

Reply to the Attention of François E.J. Tougas
Direct Line 604.691.7425
Direct Fax 604.893.2359
Email Address francois.tougas@mcmillan.ca
Date January 18, 2021

BY EMAIL TO: ferroviaire-rail@otc-cta.gc.ca

Canadian Transportation Agency
15 Eddy St
Gatineau, Québec
J8X 4B3

Re: Agency Consultation on Cost of Capital Rates – Response to Initial Submissions

This letter is in response to the initial submissions Canadian National Railway and Canadian Pacific Railway. To the extent required here, the capitalized terms used here refer to those used in our initial submissions of November 25, 2020.

We have appended a report from Dr. Larry Gould, which highlights the differences between his recommendations of November 25, 2020, and the recommendations contained in CN's and CP's submissions of the same date, as well as his comments thereto.

We look forward to receiving the further submissions of other stakeholders and participants in this Agency Consultation, particularly those of CN and CP, and to the Agency's further communications and determinations in connection therewith.

Please do not hesitate to contact us if we can be of further assistance in the Consultation.

Yours truly,



François Tougas

cc: client

// Attachments: Gould Report (January 18, 2021)

SCHEDULE "A"

Gould Report (January 18, 2021)

BEFORE THE CANADIAN TRANSPORTATION AGENCY

IN THE MATTER OF THE CONSULTATION REGARDING THE METHODOLOGY
TO DETERMINE THE NET RAILWAY INVESTMENT AND CAPITAL
STRUCTURE FOR THE CALCULATION OF COST OF CAPITAL RATES

RESPONSE TO SUBMISSIONS
ON THE METHODOLOGY TO DETERMINE THE
CALCULATION OF NET RAILWAY INVESTMENT
AND CAPITAL STRUCTURE

REPORT

Prepared by:

LAWRENCE I. GOULD

Lawrence Gould

January 18, 2021

I. INTRODUCTION

The Canadian Transportation Agency (Agency) has initiated a consultative review of its methodology for determining the net railway investment and capital structure for the calculation of cost of capital rates (the “Consultation”). I was asked by McMillan LLP to provide my independent judgment and opinion to the Agency on the submissions provided by Canadian National Railway Company (CN) and Canadian Pacific Railway Company (CP) pertaining to the Agency’s net railway investment and capital structure methodology in the Consultation.

I am Senior Scholar at the Asper Business School, University of Manitoba. Previously I have been Head, Department of Accounting and Finance at the University of Manitoba and Chairman, Finance and Business Economics at McMaster University.

I received the Bachelor of Science Degree in Economics from the Wharton School of Finance and Commerce, University of Pennsylvania in 1966. I completed the Master of Business Administration Degree in Finance from New York University in 1968 and the Doctor of Philosophy Degree in Finance from the University of Toronto in 1975.

During the last 40 years I have been employed as a consultant in a number of cases that posed a wide range of problems in applying financial theory to the determination of the cost of capital and valuation. I have testified on financial matters before the Canadian Transportation Agency, the Canadian Radio-Television and Telecommunications Commission, the Canadian Human Rights Tribunal, the Public Utilities Board of Manitoba, the New Brunswick Board of Commissioners of Public Utilities, the Newfoundland Board of Commissioners of Public Utilities, the Nova Scotia Utility and Review Board, the New Mexico Public Service Commission and the Federal Communications Commission.

I have also been engaged in academic research to extend the theory of the cost of capital. Among the subjects of this research have been the effects of income taxation on the cost of capital, the impact of growth on the cost of capital, the impact of inflation on the cost of capital, estimating the cost of capital for a non-traded division of a company and the use of the capital asset pricing model in estimating the cost of capital. I have published articles on the cost of capital and related problems in finance in the Journal of Finance, Financial Management, the Journal of Portfolio Management, the Journal of Accounting, Auditing and Finance, the Canadian Tax Journal and elsewhere.

II. STATEMENT OF THE PROBLEM

The Agency's staff produced a discussion paper that outlined certain issues about the Agency's methodology to determine net rail investment and capital structure for the calculation of cost of capital rates that should be considered.¹ These issues were in the form of questions on the working capital allowance component of net railway investment and capital structure. In response I provided my opinion on the Agency's existing methodology and commented on the issues raised in the Discussion Paper.²

In addition to the submission by McMillan LLP, submissions were made by the Canadian National Railway and the Canadian Pacific Railway. The process established by the Agency provides the opportunity for any party who made a submission to file a response to the initial submissions made by the other parties.³

In reviewing these submissions, it became apparent that there were very important differences between my recommendations and the recommendations contained in the submissions of the Canadian National Railway (CN) and the Canadian Pacific Railway (CP). The purpose of this report is to provide comment on the submissions concerning the issues raised in the Discussion Paper in order to assist the Agency in understanding the differences in the recommended methodology to determine net railway investment and capital structure for the calculation of cost of capital rates.

¹ Canadian Transportation Agency, Discussion Paper on the Methodology to Determine Net Railway Investment and Capital Structure for the Calculation of Cost of Capital Rates, September 25, 2020 [Discussion Paper].

² My opinion on these issues is contained in the McMillan LLP submission on behalf of Teck, the Western Grain Elevator Association, the Canadian Canola Growers Association, and the Mining Association of Canada, "Issues in the Calculation of Net Railway Investment and Capital Structure," November 25, 2020.

³ Discussion Paper, page 8.

III. ISSUES RAISED IN THE SUBMISSIONS

Instead of commenting separately on each submission, I have organized my response by the issues where there was a substantial difference in the conclusions or recommendations. As explained in the previous section, CN's and CP's recommendations differ greatly from my analysis and recommendations, so I will respond specifically to those submissions. In addition to the issues raised in the Discussion Paper, I will also respond to other issues raised by CN's and CP's submissions.

Issue 1: Should a negative working capital be allowed in the calculation of net rail investment?

Q.1 Should the cost of capital reflect the economic reality of the railway company at the time it is calculated, regardless of whether it is positive or negative? Please provide a rationale for your response.

In its submission, CN argues that a railway company cannot have a negative working capital as an input to the determination of its capital structure.⁴ CN maintains that a negative accounting working capital does not reflect a railway company's economic reality and is not an accurate estimate for regulatory purposes:

“CN's negative accounting working capital occurs on the most part because of an accounting election to present continuously rolling commercial paper as current liabilities. Accounting rules allow the presentation of such commercial paper as a long-term debt (more on this later), and if CN had elected to use this long-term presentation alternative, CN would have a more positive accounting working capital. Without any change in the day-to-day operations needs, changes in CN's participation and accounting methodology for its commercial paper operations would yield very different results.”⁵

⁴ Consultation on the Methodology to Determine Net Rail Investment and Capital Structure for the Calculation of Cost of Capital Rates, CN's Submission, November 25, 2020 [CN's Submission], page 4.

⁵ CN's Submission, page 3.

The current methodology for determining the working capital allowance was decided by the Agency in 2017 after a consultation, which included CN's and CP's participation.⁶ The Agency acknowledged that a properly conceived and executed lead-lag study would be considered to result in the most accurate estimate of the amount of the working capital requirements. However, there were concerns raised by CN and CP about the potential costs to the railway companies of conducting extensive and repeated lead-lag studies, and the Agency wanted to adopt a methodology that would allow working capital allowances to reflect current operations without imposing an undue burden on the railway companies. The Determination noted:

“CN proposed that the classical accounting definition of working capital, which is current assets less current liabilities, represents an acceptable measure of the investor-financed cash and materials and supplies required for the day-to-day operations of the railway companies, and should be used to determine the amount of the working capital allowance.”⁷

In effect, the current methodology is based on CN's proposal, modified only by the way in which averaging is done. In this modification, the annual working capital allowance is estimated as an average of 12 monthly estimates of the requirements, where each monthly estimate is determined as the average of the opening and closing balances of current assets for the month, less the average of the opening and closing balances of current liabilities for the month.

⁶ Canadian Transportation Agency, Determination of the Methodology to be Used by Federally-Regulated Railway Companies to Determine the Working Capital Amounts and Capital Structure for Regulatory Purposes, December 5, 2017.

⁷ Ibid, page 12.

Companies can vary their working capital policies and their financing policies, affecting the calculated amount of working capital included in net railway investment as determined by the current methodology. However, as I have shown in my submission, the WACC cannot be determined independently from the determination of the rate base.⁸ For example, if CN substitutes long-term debt for commercial paper, the calculated amount of working capital would increase, which would increase net railway investment. Simultaneously, long-term debt would increase, which would decrease the WACC. However, whether the calculated amount of working capital is positive or negative may be important for managerial or investment decisions, it is not relevant for the Agency's determination of the WACC or the calculation of net railway investment.

⁸ Gould, Lawrence I., Issues in the Calculation of Net Railway Investment and Capital Structure, November 25, 2020 [Submission], pp. 5-10.

Issue 2: Should commercial paper be included in the calculation of working capital?

Q.2 Although commercial paper, by definition, is a short-term financial instrument, should commercial paper that is routinely rolled over be treated as a current liability or as long-term debt? Please provide a rationale for your response.

CN argues that although its commercial paper is short-term in duration, it is routinely rolled over so that in substance it looks and behaves as long-term financing. Therefore, CN maintains that commercial paper should be considered as long-term debt:

“Therefore, as long as CN has the intent to refinance the short-term obligation on a long-term basis – which is clearly demonstrated by its history of refinancing – and its ability to refinance is supported by a backstop credit facility, short-term obligations such as commercial paper and the current portion of long-term debt can be classified as LTD which would therefore be excluded from the working capital calculation.”⁹

In support of this argument CN cites guidance within U.S. GAAP:

“U.S. GAAP allow the classification of certain short-term instruments as long-term debt (LTD) under certain conditions, depending on a company’s demonstration of intent and ability to refinance such instruments on a long-term basis, in order to avoid the working capital problem explained above.”¹⁰

and

“Until 2009, CN used to include its commercial paper in LTD. For example, in its 2009 audited annual report, CN stated in its financial notes ‘Commercial paper debt is due within one year but is classified as long-term debt, reflecting the Company’s intent and contractual ability to refinance the short-term borrowings through subsequent issuances of commercial paper or drawing down on the long-term revolving credit facility’.”¹¹

⁹ CN Submission, page 5.

¹⁰ CN Submission, page 4.

¹¹ CN Submission, page 5, footnote 2.

However, since 2009 commercial paper has been included in current liabilities.

Therefore, it can be concluded that CN has not demonstrated the intent and ability to refinance commercial paper so that it could be classified as long-term debt since 2009.

CP's opinion is that even in the unusual circumstance when commercial paper is rolled-forward over a long time period, this does not somehow transform it into a long-term debt obligation and it remains a short-term financing instrument with short-term rights and obligations attached. CP concludes:

“However, the preceding notwithstanding, to the extent that commercial paper is to be included in the calculation of the regulatory cost of capital, it should be treated as a current liability. This is for the simple reason that commercial paper is, in fact, a current liability. Regardless of the time period that commercial paper is outstanding, any amount of commercial paper outstanding represents a reduction in the company's access to liquidity, and as such it is properly reflected as a reduction in working capital.”¹²

Under the Agency's current methodology, commercial paper should continue to be included as a current liability when determining the working capital requirement of net rail investment.

Q.3 If the CTA finds it appropriate to treat rolled over commercial paper differently, how should commercial paper that is rolled over and commercial paper that is not be identified in the railway company's annual submissions to the CTA?

If the Agency finds it appropriate to treat rolled over commercial paper as long-term debt, there will be two different treatments for commercial paper. The rolled over commercial paper

¹² CP's Response to the Agency's Discussion Paper on the Methodology to Determine Net Rail Investment and Capital Structure for the Calculation of Cost of Capital Rates, November 25, 2020 [CP Submission], page 2.

would be removed from current liabilities, which would increase the working capital allowance and net rail investment. Simultaneously, the rolled over commercial paper would be included as long-term debt, which would lower the WACC. The remainder of commercial paper would remain as a current liability and not be included in the calculation of the WACC.

CN acknowledges the difficulty of trying to follow which commercial paper was renewed and which was not and, as a result, recommends:

“Once it is accepted that a railway can classify its commercial paper as LTD, all of its commercial paper should be classified as such. One cannot make a distinction that some commercial paper is LTD and some other is short-term. Commercial paper simply becomes another source of funds, like equity or bonds, with its own interest cost.”¹³

CN’s recommendation to classify all commercial paper as long-term debt ignores the criteria of whether there is intent and ability to refinance the issues. The difficulty in identifying which issues of commercial paper are equivalent to long-term debt is another reason why commercial paper should continue to be included as a current liability when determining the working capital requirement of net rail investment. However, if the Agency finds it appropriate to treat rolled over commercial paper differently, the onus should be on the railway companies to provide their rollover plan identifying commercial paper issues that they consider long-term debt and provide documentation for the rollovers as they occur.

¹³ CN Submission, page 5.

Q.4 How should commercial paper which is raised for general corporate purposes be allocated to regulated activities? Please provide a rationale for your response.

This question is similar to how to apportion general purpose long-term debt of a railway company between its Canadian rail entities and non-regulated entities. It is discussed in Issue 4 below.

Q.5 Are there other short-term financing instruments (for example, an unsecured revolving credit facility or an accounts receivable securitization program) that should be treated as long-term debt rather than as a current liability? Please provide a rationale for your response.

In addition to its commercial paper program, CN has access to a revolving credit facility and an accounts receivable securitization program. CN argues:

“Funding is sourced amongst these programs continuously, as opposed to only a short-term borrowing that simply matures within the year. They should therefore also be treated as LTD, similar to the above arguments for commercial paper, i.e. they become a source of funding in the Company’s capital structure, each with their related interest costs.”¹⁴

A revolving credit facility is the same as a typical line of credit except that instead of renegotiating the terms of the line of credit on an annual basis there is a commitment from the bank that exceeds a one-year time period. Similarly, an accounts receivable securitization program provides the company with short-term financing secured by current assets. Although the agreement may be in excess of one year, it may sometimes be terminated before its scheduled maturity.

Although the commitments for these programs exceed a one-year time period, the arguments are similar to the classification of commercial paper. Based on the characteristics of

¹⁴ CN Submission, page 6.

the loans and their use as short-term financing, both should be considered current liabilities in the methodology that the Agency uses to determine the working capital component of net rail investment.

Alternatively, if the Agency finds it appropriate to treat an unsecured revolving credit facility or an accounts receivable securitization program as long-term debt, it would be removed from current liabilities, which would increase the working capital allowance and net rail investment. However, it must then be included as long-term debt, which would lower the WACC.

Issue 3: Should the current portion of long-term debt be identified as a current liability or as long-term debt?

Q.6 Should the current portion of long-term debt be treated as a current liability as per US GAAP or should it be treated as long-term debt? Please provide a rationale for your response.

CP argues that the current portion of long-term debt is a current liability, and it is best treated as such for purposes of determining the regulated cost of capital and for other railroad costing purposes:

“The current portion of long-term debt should be treated as a current liability. Similar to the commercial paper discussion above, the current portion of long-term debt is a current liability under US GAAP. The UCA does not modify the US GAAP treatment for this account.”¹⁵

CP is correct from an accounting point of view. However, as I pointed out in my Submission, management and financial analysts are interested in separating out the current portion of long-term debt to determine if a company has sufficient liquidity to pay off its short-term obligations, but a regulatory agency is concerned with a different problem--measuring a company's capital structure for the calculation of cost of capital rates.

What differentiates this from the previous discussion about commercial paper is that the current portion of long-term debt is a part of a long-term debt issue in a target capital structure that management considers optimal to finance long-term assets. In measuring a company's

¹⁵ CP Submission, page 3.

capital structure for the calculation of cost of capital rates, the Agency should consider the current portion of long-term debt as part of long-term debt.

Issue 4: How to apportion general purpose long-term debt of a railway company between its Canadian rail entities and non-regulated entities?

Q.7 To the degree that general corporate activities affect the Canadian rail entity, how should the CTA allocate a portion of those activities to the Canadian rail entity?

CN makes two different recommendations for answering the question of how to apportion general purpose long-term debt between the Canadian rail entities and non-regulated entities.

First, CN strongly disagrees with the basic idea of allocating debt between its regulated and non-regulated operations. CN argues that the Agency should use the cost of capital for the consolidated corporation:

“There is only one entity that issues equity on the market, and that is the consolidated corporation, not the Canadian nor the U.S. operations. Similarly, there is only one entity that issues debt instruments on the market, and that is again the consolidated corporation. Therefore, there is only one cost of capital and that is for the consolidated corporation, and that unique cost of capital should then be the same for both Canadian and U.S. operations.”¹⁶

This not a correct application of financial theory. The cost of capital for the consolidated corporation is only an average cost of capital that is appropriate for the entire portfolio of its investments. It is not appropriate for a division of the corporation that is being regulated by the

¹⁶ CN Submission, page 7.

Agency. Each division of a consolidated corporate entity should be treated as if each were operating independently. The division of Canadian rail activities must be considered as a separate stand-alone entity, distinct from its parent company, because it is the cost of capital for that division that we are attempting to measure and not the cost of capital for the parent company's consolidated activities. The Agency should use a separated balance sheet reflecting the capital structure that the railway would have as an independent company.

Second, the Agency adopted an interim methodology to allocate general purpose debt based on revenue ton miles (RTM), the movement of one ton of revenue traffic over one mile, until further consultation had been completed.¹⁷ CN argues that if the Agency decides to apportion debt between its Canadian rail entities and non-regulated entities, the allocation should be based on investment properties cost rather than on RTM:

“CN believes that a better method of debt allocation is by investment properties cost, or gross book value (GBV). GBV represents directly the cost of properties and hence directly the funds needed in their investment.”¹⁸

CP also argues that if the Agency decides to allocate general purpose debt to the regulated rail balance sheet, the allocation should be based on investment properties:

“Nevertheless, to the extent that such an allocation methodology will be required going forward, the best allocation methodology for this adjustment to the regulatory capital structure is to use the ratio of the total net book-value of Canadian railway properties to the net book-value of the consolidated company's properties.”¹⁹

¹⁷ Canadian Transportation Agency, Decision LET-R-41-2019, April 30, 2019.

¹⁸ CN Submission, page 11.

¹⁹ CP Submission, page 5. However, CP provided no data with its argument.

The regulatory balance sheets and income statements of the railways are not publicly available and they have not been provided for this consultation. The only geographic data available is what the railways choose to provide and the very few items contained in the annual reports of the consolidated companies. CN provided data on its properties, RTM and revenues for the years 2017-2019, split between Canada and the United States, which is reproduced in Table 1. The Canadian share for this period averaged 53.3 % for properties, 73.6% for RTM and 67.6% for revenues. Although CN recommends that the debt allocation should be based on the GBV of properties, the properties data used in its examples are net book values (NBV). GBV property data is not provided. The only other geographic data available from CN's annual reports are for net income and employees, which is shown in Table 2 for the years 2017-2019. The Canadian share for this three-year period averaged 66.5% for net income, but the most recent two years averaged 73.7%. The Canadian share of employees averaged 70.4%.

The Agency relies on the Uniform Classification of Accounts and Related Railway Records (UCA) as the framework for regulatory accounting in cost of capital determinations. Using the railways consolidated statements to allocate debt requires resolving differences in accounting rules between United States Generally Accepted Accounting Principles (GAAP) and the UCA, and reconciling differences between the parent company's balance sheet and the regulatory balance sheet. But CN cannot provide this reconciliation:

“CN does not have nor can produce UCA-compliant accounts for CN's U.S. operations. This would entail revisiting every engineering project and mechanical repair in the last 25 years to determine their capitalization rate according to the UCA rules – an impossible feat.”²⁰

²⁰ CN Submission, page 12.

The RTM based approach for allocating long-term debt excludes each issue of debt that can be linked directly to United States railway operations from the regulatory balance sheet. It is only the general purpose debt that is then allocated to the regulatory balance sheet based on the proportions of RTMs in Canada in the year in which the debt was issued. There is no reason to believe that the GBV of properties provides a better allocation of general purpose debt. Using the available data as an example, an allocation of 73.6% based on RTM seems more reasonable than the 53.3% based on properties for a Canadian division which had 71.0% of the employees and earned 73.7% of the net income over the most recent two-year period, 2018-2019. Furthermore, compared with the approach based on allocations of long-term debt using the consolidated financial statements, the RTM based approach has the advantage of avoiding the problems of reconciling the accounts from the different accounting systems.

The Agency should continue to use a separated balance sheet to allocate specific issues of long-term debt, excluding each issue of debt that can be directly linked to United States railway operations from the regulatory balance sheet. All general purpose debt should continue to be allocated to the regulatory balance sheet based on the proportions of RTMs in Canada in the year in which the debt was issued. The RTM-based approach should also be used for allocating commercial paper that is raised for general corporate purposes to regulated activities.

Q.8 Alternatively, should the CTA disallow debt whose use cannot be identified? That is, should railway companies be required to identify what general purpose debt is incurred for, in order for such debt to be included or excluded in the calculation of cost of capital?

CN argues that long-term debt used to fund U.S acquisitions and U.S. investments should be removed from the allocation process in perpetuity:

“If RTM is kept as the method of allocation, then perpetual renewal should be allowed for LTDs used in the U.S. acquisitions or other specific U.S. investments, in order to account for the fact that they require more funding per U.S. RTM compared to Canadian RTM.”²¹

CN may fund a U.S. acquisition with debt, but that does not imply that the long-term capital structure of that acquisition has that debt ratio in perpetuity. CN also argues that:

“If it is not clear what the debt is for, then it must be assumed that it is for general corporate purposes.”²²

As I explained in my Submission, the management of a regulated company will want the lowest possible debt ratio that it can persuade the regulatory agency to accept, and a regulator should not simply accept the debt ratio advocated by the company. Therefore, each debt issue should be considered initially to be on the railway’s regulated balance sheet. The onus should be on the railway to prove that the debt issue was raised for specific non-rail purposes or to finance United States railway operations, and that it should be removed from the regulated balance sheet. Similarly, if the railway can prove that the debt issue was raised for general purposes by identifying its use, it should then be allocated to the regulated balance sheet using the RTM based approach.

Q.9 Should the CTA enforce stronger data reporting (for example, tracking or projecting what proportion of general purpose debt is used in Canadian rail operations)?

CN and CP both argue against enforcing stronger data reporting:

²¹ CN Submission, page 12.

²² CN Submission, page 12.

“CN does not believe that enforcing stronger data reporting to track the use of general-purpose debt will yield clearly defined results due to the high level of subjectivity required.”²³

and

“The Agency should not enforce data reporting, tracking or projecting the uses of general purpose debt. Rather, to the extent that such allocation may be deemed necessary, the Agency should determine an objective allocation methodology.”²⁴

However, neither railway addresses the issue of why there appear to be large observed differences in the reporting of certain cost of capital elements. In fact, the goal of this Consultation has been stated as:

“Overall, the CTA's objective is for the inputs to cost of capital to be methodologically sound; rigorous; fair between system users and railway companies; **and consistent between railway companies.**”²⁵ [Emphasis added]

A description of the current data reporting requirements was not included in the Discussion Paper. However, the issues and questions for discussion resulted from the different reporting practices of the railway companies. As I pointed out in my Submission, information provided in recent decisions raise concerns about whether the Agency is receiving adequate information. For example, it would seem that current data reporting requirements were not sufficient to inform the Agency without a specific inquiry: whether CP used commercial paper; whether commercial paper was included in the calculation of working capital in CP's cost of capital submissions; that CP was not including debt issued for share buybacks in the calculation

²³ CN Submission, page 13.

²⁴ CP Submission, page 7.

²⁵ Discussion Paper, page 5.

of its capital structure; and that there was no information available on the interest rate and interest expense of CN's commercial paper.

The Agency should enforce stronger data reporting on the terms, purpose and classification of each debt issue.

Issue 5: Treatment of debt not issued by a railway company

Q.10 Are there examples of an abnormal situation (such as acquisitions of another railway company and its debt) where the market value of debt should be used, rather than the face value, in the determination of the railway company's capital structure?

CN argues that its acquisition of BC Rail is an abnormal situation where the market value of debt should be used, rather than the face value, in the determination of its capital structure:

“There are special situations that warrant special treatments. The acquisition of BC Rail by CN is one such special case. The BC Notes are not a debt issued by CN for the purpose of purchasing BC Rail. They were an arrangement already in existence between BC Rail and its parent BCRC prior to the CN acquisition. When CN acquired the BC Rail, CN acquired \$5 million of liabilities and countervailing assets, not \$842 million. CN must earn 5.75% per year on this debt in order to be able to meet its obligation of repaying it at maturity in 2094 at the face value of \$842 million. Given the interest amount that CN must earn in order to meet this debt obligation and the value on which CN has to earn this interest amount, the more appropriate values for inclusion in the

calculation of CN's capital structure and average interest rate on debt for COC purposes, are the debt discounted value and 5.75%, respectively."²⁶

The history of the BC Notes was explained by CN:

"Before the acquisition by CN, all the various BC Rail debts were consolidated by BC Rail into two debts:

1. 90-year notes due in 2094 bearing 0% interest with principal amount of \$842 million and fair value of \$5 million;
2. Demand notes with the balance that were repaid/retired by the CN acquisition.

Upon closing, CN recorded the 90-year notes as a discounted debt of \$5 million, their fair value, as required by all accounting and financial rules of acquisitions. The value of the debt has been accreting since then and will continue to accrete back to its principal amount over the life of the notes, at the implied interest rate of 5.75%. The value of the notes as at Q4 2019 was \$12 million. The RBS mirrors this treatment, starting at \$5 million in 2004 and accreting to \$12 million in 2019."²⁷

The important point is that in its acquisition of BC Rail, CN acquired BC Rail's assets and assumed BC Rail's liabilities. Included in the assumed liabilities were the non-interest bearing 90-year subordinated notes with a face value of \$842 million and a market value of \$5 million. These BC Notes are now part of CN's long-term debt and appear in CN's 2019 financial statements at a face value of \$842 million, with the discount of \$830 million included in net unamortized discount.²⁸

CN's argument that the acquisition of BC Rail has created a special situation that warrants a different treatment is not correct. To see this, let us assume that the acquisition of BC

²⁶ CN Submission, page 19.

²⁷ CN Submission, page 14.

²⁸ CN 2019 Annual Report, page 80.

Rail did not take place, but in 2004 CN issued 90-year non-interest bearing subordinated notes with a face value of \$842 million and a required yield of 5.75%. The accounting treatment is:

At issuance in \$ millions:

Cash	5	
Discount on Notes Payable	837	
Notes Payable (Face Value)		842

The discount is reduced as it is amortized over the life of the bond and recorded interest is the reduction in unamortized bond discount. CN would have received only \$5 million in cash, not \$842 million, and the 2019 financial statements would be the same with CN Notes replacing BC Rail Notes. The important point is that the large discount is created by the zero-coupon rate and the long 90-year maturity date, not by the BC Rail acquisition.

The appropriate specification of long-term debt in the capital structure was considered by the Agency in 2011. The question was whether to continue the practice of determining the cost of long-term debt using the embedded cost of long-term debt in the railways' books or to use a market-based approach for assessing debt costs through the use of bond yields. The Agency examined three models to measure the return on bond issues: using the coupon rate of the bond, calculating the current yield on the bond, and calculating the yield to maturity on the bond. The Agency concluded:

“To the extent that the method for measuring the yield on long-term debt is attempting to reflect the actual financing cost of existing debt, the Agency finds that the coupon rate method is the most reasonable, reliable and pragmatic of the three models examined.”²⁹

²⁹ Canadian Transportation Agency, Decision 425-R-2011, December 9, 2011, page 29.

The specification of long-term debt in the capital structure was considered again in 2017:³⁰

“Considering the sources and uses of funds in the capital structure from an economic perspective, the face value of the long-term debt and any premiums received on the bonds function as sources of funds, while any discounts on the face value of the debt function as assets. This suggests to the Agency that, for the economic purpose of determining the cost of capital, long-term debt is more properly included in the capital structure at its face value, the discounts on long-term debt are more properly included as assets in the net rail investment, and premiums on long-term debt are more properly included with the other sources of funds deemed to have zero cost rate.”

and

“A further complication arises from the determination of the cost rate of debt, which is weighted by the long-term debt in the cost of capital determination. The cost rate of debt is the average cost to the company of financing each dollar of debt capital. It is calculated as a weighted average of the interest rates on all the existing non-matured debt instruments issued by the company. If the net values of the debt instruments are used as the weighting factors, then the appropriate cost rates are the effective interest rates, which adjust the coupon rates for any premiums or discounts. Calculation of the effective interest rates is not simple, considering the many different bonds over time with different maturities and coupon rates issued by railway companies, and places an additional burden on the railway companies.”

and

“Given the current Agency methodology, which specifies that the cost rate of debt must be a weighted average of the coupon rates on existing debt instruments, it is reasonable to conclude that the decision also implies that the face values of the debt instruments would be the appropriate weighting factors. That is, that the long-term debt reported in the capital structure must reflect the face values of the debt instruments, which also corresponds with the implied specification of the long-term debt in the UCA as the face value.”

and

³⁰ Canadian Transportation Agency, Decision R-2017-198, December 5, 2017, pp. 13-14.

“The Agency finds that the appropriate specification of long-term debt in the capital structure, to conform to the long-standing definitions of assets and liabilities, and to conform to the existing Agency order regarding determination of the cost of debt rate, is the face value of the debt.”

The question posed by CN’s Submission is whether its acquisition of BC Rail is an abnormal event that creates a situation where the market value of the BC Rail Notes should be used instead of the face value in CN’s regulated balance sheet to determine the capital structure.

The Agency’s previous decisions have determined that the appropriate specification for long-term debt obtained through a bond issue is its face value, not the net value, when market value differs from face value. When debt was obtained through the acquisition BC Rail, market value differed from face value. Although the method of obtaining the debt differs in the two situations, there is no reason why the treatment of debt by acquisition should differ from debt obtained through a bond issue.

Q.11 If market value is determined appropriate, what rate or rate calculation should the CTA use for this debt?

If market value is determined appropriate, unamortized discounts and unamortized premiums on bonds payable should be considered as valuation accounts used in combination with the face value of long-term debt for the purpose of capital structure determination. That is, the unamortized bond discounts should reduce long-term debt and unamortized premiums should increase long-term debt. In each year the balance represents the value of the liability and reported interest will be the required market yield at acquisition.

Although interest rates may change over the life of the bonds affecting the market value of the long-term debt, it is important to note that interest rate changes after issuance have no effect on the accounts.

CANADIAN NATIONAL RAILWAY
PROPERTIES
2017-2019
(C\$ 000,000)

RTMs	2017	2018	2019
Canada	18,305	19,737	21,482
U.S.	15,884	18,036	18,187
Total RTMs	34,189	37,773	39,669
Canada %	53.5%	52.3%	54.2%

SOURCE: CN Submission, page 10, Table 1.

CANADIAN NATIONAL RAILWAY
REVENUE TON MILES (RTM)
2017-2019
(000,000)

RTM	2017	2018	2019
Canada	174,389	181,684	179,347
U.S.	62,709	66,699	62,607
Total RTMs	237,098	248,383	241,954
Canada %	73.6%	73.1%	74.1%

SOURCE: CN Submission, page 10, Table 2.

CANADIAN NATIONAL RAILWAY
REVENUES
2017-2019
(C\$ 000,000)

Revenues	2017	2018	2019
Canada	8,794	9,610	10,167
U.S.	4,247	4,711	4,750
Total Revenues	13,041	14,321	14,917
Canada %	67.4%	67.1%	68.2%

SOURCE: CN Submission, page 11, Table 4.

CANADIAN NATIONAL RAILWAY
NET INCOME
2017-2019

C\$ millions

Net Income	2017	2018	2019
Canada	2,857	3,163	3,131
U.S.	2,627	1,165	1,085
Total Net Income	5,484	4,328	4,216
Canada %	52.1%	73.1%	74.3%

SOURCE: CN Annual Report, page 104.

CANADIAN NATIONAL RAILWAY
EMPLOYEES
2017-2019

Employees	2017	2018	2019
Canada	16,597	17,976	18,726
U.S.	7,348	7,744	7,249
Total Employees	23,945	25,720	25,975
Canada %	69.3%	69.9%	72.1%

SOURCES: CN 2017 Annual Report, CN 2018 Annual Report, and CN 2019 Annual Report.