

Wheat Market Outlook and Price Report: November 21, 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).

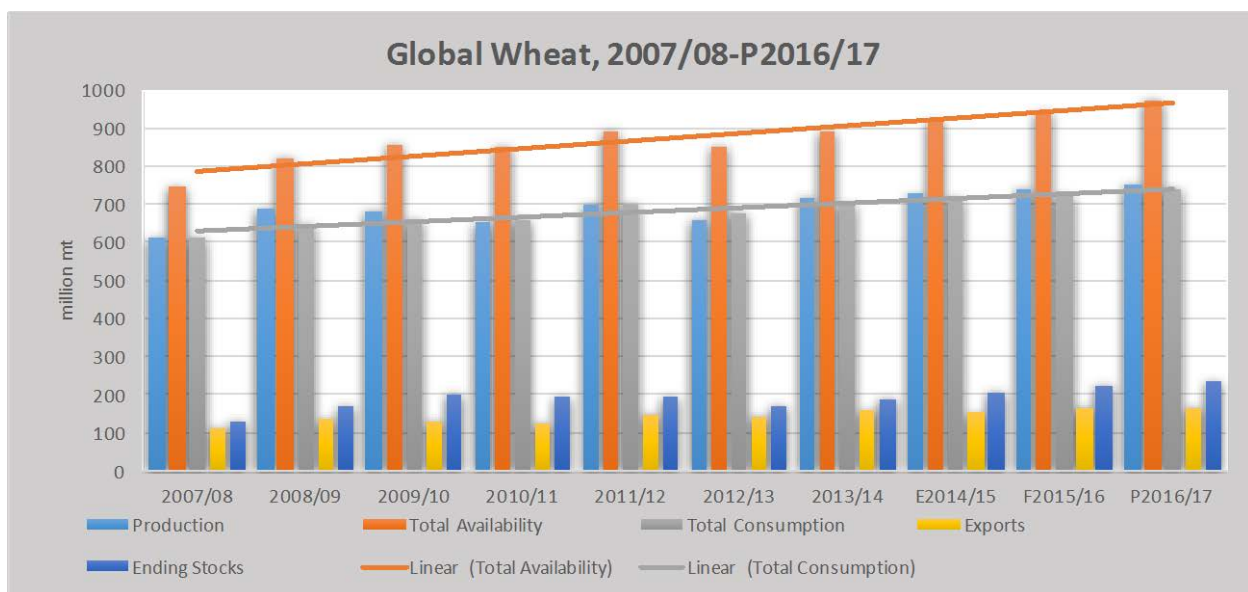
The report is made up of several sections. Following this section, a World Wheat overview is provided, which includes a summary of wheat market fundamentals, world production and trade, and a wheat market outlook. This is followed by several price tables, which include primary elevator bids at various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

➤ **Summary 2016/17 Wheat Fundamentals**

- **World wheat production** for 2016/17 is forecast at 745 million mt, 9.2 million mt or 1.3% ahead of last year's record tonnage. Adding beginning stocks, puts **total global supply** at about 970 million mt.
- **Total wheat consumption** is pegged at 736 million mt. This includes the **exported tonnage** of 167 million mt for 2016/16.
- **Ending stocks** are projected at 233.5 million mt, up 12 million mt or 5.4% from last year. The **stock-use ratio** will likely rise from 30.8% last year to 31.7% this crop year.



- **Wheat trade flows:**
 - Early this crop year global wheat trade was dominated by available product from the **Black Sea countries**, and especially **Russia**. Russia produced a record crop of 72 million mt in 2016/17 (61 million mt last crop year), and is expected to export 30 million mt (25.5 million mt last crop year). Due to limited storage capabilities, Russia tends to be especially aggressive early in the crop year and dominate wheat trade during the fall months.
 - In contrast, **EU** wheat exports are expected to fall from 34.6 million mt last year to 25 million mt this crop year due to major production and quality problems.
 - These developments have improved the position of **US** wheat in the world markets. Importantly, *US wheat has become price competitive into those markets, which are capable of taking 60,000 mt vessel sizes*, especially to Pacific destinations. This development should also apply to Canadian wheat competitiveness. The US is expected to export 26 million mt of wheat this crop year, up from 21.8 million mt last crop year.
 - **Canadian** wheat exports are projected to fall from 22.1 million mt to 21.5 million mt due to quality problems.
 - **Overall**, the world has no shortage of wheat for now, and the strong US\$ and soaring freight markets could be trimming marginal demand. A big crop from the southern Hemisphere may be coming to the market.

- **Observations on the 2016/17 wheat supply:**
 - **Wheat quality:** Feed quality and lower grades of wheat are abundant in the world and are currently priced competitively to corn. This will induce more feed wheat use at the cost of corn use in feed.
 - Livestock producers have been benefitting from historically low feed grain prices and from competition within the feed segment of the grain market.
 - At 146.9 million mt global wheat feed use is projected up 1.9 million mt this month, and is 6.1% (or 8.4 million tons) ahead of last year's wheat feed and residual use consumption.
 - The use of feed wheat is projected to be up for Ukraine, Russia, Vietnam, and for Canada. The Ukraine is estimated to use 4.7 million mt of feed wheat, Russia 16 million mt, Vietnam 1.2 million mt, and for Canada 4.5 million mt.
 - *In contrast, the premium for higher quality wheat grades is rising.*

Wheat Market Outlook:

- Significant events:
 - **US export sales** are currently 31% above last year's volume, and they are higher than the USDA forecast projecting a 27% increase. HRW is running 100% above last year at this time, while USDA was projecting at 73% over last year's performance. HRS exports are 24% ahead of last year's; higher than the USDA forecast for a 17% increase. SRW is down 34%; USDA projected a drop of 25%.
 - Quality wheat is in demand, while lower grade wheat is in ample supply.
 - *If the export pace of US wheat continues at the current pace as we expect to happen, then stocks of US HRW/DNS could get quite tight.*
 - *Based on a FOB price comparison of various types of wheat, HRW is very competitively priced in the Gulf and very cheap for all Pacific/ South America destinations - especially considering better specifications. FSU/EU have lower protein when calculated using the same moisture basis as US wheat.*

- Outlook:
 - World FOB price spreads for wheat continue to move significantly. They are driven by:
 - Increased FSU/European prices
 - Volatile currencies, especially since last week's US election
 - 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; not critical at this stage, but worth watching on the radar screen.
 - Funds that remain heavily short.
- The big question for the rest of this season remains one of quality, and how much additional demand will end up in the US HRW S&D to satisfy quality demand.
- For the short term the world has no shortage of wheat, as the Australian harvest is about to start.
- **Still, the price downside for wheat looks limited, despite higher world, US and major exporter's stocks.**
- Durum wheat:
 - The international durum market is tightening up: Firmer cash markets for lower quality specifications have started to support Canadian prices. It is helpful that there are reports that next year, the EU will plant 7% less durum.
 - The last major international trade was Algeria buying 300,000 mt of durum at a Canadian price parity of about Cdn.\$9.35/bu fob elevator Saskatchewan.
 - The Canadian crop has a wide range of qualities. Growers will definitely be able to achieve good prices for #2 durum and should be able to obtain at least C\$9.00/bushel at the elevator. The international market has shown that it will also accept #3 Canada Western Durum with minimum 60% HVK. Incidentally, this is roughly the equivalent of a #1 US Hard Amber Durum grade.

iii) Primary Elevator Price Tables and Grade Spreads

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

Date: 18-11-2016

NW Sask	Spot		NW Sask	Deferred	
	(bu.)	(mt)		Jan. '17 (bu.)	Jan.'17 (mt)
1 CWRS 13.5	\$6.39	\$234.79	1 CWRS 13.5	6.41	\$235.53
1 CWAD 13.0	\$8.43	\$309.75	1 CWAD 13.0	8.52	\$313.06
1 CPSR 11.5	\$4.50	\$165.35	1 CPSR 11.5	4.59	\$168.65
SW Sask			SW Sask		
1 CWRS 13.5	\$6.35	\$233.32	1 CWRS 13.5	6.37	\$234.06
1 CWAD 13.0	\$8.58	\$315.26	1 CWAD 13.0	8.66	\$318.20
1 CPSR 11.5	\$4.40	\$161.67	1 CPSR 11.5	4.50	\$165.35
NE Sask			NE Sask		
1 CWRS 13.5	\$6.18	\$227.08	1 CWRS 13.5	6.28	\$230.75
1 CWAD 13.0	\$8.73	\$320.78	1 CWAD 13.0	8.88	\$326.29
1 CPSR 11.5	\$4.32	\$158.73	1 CPSR 11.5	4.39	\$161.31
SE Sask			SE Sask		
1 CWRS 13.5	\$6.21	\$228.18	1 CWRS 13.5	6.25	\$229.65
1 CWAD 13.0	\$8.69	\$319.31	1 CWAD 13.0	8.83	\$324.45
1 CPSR 11.5	\$4.23	\$155.43	1 CPSR 11.5	4.31	\$158.37

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

Avg. Grade		
Spread/ Pro	Cdn\$/bu.	Cdn.\$/mt
Discounts		
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				18-11-2016
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	\$325.75	\$417.12		
HRS	\$324.76			
HRW 11.5	\$262.69			
SWW 12.0	\$242.82			
1 CWRS 13.5 ³	\$325.75		\$229.65	\$96.10
2 CWRS 13.0 ³	\$324.76		\$211.28	\$113.48
3 CWRS ³	\$262.69		\$205.03	\$57.66
CPS ³	\$235.87		\$169.02	\$66.85
1 CWAD ⁴		\$410.17	\$297.63	\$112.54
Competing wheat:	US\$/mt			
Russia 12.5 (Black Sea , 25k mt)	\$176.50			
French 11.0 (Rouen)	\$187.90			
ASW 10.5 (W Coast)				

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	2CWRS	3CWRS	Winter wht.	CPS
Sept/Oct delivery	\$8.68	\$6.95	\$4.75	\$4.75
Parity Track Rosetown	\$7.18	\$5.45	\$4.92	\$4.92
Track Bid Rosetown Area	\$5.92	\$5.60	\$4.61	\$4.61
Gross Margin at Elevator (\$/bu)*	\$1.26	-\$0.15	\$0.31	\$0.31
Gross Margin at Elevator (\$/mt)*	\$46.29	-\$5.51	\$11.50	\$11.50
* to cover elevation, elevator market risk, margin				