TD Bank Financial Group

Special Report

November 5, 2009

TD Economics
www.td.com/economics

HIGHLIGHTS

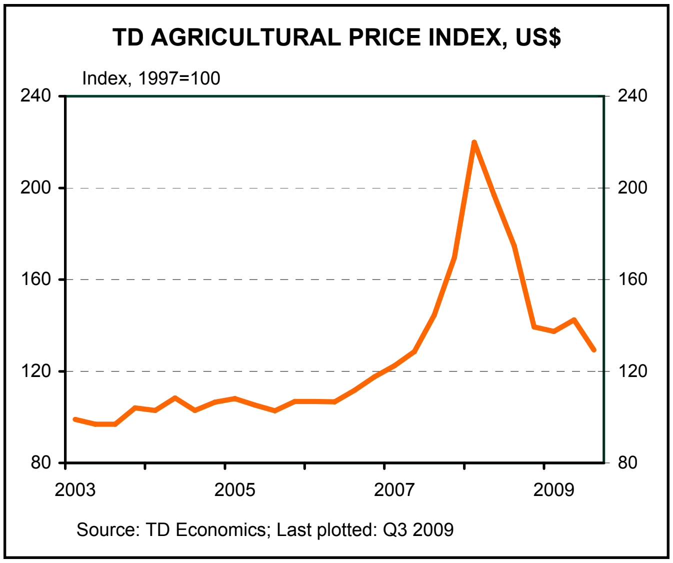
- **Little upside for agricultural prices in the near term, as many markets are oversupplied**
- **Lower input costs to offset falling prices, leaving 2009 realized net farm income close to 2008 levels**
- **Longer-term prospects remain bright, as demand will grow alongside the ethanol and biofuels industry and emerging markets**
- **Livestock traceability to become a major objective for the sector in the coming years.**

Dina Cover, Economist
416-982-2555
mailto:dina.cover@td.com

OUTLOOK FOR CANADIAN AGRICULTURE

Slow Recovery in Prices Forecast Next Year But Long-term Outlook Still Bright

Following two years of huge price swings, 2009 has been marked by a period of relative calm for the agricultural sector. Even during the worst of the largest global recession in half a century, agricultural prices, for the most part, managed to hold up quite well during the first half of this year given the fact that people still needed to eat. But after a bumper harvest during the 2008-09 crop year, the pendulum has swung from one extreme to the other, as fears of shortages have been replaced by troublesome supply surpluses. Meanwhile, the livestock market did not experience the typical seasonal upswing in demand during the summer barbeque months, since demand for high quality meats is correlated with incomes which were falling. Accordingly, the fortunes in the agricultural sector have since taken a turn for the worse, with prices succumbing to downside pressures in the third quarter.



Now that the global economic recovery appears to have gained some traction and most other sectors of the economy are set to rebound, what lies ahead for the agricultural sector? Unfortunately for farmers, we see the recent downward pressure on prices continuing in the near term and only modest upside in 2010 as excess supply persists across major agricultural commodities. But notwithstanding relatively depressed prices and a high Canadian dollar, a drop in input costs will help to keep total farm income relatively stable this year.

Longer term, however, the outlook for the agricultural sector in Canada remains quite bright. Demand for crops from the ethanol and biofuels industries, although taking a backseat in the media recently, is expected to remain strong. And with government mandates still in place, this trend is likely to continue to support demand and prices for crops. Emerging markets are also expected to underpin demand for agricultural products as incomes and populations continue to grow rapidly, increasing the desire for high quality foods – particularly meat. In addition to directly lifting world prices, the emerging markets provide enormous opportunities for Canadian farmers to diversify away from the United States.

Improving quality and food traceability is one way to help Canadian producers become attractive and expand into foreign markets, and this is likely an issue that will draw a lot of attention in the sector over the next few years.

Crop markets switch gears

While record yields and production during the 2008-09 crop year led to a surge in world stockpiles, crop prices managed to stay propped up due to adverse growing conditions during the spring. Indeed, late planting, cool temperatures, excess moisture and low fertilizer use all pointed to a poor global turnout for the current growing season. Six months later, however, it appears as though these factors did not have enough of a negative impact to harm future output, as production estimates for the 2009-10 growing year continue to be upgraded, and now suggest another bumper crop year is in store.

The abrupt shift in expectations to a massive surplus across several major crop-producing countries has not been favourable for prices. In the third quarter, as the outlook for production improved while demand estimates remained relatively static, prices of benchmark crops, including wheat and corn, tumbled by over 15%. This has left prices at their lowest level since mid-2007, prior to the rapid run-up that began shortly thereafter. The drop in oilseed prices was less pronounced due to stronger export demand. Soybean prices fell by about 5%, while canola prices were down by only 1% during the quarter. In Canadian dollars, the declines were even steeper, as the loonie gained over 6% relative to the greenback.

Among the crops, the wheat market appears to be suffering from the largest global supply glut, as evidenced by the sharp drop in prices in recent months. And after ending the 2008-09 crop year at a 6-year high, carryover stocks are expected to be about 12% higher at the end of the 2009-10 year. But other global crop markets, including corn, soybean and barley, are following along the same path, as 2009-10 output is likely to hit new heights, easily meeting, if not exceeding, demand. As such, year-ending stocks are expected to reach record or near-record levels for most crops this year. The bright spot for Canada has been the canola market, as soaring exports have partially offset the rise in output. But although the rise in exports has kept year-ending stocks within historical limits, they are still quite elevated. Canadian barley producers were not so lucky, as hefty competition from cheaper alternative feed grains weighed on demand, driving carryover stock levels well-above the five-year average.

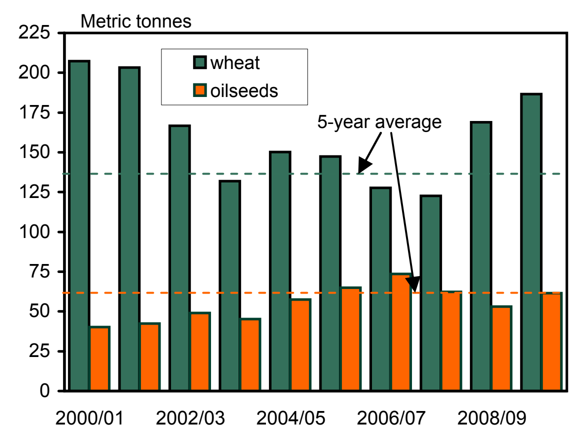
The demand side of the equation has not been much help in bringing more balance to the world crop markets either. In fact, demand of grains and oilseeds is not expected to pick up significantly in the near term, as stocks around the world seem to have been rebuilt after dwindling over the

TOP GRAIN PRODUCING COUNTRIES
2008 Output (Million MT)

Rank	Wheat		Barley		Rapeseed	
1	EU-27	151.3	EU-27	65.6	EU-27	18.9
2	China	112.5	Russia	23.1	**Canada**	**12.6**
3	India	78.6	Ukraine	12.6	China	12.1
4	U.S.	68.0	**Canada**	**11.8**	India	7.0
5	Russia	63.7	Australia	7.0	Ukraine	2.9
6	**Canada**	**28.6**	Turkey	5.6	Australia	1.7

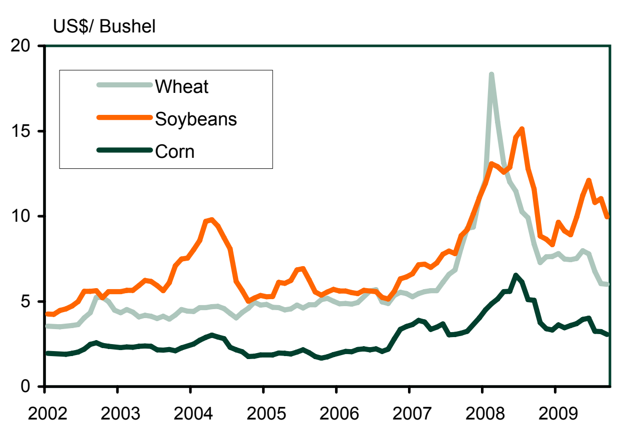
Source: USDA

WORLD YEAR-ENDING STOCKS



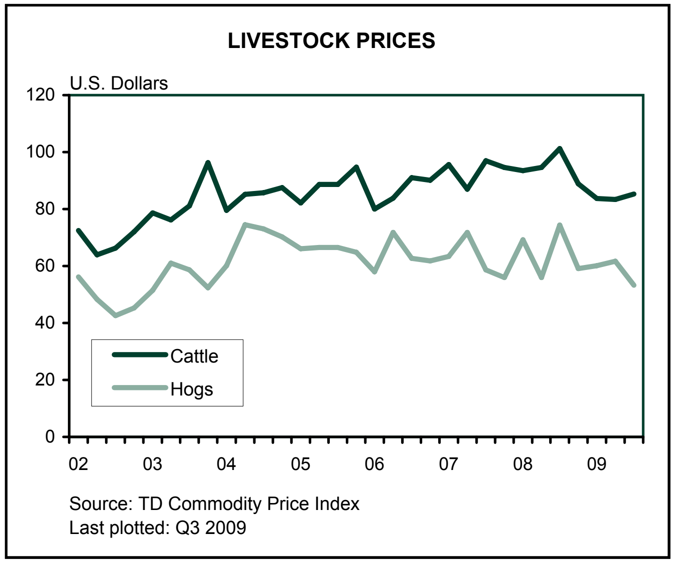
Source: USDA

CROP PRICES



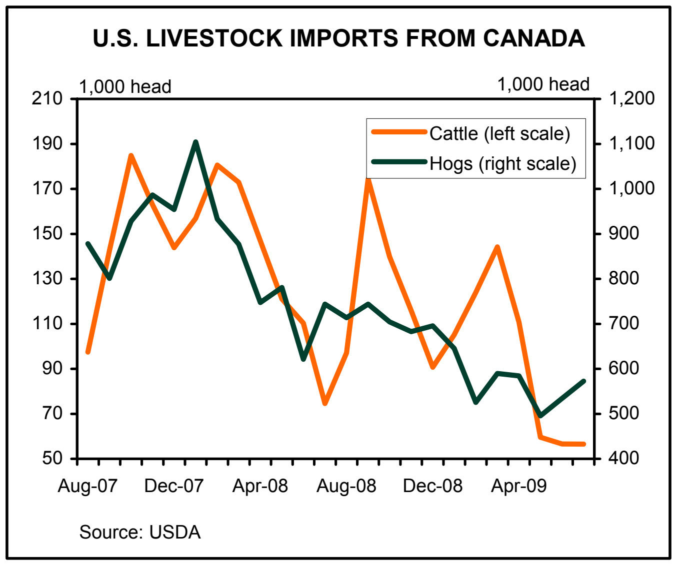
Source: Wall Street Journal, Haver Analytics
Last Date plotted September, 2009

prior two years when supplies were tight, and as livestock herd sizes continue to decline, thereby reducing feed use. Consumption from the ethanol and biofuels industry is soaking up some of the excesses in the corn and soybean markets, but not enough to offset the growing gap between production and consumption. So with little prospect for a significant increase in demand to take place in the near term, it will take a great deal of supply-side discipline or severely adverse growing conditions to work down the excessive inventories. Accordingly, a bearish tone is likely to persist in crop markets over the next 2-3 quarters.



Livestock market still facing several challenges

In addition to the slump in demand brought on by the recession, Canadian livestock producers have been faced with a slew of other challenges. The final rule of the Country of Origin Labelling (COOL) legislation in the U.S. came into effect in March. And in addition to abiding by this rule, packers in the U.S. were asked to take on further voluntary measures when dealing with foreign meat. As a result, Canadian exports to the U.S. have dropped considerably this year, with both cattle and hog exports down by nearly 25% Y/Y in July. Unable to come to an agreement with officials in the U.S., the Canadian government requested last month a WTO panel to settle the dispute, stating that COOL unfairly discriminates against Canadian producers. WTO panels typically take about nine months to release the final report, so this legislation will continue to plague the livestock market in Canada through 2010.



Making matters worse for the hog market was the spread of the H1N1 flu in late April, which was originally named the 'swine' flu, even though it could not be transmitted through pork consumption. Still, the name sent consumers in the

The loonie takes flight

After hitting a trough of 76 US cents in March, the Canadian dollar jumped 27%, and was sitting just shy of parity in mid-October. The key drivers behind the loonie's rapid ascent include a weakening U.S. dollar – as the greenback has depreciated against all major currencies in recent months – and rising commodity prices, particularly gold and oil. While there has been some concern that the Canadian dollar has become largely overvalued, several factors suggest that loonie is roughly in line with fundamentals.

Canada's domestic economy has proven to be much more resilient than that in the U.S. Exceptional buoyancy in the housing market, a solid financial system, a healthier labour market, and above all, a lower level of federal debt relative to the U.S. have all helped to lift the Canadian dollar.

We expect U.S. dollar weakness to persist through the first half of 2010. And combined with the more solid fundamentals in the Canadian economy, the loonie will likely remain elevated over the next year, reaching a peak of 102 US cents in the second quarter, before heading back towards the mid-90s later next year.

other direction, depressing demand even more. This issue has since subsided, though there are still some concerns lingering in certain areas of the world, such as China. Furthermore, China has been a key destination for pork exports as the hog market there was hit with blue-ear disease in 2007. But production in that country has since rebounded, diminishing demand for imports of North American pork.

While herd sizes in Canada have been shrinking for the past three years, the hog market is still oversupplied. In addition to the Cull Breeding Swine program that was put in place last year, the Canadian government has announced further aid for the sector. The new funding aims to cut herd sizes even more by helping struggling producers transition smoothly out of the industry. As well, the government will back loans to help viable operations get through the current downturn and is initiating an International Marketing Fund to attract new buyers for Canadian pork.

Little upside to prices in the near term

The accompanying table presents TD Economics' near-term price projections for key agricultural commodities in U.S. and Canadian dollars. Over the remainder of 2009 and into early 2010, crop prices will probably give way to further bouts of downward pressure, given the fact that many markets are already oversupplied and the relatively healthy output projections for the upcoming harvest season. But while prices are expected to fall back to three year lows, the longer-term structural uptrend that has been evident since early this decade is projected to remain intact. Despite several challenges, the livestock sector will likely fare somewhat better. The cattle market has already begun to tighten, and while there remains a large surplus of hogs, prices are already so low that they don't have much more room to fall. A strong loonie will also limit exports, keeping a lid on demand, and consequently, prices in Canada. We discuss some of the factors behind the Canadian dollar's strength in the text box on page 3.

By mid-2010, prices should stabilize, and barring expectations for another bumper crop year in 2010-11 or another outbreak of a meat-related virus, prices should begin to trek up gradually. With the wheat market expected to experience the largest carryover stocks, it would be reasonable to expect some acreage to be shifted away from wheat and towards other crops such as canola and barley. As such, prices of the latter two crops could see some relative weakness and wheat relative strength in 2011.

TD ECONOMICS AGRICULTURAL COMMODITY PRICE FORECAST 2009-2011

	2002-07 Average	2009				2010				2011				Q4/Q4 % chg		
		Q1A	Q2A	Q3A	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2009	2010	2011
US$ PRICE FORECAST																
Wheat ($/mt)	210	322	325	270	255	235	240	245	250	260	270	280	290	-21.1	-2.0	16.0
Barley ($/mt)	115	131	146	150	135	130	135	145	150	150	145	145	140	-7.7	11.1	-6.7
Canola ($/mt)	285	360	422	416	390	395	410	420	425	425	420	415	410	11.8	9.0	-3.5
Corn (cents/bu)	244	356	388	317	315	305	320	330	340	345	350	365	360	-9.7	7.9	5.9
Cattle (cents/lb)	83	84	83	85	87	87	88	90	92	95	97	99	100	-2.2	5.7	8.7
Hogs (cents/lb)	59	60	62	53	50	52	54	57	59	60	63	65	68	-15.5	18.0	15.3
C$ PRICE FORECAST																
Wheat ($/mt)	269	405	378	289	255	233	235	250	269	283	297	311	326	-35.4	5.4	21.2
Barley ($/mt)	147	165	169	161	135	129	132	148	161	163	159	161	157	-24.4	19.4	-2.4
Canola ($/mt)	365	453	490	445	390	391	402	429	457	462	462	461	461	-7.9	17.1	0.8
Corn (cents/bu)	312	449	451	339	315	302	314	337	366	375	385	406	404	-26.0	16.0	10.7
Cattle (cents/lb)	106	106	97	91	87	86	86	92	99	103	107	110	112	-19.8	13.7	13.6
Hogs (cents/lb)	76	76	72	57	50	51	53	58	63	65	69	72	76	-30.7	26.9	20.5

Source: Forecast by TD Economics at November 2009
Wheat: 1 CWRS, Canada: St Lawrence, 13.5% (C$/mt)
Barley: Canada: Cash Prices: Feed Barley: Lethbridge: Grade 1 CW (C$/mt)
Canola: Canada: Cash Pr: Canola: Instore Vancouver: Grade 1 Canada NCC (C$/mt)
Corn: #2 yellow: Central IL:($/bu)
Cattle: Live Cattle Futures Price: 1st Expiring Contract Open (Cents/lb)
Hogs: Lean Hogs Futures Price: 1st Expiring Contract Open (Cents/lb)

Net farm incomes to be flat in 2009

With weaker agricultural prices expected for the remainder of the year, what will be the impact on farm incomes? In 2008 (latest available data), realized net farm income shot up by 65% to the second highest level on record. Crop farmers benefited the most, as higher grain and oilseed prices more than offset the rise in operating costs, while livestock producers were battling elevated feed costs and lower prices due to the surging loonie. This year, although the tables have turned, bottom lines in the farm sector will likely be quite similar to 2008.

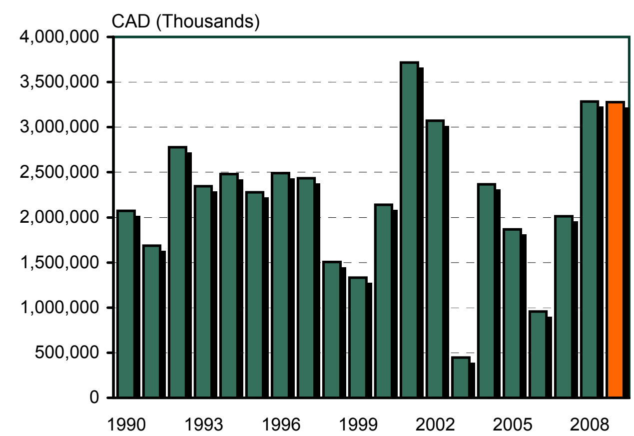
Farm cash receipt figures – a measure of gross revenue – have been released for the first half of the year, and showed a decline of 1.4% compared to the same period for 2008. The hog sector outperformed during the first half of the year, with receipts surging 10%, although the level remained quite depressed. On the flipside, the cattle industry was hit with lower demand from the U.S. and lower slaughter rates. As a result, in spite of higher prices, total receipts were down 3.2% as of June. Lower crop prices have been offset by increased shipments of wheat and canola, with receipts in the sector up 2.4% over year-ago levels.

Receipts during the second half of this year are likely to slide further as both crop and livestock prices slipped below year-ago levels and are unlikely to pick up before the year is out. But with input costs having fallen this year as well, realized net farm income will likely remain close to that recorded in 2008. Energy prices have plunged considerably, with crude oil prices down by about 50% from year ago levels. Meanwhile, transportation costs, as measured by the Baltic Dry shipping index, have been close to 70% lower than 2008 levels. Fertilizer prices have also sunken from the heights seen last year, though potash prices managed to remain elevated for a much longer period than nitrogen or phosphate based fertilizer prices. But, high potash prices just resulted in lower potash applications, ultimately driving potash prices down. Peak to trough, potash prices sank by about 50%, while the drop in nitrogen and phosphate prices was closer to 75%. And lastly, even though the dollar is approaching parity, its average value for 2009 (86 US cents so far this year) will be lower than in 2008 (94 US cents) – which has brought some reprieve to exporters.

Next year, farmers will be faced with some challenges that could weaken their bottom lines.

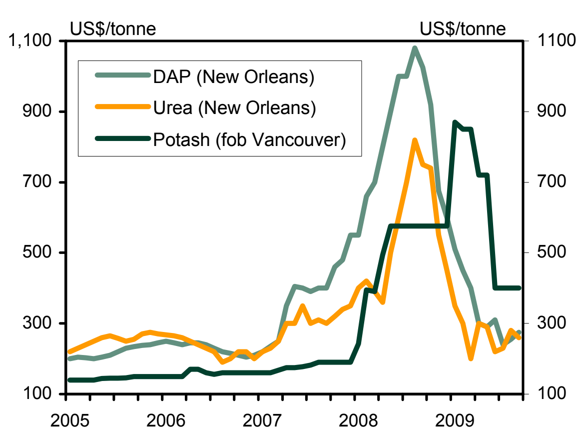
- We expect the recent strength in the loonie to extend into next year, peaking in the second quarter at 102 US cents and falling to only 93 US cents by the end of the year. But with several other major currencies

CANADIAN REALIZED NET FARM INCOME



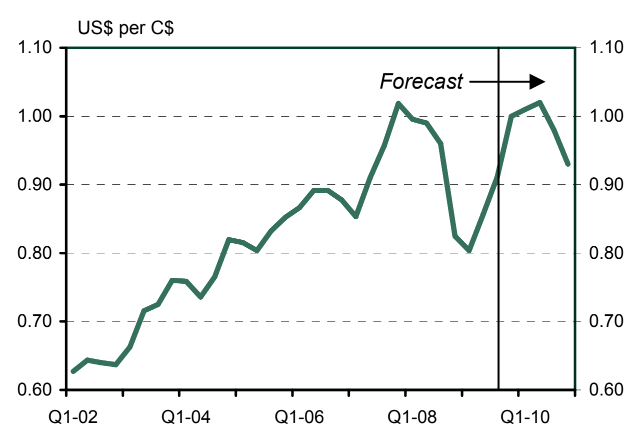
Source: Statistics Canada, 2009 Estimate by TD Economics

FERTILIZER PRICES



Source: Fertilizer Week, Green Markets, TD Newcrest
Last plotted: September 2009

U.S./CANADA EXCHANGE RATE



Source: Bank of Canada

following the same trend against the greenback, these exchange rates relative to the loonie will likely remain in a tighter range. As a result, export demand from markets outside the U.S. won't be hit as hard. Moreover, while weighing on the export side, the stronger loonie will reduce the cost of inputs priced in U.S. dollars, including farm equipment, providing some relief for farmers on the cost front.

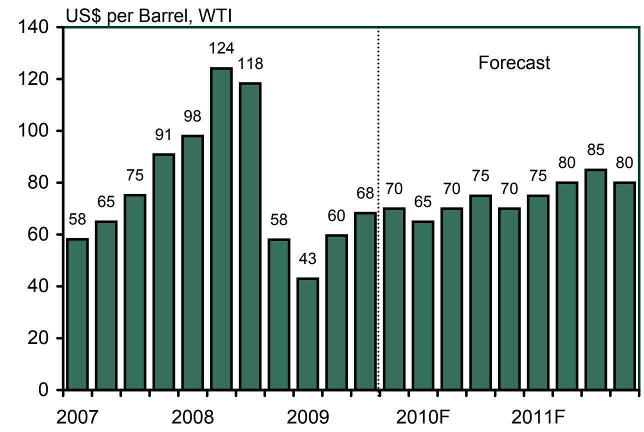
- Despite the surge in net farm income in 2008, farm debt outstanding was 14% above the 2003-2007 average. This uptrend likely continued into 2009 and will persist in 2010 as well. However, the cost of borrowing should remain low, as we expect the Bank of Canada to leave rates unchanged at 0.25% until the fourth quarter of 2010.
- Energy prices are likely to edge up slightly compared to 2009, though the supply glut overshadowing the market will keep prices in check. Indeed, despite an uptick in demand alongside the economic recovery, we expect crude oil prices to hover in the US$65-75 per barrel range in 2010.
- As demand around the world begins to pick up, and restocking of commodities is taking place, freight costs for dry bulk cargoes, which are well below the averages seen over the past five years, are likely to creep up.
- Fertilizer prices are also likely to edge up next year. Although some farmers may decide to go another year with reduced fertilizer usage, others will begin to replenish the soil so that yields aren't compromised, thereby increasing demand. But while fertilizer prices will likely return to levels above the averages seen in the years prior to the massive surge, we don't expect them to rise anywhere close to the highs seen in 2008.

Given a weaker price environment, an elevated loonie and stable to higher input costs, there is some downside risk to net incomes in the farm sector in 2010. Of course, this is assuming a normal growing year. The outcome could turn out dramatically different should adverse weather conditions hit major growing areas.

Longer-term prospects still bright

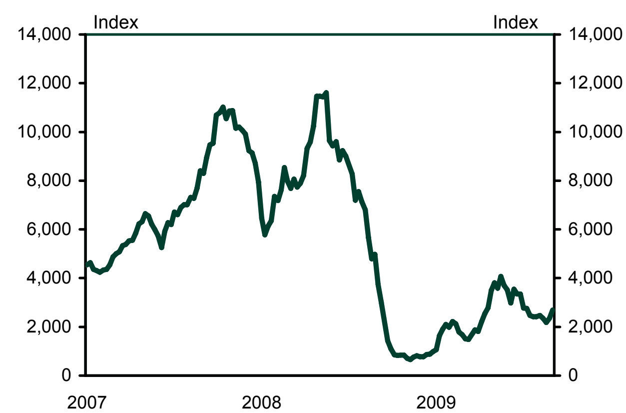
The longer-term prospects for the Canadian agricultural sector remain quite promising, as the uptrend in prices that began at the start of the decade will likely remain intact. The buzz surrounding ethanol and biofuels has died down in the midst of the recession and a lower gasoline price

CRUDE OIL PRICE FORECAST



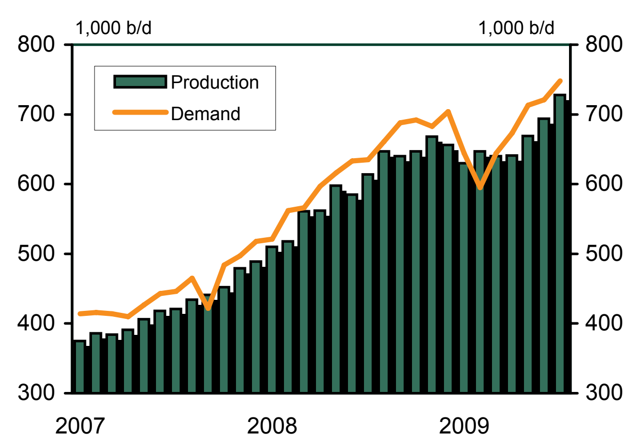
Source: Haver Analytics, Forecast by TD Economics as at Oct. 2009

BALTIC DRY INDEX



Source: Bloomberg
Last plotted: October 2009

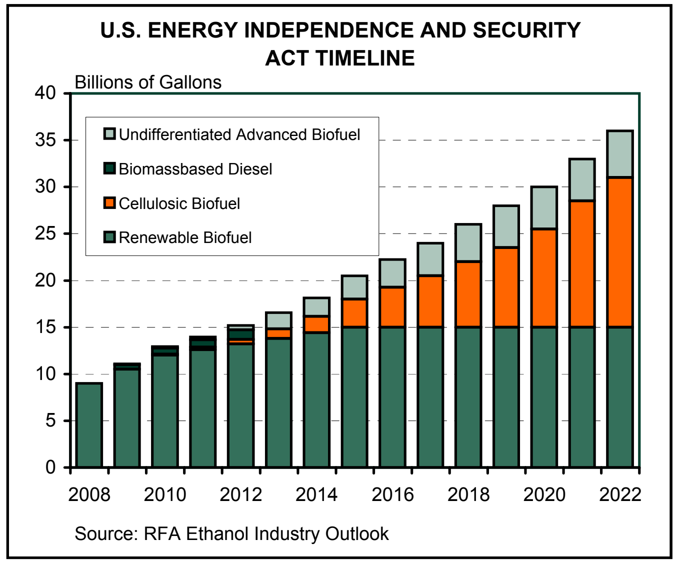
U.S. ETHANOL PRODUCTION & DEMAND



Source: RFA; Last plotted: July 2009

environment. But notwithstanding the demise of some major players in the ethanol market this year, the slump in corn prices has pushed producers out of the red, resulting in increased output. Indeed, ethanol production in the U.S. has been setting a new record month after month, with output during the first half of the year up 17% over year-ago levels.

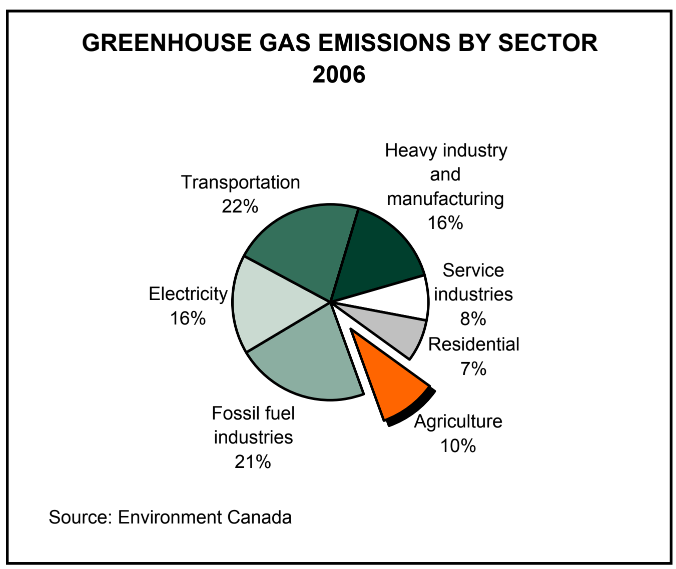
Some questions have been raised over the actual environmental benefits of corn-based ethanol, as the production process requires more energy from other sources (most often natural gas) than that of crude oil or gasoline production. Moreover, there are also indirect negative effects, such as increased use of land, fertilizer and pesticides needed to ramp up crop production to meet the rise in consumption (from biofuels as well as from human consumption) which can lead to poorer soil, air and water quality. There has been much debate about whether these indirect effects should count against the ethanol industry should strict greenhouse gas emissions regulations – such as cap and trade or intensity targets – be implemented. Until that issue is resolved, it is uncertain how the ethanol industry would be impacted. Nonetheless, mandates are still in place in the U.S. and they are set to rise over the next few years, which will keep demand propped up. The agricultural sector as a whole is a large contributor to greenhouse gas emissions; hence any legislation on climate change could have a significant impact on farmers. We discuss this in the accompanying textbox.



Meanwhile, despite a slowdown this year due to the recession, growing incomes and populations, particularly

Agriculture a large contributor to greenhouse gas emissions

The agricultural sector is a significant contributor to global greenhouse gas emissions – accounting for nearly 15%. In Canada, the sector accounted for just under 10% of total greenhouse gas emissions in 2006, far outstripping its 1.7% contribution to real output. But as importantly, the sector also has the potential to mitigate emissions through changes in technologies and management systems. Altering crop mixes, cultivation systems and land use could increase the storage of carbon above and/or below ground in soil and plants, while adjusting management practices – with respect to fertilizer use, irrigation, and soils – can lower emissions of nitrous oxide and methane. In the livestock sector, improving feeding systems could help to reduce methane emissions, while converting waste into energy would help to offset emissions elsewhere.



In light of the impact that the agricultural sector can have on global emissions, some organizations have suggested that the industry be prominently featured at the upcoming Climate Change Conference in Copenhagen in December. But at this point, it appears as though the sector will be not be given too much attention, as a top negotiator of the working group of the conference indicated that agriculture will have to be dealt with separately by each individual country.

While the outcome of the climate change negotiations is unknown, it is almost certain that the Canadian government will implement a carbon policy within the next couple of years. And while the impact that this national legislation will have on the agricultural sector is also quite cloudy at this point, it is likely that it will lead farmers to adopt new practices that result in lower greenhouse gas emissions.

in emerging markets, will continue to underpin a steady uptrend in demand for high quality food, supporting both the crops and livestock sectors. (For details, see the accompanying text box) In order to benefit from this demand growth, Canadian agricultural producers should look to broaden their export markets.

The need to expand trade horizons beyond the U.S. applies just as strongly to food processing, which is Canada's largest manufacturing industry by value of shipments. Indeed, a more general argument can be made that Canada is missing out on significant opportunities to add value to agriculture commodities before they are exported abroad. In order to make a true imprint on the global marketplace, however, the food processing sector will need to make a firm commitment to technology, R&D, cost reduction and efficiency. But, if achieved, the benefits to the Canadian economy would be enormous.

Livestock traceability – the way of the future

One way to help make Canadian-made products more attractive in foreign markets is to increase livestock traceability measures. With all the disease outbreaks that have occurred over the past decade relating to livestock and meat-related products, this is one issue that is increasingly becoming a necessity in order for producers to remain competitive on the global stage. In fact, traceability and age verification are the minimum requirements for market access in several Asian countries – where the market for high quality meat

Emerging markets to underpin demand growth

The recent shift to a protectionist environment in the U.S. highlights the importance of export diversification for Canada. The COOL regulations already in place essentially work to protect U.S. producers, and with the U.S. economy to recover only gradually from this recession, the government could potentially implement more measures. So with a considerable chunk of Canadian crop and livestock exports destined for the U.S., the agricultural sector should work to broaden its export market. The cattle sector has made some progress over the past year, as Colombia and Saudi Arabia have agreed to reopen the border to Canada after closing it in 2003 during the BSE outbreak. The canola market has also done well this year with exports surging 40% to a record high – and China and Japan have been the top two destinations for exports.

Furthermore, the first round of negotiations between Canada and the European Union regarding the Comprehensive Economic and Trade Agreement began in late-October. However, there is much concern that the agricultural sector itself will be the biggest obstacle. In particular, Canadian government officials have stated that supply management programs in dairy among other areas are off the table during the trade negotiations. At the same time, large subsidies provided to European producers is likely to be a bone of contention for Canadian officials.

While definitely taking steps in the right direction, Canada should continue to seek out bilateral free trade agreements, as the prospects for further growth in global agricultural exports are copious. Emerging markets in particular present a great opportunity, as population and incomes are expected to grow quite rapidly over the next few decades, which will boost demand for higher quality food. While the negotiations of the Doha Round are far from over, the G-20 leaders have indicated that they are determined to come to an agreement by 2010. If the involved countries are indeed able to successfully settle, it would likely help to open the door to emerging markets for Canada.

There has been some chatter recently that China – who is currently the world's largest importer of agricultural and food products – is becoming self-sufficient with respect to food. And indeed, the country has made considerable progress in agricultural production over the past 30 years, even generating a grain surplus in some years. But the country faces several challenges that will hinder steady growth in agricultural output going forward. Water shortages and loss of fertile cropland will be major impediments to production, while slower productivity growth will also limit output growth. Climate change is another factor that some have cited as a possible threat to Chinese production, although the impact is still uncertain at this point. So given that growth in the agricultural sector appears to be limited, and that urbanization and growth of the lower-edge middle class will result in higher incomes and hence increased demand for higher quality food, China is likely going to be a net importer of agricultural products in the long run.

In our view, emerging markets still present a great opportunity for the Canadian agricultural sector. While Canada is a relatively small trading nation, and thus will not be able to capture a large share of the market in these countries, continued government support and ongoing trade negotiations will be helpful in making Canadian products visible in these markets. As well, implementing policies, such as traceability programs that are superior to other major exporters, could give Canada a competitive advantage.

is likely to grow quite rapidly over the next few decades.

Government officials have recognized the value that a national system would bring to Canada and at their meeting this past July, federal, provincial and territorial agriculture ministers agreed that a mandatory comprehensive national traceability system will be implemented by 2011, and will be supported by national funding and regulatory framework. The National Agricultural and Food Traceability System (NAFTS) will begin with livestock and poultry. Some provinces are already ahead of the curve, with Quebec being the first province to implement a full traceability system in 2001, which uses radio frequency identification technology to track cattle and sheep. This year, Alberta implemented its own program, with mandatory premises identification for all livestock producers and mandatory cattle age verification for all cattle born this year and beyond. The national traceability plan will build upon these initiatives already in place.

The benefits of a mandatory NAFTS include quick and effective reaction to disease outbreak, consumer assurance, and minimizing economic impacts which would ultimately lead to increased global market access and perhaps premium pricing on Canadian products. But the notion of such a program has raised the question of how much it will cost producers to implement. With the details yet to be ironed out, it is impossible to find an answer at this point. However, it has been emphasized that the costs will be shared across the value-added food chain as well as governments and will be commensurate with benefits received. We have already seen signs of government support. In 2008, the Alberta provincial government announced that it would invest $356 million in a long term traceability strategy to help make the livestock industry more competitive. In July of this year, the federal government announced that it will invest $20 million in a new Livestock Auction Traceability Initiative, which will help to boost traceability capacity in facilities where animals usually comingle with other herds. The funding will come from the $500 million Agricultural Flexibility Fund that was included as a part of Canada's Economic Action Plan. Overall, while the cost to producers may rise somewhat, a national traceability program will increase their competitiveness, and lead to a new era for the Canadian livestock industry.