A COMPARISON OF THE RAIL REGULATORY REGIMES IN CANADA AND THE UNITED STATES

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Introduction

This paper examines elements of the current rail legislative authority provided by the *Canada Transportation Act* (CTA) to the Canadian regulator, the Canadian Transportation Agency (Agency), in comparison with the legislative authority provided by *Title 49 of the United States Code* (Title 49) to the United States regulator, the Surface Transportation Board (Board). The analysis presented here focuses on the economic aspects of current legislation and is not meant to provide legal interpretations of the CTA or Title 49. As such, this paper is not intended to assess the effectiveness of the different provisions in the legislative instruments, but merely to identify the tools legislated by each country to facilitate a freer market and to increase competitive services.

To allow for an appreciation of the reasons for two distinct legislative regimes aiming for similar objectives, the paper first touches upon the geography, regulatory policy and regulatory bodies in Canada and the United States. Then, the paper present an overview of the tools provided by the legislative provisions which range from setting competitive access, rates and tariff provisions, to adjudicating and resolving disputes between the railway companies and rail users.

Rail Industry

The rail infrastructure in both Canada and the United States is characterized by large distances and low density, discrete population centers, which play a defining role in the operations of the North American rail industry. In 2007, Canadian railways operated over 47,800 kilometres of track[1], while railways in the United States operated over approximately 225,500 kilometres of track[2]. The large distances necessitated significant capital investments to build the rail lines and provide economies of scale to railroads over these distances.

These economies of scale raise concerns of possible anti-competitive and economically inefficient behaviour. Historically, in Canada and the United States, these issues led to government subsidization for the initial construction of railways and efforts to prevent the abuse of market power by the railroads. Although the countries are similar in size geographically, and both countries have discrete population centres separated by vast distances, the differences appear even more stark in Canada. The combination of geography and the transcontinental infrastructure of Canadian National Railway and Canada Pacific Railway lead to the companies facing greater challenges than their counterparts in the more-densely-populated United States, but also possessing greater market power. This makes the regulatory challenge more difficult in Canada.

Rail Transportation Policy

Transportation legislation with regards to railways in both Canada and the United States attempts to strike a balance between shippers' and rail carriers' interests. However, the legislation in each country is a result of contextual circumstances and changes within the different jurisdictions. The philosophy underpinning Canada's national transportation policy is set out in section 5 of the CTA, which declares:

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[1] 2008 Railway Trends, p. 14, Railway Association of Canada, 2008.
[2] Overview of America's Freight Railroads, Association of American Railroads, September 2008.

> a competitive, economic and efficient national transportation system that meets the highest practicable safety and security standards and contributes to a sustainable environment and makes the best use of all modes of transportation at the lowest total cost is essential to serve the needs of its users, advance the well-being of Canadians and enable competitiveness and economic growth in both urban and rural areas throughout Canada.

The section then continues on to state that those objectives are most likely to be achieved when:

- competition and market forces are the prime agents in providing viable and effective transportation services for all modes;
- regulation and strategic public intervention are used to obtain outcomes that cannot be obtained by market forces without undue favour or disadvantage to any particular mode of transportation;
- rates and conditions do not constitute an undue obstacle to the movement of traffic.

The national transportation policy statement for the United States is similar in tone to the Canadian statement. Set out in Section 101 of *Title 49* of the U.S. Code, the summary statement declares that:

> national objectives of general welfare, economic growth and stability, and security of the United States require the development of transportation policies and programs that contribute to providing fast, safe, efficient, and convenient transportation at the lowest cost consistent with those and other national objectives.

The CTA created the Agency as an independent, quasi-judicial tribunal to make decisions on a wide range of economic matters involving federally regulated modes of transportation (air, rail, and marine) and to support the federal government's transportation policy. Modes of transportation which cross provincial or national boundaries, except for trucking, are federally regulated. [3]

To assist in achieving its mandate, the Agency divides its responsibilities broadly into the areas of economic regulation, dispute

[3] Mission, Mandate, Vision and Values, Canadian Transportation Agency Website, accessed December 16, 2008. http://www.cta-otc.gc.ca/about-nous/mission_e.html.

resolution, and accessibility. With regards to rail regulation, the Agency's major responsibilities include:

- resolving disputes between shippers and passenger service providers and rail carriers related to charges, rates and level of service; and,
- setting rates designed to ensure competitive access to rail transportation services.

Section 701 of Title 49 (49 U.S.C.,701) establishes the United States Surface Transportation Board (Board) as an independent regulatory agency, to serve as both an adjudicatory and a regulatory body. It is charged with "fundamental missions of resolving railroad rate and service disputes and reviewing proposed railroad mergers"[4].

Revenue Adequacy

Due to the significant fixed and sunk costs incurred in order to provide rail transportation services, it is generally accepted in Canada and the United States that the most viable option for maintaining a healthy industry is to allow the railways to practice demand-based differential (Ramsey) pricing, where some shippers pay more than others for the same services, depending on the elasticity of the shipper's demand for the service. Charging captive traffic a higher rate allows a carrier to reduce rates for more price-sensitive traffic, and thus keep that traffic and the contribution it provides to fixed costs.

This means that captive traffic is paying a lower price than would be available if the carrier lost the more sensitive traffic and they had to pay more to cover the carrier's fixed costs. Viewed the other way, it is absolutely critical for the carrier to have some traffic over which it has some pricing discretion, since it is this traffic and other "bottleneck" facilities such as tunnels, bridges, etc., that allow the carrier to earn enough revenues to cover its fixed costs. Regulatory

[4] About STB > Overview, US Surface Transportation Board Website, accessed December 17, 2008. http://www.stb.dot.gov/stb/about/overview.html.

actions designed to increase competitive access are mindful of this fact.

To this end, the US Congress directs the Board to:

> maintain and revise as necessary standards and procedures for establishing revenue levels for rail carriers that are adequate, under honest, economical, and efficient management, to cover total operating expenses, including depreciation and obsolescence, plus a reasonable and economic profit or return (or both) on capital employed in the business. (49 U.S.C., 10704(a)(2)).

Further, Congress charges the Board to make an adequate and continuing effort to assist rail carriers in attaining revenue levels prescribed as stated, and to annually determine which rail carriers are earning adequate revenues, (49 U.S.C., 10704(a)(3)). These established revenue levels are intended to provide carriers a flow of net income which takes into account a railway's costs for transportation, asset depreciation, cost of capital and debt, in order to ensure adequate investment in the United States railway system and payment of debt, and compensation for inflation for the mix of material and labour (49 U.S.C.,10704(a)(2)).

The responsibility of the Board to ensure that US rail carriers are revenue-adequate reflects one of the principal objectives of rail transportation policy in the United States, and this policy is also reflected in the restrictions in the legislation covering the Board's authority to hear rate complaints, as discussed below.

Rates and Tariffs

The legislation in both countries sets out two types of rates: Single Line Rates, involving only one railway company, and Joint Rates, when traffic needs to be moved over the routes of two or more companies.

Single Line Rates

Canadian legislation directs, in Section 117 of the CTA, that a railway company cannot charge a rate for any movement unless that rate is spelled out in a tariff which has been issued, published, and is

in effect as per the Act. Tariffs are not required to be filed with the Agency, they are only required to be published and either publicly displayed or available for inspection (subsection 117(3), CTA). Further, a freight tariff must be issued when requested by a shipper for the movement of traffic on a railway (section 118, CTA) and any increase in a posted tariff rate can only be made after 20 days' advance notice has been provided to shippers. Finally, tariff rates are the lawful rates of the railway company and must be charged until they expire or are superseded by a new tariff (subsection 119(2), CTA). This avoids price discrimination, and helps to ensure that shippers have a clear and transparent price on which to base their transportation decisions at their disposal, and leads to an efficient transportation network.

To allow carriers maximum flexibility in meeting the goal of revenue adequacy, U.S. carriers are allowed to set their own rates for whatever traffic they carry. U.S. legislation (49 U.S.C., 11101(a)) directs that upon the request of a shipper, a rail carrier is required to establish a rate for transportation requested by the shipper between any two points on the system of that rail carrier where traffic originates, terminates, or may be interchanged. The legislation adds that a rate established as stated shall apply to the shipper that makes the request, without regard to whether the rate established is for part of a through transportation route between an origin and a destination, whether the shipper has made arrangements for transportation over any other part of that through route, or whether the shipper currently has a contract with a rail carrier for any part of the rail traffic at issue, provided that the rate prescribed by the Board shall not apply to transportation covered by such a contract.

In the United States, publication of tariffs is usually not required. U.S. rail carriers are instead required to provide, on request, their rates and other service terms, either in writing or in electronic form (49 U.S.C., 11101(b)). As in Canada, a rail carrier in the United States is prohibited from increasing a common carrier rate or common carrier service term until 20 days after notice has been provided (49 U.S.C. , 11101(c)). In contrast to Canadian legislation, however, the requirement to supply such notice is limited to shippers who have

requested the affected rates or arranged with the carrier for a movement that is being provided at the affected rates, or have changed terms within the last 12 months.

An exception to the more liberal U.S. tariff publication requirements is with regard to the transportation of agricultural products (grain, grain products and fertilizer). In addition to complying with the common carrier rate rules in (49 U.S.C., 11101(b)), a rail carrier of agricultural products must publish, make available, and retain for public inspection its common carrier rates, schedules of rates, and other service terms, and any proposed and actual changes to such rates and service terms (49 U.S.C., 11101(d)).

Joint Rates

In Canada, a shipper who needs to move traffic from origin to destination over any route which, , is owned by more than one railway company, may request a joint tariff from the railway companies for that movement (section 121, CTA). This means, the railways must agree on a joint tariff, including the apportionment of the rate in the tariff, or must enter into a confidential contract to service the continuous route. In the case of a confidential contract covering the entire route, only the originating railway must publish the tariff as noted above. If the companies cannot come to an agreement or confidential contract, the Agency may, on the application of the shipper, set out the terms of an agreement which will specify the joint tariff and the apportionment of the tariff among the railway companies.

In the United States, Title 49 states that joint rates must be reasonable and must be made without unreasonable discrimination against a participating carrier (49 U.S.C., 10701). Furthermore, upon complaint, the Board has the authority to set out the distribution of joint rates if it determines that to be in the public interest. However, the Board is allowed to override agreements between carriers only when the pre-existing rates as agreed upon by the railway companies are seen to be unreasonably discriminatory, or unreasonably high (49 U.S.C., 10705).

Rate Disputes

Since one of the fundamental principles of rail transportation policy in both Canada and the United States is to allow market forces to dictate pricing and service decisions in the industry, it is important for regulatory interventions to be targeted to remedy only those situations where market forces clearly are deficient.

Rate Reasonableness Analysis

Not withstanding the need for carriers to earn adequate revenues through differential pricing, it is considered important to limit the power of a carrier to take advantage of its captive traffic and other bottleneck facilities by charging unreasonably high rates. Hence, the US Congress legislated a rate reasonableness analysis mechanism to determine whether the degree of differential pricing practised with respect to a specific traffic movement is, indeed, reasonable.

The Staggers Act (1980) allows only limited regulation of railroad rates, because of the major policy objective of ensuring that the railways earn adequate revenues. A shipper whose freight is transported under a rail tariff can apply to the Board for relief if it believes its carrier is charging an unreasonably high rate for carriage of its goods.

In addition, the Board can consider the reasonableness of a challenged rate only if the carrier has market dominance over the traffic involved, defined as an absence of effective competition from other carriers or transport modes. (49 U.S.C., 10701(c)-(d), 10707(a)). The Board has to determine whether there are intermodal or intramodal alternatives available to the shipper that are sufficiently competitive, alone or in combination, to bring market discipline to the railway's pricing.

Next, the statute indicates that the revenue produced by the movement must be 180 percent or more of the variable cost to the carrier of providing the service to identify potential market dominance (49 U.S.C. ,10707(d)(1)(A)). The 180% revenue/variable cost demarcation line appears to be a purely jurisdictional threshold

established by the Congress to limit the rate complaint cases the Board is permitted to entertain. The legislation specifically cautions that a finding that the rate on a movement has revenue greater than 180% of variable cost does not establish a presumption that (a) the carrier has market dominance, or (b) the rate exceeds or does not exceed a reasonable maximum. The Board suggests the demarcation line was drawn such that, while all rates greater than 180% of variable cost is not captive, all captive traffic would be in the greater than 180% group. That is, the line is set to define all potentially captive traffic.

If the Board determines that the carrier has dominance in the relevant market, it must next determine if the rate in question is, indeed, reasonable. (49 U.S.C.,10701(d)(1)). Theoretically, if the current carrier is fully efficient and realizes economies of scale, scope, and density, its existing configuration will yield the lowest overall cost of service. If not, then the shipper is unreasonably bearing the cost of the carrier's operational and plant inefficiencies. Therefore, the Board constructs a "stand-alone cost" model for a hypothetical rail carrier based on a plant size and traffic base that are designed to maximize the efficiencies and production economies for the traffic under dispute. The Board then compares the hypothetical standalone carrier's cost, including an adequate return on capital, with the rate under complaint. Rates higher than standalone costs are deemed unreasonable, (49 U.S.C., 10707(c)), and the Board may then prescribe the maximum lawful rate (49 U.S.C., 10704(a)(1)), and order the railroad to pay reparations to the complainant (49 U.S.C., 11704(b)). The Board has decided a number of rate complaints using the stand-alone cost (SAC) analysis.

Though it is the only rigorous economic test for excessive rates in a Ramsey pricing regime, the SAC analysis of rate reasonableness is extremely expensive and not feasible for scattered or intermittent traffic or for relatively smaller amounts of money. Accordingly, the Board uses three revenue-variable cost benchmark figures as starting points for a case-by-case reasonableness analysis.

In addition, a shipper filing such a rate complaint, within 10 days of filing the formal complaint with the Board, is required to engage in-non-binding mediation under the patronage of the Board to attempt to resolve the dispute with the railroad. The dispute is adjudicated by the Board when mediation is unsuccessful in resolving the dispute.

Final Offer Arbitration

Final offer arbitration (FOA) is the main mechanism prescribed in the CTA for resolving rate disputes in Canada. FOA is not available in the United States

On receiving a shipper's written complaint to the Agency regarding excessive rates charged by its carrier, the Agency informs the carrier of its intent to pursue a FOA process to resolve the dispute and starts the administrative process. FOA is not a proceeding before the Agency, but the Agency has the role of administering and facilitating the process, and provides a list of specialized arbitrators to the parties.

Both the shipper and carrier submit their final offers of what they consider the appropriate rate for the rail service. The arbitrator considers all information provided, and unless the parties agree otherwise, also considers if the shipper has access to other competitive means of transportation for the freight movement in question. At the end of the FOA process the arbitrator chooses one of the final rates offered by both parties after taking into consideration and analysis all the evidence provided by both parties. The arbitrator's decision is binding and is enforced as a decision of the Agency.

FOA is available only for settlement of rate disputes between a shipper or a group of shippers and a railway company related to the carriage of goods, or between a passenger rail service and a rail carrier with respect to the rate the carrier is charging for the provision of services. Public passenger rail providers such as government and transit authorities cannot apply for FOA.

A group of shippers can jointly submit a FOA request to the Agency on a joint offer that is common to all shippers. However, the group of

shippers interested in the FOA process must not submit any related matter to the Agency before a satisfactory attempt to mediate the matter.

Direct Adjudication

The Agency may establish new charges upon a complaint with respect to the reasonableness of charges and associated terms and conditions for the movement of traffic, or for the provision of incidental services found in a tariff that applies to more than one shipper (subsection 120.1(1), CTA). Such charges can be related to demurrage services, fuel surcharges, or car maintenance charge. This tariff cannot be a disputed rate upon renewal of confidential contracts between a shipper and a carrier, or a disputed tariff applicable to one carrier, as the tariff must be applicable to more than one shipper. Such cases can also be resolved by mediation under section 36.1 of the CTA or final offer arbitration.

In deciding whether a charge or associated terms and conditions are unreasonable, the Agency must take into account the charge's objective, the industry practice, the existence of competitive alternatives to the provision of an incidental service or any other matter (subsection 120.1(9), CTA). The charges or associated terms and conditions ordered by the agency must be fair and reasonable to both shippers and carriers.

Public Passenger Rail Carriers

In both Canada and the United States, public passenger service providers are expected to negotiate the terms of use of the railway companies' railway, land, facilities and equipment directly with the railway companies, with both regulators offering mediation. Should the parties be unable to agree to terms, the Board or the Agency are empowered in their respective jurisdictions to decide the disputes for both commuter rail and passenger rail providers.

A public passenger service provider may, after reasonable efforts to agree on service conditions and appropriate compensation, apply to the Agency to decide the matter (Section 152.1). When prescribing the amount to be paid by the public passenger service provider to the

railway company for the use of its land, equipment or facilities, the Agency is required to consider several factors, including the variable costs incurred by the railway company, the cost of capital, the cost of improvements to the railway company's land, equipment or facilities used by the public passenger service provider, a reasonable contribution towards the railway company's constant costs, and the value of any benefits that would accrue to the railway company from any investment made by the public passenger service provider. In addition, the Act allows for compensation of any expenses incurred by the railway to avoid congestion and undue delay on its tracks.

Similarly, in the United States, the Board is empowered to order that the facilities be made available to Amtrak, and to prescribe reasonable compensation for Amtrak's use of the facilities and services provided. When prescribing reasonable compensation, the Board is required to take into consideration the quality of service when determining the extent to which the amount of compensation shall be greater than the incremental cost of Amtrak's use of the facilities and services provided. Amtrak's right to use the facilities or have the services provided is conditioned on payment of the compensation.

Competitive Access

Canadian legislation attempts to use indirect remedies to mitigate market failure, in the form of competitive access provisions which serve as a surrogate for direct rail competition by addressing perceived imbalances in the bargaining positions between shippers and railway companies, in circumstances where competition and market forces are too weak to perform that function. The three main competitive access provisions are interswitching, competitive line rates, and running rights.

Interswitching

Section 127 provides that where a shipper has access to the line and facilities of only one railway company at the origin or destination of its traffic, but is located within a 30 km radius of an interchange

between its railway company's line and another railway company, the shipper can apply to the Agency to have its traffic transferred by its railway company to the second railway company for the rest of the movement. This transfer of freight from one railway company to another, called interswitching, has been a widely used feature of the railway environment in Canada since it was introduced at the beginning of the 20th century. Originally introduced as a measure to avoid congestive overbuilding of railway lines, the scope of the provision has been significantly extended under current legislation in order to provide competitive access for otherwise captive shippers.

The Agency determines the rate one railway company must pay another for interswitching the shipper's traffic, based on the variable costs incurred by the interswitching railway for moving the traffic to and from the interchange, plus an appropriate contribution to its fixed costs. The Agency currently publishes uniform interswitching rates across Canada covering various car size ranges and various distances to the interchange.

The closest equivalent to interswitching in the United States legislation is reciprocal switching (49 U.S.C., 11102). Upon request from a shipper, the Board may require rail carriers to enter into reciprocal switching agreements when it finds such agreements to be practicable and in the public interest, or necessary to provide competitive rail service. If the rail carriers cannot agree upon conditions and compensation, the Board may establish them (49 U.S.C., 11102(c)).

However, viewing its mandate directed to correcting abuses and not restructuring the railroad industry, the Board will not intervene to order reciprocal switching unless it is in the public interest and two conditions are met:

(i) whether the railroad has used its market power to extract unreasonable terms on through movements; or
(ii) whether the railroad has, because of its monopoly position, shown a disregard for the shipper's needs by providing inadequate service.

Competitive Line Rates

Where a shipper has access to the line and facilities of only one railway company at the origin or destination of its traffic, and uses a continuous route operated by more than one railway company, but **is located outside a 30 km radius of the interchange** where its railway company's line connects with the line of the other railway company, the shipper can apply to the Agency to have its traffic transferred by its local railway company to the second railway company for the rest of the movement. The rate to be paid by the second railway company to the local railway company for moving the shipper's traffic to the interchange is called a Competitive Line Rate (CLR).

Upon complaint, the Agency may establish the rate using a strict formula contained in the legislation. The Agency is also empowered to establish the route for the movement, the interchange point, and the service conditions to be fulfilled by the local carrier.

Running Rights

In Canada, a railway under federal jurisdiction can apply to the Agency for the right to use the tracks, terminals, stations and right-of-way, and to run and operate its trains over and on any portion of the railway of another railway company (section 138, CTA). The Agency may grant the right and may make any order and impose any conditions on either railway company respecting the exercise or restriction of the rights as appear just or desirable to the Agency, having regard to the public interest. The railway company granted running rights must pay compensation to the host railway company for the right granted and, if the parties do not agree on the amount of the compensation, the Agency may, by order, fix the amount to be paid.

The United States has a similar legislative provision in (49 U.S.C., 11102), which allows the Board to grant terminal running rights. The Board may allow the terminal facilities owned by one carrier, which may include main-line tracks for a reasonable distance, to be used by another carrier, if the Board finds it to be practicable and in the public interest, and would not substantially impair the ability of the owning

carrier to use the facilities to handle its own business. If the carriers cannot themselves agree upon the terms and compensation, the Board is empowered to set them.

Joint Track Usage
Canadian legislation contains another provision designed to increase the efficiency of rail carrier movements, but gives the authority under the provision to the Governor in Council (GiC). The GiC may, on the application of a railway company, a municipal government or any other interested person, or on its own initiative, and after any investigation that the it considers necessary, ask two or more railway companies to consider the joint or common use of a right-of-way, if it is of the opinion that its joint or common use may improve the efficiency and effectiveness of rail transport and would not unduly impair the commercial interests of the companies (Section 139, CTA). The GiC may order joint track usage if it would not unduly impair the commercial interests of the companies. If the companies do not agree on the amount of compensation to be paid in respect of the joint or common use of the right-of-way and any related work, the GiC may also, by order, fix the amount of that compensation. There is no equivalent provision in U.S. legislation.

Conclusion

Both Canada and the United States follow a market-based transportation policy aiming to maintain a competitive and healthy rail industry. Following this policy, the regulatory bodies in both countries prescribe in essence similar provisions for the setting of rates and offer similar dispute resolution mechanisms. Both encourage alternative dispute resolution mechanisms such as mediation or arbitration over direct adjudication. To some extent, the legislative effort to encourage both intra- and inter-modal competition in transportation service has been less successful in Canada than in the United States due in part to Canadian geography, with smaller communities separated by much larges distances. Perhaps as a result, Canada has more provisions than the United States to promote competitive access.