

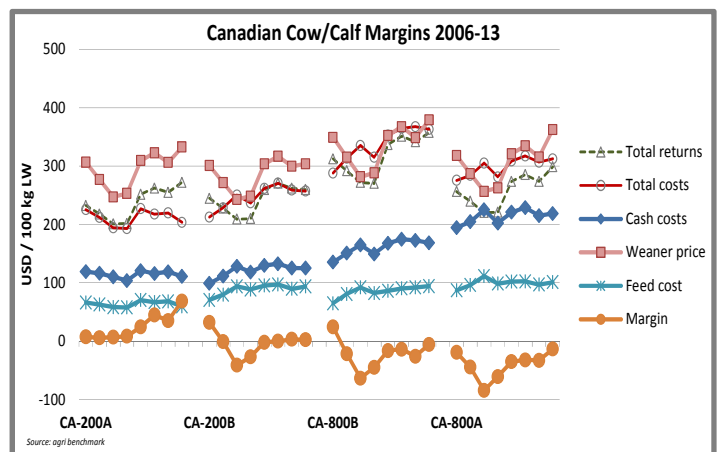
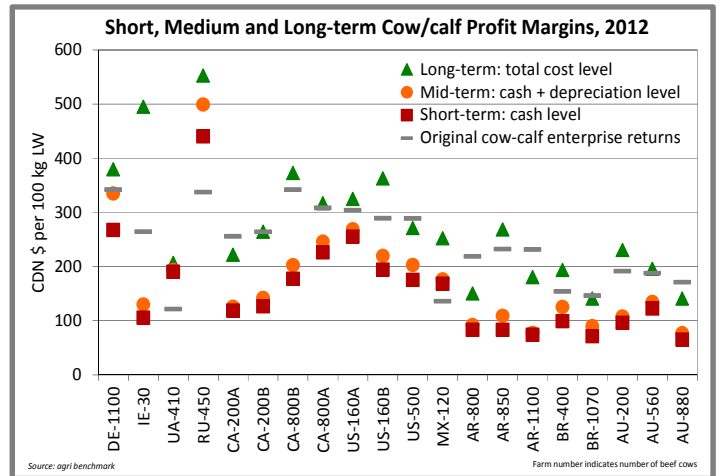


agri-benchmark analysis

The Canadian beef industry is glad to have the last decade in the rearview mirror and to be looking ahead to better opportunities with growing global demand. But Canadian beef producers are not alone in suffering from adverse currency movements, rising costs and severe weather events. While financially in a less desirable position than some key competitors, with equity drained over the last decade, productivity levels are top notch.

Global beef markets have reached a critical moment, with rapid growth in demand developing, led primarily by China, pushing global beef prices higher. Current data from *agri benchmark's* typical farms indicate cow/calf and feedlot enterprises are covering short-term (cash costs) and medium-term (including depreciation) costs in most key countries. However, rising input costs along with resource and environmental constraints are generally keeping farms from covering long-term costs (including opportunity costs). This has prevented a number of countries from expanding in response to the current price signal.

In general, whole farms are profitable in the medium term, enabling farms to survive the rough times. With big price increases in 2014 many countries will be in a position to cover long term costs. *But will it be enough to create expansion?* No single factor drives a cow/calf producers decision to expand, but they consider a wide range of market signals (for beef and other commodities, both locally and globally) and production constraints (like feed and labour availability).



WHAT IS AGRI BENCHMARK?

agri benchmark is a global, non-profit and non-political network of agricultural economists, advisors, producers, multi-disciplined farm experts and specialists. They provide a consistent methodology to compare production systems, cost of production and profitability around the world. This is a challenge given the wide variety of different production practices from grain fed to grass fed beef that range from less than two years to over four years to get a calf to finish weight. The cattle and sheep network has 29 member countries, covering 90% of world beef production and 55% of world sheepmeat production.

The core competence of the network is the analysis of production systems, their economics, drivers and perspectives and aims to assist: **producers and their organizations** to better understand future production through analysis of comparative performance and positioning; **non-profit organizations** (governments, NGOs, international organizations) to monitor and address global agricultural challenges; and **agribusinesses** to operate successfully through in-depth understanding of markets and customers.

Canadian & US *agri benchmark* typical beef cattle farms (all farms are identified by the country and number of beef cows):

- CA-200A (200 beef cows) – Alberta, Angus cross, cash crops
- CA-200B – NW Saskatchewan, British cross, cash crops
- CA-800A – Alberta, British cross, backgrounding
- CA-800B – NW Saskatchewan, British cross, backgrounding
- CA-27,500hd – Alberta feedlot, purchased beef steers/heifers
- US-160A – Kansas, cross cows, cash crops
- US-160B – New Mexico, British/Continental, backgrounding, lease hunting
- US-500 – Montana, British/Continental, lease hunting
- US-7200 – Kansas feedlot, beef calves
- US-75K – Kansas feedlot, beef/dairy backgrounded cattle

For more details go to: <http://canfax.ca/FactSheets.aspx>

International Cost of Production Analysis

GLOBAL OPPORTUNITY

Growing demand, especially in Asia and the Middle East, along with current supply limitations have seen global beef prices double in the past decade, along with other proteins. This spring price jumps not only occurred in the Canadian cattle market, but the global beef market.

Several countries have seen nominal beef prices (in US dollars) increase by more than US\$5/kg carcass weight. Prices have increased the most in importing countries like Europe, China, Indonesia and Tunisia. China will likely see further substantial growth in beef imports, stretching the ability of major exporters to supply enough to meet the growing demand.

Prices have increased the least in exporting countries like Brazil, Australia, the US and Canada. In some locations prices have been pushed higher by currency appreciation versus the US dollar and rising production costs.

Global Exporter Performance

Growth in beef production over the last decade has come from grass-fed and dairy countries. Brazil and Australia were the largest beef exporters in 2013 and both had larger export volumes with favourable exchange rates particularly in the second half of the year. However, the reason for larger exports was very different in each country. Brazil has been rebuilding the herd since 2007; along with productivity improvements this supported an 18% increase in exports. But this was still below the 2007 record of 1.59 million tonnes when the industry was liquidating. In contrast, Australia was reducing its herd due to severe drought in major grazing regions, increasing exports by 9%.

India's buffalo exports continue to see significant growth. While the per unit price increases with the global market, it is still very low reflecting quality differences. So while India's growing exports are certainly a factor in the global protein trade, the product does not compete directly with North American beef.

Canada has dropped from being the third largest beef exporter in the world, to fifth largest exporter with only 6.9% of trade in 2013. Larger exports would not be noticed by our neighbor to the south as they experience shrinking production and it would not make a dent in China's estimated 1.3 million tonnes in beef imports in 2013 (including grey channel trade).

The right product for the right market

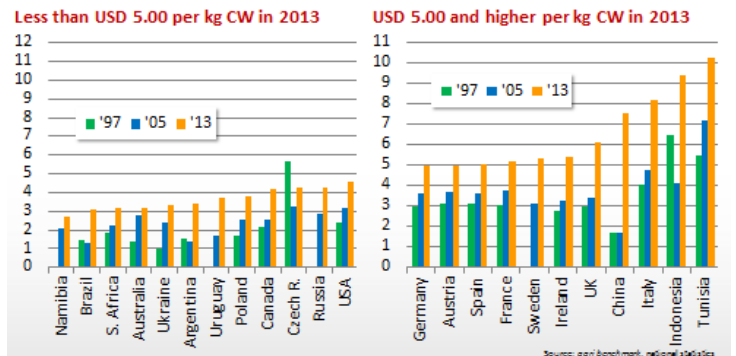
It is not just different parts of the animal that drive trade, but frequently different types of animal or qualities of beef for different markets and consumers within a market. In Asia, for example, rapidly growing demand is changing the world scene, particularly for frozen low quality and manufacturing cuts. This growth is predominately for lean beef and is influenced by traditional beef use and cooking methods (e.g. hot pot). There is niche demand for high quality items in these markets that is still developing.

Production, consumption and consumer preferences are the main drivers of the beef trade. Here's a look at the underpinning factors:

Comparative advantage - Large areas of pasture mean Australia and South America are high consumers of beef and major net exporters. Lack of land means the islands of Asia have low beef consumption and are major net importers. Cold winters create need for winter feeding and use of grain in the Northern hemisphere. Government policies can mean these comparative advantages are helped or hindered by domestic production support, self-sufficiency programs, export subsidies and market access restrictions due to disease.

Beef quality is in the eye of the beholder - Beef isn't just beef – hundreds of cuts come from a single carcass. Different cuts provide different textures that the consumer can taste and may prefer or dislike. Culture, tradition, and lifestyle largely

Beef prices rising (1997, 2005 and 2013)



International Cost of Production Analysis

govern what consumers cook and the way they cook it (e.g. stews, grilled, thinly sliced, etc.). This largely determines what beef products they prefer. Preferences are also impacted by type of product that has historically been available in that part of the world (e.g. grain or grass fed, lean young bulls, mature cows or youthful fed animals).

Types of animals traded - France is a country where beef production equals consumption. However 80% of beef consumption comes from female animals. To cover this specific demand, females are imported from Germany and young bulls as well as weaner calves are exported to Italy. These differing preferences drive live cattle trade within Europe.

Cuts traded - No animal is produced specifically for export markets anymore; many countries just divert a few items that are not in demand at home. The U.S. is a major exporter to Japan and South Korea but it is really only one cut; 70 per cent of U.S. beef exports to Japan are grain-fed brisket (short-plate) and 60% of their exports to Korea are short ribs. U.S. forequarter cuts and offal (e.g. tongue) are also diverted to the export market.

Korea is a major consumer of single rib belly cuts, which drives imports but makes carcass valuation for domestic producers extremely difficult.

Seventy per cent of Australia's beef exports to the U.S. are manufacturing beef from cull cows and trim from prime animals. While a net exporter, Australia imports rump from New Zealand, a product that is discounted in North America, but preferred there. Similarly Canada is a net exporter with thin meats going into the Hispanic market and offal overseas; but as a deficit producer of loin cuts, that product is imported from the U.S.

The global beef industry is becoming more sophisticated in how to find the best prices for each cut around the world. Product is being cut and packaged differently to meet demand from niche markets. Case in point – Australia. Historically Australia sent full sets to Asia but now individual primals and cuts are being divided up. As opportunities arise with growing global demand; exporters need to evaluate which cuts are the most appropriate for each market.

Canada is a Price Taker

Cattle prices are set in the much larger U.S. market and after transport/transaction costs a Canadian price is determined based on local supply and demand conditions. This means increased production from Canada will not move the global market. While a complete removal of Canadian exports in 2003 resulted in higher U.S. cattle prices, an incremental increase in production will not impact overall cattle prices. There is an opportunity for producers to expand the herd. Cow/calf margins in 2014 are projected to surpass anything seen during the expansion phase of the 1990s.

HIGHER COSTS

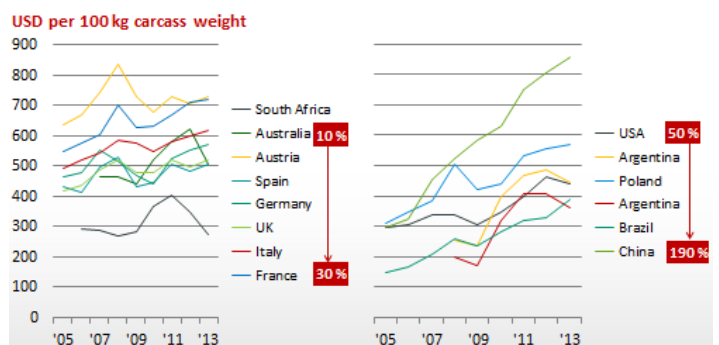
Indeed, the rising beef prices have only matched jumps in cost of production over the last decade with the cost increases led by cattle, land, feed, fuel, fertilizer and labour. These higher input costs have impacted beef production around the world. Since 2005 cost of production has increased 190% in China, 160% in South America, 50% in the US, 30% in Europe and 10% in Australia (in US dollars).

agri benchmark expects beef and cattle prices to increase further across global markets in coming years, leading to some general recovery in farm profitability.

However, with growing land, climate and feed constraints a major challenge facing future beef production and profitability in all major producing countries is to continue to improve productivity. *agri benchmark* contends that narrowing the enormous gap between the performance of the top and bottom beef producers should be a priority in all major producing and exporting countries.

Hence, while global beef farm prospects look bright, Canadian producers will need to at least keep pace with productivity improvements made by our main competitors in order to fully participate in the global growth opportunities.

Cost developments of selected farms
2005-2013 (USD and %)



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WHAT IS STANDING IN CANADA'S WAY?

In general, **cow/calf** cost of production in Canada is very similar to the United States with some regional variations. There are a range of cost structures in any country and it is not necessarily a certain country that stands out as competitive internationally so much as a group of low cost producers within each country.

Despite a long term trend of rising costs in the South American countries with rising land and labour costs they are still lower cost producers versus Northern hemisphere competitors, particularly in terms of cash costs.

In comparison to other major grain-fed competitors, Canadian cow/calf systems have:

- higher labour costs,
- lower forage yields,
- higher machinery & building costs, and
- higher veterinary & medicine costs.

For **finishing feedlots** higher feed costs are the major Canadian disadvantage, along with higher calf prices which is amplified at times when the fed cattle basis is weaker. Land costs were higher than anywhere else. Labour costs were on par with Australia but higher than the US and other countries. Capital costs were similar to Mexico but higher than anywhere else.

In comparison to other major exporters, Canadian finishing feedlots have:

- Higher cost for land, labour and capital, but the big differences were due to higher feed costs (productivity) and wages (labour supply).
- Average daily gain was lower than the top performers in the US, Brazil and Australia
- The US had a slightly higher dressing percentage – mainly due to differences in definition.

Labour woes a global issue

Shortages of qualified labour in the cattle industry are not unique to Canada. Many countries (AU, BR, CN, DE, AR) face intense competition for labour from other industries (e.g. mining in Australia, construction in Brazil) and higher wages either from market forces or minimum wage legislation. In some cases, as children move to urban areas, agricultural skills are lost reducing the pool of qualified labour. Whatever the root cause, labour shortages can have unintended consequences, preventing producers from adopting new technology that would improve productivity and ultimately their bottom line.

Some countries have found ways of dealing with these shortages by increasing the amount of seasonal and contracted labour, increasing labour productivity through larger farm sizes, or adopting labour saving technology and infrastructure (e.g. remote water sensors and cameras). However, in some regions of Canada finding seasonal or contract labour can be just as difficult as finding full time staff, and increasing size is limited by availability of land. This leaves substituting labour inputs with technology. New technology frequently means a substantial investment and training that can be time consuming up front; therefore adoption of these technologies can be limited even if it means saving time later.

As other countries find ways of addressing their labour shortages through productivity improvements, Canada cannot stand still or will risk falling behind. Adoption of technology cannot be limited to only those that save time, but must also include productivity improvements that will keep Canadian products competitive internationally. This means labour supply, whether full time, seasonal or contracted, is one issue that will impact the beef industries future growth.

