

MEASURING THE EQUALIZATION CLAWBACK ON NATURAL RESOURCE REVENUE IN HAVE-NOT PROVINCES

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Executive Summary

Over time, critics have identified many problems with Canada’s equalization program. This study will examine and quantify one such problem: the disincentive that the program creates for the development and deployment of natural resources in “have-not” provinces—that is, those that receive equalization payments. This disincentive arises from the loss of equalization dollars—sometimes referred to as a “clawback”—that occurs when the revenue from natural resources increases.

We measure the clawback that results from additional natural resource revenue at the margin in each of the have-not provinces—Manitoba, Quebec, New Brunswick, Nova Scotia, and Prince Edward Island. This is to say, we calculate how much money each have-not province loses in equalization grants for various levels of increase in revenue from natural resources.

We find that there is, in many cases, a substantial clawback in equalization payments resulting from additional resource revenue in all five “have-not” provinces. In other words, a substantial portion of the fiscal benefits from increased resource revenue are lost because equalization payments decrease as a result of how that additional revenue is treated in the equalization formula. In 2018/19, the clawback rate from a 10% increase in natural resource revenue ranged from 44% in Prince Edward Island to 94.9% in Manitoba and 97% in New Brunswick. In 2020/21, the clawbacks ranged from a low of 3.2% in Quebec to 47.4% in Prince Edward Island.

This study explains how various components of the equalization program combine to produce the results shown above. Further, it discusses some unintended side effects that may distort policy development in have-not provinces. Specifically, it considers the possibility that clawbacks on resource revenue may be influencing policy decisions surrounding the development of natural resources in have-not provinces. Further, the equalization formula may be creating incentives for provinces with abundant hydroelectric resources to sell to residents at reduced prices through crown corporations, effectively providing subsidized hydroelectric power for residents at the expense of taxpayers elsewhere in the country.

The study also considers instances when the federal government has sought to mitigate the impact of equalization clawbacks on natural resource development in the past. Specifically, we examine the conditions of the Atlantic Accords of 1985 and 2005, which sought to mitigate the clawback effects of offshore oil development in Nova Scotia and New Brunswick to create better incentives for those provinces to develop those resources. Since the time of the Atlantic Accords, of course, the equalization program has been changed in several ways. This paper assesses whether the current formula and rules continue to create significant clawbacks on marginal additional natural resource revenue in have-not provinces and to estimate their extent.

Introduction

Over time, critics have identified many problems with Canada’s equalization program.¹ This study will examine and quantify one such problem: the disincentive that the program creates for the development and deployment of natural resources in “have-not” provinces—that is, those that receive equalization payments. This disincentive arises from the loss of equalization dollars—sometimes referred to as a “clawback”—that occurs when the revenue from natural resources increases. We measure the clawback that results from additional natural resource revenue at the margin in each of the “have-not” provinces—Manitoba, Quebec, New Brunswick, Nova Scotia, and Prince Edward Island. This is to say, we calculate how much money each have-not province loses in equalization grants for various levels of increase in revenue from natural resources.

There is a provision in the formula for calculating equalization payments that takes into account natural resources within each province. The overall formula for calculating equalization payments assesses the revenue-generating capacity of each province and, within that capacity, 50% of actual natural resource revenues are included. The natural resource provision has the effect of lowering a recipient province’s equalization payments if the province increases its natural resource revenue.

We find that there is a substantial clawback in equalization payments resulting from additional resource revenue in all five have-not provinces. In other words, a substantial portion of the fiscal benefits associated with increased resource revenue are lost because of the decreases in equalization payments that result from the collection of that additional revenue.

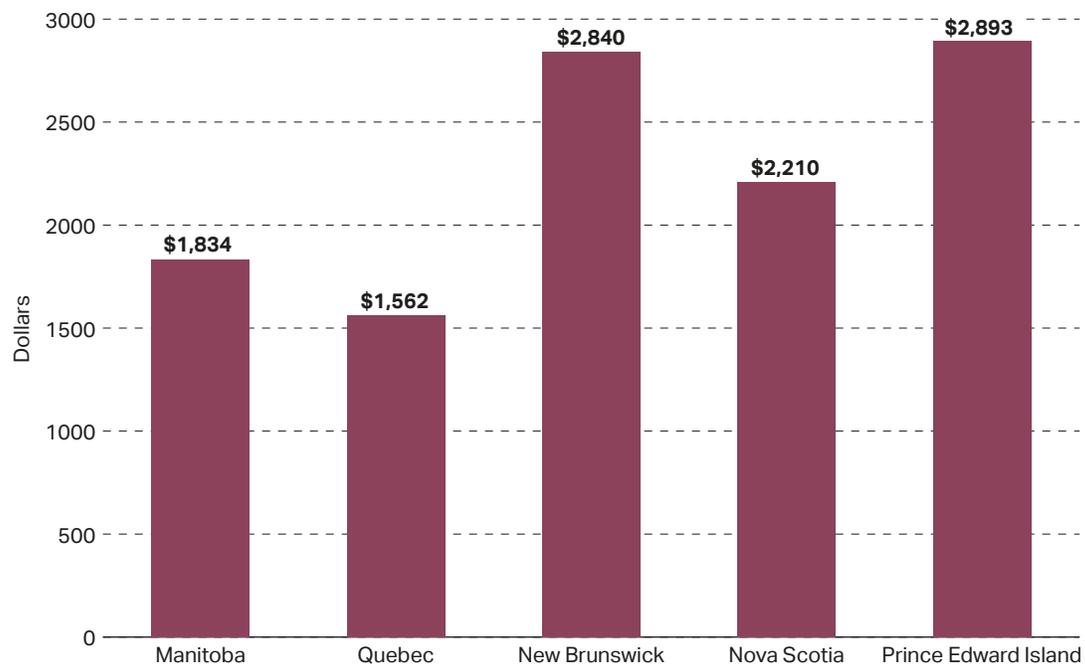
We do not assess the impact of these clawbacks on policy but rather simply demonstrate their existence, measure them, and identify the resulting incentives as a possible influencing factor on policy decisions affecting the development of natural resources in have-not provinces.

1. For background on the purposes and structure of the equalization program, see Eisen, Emes, Lafleur, and Hill, 2020.

Background and Importance of Equalization

The stated goal of Canada’s equalization program, as stated in Section 36.2 of the Constitution Act of 1982, is to ensure that all provincial governments are able to provide “reasonably comparable public services at reasonably comparable levels of taxation”. In short, it does this by taking federal tax dollars (drawn from general revenue paid into by residents and businesses in all jurisdictions) and providing block grants to lower-income provinces. Equalization is a major source of revenue for all provinces that receive it. As **figure 1** below shows, per-capita payments ranged from \$1,562 in Quebec to \$2,893 in Prince Edward Island in 2020/21.

Figure 1: Equalization per person (\$) in Manitoba, Quebec, New Brunswick, Nova Scotia, and Prince Edward Island, 2020/21

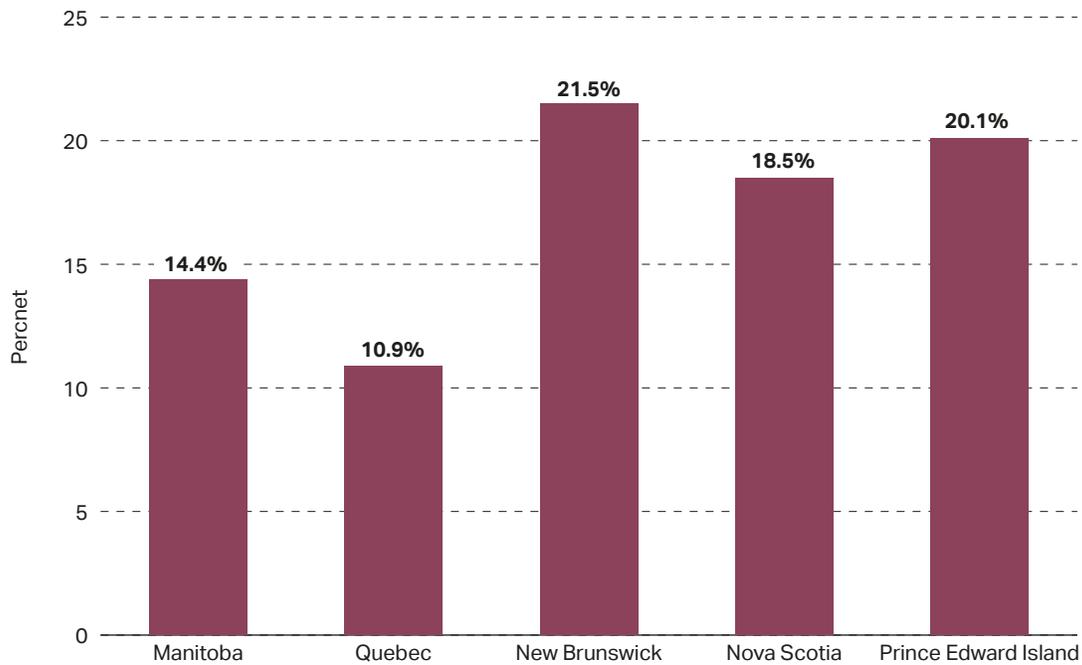


Sources: Canada, Department of Finance, 2020; RBC Economics, 2020.

These equalization payments constitute a meaningful share of provincial government revenue in each of the have-not provinces (**figure 2**). In Quebec, equalization accounts for almost 11% of total provincial government revenue. In New Brunswick, it is over 21%.

Equalization plays an important role in addressing what is sometimes referred to as a “horizontal fiscal imbalance” in Canada. This term refers to the fact that some provinces would raise substantially more money than others at identical levels of taxation (Atlas of Public Management, 2016).

Figure 2: Equalization as a share (%) of total provincial revenue in Manitoba, Quebec, New Brunswick, Nova Scotia, and Prince Edward Island, 2020/21



Sources: Canada, Department of Finance, 2020; Manitoba Finance, 2019; New Brunswick, Dep't of Finance and Treasury Board, 2020; Nova Scotia, 2020; Prince Edward Island, 2019; Québec Finances, 2020.

Criticisms of Equalization

The equalization program is a target of frequent criticism, as analysts and experts have argued that there are several problems with the formula and in some instances have proposed ideas for reform. Below is a short and by no means comprehensive review of some of these critiques

Boessenkool (2002), Ferede (2014), and Smart (2007) have all written studies showing that equalization creates incentives for higher tax levels—which are harmful to economic growth in have-not provinces (particularly the most populous ones).

Politicians in have-provinces that have experienced sharp fiscal downturns have complained that the program is flawed. They point out that the program does not deliver money to higher-income provinces when they are experiencing recessions or sudden drops in fiscal capacity. For example, when in opposition, now-Premier Jason Kenney argued that Alberta “deserves an equalization program that will be there when times are bad” (Clancy, 2018).

Several analysts have also criticized what is known as the fixed growth rate rule. This element of the equalization formula requires the program to grow at a fixed rate, in line with the rate of nominal GDP growth, regardless of whether the fiscal capacity gap between richer and poorer provinces is growing or shrinking (Feehan, 2020: note 25). Some of these critics have argued for the removal of the fixed growth rate rule altogether (Dahlby, 2014), while others have argued for reforming the rule so that it is only operable when its effect is to reduce rather than to increase program costs (Eisen, Emes, and LaFleur 2017).

Meanwhile, other analysts have criticized the program for simply seeking to equalize fiscal capacity across the provinces in terms of government revenue, without reference for potential differences in the cost of delivering public services in different parts of the country (MacKinnon, 2012).

Finally, a number of the most important and long-standing disputes surrounding the equalization formula have focused on its treatment of natural-resource revenue. We turn now to a brief discussion of some of these critiques.

The Treatment of Natural Resources and the Clawback Effect

The treatment of natural resources in the equalization formula has, for decades, been one of the most important focal points for criticism and debate. Currently, natural resource revenue is treated differently from all other revenue in that only 50% of revenues are included (as opposed to 100% of revenue capacity from other sources of revenue). Or, alternatively none of the resource revenues is counted if that yields a higher entitlement for a receiving province. Questions surrounding whether natural resource revenue should be included, to what extent, and how various rules and program features can help promote fairness in the program are just a few of the issues that have been raised at various times.

The 50% inclusion rule was implemented on the recommendation of the Expert Panel on Equalization and Territorial Formula Financing in its report, *Achieving a National Purpose: Putting Equalization Back on Track* (2006). The 50% inclusion rule—coupled with a fiscal capacity cap that prevents any recipient province from having a post-equalization fiscal capacity higher than any non-recipient province—was recommended as a compromise designed to avoid the dollar-for-dollar clawbacks that would come from 100% inclusion while full exclusion could cause affluent natural resource provinces to actually become recipients (Feehan, 2014).

Two other aspects of the current equalization formula are also relevant for the clawback rates on new natural resource revenue in have-not provinces. Unlike the 50% inclusion rule and the fiscal capacity cap, the 0% inclusion rule and the GDP growth adjustment rule were not recommended by the expert panel. Effectively, the 0% inclusion rule means that a province's equalization entitlement (before application of the fiscal capacity cap) is based on the larger of the province's fiscal capacity including 50% of natural resource revenues and its fiscal capacity excluding natural resource revenues. As discussed above, the fixed growth rate rule ensures the total amount of equalization grows in line with GDP growth. Ultimately, the interaction of these rules and (at the larger revenue increases shown for Quebec below) the fiscal capacity cap determine the clawback rates on new resource revenue in have-not provinces that are calculated below.

Perhaps the most important difference, however, between the treatment of natural resource revenues and all other types of revenue is that, for all other sources of revenue, the formula measures the capacity of provincial governments to raise revenue at a given tax level. Governments may in fact collect either more or less depending on the tax level that they do in fact choose to set. On the other hand, the formula's treatment of natural resource revenue depends on the actual amount of money raised, with each governments' fiscal capacity from this source assessed, for the sake of the formula, at 50% of resource revenues actually collected. There are good reasons for this difference between the treatment of natural resource revenues and those from other sources. Most importantly, measuring the capacity of each province to generate natural resource revenues would be complex and, perhaps, impossible to do with any degree of accuracy (Expert Panel on Equalization and Territorial Formula Financing, 2006).

However, this crucial difference between how revenues are calculated may create additional incentive problems for natural resource development in have-not provinces. Since fiscal capacity in this area is determined by how much natural resource revenue is in fact generated, this means that there is a direct and unique "clawback" resulting from gains in natural resource revenue that does not exist for other types of revenue. For other types of revenue, payments are based on the capacity of have-not governments to raise that revenue rather than how much they actually raise. This means that the fiscal benefit of each dollar raised in resource revenue in a have-not province is reduced by lost equalization payments, with possible implications for policy choices surrounding natural resource development.

This issue has been identified in the past, and ameliorative actions to address the problem have been taken at various points. For example, and of greatest importance, the 1985 and 2005 Atlantic Accords were struck between the Canadian government and the provincial governments of Nova Scotia and Newfoundland & Labrador precisely to remove the disincentive effects equalization would otherwise have had on the development of offshore natural resources (Higgins, 2012). At the time, the standard formula would have produced a 70%–80% clawback in the form of lost equalization dollars from all new natural resource revenues in these provinces (Bickerton, 2008).

A second example of past efforts to improve incentives to develop natural resources by restricting equalization clawbacks was the "generic solution" that was inserted into the equalization formula in 1994. This dimension of the formula mitigated equalization reductions under a specific circumstance: when a particular tax base was heavily

concentrated in a specific province. For instance, when the generic solution was first introduced, it was applied to asbestos in Quebec and potash in Saskatchewan. Under the generic solution, 70% of the applicable tax base was entered into the equalization formula meaning that 30% of that revenue base was not equalized (Broadway, 2004).

The provincial and federal governments of the day realized such a large clawback would badly discourage natural resource development and thus economic development itself. This was the motivation in the development of the Accords, through which the federal government agreed to replace lost equalization dollars resulting from offshore oil and gas development in these two provinces in order to remove the disincentives equalization was creating for such development. The movement to a 50% inclusion rate (with the option of 0% inclusion) for natural resources and other changes to the program design since then have changed the clawback for have-not provinces considering natural resource development somewhat. Nevertheless, some analysts have argued that remaining clawback rates on natural resource development are still creating disincentives for the development of such resources (Milke and Eisen, 2015).

There are at least two ways that the clawbacks described above could, under the current formula, be creating undesirable policy incentives in have-not provinces. The first of these has already been discussed. A high clawback on new natural resource revenues can act as a deterrent that prevents the development of natural resources altogether, as the fiscal benefits of pursuing it for governments are reduced. As mentioned, this was the motivation behind the Atlantic Accords, and the question of whether and to what extent this factor is influencing policy choices today is a question deserving of careful scrutiny. For example, some commentators and analysts have suggested that equalization clawbacks may be discouraging governments from pursuing opportunities to generate resource revenues by means of hydraulic fracturing in Maritime Canada (Yakabuski, 2014; Eisen and Milke, 2014; Atkins, 2016).

A second incentive for poor policy created by equalization clawbacks surrounds the have-not province's treatment of hydroelectric resources. As Feehan (2014) notes, hydroelectric resources differ from most others in that a large share of hydroelectricity produced in a province is also consumed there. This reality and the rules surrounding equalization create an incentive for provinces with abundant hydroelectric capacity (particularly Quebec and Manitoba) to use publicly owned companies to offer rate-payers lower prices, thus reducing costs for their own residents while simultaneously reducing their own natural resource revenues and thus—conversely—increasing their

equalization payments. In short, the formula and its clawbacks may be creating incentives for provinces to heavily subsidize hydroelectric rates knowing that some of the lost revenue will be replaced in the form of commensurately increased equalization payments. In other words, the program and its related clawback create an incentive for these provinces to subsidize hydroelectric costs for their own residents at the expense of taxpayers across the country.

It is beyond the scope of this paper to assess the extent to which incentives related to equalization clawbacks are in fact influencing policy choices in the ways described in this section. Instead, the purpose of this discussion has been to show that there are at least two ways in which high clawbacks on equalization payments from natural resource development create incentives that may lead to economically and/or environmentally harmful policy choices and to note that the extent to which this is the case represents an issue deserving of future attention, research, and analysis. We now turn to estimate the scale of these clawbacks.

Estimating the Size of the Equalization Clawback of New Natural Resource Revenues in the Have-Not Provinces

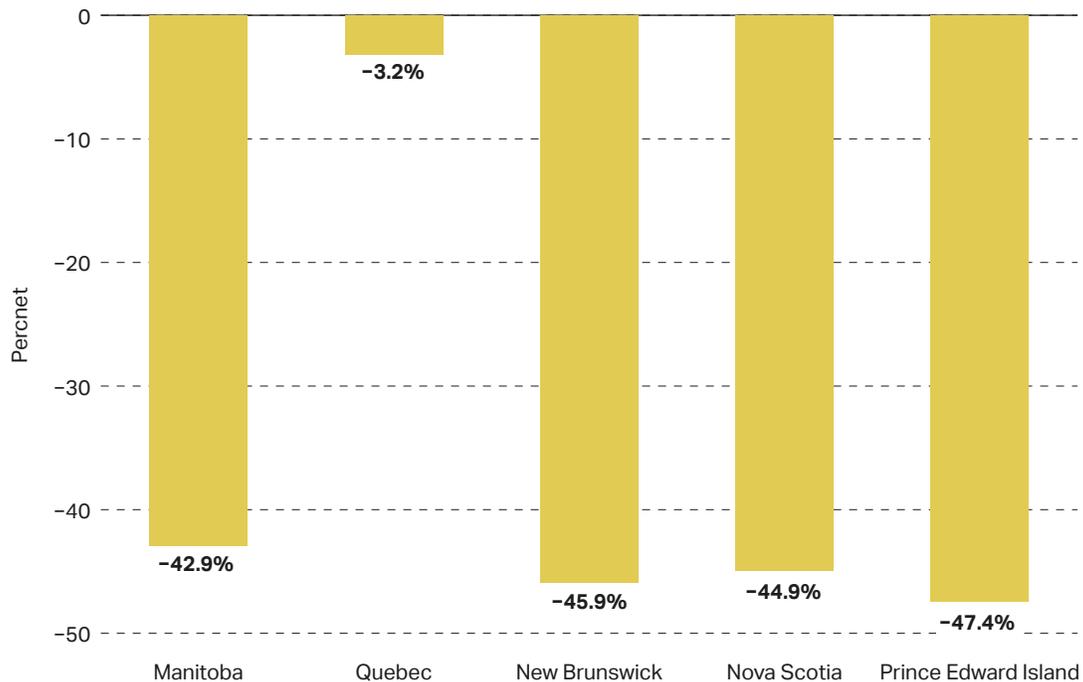
There is no single clawback rate that results from have-not provinces increasing their natural resource revenues. Instead, the extent to which new natural resource revenues are offset by reduced equalization payments depends on a number of factors including whether the 0% or 50% inclusion rate applies, interaction with the equalization formula's fiscal capacity cap, and the GDP growth adjustment. The fiscal capacity cap was introduced in 2007, at the recommendation of the Expert Panel on Equalization and Territorial Formula Financing, to ensure that no province receiving equalization would wind up with a higher total fiscal capacity, including all of its natural resource revenues, than any non-receiving province.

Our primary estimate of the clawback rate shown below for fiscal year 2020/2021 is based on a scenario in which a given have-not province had experienced a 10% increase in its natural resource revenue above what it actually collected in each of the years used to calculate 2020/21 entitlements. In short, the estimates below aim to show the extent to which a 10% increase in natural resource revenues in a specific "have-not" province would be clawed back in the form of lost equalization payments.

Figure 3 shows that under this scenario of a 10% marginal increase in natural resource revenues, the clawback in lost equalization revenues in each of the Maritimes provinces would be substantial. Specifically, the estimated clawback rate in this scenario is 44.9% in Nova Scotia, 45.9% in New Brunswick, and 47.4% in Prince Edward Island. Manitoba's clawback rate in this scenario is only slightly lower at 42.9%.

Under this scenario, Quebec's clawback rate would be much lower, just 3.2%. Quebec's low clawback rate from the small marginal increase in natural resource revenue shown here is a result of the formula's inclusion of the 0% inclusion option. As in the other have-not provinces, the increased resource revenue produces a drop in Quebec's pre-cap equalization (50% inclusion). The 0% option renders this irrelevant because pre-cap equalization is based on whichever of the 50% or 0% inclusion rates produces a higher entitlement. The only reason Quebec has any clawback in this scenario is that its increased resource revenues raise the equalization total (post fiscal cap), which produces a smaller GDP growth adjustment. Since the adjustment is smaller, Quebec gets a smaller adjustment payment.

Figure 3: Clawback rate (%) with a 10% marginal increase in natural resource revenue in Manitoba, Quebec, New Brunswick, Nova Scotia, and Prince Edward Island, 2020/21



Source: Canada, Department of Finance, 2020.

Removing the 0% rule from the formula would produce a clawback rate for Quebec of 13.9%. However, this low clawback rate is contingent on the size of the increase in natural resource revenue modeled in the estimate. With a larger increase in natural resource revenue (roughly anything above 1.4 times the base amount), the effect of the fiscal capacity cap would be to increase the clawback significantly. The increases in Quebec's resource revenue discussed below would also allow Ontario to share in the adjustment payments, further lowering Quebec's equalization. For instance, if Quebec's natural resource revenues increased by 50% (\$1.7 billion), the clawback rate on that increase would be 32.7%. A doubling of natural resource revenues would bring the average clawback rate up to 50.9%. In fact, increases of this magnitude in Quebec's natural resource revenues would have substantial effects not only on Quebec's equalization entitlements, but on those of all recipient provinces.²

2. Exploring the unique impacts of large increases in Quebec's resource revenue on the entirety of the equalization program is beyond the scope of this paper, as it introduces important issues surrounding the effects of large resource revenue gains on all other recipient provinces, whereas this paper is more narrowly focused on the impact of clawbacks on resource revenue gains in the provinces experiencing those gains. Exploring issues surrounding the effects of large resource revenue gains in Quebec represents

The estimates provided above show how complicated it can be to determine how equalization will change: as noted the precise size of the clawback in any given province hinges on several factors. These factors include whether or not the fiscal capacity cap applies, whether the 0% or 50% inclusion rate is in play, and the effect of the adjustment payments made under the fixed growth rate rule that requires the overall equalization envelope to grow approximately in line with nominal national GDP. The fixed growth rate rule was introduced in 2009 and was not based on any recommendations from the expert panel (Eisen, Emes, and Lafleur, 2017).

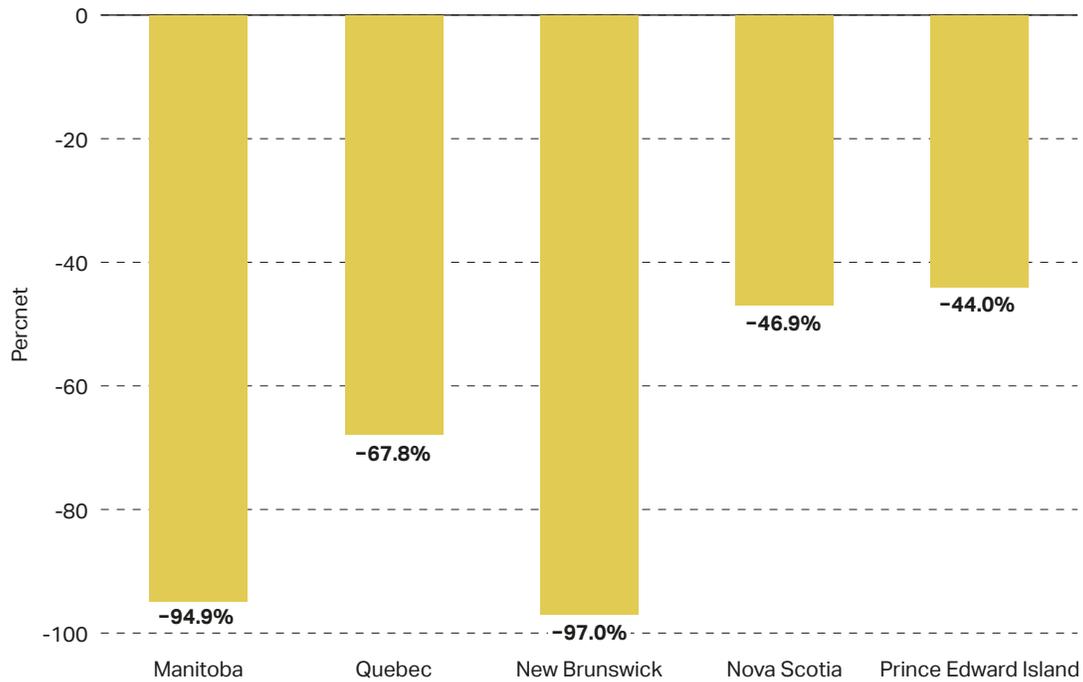
To illustrate the extent to which different scenarios can produce very different clawback rates in the various province, in figure 4 we look at the clawback rates experienced in each of the have-not provinces (again, assuming a 10% marginal increase in natural resource revenues in each of the years used to calculate equalization entitlements) in 2018/19. Generally speaking, the estimated clawback rates from a 10% increase in resource revenues are even more pronounced in 2018/19 at this level of increased revenue than is the case for 2020/21. Ontario's fiscal capacity was relatively low in 2018/19, which meant that the fiscal capacity cap applied in New Brunswick, Manitoba, and Quebec even before we increased their resource revenue.

Figure 4 shows in 2018/19, the clawback rate on a 10% increase in natural resource revenues was similar in Nova Scotia (46.9 %) and Prince Edward Island (44.0%), as was the case for the 2020/21 estimates. Each of the remaining have-not provinces faced significantly higher clawbacks from a 10% increase in natural resource revenues. Quebec's clawback rate under this scenario is fundamentally different from 2020/21—and would have been 67.8% in 2018/19. As was the case with the relatively high clawbacks on a doubling of resource revenues in 2020/21, Quebec's results are driven by the interaction of the FCC and an offsetting adjustment. Manitoba (94.9%) and New Brunswick (97%) faced clawbacks of almost the entirety of a 10% marginal increase in natural resource revenue

Receiving provinces have no influence on the level of the fiscal capacity cap as it is determined by the fiscal capacity of the lowest non-receiving province. Therefore, it is extremely difficult for recipient provinces to predict, with any reasonable level of certainty, the impact of growing natural resource revenues will have on future equalization

an important avenue for future research, not only because the effects on equalization entitlements across the country are large, but also because the possibility of such resource revenue gains in Quebec appear to be possible with relatively small increases in that province's hydroelectricity prices.

Figure 4: Clawback rate (%) with a 10% marginal increase in natural resource revenues in Manitoba, Quebec, New Brunswick, Nova Scotia, and Prince Edward Island, 2018/19



Source: Canada, Department of Finance, 2020.

payments as that clawback is sensitive to small changes in variables including its proximity in a given year to the fiscal capacity cap. Although we have seen that the clawback on additional natural resource revenues is, under several scenarios, substantial, this uncertainty and the possibility of near 100% clawback rates on a moderate increase in revenues (as was faced by New Brunswick and Manitoba as recently as 2018/19) could plausibly have an effect on policy making affecting natural resource development in have-not provinces.

Conclusion

The 1985 and 2005 Atlantic Accords were motivated by an understanding of the potentially harmful incentives that equalization clawbacks can have on natural resource development in have-not provinces. Since the time of the Atlantic Accords, of course, the equalization program has been changed in several ways. This publication has assessed whether the current formula and rules continue to create significant clawbacks on marginal additional natural resource revenue in have-not provinces and to estimate their extent.

We find that the current equalization arrangements can result in substantial clawbacks of marginal additional natural resource revenue in have-not provinces. Specifically, a 10% increase in natural resource revenue would have produced clawbacks ranging from 43% to 48% in Manitoba and the Maritimes in 2020/21. Further, if the fiscal capacity cap were to apply to a province without any increase in natural resource revenue, then the clawback rates would be substantially higher. For example, a 10% increase in natural resource revenues would have produced rates ranging from 67.8% to 97% in Quebec, Manitoba, and New Brunswick in 2018/19.

In short, the equalization program today continues to produce significant clawbacks of equalization dollars from marginal gains in natural resource revenue in have-not provinces. We have identified at least two ways that these clawbacks may be distorting decisions about policy: first, the outright discouragement of natural resource development; second, possible increased subsidization of hydroelectric power to residents in Quebec and Manitoba. Assessing the extent to which equalization clawbacks are in fact influencing policy choices in these and other areas represents a promising avenue for future research.

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Acknowledgments

The authors wish to thank the Lotte & John Hecht Memorial Foundation for its generous support of this project. They also wish to thank the anonymous reviewers for their comments, suggestions, and insights. Any remaining errors or oversights are the sole responsibility of the authors. As the researchers have worked independently, the views and conclusions expressed in this study do not necessarily reflect those of the Board of Directors of the Fraser Institute, the staff, or supporters.

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Date of issue

2020

ISBN

978-0-88975-609-0

Citation

Ben Eisen, Joel Emes, and Alex Whalen (2020). *Measuring the Equalization Clawback on Natural Resource Revenue in Have-Not Provinces*. Fraser Institute.

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