AS THE CROW FLIES: CANADIAN GRAIN FREIGHTING REGULATION FROM 1897 TO THE PRESENT

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Three broad eras of grain freighting regulation have governed the movement of Canadian grain to export position:

(1) The Crow's Nest Pass rate regime (1897-1984);

(2) The palliative period of government subsidies (1972-1984) and rate top-ups under the *Western Grain Transportation Act* (1984-1995); and

(3) The 2000 revenue cap or maximum revenue entitlement (MRE), characterized by Canada's grain monitor as "an inflationary control mechanism."

Over the years, certain truths have been observed. The federal government's grain freighting policy choices have often frustrated the development of an efficient and modern grain handling and transportation system. Many unforeseen consequences have resulted. While grain policies were ostensibly developed to benefit farmers, they have often ended up harming their interests.

With rates under the Crow regime held at 1899 levels, the railways began the period of sustained losses in grain hauling following World War II. As costs rose during the post war inflationary period, value was eroded, so much so that within the decade the railways were lurching towards financial ruin. As their balance sheets declined, so too did their capital investment in rail lines and rail cars. Railways, however, were not the only victims of a fixed rate. By not bearing the full transportation costs under the Crow rate, the co-operatives lacked any incentive to move grain through a modernized facility. Their elevator system, over-built and run-down, was frozen in time. The resulting inefficiencies left the co-operatives struggling. By the 1970s, the entire grain handling and transportation system was in collapse, "little different from that of the 1930s, when horses pulled grain to market" reflected MacInnes Runciman, president of United Grain Growers.

The palliative period (1972-1995) sought to address those deficiencies and is associated with massive federal subsidies and rate top-ups. To keep grain moving, the government of Canada subsidized freighting charges, repaired boxcars, rehabilitated, upgraded and maintained branch lines and purchased a new fleet of 13,500 hopper cars to replace the boxcars then used to transport grain. With market signals blocked by decades of over-regulation and a twenty-three year period of sustained government largesse, the co-operatives returned profits to their members in the form of dividends, leaving them financially weakened and vulnerable when Ottawa changed course.

It was not until the MRE of 2000—after more than one hundred and three years of Crow rates—that farmers, railways and grain companies were finally given the incentive to invest. Yet not only did the promise of investment ultimately prove illusory, it arrived too late for the financially weakened co-operatives. A series of mergers, beginning in the 1990s, had eroded farm-control over the grain handling system.

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The last two vestiges of farm control, the Canadian Wheat Board (CWB) and Viterra, formerly the Saskatchewan Wheat Pool, the kingpin prairie pool with roots dating back to the 1920s, ended during the Harper years. In 2012, the CWB was axed, rendering the bid for Viterra inevitable. The transaction was troubling to many, prompting interventions from the Government of Saskatchewan, the Western Canadian Wheat Growers and the Agricultural Producers Association of Saskatchewan, amongst others.

Viterra's 2012 corporate carve-up left Richardson and Glencore roughly equal players on the prairies, substantially increasing Richardson's inland and port presence. Under the transaction, Agrium, already the biggest U.S. retail seller of fertilizer, chemicals and seeds, acquired 210 Viterra stores (adding to its then 65 Canadian store inventory). Contingent on the divestiture of 7 retail stores and 9 anhydrous ammonia businesses, the Agrium Inc. portion of the deal was ultimately the subject of a 2013 Competition Bureau Consent Order.

Since 2012, the farmers' loss has been real and damaging. While the CWB lacked influence over the world price of grain, it disciplined the farmers' distribution, or handling costs. This it did by requiring the grain trade to bid for farmers' grain handling. With the CWB's shuttering in 2012, so went that discipline, a loss that has resulted in a role reversal says agricultural economist, Derek Brewin. Where the proprietary grain trade were formerly agent in the transaction, they have been elevated to principal. Today, the farmer is agent. Significant repercussions accompany the change.

Grain, incented by the MRE to flow through the grain companies' system, provides them with "unbreakable market power to channel grain supplies into their control", allowing two elevations and extraordinary margins. It discourages farmers from accessing the largest possible number of markets and competitive choices. The lack of any investment spur under the MRE has re-created conditions reminiscent of the deteriorating Crow era, leaving farmers exposed to the same vulnerabilities.

Many in the farm community have been blinded to these concerns, overwhelmed by the allure of reduced freight rates, says the report. Farmers should question whether they have witnessed greater returns under the MRE. Or has it allowed widened margins to a substantially strengthened grain trade, a matter addressed by Brewin in his 2016 report.

Finding a basis price increase in recent years where a drop should have occurred and collusive-like behaviour by grain handlers, Brewin claims that transportation rents were not passed back. "If you take too much away from farmers," he cautions, "they will let their assets depreciate and not invest in improved technology, things the supply chain will eventually need."

Farmers should also question whether the current supply chain's infrastructure, stalled under the MRE, could keep pace with the surge in economic growth predicted by The Conference Board of Canada in a 2016 report. Fuelled by Asian and European-bound exports across the agricultural sector, fully 90 per cent of the growth in agricultural products will originate in Saskatchewan and Alberta, resulting in a "critical" need to upgrade railway infrastructure, it found.

Today's farmers operate in a concentrated grain industry, absent the checks of the CWB and with deteriorating infrastructure. Their loss began over a century ago, with the Crow, where rates stood frozen for 97 years.

1. Fixed rate era (1897-1984): disintegration of the elevator system

The Crow's Nest Pass Agreement is a ten-page contract, executed between the CP and the federal government on September 6, 1897. In return for Ottawa financing about one-third the cost to build a new line through the Crow's Nest Pass, the CP agreed to forever freeze rates to Thunder Bay on some eastbound grain corridors. In 1925, Ottawa turned the contract into law and, over the years, dramatically changed its terms to include all elevator points, both railways, all ports and in 1961, extending it to include canola (formerly, rapeseed) and flaxseed when they became agricultural commodities. The changes resulted in huge railway losses.

While the Crow's fixed rate guaranteed farmers price stability, it brought about the near financial ruin of railways, then recouping about one-fifth their cost in moving grain. As a result, railways were unable to upgrade their system. The purchase of the new specialty cars then used to transport grain was beyond their means. Grain continued to move in boxcars, the fleet's workhorse, completely unsuitable to the transportation of grain.

Grain jammed in the boxcars' side-mounted doors, necessitating the construction of a retrofitted interior door. The "grain door" had to be broken open at destination to access the grain, "a tedious and wasteful process because every grain door was destroyed when the car was unloaded at the terminal elevator", reflected Runciman. Because each trip required the doorposts to be nailed, "some of the old boxcars got so there was nothing left to nail the darn things to", he added.

The grain handling industry was similarly dysfunctional. By not bearing the full cost of transporting grain, it too was without incentive to update. Between 1920 and 1970, about half the prairie elevators remained virtually unchanged: too small to take advantage of multiple car loadings, unable to accommodate the larger trucks preferred by farmers for hauling grain, and burdened with inefficiencies. The elevators were small and closely spaced, each at about 11 kilometres apart. As a result, their sidings were able to accommodate no more than a half-dozen boxcars. The boxcars arrived a few at a time rather than in the fifty or one hundred cars today. Too short to accommodate the semi-trailers then preferred to move grain to the elevators, the antiquated platform scales were not up to the basic task of weighing grain. A 1970study by the Grains Group, a federal advisory body, argued that the country's 5,000 prairie elevators should be replaced with twenty-five inland terminals.

The Crow's fixed rate, however, made rationalization of the grain handling and transportation system impossible. To move grain efficiently, the railways needed to abandon the low volume branch lines; the co-operatives needed a reduction in the number of surplus elevators. Both required a new hopper car fleet and upgraded sidings to accommodate multiple car loadings. Yet absent each financing the upgrades on its own, the Crow's fixed rate lacked the needed spur or incentive for change. A prairie stalemate occurred. "Almost inoperative" according to Runciman, the grain handling system stagnated instead.

The system's shortcomings were driven home in the 1960s when major grain sales to Russia and China were lost as a direct result. Termed a crisis, the federal government initiated a series of studies. By 1972, with double-digit inflation ramping up costs, the railways were on the brink of ruin and could no longer make up the shortfall needed to keep grain moving. With rail cars not moving, Ottawa stepped in, beginning a series of massive federal subsidies and infrastructure purchases, including a full fleet of 13,500 grain cars. Subsidies continued until they were finally eliminated with the *Budget Implementation Act* (1995).

With market signals blocked for years, not only did the co-operatives face capacity constraints and eroding balance sheets, profits were returned to members as patronage dividends, rather than retained for future investment in modern facilities. Unable to finance the new builds required in the 1970s, the strength of the farm-run co-operative movement eroded. The weakening of the co-operatives marked the beginning of the end of the epic seventy-year struggle of farmers against the macro forces of railways, a proprietary grain trade and the Winnipeg Exchange.

2. Subsidized rates (1972-1995): the co-operatives lose strength

Not only did subsidization flagrantly breach WTO norms, it proved enormously costly. Initiated at a time when federal revenues were $34 billion, the subsidies, spiking on and off at a billion dollars, were a major contributor to Canada's current debt load. The last subsidy payment, of $800 million in 1994, was followed by a federal cash payout to grain farmers of $1.6 billion in the 1995 *Budget Implementation Act.* This brought the subsidization era to a close.

Over those years, it became clear that commercial freighting and elevator consolidation were the answer. In farm-run organizations, however, the fight for the Crow and rate regulation remained heated. While the Crow's Nest Pass agreement of 1897 had helped advance railway expansion, over the years, it became "re-interpreted as a social contract", or trust, between Ottawa and prairie farmers, who benefitted from the artificially low rate. Prime Minister Pierre Trudeau's Transport Minister, Jean-Luc Pépin was tasked with finding a replacement for the Crow.

In 1967, Canada had deregulated rates, on all commodities except grain. Faced with a similar over-regulated and near-bankrupt railway industry, the United States followed suit in 1980, deregulating all commodity groups. That same year, Pépin was arguing at the Western Agricultural Conference that absent sound railway funding, farmers' own self-interest was at stake.

> You are damaging your own self-interest as producers of grain by allowing the situation to continue. If no change takes place, you are going to suffer for it.

The argument gained traction. A policy that split future rail increases amongst government, railways and farmers was endorsed by the Pool delegates and later reflected in the 1984 *Western Grain Transportation Act.* Change, however, may have arrived too late for the co-operatives.

By 1988, the four large co-operatives: United Grain Growers (formed in 1906) and operating across the three prairie provinces, and the three Pools: Saskatchewan Wheat Pool (SWP), Alberta Wheat Pool (AWP) and Manitoba Pool Elevators (MPE), all formed in the early 1920s, were said to be "on the back side of a power curve", an aviation metaphor describing an inability to lift. They were facing financial ruin.

A report by Touche Ross, an international accounting firm, outlined the dire financial condition of the four, laying blame on an "out-dated system" where financial health "had been impaired by the cost of the widely dispersed and inefficient elevator system."

Within two years, construction of modern grain facilities, capable of loading 100-car unit trains to capture the anticipated savings in a market-based system, began. Over the 1990s, the four co-operatives spent one billion dollars on modern inland terminals. The capital came from different sources: UGG and SWP became publicly traded; AWP and MPE's capital came from equity markets. The capital outlay, however, was unable to support the debt of these latter two.
To tackle declining returns, AWP and MPE mounted a hostile take-over bid of UGG. It ultimately failed. In 1998, the two combined to form Agricore Co-Operative Limited. Their ROA and EVA, being indicators of a firm's profit and worth, continued on a downhill trajectory. Within three years, AWP and MPE merged with UGG, creating Agricore United in 2001.

Whether the last Canadian co-operative giant, SWP, born "from the clash of strong wills and strong words among prairie hardened farmers who were determined to let nothing block their progress", now publically traded, could still call itself a policy champion for farmers was debatable. While the SWP and the CWB remained standing at the end of the mergers, the days were numbered for those last surviving vestiges of farm-controlled institutions. They would receive their final blow during the Harper years.

3. The MRE (2000-present): the promise of investment proves illusory

In December 1997, Willard Z. Estey, a former Supreme Court of Canada justice, was commissioned to review the grain handling system. Travelling the country extensively and meeting industry participants, his 1998 report found that the built-in constraints and inefficiencies of the grain handling system required a commercial, market-based answer.

Ottawa policy makers drafted regulation intended to replicate the market, claiming new regulation would send "clearer market signals" and spur needed investment. This new regime, it claimed, would be temporary; a five-year bridge while it co-ordinated its grain legislation. Neither claim came about. While a commercial system may have saved the last two remaining farm-controlled institutions, the MRE likely sealed their demise.

The 2000 MRE only applies to export grain. Other grain industry participants, such as flourmills, are treated differently from exporters. Thus, for example, a miller in Port Moody British Columbia will suffer a higher freight rate than if that same grain were switched out to a boat in Vancouver. Second, only the exporter receives the Government of Canada grain cars free of charge; the Ontario miller will pay, directly or indirectly, the Government of Canada Alternate Use Fee for the use of those very cars.

These were likely the intended, albeit curious, consequences of the MRE. Others, especially whether the MRE would spur investment, were likely unforeseen. The initial enthusiasm for the regime quickly evaporated, as the investment incentive it heralded proved paltry and subject to regulatory hoops.

The part of the MRE formula dealing with recovery of capital, the so-called volume-related composite price index, only allows a discount-to-market capital return, rather than replacement value. Further, according to expert testimony before the Canadian Transportation Agency (CTA), the cost of capital (at 6-7%) does not even come close to a conventional rate of return on invested capital. A "nonsensical position given the risk assumed by equity capital providers," the 2011

filing by Analysis Group, Inc. said. In the U.S., the capital cost allowance on rail cars is 30 per cent, reported the CTA decision.

Further, carriers are being compelled to donate their capital—a clear violation of WTO rules. The CN and the CP are unique in that they have major operations in the U.S. where they capitalize cars based on market-based rates charged to shippers. They are fully aware of the capital donation required of them under the VRCPI.

The lack of investment in a replacement fleet of grain cars, attributable to this part of the legislation, imperils supply chain efficiency. The current government of Canada cars are, according to Camas Consulting, "old, small cubic cars, not well-suited for contemporary grain shipping requirements." Due to the past-retirement age of much of the fleet, bad car orders, being cars that are under repair, have jumped, almost tripling in recent years. In August 2016, trade journal, *The Western Producer* remarked on the "dramatic increase" in bad car orders over the previous winter (at 100 in December 2014, compared to 800 in December 2015). When interviewed, a Transport Canada official confirmed that the increase was in fact due to the age of the cars.

Serious problems flow from the unserviceable fleet. The differences in car sizes, lack of upgrades and uniformity are weakening Canada's grain supply efficiency, especially at ports, by slowing the load and discharge cadences on bulk shipments, in some cases by 50 per cent or more as compared to modern uniform car fleets, such as potash.

Intended to benefit farmers, the MRE has hurt them in other ways.

By mandating the "zones" where grain must travel to access the discount, competitive shipping choices, such as U.S. destinations and movements east of Thunder Bay, are discouraged. Not only does this inhibit competitive choices, it also prevents broader market access that could be achieved through alternative transportation corridors.

For example, an elevator at Moose Jaw, Saskatchewan provides a farmer access to three CP corridors: east to Thunder Bay; west to Vancouver or south to Minneapolis/Chicago. Leaving aside the trade breach, why on a per tonne basis are movements to Thunder Bay/Vancouver favoured as opposed to the CP's large base of millers in Minnesota?

Second, by forcing export grain through the "zone", three line companies have benefited with double elevations, providing them with an "extraordinary margin above that seen in the US PNW just 250 miles south and allows pricing into Pacific markets significantly below US pricing", according to the report.

A truly commercial system of grain freighting would encourage greater infrastructure investment. Financial incentives have encouraged U.S. ports to invest to attract business. Loop tracks, which make it possible to unload goods from a moving train, tripling unloading times, are increasingly common in U.S. Pacific Northwest ports, impacting decision-making and the potential for growth.

Vancouver's port, where construction of its sole loop track is underway, handles 50 per cent of Saskatchewan's grain exports. Unless the rail-port supply chains improve, the growth in agricultural products, with a forecasted two new trains of agricultural products moving through

Vancouver per day, will prove challenging, says the Conference Board of Canada in its March 2016 report: *Building for Growth: Trade, Rail and Related, Infrastructure.*

The MRE is replete with WTO breaches. Not only do Canadian exporters get free cars, the MRE rates are discounted compared to the railway company average for other commodities. These concessions to export grain shippers— of free cars and cheap rates—mean they are effectively exempt from paying their fair share towards upgrading equipment and networks. In this way, the MRE "acts like an export tax on all non-agricultural products," says Barry Prentice, a professor in the department of Supply Management at the University of Manitoba. The steep Canadian discount (at 70 per cent higher in U.S. terms) amounts to a subsidy and allows Canadian exporters to price grain in world markets below real costs.

When one class of shipper is forced to pay a higher rate than another it is the equivalent of "pooling", a matter the WTO deemed a fundamental trade issue with the CWB. The ability to "tax" one class of shippers to enhance the export powers of another class of shippers is a specific WTO breach.

One of the provisions of the MRE amounts to a tacit admission that the rates are distortive. The reason marine transport of export grain to California ports, for example, is specifically prohibited, is that it would spark a direct trade conflict. If Canada admits that its rail and other export enhancement structures are trade distorting for shipment to California, it asks, why are they not distortive for shipment to Yokohama, Shanghai or Manila? Why is a U.S. miller at a disadvantage of some 25 per cent compared to an off-shore miller receiving Canadian grain via Vancouver?

These deficiencies were all known before the MRE came into effect. The Canada-U.S. Joint Commission on Grains was established in September 1994 for the very purpose of ensuring that the trade distorting elements of the respective systems were alleviated. Among the commission recommendations were deregulation of the rail system and resolution of the GOC grain car fleet ownership in a non-trade distorting manner.

David Emerson's extensive 2016 Transportation Review reinforced the point. In his section on the transport of grain, he calls for the eventual elimination of the MRE due to its "market-distorting effects" and to "harmonize Canada's grain pricing and regulatory regimes with those in the United States."

CONCLUSION

Perhaps the first official recognition of the relationship between railways and the grain industry came from Willard Z. Estey, Q.C., the former Supreme Court of Canada justice tasked with finding an answer to the problems with Canada's grain handling and transportation system. "The railways and the farmers cannot do without each other. Mutual survival dictates that efficiencies and economies must be shared between the two," he wrote. The very viability of the grain industry, his 1998 report said, is cemented to a healthy railway.

Without commercial discipline, however, the shared end-goal of shippers and railways of getting grain to market in a timely and cost effective way remains elusive. Without investment, inefficiencies reminiscent of those during the Crow era have developed. While boxcar doors split apart at destination are no longer being used to move grain, today's fleet is "duct-taped together and on its last legs", according to Steve Pratte, Policy Manager with the Canadian Canola

Growers Association, a national producers group with offices in Ottawa and Winnipeg. Six thousand new hopper cars are immediately required to meet export demand, claims Bloomberg Business News.

But a stalemate has set in, one not dissimilar to that in the Crow era. Railways, grain companies and the federal government are eachwaiting for "someone to make the first move", says Alberta Pulse Growers past chair, Allison Ammeter. For now, none seem willing to make necessary investments.

Yet a forecasted surge in agricultural exports reported by the Conference Board of Canada could create delivery problems. Rail carloadings are expected to increase from 200 million in 2011 to 3.2 million by 2025. Half of the growth will originate in Alberta and Saskatchewan.

Other troubling trends are occurring. Russia is positioned to take a leadership role in the world wheat trade, a ranking it last held when Czars ruled. Noting Russia has displaced the U.S. in wheat exports and was expected to top the E.U for the top spot, Bloomberg Business News reported that Russian wheat has crowded out the U.S. from exports to Egypt, the world's biggest buyer and is gaining a foothold in Nigeria, Bangladesh and Indonesia. While Russia's grain exports are now the equivalent of about one-third of its oil exports, Ukraine has similarly ratcheted up its wheat exports, holding 12 per cent of world exports, compared to 4.3 per cent in 2007.

In Canada, there is growing acceptance that the lack of capacity is unacceptable and that major investments and rationalization in both the grain and rail industry are needed to meet these trends. While Canada's past strategy has been to let the market decide, a more aggressive approach is needed. First, for the supply chain to work in a timely and efficient manner, railway investment and rationalization of the grain industry must be addressed. The continued value of rate regulation on one commodity, grain, needs a dispassionate debate.

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