

Wheat Market Outlook and Price Report: December 19, 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:

➤ **Production**

- This month, USDA projected that the world has a much higher wheat production than previously estimated, leading to expanded wheat trade, higher consumption, and increased stocks.
- The changes were driven mainly by Australia, where a huge wheat output is expected, but are also supported by lesser increases in projected production in China, the European Union, and Brazil.

➤ **Consumption**

- USDA raised world wheat domestic consumption for 2016/17 by 3.3 million mt this month to 739.8 million. Wheat feed and residual use was up 1.2 million mt to 148.1 million mt, while wheat food, seed, and industrial use was increased by 1.1 million mt. Abundant supplies of low-quality, competitively priced wheat is encouraging additional wheat feeding in wheat-producing countries, and an expansion of wheat consumption in a number of cost-conscious importing countries.

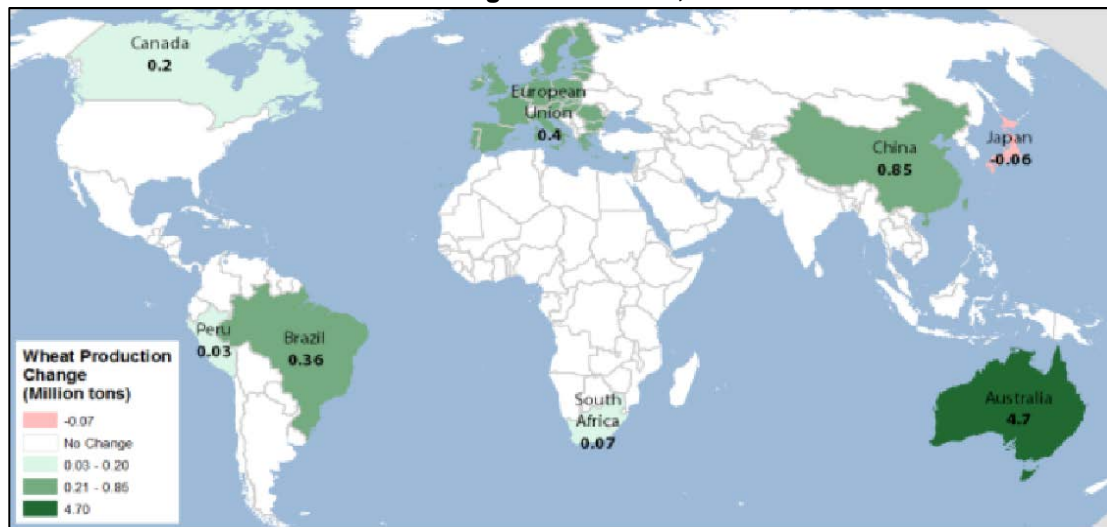
➤ **Trade**

- This month USDA further increased projected world wheat trade for the international 2016/17 July-June trade year by 1.8 million mt, to a record 175.4 million mt. A substantial increase in projected wheat supplies puts further pressure on wheat prices. Countries in East and Southeast Asia are expected to benefit especially from proximity to ample Australian wheat supplies.

➤ **Ending Stocks**

- The projected expansion of world wheat supplies exceeds higher projected consumption, so that estimates for global ending stocks are up. Stocks are now projected to advance the record to 252.1 million mt, up 2.9 million mt.

Wheat Production Changes for 2016/17, December 2016



Source: USDA, FAS, PSD database

➤ Global wheat and trade:

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

Canadian wheat:

- *No Canadian wheat seems to have traded on the big 725,000 mt sale of optional origin wheat to Saudi Arabia.* According to trade sources, some of the trade is likely to be covered by US origin wheat, as US HRW offers were competitive.
- Canadian wheat exports continue to lag last year's and are about 21% behind for wheat and 16% behind for durum.
- The Great lakes – St. Lawrence Seaway will close for the season on December 20th and will reopen at the end of March.

US wheat:

- According to the Wall Street Journal, US trade lawyers have raised new charges at the WTO, challenging China's complicated barriers to importing wheat, rice and corn. This follows challenges made earlier this year over China's subsidies for domestic production. China increase import duties on US DDGs earlier in the year on anti-dumping charges.
- Informa (a US forecasting company) dropped their US corn and wheat area forecast to 90.15 million and 33.2 million (from 33.8 million acres) acres, respectively. With return per acre calculations clearly favouring soybeans over the past few years, wheat continues to lose ground.

EU wheat:

- At 18.1 million acres seeded, French winter acres remain above their 5-year average of 17.4 million acres. This includes 12.8 million acres of soft wheat (highest since 1993) and 894,500 acres of durum (only down by 19,770 acres from last year).
- In Germany, seven Panamax¹ were reported loading for Saudi and East/S Africa.

India:

- Following the removal of its import tax, India has started buying more wheat in the world markets.

Russian Federation:

¹ A Panamax is a mid-sized cargo ship carrying about 52,500 mt of cargo and that is capable of passing through the lock chambers of the Panama Canal which are 1,050 ft (320.04 m) in length, 110 ft (33.53 m) in width, and 41.2 ft (12.56 m) in depth.

- Russia is expected to become the world's top wheat exporter this season. Per Russian Agriculture Minister Alexander Tkachev, Russia has ramped up its grain export capacity to 45 million mt and will now focus on infrastructure in remote areas. Russia has also supported the development of its port capacity from 5 to 45 million mt. The government aims to drive production of its grain to 150 million mt by 2030, up from a record crop of 117 million mt in 2016. The government said that if Russia boosts its grain crop to 150 million mt by 2030, it would have 50 million mt available for export compared with 35 million mt in the 2016/17 marketing year.
 - Australia:**
 - Australia's wheat production was revised to 32.6 million mt, up from 28.3 million mt, which is a negative development for the wheat market and white wheat in particular going forward.
 - Argentina:**
 - The Argentine wheat harvest has begun in northern La Pampa and center-west Buenos Aires province. Production estimates continue to vary and range from 11.5 million mt (BAGE) to 14.9 million mt (Government). Last year's wheat crop amounted to 11.5 million mt. According to reports, yields remain well above projections but the reports also suggested problems with quality was awful (very low protein content) despite greater use of fertilizer and input technology this year (due to improved profitability following the removal of the export tax).
 - **Saudi Arabia** booked 725,000 MT of optional origin hard wheat for February 1 to April 10/17 shipment. According to trade sources, some of this is likely to be US origin, as US offers were competitive.
 - **Algeria** bought a reported 490,000 mt of 'optional wheat' at US\$200/mt C&F for February '17. The business seems to have been filled by Argentine wheat.
 - **Tunisia** bought 75,000 mt of Feb-Mar soft at \$193-\$196 and 75,000 mt of durum at around \$275. This is a low durum price, which we can assume is either low quality or Spanish or Mexican origin durum.
 - We have no results yet on the **Philippine** feed wheat tender.

Wheat Market Outlook:

- Significant events this past week:
 - **Futures:** Kansas City rallied to a 5 1/2¢ premium from a 4¢ discount to CBOT at the end of last week, whilst Minneapolis was again the best performer ending at \$1.30/bu over KC with HRS accounting for 46% of the US weekly export sales total.
 - US wheat inspections and sales remained well ahead of the USDA pace: The USDA weekly **US Export Sales Report** showed a combined total of 564,000 mt wheat including 33,000 mt slated for 2017/18 delivery to the Philippines. This was on the high end of trade expectations. HRW commitments are 89% ahead of last year's shipments (USDA 75%), HRS is up 34% (USDA 17%) whilst SRW is down 33% (USDA 25%).
 - Weekly US shipments were down 24% from last week to 422,000 mt for the week ending 12/8, but 27% larger than the same week last year.
 - Given the US export numbers, 76% of the wheat export target has already been filled. However, with the stronger U.S. Dollar, and a bountiful global crop to source from, the likelihood that the pace of demand is sustainable is lessening.
 - In the **Black Sea wheat market**, Indian demand for 11.5 Pro wheat dominated the action. Since the lifting of the import duty, India took its purchases from Russia to over 200k mt, with the bid-offer of US\$183-186/mt.
 - **Indian farmers** are still in opposition to the removal of the duty. Their government has ignored this, as the country has minimum stocks, domestic prices have spiked over US\$300/mt and the population has no cash. This is making further imports absolutely necessary in order to avoid social unrest.

- **Australian Fob markets** showed no reaction to the Saudi sales although the Western Australian wheat price of US\$200/mt Fob for APW is a long way from competing with other origins. However, with a 33 million mt crop and a 25 million mt export surplus, the price adjustment will have to come sooner or later.
- **Argentine wheat** remains the world's cheapest origin with 11.5 Pro offers some US\$6-7/mt below quoted levels for 12 Pro, and a further US\$3/mt less 10.5 Pro. However, the Argentine farmer remains a reluctant seller as the Argentine Peso has fallen through the 16 peso per US\$ barrier.

Wheat Protein Comparisons			
Country	Moisture basis used	Example: 13% Protein	Protein Converted to Dry-Matter Basis
Australia	11.0	13.0	14.6
Black Sea	0.0	13.0	13.0
Canada	13.5	13.0	15.0
European Union	0.0	13.0	13.0
United States	12.0	13.0	14.8

Exporters quote wheat protein using a fixed moisture basis, but different origins use different bases.

Canada specifies protein using a 13.5 moisture basis, while the **U.S.** uses a 12% moisture basis. The **EU** and **Black Sea** countries typically use a dry-matter basis (0% moisture). **Australia** uses an 11% moisture basis.

The table is an example of how the moisture basis used impacts the actual protein received.

➤ **Outlook:**

- The markets have entered the holiday doldrums, and we do not see much of real interest until the New Year.
- The quality terms of the **Saudi wheat tender** were perfect for Canadian wheat, but we understand no Canadian wheat was offered.
- Forward cash markets will be driven by:
 - Size of wheat stocks against weather threats
 - Depth of new demand showing up in the markets.
 - Geopolitics and their effect on currencies
 - Especially the **US\$** (which rallied to 14-year highs this past Friday) and the **Egyptian pound**
 - The amount of wheat imported by **India**.
- The extreme cold and limited snow in the US Plains and Ukraine will be watched.



- The size of this year's wheat production is pressuring the market.
- The strong and increasing US\$ is lowering demand for wheat and also encourages non-US wheat acreage expansion.
- **There is too much low quality wheat around and a tight situation developing in quality wheat. We will see the premiums for Kansas/Minneapolis improve over Chicago - but not by too much as prices are encouraging more new crop wheat plantings in FSU.**
- Time for Canadian exports is getting tight as and the markets will soon be discussing new crop (2017) wheat from the EU and Eastern Europe.
- Premium wheat that trades against Minneapolis should be sold.

iii) Primary Elevator Price Tables and Grade Spreads

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

Date: Dec. 19, 2016					
NW Sask	Spot		NW Sask	Deferred	
	(bu.)	(mt)		Feb. '17 (bu.)	Feb.'17 (mt)
1 CWRS 13.5	\$6.50	\$238.84	1 CWRS 13.5	\$6.56	\$241.04
1 CWAD 13.0	\$7.98	\$293.22	1 CWAD 13.0	\$8.10	\$297.63
1 CPSR 11.5	\$4.36	\$160.20	1 CPSR 11.5	\$4.45	\$163.51
SW Sask			SW Sask		
1 CWRS 13.5	\$6.44	\$236.63	1 CWRS 13.5	\$6.48	\$238.10
1 CWAD 13.0	\$8.02	\$294.69	1 CWAD 13.0	\$8.16	\$299.83
1 CPSR 11.5	\$4.28	\$157.26	1 CPSR 11.5	\$4.35	\$159.84
NE Sask			NE Sask		
1 CWRS 13.5	\$6.33	\$232.59	1 CWRS 13.5	\$6.37	\$234.06
1 CWAD 13.0	\$7.75	\$284.77	1 CWAD 13.0	\$7.93	\$291.38
1 CPSR 11.5	\$4.21	\$154.69	1 CPSR 11.5	\$4.25	\$156.16
SE Sask			SE Sask		
1 CWRS 13.5	\$6.28	\$230.75	1 CWRS 13.5	\$6.31	\$231.85
1 CWAD 13.0	\$7.80	\$286.60	1 CWAD 13.0	\$7.96	\$292.48
1 CPSR 11.5	\$4.13	\$151.75	1 CPSR 11.5	\$4.13	\$151.75

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 Basis² (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)

² 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."

- 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 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				Dec. 19, 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	\$329.84	\$302.31		
HRS	\$323.94			
HRW 11.5	\$251.68			
SWW 12.0	\$230.05			
1 CWRS 13.5 ³	\$329.84		\$229.65	\$100.19
2 CWRS 13.0 ³	\$323.94		\$209.07	\$114.86
3 CWRS ³	\$251.68		\$197.68	\$54.00
CPS ³	\$223.17		\$153.59	\$69.58
1 CWAD ⁴		\$412.91	\$303.14	\$109.77
Competing wheat: US\$/mt				
Russia 12.5 (Black Sea, 25k mt)	\$183.00			
French 11.0 (Rouen)	\$181.09			
ASW 10.5 (W Coast) Jan.	\$194.00			
Argentine 12.0	\$165.00			

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					Dec. 19, 2016
Canadian Funds		Grade			
PNW value/Vancouver	1CWRS13.5	2CWRS	3CWRS	Winter wht.	CPS
Dec./Jan. delivery	\$8.79	\$8.63	\$6.66	\$6.07	\$6.07
Parity Track Rosetown	\$7.29	\$7.13	\$5.17	\$4.58	\$4.58
Track Bid Rosetown Area	\$6.25	\$5.69	\$5.38	\$4.18	\$4.18
Gross Margin at Elevator (\$/bu)*	\$1.04	\$1.44	-\$0.21	\$0.40	\$0.40
Gross Margin at Elevator (\$/mt)*	\$38.32	\$53.00	-\$7.87	\$14.59	\$14.59
* to cover elevation, elevator market risk, margin					