

Wheat Market Outlook and Price Report: August 20, 2018

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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 Aug. 20 2018

August USDA/ WASDE Report versus estimates made by members of the trade community:

World Wheat Production								
	2014/15	2015/16	2016/17	2017/18	usda change production 2017/18 v 2018/19	2018/19Aug usda	trade estimate of production 2017/18 v 2018/19	trade production estimate 2918?19
Production								
Argentina	13,930.00	11,300.00	18,400.00	18,000.00	108%	19,500.00	108%	19,500.00
Australia	23,743.00	22,275.00	31,819.00	21,300.00	103%	22,000.00	85%	18,000.00
Canada	29,442.00	27,647.00	32,140.00	30,000.00	108%	32,500.00	100%	30,000.00
China	126,208.00	130,190.00	128,845.00	129,770.00	99%	128,000.00	98%	127,000.00
Egypt	8,300.00	8,100.00	8,100.00	8,450.00	100%	8,450.00	100%	8,450.00
European Union	156,912.00	160,480.00	145,369.00	151,681.00	91%	137,500.00	89%	135,500.00
India	95,850.00	86,530.00	87,000.00	98,510.00	98%	97,000.00	96%	95,000.00
Iran	13,000.00	14,500.00	14,500.00	14,000.00	104%	14,500.00	104%	14,500.00
Kazakhstan	12,996.00	13,748.00	14,985.00	14,802.00	98%	14,500.00	98%	14,500.00
Morocco	5,116.00	8,064.00	2,731.00	7,092.00	116%	8,200.00	116%	8,200.00
Pakistan	25,979.00	25,086.00	25,633.00	26,674.00	99%	26,300.00	99%	26,300.00
Russia	59,080.00	61,044.00	72,529.00	84,992.00	80%	68,000.00	80%	68,000.00
Turkey	15,250.00	19,500.00	17,250.00	21,000.00	90%	19,000.00	90%	19,000.00
Ukraine	24,750.00	27,274.00	26,791.00	26,981.00	95%	25,500.00	95%	25,500.00
Uzbekistan	7,150.00	7,200.00	6,940.00	6,900.00	87%	6,000.00	87%	6,000.00
Others	55,358.00	56,857.00	56,127.00	50,493.00	102%	51,600.00	102%	51,600.00
Subtotal	673,064.00	679,795.00	689,159.00	710,645.00	95%	678,550.00	94%	667,050.00
United States	55,147.00	56,117.00	62,833.00	47,371.00	108%	51,078.00	108%	51,078.00
World Total	728,211.00	735,912.00	751,992.00	758,016.00		729,628.00		718,128.00

- The above table shows that the Trade's estimates of wheat production vary a lot from the numbers in the last WASDE report.
- If the trade is correct then the world wheat balance sheet is much tighter than the USDA's estimates.

- Assuming wheat demand stays about unchanged, the Trader's numbers suggest we need to reduce ending stocks by 10 mln mt, or we need to ration wheat supplies. That would also suggest that if the Russians want to prevent inflation, this is a good time to apply export taxes. These are the issues that keep Traders from getting bearish on wheat. In addition, end users are not well covered.

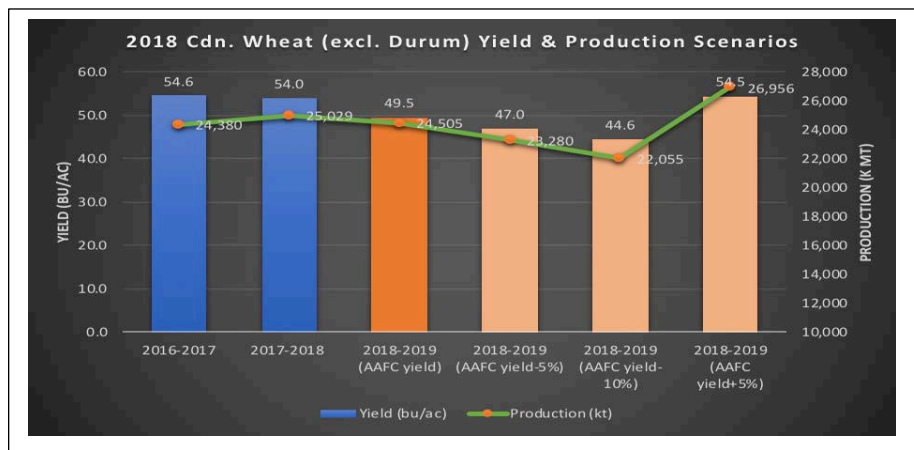
➤ **Global wheat production and trade:**

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

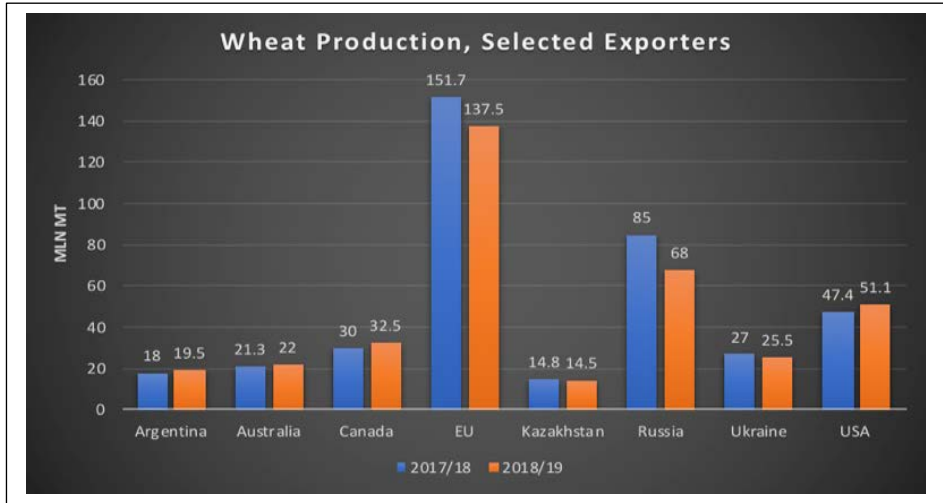
- Futures:** Sep'18 contract Chicago winter wheat closed at 560-4 up 18-2 cents in Friday's trade. Sep'18 contract Kansas hard red winter wheat closed up 17-4 cents at 565-0. In Minneapolis, Sep'18 contract hard red spring wheat closed at 608-4, up 12-2 cents in Friday's trade, while Dec'18 hard red spring wheat closed at 625-2, up 12-0 cents for the day.
- Funds:** Index Funds did very little during the week. Spec Funds bought corn/wheat and soybeans whilst selling a small amount of soymeal. Spec funds are net long grains short oilseeds.
- Matif:** A 13-month low in the €uro plus the Russian rumours about a potential export tax helped Matif to a higher close despite a €6 lower start Monday.

- **Canadian wheat:**

- Last Thursday, Iraq bought of 200k mt of US hard red winter wheat at \$334/mt, and an additional 100k mt of Canadian wheat at \$324/mt. This is an excellent trade for Canadian wheat! *Finally a company has sold some Canadian wheat to Iraq. We are starting to see that more North American wheat is needed in world trade this new crop year.*
- Canadian yields: Though we have seen some surprisingly good yields in Manitoba, good SK and AB wheat yield are not a forgone conclusion yet: The Cdn Prairie summer has been unusually hot and dry this year, and the full effect on yields remains to be seen. While USDA left Cdn. wheat production unchanged in their recent report, the graph above plays out several yield scenarios for 2018 Cdn. wheat: In orange, the current AAFC yield assumption of 49.5 bu/acre, which would generate a wheat production volume of 24.5 mln mt (excl. durum). Next the first light orange column, a 5% yield reduction to 47 bu/ac avg. would generate 23.3 mln mt of wheat production. A 10% drop in avg yield to 44.6 bu/acre would generate only 22.1 mln mt wheat. Conversely, a more unlikely 5% increase in yield to 54.5 bu/acre would generate 26.95 mln mt wheat this year. Actual 2018 yield data will be watched closely.

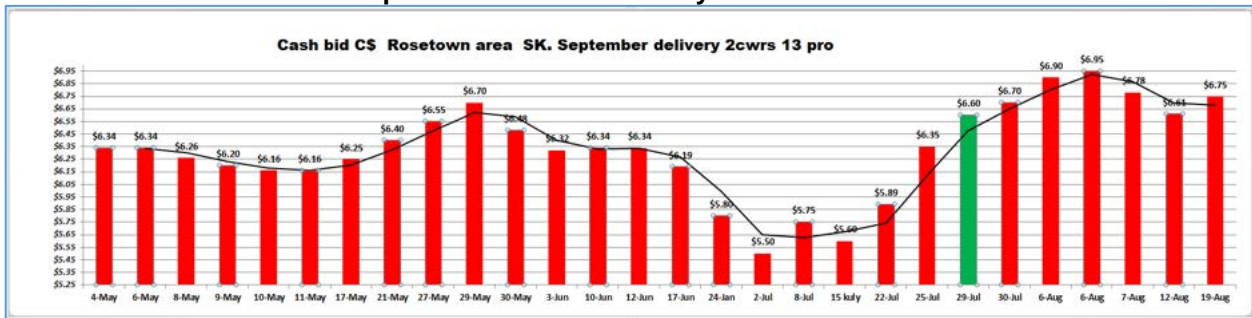


- The graph shows '17/18 and P18/19 wheat production for major export countries, using USDA data. While it is evident that production especially in the EU and in Russia is down significantly, it is worth noting that local agencies/analysts use significantly lower numbers than USDA for the following



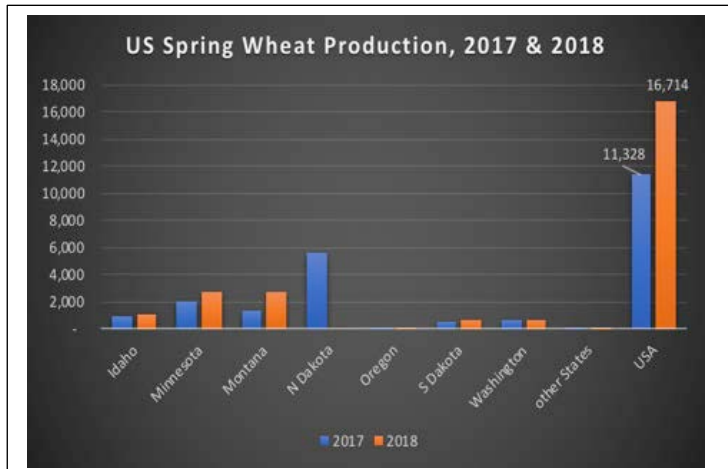
countries: Estimates for EU-27 production at 127.7 mln mt + durum (Stratégie Grains; at least -1.3 mln mt to USDA), Australia at 20 mln mt (private forecasters; -2 mln mt to USDA), Canada 30.6 mln mt (AAFC; -1.9 mln mt). These differences alone add up to -5.2 mln mt. There are also questions about final wheat production numbers for India (monsoon rainfall is currently running 9.5% behind normal) and for China. - We expect that the wheat market also still has some major adjustments to make in the world trade matrix

- Canadian elevators improved their bids but they remain well below world market values



o **US wheat:**

- The US HRW harvest continues quickly in Montana and the PNW with strong quality results; this is a very good HRW crop.
- US HRS harvest is about 1/3rd complete and initial sample data shows test weight average of 61.7 lb/bu (81.1 kg/hl) and average protein 14.9% (12% moisture basis). Yields in the Northern Plains vary depending on local conditions, generally between 40 to 70 bu/ac. (2.7 to 4.7 mt/ha); yields in Washington state are up a bit from last year, averaging about 48 bu/ac.
- SW harvest continues apace under hot, dry conditions; this is a typically good SW crop with low protein, low moisture and good test weight.
- Early in the week, improved NASS US crop condition ratings and rapid



harvest restricted spring wheat buying in Mpls., caused futures to drop.

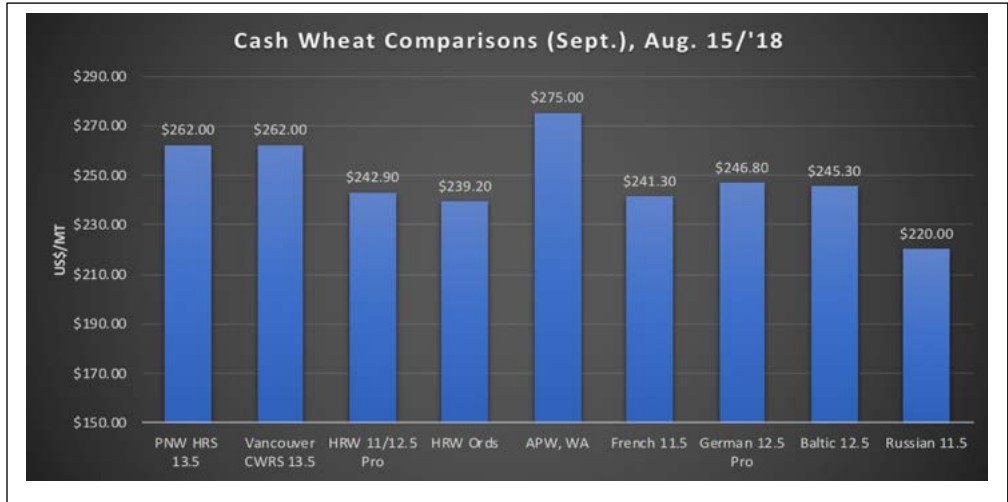
- In international markets, **US SRW FOB prices** are now below Russian wheat values, which had not happened in a long while. But advantageous Black Sea freight costs still favour Russian wheat into the eastern Mediterranean. Weather issues in Australia and Canada plus political uncertainty in Russia remain issues in the market. And as the N Hemisphere planting season approaches, dryness in the US Plains and Europe will be carefully watched as the market will need to buy additional wheat acres for the next crop.
 - **Australian wheat:**
 - USDA left Australian wheat production unchanged last Friday at 22 mln mt. Private forecasters in Australia are using a 2 mln mt smaller wheat production number.
 - Australian wheat futures made their 7th straight higher weekly close.
 - Shipments continue from the west and south to the East and Fob values remain way too high for the export market.
 - New crop APW remains above US\$290/mt basis replacement and it easily is the world's most expensive wheat.
 - **Argentine wheat:**
 - In Argentina, wheat planting is complete and soil moisture levels are generally adequate with 51% of the crop rated GD/EX (47% last week, 77% last year).
 - New crop wheat production estimates remain in a 19-21 mln mt range versus 18 mln mt this year.
 - Values: 12.5% protein wheat increased by US\$5/mt to US\$240 for December ;18.
 - (An additional US\$5/mt per month carry, less US\$5/mt per ½% of protein).
 - The Central Bank in Argentina raised interest rates to a huge 45% with consequent inflation concerns, which is preventing farmers from selling commodities.
 - **EU wheat:**
 - The vessel line-ups in Brussels showing export movement continues to show that the EU is doing the job of pricing itself out of the export market. The only destination of note is the captive French wheat demand by Algeria.
 - **Black Sea wheat:**
 - Friday morning wheat got support from Russia's Agriculture Ministry allegedly considering to limit wheat exports for the '18/'19 shipping season to only 30 mln mt. The Russian Ag Ministry later issued a statement that they are not considering such a limitation and expect exports to total 35 mln mt. However, the situation is far from clear and we expect to hear more on this topic.
 - Russia's wheat harvest was put at 56% complete with yields down 20% against USDA's projected 18% decline. Ukraine is 98% complete with yields down 9%, in line with the USDA.
 - Russian 12.5% protein wheat for Sept. was at ~ being US\$229-233/mt at the end of the week, with the 11.5% protein discount at US\$10-14/mt. There were no offers for the deferred positions.
- **Significant purchases/ trades:**
 - **Egypt** bought 240,000 mt of wheat for Sept. 20-30 at around US\$248/mt C&F plus 180,000 mt of Oct 1-10 at \$250.40.
 - **Iraq** bought 200,000 mt of HRW at around US\$334/mt, *plus 100,000 mt of Canadian wheat at US\$324/mt.*
 - **Jordan** bought 60,000 mt of LH Oct at US\$262/mt.
 - US export sales at 803,000 mt were a 19-month high for a season total 305 mln bushels, down 26% on last year (23% last week)

➤ **Wheat Market Outlook:**

Significant events:

- Markets were being shaken by **big currency moves** last week. The U.S.\$ which was trading near 97 points, the highest level in over 14 months. Meanwhile, the Euro sank to its lowest against the US\$ in more than a year as a plunging Turkish lira sparked broad risk aversion, with investors worried about contagion to European banks. The Ruble closed ~67.55 tdy.
- Turkey opened a 750k mt **duty free import quota** valid through May 2019. The previous duty level was 45%. We understand this quota is for the TMO, not the private trade.
- In international markets, **US SRW FOB prices** are now below Russian wheat values, which had not happened in a long while. But advantageous Black Sea freight costs still favour Russian wheat into the eastern Mediterranean.

Weather issues in Australia and Canada plus political uncertainty in Russia remain issues in the market. And as the N Hemisphere planting season approaches, dryness in the US Plains and Europe will be carefully watched as the market will need



- to buy additional wheat acres for the next crop.
- *Even while the market still trying to get its head around the recent USDA numbers, it seems clear that US/ N. American wheat will play a much bigger role in world markets during the new crop year than last crop year.*

➤ **Outlook:**

In our view, the USDA was unrealistic in their estimates of global wheat production and in particular in their estimate of usage. We think their estimates of global feed grain production will also prove to be overstated. The Trade and the USDA still have some major adjustments to make in the world wheat trade matrix with the Trade expecting crops in Europe, Australia and Canada to all experience further reductions compared to USDA estimates.

Also, the market now has to come to terms with the possibility of Russian export controls by the end of 2018.

And while the market still trying to get its head around the recent USDA numbers, it seems clear that US/ N. American wheat will play a much bigger role in world markets during the new crop year than last crop year.

We see no need to for farmers sell wheat at the current time.

iii) Primary Elevator Price Tables and Grade Spreads

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

Date: August 20, 2018					
NW Sask	Spot		NW Sask	Deferred	
	(bu.)	(mt)		Oct. '18 (bu.)	Oct. '18 (mt.)
1 CWRS 13.5	\$6.55	\$240.67	1 CWRS 13.5	\$6.64	\$243.98
1 CWAD 13.0	\$6.25	\$229.65	1 CWAD 13.0	\$6.24	\$229.28
1 CPSR 11.5	\$6.18	\$227.08	1 CPSR 11.5	\$6.23	\$228.92
SW Sask			SW Sask		
1 CWRS 13.5	\$7.02	\$257.94	1 CWRS 13.5	\$7.11	\$261.25
1 CWAD 13.0	\$6.96	\$255.74	1 CWAD 13.0	\$6.86	\$252.06
1 CPSR 11.5	\$6.11	\$224.51	1 CPSR 11.5	\$6.26	\$230.02
NE Sask			NE Sask		
1 CWRS 13.5	\$6.89	\$253.17	1 CWRS 13.5	\$6.94	\$255.00
1 CWAD 13.0	\$6.71	\$246.55	1 CWAD 13.0	\$6.77	\$248.76
1 CPSR 11.5	\$5.99	\$220.10	1 CPSR 11.5	\$6.01	\$220.83
SE Sask			SE Sask		
1 CWRS 13.5	\$7.00	\$257.21	1 CWRS 13.5	\$7.06	\$259.41
1 CWAD 13.0	\$6.89	\$253.17	1 CWAD 13.0	\$6.95	\$255.37
1 CPSR 11.5	\$6.01	\$220.83	1 CPSR 11.5	\$6.07	\$223.04

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

Avg. Grade Spread/ Pro Discounts	Cdn\$/bu.	Cdn.\$/mt
1 CWRS 14.0	0.11	4.15
1 CWRS 13.5	Base Grade	Base Grade
2 CWRS 13.5	(0.18)	(6.61)
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:

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.”

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				August 20, 2018
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	\$338.11	\$325.16		
HRS	\$330.92			
HRW 11.5	\$326.60			
SWW 12.0	\$304.06			
1 CWRS 13.5 ³	\$338.11		\$248.39	\$89.72
2 CWRS 13.0 ³	\$330.92		\$228.18	\$102.74
3 CWRS ³	\$326.60		\$224.51	\$102.10
CPS ³	\$297.35		\$215.32	\$82.03
1 CWAD ⁴		\$330.92	\$257.21	\$73.71
Competing wheat:	US\$/mt			
Russia 12.5 (Black Sea, 25k mt)	\$231.00			
French 11.5 (Rouen)	\$250.62			
APW 10.5 (W Coast)	\$283.00			
Argentine 12.0				

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					August 20, 2018
Canadian Funds	Grade				
PNW value/Vancouver	1CWRS13.5	2CWRS	3CWRS	Winter wht.	CPS
May/June delivery	\$9.02	\$8.82	\$8.71	\$8.09	\$8.09
Parity Track Rosetown	\$7.52	\$7.33	\$7.21	\$6.60	\$6.60
Track Bid Rosetown Area	\$6.76	\$6.21	\$6.11	\$5.86	\$5.86
Gross Margin at Elevator (\$/bu)*	\$0.76	\$1.12	\$1.10	\$0.74	\$0.74
Gross Margin at Elevator (\$/mt)*	\$28.02	\$41.04	\$40.40	\$27.04	\$27.04

* to cover elevation, elevator market risk, margin