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Nova Scotia, New Brunswick, and the Equalization Policy Crutch

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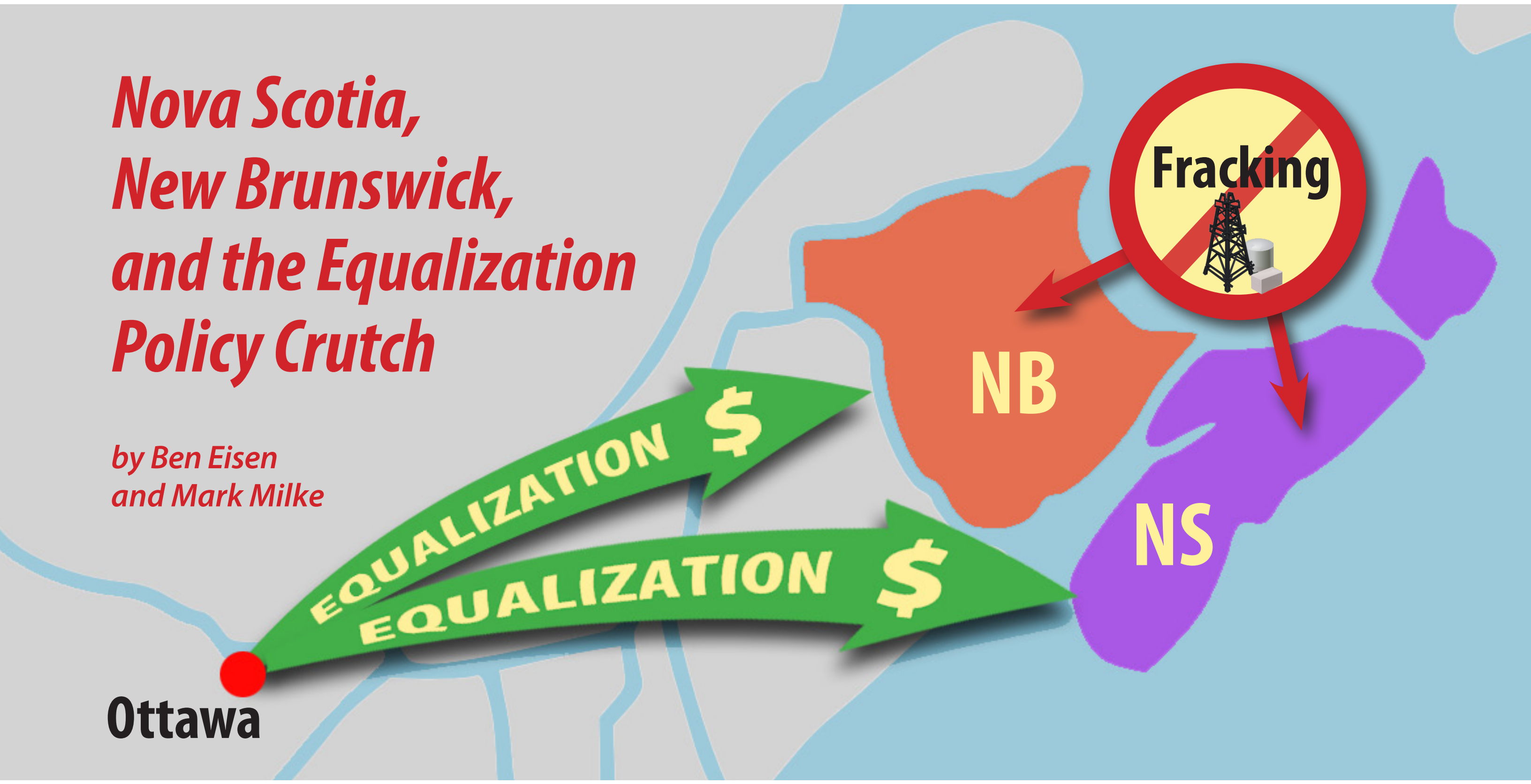


Summary

■ Generally speaking, the equalization program creates disincentives in have-not provinces for economic development that would act to increase own-source revenues.

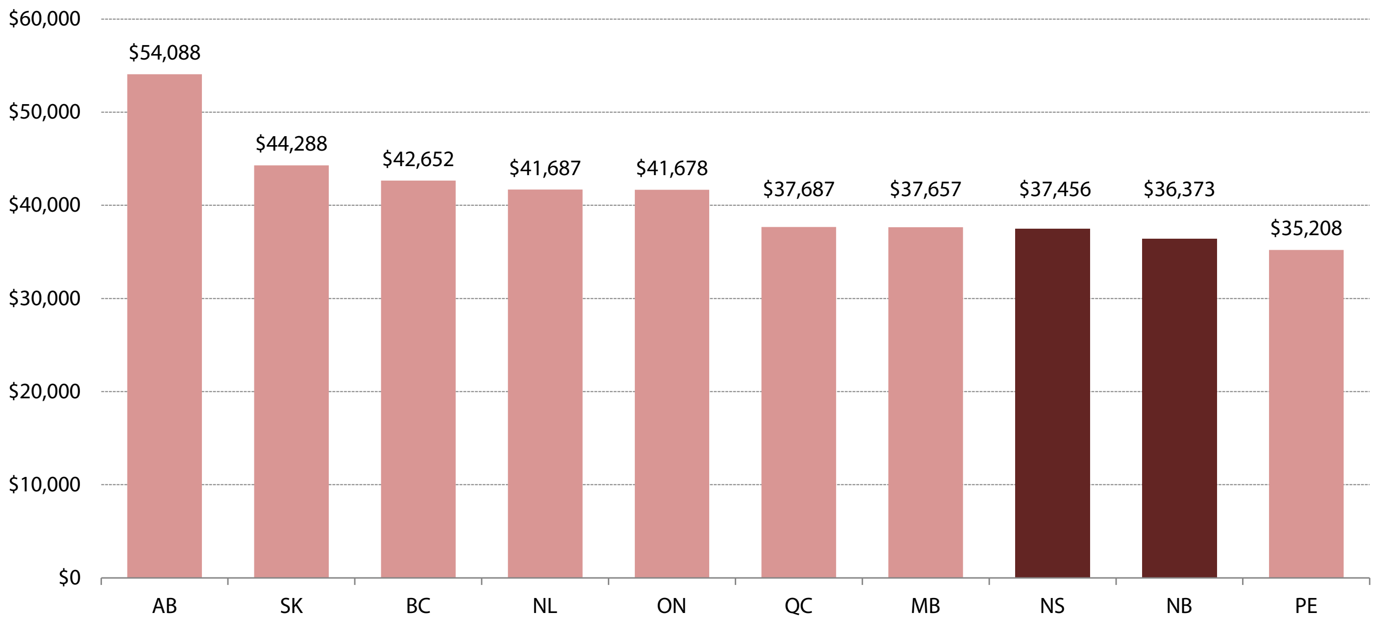
■ The 2007 equalization reform sought to weaken these disincentives for natural resource development by excluding 50 percent of resource revenue from equalization calculations.

■ It appears that the incentives are still not strong enough for Nova Scotia and New Brunswick. Nova Scotia recently extended a moratorium on hydraulic fracturing and New Brunswick introduced a similar moratorium.

■ In contrast, Newfoundland & Labrador is reaping benefits from conventional oil production. Pennsylvania, too, has benefitted from tapping into the Marcellus gas discovery.

■ The potential benefits of overcoming the equalization disincentive and allowing resource development for Nova Scotia and New Brunswick include increased private sector investment, stronger job creation, higher incomes, and additional royalty and tax revenues, which would then allow both governments to reduce their noticeably high tax levels.

Figure 1: Average Household Income in 2013 ($)



Source: Statistics Canada (2014a), Cansim Table 384-0042.

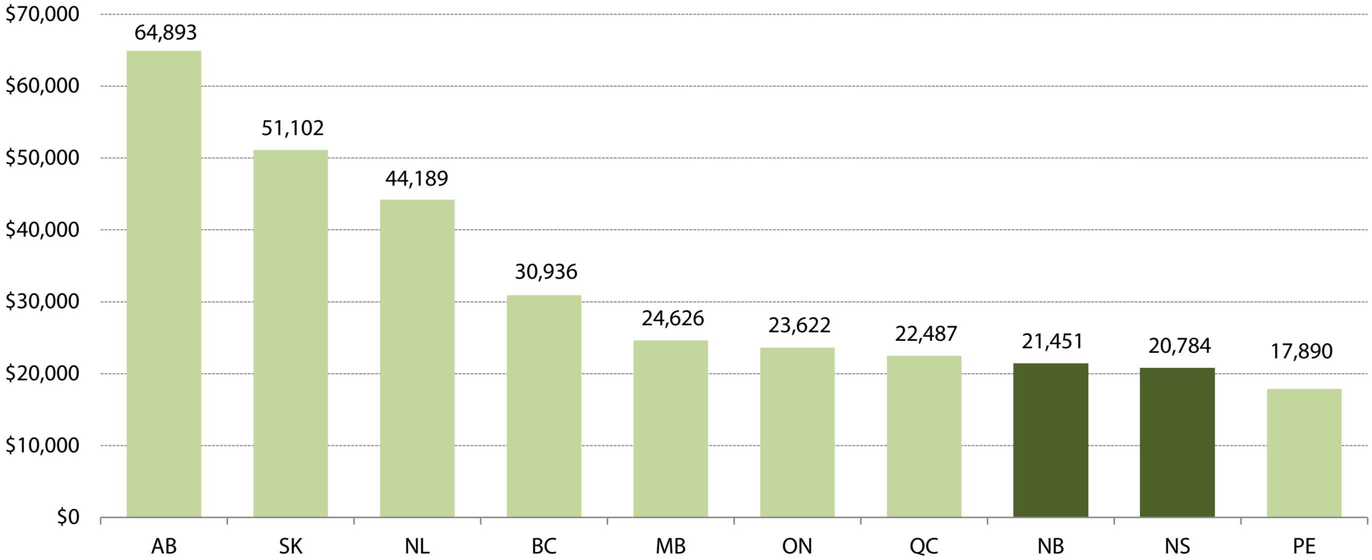
Introduction: A prosperity problem in Nova Scotia and New Brunswick

Across almost every major economic indicator, Nova Scotia and New Brunswick underperform the rest of Canada and rank amongst the poorest regions in the country. Figure 1 illustrates the average household income by province in 2013. Nova Scotia and New Brunswick rank eighth and ninth, respectively, amongst the provinces for average household income. Only Prince Edward Island has a lower average household income level.

An even more dramatic indicator of the prosperity gap is the fact that the average household income in Nova Scotia and New Brunswick is less than four-fifths that of the top three provinces: Alberta, Saskatchewan, and British Columbia. It is clear that Nova Scotia and New Brunswick are two of the poorest provinces in the country.

A key part of the explanation for the poor performance of both provinces is their inability to attract private sector investment. Such investment is the foundation for prosperity. (For the purposes of this paper, prosperity is defined by higher incomes, higher levels of job creation, and greater economic opportunities.) Figure 2 illustrates the average annual level of private sector business investment in each province per private sector worker over the last decade (2004-2013) in inflation-adjusted dollars. As with the average household income measure, Nova Scotia and New Brunswick rank third last and second last, respectively, of the ten provinces. Only Prince Edward Island attracts less investment. Tellingly, the average level of private sector investment per private sector worker over the period was just 51.0 percent (Nova Scotia) and 52.2 percent (New Brunswick) of that in neighbouring Newfoundland & Labrador, which ranked third in Canada.

Figure 2: Average Annual Private Sector Investment* per Private Sector Worker, 2004-2013 (2013$)



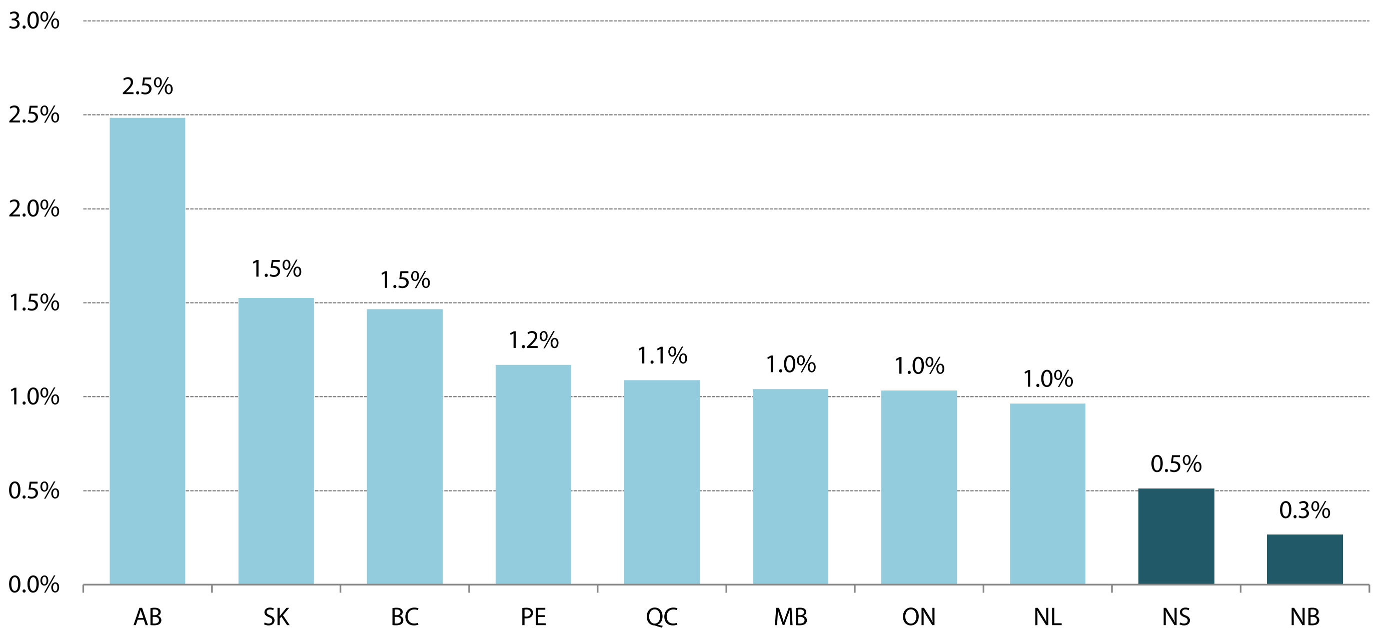
Note: private sector investment here refers to a Statistics Canada category known as "business investment" and consists of: residential structures; non-residential structures, machinery and equipment; and, intellectual property products.
Sources: Statistics Canada (2014b), CANSIM Table 384-0038; and Statistics Canada (2014c), CANSIM Table 282-0012.

The dearth of private sector investment in both provinces is a central explanation for the record of weak job creation in Nova Scotia and New Brunswick. Figure 3 illustrates the average annual growth rate in employment in Canada between 2004 and 2013, by province, for both the private and public sectors. By this measure, Nova Scotia ranks ninth and New Brunswick ranks dead last. In fact, Nova Scotia's job creation record over this period was just half that of Newfoundland & Labrador. Meanwhile, New Brunswick's record was less than one-third that of Newfoundland & Labrador.

The combination of low investment levels and the associated poor job creation rates means that both provinces are dealing with relatively high rates of unemployment. Figure 4 illustrates the average annual unemployment rate for all the provinces from 2004 to 2013. Nova Scotia's average annual unemployment rate was the fourth highest during this period while New Brunswick's unemployment rate was the third highest.[1]

[1] Some may object that Newfoundland & Labrador had the highest average unemployment rate in Canada over the ten-year period, so perhaps there is little proof that allowing resource development has helped that economy. However, the starting points and the trend are what counts: In 2004, Newfoundland & Labrador's unemployment rate was 22.7 percent; it declined steadily after that year, rose again to 22.6 percent because of, and in, the recession in 2009, declined again, and as of 2013 was 16.7 percent (Statistics Canada 2014d). In addition, as per figure 3 and the ten-year average, employment growth in Newfoundland & Labrador was double that observed in Nova Scotia, and triple that in New Brunswick. Simply put, Newfoundland & Labrador started "further back" on employment measurements and accelerated in the 2004-2013 period relative to Nova Scotia and New Brunswick. Thus, Newfoundland & Labrador's decision to allow resource development has indeed mattered to its economy.

Figure 3: Annual Average Employment Growth, 2004-2013 (%)



Source: Statistics Canada (2014d), CANSIM Table 282-0002.

An opportunity foregone

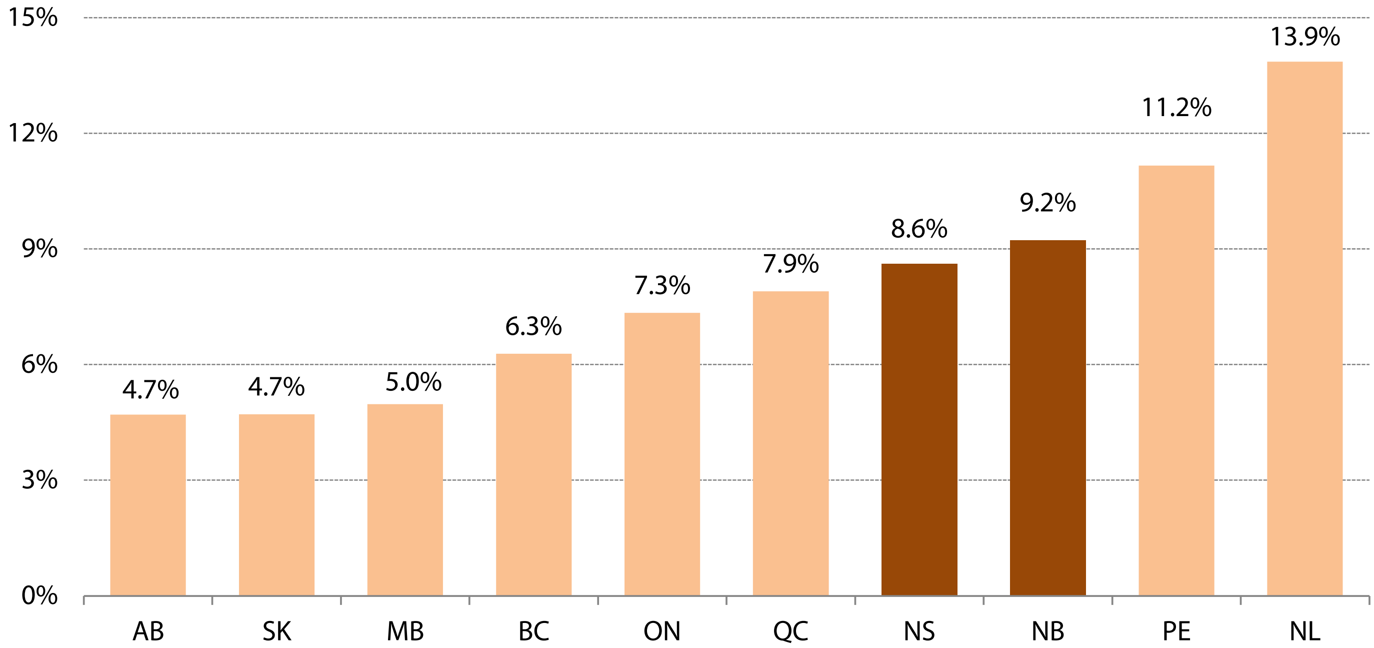
The burden of low economic performance and the dearth of prosperity related to that poor performance have been recognized for decades (McMahon 1996, 2000a, 2000b). Recently though, Nova Scotia and New Brunswick have had the opportunity to change some negative economic indicators for the better by allowing exploratory drilling for natural gas. Depending on the results of such exploration, and if additional commercial activity results, that drilling, in turn, would result in additional private sector investment, increased job creation, higher incomes, and additional tax revenues for the two provincial governments.

For example, in Nova Scotia, the province's energy department has noted that offshore, the province has 120 trillion cubic feet of natural gas and eight billion barrels of oil. Presumably more exists onshore to be discovered given the province itself notes that "Nova Scotia has ample onshore exploration and development opportunities" (Nova Scotia, undated 1).

In 2013, New Brunswick estimated its known shale gas reserves at 15 trillion cubic feet, a 350-year in-province supply based on current residential, industrial, and commercial use in the province. *The New Brunswick Oil and Natural Gas Blueprint* noted that oil and gas in that province "holds the potential to be a significant factor in the province's economy" and that the province's "offshore may contain significant oil and gas reserves" with precise estimates to await more seismic and exploratory drilling data (New Brunswick, 2013: 1, 11, 30).

The moratorium on hydraulic fracturing means that both provinces are proactively foregoing the high paying direct and indirect jobs that could be created from developing this resource. This is in noticeable contrast to Pennsylvania,

Figure 4: Average Unemployment Rate, 2004-2013 (%)



Source: Statistics Canada (2014d), CANSIM Table 282-0002.

home to a shale gas boom in the Marcellus region. According to the Pennsylvania Department of Labor and Industry, direct jobs attributable to the shale gas sector in the state (as of October 2014) were estimated at more than 28,000 (up from 13,000 in 2010). Of note, the average wage for those directly employed in the industry was US$92,914 (Pennsylvania, 2014: 6, 8).

As for estimates of potential new royalties, the 2014 Report of the Nova Scotia Independent Panel on Hydraulic Fracturing provided a "lower medium case" scenario that estimated the royalties that could accrue to the province from the development of shale gas. The report determined that, depending on the year in question, between $122 million and $209 million annually could flow into the provincial treasury for over six decades from these royalties—a total of $5.9 billion over that time. The panel noted that under more optimistic scenarios (upper medium and extreme case scenarios), royalties could be three to five times that amount (Cape Breton University and Verscheun Centre, 2014: 116-188). These revenues could help eliminate both provinces' current deficits and, over time, help lower tax rates so they become more competitive and attractive to investors.

Despite such an opportunity however, in September 2014, Nova Scotia extended a 2012 moratorium on hydraulic fracturing for natural gas and New Brunswick announced a moratorium on the same (Younger, 2014; New Brunswick Liberal Party, 2014: 28). These actions lead to the natural question: why did two provinces in dire need of private sector investment, employment opportunities, and higher incomes and tax revenues, decide to place a moratorium on beneficial, at-home, energy development?

One obvious answer is that politicians will respond to voters and to selected voter concerns on a particular issue—in this instance, the concern over the safety of hydraulic fracturing. This essay will not delve into the degree of public support or opposition to hydraulic fracturing, or the debates over the safety of the practice, both of which have been covered elsewhere.[2]

Instead, this essay will explore one other issue: that the federal equalization program provides incentives for political actors to allow anti-prosperity development policies to flourish.

The origin, description, and formula for equalization

Let's begin by explaining the equalization program. In general (and beyond equalization), federal transfer payments[3] date back to Confederation, though the start of equalization dates from a federal-provincial agreement in 1956 (Holden, 2007: 1); the program was later entrenched in the Constitution in 1982.

Section 36(2) of the Constitution Act, 1982, states that equalization is meant to "provide reasonably comparable levels of public services at reasonably comparable levels of taxation." As the federal Department of Finance notes, equalization is meant to address "fiscal disparities among provinces." Echoing the constitutional imperative, the department notes equalization exists to "enable less prosperous provincial governments to provide their residents with public services that are reasonably comparable to those in other provinces, at reasonably comparable levels of taxation" (Canada, 2013).[4]

To determine eligibility, equalization payments are calculated based on a formula that measures a province's ability to raise revenues, its "fiscal capacity." To calculate the differing fiscal capacities, a federal formula including 31 different provincial revenue sources is used. Revenues are grouped into five categories (personal income taxes, business income taxes, consumption taxes, property taxes, and natural resource revenues) for the purposes of the formula.

For all of the categories except natural resource revenues, the formula defines the fiscal capacity for each province by estimating how

[2] As one of our colleagues, Dr. Kenneth Green, has observed, a literature review in the peer-reviewed journal Science concluded that in North America, "more than one million hydraulic fracturing treatments have been conducted, with perhaps only one documented case of direct groundwater pollution resulting from injection of hydraulic fracturing chemicals used for shale gas extraction" (Green and Milke, 2014, quoting Science). The Nova Scotia Panel on Hydraulic Fracturing has also concluded that "a number of the potential long-term and cumulative public health impacts of hydraulic fracturing and its associated activities and technologies are simply unknown at the present time. However, there is currently no evidence of catastrophic threats to public health in the short-to-medium term that would necessitate the banning of hydraulic fracturing outright" (Cape Breton University and Verscheun Centre, 2014: 308).

[3] Current federal transfers beyond equalization include the Canada Health Transfer and the Canada Social Transfer, Offshore Accord payments, and the Total Transfer Protection program. They are not germane to this essay and definitions and parameters can be found at (Canada, 2014).

[4] Equalization's constitutional status leads some to assert the prospect for substantial reform to the program is difficult, if not constitutionally out of reach. However, according to a 2006 paper published by the Fraser Institute and which surveyed the views of constitutional scholars on this topic, the notion of an equalization program unable to be substantially reformed is severely overstated. See Kellock and LeRoy, 2006, for a full discussion of this topic.

much revenue each province would raise if all of the provinces had an identical tax rate. Natural resources are treated differently; because of differences in royalty structures and other factors, actual resource revenues are used to determine the fiscal capacity in this area instead of an estimate based on what would be raised using a constant tax rate across provinces.

In total, the formula resulted in $16.7 billion in equalization grants being paid out to six recipient provinces in 2014/15 (Canada, 2014).

Once calculations of fiscal capacities are determined, provinces that receive equalization payments are often referred to informally (not in the Constitution) as "have not" provinces, while those that do not are referred to as "have" provinces. As of 2013/14, the "have-not" provinces were Manitoba, New Brunswick, Nova Scotia, Ontario, Prince Edward Island, and Quebec. The remainder (British Columbia, Alberta, Saskatchewan, and Newfoundland and Labrador), were "have" provinces (Canada, 2014).[5]

The disincentives

Economists have identified a number of ways that the equalization program creates disincentives for governments in have-not provinces to take sensible economic actions that could improve their economic performance, and in so doing, increase their own-source revenues.

One clear example is provided in a recent paper published by the University of Calgary's School of Public Policy. It showed that provinces sometimes design their fiscal policies to maximize equalization grants rather than create economic environments conducive to economic growth and development. It found that a focus on maximizing equalization rather than economic development led to economic policies that are sub-optimal (Ferede, 2014). Specifically, the study found that equalization grants encourage higher tax rates and increased levels of government spending in recipient provinces, which hinders economic growth.

The equalization formula treats resource revenue[6] differently than other types of own-source revenue, and in doing so reduces—but does not eliminate—the disincentive effects discussed previously. Whereas new revenue from most other revenues are "clawed back" at a rate of nearly 100 percent, in 2007, the federal government changed the equalization formula to exclude 50 percent of resource revenues from equalization calculations.[7] This means that for each new dollar in resource revenue generated by a have-not province, approximately 50 cents are clawed back by the federal government in the form of reduced equalization payments.

The equalization policy crutch

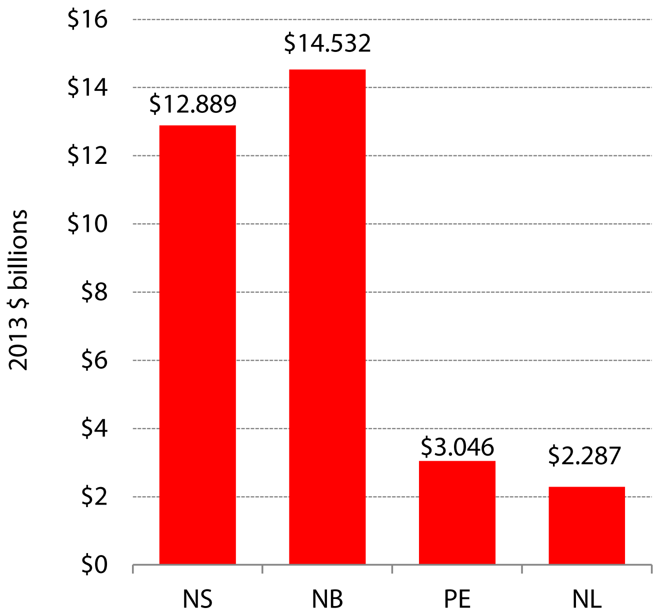
The justification for the federal subsidy program is that it ostensibly helps poorer prov-

[5] Note that the specific provinces which receive equalization, and the total number in receipt, can change from one year to the next.

[6] Under Section 92 of Canada's Constitution, natural resources belong to the provinces in which they are located. That means provinces receive 100 percent of the royalties from such development, i.e., 100 percent of the stumpage fees from forestry operations and 100 percent of the royalties from (onshore) oil and gas development.

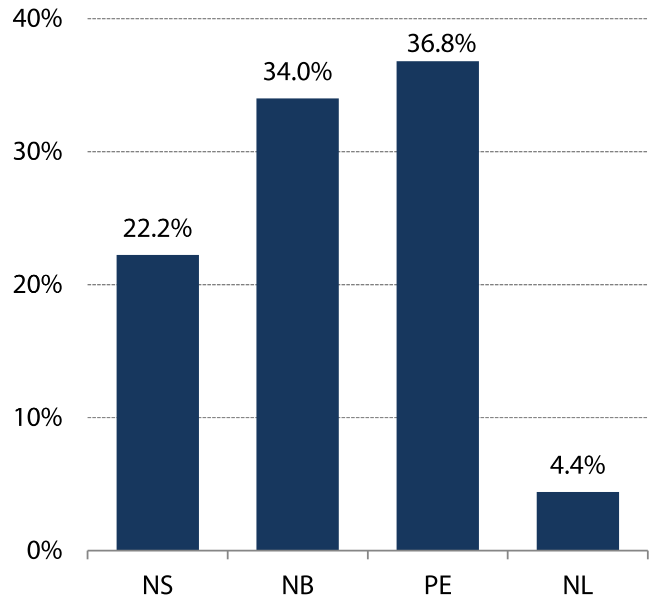
[7] Previously, resource revenues were treated like any other type of income for provinces, and were therefore clawed back at nearly 100 percent (Courchene, 2004). The 50-percent exclusion rate was introduced in an effort to reduce equalization's disincentive effects for natural resource development, and encourage provinces to allow sensible resource development (Chassin, 2012).

Figure 5: Equalization payments 2005/06 to 2013/14 (in 2013 $billions)



Sources: Canada (2014); and provincial public accounts.

Figure 6: Equalization as a percentage of own-source revenues, 2005/06 to 2013/14



Sources: Statistics Canada (2014e), Table 326-0021.

inces. However, the practical, real-world reality is that the program also mitigates the consequences of provincial choices that opt to forego additional own-source revenues that could replace some or all equalization transfers. Simply put, as currently designed, equalization creates perverse fiscal incentives. For example, it is apparent that even the 50 percent exclusion rate for natural resources has not been enough to tempt some provinces—such as Nova Scotia and New Brunswick profiled here—to allow further onshore resource development.

This is a problem, given that as of 2013/14, three of the four Atlantic provinces are highly dependent on equalization (see figures 5 and 6). A look at the period from 2005/06 to 2013/14 (from the earliest year data was available through to the most recent provincial annual reports), clearly shows the dependency. The data show that New Brunswick, Nova Scotia, and Prince Edward Island are highly dependent on equalization payments relative to own-source revenues (e.g., total provincial revenues after subtracting federal transfers) (Canada, 2014; provincial public accounts—various years).

Over the nine-year period, Nova Scotia received $12.9 billion in equalization payments, equivalent to 22 percent of all own-source revenues. Federal equalization payments to New Brunswick amounted to $14.5 billion, equivalent to 34 percent of all own-source revenues. Prince Edward Island received $3 billion in equalization, equivalent to 36.8 percent of PEI's own-source revenue.

The exception in Atlantic Canada is Newfoundland & Labrador, which last received an equalization "cheque" in 2007/08. Over the nine years surveyed, equalization was a comparatively small amount of revenues for the province relative to its own-source revenues. Between 2005/06 and 2013/14, Newfoundland & Labrador received just under $2.3 billion in equalization payments, akin to 4.4 percent of total own-source revenues.

Summary

In general, the equalization program creates disincentives for economic development in have-not provinces. Past equalization reforms that sought to weaken these disincentives appear not to have been robust enough. The result is that existing incentives are still not strong enough for Nova Scotia and New Brunswick to pursue resource development–development that would, if pursued, have the potential to result in higher incomes, additional royalty and tax revenues for both provincial governments, and which would then allow for a reduction in the noticeably high tax levels in both provinces.

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