Wheat Market Outlook and Price Report: December 12, 2016 By Marlene Boersch/ A.P. Temple Mercantile Consulting Venture Inc.

i) Background and Rationale for the Report

The following wheat market outlook and price report will be published on a weekly basis on the Sask Wheat Website. The report provides producers with an overview of world wheat markets, a market forecast, and benchmark prices at both the primary elevator and export positions (FOB Vancouver or elsewhere).

The report is made up of several sections. Following this section, a World Wheat overview is provided, which includes a summary of wheat market fundamentals, world production and trade, and a wheat market outlook. This is followed by several price tables, which include primary elevator bids at various Saskatchewan locations (Table 1), grain spreads (Table 2), and FOB port prices and basis (as measured by subtracting the primary elevator price (Rosetown) from the relevant port location price for individual crops) (Table 3). Table 3 is preceded by a description of the various assumptions, definitions and methodology used in arriving at the FOB port prices and in the export basis calculation.

ii) Wheat Market Outlook Nov. 21/'16

2016/'17 World Wheat Overview:

Production – Last USDA report for 2016

- In last Friday's USDA report, Global and Australian production for 2016/17 were both raised to new records.
 - Australian production was raised to 33 million mt
 - World production was revised 6.5 million mt higher to 751.3 million mt.

Trade

- USDA raised global trade to a new record (176.8 million mt) with stronger import demand from Asia and Brazil. Larger exports for Australia and Argentina are partially offset by a decrease for Russia. The U.S. season-average farm price was left unchanged at \$3.70 per bushel.
- Changes to selected exporters:

Argentina: Forecasts for Argentine wheat exports were raised by 200,000 mt to 8.2 million mt based on the fast pace of old-crop shipments.

Australia was boosted sharply by 2.5 million mt to 23.0 million mt due to larger production and competitive pricing.

Russia was lowered 1.0 million tons to 29.0 million due to slower-than-expected trade.

Changes to selected importers:

The import forecast for **Bangladesh** was raised by 400,000 mt to 5.1 million mt on a stronger pace of trade.

Brazil was up 400,000 mt to 7.0 million mt with food use expected to rebound.

Indonesia was boosted 300,000 mt to 8.8 million mt on trade to date and rising food use.

Thailand was raised 200,000 mt to 3.8 million mt based on the pace of trade.

Vietnam was up 300,000 mt to 3.3 million mt based on stronger trade and higher expected feed and residual use.

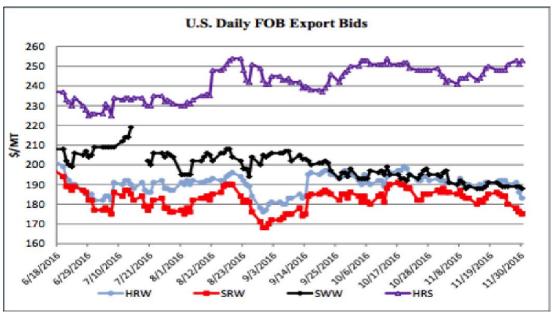
India's imports were left unchanged!



> Stocks

- World stocks were increased by 3 million mt to 252 million mt, up 12 million mt on the year and a new record.
- The US S&D was unchanged.

There were no major surprises in the USDA report, but the report was not bullish. USDA will have to make some changes to Indian imports in the next report [see below].



Source: USDA

Global wheat production and trade:

Below is a brief synopsis on this week's market events in the major wheat origins.

Canadian wheat:

- O Statistics Canada's production report came on the heels of the bearish ABARE (Australian statistics agency) report on Australian wheat. The StatsCan November estimates for wheat pegged 2016 Canadian spring wheat production at 20.5 million mt (up 2.5% from 20 million mt in 2016), winter wheat at 3.5 million mt (up 57% from 2.2 million mt in 2015), and durum wheat at 7.8 million mt (up 44% from 5.4 million mt in 2015). Total 2016 Canadian wheat adds to 31.3 million mt; this is 13.4% bigger than last year's wheat crop. Expectations prior to the report were for a 30.7 million mt wheat crop, including 7.2 million mt of durum; 11% bigger than last year's wheat crop. Many analysts expect to see revisions to this report for various crops including wheat because of the huge difference between seeded and harvested acreage at 1.29 million acres for wheat.
- o It is a shame that Canadian wheat exports have been so slow during the first 18 weeks of the crop year. A 31.7 million mt Canadian wheat crop is bigger than traders expected, and come April, finding enough consumptive demand could be tough because then the new crop harvest across much of North Africa and the Middle East will be just weeks away.

US wheat:

 Weekly US export sales for old crop were up 4% vs. last week, and larger than the higher end of pre-report expectations at 503,100 MT. US wheat ending stocks were left



unchanged in Friday's USDA report at 1.143 billion bushels. The average of pre-report trade estimates for 16/17 global ending stocks were at 250.3 million mt but came in at a higher 252.1 million mt.

Australia:

- ABARE revised the 2016 Australian wheat crop higher by 4.5 million mt to a record 32.6 million mt (USDA numbers are at 28.3 million mt). This leaves an exportable surplus of roughly 25 million mt, almost 9 million mt more than this year. It will make a rally in world wheat prices difficult without a real Northern Hemisphere weather problem.
- Interestingly, Australian futures were slightly higher following the report because some private trade estimates were as high as 33-35 million mt. They considered the ABARE number too small. Nevertheless, Fob values are sliding with APW at US\$195 for February-March '17 in Western Australia.

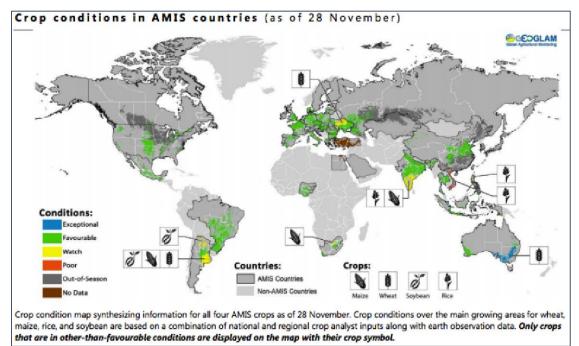
EU wheat:

 A report on agriculture markets by Commerzbank (a German Bank) proposes that wheat prices are unlikely to recover in 2017. The bank believes, while demand has been stable, plentiful supplies and similar production expectations will keep rallies muted.

Crop conditions - Wheat:

- Northern hemisphere: Winter wheat planting is complete and is under generally favourable conditions at this early stage in the season as it enters dormancy in most countries.
- Southern hemisphere: Harvest has begun with conditions mostly favourable for South Africa and most of Argentina. Australia is experiencing exceptional conditions over large production areas, owing to earlier beneficial rainfall.
 By wheat producing country:
- EU: Overall conditions are favourable for winter wheat despite some problematic weather conditions during sowing and emergence.
- US: Conditions are favourable for winter wheat.
- o **Canada**: Winter wheat is under favourable conditions with only minor delays in seeding due to wet conditions in Saskatchewan.
- China: Conditions have improved with recent good weather and beneficial snowfall for the dormancy period.
- o **India**: Sowing is ongoing under generally favourable conditions.
- Russian Federation: Winter wheat conditions are favourable as the crop enters dormancy.
- O Ukraine: Winter wheat is under generally favourable conditions, and November rains provided good soil moisture reserves. However, there is concern over conditions in central Ukraine where seeds in a number of areas did not form shoots due to late planting and cold temperatures in October.
- Australia: Record yields are expected as conditions have improved markedly since September, with abundant soil moisture levels and mild temperatures boosting production prospects across the country.
- Argentina: Harvest is ongoing in the north of the country under favourable conditions.
 The main producing regions are under generally favourable conditions with good yields expected. However, a mix of dry soils, flooding and frosts is causing some concern in parts of the Buenos Aires region.





Source: Agricultural Market Information System, FAO

Wheat Market Outlook:

- Significant events this past week:
 - India scrapped it's 10% import duty on wheat. Previous reports had suggested the duty would be raised to the original 25% ahead of the start of the harvest in March-April. Domestic prices for wheat in India were at record highs in November, which sparked the government action. An exporter in recent years, traders expect that as much as 5 million mt (+) could be imported by India this year. The country has already purchased wheat this fall from Australia & the Black Sea. The news sparked a round of short covering by the Spec Fund short.
 - Saudi Arabia was tendering Friday for 715,000 mt of hard wheat for February April '17 delivery. Minimum protein requirement is 12.5%. The Saudi tender will be interesting at current Fob parities because the specs exclude the Black Sea wheat. Tender results are not known yet at the time of writing.
 - Weekly US export sales for old crop were up 4% over last week, and larger than the higher end of pre-report expectations from the trade. Another 24,149 mt of new crop sales were reported with most of it booked for Mexico. Total US sales and shipments were both more than double the same week last year.
 - US inspections were 454,000 tonnes (season total 499 myn bushels, up 29%), sales were 523,000 tonnes (season total 711 myn bushels up 32%). USDA's US exports were unchanged and HRW is 91% ahead of last year (USDA 75%), HRS is up 32% (USDA 17%), SRW is down 36% (USDA 25%).
 - The current wheat price line-up again shows that HRW wheat is highly competitive in the international markets, and is and even cheaper than Argentine wheat beyond January. However, there seems to be very little incremental demand.



Outlook:

- The markets are entering holiday doldrums, and with the exceptions of the Saudi wheat tender and the usual Christmas-period volatility in Chicago, we do not see much of real interest until the New Year.
- The quality terms of the Saudi wheat tender are perfect for Canadian wheat (see at right); we hope Canadian wheat is included in the offers.

HARD RED WHEAT GRADE 2

Origin: USA/South America/Canada/Australia

1000 Kernel Weight: 30-32

Protein: 11% - 13%

Moisture Content: 12% Max Damaged Kernels: 0.5% Max Foreign Material: 0.5% Max Imperfect Grains: 0.5% Max

Wet Gluten: 26% Min Dry Gluten: 10% Min Dockage: 1-3% Max Radiation: Normal

Water Absorption: 76% Min

- Friday's USDA report states that there is even more wheat looking for demand than before: World production up 6.5 million mt. Expected wheat trade is up by 2.6 million mt.
- o A big change are **India's import prospects** of 5 million mt, which were largely ignored by the markets before the reduction in their tariffs.
- o **Technically** wheat and corn could rally short-term.
- o Forward cash markets will be driven by:
 - Size of wheat stocks against weather threats
 - Geopolitics and their effect on currencies
 - Especially the US\$ and the Egyptian pound
 - Wheat imports by India, which could led some support to the market
- > With the exception of the EU, the world (and exporters) are carrying a major cushion of wheat stocks against any new crop weather threat.
- At the same time geopolitics and **currencies** (notably the US\$ and Egyptian Pound) continue to threaten on demand.
- India is the only destination that looks like it can add any support to the market through extra demand.
- ➤ We could still see a small rally in quality wheat, but it will be small and short-lived unless we experience quality problems with new crop wheat in the EU and FSU.
- ➤ We think hard wheat may have a little more upside and should be sold on a scale-up basis, but we expect the maximum upside to be ~20 cents/bushel.
- Time is running out and the markets will soon be talking about new crop wheat (from the EU and Eastern Europe) during a period when it is unlikely that we will have as much poor quality wheat. Premium wheat that trades against Minneapolis should be sold. Feed grains in Canada have a little more upside, so farmers may want to hold barley for the present, but may want to sell oats at \$3.50 or better.



iii) Primary Elevator Price Tables and Grade Spreads

Table 1: Canadian Primary Elevator Bids, in Canadian Dollars per Bu and per MT

Date: Dec. 12, 2016

NW Sask	Spot		NW Sask	Deferred		
	(bu.)	(mt)	INVV Sask	Feb. '17 (bu.)	Feb.'17 (mt)	
1 CWRS 13.5	\$6.48	\$238.10	1 CWRS 13.5	\$6.58	\$241.78	
1 CWAD 13.0	\$8.08	\$296.89	1 CWAD 13.0	\$8.20	\$301.30	
1 CPSR 11.5	n/a	n/a	1 CPSR 11.5	n/a	n/a	
SW Sask			SW Sask			
1 CWRS 13.5	\$6.42	\$235.90	1 CWRS 13.5	\$6.58	\$241.78	
1 CWAD 13.0	\$8.06	\$296.16	1 CWAD 13.0	\$8.20	\$301.30	
1 CPSR 11.5	n/a	n/a	1 CPSR 11.5	n/a	n/a	
NE Sask			NE Sask			
1 CWRS 13.5	\$6.37	\$234.06	1 CWRS 13.5	\$6.45	\$237.00	
1 CWAD 13.0	\$7.73	\$284.03	1 CWAD 13.0	\$7.91	\$290.65	
1 CPSR 11.5	n/a	n/a	1 CPSR 11.5	\$4.45	\$163.51	
SE Sask			SE Sask			
1 CWRS 13.5	\$6.32	\$232.22	1 CWRS 13.5	\$6.41	\$235.53	
1 CWAD 13.0	\$7.78	\$285.87	1 CWAD 13.0	\$7.95	\$292.11	
1 CPSR 11.5	n/a	n/a	1 CPSR 11.5	\$4.35	\$159.84	

Table 2: Grade Spreads, in Canadian Dollars per Bu and per MT

Avg. Grade Spread/ Pro Discounts	Cdn\$/bu.	Cdn.\$/mt	
1 CWRS 13.5	Base Grade	Base Grade	
2 CWRS 13.5	(0.38)	(13.96)	
1 CWRS 12.5	(0.57)	(20.94)	
1 CWAD 13.0	Base Grade	Base Grade	
1 CWAD 13.5	0.03	1.10	
2 CWAD 13.0	(0.79)	(29.03)	
2 CWAD 12.5	(0.97)	(35.64)	

iv) FOB Wheat Prices and Export Basis Calculation

Background and Rationale:

Reporting FOB prices at port position and primary elevator prices allows the reader to gain an understanding of both local and international wheat prices and to understand the relationship between the two, as measured by the export basis. Export basis can be defined as FOB port position prices minus the primary elevator prices at any given prairie delivery location, and is therefore reflective of transportation costs plus any premiums being captured by terminal grain elevator companies or the railway companies, at any given time.



In general, a widening basis is indicative of decreasing system performance in terms of either reduced port capacity or rail service, or both. A narrowing basis is indicative of increased available port capacity and/or better ability of the railways to provide ample service to grain shippers. In this regard, tracking these prices over time has value both in terms of producers being able to time the selling of their grain but also in terms of evaluating and setting policy related to various transportation and capacity issues.

Gray (2015) has calculated a normal basis to be in the range of C\$72/tonne. During the 2013/14 crop year the export basis for wheat widened to approximately C\$250/tonne, which indicated an inability of the grain handling and transportation system to adequately handle the record crop produced that year. This occurrence has highlighted the need to improve the level of rail service and take measures to expand port capacity where possible. It has also underscored the need for better price transparency and market information within the grain sector.

Assumptions, Definitions, and Methodology

The following background information should assist in understanding and interpreting international market signals and to relate them to the 'local' Saskatchewan wheat market:

- The price information generated for the weekly report is designed to show farmers at what price levels several wheat classes are trading at local primary elevators (Table 1) and in nearby international markets (Table 3). To express the Export Basis¹ (see Export Basis in Table 3) defined as Cdn. FOB Prices minus primary elevator bids, the FOB prices are translated into Cdn. dollars from US dollars and compared to current actual primary elevator Street prices at Rosetown, Saskatchewan (see Street Prices in Table 3). Rosetown is used as a proxy for all primary elevators in the basis calculation. The actual handling and transportation costs from the West Coast to delivered elevator (Rosetown area) range from ~C\$58.00-C\$74.72/mt, depending on number of cars moved and elevator used.
- > Approximate relationship between U.S. wheat classes and Canadian wheat classes:
 - o DNS 14% in the Pacific North West (PNW) ≈ 1 CWRS 13.5% in Vancouver
 - o HRS in the Pacific North West (PNW) ≈ 2 CWRS 13.0% in Vancouver
 - o HRW in the Pacific North West (PNW) ≈ 3 CWRS in Vancouver
 - o SW (lowest price wheat) ≈ CPS red (mostly fed domestically)
 - o HAD (Lakes) ≈ CWAD (Thunder Bay/ Lawrence)
 - Abbreviations: DNS (Dark Northern Spring Wheat); HRS (Hard Red Spring Wheat); HRW (Hard Red Winter Wheat); SW (Soft Wheat); HAD (Hard Amber Durum Wheat); CWRS (Canadian Western Red Spring Wheat); CPS (Canada Prairie Spring Wheat); CWAD (Canadian Western Amber Durum Wheat)

Hard wheat price calculations:

[&]quot;The difference between FOB Vancouver prices and the Saskatchewan elevator cash bids to producers is referred to as export basis: Basis can refer to the difference between any two prices. As the largest volume port, Vancouver FOB, minus the elevator bid prices representative measure of the "export" basis for grains in Western Canada."



¹ Gray, R.S. (2015). The Economic Impacts of Elevated Export Basis Levels on Western Canadian Grain Producers 2012/13, 2013/14 and 2014/15.

Exporters in Western Canada generally derive their primary elevator wheat prices from HRS values at the West Coast (Pacific Northwest - PNW).

Similarly, HRW values are used for lower grade (3) CWRS.

- West Coast HRS and HRW values essentially dominate the international hard wheat trade and determine its basic value.
- If premiums are paid for 1 CWRS 13.5, elevator companies are often able to retain the premium

Durum wheat price calculations:

The primary export route for Canadian durum wheat is still through Thunder Bay, not the West Coast of Canada.

- Nevertheless, the Pacific Coast has increased in importance for durum over time with 38% of total export volume crop year to date.
- o Italy is the single biggest buyer of Canadian durum wheat with 27% of total Canadian durum exports YTD (East Coast shipments).

> Optional origin grain sales:

Most major international grain companies sell 'optional origin' wheat to their customers and often cover their sales 'at best' closer to the shipment position. The Canadian grain system is not conducive to servicing optional origin sales because the volume of wheat kept in storage in port today is much smaller than prior to deregulation of the Canadian wheat market.

Table 3: Relevant FOB Prices and calculated Basis, US & Canadian Dollars per MT



Relevea	ant FOB Prices an	d Export Basis		Dec. 12, 2016	
	FOB Prices CDA ¹ (calculated)		Street Prices	Export Basis ²	
Type of Wheat	West Coast (Cdn./mt\$)	Great Lakes (Cdn.\$/mt)	Rosetown (Cdn.\$/mt)	Basis: West Coast-Centr. SK (Cdn\$/mt)	
DNS 14.0	\$320.33	\$297.69			
HRS	\$317.44				
HRW 11.5	\$244.22				
SWW 12.0	\$232.18				
1 CWRS 13.5 ³	\$320.33		\$221.20	\$99.13	
2 CWRS 13.0 ³	\$317.44		\$193.27	\$124.17	
3 CWRS ³	\$244.22		\$194.74	\$49.48	
CPS ³	\$225.44		\$148.08	\$77.36	
1 CWAD⁴		\$404.63	\$302.04	\$102.59	
	_				
Competing wheat:	US\$,	/mt			
Russia 12.5 (Black Sea,					
25k mt)	\$183	3.00			
French 11.0 (Rouen)	\$ 181.09				
ASW 10.5 (W Coast) Jan.	\$194	1.00			
Argentine 12.0	\$16 5	5.00			

¹ FOB Prices CDA = FOB US\$ converted into Canadian Currency



² Export Basis = FOB Prices CDA minus Cdn. Street Price

 $^{^{3}}$ DNS 14% \approx 1 CRWS 13.5%; HRS \approx 2 CWRS 13.0%; HRW \approx 3CWRS; SWW \approx CPS

⁴ Values derived to Lakehead FOB

ADDENDUM

Futures Driven Basis Calculation, Canadian Dollars per MT

Canadian Wheat - World	l Price Parities				Dec. 12, 2016
Canadian Funds			Grade		
PNW value/Vancouver	1CWRS13.5	2CWRS	3CWRS	Winter wht.	CPS
Sept/Oct delivery	\$8.53	\$8.46	\$6.46	\$6.14	\$6.14
Parity Track Rosetown	\$7.04	\$6.96	\$4.97	\$4.64	\$4.64
Track Bid Rosetown Area	\$6.02	\$5.26	\$5.30	\$4.03	\$4.03
Gross Margin at Elevator (\$/bu)*	\$1.02	\$1.70	-\$0.33	\$0.61	\$0.61
Gross Margin at Elevator (\$/mt)*	\$37.40	\$62.44	-\$12.25	\$22.37	\$22.37
* to cover elevation, elevator market risk, ma	argin				

