# How producers became trapped in bulk-trades

We are the 8<sup>th</sup> largest grain-producer and 5<sup>th</sup> largest grain-exporter in the world. For more than a century, we have been growing more grain than we consume, and thus had to export. With yields increasing faster than consumption, export volumes have been on the rise, and we now export half of what we grow. Some believe we should not worry about exports, but unless we curtail production levels, we cannot escape exporting, and thus, we should try to get as much value from exports as we can.

We embarked on our platform's mission in the belief that our nation's exportperformance was not living up to the full potential of our grain-economy, particularly from producers' perspective. Our overseas grain-exports are too dependent on bulktrades, and this limits "value", especially what trickles down to primary producers:

- A handful of grain-companies control the bulk-systems, with too much market-power, and squeeze the margins producers get from grain-trades.
- ➤ Captivity to bulk-trades limits our diversification potential, sticking to high-volume staple-crops instead of growing higher-value specialty-crops.
- Moreover, bulk-exports are facing increasing competition from emerging grain regions, putting in danger the already slim margins producers get.

Instead of cumbersome regulatory solutions, like imposing price-controls or breaking up grain-companies, our solution to this problem is rather simple: create new direct-sales channels. This would put competitive pressure on bulk-trades, thereby forcing their custodians to pay higher prices for the staple-crops they are already exporting and/or switch to exporting higher-value specialty-crops that yield higher-margins.

Here we will dive further into the history of grain trades with a piece on how grain-transport evolved in our own country, and how the bulk-trap came to be. The story begins with the early settlements of the Prairie region, which could not have happened without railways, while the railways would have never become viable without rapid growth in grain-traffic – the classic dilemma undeveloped regions face.

Then we turn to the regulated era, the establishment of CWB to stabilize the grain industry devastated by the *Great Crash*. Though most view CWB mainly as a single-desk buyer and seller of grains, in between those functions it had a critical logistics-role to perform. Leaving aside the market-side of things, we look at CWB through this lens, how it gave rise to today's highly integrated bulk-transport system.

Finally, we turn to the unwinding of the CWB with the expectation that it would eventually be abolished to give producers the freedom to trade as they wished. Ironically, privatization started not with the abolition of CWB but the corporatization of producer-coops. Before new sales-channels could even form, export trades fell captive to bulk-systems, now in the hands of a handful of private trading companies.

## Early days of growing and moving grain

Grain farming in Canada got started first in the Maritimes, then in Quebec, but took a more serious hold in Ontario, with wheat becoming the province's principal crop in the latter half of the 19<sup>th</sup> century. Wheat was grown earlier in Manitoba, where the province's first wheat-harvest was said to be in 1820 (Selkirk settlement). Its spread further west in Saskatchewan and Alberta came after the *Dominion Act* of 1872 that opened the homestead-settlement era, with an acceleration later in the century.

Wheat-farming through most of the 19<sup>th</sup> century was an oxen or horse driven affair. Depending on how many hands a farmer could mobilize and hire – a few in family-farms, many more in large-estates of Ontario – they plowed the fields, seeded, and left it to nature to grow the crops. When the time came to harvest, early in the century they were using reaping-hooks or sickles, and later switched to cradles and scythes. At this stage a farm-hand was probably harvesting an acre of land a day.

The chores did not end by collecting the crops; wheat needed to be threshed and winnowed, loosening the chaff first and then extracting the grain. Early in the 19<sup>th</sup> century, flailing was the only way to thresh, though efforts were made to draw on horsepower. Winnowing was also done with hand-tools, relying on wind when it was blowing. Even with improved methods, a farm-crew might be able to go through only 10 bushels of wheat a day. As harvesters-threshers advanced into the latter half of the 19<sup>th</sup> century, and if a tractor could be afforded to go with them, a farm-crew was probably cutting and threshing 40-50 acres of land per day.

This was not the end of the chores; whatever was not going to be consumed on the farm or in the immediate vicinity had to be bagged and carried to the nearest market in horse-wagons. In most cases, there was yet a longer horse-wagon journey to nearest waterways, at least until the railways came along. In the east, Grand Trunk Railway was finished in 1860 from Sarnia to Montreal, providing an alternative to ships in Great Lakes and Saint Lawrence. GTR was a British company but generously supported by the Canadian government. By the 1880s, GTR had become the world's largest railway – 2000 km of track with 700 locomotives and 18,000 freight-cars.

At the time of Confederation in 1867, extending railways to the West had become imperative, not just to settle the Prairies but also to fulfill the Union-promise made to British Columbia. To this end, Canadian Pacific Railway (CPR) was incorporated in 1881 with the explicit objective of building a transcontinental railway from Eastern Canada all the way to the Pacific Ocean. CPR was a private company, but the government was there to provide whatever support was necessary, including land and generous construction subsidies. CPR's transcontinental railway had become the *national-dream* and was completed in 1885 to open the West to be settled.



Originally CPR's transcontinental route had been planned further north to serve the northern corridor that had opened much earlier with the fur-trades, but with the selection of the southern route, northern Saskatchewan needed service. This gave rise to a privately financed initiative to build a railway from Regina to Prince Albert that was finished in 1889. It was originally leased to CPR to feed its mainline but was then sold to Canadian Northern Railway in 1906. The latter had started as early as the 1880s as a collection of provincially funded northern branch-lines to feed CPR in Manitoba, but would not come into being as a railway to its own right until 1896.

In the meantime, the British-owned GTR had already extended to Winnipeg and was seeking government support to build its own transcontinental railway. Through a subsidiary set up for this purpose, Grand Trunk Pacific, the project was completed in 1914. But neither GTP nor GTR were viable entities and would not survive WW1; in 1919 the whole enterprise went bankrupt and was nationalized. In 1923 it was put under the new Crown corporation, Canadian National Railway (CNR), together with other distressed or bankrupt railways, including Canadian Northern which by then had already reached the Pacific but was on life-support with government subsidies.

This expansion of the rail-network across the country would not have happened without vast increases in grain production. In the east it was driven by Ontario's grain sector, mainly wheat, but had slowed down with agricultural diversification. The main impetus from late 19<sup>th</sup> century onwards was coming from the Prairies, with limited population but rapidly growing grain output. Grain-exports had to get at least to Thunder Bay in the east, or to Vancouver in the west, both by rail.

Into the 20<sup>th</sup> century, homestead settlements had accelerated, and crop yields were on the rise, driven by improved farming methods, higher quality seeds, and better equipment. The region's population increased 6-fold to 2.5 million by 1950, but local consumption would still not make a dent in what was being produced, from farmland that had increased from little more than 1 million, to 17 million hectares until the *Great Depression*. Coupled with yield-increases, at least 4-5-fold, it is hard to estimate how much more grain had to move to market, mostly captive to rail.

In the early railway-days, the standard handling method was still "bags", loaded into boxcars like they had been on to vessels. What revolutionized grain-handling was grain-elevators built to consolidate grain-deliveries from farms in their vicinity. These elevators allowed railcars (boxcars earlier, hopper-cars later) to be loaded directly. The first elevator in the Great Lakes region was built in Buffalo in 1843, first in Canada in Port Perry in 1873. The first in the west was in 1879 in Plum Coulee, Manitoba, but they spread like wildfire for the next half-a-century to all rail-lines; by the Great Depression, there were close to 6,000 grain elevators across the region.

Originally, these elevators were built to operate for profit by private-investors, including flour-milling companies. Later, companies emerged specializing in building and operating grain elevators – some wherever they could, others on CP properties. Into the early 20<sup>th</sup> century, farmer-coops got into the act to provide market-access for their members, starting with the Grain Growers' Grain Company in 1906. There was also pressure on provincial governments to build elevators and offer favorable rates to their constituents. After WW1 wheat-pools got into grain-marketing in earnest, by starting to build new elevators as well as buying already built ones.

Getting their crops from farm-gates to the nearest elevators was still a problem for many producers; early into the 1900s horse-wagons were still widely used, perhaps slower but much cheaper. They would slowly fade away with trucks, getting larger and more affordable to buy and operate but would not become universal well into the 1920s. After that, grain-trucking would become a major force in driving elevatorconsolidation trends, and in time branch-line abandonments across the region.

By the mid-1920s the rail-system stabilized with two main competitors, CP and CN. Though construction of new lines slowed down, both continued to build branch-lines into each other's territories to expand their catchment areas. Then, railways started to shift their strategy: retreat to mainline operations, leaving branch-lines to their destiny, or others to operate (provincial governments or SLRs). They were open to options for rail-cars to be loaded off-line and brought to them to haul to final destinations. They also knew that trucks had become competitive with branch-lines to haul grains over much longer distances to elevators of their choice on main-lines.





















## Emergence of a regulated bulk-system

Before the *Great Depression* struck in 1929, it looked like the Prairie grain-economy had settled into a steady course. Grain prices had recovered from the post-WW1 crash and held their own in real terms. Farming had become more expensive with pressures to mechanize, but yields were on the rise to provide relief, at least for those who could properly manage their affairs. There was more land to cultivate, bringing in new settlers and giving those already established a chance to expand.

Most importantly, the cooperatives had given farmers a collective voice, a sense of power and security. By taking the lead in marketing, wheat-pools had greatly improved the terms of trade in favor of farmers; there was some resistance to the first abandonment of CWB, but without any worries about the return of the much-hated trading interests that had choked farmers earlier in the century. Also, wheat-pools were very helpful in helping farmers procure supplies and manage elevators.

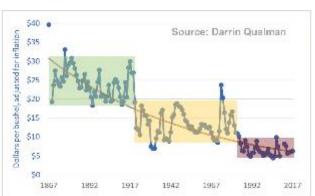
Grain-exports were on the rise, with rail access in both directions. Much of the grain was moving east through Thunder Bay, or the longer rail-route to eastern ports. Export markets were mostly across the Atlantic but at least there was access to Vancouver to ship back east through the Panama Canal. Also, the railway-battles had been settled now with two transcontinental options, CP and CN, with no ability to negotiate competitively, but at least with the security of the regulated crow-rate.

Though the 1920s were not quite "roaring" for Prairie farmers, a sense of confidence and security had prevailed, but would prove to be short-lived. The wheat-pools were not prepared; in fact, they were over exposed going into the *Great Crash* of 1929 and collapsed. The federal government was quick to come to the wheat-pools' rescue, but individual farmers suffered greatly. Most hung on, but with considerable pain, while many could not escape bankruptcy, losing everything they owned.

In 1935 the government brought back the CWB and this time permanently. Initially, CWB was voluntary, but it was at least a secure buyer for many farmers afraid of market uncertainties. Just before WW2 broke out, CWB became the sole purchaser of wheat, and in the coming years its scope was extended to barley, oats, and other crops. Basically, CWB became the sole buyer of grains, a monopsony, and a single-desk marketing authority, the sole exporter of Canadian grains to world-markets.

As the sole buyer of grains, CWB would make an initial payment to farmers for their crops, calculated as a percentage of the expected market value of the types of crops they had, back then mostly wheat. The magnitude of this initial payment varied but could be as much 75% of the expected market value. This was not repayable even if prices crashed and the CWB could not recover the upfront payment; any loss would be on the government's account, giving farmers considerable comfort and security.







At the end of the crop year, actual revenues from each crop type would be tallied up, and after deducting CWB's costs (handling, marketing, overheads, etc.) each farmer would get a share of the surplus according to the volume they had delivered to CWB. Thus, there was pooling of revenues for each crop category, fairly differentiated by type and grade, particularly for wheat. Farmers would get an equalized price per bushel from what CWB had managed to sell for in domestic or export markets.

Basically, CWB's mandate was to maximize sales-revenues for each crop type from both domestic and export sales. Farmers, on the other hand, had to produce as much as possible of what they had chosen to grow to maximize their own revenues. Crop choices were made by farmers depending on their soil-conditions, but certainly not as varied back then as today. Critics called it a "socialized" system, but most considered it a blessing after the turmoil they had to endure through the Depression.

Though CWB had become the sole buyer of grains from farmers, actual collection and consolidation methods were not cast in stone; they were determined by cost considerations. Realizing that wheat-pools were already dominant at this end of the supply-chain, CWB continued to work with them to get grains (particularly wheat) to where they were needed: domestic sales-points or export-positions. In essence, wheat-pools became the Board's primary farm collection and consolidation partners.

Though many elevators were still privately owned-and-operated, most were in the control of wheat-pools, thus they could apply market pressure on private entities to price their services competitively. Wheat-pools themselves had no reason to pricegauge, as they were farmer-owned. Whatever profits they made from service-offerings would go back to farmers; moreover, they had every incentive to minimize costs as any surplus in that vein would also end up in farmers' pockets.

The next link in the transport-chain was "rail", moving grains east to Thunder Bay or directly to St. Lawrence, or west to Vancouver. The infrastructure was in place with two transcontinental railways, with an extensive network of branch-lines, to move grain from country-elevators to ports or domestic end-markets across the country,

coast to coast. Distance based rates had been fixed on CPR with the 1897 Crow's Nest Agreement, and made statutory with the Railway Act of 1925, whereby shippers would absorb close to 20% of the rate and the government would pick up the difference. These statutory rail-rates were also extended to CNR in 1927.

When CWB became the sole shipper of grains in 1935, these rates were in place to wherever grain had to be moved. The railways were content as grain was by far the largest volume they carried – 35-40 MT moving on their networks, 6-8 MT for export. At the time the rates seemed compensatory, but that would change in the years to come, by 1970s not even covering their variable costs. This problem would be fixed in their favor with the Western Grain Transportation Act of 1984, which provided government subsidies while maintaining distance-based rates for grain-shippers.

All along CWB's functions did not end with railways delivering to port positions or end markets; grains consolidated from inland elevators and railed, had to be stored for local distribution or furtherance by ship to export markets. CWB did not have a mandate to build grain-terminals at government's expense, thus it had to sell to grain-companies to look after storage and distribution domestically, or pay port-side terminals to look after storage and handling of exports. Where that capacity did not exist, it would offer long-term contracts to entice new facilities to be built by others.

CWB was a single-desk buyer of grains from producers as well as a seller of those grains to domestic and export markets. However, it was often overlooked that in executing both sides of its mandate, CWB had an equally if not more challenging "logistics" function. Tens of millions of tons of grains had to be collected from farmgates and delivered to customers, a mandate CWB shouldered with no assets, what we would call an asset-lite logistics provider with fully integrated service offerings.

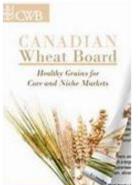
When CWB was charged with this mandate all the elements were in place in rather primitive states - trucks, elevators, railways, terminals, ports, and ships. But over 80 years, each-and-every one of these elements advanced beyond recognition, while CWB carried out its role as a logistics service integrator. What we ended up with was a fully integrated bulk-transport-system that would outlive CWB for others to inherit.



















#### Privatization of a consolidated bulk-system

Through the first four decades CWB's monopsony over grain trades did not face serious challenges; grain production had increased from 25 to 45 MT, while exports more than doubled from 6 to 15 MT. The price of wheat, by far the largest crop, had been in decline in real terms, but with yield increases on the rise, farmers were taking in much higher revenues. Ironically grumblings against CWB heightened in the early 1970s when wheat price was at \$25 in today's dollars (now only \$5-6).

In the early 1970s the push against CWB came over feed-grains, from the powerful meat-dairy lobby from Eastern Canada where they were the voice of the agricultural sector. Soon after feed-grains were dropped from the monopsony-net; a decade later oats and other specialty crops were dropped as well. The monopsony was now limited to non-feed wheat and barley, but this was not going to affect CWB's power, still with three-quarters of grain production and close to 90% of export volumes.

It was not openly admitted but railways were also part of the lobby against CWB. At this stage both railways faced a formidable challenge as grain-rates were not even covering variable costs. They were in open warfare against the federal government, and they were using CWB as a proxy against the real adversary, thinking that by breaking up the monopsony, they would have greater negotiating power. These hostilities would continue until the railways got their way with the 1984 WGTA.

There was also a *freedom-movement* getting underway in some producer segments. With the rise of specialty crop volumes, particularly canola that would expand to account for half of wheat exports, they were selling direct not only to local crushers and processors but also across the border to the US. They thought they could get better prices for wheat-barley as well, and in 1993 they got a brief relief with barley exports to the US being exempted from CWB, but it would last only for about a year.

Aside from these mounting pressures, an existential blow came from the wheat-pools, which CWB believed were its advocates and partners in grain consolidation and handling. In 1996 Saskatchewan Wheat Pool broke from its co-operative roots and became a publicly traded company. Soon after the other big co-ops, Manitoba Pool Elevators and Alberta Wheat Pool merged, and brought United Grain Growers under their umbrella to form Agricore United, an even larger entity than SWP.

In 2006 SWP launched a bid to takeover Agricore, only to face a counter bid from James Richardson International (JRI), Canada's largest and oldest private grain-company. However, SWP won the ensuing bidding war; SWP and AU merged and became a TSX-listed company, Viterra. After a worldwide expansion binge, it had become a distressed entity, and Viterra was bought by Glencore International, an LSE-listed global commodity giant, but kept under a wholly owned Dutch subsidiary.



All the corporatization, merger, and acquisition trends were music to the ears of the incoming Premier Steven Harper, proof that the grain-industry did not need a public-monopsony. There was also tacit producer endorsement behind this since the ball had started rolling with their blessing; a majority of coop members had voted for corporatization. Coming to power in 2006, his minority government failed to shut down CWB, but upon seizing majority, Bill C-18 would sail through the Parliament.

Bill C-18 was passed before the end of 2011, calling for the end of CWB's single-desk powers by August 1, 2012. Though it would continue to operate as a grain-company, it had to be privatized within 3 years, during which it was given a mandate to define its market position to attract private-sector investors. Its diehard advocates would not admit to it but CWB's only market-value was its single-desk status; once that was taken away, there was little to sell, but the participating producers felt otherwise.

For all these decades, CWB had operated as an asset-lite logistics and marketing company, virtues all self-respecting grain-companies would believe they possessed – but now, what was there to buy or sell? The interim management tried to position CWB in the marketplace with a couple of bulk-vessels and some terminal-capacity, somehow managing to attract 60 or more offers. The winner was a joint-venture between a well-known US grain company Bunge and a Saudi investor (SALIC).

The price tag was \$250 million for 50.1% of CWB that was rebranded as G3 Global Grain Group. The remaining shares were placed in a Trust, in which wheat-barley producers would get stakes proportional to what they had sold to CWB in the last crop-year. The controlling interests, Bunge and SALIC, were given an option to buy the Trust shares, but the details were vague or yet to be determined – the corporate announcement by Bunge (NYSE-listed) stayed away from the topic altogether.

The critics of the deal were crying foul, either over losing the security the CWB had given producers, or that this great national treasure was given away to foreigners for a piddly sum of money. As to what the new owners brought to the Prairie graineconomy, it is a topic for debate. Bunge was already a major player in global graintrades, but perhaps saw an advantage in taking a greater stake in Canada with G3. As to SALIC, its participation came with a Saudi-intent to import more — Saudi Arabia was a significant grain-importer, now talking about buying all its grains from Canada.

From our perspective, the Harper government's decision to abolish the CWB was political; we can agree or disagree with it, but we cannot argue with its legitimacy. They tried but failed when they came to power in a minority in 2006, but when they gained majority in 2011, they moved quickly. They believed a *public-monopsony* was not serving the interests of a region that had voted for them with a significant majority. Moreover, two provincial governments (Alberta and Saskatchewan) were in the hands of conservatives and the third (Manitoba) would follow shortly after.

Whether producers have suffered or benefited from this decision should be assessed empirically: have their margins increased or decreased because of this decision? But there is no data to pass judgement on this, nor any willingness to provide it on producers' part or to collect it on governments' part. Rather than dwelling on this, our concern is elsewhere: captivity of our grain exports to bulk-trades that not only squeeze producer-margins but also hold back diversification to higher value-crops.

In this article we tried to trace the origins and evolution of bulk-systems, starting before CWB but consolidating and getting integrated in its hands. In addition to its single-desk trading mandate from both ends, buying and selling, CWB oversaw all transport and logistics functions, getting grains from farm-gates to end-markets. In the latter capacity, CWB did not own the assets (elevators, rail-lines, terminals, ports, or vessels) but managed the logistics-chain in fulfilling grain-trades.

The primary consolidation part of this system was mostly in the hands of wheat-pools, but their corporatization and subsequent privatization introduced a new *for-profit* layer to the bulk-chain. This process got underway with the tacit approval of producers; as co-op members, they voted for it, strangely enough undermining their own collective interest. In doing so, they ended up giving as much market power to Viterra, the ultimate victor of this merger-and-acquisition process, as CWB ever had.

As CWB was sunsetting, a handful of grain-companies already in non-board grain-trades (canola most significant among them) had taken control of all the gateways to the bulk-system, together with the port-side terminals. In the absence of alternative channels, overseas exports fell captive to a *private-oligopsony* that in essence had replaced a *public-monopsony*. Preoccupation with CBW deflected from an equally big problem: producer-implications of this new "order" in overseas grain-trades.



#### How to protect producer-interests

With what we just concluded, you may expect the standard panacea: break-up the oligopoly and/or regulate the grain-trades. But we have no interest in pursuing these types of prescriptions when there are much more practical solutions, market based or driven. Our remedy is to break loose from bulk-trades and instead pursue alternative sales-channels to overseas markets that can be fulfilled in container-loads, directly from production sources to final-destinations without intermediaries — unless they have some value to add to the grains being exported. We take our cues in this regard from our own back-yard, domestic and transborder grain trades.

We observe that as certain crops were freed from CWB's monopsony (feed-grains, oats, and specialty crops), new sales-channels formed, whether in the hands of grain-companies (if they had any value to add) or direct-sales from producers to endusers (millers, crushers, processors, or feed-lots). These new channels were of great significance, as they eliminated intermediaries, establishing directly negotiated price benchmarks, and thereby, imposing market-discipline on all grain-trades. Also, the need for volume-consolidation vanished with buyers procuring only as much as they needed from production-sources and arranging for direct-deliveries by truck or rail.

There are two constraints that are holding this same pattern from taking hold in overseas export markets. The first is the *familiarity-gap* between our producers and overseas buyers. There is a bit of an overhang from the CWB-era; producers are not accustomed to reaching out to new markets, let alone to actual grain-buyers. These direct-sales channels formed across North America by corporate buyers reaching out to producers through structured procurement programs to meet their needs. But overseas buyers know little about our region and its advanced grain-economy to realize that a huge variety of crops can be bought directly from production sources.

The second is lack of *containerized-logistics* capacity. We have been accustomed to a standard way of shipping grains: whatever farmers produce is consolidated in grain-elevators, railed to port-locations, stored at coastal-terminals, and shipped to overseas markets in bulk-vessels. As we discussed in previous articles, our producers as well as the grain-industry at large view this pattern as a *celestial dictum*, the only way grains can be exported to overseas markets. In fact, in many parts of the world grain-trades have already been containerized, with significant distribution efficiency benefits to end-users; somehow we missed out on this *intermodal-revolution*.

Our mission is to overcome both these constraints. Through our *trade-facilitation* efforts, we will promote the virtues of our grain-economy to attract overseas buyers to procure the grains they need directly from production sources. Also, we will put our global experience in practice to develop the necessary *logistics-capacity* to service and containerize grain-exports to final destinations with crop quality intact, and as necessary identity-preserved. We realize that everybody is skeptical about container-supply in the interior, but we have a plan to solve that problem as well.