

Wheat Market Outlook and Price Report: November 28, 2016

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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).

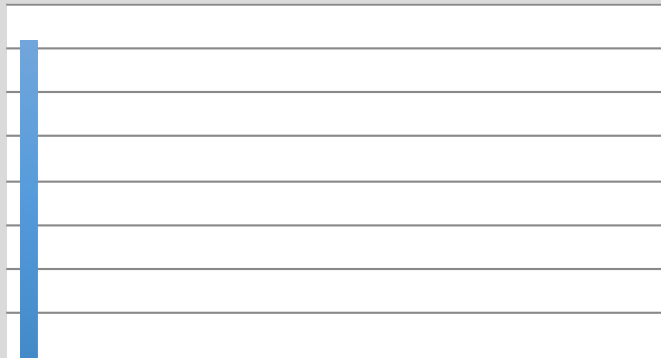
The report is made up of several sections. Following this section, a World Wheat overview is provided, which includes a summary of wheat market fundamentals, world production and trade, and a wheat market outlook. This is followed by several price tables, which include primary elevator bids at various 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:

➤ **November International Grains (IGC) Council report**

- **World wheat production** for 2016/17 is seen at a record 749 million mt, up 1 million mt from last month's IGC forecast and well above the 737 million mt last crop year.
- **ICG ending stocks** for 2016/17 wheat are now projected at 235 million mt, up 2 million mt from last month's forecast and up 13 million mt from last crop year. 2016/17 wheat ending stocks held by major exporters were pegged at 71 million mt, up from 70 million mt last month and from 68 million mt last year. (Argentina, Australia, Canada, the EU, Kazakhstan, Russia, the Ukraine and the US are considered to be 'major exporters').
- IGC forecast the **2017/18 harvested wheat area** to be virtually unchanged, with reductions in the USA, Kazakhstan, and increases in Russia and North Africa. We think this forecast may be too optimistic on planted acres.



ICG World Wheat Estimates					
<i>million mt</i>	2013/14	2014/15	E2015/16	Oct. F2016*17	Nov. F2016/17
Production	717	730	737	748	749
Trade	157	153	164	167	166
Consumption	699	715	720	736	736
Carryover Stocks	190	205	222	233	235
<i>Year/ Year change</i>	19	15	17		13
<i>Major Exporters*</i>	56	65	68	70	71

* Argentina, Australia, Canada, the EU, Kazakhstan, Russia, the Ukraine and the US are considered to be 'major exporters'

➤ **Global wheat production and trade:**

There is a lot of competition in the wheat markets as wheat is produced around the world. Below is a brief synopsis on this week's market events in the major wheat origins.

US wheat:

- Weekly shipments and sales by the US remain well ahead of the USDA's projected pace: On Nov. 25th USDA reported stronger than expected US export sales at 712,500 mt for the week ending November 17. Traders had been looking for 350,000 to 550,000 MT. *The season total of wheat sales is 93% above last year, against USDA's 73% projection.*
- Price spreads against competing origins were steady and HRW Gulf premiums rose 5¢.
- Still, the HRW domestic basis remains very weak despite the need for rain, with ratings showing some sizeable downgrades in the southern states.
- The US dollar was firm, which is generally negative for commodity values.

Australian wheat:

- Earlier domestic wheat crop estimates were calling for 30-31 million mt, but the IGC is now calling for a 28.3 million mt crop; still a 5 year high. Farmer selling remains light and reports suggest that *high pro wheat is hard to find* with most of the crop coming off as ASW and APW. However, there were no reports of any major downgrades to feed wheat.

Argentine wheat:

- Like in Australia, the size and quality of the Argentine wheat harvest remains unclear. IGC was forecasting a 14.2 million mt crop (USDA 14.4 million mt), but the local Buenos Aires Grain Exchange expects a smaller 12.5 million mt crop. The Argentine harvest is ~18% complete against 20% last year, the average yield has risen to 2.15 mt/ha (34 bu/ac). The domestic market was quiet with farm bids still below corn.
- Argentine Fob values were again unchanged at \$170 for 12 pro basis December plus \$2-3 per month, with 11.5 pro at a \$5 discount and 10.5 pro \$3 below that. Just 115kt old crop licences were taken this week (zero new crop), taking the combined 2-season total to 9.3 million mt against exporter ownership of 10 million mt.

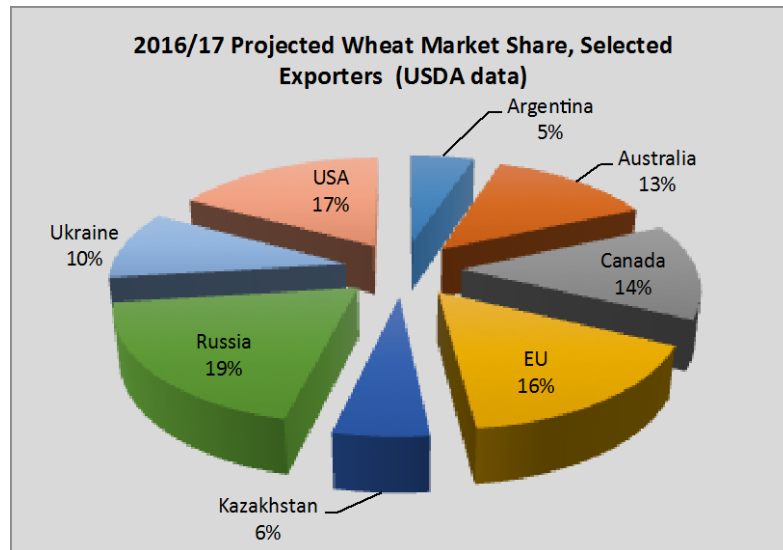
EU wheat:

- Matif wheat futures were steady. The Euro fell to levels not seen since March 2015.
- Cash premiums fell €1-2/mt leaving Fob values slightly lower and trimming the German/Baltic spread against Russian 12.5 pro to around \$5/mt for January onwards.

Black Sea wheat:

- The bid for December'16 Russian 12.5 protein wheat rose to a \$2 premium over the deferred months at \$183-185/ mt, and short sellers to GASC (Egypt) struggled to find offers.
- The same was true for Ukrainian 11.5 protein wheat (bid \$183/mt) and for feed wheat (bid \$170/mt). Farmers remained tight holders, with execution and logistics still a major issue. The Ruble ended down slightly on the week.
- The Turkish Lira and Egyptian pound fell to all-time lows, which is negative for demand. Historically, Turkey and Egypt are the two biggest buyers of Russian wheat.

- Regarding the next crop, we note that there are more winter cereals being planted in Russia this fall, but the opposite is true for the Ukraine, where fewer acres are getting planted. In addition, the Ukrainian winter wheat crop had emergence problems and will be more



susceptible to winter kill.

Wheat Market Outlook:

- Significant events:
 - US markets were closed last Thursday due to the US Thanksgiving holiday. Most traders were away Wednesday afternoon until this Monday, which made for a slow week in the markets.
 - US soft white wheat basis levels have softened after a brief rally when exporters sought to add additional tonnage to the pipeline ahead of the extended river closure starting December 10th. There are not a lot of bids for post river closure at this time and will require additional export business to keep the market firm if producers start selling grain.
 - In their latest report, the USDA surprised the grain markets by raising corn yields by 1.9 bu/acre to 175.3 bu/acre. Corn ending stock projections are now 2.4 billion bushels while the market had been expecting 2.29 billion bushels. This may affect feed wheat values.
 - Markets keep monitoring the drought conditions in the US southern plains. Winter wheat planting dropped from last year and it remains too dry in some regions.
 - The Australian wheat harvest is underway and it looks to be a very large crop. USDA pegged the crop size at 28.3 million mt (ICG at 28.3 million mt this week), while others think it could be as large as 30-31 million mt. Early harvest results are showing the effects of September frosts in Western Australia which may lower production a bit, but not to levels that would change the overall supply picture.
- Outlook:
 - The north American market was thin due to the US holidays. However, there are signs of increasing demand for US HRW, and Gulf premiums were quoted 3-5c/bu higher.
 - Black Sea markets were characterized by big bid-offer spreads. Much of that is due to worsening logistics and severe execution problems.
 - Forward cash markets will be driven by:
 - Harvested wheat quality in Australia

-Is the USDA correct at 28.5 million mt for Australia (IGC 28.3), or are domestic estimates correct at 30-31 million mt?

- Harvested volume and quality in Argentina
 - Is the USDA correct at 14.4 million mt for Argentina (IGC at 14.2 million mt), or is the harvest smaller, more like 12.2 million mt the local stock exchange is forecasting?
 - The developments of the Black Sea winter and its effect on crops
 - Ongoing weather issues, especially in South America
 - A long-term US climate outlook that implies an expanding drought across the US HRW Belt and parts of the South East SRW regions
 - Volatile currencies (Ruble, Euro, Turkish Lira, Egyptian pound, Canadian dollar, etc.)
 - Funds that remain heavily short
- The Australian harvest has started, so for the short term the world has no shortage of wheat.
 - However, the spread between high quality and low quality wheat is widening, and it is still unclear if Australian and Argentine wheat can improve the supply balance between high and low quality wheat.
 - **Still, the price downside for wheat looks limited, despite higher world, US and major exporter's stocks.**

iii) Primary Elevator Price Tables and Grade Spreads

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

Date: Nov. 28, 2016

NW Sask	Spot		NW Sask	Deferred	
	(bu.)	(mt)		Jan. '17 (bu.)	Jan.'17 (mt)
1 CWRS 13.5	\$6.43	\$236.26	1 CWRS 13.5	\$6.51	\$239.20
1 CWAD 13.0	\$8.13	\$298.73	1 CWAD 13.0	\$8.23	\$302.40
1 CPSR 11.5	\$4.55	\$167.19	1 CPSR 11.5	\$4.62	\$169.76
SW Sask			SW Sask		
1 CWRS 13.5	\$6.36	\$233.69	1 CWRS 13.5	\$6.44	\$236.63
1 CWAD 13.0	\$8.20	\$301.30	1 CWAD 13.0	\$8.30	\$304.98
1 CPSR 11.5	\$4.45	\$163.51	1 CPSR 11.5	\$4.52	\$166.08
NE Sask			NE Sask		
1 CWRS 13.5	\$6.21	\$228.18	1 CWRS 13.5	\$6.29	\$231.12
1 CWAD 13.0	\$8.00	\$293.95	1 CWAD 13.0	\$8.15	\$299.46
1 CPSR 11.5	\$4.35	\$159.84	1 CPSR 11.5	\$4.42	\$162.41
SE Sask			SE Sask		
1 CWRS 13.5	\$6.23	\$228.92	1 CWRS 13.5	\$6.31	\$231.85
1 CWAD 13.0	\$8.03	\$295.05	1 CWAD 13.0	\$8.18	\$300.57
1 CPSR 11.5	\$4.26	\$156.53	1 CPSR 11.5	\$4.33	\$159.10

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	(0.20)	(7.35)
1 CWRS 12.5	(0.37)	(13.60)
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:
 - DNS 14% in the Pacific North West (PNW) ≈ 1 CWRS 13.5% in Vancouver
 - HRS in the Pacific North West (PNW) ≈ 2 CWRS 13.0% in Vancouver
 - HRW in the Pacific North West (PNW) ≈ 3 CWRS in Vancouver
 - SW (lowest price wheat) ≈ CPS red (mostly fed domestically)
 - 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:

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.
 - 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

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.

"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."

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

Relevant FOB Prices and Export Basis				Nov. 28, 2016
Type of Wheat	FOB Prices CDA ¹ (calculated)		Street Prices	Export Basis ²
	West Coast (Cdn./mt\$)	Great Lakes (Cdn.\$/mt)	Rosetown (Cdn.\$/mt)	Basis: West Coast-Centr. SK (Cdn\$/mt)
DNS 14.0	\$326.43	\$432.28		
HRS	\$324.46			
HRW 11.5	\$259.47			
SWW 12.0	\$240.76			
1 CWRS 13.5³	\$326.43		\$231.85	\$94.57
2 CWRS 13.0³	\$324.46		\$213.48	\$110.98
3 CWRS³	\$259.47		\$207.24	\$52.23
CPS³	\$233.87		\$167.92	\$65.95
1 CWAD⁴		\$425.39	\$302.04	\$123.35
Competing wheat: US\$/mt				
Russia 12.5 (Black Sea, 25k mt)		\$184.00		
French 11.0 (Rouen)		\$188.27		
ASW 10.5 (W Coast)				
Argentine 12.0		\$170.00		

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

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

³ DNS 14% ≈ 1 CRWS 13.5%; HRS ≈ 2 CWRS 13.0%; HRW ≈ 3CWRS; SWW ≈ CPS

⁴ Values derived to Lakehead FOB

ADDENDUM

Futures Driven Basis Calculation, Canadian Dollars per MT

Canadian Wheat - World Price Parities					
Canadian Funds	Grade				
PNW value/Vancouver	1CWRS13.5	2CWRS	3CWRS	Winter wht.	CPS
Sept/Oct delivery	\$8.70	\$8.64	\$6.87	\$6.36	\$6.36
Parity Track Rosetown	\$7.20	\$7.15	\$5.38	\$4.87	\$4.87
Track Bid Rosetown Area	\$6.31	\$5.81	\$5.64	\$4.57	\$4.57
Gross Margin at Elevator (\$/bu)*	\$0.89	\$1.34	-\$0.26	\$0.30	\$0.30
Gross Margin at Elevator (\$/mt)*	\$32.69	\$49.10	-\$9.65	\$10.96	\$10.96

* to cover elevation, elevator market risk, margin