* 2011 Census of Agriculture shows that of the 590 Manitoba farms with pigs in May 2011, 165 or 28.0% had fewer than 6 pigs, 94 or 15.9% produced weanlings only, 142 or 24.1% were farrow to finish operations, 13 or 2.2% were nursery operations and 176 or 29.8% were finishing operations.

Further analysis using *Statistics Canada's* 2011 Census data showed that 48.6% of the Manitoba farms with pigs in 2011 had no sows. These 287 units had an average of 2,090 pigs per farm and 21.0% of the total number of pigs in Manitoba. There were 303 Manitoba pig farms, or 51.4% of the total number of operations, with sows and, of these, 109 or 36.0% had fewer than 100 sows.

These smallest farrowing units had only 0.4% of the total number of sows and total pigs in Manitoba. On the other end of the scale, there were 80 pig production units (compared to 75 in 2001 and 111 in 2006) with more than 1,000 sows per unit. These large units averaged about 3,066 sows per unit and, in total, comprised 79.1% of all sows and 58.4% of total pigs in



the province. Another 46 units had 600-999 sows, averaging 778 sows per unit, with a total of 11.5% of all sows and 11.6% of total pigs in the province. There were 53 units in the 300-599 sow category which had 8.1 % of all sows, 7.6% of all pigs and averaged 474 sows per unit. The 15 pig farms with 100-299 sows had 0.8% of all sows and 1.1% of all pigs.

According to *Statistics Canada*, 356 Manitoba pig farms had 300 animal units (AU) or less comprising 60.3% of Manitoba pig farms. Of all farms with sows, 156 or 51.5% had more than 300 AU in 2011.

Farm Location:

The *2011 Census* showed that 31.9% of Manitoba’s pig farms with 48.5% of all pigs were located in the Eastern Region (9 and 10 in graph), 33.6% of pig farms with 28.0% of all pigs in the Central Region (7 and 8 in graph) 15.9% of farms with 9.5% of pigs in the Southwest Region (1,2 and 3 in graph), 6.8% of farms with 1.4% of pigs in the Northwest Region (4,5 and 6 in graph) and 11.9% of farms with 12.6% of pigs in the Interlake Region (11 and 12 in graph).

Pig Densities:

The number of pigs per hectare of arable land and improved pasture (land which can be fertilized by pig manure) in Manitoba varies from one Rural Municipality to the next. Areas of greatest concentration are in the south-east part of the province.

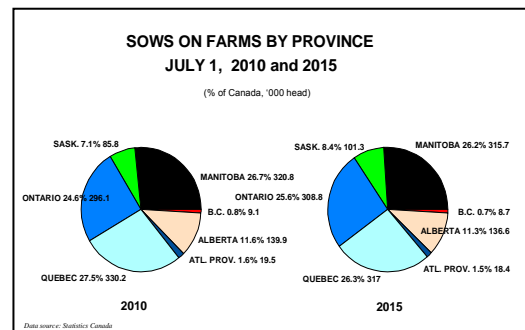
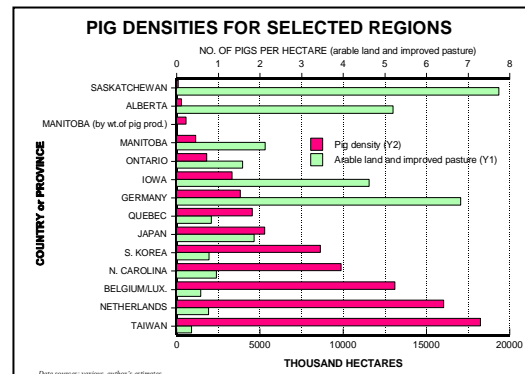
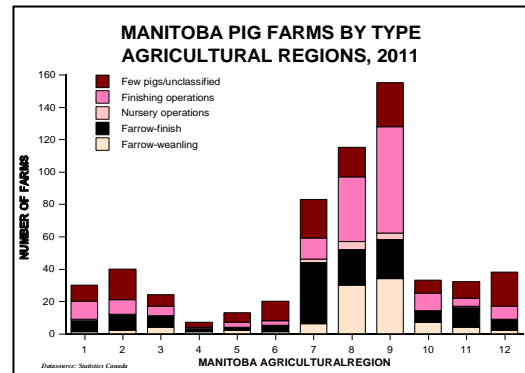
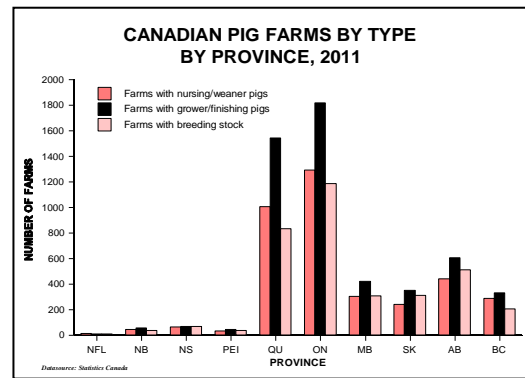
Overall, at about 0.5 pigs/ha in 2015, Manitoba has one of the lowest pig densities of all major pig-producing provinces, U.S. states or countries.

In 2015, over 35% of all pigs produced in Manitoba were exported at much less than half the slaughter weight.

Very young pigs consume very little feedstuffs and produce very little manure during their time in Manitoba. Thus, significantly less manure is produced by these pigs in Manitoba so the size of pigs on farms should be taken into account when calculating pig density. The large proportion of pigs sold out-of-province weighing less than 7 kg means that Manitoba’s pig density would be reduced by about one-third if pig weight is used to calculate the density rather than the total number of pigs on farms. Most other provinces and countries feed pigs to slaughter weight.

Pig Inventory

Note: It is often incorrectly assumed that Manitoba’s total annual pig production (about 8 million pigs in 2015) is on Manitoba farms all at one time. This is obviously not the case as the number of pigs at any point in time consists of the breeding herd of sows and boars, which are on farm all year, as well as less than one-third of the pigs



destined for market each year, ranging from new-born to slaughter weight of over 122 kg.

Sows produce, on average, 2.4 litters of pigs annually. The number of sows on Manitoba farms was a record 369,300 head on July 1, 2007. Herd reduction due to financial difficulties led to sow numbers declining to 314,100 head on July 1, 2014, but rising to 318,900 head by January 1, 2016.

The total number of pigs on farms in mid-2015 was 2,995,000 head, up by 1.7% from a year earlier and only 0.03% below the July 1, 2007 record of 3,005,000 head.

On July 1, 2015, of the 2,676,000 pigs on Manitoba farms destined for market, 1,131,500 head or 42.3% were either new-born or weanling pigs weighing less than 23 kg. Almost half of these pigs weighed less than 7 kg. Many pigs weighing less than 7 kg are born and exported between quarterly *Statistics Canada* surveys so are never counted. About 497,300 of the pigs (18.6%) on farms July 1, 2015 weighed between 23 kg and 53 kg, of which about 10% were to be exported. There were 562,300 head (21.0%) in the 54 to 80 kg category and 484,900 head (18.1%) in the 81+ kg category, almost all of which were fed to an average slaughter weight of over 122 kg.

Facilities:

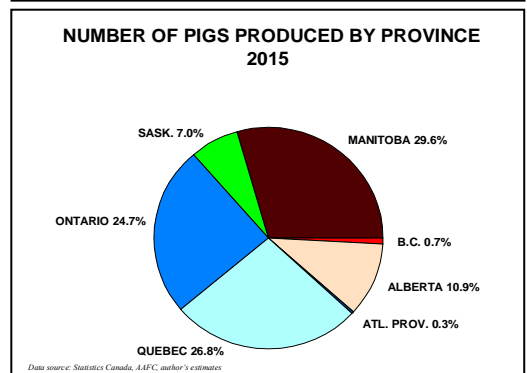
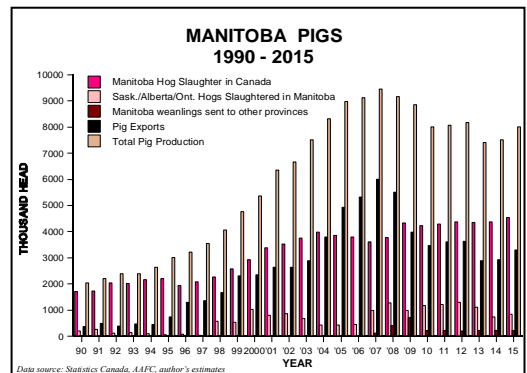
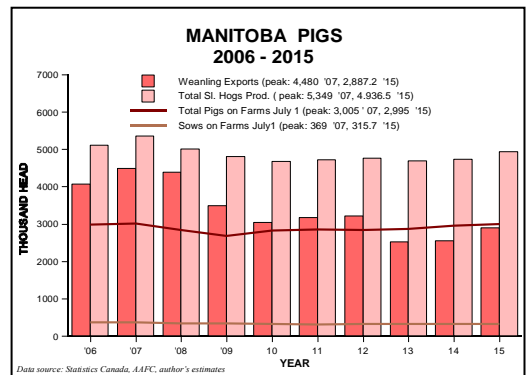
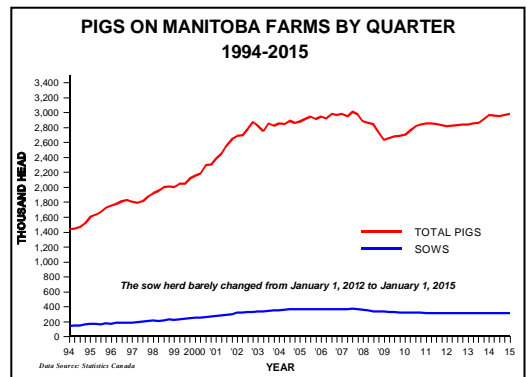
After more than four years of adverse market conditions, trade barriers and financial challenges, many Manitoba pig producers went out of production and pig barns were closed from 2008 to 2012. At the time, restrictions imposed by the provincial government on new and expanded pig barn construction meant that if a Manitoba producer wanted new barn space to feed weanling pigs or wanted to expand the sow herd, new barn location likely would have to be in another jurisdiction like Saskatchewan. Many Manitoba-produced weanlings are fed in barns in the United States, some owned by Manitoba operators.

The pig industry has a net worth of more than six billion dollars invested in barns, land, equipment and livestock, less than \$2 billion of which was barns only.

Pig Production

Manitoba is the largest pig-producing and pig-exporting province in Canada with 29.6% of national pig production in 2015.

Manitoba sow numbers and/or pig production increased annually from 1990 to 2007, but declined in 2008, 2009, 2011 and 2013 due to diminished (often negative) returns from producing pigs. Production (net sales plus annual

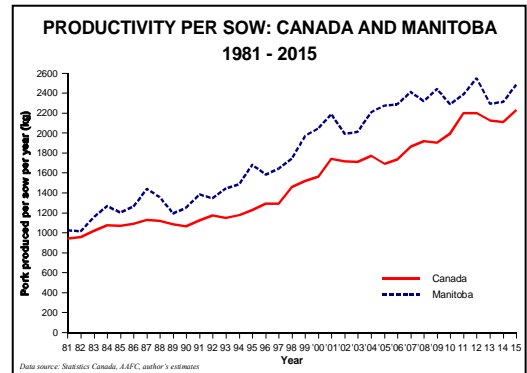


change in inventory) rose from about 7.5 million pigs in 2014 to over 8.0 million pigs in 2015. Of all pig sales in 2015, 2.24 million head (under 7 kg) were exported to the United States and about 0.2 million head (under 7 kg) went to other provinces. In addition, 0.17 million pigs were exported at weights of 7-23 kg (less than one-fifth of a slaughter hog's weight), almost 0.47 million head were 23-50 kg and 0.40 million head were 50 kg and over, including those going for slaughter. Over 4.53 million Manitoba hogs were slaughtered in Canada.

Production Efficiency:

Manitoba pig producers produce and sell more pigs per sow annually than any other province. The quality of Manitoba pigs is among the best in Canada.

Manitoba sows are the most efficient producers of pork in Canada, producing an annual average of over 2.4 tonnes per sow in 2015 compared to the Canadian average of 2.2 tonnes of pork per sow.



Value of Pig Production:

The estimated value of Manitoba pigs produced was \$1.03 billion in 2015, up from almost \$955 million in 2013 and \$928 million in 2012, but below the record of \$1.225 billion in 2014.

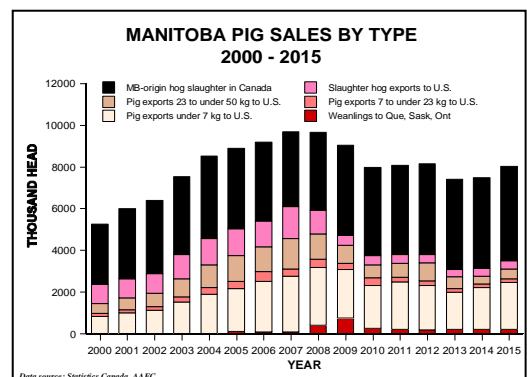
Future:

Despite slightly higher pig production expected in 2016, due to the increase in sow herd in 2015, and steady to higher average pig prices due to the weak Canadian dollar, the value of pig production in 2016 is likely to remain below the record 2014 level.

Pig Sales and Farm Cash Receipts

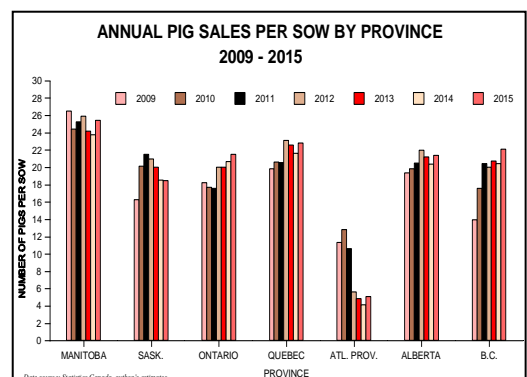
Marketing Options:

Manitoba hog producers organized in 1965 to form the Manitoba Hog Marketing Commission, which had a monopoly on the sale of slaughter hogs in the province, becoming the Manitoba Hog Marketing Board in 1972. Since July 1, 1996, Manitoba pig producers have had the option to market hogs to be slaughtered in the province either through Manitoba Pork Marketing Co-op, brokers or directly to processing plants. In 2009, the Board of Directors of Manitoba Pork Marketing Co-op and Saskatchewan's SPI Marketing Group established a new company **h@ms** (hog administrative marketing services) that will provide hog marketing services for both provinces. Starting January 1, 2010, **h@ms** provides marketing, procurement, price settlement, in-transit Insurance and risk management services for the parent companies. It represents about 300 producers.



Pig Sales:

Net Manitoba pig sales were about 8.0 million head in 2015, of which almost 3.3 million head or 41% were sold out of the province.



Mandatory Country-of-Origin Labelling (mCOOL) in the United States (see p14) resulted in reduced demand for Manitoba weanlings and feeder pigs by American finishing operations as some major hog slaughter plants refused to kill Canadian-born pigs.

Since peaking at 4.48 million head in 2007, weanling pig exports fell each year until 2011. Due to the Manitoba government restrictions on new barn construction or expansion in the province, some weanling pigs that would have been exported to the United States before mCOOL had to be finished elsewhere. In 2015, roughly 0.2 million Manitoba weanlings were finished in other provinces, mainly in Saskatchewan. Manitoba pig producers and brokers exported over 0.40 million hogs, weighing over 50 kg, almost 2.89 million weanling/feeder pigs directly to the United States in 2015 and 32,900 hogs for slaughter in Alberta. In the early 1990s, many more Manitoba pigs were shipped east than to the United States.

Demand for local hogs by Manitoba pork processors has improved, but about one-seventh of hogs slaughtered in Manitoba still come from Saskatchewan and Alberta. Over 4.53 million Manitoba hogs were killed in Canadian federal and provincial plants in 2015, all but 0.03 million in Manitoba. This was up 3.9% from 2014.

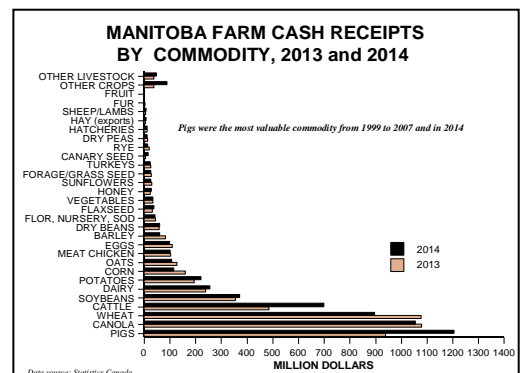
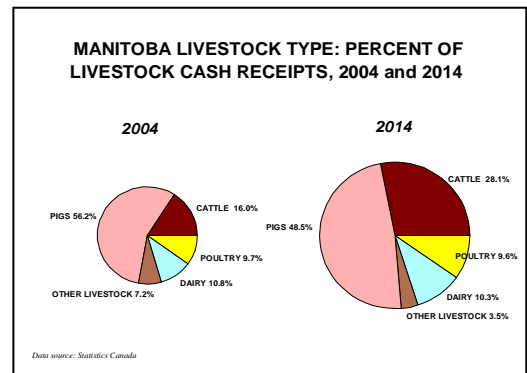
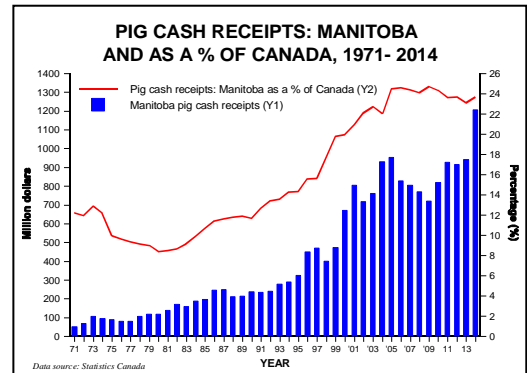
Farm Cash Receipts from Pig Sales:

The swine industry was the largest source of farm cash receipts of any Manitoba agricultural commodity sold from 1999 to 2007, but record high crop prices raised cash receipts from sales of both canola and wheat above those of pigs in 2008 and 2009 and again in 2013. Pig receipts were second to canola from 2010 to 2012 and in 2015, but surpassed canola in 2014 due to record high pig prices.

According to *Statistics Canada*, pig sales contributed roughly 20% of Manitoba’s farm cash receipts from the market (excluding direct program payments) in 2015. The share is down from 31% in 2005. Fewer pigs sold and low average net pig prices reduced farm cash receipts from the sale of pigs from \$804.4 million in 2007 to \$770 million (*author’s estimate due to errors in data*) in 2008 and \$718.0 million in 2009. Rising pig prices increased pig cash receipts to \$817.3 million in 2010 and \$925.8 million in 2011, but receipts fell to \$915.2 million in 2012 when prices declined again. Higher pig prices raised receipts to \$940.1 million in 2013 and record high prices the following year raised receipts to \$1.205 billion in 2014, a new record. Falling prices lowered receipts to an estimated \$980 million in 2015 (*Cash receipts for 2015 are available in May 2016*)

Future:

Relatively steady sales and pig prices expected in 2016 will keep cash receipts close to \$1 billion.



Feed Use

Although Manitoba pigs are usually fed barley-based rations, the industry provides an important market for Manitoba-grown feed wheat, corn, canola meal, soybean meal and dry peas. **The pig industry uses almost two million tonnes of feed annually, of which 10% to 20% is imported from the U.S. depending on relative feed grain and soy meal prices.** Very rough estimates show that almost 0.7 million tonnes of wheat, 0.6 million tonnes of barley, almost 0.1 million tonnes of canola meal, 0.3 million tonnes of corn, 0.03 million tonnes of dry peas, over 0.2 million tonnes of soy meal and a small amount of oats were used in pig rations. The ingredients used in rations vary from year to year depending on the availability and price of crop components. If all the pigs produced in Manitoba were fed to slaughter weight instead of being exported as weanlings/feeder pigs, then the feed consumed annually would rise by 30%. **Feed costs in 2015 were roughly \$560 million**, up by 1% from 2014.

Carcass Grading

The trend towards the production of leaner, higher quality hogs in Canada was mainly due to a carcass classification and settlement system introduced in 1968 with mandatory national standards for weight and leanness. It was implemented on location at each packing plant. The average carcass was given an index of 100 and the grade index was linked to hog price. In 1986, Canada became one of the first countries to implement a hog carcass classification system employing electronic grading probe technology which values carcasses on the basis of objective measurements of both fat and muscle content. The electronic probe resulted in improved accuracy of grading and reduced variability of hog carcass. More recently, there has been a reduction in the number of yield and weight classes in the national index grid, while focusing on leanness and core weight hogs of 75 to 90 kg. This provides incentives to producers to market hogs that fall in that core area, in line with consumer's demand for leaner pork. Canada's hog carcass index system was designed to reduce variability in pork quality and to provide to producers a consistent, quantitative signal regarding characteristics preferred in the changing marketplace. Although totally objective, it is influenced by domestic market needs and export customers' demands. As the variety of customer needs has increased, variations of the national grid within provinces and for slaughter plants have been introduced. *(Source: Canadian Pork Council)*

In 1996, hog carcass grading was privatized when Agriculture and Agri-Food Canada decided to relinquish its grading program. In 1997, the four large federally inspected processors in Manitoba and Manitoba Pork Council founded Manitoba Hog Grading Inc. (MHGI) as a grading service. MHGI's board of directors has equal representation from Manitoba producers and processors. Its mission is to provide a carcass grading service that is accurate, consistent, effective and cost efficient and to deliver this service for hog producers and pork processors in Manitoba. In 2000, grading staff became plant employees. *(Source: Manitoba Pork Council)*

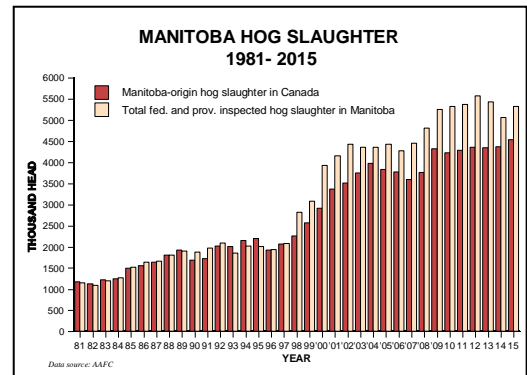
Hog Slaughter and Pork Processing

Agri-food Processing:

Manitoba's food and beverage processing industry includes the slaughtering and/or processing of red meat and poultry, vegetable oils, cereal products, feed, seed, dairy products, fruit and vegetables and beverages. It is one of the most important manufacturing industries in the

province, producing over \$4.2 billion of goods, or 25% of the total manufacturing output in the province in 2015.

Red meat slaughter and processing, Manitoba's largest food processing sector, produced about \$1.4 billion of meat and meat products in 2015. This was one third of the value of total food processing in the province. The sector employs about 4,500 people. Raw inputs, mostly hogs with very small numbers of cattle and sheep, accounted for most of the meat processing industry's estimated total cost of materials and supplies. Over 85% of the hogs slaughtered in the province in 2015 originated in Manitoba. Due to the closure of *Maple Leaf Pork's* hog slaughter and pork processing plant in Saskatoon in 2007, most of Saskatchewan's finished hogs are now killed in Manitoba and Alberta.



Almost all of the Manitoba red meat sector's output consists of pork, most of which was sold to other provinces, United States, Japan, China/Hong Kong, Mexico, South Korea and 25 other countries in 2015.

Meat Processing Plants:

Technological changes in animal slaughter and meat production have contributed to the rationalization of the meat packing industry over the years.

A hog slaughter plant was built in Neepawa in 1986 by *Springhill Farms, Ltd.* *Canada Packers* closed its Winnipeg slaughter plant in early 1987, which reduced Manitoba's cattle, hog and sheep slaughter capacity significantly. Further reduction in cattle and hog slaughter capacity occurred in March 1990 when *East West Packers* was forced to close. *Burns Meats* (purchased by *Maple Leaf Foods (MLF)*) closed its Brandon cattle slaughter plant in November 1990 and shut down its Winnipeg cattle kill line at the Winnipeg (Lagimodiere) plant in late 1997. This plant, converted to a ham-processing plant by *MLF*, expanded between 2007 and 2009 to consolidate the company's Western Canadian ham-boning operations employing 850 people. It expanded again in 2013, adding a bacon processing operation, the largest in Canada, employing about 350 people. *J.M. Schneider Inc.* significantly increased their pork processing capacity in 1997 with a new world-class plant in Winnipeg. Rapidly rising pig production in the province led to the construction of *Maple Leaf Foods'* world-class hog slaughter plant in Brandon, which opened in September 1999. In March 2001, *MLF* purchased the *J.M. Schneider* hog slaughter and pork processing plants in Winnipeg (which at the time were owned by the American company, *Smithfield Foods*). The *MLF* hog slaughter plant in Winnipeg was closed in October 2007 and the 11-year old *MLF* pork plant ceased processing pork in fall 2008. *MLF* closed a very small processing plant in Winnipeg on December 31, 2014

The largest plant, *MLF* Brandon, has a full two-shift capacity to slaughter over 4.5 million hogs and employment of 2,325 people. The plant's second shift was completed in fall 2008. In early February 2008, *HyLife Ltd.* (was *Hytek*), the largest pig-production company in Canada with an annual output of about 1.4 million pigs from its farms in Canada and the United States, finalized its purchase of the *Springhill Farms* slaughter plant in Neepawa. The plant had a total work force of 550 by 2010 and, with expansion to a capacity of 1.4 million head in 2012, plant jobs increased to almost 900. About 60% of the pork produced by the plant is sold offshore.

In addition to the two major and one minor federally-inspected hog slaughter plants in operation in 2015, there were also a number of smaller provincially-inspected abattoirs and various further meat processing plants for products such as specialty meats, bacon, hams, etc.

Hog Slaughter:

Manitoba processes over one-quarter of the hogs slaughtered in Canada, the second most after Quebec. Inspected plants in Manitoba killed 4.27 million hogs in 2006, including 0.85 million head from Saskatchewan and Alberta. Slaughter increased steadily to a record 5.57 million head in 2012, declined to 5.05 million head in 2014, but rose to 5.32 million head in 2015. Manitoba plants had 25.1% of the national kill in 2015, up from 16.7% in 1999, but below 26.4% in 2012.

Manitoba’s two largest plants were operating at less than 80% of capacity in 2015 compared to 90+% for most American plants of their size. The slaughter in Canadian plants of hogs originating in Manitoba rose by 3.9% in 2015 to 4.53 million head, while the number of hogs brought into Manitoba plants from Saskatchewan and Alberta fell from 1.29 million head in 2012 to 0.72 million head in 2014, but rose to 0.76 million head in 2015.

Future:

Manitoba plants will need to slaughter hogs from other provinces in 2016 (about 25% of which could be Manitoba-produced weanlings fed in Saskatchewan) as there will not be sufficient hogs available from Manitoba finishing barns. Manitoba pig operations do not have the annual capacity to finish more than 6 million hogs, which could be required eventually by local plants.

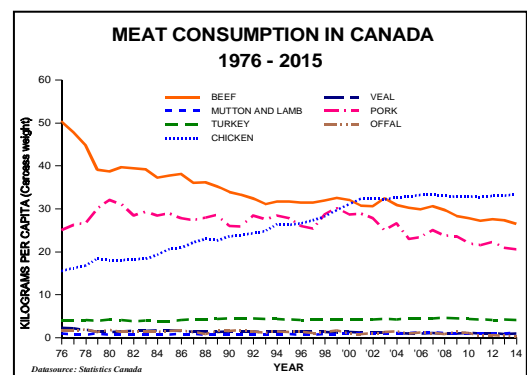
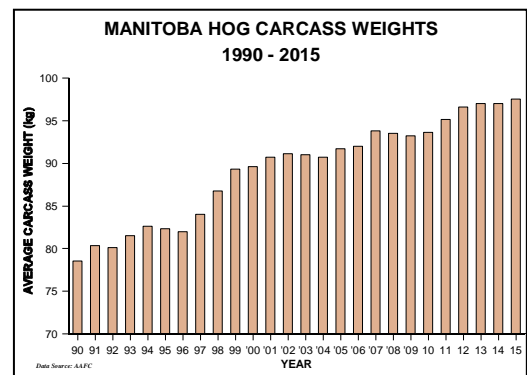
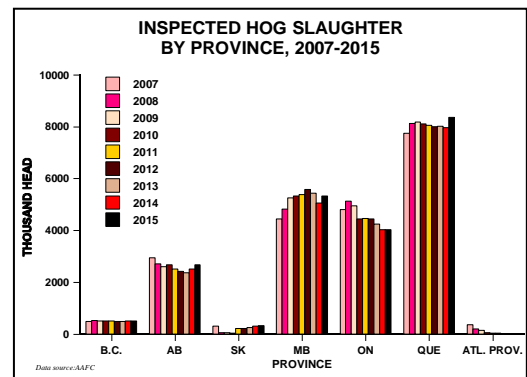
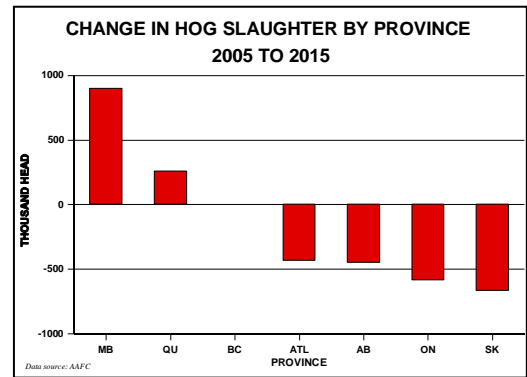
Carcass Weights and Pork Production:

The average carcass weight of hogs slaughtered in the province rose from 93.2 kg in 2009 to 96.6 kg in 2012. In 2015, the average carcass weight was a record 97.5 kg (equivalent to 122 kg or 268 lb of live hog).

An estimated 520 million kg of pork and pork products (carcass weight) were produced in the province in 2015, down by 3.3% from the record 538 million kg in 2012.

Pork Available for Consumption

Canadians consumed slightly over 23 kg (carcass weight) of pork or close to 17 kg (boneless weight) per person per year in 2005, 2006, 2008 and 2009, but consumption was 25 kg (carcass weight) or over 18 kg (boneless weight) in 2007 and about 21 to 22 kg (carcass weight) or 15 to 16 kg (boneless weight) from 2010 to 2014. Pork available for consumption is less than beef or chicken, where it was 18 kg and 20 kg (boneless wt.) in 2014. Consumption in 2015 is likely to have been similar.



Trade

As Manitobans consumed only about 5% of the total pork (retail weight) produced by slaughter plants in the province in 2015 and over 4% of the estimated total Manitoba-origin pork equivalent of roughly 650 million kg (retail weight) (including exported pigs converted to finished pork retail weight) sold in 2015, most of the pigs and pork produced in Manitoba had to be sold to other provinces or countries.

Pigs:

Manitoba is the largest pig-exporting province in Canada with over 57% of national pig exports in 2015.

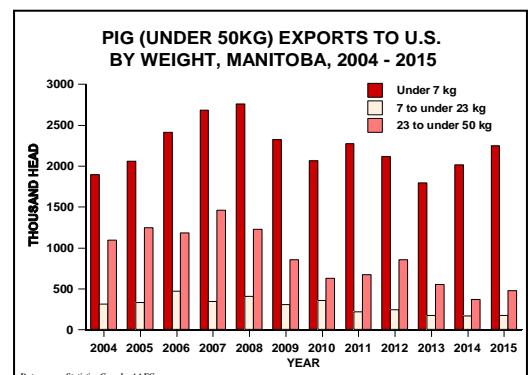
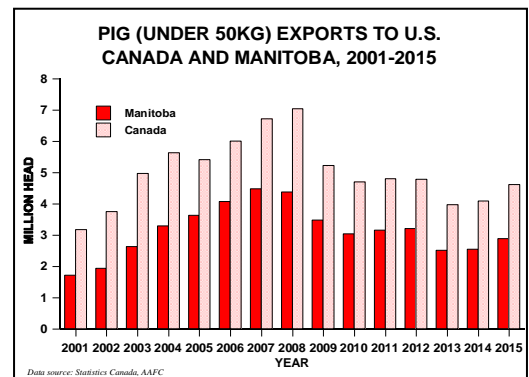
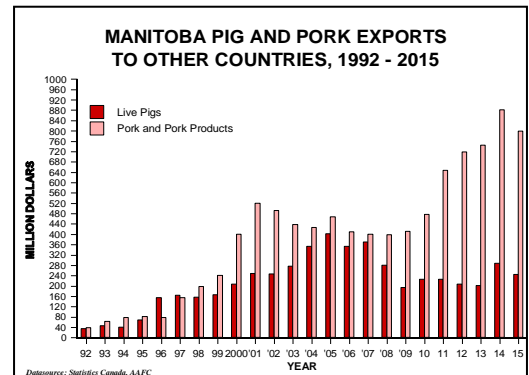
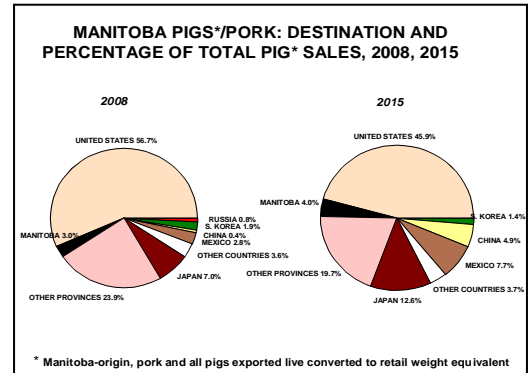
Due mainly to the impact of mandatory Country-of-Origin Labelling (mCOOL), introduced in the United States on September 30, 2008, Canadian pig exports declined from 9.36 million head in 2008 to 4.96 million head in 2014, but rose to 5.77 million head in 2015, just over half of the record 10.03 million head in 2007.

Manitoba producers shipped 3.29 million breeding swine, sows for slaughter, finished hogs and weanling/feeder pigs to other countries in 2015, 12.8% more than in 2014, but just over half the number exported in 2007.

A stronger Canadian dollar relative to the American dollar and falling pig prices in 2006 and 2007 meant that although more Manitoba pigs were exported in those years, their value fell to about \$375 million and \$406 million respectively, compared to \$418 million in 2005. Lower pig prices and reduced pig exports in 2008 and 2009 resulted in a further drop in export value to \$280 million and \$193 million respectively. Higher prices and increased exports raised the value to \$287 million in 2014, but, despite a further rise in exports, weaker pig prices lowered the value by 15% to almost \$245 million in 2015.

Weanling pig exports went up significantly over the years from 144,165 head in 1990 to 4.48 million head in 2007, but declined from 4.38 million head in 2008 to 3.04 million head by 2010. Beginning in 2008, some American feeding operations were discouraged from feeding Canadian weanling pigs because many major U.S. slaughter plants refused to kill Canadian-born hogs due to mCOOL. Only eight American plants accepted Canadian-born hogs.

Improved demand for hogs led to total exports rising to 3.21 million head in 2012, but the number fell in 2013. Weanlings shipped to American feeding operations increased from 2.55 million head in 2014 to 2.89 million



head in 2015. Over 77.7% of the weanling/feeder pig exports in 2015 weighed less than 7 kg, 5.9% weighed 7-23 kg and 16.4% were in the 23-50 kg range.

Hogs, 50 kg or more (mostly for slaughter including cull sows and boars, but excluding breeding stock) rose by 11% to 401,300 head in 2015. These hogs were exported to 17 states in 2015 with 81% going to plants in Wisconsin, Iowa, Nebraska, North Dakota and Minnesota. Shipments of pigs under 50 kg (weanlings/feeder pigs) went to feeding operations in 12 states with 99% going to Iowa (67%), Minnesota, South Dakota and Nebraska in 2015. In addition, over 3,420 breeding stock were exported to 13 countries in 2015.

Pork:

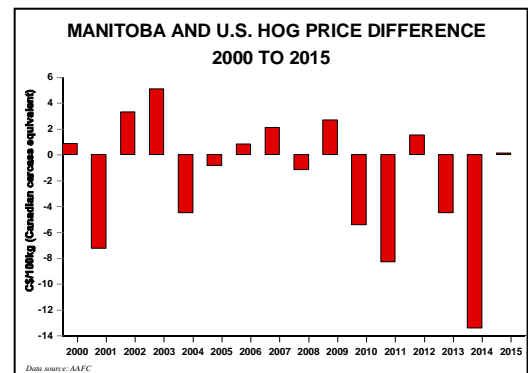
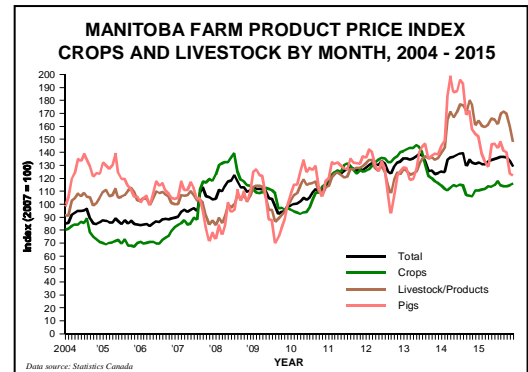
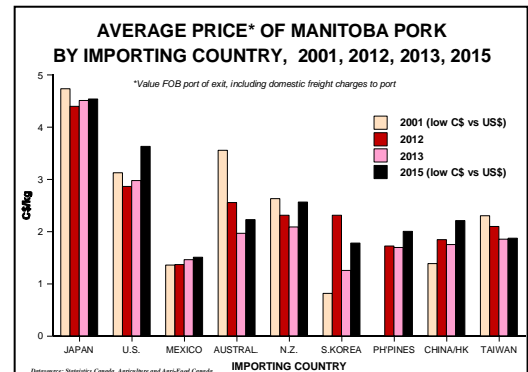
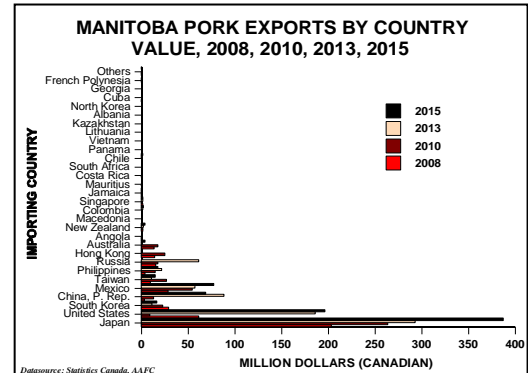
Up until 2003, Manitoba was the second-largest pork-exporting province after Quebec (not including pork shipped to plants in other provinces and subsequently exported). However, from 2003 to 2006, Manitoba dropped to fourth-largest pork exporter after Quebec, Ontario and Alberta, rising to the third-largest pork exporter after Quebec and Ontario from 2007 to 2011 and back to second-largest after Quebec in 2012. Manitoba was directly responsible for 23.2% of Canada's pork exports (by value) in 2015, down from 23.7% in 2014.

In 2015, Manitoba pork and pork product exports of 259.6 million kg, shipped to 30 countries, were 4.6% below the record of 271.7 million kg in 2013. The value of pork exports in 2015 was \$799.3 million, 9% below the record value of \$880.3 million set in 2014. Almost 51% of pork exports were fresh chilled cuts, while over 42% were frozen cuts. The rest was cured or preserved.

Manitoba processors decreased pork exports to the United States and increased exports to other countries from 2009 to 2011. Exports to the United States were down by 79% (by value) in 2009 and by 30% in 2010, when less than 2% of total Manitoba pork exports went to the United States. However, in 2011, 2012, 2013, 2014 and 2015, exports to the U.S. rose to 15%, 25%, 25%, 26% and 25% of the total pork export value respectively.

Japan is Manitoba's largest and most lucrative pork market by far. More than 48% of Manitoba pork exports (by value) and 33% (by weight) went to Japan in 2015, 25% (by value) to the United States with close to 10% going to Mexico and almost 9% to China/Hong Kong. The average price of pork exported to Japan is much higher than for any other country.

It appears that about one-quarter of the pork (by retail weight) produced by Manitoba plants in 2015 was shipped to other provinces, such as Ontario.



Prices and Profit

World pork demand, demand for pigs and pork in the United States, and the Canada-U.S. exchange rate are major factors in pig price determination in Manitoba. The United States is still Manitoba's largest market for pigs and is a major competitor in foreign pork markets.

A lower-valued Canadian dollar relative to the U.S. dollar raises the value of Manitoba pig and pork exports to the United States as well as making Manitoba pork more competitive with American pork in the United States, Canada and foreign markets, but increases the costs of imported farm inputs from the United States.

Slaughter hogs:

Over the years, the introduction of new and different pricing grids by Canadian hog processors has meant there is no longer a defined standard or "Index 100" hog across Canada, even though some provinces continue to use this term when quoting a base price. The various formulae used by Canadian processors to pay producers for their hogs are based on U.S. prices and the exchange rate. No prices are based on only Canadian variables.

In order to compare prices with previous years, the "Index 100" hog price is used in the graphs.

The 7.2% increase in American pork production contributed to a 34% drop in U.S. hog prices in 2015. However, a Canadian dollar value averaging 21.8% below the American dollar helped moderate the decline in average Manitoba hog prices in 2015 relative to the drop in U.S. hog prices.

The average Manitoba slaughter hog price of \$177/100kg in 2015 was 18.5% below the record price of over \$218/100kg in 2014.

Weanling pigs:

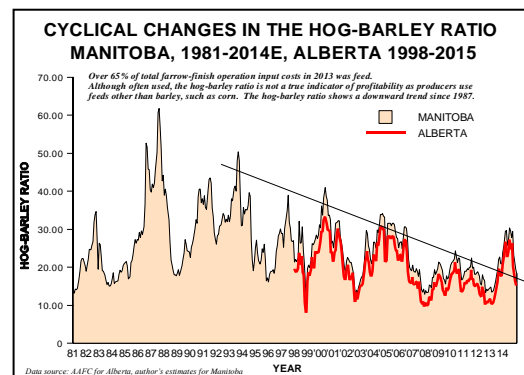
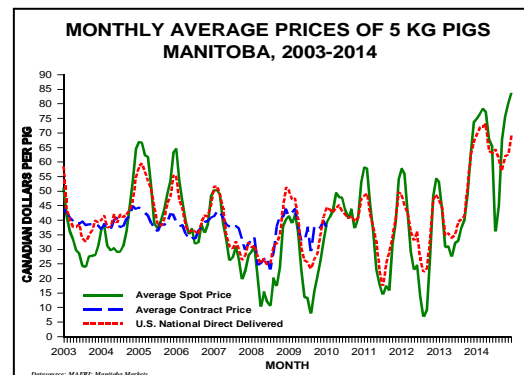
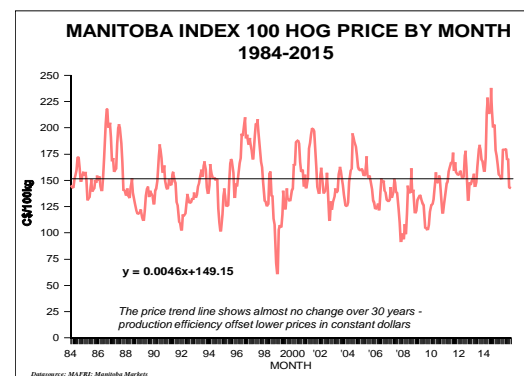
The initial reaction to mCOOL by many American feeding operations was to stop purchasing Manitoba weanling and feeder pigs in 2008. But other feeders continued to buy high-quality Manitoba pigs and some Manitoba-owned pigs are being finished in the United States.

Average export prices for weanling pigs (under 7 kg) in 2015 were down by 16.1% from the previous year, prices for pigs (7-23 kg) fell by 18.6% and prices for heavier pigs (23-50 kg) decreased by 20.8% from 2014.

Margins:

Falling feed costs from mid-2013 and higher hog prices meant margins from pig production improved significantly in late 2013 and 2014. Net market income for pig producers rose from \$115,500 in 2011 to \$808,300 in 2014, but is estimated to have been lower in 2015.

The average net operating income per pig farm was over \$735,200 in 2014, up from \$303,000 in 2013. Net income is expected to be lower in 2015.



Mandatory U.S. Country-of-Origin Labelling:

(introduced September 30, 2008, taking full effect on March 16, 2009)

Beef (including veal), pork, lamb, chicken or goat must bear a COOL label if it is sold at retail, is a muscle cut or is a ground product.

COOL allows for four separate labels:

- one for an all-U.S. product,
- a second for a product of the U.S. and other countries (can be used for Manitoba weanlings fed in the U.S.),
- a third for pigs from another country shipped directly to a U.S. processor (can be used for Manitoba slaughter hogs), and
- a fourth label for a product of other countries (such as Manitoba-produced pork).

Pigs, used for pork which is “significantly” processed or sold to the food service trade or exported are exempt from COOL.

The COOL rules forced U.S. processors to segregate pigs from Canada, Mexico and the United States at their facilities, which added to costs. Because of this, some major pork processors such as Smithfield Foods decided not to kill Canadian-born hogs. Tyson Foods, with about 18% of United States pork production, slaughters Canadian-born hogs.

In mid- 2009, Canada filed a complaint with the **World Trade Organisation (WTO)**, as did Mexico soon afterwards. The two countries argued that mandatory COOL was an illegal, non-tariff trade barrier which gave U.S. products unfair advantage over products from Canada and Mexico. In late May 2011, a WTO panel issued a preliminary ruling, charging that *mandatory COOL violates WTO trade standards*. The WTO panel also ruled that COOL requirements do not meet the U.S. stated objective that the labelling law informs and helps U.S. consumers make purchasing decisions regarding the origin of meat, produce and other products covered by COOL. On December 21, 2011, the United States requested an extension to appeal and announced on March 23, 2012 that the WTO ruling would be appealed. In response to this appeal, **the WTO decision on June 29, 2012 again agreed with findings in favour of the Canadian livestock industry, farm families and North American economies that COOL is discriminatory**. On August 21, 2012, the U.S. informed the Dispute Settlement Body (DSB) that it intended to implement the DSB rulings in a manner that respects its WTO obligations and that a reasonable period of time is needed to do so. On December 4, 2012, the Arbitrator said he had determined that a ‘reasonable period of time’ for the U.S. to implement the recommendations and rulings of the DSB is 10 months from the date of adoption of the Panel and Appellate Body reports, that is until May 23, 2013. At that time the U.S. came out with even more complicated labelling rules, which Canada challenged.

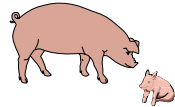
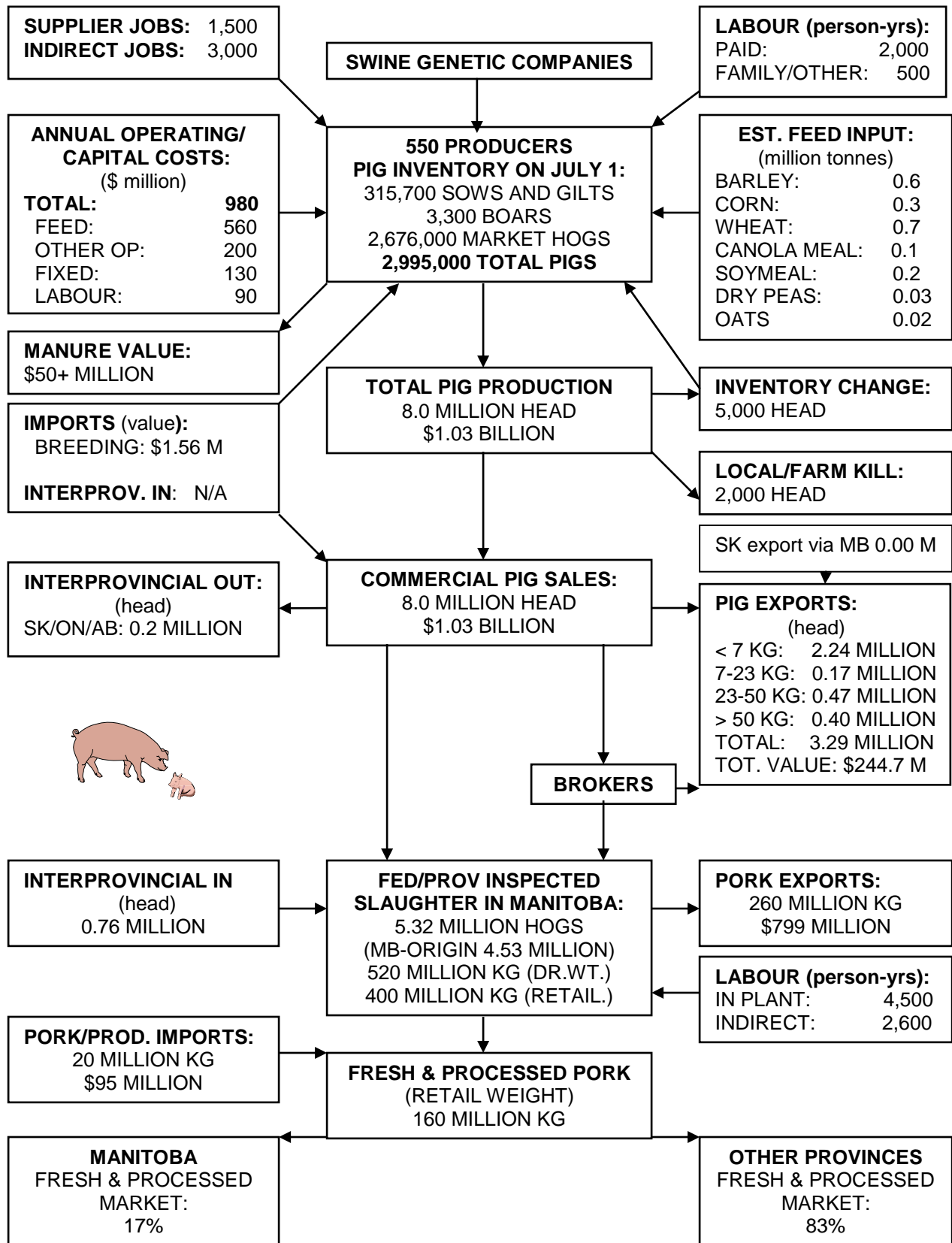
The American Meat Institute also challenged the COOL rule. On March 28, 2014, the court denied a preliminary injunction against enforcing COOL and found that the meatpacking industry’s efforts were “unlikely to succeed on the merits of its claims.”

On October 20, 2014, WTO once again sided with Canada and Mexico. Following an appeal, in mid-May 2015, the WTO upheld its earlier ruling. Mexico and Canada immediately proceeded to apply for approval to impose retaliatory import duties equivalent to the economic impact experienced by COOL on the two countries. The WTO Arbitration panel ruled in December 2015 that Canada could impose over \$1 billion in duties. Meanwhile, **the United States Congress and the President passed amending legislation repealing the COOL legislation applying to beef and pork on December 18, 2015**.

In January 2016, USDA announced it will be moving to amend the COOL Regulations.

<u>PIG INDUSTRY STATISTICS</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014^R</u>	<u>2015^P</u>
PIG FARMS (inc. non-commercial):	910	830	635	585	575	565	550	550
(farms, 51+% of income from hogs):	380	355	330	318	280			
Average no. of pigs per farm on July 1	2,989	3,048	4,433	4,863	4,922	5,062	5,355	5,445
PIGS ON FARMS ON JULY 1:								
Sows and bred gilts ('000)	337.8	327.3	320.8	308.9	313.3	314.6	314.1	315.7
<i>% of Canada</i>	24.6	25.6	26.7	26.2	26.3	26.4	26.2	26.2
Boars ('000)	4.5	4.3	3.8	3.3	3.3	3.3	3.3	3.3
Market pigs ('000)	2,497.7	2,343.4	2,490.4	2,532.8	2,518.4	2,542.1	2,627.6	2,676.0
Total pigs ('000)	2,840.0	2,675.0	2,815.0	2,845.0	2,835.0	2,860.0	2,945.0	2,995.0
<i>% of Canada</i>	21.3	21.2	22.5	22.4	22.4	22.4	22.6	22.6
PIG PRODUCTION ('000):	9,150	8,850	8,000	8,050	8,150	7,400	7,500	8,000
<i>% of Canada</i>	30.0	31.4	29.6	29.8	30.5	29.4	29.3	29.6
Annual production change %:	-3.2	-3.3	-9.6	0.6	1.2	-9.2	1.1	6.7
VALUE OF PIG PROD. (\$ million):	755	735	830	910	928	955	1,225	1,030
PIG CASH RECEIPTS* (\$ million):	770.0 ^E	718.0	817.3	925.8	915.2	940.1	1,205.6	980 ^E
<i>% of Canada *(minus levies ,sl. error)</i>	24.1	24.7	24.3	23.6	23.7	23.1	23.7	23.8
NET MARKET INCOME/FARM (\$'000)	-207.0	-143.7	-6.5	115.5	122.4	179.6	808.3	N/A
NET WORTH (\$'000):	2,243.8	2,456.4	3,698.7	4,207.6	N/A	5,995.4	N/A	N/A
PIG PRICES:								
Average "All-in" hog (\$/100kg):	139	133	152	172	170	178	218	177
Average "Index 100"hog (\$/100kg):	127	121	138	158	156	163	201	164
Average pig: under 7 kg (\$/pig):	30.2	29.9	39.4	36.0	35.0	39.6	57.2	48.0
Average pig: 7 up to 23 kg (\$/pig):	34.9	37.0	50.4	52.2	47.9	52.7	81.4	66.3
Average pig: 23 up to 50 kg (\$/pig):	39.6	47.2	62.5	57.4	49.7	61.3	102.7	81.3
HOG SLAUGHTER:								
Inspected slaughter in Manitoba ('000)	4,806.8	5,242.2	5,322.3	5,368.0	5,571.8	5,427.6	5,051.2	5,319.1
<i>% of Canada</i>	22.3	24.2	25.2	25.4	26.4	26.1	24.8	25.1
Mb-origin slaughter in Canada ('000)	3,882.7	4,312.4	4,218.8	4,281.3	4,357.9	4,338.6	4,362.1	4,531.8
<i>% of Canada</i>	8.0	19.9	20.0	20.3	20.6	20.9	21.5	21.4
Average warm carcass weight (kg):	93.5	93.2	93.6	95.1	96.6	97.0	97.0	97.5
PORK PROD: (million kg carcass)	450	488	496	510	538	527	490	520
EXPORTS:								
Total Pigs <50kg - ('000)	4,383.2	3,478.5	3,042.4	3,161.4	3,212.2	2,513.3	2,546.2	2,887.2
- (\$ million)	145.9	121.0	138.2	131.6	128.2	113.8	166.5	157.5
Pigs <7kg - ('000)	2,757.4	2,320.3	2,063.3	2,273.6	2,115.0	1,789.5	2,012.3	2,243.7
- (\$ million)	83.3	69.5	81.3	81.8	74.0	70.9	115.2	107.8
Pigs 7 to <23kg - ('000)	403.7	303.0	354.4	219.8	242.0	172.7	165.3	170.8
- (\$ million)	14.1	11.2	17.9	11.5	11.6	9.1	13.5	11.3
Pigs 23 to <50kg - ('000)	1,222.1	855.2	624.7	668.1	855.2	551.1	368.5	472.8
- (\$ million)	48.4	40.3	39.1	38.3	42.5	33.8	37.8	38.4
Hogs 50+kg - ('000)	1,117.7	481.8	451.8	428.1	397.6	348.1	371.2	404.7
- (\$ million)	133.8	72.0	86.8	94.4	78.8	86.7	120.2	87.2
Pork/products** - (million kg)	153.9	165.0	192.9	226.8	259.1	271.7	262.3	259.6
- (\$ million)	397.8	410.2	476.4	646.8	717.4	744.3	880.3	799.3
<i>** includes all pig fat and sausage casings</i>								
IMPORTS:								
Pigs - (\$ million)	0.50	0.64	0.61	0.92	0.47	0.24	0.17	1.56
Pork and products - (\$ million)	51.6	53.5	52.4	73.1	76.2	86.9	88.7	94.4
CANADIAN CONSUMPTION:								
Pork (carcass wt. kg/person)	23.89	23.57	22.06	21.50	22.30	20.88	20.63	N/A

PIG AND PORK INDUSTRY FLOW CHART, 2015

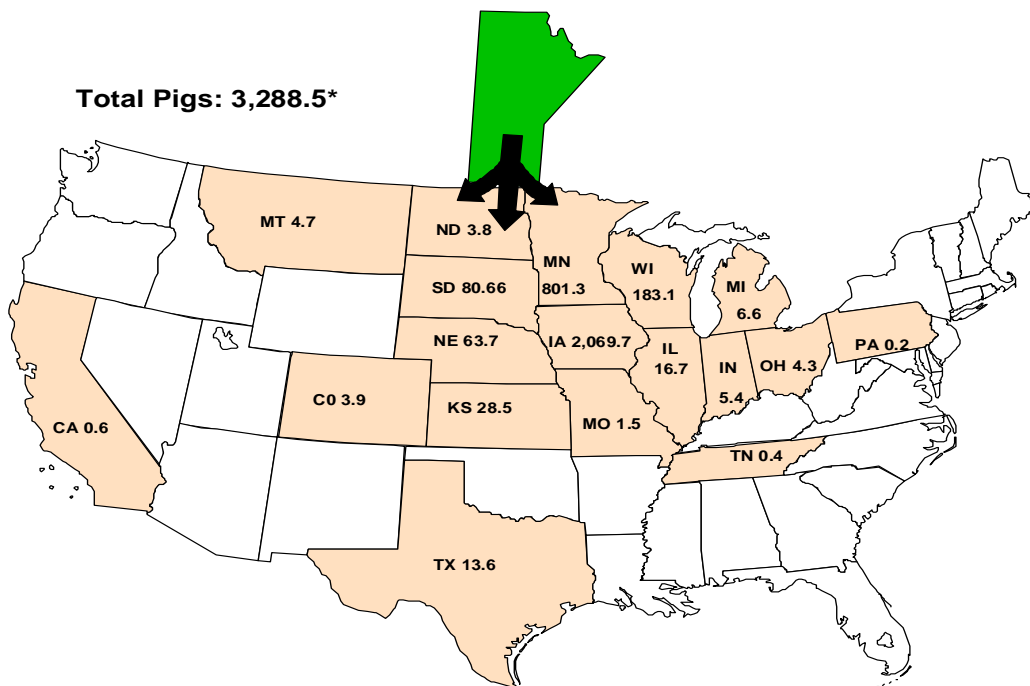


Data source: AAFC, MAFRD, Manitoba Bureau of Statistics, Manitoba Pork Council, Statistics Canada, author's estimates

MANITOBA PIG EXPORTS TO UNITED STATES, 2015

(thousand head)

Total Pigs: 3,288.5*



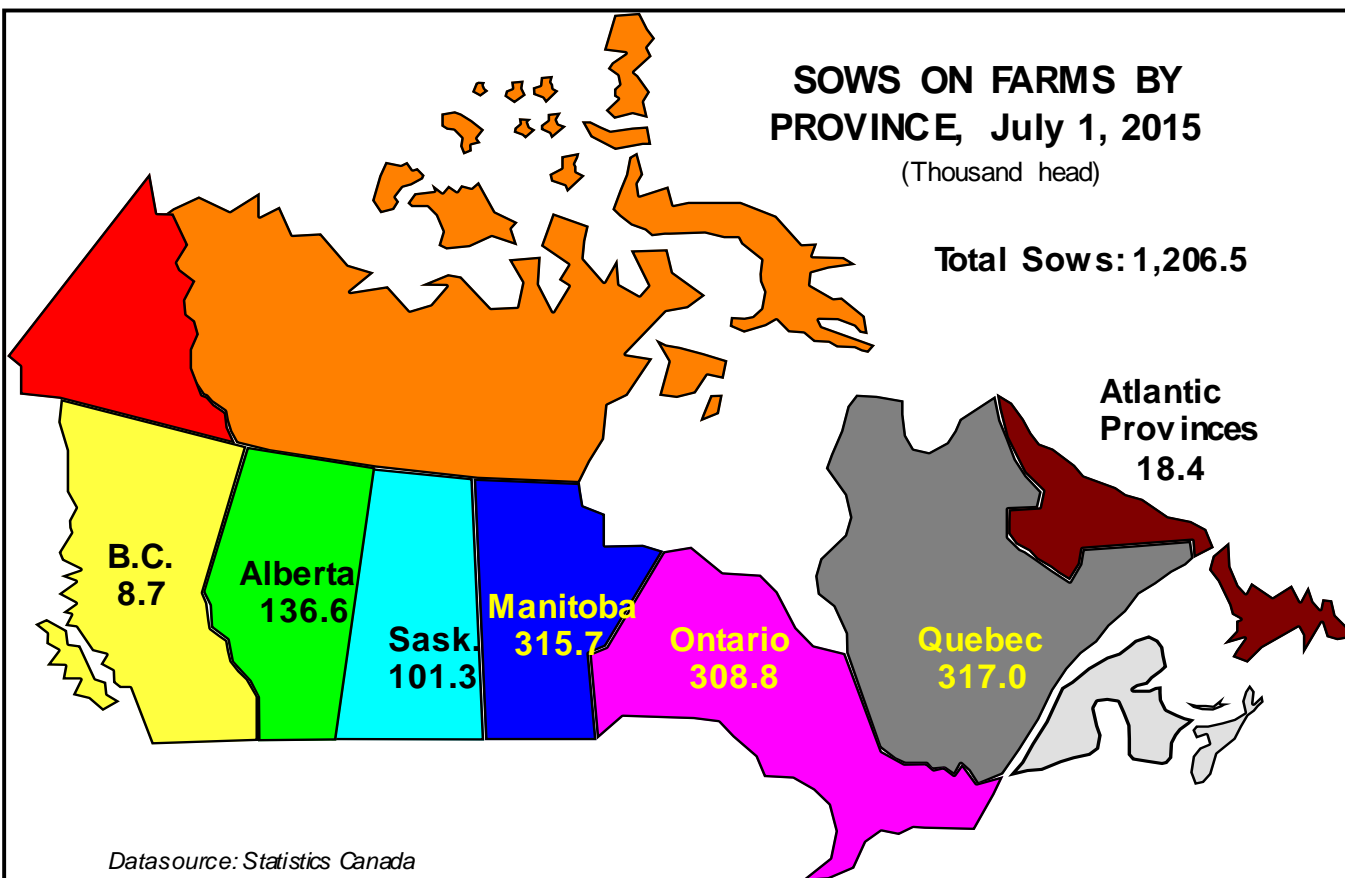
Datasource: USDof C, Statistics Canada, AAFC No breeding stock to U.S.

SOWS ON FARMS BY PROVINCE, July 1, 2015

(Thousand head)

Total Sows: 1,206.5

Atlantic Provinces
18.4



Datasource: Statistics Canada