Wheat Market Outlook and Price Report: February 20, 2017 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 February 20, 2017

2016/'17 World Wheat Overview:

➤ Global Wheat Production Summary, 2012/13 – F2016/17 (USDA data):

	2012/13	2013/14	2014/15	2015/16	2016/17
N. America	91,734	99,012	88,254	87,462	98,459
S. America	18,011	19,762	24,152	21,273	25,311
EU - 28	133,949	144,583	156,922	160,012	144,324
Other Eur.	3,431	4,103	3,929	4,018	4,606
FSU - 12	77,802	103,885	112,735	118,238	131,930
M. East	37,038	41,708	35,414	41,795	39,310
N. Africa	17,501	19,661	17,013	19,912	14,131
Sub-Sahar. Afric	6,736	7,235	7,523	6,313	7,217
E. Asia	122,490	123,248	127,650	131,515	130,136
S. Asia	126,412	125,917	130,154	119,840	123,645
Oceania	23,345	25,751	24,157	24,925	33,430
Others	181	187	186	191	191
Total	658,630	715,052	728,089	735,494	752,690



 World wheat production for 2016/17 is estimated to be 17.2 million mt (or 2.3%) bigger than in 2015/16. If last week's latest Australian estimate of their wheat crop is correct, then the 2016/17 global wheat production number will increase by another 2 million mt.

Global wheat and trade:

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

Canadian wheat:

- Shipping week 28 was a pretty good export week for Canadian wheat: Canadian wheat exports during week 28 amounted to 292k mt and 7.2 million mt year-to-date. This is 19% or 1.7 million mt lower than last year-to-date.
- o *Durum exports* during week 28 amounted to 115k mt and 2.3 million mt year-to-date. This is 13% or 335k mt lower than last year-to-date.
- The Executive Director of Winter Cereals Canada (Jake Davidson) reports the bulk of western Canada's winter wheat crop is now moving into the livestock feed market. Winter wheat acreages increased last fall in Saskatchewan, held steady in Alberta and declined in Manitoba and good snow cover this winter has helped protect the crops that were planted from winter kill. An increasing percentage of the winter wheat grown in western Canada is now being sold as feed. Davidson says growers are getting over a dollar more per bushel for winter wheat from pig farmers than what they are being offered by the grain companies.
- There was no Canadian wheat offered on last week's Egyptian tender.

US wheat:

- Weekly export sales for US wheat were listed at 588,600 mt with 569,100 mt for the 2016-2017 marketing year.
- US inspections were 308,000 mt (season total 654 myn bushels up 26%), sales were 509,000 mt for a season total 881 myn bushels, up 39% on last year against USDA's projected 32% increase.
- The lowest offer Egypt received in their tender for 55,000 MT of wheat for March 16-26 was of Russian origin. The US, which had the highest offer, has not been competitive for exports into the Egyptian market for a while.
- There is a little concern across the Southern plains about the warmer weather, as it is still only February.
- The US PNW suffered major logistics issues as snow and avalanches blocked the major rail lines, although this was more an issue for corn than for wheat.
- Japan: Japan's weekly wheat tender sought to buy 113,248 mt from Canada and the United States. From the U.S. it sought 9,080 mt of western white, 43,940 mt of hard red winter and 35,268 mt of dark northern spring. This leaves 24,960 mt for Canadian hard red spring wheat. Loading is from March 21 to April 20/17.

Australia:

- Australian futures ended down US\$3/mt, APW Fob rose US\$2/mt, but the ASW discount widened as ABARES's final crop estimate hit a record 35.1 million mt (USDA is at 33 million mt), some 5.2 million mt above the previous record back in 2011/12.
 EU:
- EU wheat futures were flat on the Matif exchange. While Morocco awarded the full 264k mt tender to the EU wheat import quota, this was already factored into the market.
 Russia:
- o In the Black Sea, spot Russian 12.5 protein values hit new highs of US\$192/mt while the bid-offer on March closed at US\$191-193/mt. The deferred discounts rose to US\$3-4/mt into the new crop where the bid-offer was US\$175-180/mt, and the 11.5 protein discount ranged from US\$3 to \$6/mt. There were no offers against feed wheat bids at US\$176/mt amidst reports it has all been blended off to India.
- New crop Russian wheat: According to market researcher UkrAgroConsult, Russian farmers may harvest 67 million mt of wheat next crop year. IKAR (Institute for Ag Market



Research) estimates the crop could reach 67.5 million mt. These would be the second largest wheat crops after the estimated 73.3 million mt harvested this year. Winter croploss forecasts do not exceed 3-5% for now, according to an UkrAgroConsult report last Tuesday.

- Kazakhstan: According to the country's First Vice Minister of Agriculture, Kayrat Aytuganov, the agro-industrial sector program envisages a reduction of planted wheat area by over 2 million ha within five years. They are planning to more than offset the reduction in area with higher yields.
- Vietnam: According to USDA, Vietnam's wheat imports for marketing year ending June 2017 is estimated to surge 67.4% year-on-year to 5 million mt, largely on strong feed demand. USDA's projection for Vietnam's wheat import is also seen to rise sharply from its estimate of 3.6 million mt for January. Hellenic Shipping News reported that strong demand from the feed industry, particularly from the aquaculture industry, such as shrimp, helped boost demand for feed wheat. Feed wheat accounted for about 25% of the imported wheat in Vietnam. Australian wheat will continue to dominate Vietnam's wheat market, although its market share has fallen from 70% in 2015 to about 40% in 2016.
- Egypt: GASC bought 360kt Black Sea wheat at US\$197/mt Fob; US\$207/mt C&F. Egypt paid between US\$2-\$4.50/mt more than during their last purchase on Jan. 26th. Purchase details for the past two tenders are shown in the table below.
 (Note the low ocean freight rates from the Black Sea ports to Egypt).

GASC Tender Purchases Jan. 26/'17 GASC Tender Purchases Feb. 17/'17 60kt Russian @ \$194.00 fob + \$9.25 ocean 60kt Russian @ \$194.00 fob + \$9.25 ocean freight = US\$203.25/mt C&F freight = US\$203.25/mt C&F 60kt Russian @ \$195.00 + \$9.85 = \$204.85 60kt Russian @ \$195.00 + \$9.85 = \$204.85 60kt Russian @ \$192.25 + \$11.20 = \$203.45 60kt Russian @ \$192.25 + \$11.20 = \$203.45 60kt Russian @ \$196.00 + \$9.85 = \$205.85 60kt Russian @ \$196.00 + \$9.85 = \$205.85 60kt Russian @ \$192.70 + \$11.20 = \$203.90 60kt Russian @ \$192.70 + \$11.20 = \$203.90 60kt Russian @ \$196.00 + \$11.60 = \$207.60 60kt Russian @ \$196.00 + \$11.60 = \$207.60 110kt Russian @ \$192.00 + \$12.32 = \$204.32 110kt Russian @ \$192.00 + \$12.32 = \$204.32 60kt Ukrainian @ \$195.50 + \$12.60 = \$208.10 60kt Ukrainian @ \$195.50 + \$12.60 = \$208.10 60kt Russian @ \$192.74 + \$11.20 = \$203.84 60kt Russian @ \$192.74 + \$11.20 = \$203.84 60kt Romanian @ \$197.50 + \$10.85 = 60kt Romanian @ \$197.50 + \$10.85 = \$208.35 \$208.35 60kt Russian @ \$192.75 + \$11.79 = \$204.54 60kt Russian @ \$192.75 + \$11.79 = \$204.54 60kt Russian @ \$197.00 + \$11.60 = \$208.60 60kt Russian @ \$197.00 + \$11.60 = \$208.60

- o Morocco allocated their full 264k mt of wheat purchases to the EU wheat import quota.
- Currencies: The Russian rouble has appreciated by 12% since November and is up 6% from the beginning of 2017. If this trend persists, those sourcing wheat from Russia may want to look at cheaper alternatives. Egypt's pound hit a 13-week high, up 16% from the post-float lows.

Wheat Market Outlook:

- Significant events this past week:
 - Futures: US wheat began the week higher but ended lower, notably in Minneapolis. The
 rally early in the week only served to make US wheat even more overpriced against
 competing origins.
 - o **US wheat**: US wheat remained expensive against other origins.
 - Argentina: Argentine Fob wheat values rose by US\$3/mt with the bid-offer on March 12 protein wheat up at US\$183-190/mt plus US\$3 per month carry charge. The 11.5 protein



- wheat discount remained around US\$3/mt while offers of 12.5 protein wheat disappeared completely.
- Brazil was again actively purchasing in the Argentine market, while at the same time offering feed quality wheat for export at US\$170/mt.
- O Australia: ABARE (Australian Statistics Agency) weighed in with a massive Australian crop number which helped lead to the price reversal from earlier in the week. Given a 35.13 million mt wheat crop, the increase in Australia's exportable surplus is around 27 million mt (USDA's 24.5 million mt), with Oct-Jan shipments around 6.5 million mt. Assuming normal exports Feb-May (2.5-3 million mt per month), this would leave a 7-10 million mt surplus for Jun-Sep '17, right during the prime Northern Hemisphere harvest period.
- o **Russia**: Russia clearly has a huge wheat surplus, but this week's purchases were mostly about interior replacement (i.e., Rouble strength at 19-month highs), which dictated the Fob price rather than the other way round.

Outlook:

Wheat markets have been driven by:

- o **Funds**, that covered far more of their position than expected, buying 43,000 contracts last week to halve their net short.
- o **Fob price spreads** amongst the competing origins, which have again changed considerably. This can be expected to continue in the coming weeks.
- o **Russian farmers**, who experience increasing competition from the record Australian harvest.
- o "Cheap wheat" in the cash markets, which has increased in value.
- o While at the same time, premiums for the best quality wheat have continued to increase.
- > There is plenty of wheat against moderate demand, except for high quality product.
- There is an old crop wheat surplus and new crop wheat crops so far look good.
- Wheat buyers are still looking to purchase HRW & HRS wheat, and to a lesser extent for SRW.
- Our marketing ideas remain the same: sell old crop wheat and 30 percent of new crop wheat.



iii) Primary Elevator Price Tables and Grade Spreads

Table 1: Canadian Primary Elevator Bids, in Canadian Dollars per Bu and per MT, (PDQ data)

Date: 21-Feb-17

NW Sask	Spot		NW Sask	Defe	Deferred		
	(bu.)	(mt)	INVV SASK	May '17 (bu.)	May '17 (mt)		
1 CWRS 13.5	\$6.20	\$227.81	1 CWRS 13.5	\$6.48	\$238.10		
1 CWAD 13.0	\$7.14	\$262.35	1 CWAD 13.0	\$7.19	\$264.19		
1 CPSR 11.5	n/a	n/a	1 CPSR 11.5	n/a	n/a		
SW Sask			SW Sask				
1 CWRS 13.5	\$6.18	\$227.08	1 CWRS 13.5	\$6.51	\$239.20		
1 CWAD 13.0	\$6.39	\$234.79	1 CWAD 13.0	\$7.24	\$266.03		
1 CPSR 11.5	n/a	n/a	1 CPSR 11.5	n/a	n/a		
NE Sask			NE Sask				
1 CWRS 13.5	\$6.04	\$221.93	1 CWRS 13.5	\$6.34	\$232.96		
1 CWAD 13.0	n/a	n/a	1 CWAD 13.0	n/a	n/a		
1 CPSR 11.5	n/a	n/a	1 CPSR 11.5	n/a	n/a		
SE Sask			SE Sask				
1 CWRS 13.5	\$5.98	\$219.73	1 CWRS 13.5	\$6.30	\$231.49		
1 CWAD 13.0	n/a	n/a	1 CWAD 13.0	n/a	n/a		
1 CPSR 11.5	n/a	n/a	1 CPSR 11.5	n/a	n/a		

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:
 - 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)
 - 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

Releveant FOB Prices and Export Basis Feb. 21, 2017						
	FOB Prices CD	A 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	\$338.34	\$307.45				
HRS	\$331.10					
HRW 11.5	\$267.87					
SWW 12.0	\$238.43					
1 CWRS 13.5 ³	\$338.34		\$228.92	\$109.42		
2 CWRS 13.0 ³	\$331.10		\$212.75	\$118.35		
3 CWRS ³	\$267.87		\$197.32	\$70.55		
CPS ³	\$231.67		\$163.88	\$67.79		
1 CWAD⁴		\$403.01	\$253.90	\$149.11		
Competing wheat:	USS	US\$/mt				
Russia 12.5 (Black Sea,						
25k mt)	\$192.00					
French 11.0 (Rouen)	\$19	\$192.66				
ASW 10.5 (W Coast)	\$189.00					
Argentine 12.0	\$193-\$190.00					

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 Price Parities Feb. 21					
Canadian Funds			Grade		
PNW value/Vancouver	1CWRS13.5	2CWRS	3CWRS	Winter wht.	CPS
Dec./Jan. delivery	\$9.02	\$8.83	\$7.11	\$6.31	\$6.31
Parity Track Rosetown	\$7.53	\$7.33	\$5.61	\$4.81	\$4.81
Track Bid Rosetown Area	\$6.23	\$5.79	\$5.37	\$4.46	\$4.46
Gross Margin at Elevator (\$/bu)*	\$1.30	\$1.54	\$0.24	\$0.35	\$0.35
Gross Margin at Elevator (\$/mt)*	\$47.68	\$56.61	\$8.81	\$12.81	\$12.81
* to cover elevation, elevator market risk, ma	rgin				

