The New Price of Food in the World

- ***How sustainable are high oil prices and biofuel development?***
- ***Implications for grain prices and agri-food transportation costs.***

THE NEW PRICE OF FOOD IN THE WORLD
Are We Facing a Structural Change?

ENAGRO 2008

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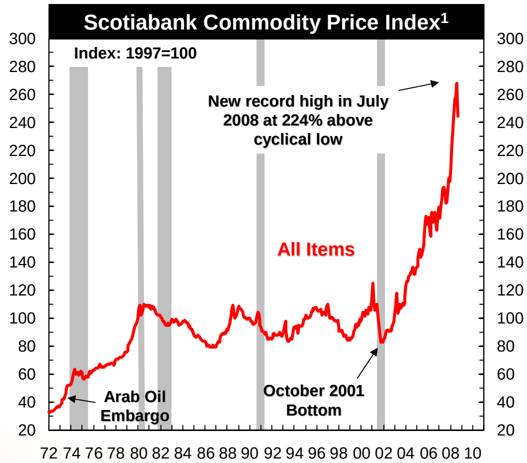
Commodity Price Upswing
This Decade On a Par With 1970's Expansion

Scotiabank Commodity Price Index[1]



Scotiabank Commodity Price Index, % change yr/yr	
December 2002	17.9%
December 2003	17.3%
December 2004	19.0%
December 2005	24.4%
December 2006	5.4%
December 2007	10.2%
(August 2008, % change yr/yr)	
All Items	33.9
Oil & Gas	50.4
Metals & Minerals	36.8
Forest Products	12.9
Agriculture	24.5

A trade-weighted U.S. dollar-based index of principal Canadian exports. Shaded areas represent U.S. recession periods. 'Bull-Run' in commodities continued in 2008:H1 due to ongoing strength in China's GDP growth, underinvestment in oil & gas and metals during the 1990s and delays in expanding capacity this decade; interest by hedge funds in commodities as a 'hedge against a declining U.S. dollar' and a major rejuvenation in grain & oilseed prices linked to biofuel development and tight global supplies, pushing up fertilizer prices (potash).

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Commodity Prices Have Peaked for This Business Cycle

Scotiabank's Commodity Price Index rose to a record high in July 2008 – 224% above the cyclical low in October 2001 – driven higher by ongoing strength in 'emerging market' demand (especially in China and India) in the face of only slow capacity expansion in oil & gas and metals this decade. Interest by hedge funds & investment funds in commodities as an asset class (given low bond yields and weak equity markets) and as a 'hedge against a declining U.S. dollar' also buoyed commodity prices. This upswing in commodity prices has been on a par with the huge expansion in the aftermath of the Arab oil embargo in the 1970s.

Many grain & oilseed prices rose to record levels in the first seven months of 2008 – spurred by crop-based biofuel development and surging income growth in many 'emerging market' economies, enabling increased red meat consumption (especially in China). The rejuvenation of global farm income in turn triggered increased fertilizer application to boost yields and record fertilizer prices.

However, Scotiabank's Commodity Price Index dropped by 8.9% yr/yr in August – the largest decline since April 2003, when the 'war premium' in oil prices eased and U.S. & European manufacturing momentum was lost in the aftermath of the Iraq War. The Index likely fell again in September.

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Commodity Prices Have Peaked for This Business Cycle (cont.)

A widening global credit squeeze – stemming from sub-prime mortgage defaults in the United States – has probably ushered in a period of slower global growth. Base metal prices likely peaked earlier this year and are expected to move irregularly lower over the balance of the decade alongside slower demand and a wave of new mine expansion, before rebounding in 2011-12. Copper – important for Chile – should outperform other base metals.

While grain & oilseed prices have lost considerable momentum in recent months – due to seasonal harvest pressure and the spillover of financial market turbulence on futures markets -- prices will rally back seasonally in late 2008 and should remain at higher levels in the next several years than from 2000-05. High oil prices will underpin global interest in crop-based biofuels, though policy in the EU increasingly favours the development of 'cellulosic ethanol' and there are some policy uncertainties in the United States, following the Presidential election.

There have been only two previous periods of 'sustained strength' in grain & oilseed prices -- the first following the Second World War, when price controls were lifted, international trade began to normalize and post-war rebuilding began. The second period began in 1973, sparked by massive unexpected wheat purchases by the former Soviet Union.

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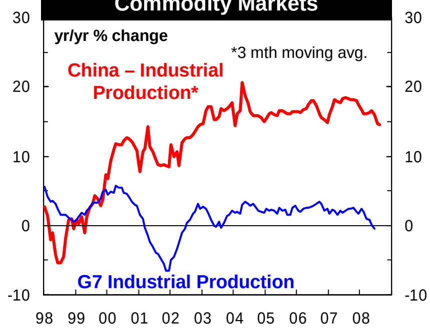
China Drives Global Commodity Markets



Demand Growth in China (2007, % change)

Crude Oil	**4.6**	Nickel	24.0
Copper	16.0	Aluminium	38.8
Slab Zinc	11.5	Iron Ore	10.3

China Industrial Production:

August 2008	**12.8% yr/yr**
G7 Industrial Production	**-0.6% (June)**
U.S.	**-1.5% (Aug)**
Japan	**-4.7% (Aug)**
Germany	**-0.6% (July)**

China posted growth of 11.9% in 2007 (the fifth year of 10%-plus gains). Fixed asset investment remained robust (up 25.8% yr/yr in 2007), with strength in real estate and primary & secondary industry (especially coal & non-ferrous metals).

The acceleration in growth raised fears that China's economy was 'over-heating', triggering interest rate hikes (the benchmark one-year lending rate was increased by 162bp to a peak of 7.47% from April 2006) and 18 increases in bank reserve requirements from July 2006. The People's Bank of China continued to tighten policy through 2008:H1, including more restrictions on lending for home purchases and a ban on bank borrowing by property developers found to be hoarding land.

Policy priorities are now shifting from avoiding 'overheating' to supporting fast and steady growth.

Financial turmoil over the Sept. 14 weekend triggered a 27bp cut in benchmark lending rates to 7.20% (effective Sept. 16) and a cut in reserve requirements by 1 percentage point for banks (excluding the five largest banks and the Postal Savings Bank, effective Sept. 25). China's CPI moderated to 4.9% yr/yr in August. Manufacturing activity apparently fell in China in July & August (likely due to plant closures to improve air quality during the Olympic Games). Should activity falter further, we expect China to introduce a broader stimulus package. GDP should still advance by 9.8% in 2008 and 9.0% in 2009.

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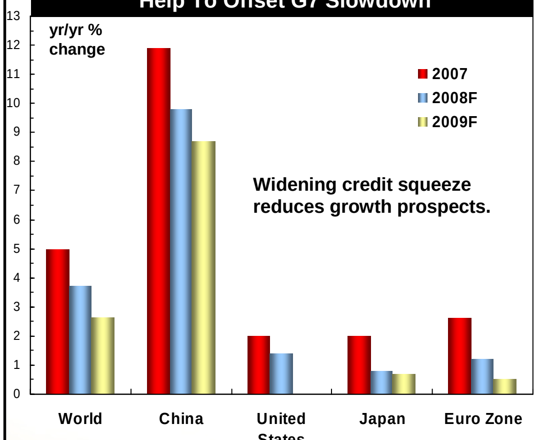
'Emerging Markets' Should Help To Offset G7 Slowdown



A 'seismic' shift in global growth has occurred from the G7 to 'emerging markets' this decade. However, high oil & energy prices have taken a toll on growth in 2008.

GDP (% per annum)

	2005	2006	2007	2008F	2009F
WORLD*	4.4	5.1	5.0	3.7	2.5-2.8
CANADA	2.9	2.8	2.7	0.5	0.0
UNITED STATES	2.9	2.8	2.0	1.4	0.0
CHINA	10.4	11.6	11.9	9.8	8.7
INDIA	9.0	9.6	9.0	7.5	6.7
MEXICO	3.1	4.9	3.2	2.5	3.1
SOUTH KOREA	4.2	5.0	5.0	4.2	3.7

*Global GDP estimate based on "purchasing power parity," as used by the IMF. Average 1988-1997: 3.4% p.a. prior to the "economic take-off" in China and India.

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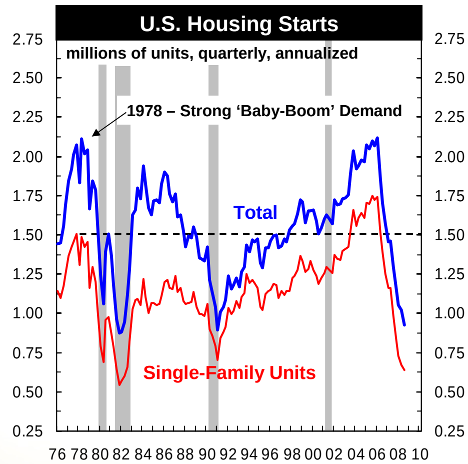

Data to August 2008.
Shaded areas represent U.S. recession periods.

U.S. Housing Start Outlook (million units)	
2006	1.80
2007	1.35
2008F	0.95
2009F	0.88

Tighter U.S. lending standards, high home inventories and negative fallout from record crude oil prices on consumer spending point to prolonged U.S. slowdown.

The plunge in U.S. new single-family home sales since the peak in 2005:Q3 at – 60% is on par with the drop in the early 1980's recession.

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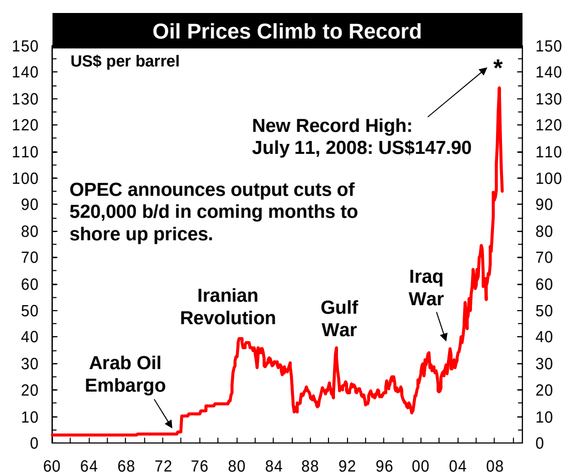

Source: Scotiabank Commodity Price Index.

Oil Prices Likely to Remain High Through Decade End

1990-99	US$19.69/bbl
2006	US$66.22
2007	US$72.32
2008F	US$108
2009F	US$90-100

'Geopolitical risks' (e.g. Nigerian unrest, Venezuelan effective nationalization of Orinoco facilities …), tight supplies and a weak U.S. dollar lifted oil prices to a record on July 11, 2008 (in both current and inflation-adjusted dollars).

The supply response to record prices has been very slow, limited by technical/engineering and political challenges (e.g. renegotiation of fiscal regimes in areas such as Kazakhstan) and 'limited exploration access' by foreign oil companies in many regions.

In similar fashion to 2006 and 2007, new non-OPEC supplies will total a mere 270,000 b/d and will only meet 39% of global demand growth in 2008 (even when demand is adjusted down for weak G7 economic activity, slowing global growth and demand 'destruction' in the United States and the Euro Zone from high oil prices). Estimates of non-OPEC supply were adjusted down again in September (largely ignored by the market). News of falling Russian output contributed to the perception of 'resource scarcity' and added US$25 to oil prices earlier in the year. Investment/hedge funds bid up prices, recognizing tight supplies.

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Oil Prices Slip From Record Highs in July

Since peaking at US$147.90 per barrel in intraday NYMEX trading on July 11, 2008, WTI oil prices retreated to a low of US$90.51 on September 16, before rebounding sharply. Prices are currently about US$93.

The decline in prices got underway as traders began to focus on easing U.S. petroleum consumption in response to record prices and a soft economy. U.S. consumers quickly responded to record gasoline prices by shifting to more fuel-efficient vehicles and industrial users shifted to cheaper natural gas (currently a bargain). U.S. petroleum products supplied (a rough measure of demand) is down 7.1% yr/yr as of mid-September, though commercial stocks of oil & products are quite low (-7.7% yr/yr) due to refinery shutdowns caused by Hurricanes Gustav and Ike (also impairing deliveries). U.S. gasoline stocks have tumbled to a record low and there may be some delay in restocking home heating oil ahead of winter.

Prices also receded alongside news of the 2008:Q2 GDP contraction in the Euro Zone and Japan and ongoing concern in the U.S. financial services sector, pointing to weak economic conditions across the G7, which will likely slow growth in 'emerging markets'. However, global oil demand will likely still edge up in 2008 (by +0.8%) and 2009 (+1.0%), with 'emerging market' demand more than offsetting lower G7 consumption (-1.7%). Longer-term, oil demand growth will be centred almost exclusively in 'emerging markets'.

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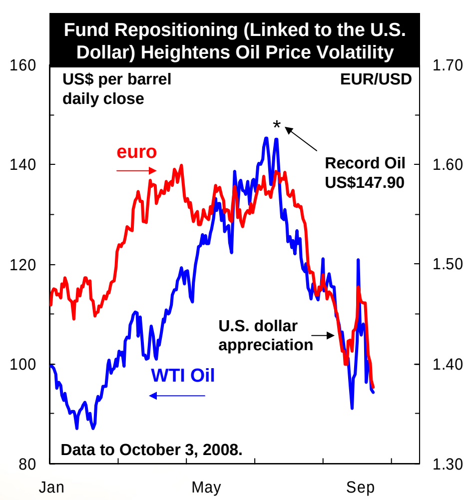

Oil prices have since retreated back to US$93 as investors flocked to the security of U.S. Treasury securities and the U.S. dollar once more strengthened.

- **The recent extreme volatility in oil prices has been heightened by investment/hedge fund financial market re-positioning.**
- **A U.S. dollar rally – that began in June – linked in part to some improvement in the U.S. trade picture -- encouraged funds to start reversing widely held financial-market positions put in place earlier this year (e.g. 'long crude oil futures – short the U.S. dollar'), pushing down oil prices even more than justified by supply/demand fundamentals.**
- **However, the widening credit squeeze in the United States in September, culminating in a U.S. Treasury plan to create a US$700 bn 'asset-purchase' fund to buy troubled mortgage-related assets from financial firms, will widen an already large U.S. budget deficit – leading to renewed weakness in the U.S. dollar. Oil prices then snapped back and a 'short-covering squeeze' on the expiry of October NYMEX futures led to a record daily increase of US$16.37 on September 22.**

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OPEC Policy – Starting to Tighten

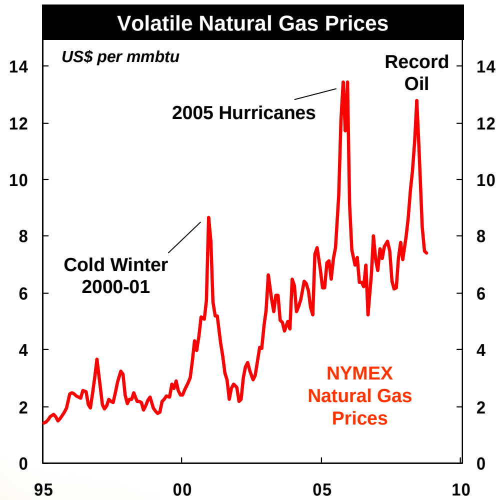
OPEC left its formal production quota unchanged at its meeting in Vienna on September 9-10, 2008. However, the cartel agreed to spend 40 days to move back towards tighter compliance with stated quotas to prevent excessive inventories from building up in a slower demand environment – implying an effective cut of 520,000 b/d.

Saudi Arabia increased output by a significant 495,000 b/d from May to July, attempting to prevent high oil prices from derailing global growth. However, Saudi output edged down in August. Given the huge slide in prices, the Kingdom also cut deliveries under its term contracts in September.

OPEC is bringing on stream new field development – to create a greater 'capacity cushion' in the global oil supply system – Saudi Arabia's 500,000 b/d Kursaniyah field has just started and Angola will bring on its Saxi-Batuque (Kizomba C) field. However, should prices retreat below the US$90 level later this year, we believe that OPEC would reduce output further.

Expanding Market Access for Alberta Oil Sands

Source: Alberta Energy and Utilities Board.



Data to October 3, 2008.

• During the July run-up in oil prices, NYMEX natural gas prices jumped to a peak of US$13.58 per mmbtu on July 3. However, the subsequent drop in prices to a low of only US$7.22 on September 29 has been much sharper than the decline in oil prices.

• Natural gas is a relative bargain, as illustrated by the following:
Fuel Prices in U.S. Gulf Coast on Sept. 15, 2008
Natural Gas del. To Utility in Texas US$7.07 per mmbtu
Residual Fuel Oil 0.7% sulphur US$14.09 per mmbtu
WTI Oil at Cushing US$17.91 per mmbtu (US$103.90 pr barrel)

• U.S. demand growth has been strong (up 4.6% 2008 YTD and 6.5% in 2007). However, relatively soft prices reflect the rejuvenation of U.S. domestic production (up 8.7% in 2008:H1) centred in the 'unconventional' gas shales and tight sands of Texas, Louisiana, Oklahoma and the Rocky Mountains – made economic by improvements in horizontal drilling.

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Oil & Gas Price Outlook

	1999	2000 Cyclical Peak	2004	2005	2006	2007	2008F	2009F
WTI Oil (US$/barrel)	19.25	30.20	41.40	56.56	66.22	72.32	108	90-100
Nymex Natural Gas (US$/mmbtu)	2.31	4.32	6.19	9.00	6.99	7.12	9.25	8.50

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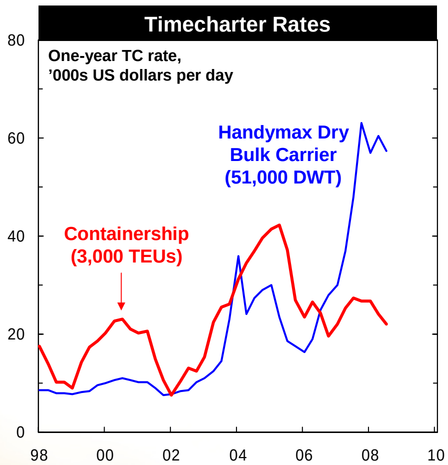
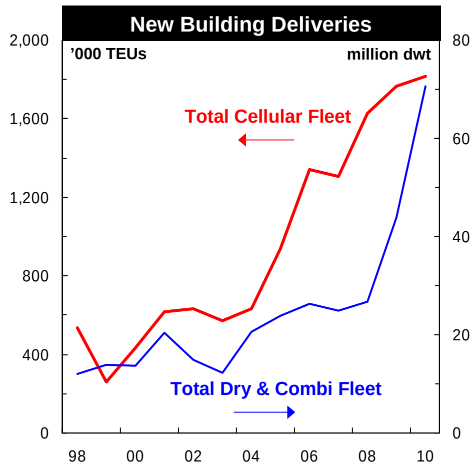
Capacity Expansion Moderates Ocean Shipping Costs



Bunker surcharges on box rates are expected to decline, but could remain relatively high.



Data Source: Marsoft.

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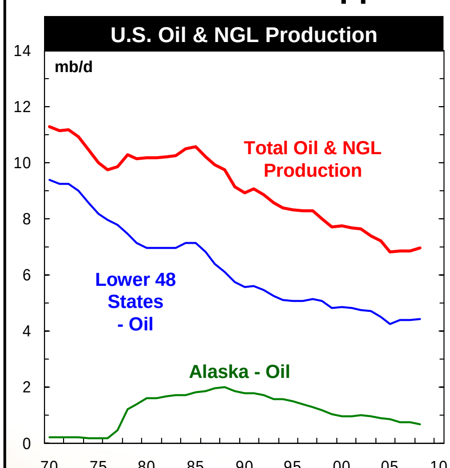
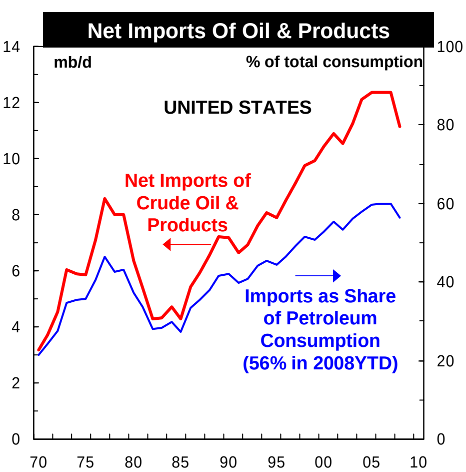
High U.S. Dependency On Imported Petroleum An Opportunity For Biofuels*



* As well as Canada's oil sands.



Net imports as % of consumption:
1970 21.5%; 1990 42.2%;
2000 52.9%; 2005 59.8%
2006 60.0%

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Biofuels Accounted for More than Half the Increase in World Consumption of Grains & Vegetable Oils from 2005 – 2007

World Consumption of Wheat & Coarse Grains*

	2005	2007	Change 2005 - 2007	
	(million tonnes)		(million tonnes)	(% of Total)
Global Consumption	1,622	1,702	80	100
of which:				
Food	642	662	21	26
Feed use	749	761	12	15
Biofuels	46	93	47	59
-- in United States	41	81	40	50
-- in European Union	1	6	5	6

*Corn, barley, sorghum & oats.
Source: OECD – FAO Agricultural Outlook 2008 – 2017.

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Biofuels Accounted for More than Half the Increase in World Consumption of Grains & Vegetable Oils from 2005 – 2007

World Consumption of Vegetable Oils*

	2005	2007	Change 2005 - 2007	
	(million tonnes)		(million tonnes)	(% of Total)
World Consumption	96	105	8.8	100.0
United States	10	11	1.3	15.0
European Union	17	19	1.9	26.0
Brazil	3	3	0.0	0.0
China	17	20	2.3	26.0
India	9	9	0.2	–
of which: Biofuels**				
World	4	9	4.9	56.0
United States	1	2	1.2	14.0
European Union	3	6	2.3	26.0

*Oilseed oils from canola/rapeseed, soyabeans and sunflower plus palm oil.
**Malaysia and Indonesia are significant manufacturers of biodiesel from palm oil.
Source: OECD – FAO Agricultural Outlook 2008 – 2017.

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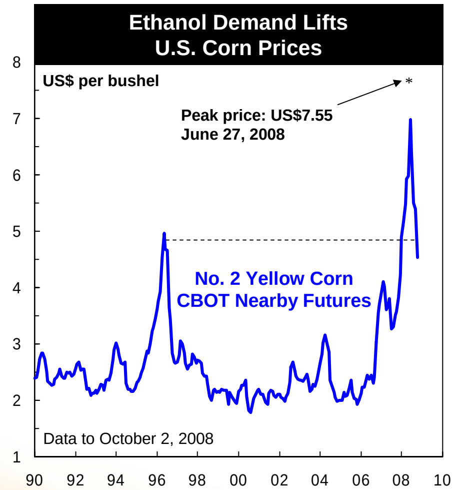
Rapid Expansion of U.S. Corn-Based Ethanol Lifts Prices Across Grain Complex



• Development of U.S. corn-based ethanol and biodiesel in Europe (made from rapeseed oil) contributed to the strong rally in global prices for feedgrains (corn & barley), wheat and oilseeds (soybeans, canola & palm oil) – beginning in the summer of 2006. The dramatic shift in acres planted from soybeans and wheat to corn in the United States – alongside two years of drought in Australia and parts of Southern Europe/Russia – led to a sharp upward move in most grain prices through the spring and early summer of 2008.

• In the 2008-09 crop year, corn used for ethanol will represent about 38.5% of U.S. corn use – up from 28.9% in 2007-08. Feed use may decline in 2008-09 due to high prices. Despite some uncertainty over public support (subsidies, import tariffs on Brazilian ethanol), the share of ethanol production is likely to grow further in coming years. Based on current legislation, the federal government US$0.51 per gallon excise tax credit for every gallon of ethanol (domestic or imported) blended into gasoline will remain in place until December 31, 2010. (Ethanol is used as an oxygenate in gasoline).

• U.S. corn prices at the farm gate should average US$5.00-6.00 per bushel in 2008-09, up from US$4.20 in 2007-08 and US$3.04 in 2006-07 (crop year: Sept-August).

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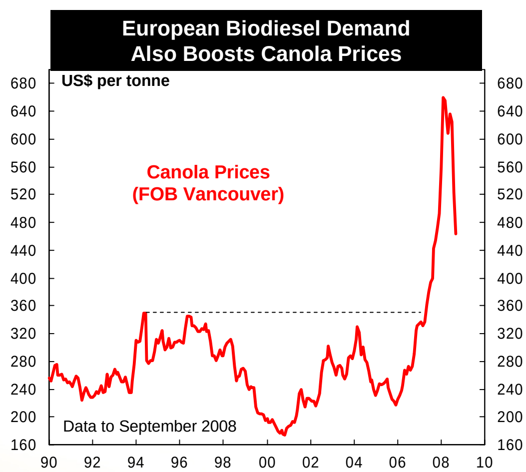

Source: IntercontinentalExchange (ICE) & Scotiabank Commodity Price Index.

Prices for canola (the highest value crop for famers in Western Canada in 2008:H1) were dramatically boosted last year by strong rapeseed demand in Europe for biodiesel production as well as robust demand for vegetable oils (particularly in Asia).

Canola crush margins in Western Canada are strong (in late August 2008, the difference between the seed cost and the value of oil & meal was over $105 per tonne – largely due to high canola oil prices). New varieties of canola make processed foods with very low trans fat as well as cholesterol. Canola oil is currently too expensive to use for biodiesel production in North America.

Substantial expansion of domestic crush capacity is underway in Western Canada.

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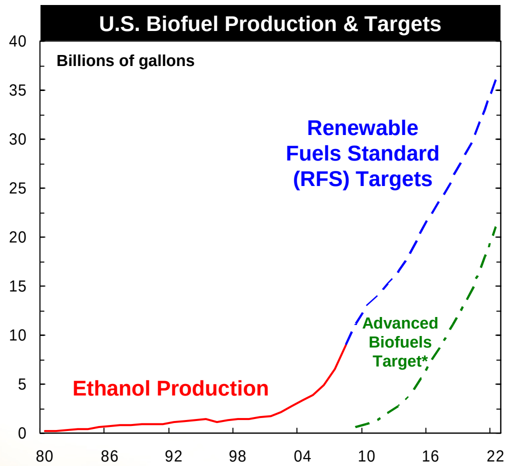

*Includes cellulosic ethanol.
Source: Renewable Fuels Association and Ryan Godfrey, Scotia Economics.

- The U.S. Energy Independence and Security Act of December 2007 substantially increased mandatory U.S. Renewable Fuel Standards (RFS), requiring that fuel manufacturers increase their use of renewable biofuels from 9 mgy in 2008 to about 12 mgy by 2010 and to 15 mgy by 2015. (mgy = million gallons per year)

- The mandated use of 'advanced biofuels' including 'cellulosic ethanol' will rise from 0.6 mgy in 2009 to 21 mgy by 2022 (despite commercially largely unproven technology). Washington will increasingly distinguish between biofuels with lower GHG emissions – reflected in mandated 'advanced biofuels' including 'cellulosic ethanol'.

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Rapid U.S. Expansion in Biofuels from Corn, But U.S. Presidential Candidates Differ In their Support

Massive U.S. federal, state and local government subsidies and grants have supported the development of 174 operating biorefineries in the United States, with capacity of 10,519.4 mgy – mostly based on corn/maize. Planned capacity expansion = 671 mgy plus new refineries under construction = 2,571 mgy, providing a total capacity of 13,761 mgy by 2013 or 10% of U.S. gasoline demand. Product is used mostly in E10 gasoline. Reducing reliance on imported oil has been the key factor supporting biofuels in the United States.

However, there is some uncertainty over public policy support for biofuels based on food & feed crops going forward. The policy platforms of the two U.S. Presidential candidates differ greatly in their approach to biofuels:

Senator Obama would increase Renewable Fuel Standards to 60 billion gallons per year by 2030 (likely through 'cellulosic and advanced biofuels'). A 'National Low Carbon Fuel Standard' requiring a 10% reduction in CO_2 emissions by 2020 would favour more use of 'cellulosic ethanol'.

The Republicans support further biofuel development, but might favour ending mandated requirements and subsidies in favour of free market economics. The current US$0.54/gallon import tariff on Brazilian ethanol from sugar cane could be eliminated.

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European Union Reduces Proposed Target for Biofuels From Food Crops

In a vote on September 11, 2008, the European Parliament's Energy Committee effectively reduced the share of biofuels in the European Commission's January 2008 proposal for renewables in transport fuels (gasoline and diesel).

While a 10% target has been maintained for 2020, the Committee stipulated that at least 40% of this target must come from 'second-generation biofuels, electricity or hydrogen (rather than biofuels made from food crops). This share and the 10% target will be reviewed by 2014.

Similarly, of the interim 5% target for renewables in all road fuels by 2015, only 4% can be from 'first-generation biofuels', with the remaining 1% from new alternatives that do not compete with food production.

A scaling back in support for biofuels produced from food & feed crops reflects concern over their impact in lifting global food prices and a more critical assessment of life-cycle CO2 emissions cut through biofuels (including the intensive use of natural gas-based fertilizers in growing many biofuel crops). To count towards the target, biofuels must save at least 45% of the GHG emissions from fossil fuels, and from 2015 onwards by 60%. Palm oil producers in Malaysia/Indonesia and sugar cane producers in Brazil have criticized the change.

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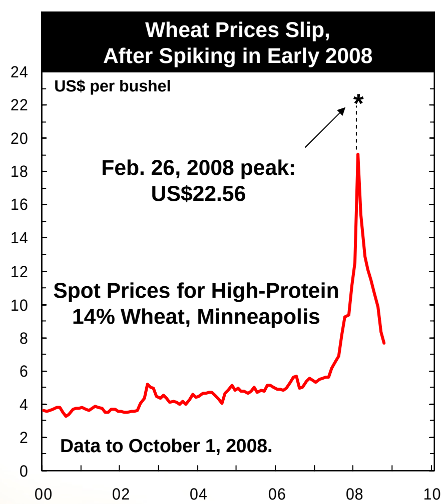
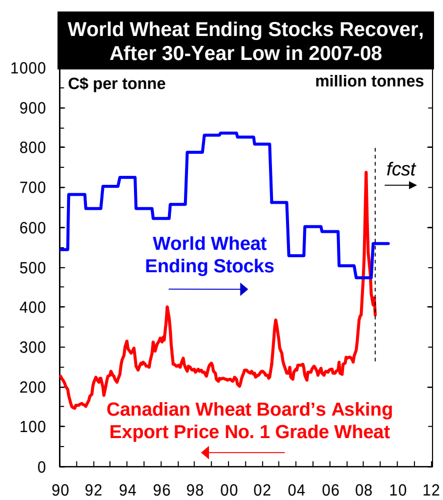


Drives Canadian Wheat Board's asking export price for No. 1 CWRS, 13.5% protein wheat.



No. 1 CWRS 13.5%; in store St. Lawrence.

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Wheat Prices Slip Back

After peaking at a spectacular S$22. 56 per bushel on February 26, 2008, spot prices for high protein 14% wheat in Minneapolis have slipped back to US$7.66 in early October – a level below a year earlier and close to a seasonal low. Financial market turbulence, hedge fund selling and the credit squeeze have contributed to the recent decline in prices, as well as global supply & demand fundamentals.

Farmers have responded to record prices by stepping up their plantings. Improved growing conditions in Canada, the Ukraine, Russia and the EU-27 will likely produce a bumper world crop in 2008-09. The U.S. Department of Agriculture expects world wheat ending stocks to rise to 139.9 million tonnes at the end of the 2008-09 crop year – up from a 30-year low of only 118.6 million tonnes in 2007-08. However, dryness has persisted in Australia and Argentina and the estimate could be revised down.

However, supplies of high-quality milling wheat remain tight – underpinning crop receipts. Most of the improvement in supply is for lower-quality 'feed wheat' – with U.S. hog and poultry producers expected to switch from relatively high-priced corn to feed wheat. European producers will also replace imported feed grains with more wheat in compound feeds.

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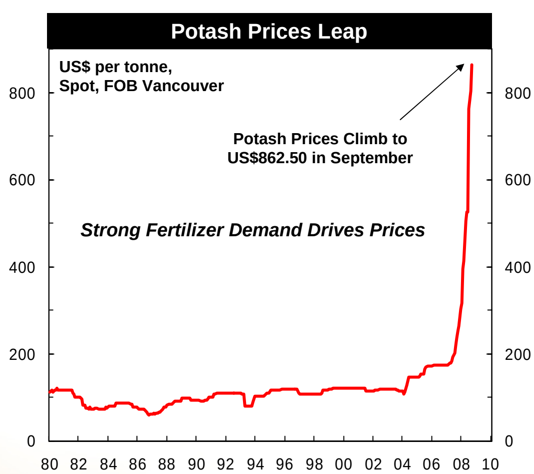

Potash (a mineral-based fertilizer) is On Track For A Record-Breaking Year

- Canpotex (which represents Potash Corporation, Agrium and Mosaic) has announced that all new spot market sales over the balance of 2008 to Asia, Brazil and Latin America will rise to US$1,000 cfr for the standard grade and US$1,025 cfr for granular product (netting back to about US$900 at the Port of Vancouver). Canada is the world's largest producer.
- Potash prices have been lifted by a major rejuvenation in global farm income as well as surging global interest in biofuels (biodiesel and ethanol).
- The three crops using the most potash per hectare planted are all used to make biofuels – sugar cane (in Brazil), palm oil (in Malaysia, Indonesia) and corn (in the United States). Potash application is also high for fruits & vegetables.

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Conclusions – Outlook for Agricultural Prices

Oil prices are expected to remain relatively high over the balance of the decade – underpinning demand for biofuels, though EU policy developments are not as supportive as they were several years ago for biodiesel in Europe. There are also policy uncertainties in the United States linked to the outcome of the Presidential election, though interest in 'renewable energy' and 'energy security' will remain intense.

Corn prices are expected to remain relatively high –given ongoing expansion in U.S. ethanol production and low U.S. carryover stocks in 2008-09 (1.018 billion bushels – down from 1.576 billion in 2007-08). The U.S. stocks-to-use ratio for corn will be 8.1% (the second-lowest in history after 1995-96). World carryover in 2008-09 = 109.9 million tonnes, down from 123.5 million in 2007-08. Barley prices (a competing feed grain for cattle) will also be underpinned by these developments.

Oil seed prices will also be buoyed by strong Asian demand for 'vegetable oils' and expanding biodiesel output, though price performance is not generally expected to be as strong as for corn. However, canola prices will likely stay strong.

Despite prospects for somewhat slower growth in 'emerging markets' – linked to fallout from the U.S. credit crisis, red meat consumption will continue to grow in the next several years – a factor boosting overall grain prices. China intends to significantly expand its cattle herd in the next three years, to cut back on beef imports. Land will be shifted from food to feed grain production, likely boosting imports of oilseeds and possibly wheat.

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