REFORMING THE FEDERAL FISCAL STABILIZATION PROGRAM

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SUMMARY

Many Albertans are feeling short-changed given how much they contribute to the rest of Canada compared to how little help they get back when their economy is in serious trouble, as it has been lately. As a result, commentators and politicians in the province tend to focus their grievances on the unfairness of the federal equalization program. While it is true that the equalization program needs reform, that program was never meant to help a province such as Alberta, where GDP per capita and household incomes are above the national average, even in times when its economy shrinks. What Albertans should really complain about is the fiscal stabilization program, which is meant to be a form of insurance for provinces whose economies experience economic shocks. In reality, it is an insurance policy that has been designed so that it barely pays anything to Alberta.

That much was starkly evident in 2015–16, when the province's revenues contracted by a staggering $8.8 billion and this so-called insurance policy paid out Alberta a grand total of $248 million. Alberta suffered an revenue reduction of $2,114 per capita, but the fiscal stabilization program caps payouts at a meagre $60 per head. Worse, the current formula does not count drops in resource revenue as meaningfully as it counts drops in other forms of revenue, which distinctly disadvantages Alberta and other resource-dependent provinces, especially Saskatchewan and Newfoundland and Labrador.

The fiscal stabilization program should be reformed to ensure that it actually provides adequate levels of insurance to the resource-dependent provinces.

That is, after all, the stated purpose of the program. A new formula should be developed that will provide meaningful assistance to provinces when they need it.

A fair formula for a fiscal stabilization program should meet the same criteria as any good insurance policy. It should cover only significant losses, which in this case should be a meaningful reduction in all of a province's own-source revenues — including non-renewable resource revenues — compared to an average of the previous five years. It should include a deductible to ensure that the insured party, the province in this case, still has an incentive to manage their fiscal affairs responsibly. And it should offer simple and transparent terms along with a streamlined claims process. The current formula violates these principles. Improving the formula will not save Alberta and other resource-rich provinces from all the pain of the occasional resource bust, but it will help alleviate some of it. That is what the fiscal stabilization program was meant to do. It is time to reform it so that it can finally live up to that promise for every province in the country.

1. INTRODUCTION

In the wake of the 2014 global oil-price downturn, slumping royalty and tax revenues, and rising provincial debts, provincial politicians and media commentators in Alberta, Saskatchewan and Newfoundland and Labrador have called for changes to the federal equalization program because it has not benefited their provinces. As I argued in a Jan. 17, 2019 Calgary Herald article, while there are problems with the equalization program, these criticisms are misplaced. The equalization program was never intended to assist a province such as Alberta whose household incomes and GDP per capita remain above average. Instead, complaints about the lack of federal support for Alberta and the other resource-rich provinces should be directed at the federal fiscal stabilization program. Reforming the fiscal stabilization program should be a priority in revising the fiscal relations between the federal and provincial governments.

The objective of the fiscal stabilization program is to provide fiscal insurance to provinces that suffer extraordinary declines in revenues. In 2015–16, Alberta's total own-source revenues declined by $8.8 billion, or $2,114 per capita. However, Alberta only received $248.3 million under the fiscal stabilization program because payments are limited to $60 per capita.[1] Clearly, the fiscal stabilization program only provided a minimal amount of fiscal insurance in the face of the steep downturn in the Alberta economy.

The fiscal stabilization program needs to be reformed so that it fulfills its mandate of supporting provinces in the event of extraordinary declines in their revenues. In this briefing paper, we will discuss the rationale for an effective federal fiscal stabilization program and the principles that should be adopted in redesigning an effective fiscal-insurance program. We then propose some alternative formulas, consistent with these principles, for calculating the fiscal-insurance payments and show the support levels that they would have provided to the provinces since the mid-1980s, had they been used instead of the actual formula.

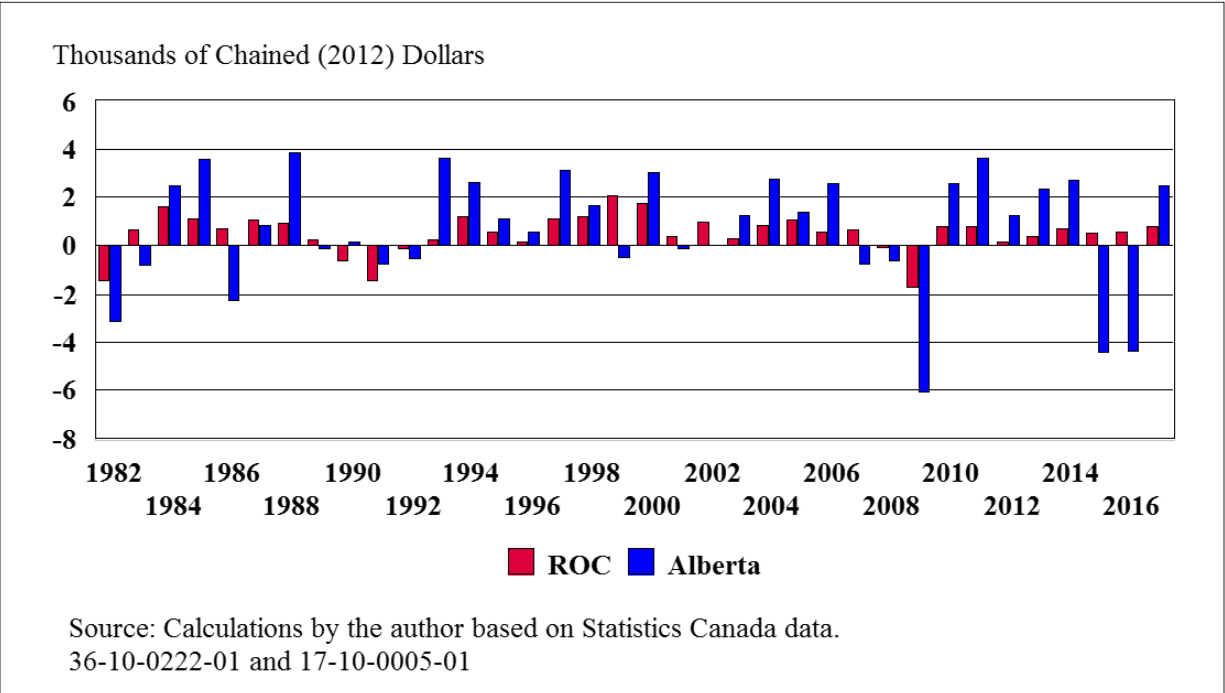## 2. THE RATIONALE FOR A FEDERAL FISCAL STABILIZATION PROGRAM

The rationale for a federal fiscal stabilization program is risk sharing.[2] Provincial governments obtain most of their revenues from taxes, royalties and user fees derived from their specialized provincial economies. They are more exposed to economic shocks than the federal government, whose tax base encompasses all regional economies. If provincial economies face different positive and negative shocks, the federal government can pool the fiscal risks that individual provincial governments face.

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[1]   The federal Department of Finance website shows an advance payment to Alberta of $251.4 million, but officials at Alberta Treasury Board and Finance have indicated that the actual payment based on updated population data was $248.3 million: https://www.fin.gc.ca/fedprov/mtp-eng.asp#Alberta. The website also indicates that there was an advance payment to Newfoundland and Labrador of $31.7 million for 2015–16.

[2]   See Bucovetsky (1998), Lockwood (1999) and Boadway and Tremblay (2006) for models of intergovernmental grants based on the risk aversion of taxpayers in regional economies that face stochastic fluctuations in output.

To illustrate the differences in economic risk, Figure 1 shows the year-over-year change in real per capita GDP in Alberta and the rest of Canada (ROC) from 1982 to 2017. It is no surprise that per capita output in Alberta has been more volatile than in the rest of Canada. In particular, per capita output in Alberta declined in 14 of the 36 years shown in Figure 1. Year-over-year declines of more than five per cent occurred in 1982, 2009, 2015, and 2016. There were nine years in which Alberta's real per capita GDP declined while real per capita GDP increased in the rest of Canada. There were simultaneous declines in real per capita GDP in Alberta and the rest of Canada in only five of the 36 years. In one year, 1990, real per capita GDP increased in Alberta while it declined in the rest of Canada. These data indicate that there are opportunities for risk sharing between Alberta and the rest of Canada because the negative economic shocks to the Alberta economy are not highly correlated with negative shocks to the rest of the Canadian economy. And when they occurred in the same year, the negative shocks in the rest of Canada were generally smaller in percentage terms than in Alberta.[3]

FIGURE 1   YEAR-OVER-YEAR CHANGES IN REAL PER CAPITA GDP IN ALBERTA
            AND THE REST OF CANADA

Source: Calculations by the author based on Statistics Canada data.
36-10-0222-01 and 17-10-0005-01

By their nature, rich regions contribute more in federal tax revenues and generally receive less in federal public expenditure than do poorer regions, leading to ongoing net fiscal transfers to the poorer regions. While there may be other economic motivations for belonging to a federation, such as sharing the cost of public goods (for example, defence) or benefiting from greater access to markets through free trade, a fiscal-insurance program can be one of the motivations for a rich but risky region to belong to a

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[3]   The one exception was in 1991 when real per capita GDP declined by 3.8 per cent in the rest of Canada, while it only declined by 1.3 per cent in Alberta.

federation. See Bucovetsky (1998). The net fiscal transfer that a rich region contributes in "normal" times could be considered its "fiscal-insurance premium." In the case of Alberta, the net fiscal transfers have been estimated by Mansell and Khanal (forthcoming) at over $5,000 per person per year since 2000. It is no wonder that many Albertans are concerned that the "insurance coverage" from the federal government has been so low while their fiscal contributions to the federation have been so high. In the following sections, we discuss how the federal fiscal stabilization program could be reformed so that it provides Alberta and the other provinces with a greater degree of fiscal-insurance coverage in the event of economic downturns.

To indicate the size of the fiscal risk that the provincial governments face, Table 1 shows the years in which there were percentage declines in their own-source revenues from their previous five-year averages since 1986–87. Three provinces — Alberta, Saskatchewan and Newfoundland and Labrador — have suffered the largest and most frequent declines in own-source revenues. Seven times have Alberta and Newfoundland and Labrador recorded revenue reductions compared to the average over the previous five years. In Saskatchewan, this occurred four times. Some of the other provinces have also recorded significant revenue reductions, such as British Columbia in 2009–10 and New Brunswick in 1998–99. Nova Scotia and Quebec have only experienced minor own-source revenue reductions. Prince Edward Island, Ontario and Manitoba have never experienced reductions in revenue compared to the previous five-year average.

TABLE 1   PERCENTAGE REDUCTIONS IN PROVINCIAL GOVERNMENTS' OWN-SOURCE REVENUES FROM PREVIOUS FIVE-YEAR AVERAGES

	Alberta	Saskatchewan	Newfoundland and Labrador	British Columbia	New Brunswick	Nova Scotia	Quebec
1986-87	34.4	12.7					
1987-88	3						
1988-89	5.8						
1996-97						0.3	
1997-98			11.4			0.4	
1998-99			8.6		16.4		
1999-00			1.2				
2000-01			7.1				
2001-02		1.7					
2002-03				2.6			
2009-10	4.1			6.8			0.007
2010-11	9.7						
2014-15			10.8				
2015-16	19.1	4.7	33.2				
2016-17	24.5	9.4	5.6				
2017-18	1.1	3.1	7.5				

Source: Calculation by the author based on the Canadian Provincial Government Budget Data set available on The School of Public Policy's website at https://www.policyschool.ca/publication-category/research-data/.

Not only have Alberta, Saskatchewan and Newfoundland and Labrador experienced more frequent revenue reductions, they are relatively large, averaging 12.7 per cent, 6.3 per cent and 10.7 per cent respectively. The revenue declines compared to a previous five-year average were also persistent. In the case of Alberta, the declines persisted over the periods 1986–89, 2009–11 and 2015–17. For Newfoundland and Labrador, there was a decline over the 1997–2001 period and more recently for 2014–18. Saskatchewan suffered declines in the three consecutive fiscal years 2015–18.

3. THREE PRINCIPLES FOR THE DESIGN OF A FISCAL-INSURANCE PROGRAM

A fiscal-insurance program should be based on the same principles as an efficient insurance contract in the private sector. That is, an efficient insurance contract should (a) only cover events where significant losses are incurred by the insured, (b) preserve incentives for the insured to avoid losses, and (c) be simple and transparent with a streamlined claims-settlement process. Below we discuss how each of these key features should be applied to the design of a federal fiscal-insurance program.

3.1 COVERAGE OF SIGNIFICANT LOSSES

What should be covered? Provincial governments face fiscal uncertainty from unanticipated increases in expenditures and unanticipated declines in revenues. As with private insurance, there is no need to cover small, predictable fiscal losses. Only large, unanticipated losses should be covered.

Unanticipated increases in provincial expenditures, which are often due to natural disasters such as fires, floods, or droughts, are generally small compared to overall provincial expenditures, and spending to repair damages can be spread over several years. Also, governments have more control over expenditures than they do over revenues, leading to a potential moral-hazard problem if fiscal-insurance coverage is applied to all provincial spending increases. (See below.) These considerations imply that provincial governments' expenditure increases should not be covered by fiscal insurance, but large declines in own-source revenues should be covered.

Which revenue losses should be covered? It can be argued that since resource revenues are the most volatile source of provincial revenues, they are a good candidate for fiscal-insurance coverage. However, provincial governments can and should adopt fiscal policies to offset short- to medium-term resource-revenue fluctuations by establishing revenue-stabilization funds.[4] They should also save some portion of resource revenues in sovereign wealth funds to deal with long-term declines in resource revenues. Still, in resource-based provincial economies, declines in resource revenues coincide with significant reductions in those governments' other sources of revenues, such as provincial personal and corporate income taxes and sales and excise taxes. The overall decline in

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[4]   As discussed below, the deductible for the fiscal-stabilization payments should be sufficiently high, and only a fraction of the revenue reduction above the deductible should be covered, in order to provide the provinces with the incentive to establish a revenue-stabilization fund.

revenues can exceed the ability of a stabilization fund to finance budget deficits during a major downturn in the economy. From a provincial-budget perspective, it does not matter which source of tax revenue has declined. It is the total decline in revenues that will require either expenditure restraints or increased borrowing to cover budget deficits. These considerations suggest that a federal fiscal-insurance program should cover declines in a provincial government's total own-source revenues. Coverage should not depend on which source of tax revenue has been responsible for the decline in revenues, but only significant reductions in total own-source revenues should be covered.

How should the decline in provincial own-source revenues be measured? The current fiscal stabilization program only covers year-over-year declines in provincial revenues. (See Section 4 for a description of the current program.) This is an overly restrictive way of defining an eligible revenue reduction, because if a province has been receiving a stable revenue stream over a number of years and then faces an abrupt and persistent decline in its revenues, the required fiscal adjustment may stretch over several years. For these reasons, eligible revenue losses should be calculated as the decline in revenues in a given year compared to the province's average annual own-source revenue in the recent past; say, for instance, the previous five years. Using a moving average of past revenues provides a better indication of the size and duration of a revenue downturn than a simple year-over-year comparison. Furthermore, a year-over-year calculation of entitlement could lead to a perverse result. For example, if a provincial government received a large, abrupt increase in revenue in one year, followed by a decline the following year to a normal level, it might be eligible for a fiscal-insurance payout under the current program based on year-over-year changes in revenues. For these reasons, the eligible revenue losses should be based on declines in own-source revenues compared to a past moving average.

3.2   PRESERVING LOSS AVOIDANCE INCENTIVES

Insurance coverage can erode the insured's incentives to avoid or limit losses. In private insurance markets this is known as the moral-hazard problem. To maintain appropriate levels of loss-prevention activity, private insurance contracts limit the coverage of losses by imposing deductibles and/or only covering a percentage of the eligible claims (co-insurance). The same principle should apply to fiscal insurance. As noted above, provincial governments can cope with moderate revenue declines by establishing revenue-stabilization funds and more generally by balancing their budgets over a normal business cycle, running surpluses during booms to offset borrowing to finance deficits during economic downturns. Maintaining a manageable debt level and a good credit rating allows the province to borrow to finance "normal" fluctuations in revenues. To preserve provincial incentives to maintain prudent fiscal policies, fiscal-insurance coverage should follow the private sector practice of only covering losses that exceed some percentage of "normal" own-source revenues (a deductible) and then only covering a fraction of eligible losses (co-insurance). In Section 5, we propose three alternative fiscal-insurance formulas to illustrate how different deductibles and coverage rates would have affected payments to the provinces in the past.

Should fiscal-insurance coverage take into account discretionary tax-policy changes? Tax-rate cuts, changes to tax bases or reductions in tax-collection efforts could reduce

provincial revenues but increase fiscal-stabilization payments. Should a fiscal stabilization program have rules to prevent "fiscal arson"? The current fiscal stabilization program allows the federal finance minister to adjust the payments to reflect "changes made by the province in the rates or structure of provincial taxes or of other means of raising the revenue of the province from the rates or structures in effect in the preceding fiscal year." (Federal-Provincial Fiscal Arrangements Act (R.S.C., 1985, c. F-8) Part II.) However, if there is a reasonably large deductible in place, such measures are probably not needed to prevent a provincial government from (continuing with the "fiscal arson" metaphor) burning down its home to collect insurance. Furthermore, prudent fiscal policy in some circumstances may require lower tax rates to stimulate the economy during a downturn. It is also very difficult to accurately calculate the reduction in revenues that would result from a provincial tax cut, because tax bases will generally increase over time in response to the tax-rate cut. The decline in revenues will be less than the "mechanical" calculation of the revenue loss based on the revenue generated per tax point.[5] Indeed, in some cases, as the study by Dahlby and Ferede (2018) has shown, provincial corporate tax-rate cuts may lead to higher revenues in the long run. In addition, if a provincial government cuts its tax rate on a tax base that is shared with the federal government, it will normally boost federal revenues because a lower provincial tax rate will lower tax avoidance and evasion activity, thereby increasing the shared base. These so-called vertical tax externalities are substantial in the Canadian context and provide a rationale for federal support for, rather than punishment of, provincial tax cuts. For these reasons and others that are discussed below, there should not be any adjustment to fiscal-stabilization payments based on provincial tax measures that may reduce revenue collections.

3.3   SIMPLE, TRANSPARENT CONTRACTS AND STREAMLINED CLAIMS ADJUSTMENT

Simple, transparent insurance contracts and streamlined claims-adjustment processes lower transactions costs, reduce the likelihood of expensive legal disputes and promote confidence in the reliability of the insurer. Similarly, the regulations determining payments under a fiscal-insurance program should be simple and transparent, and payments should be made in a timely manner. A simple formula with well-defined parameters, such as the deductible and the coverage rates, would allow provincial politicians, government officials and the general public to feel confident that payments will be made under the specified conditions. Streamlining the calculation of the payments is another reason why adjustments for changes in provincial tax policies, referred to above, should be avoided, because calculating the effects of such policies on tax revenues is complicated and would lead to controversy and delays.

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[5]   See, for example, the estimates of the revenue per tax point in the Government of Alberta, 2018–21 Fiscal Plan, p. 133.

4. FISCAL-STABILIZATION PAYMENTS UNDER CURRENT FORMULAS

As noted in the introduction, Alberta received only $248.3 million for 2015–16 under the fiscal stabilization program because payments are capped at $60 per capita. Lifting the cap on the payments would be a welcome measure, but the existing formulas for calculating the payments should also be revised, because they do not provide adequate fiscal insurance when there are declines in resource revenues. For example, the current formula does not take into account a reduction in resource revenues if the year-over-year decline in resource revenue is less than 50 per cent, and even then it only provides a payment if non-resource revenues decline by more than five per cent.

In this section, we compute the federal fiscal-stabilization payments that would have been made to Alberta, Saskatchewan and Newfoundland and Labrador with the existing formulas using the same revenue data that will be used to calculate the payments under the three alternative programs in Section 5. Our objective is not to replicate the payments that would have been made by the federal government in the absence of the cap, because we do not know what data on provincial revenues the federal government would use in these calculations, but to compare the current formulas with the alternative formulas in Section 5 using the same provincial revenue data.[6]

The formulas that determine payments under the current fiscal stabilization program, in the absence of a cap, depend on the year-over-year change in resource revenues. Three cases are distinguished under Part II of the Federal Provincial Fiscal Arrangements Act that deals with the fiscal-stabilization payments (FSP) to the provinces. Case 1 applies if natural resource revenues (NRR) in year t, NRR_t, are higher than in the previous year. In this case, the fiscal-stabilization payment for year t, FSP_t, is the difference between the year-over-year reduction in total revenues and five per cent of total revenues in the previous year. In other words, in Case 1, the FSP covers total revenue reductions in excess of five per cent of the previous year's total revenues. Case 2 applies when natural resource revenues decline by more than 50 per cent. The FSP is equal to the difference between the reduction in non-resource revenues, $R_{t-1} - R_t$, and five per cent of the previous year's non-resource revenues, plus the difference between the decline in natural resource revenues and 50 per cent of natural resource revenues in the previous year. Effectively, the FSP covers reductions in non-resource revenues and resource revenues in excess of five per cent and 50 per cent of the previous years' revenues from these sources. Case 3 applies when natural resource revenues decline but by less than 50 per cent of the previous year's revenues. In this case, the FSP is the difference between the decline in non-resource revenues and five per cent of the previous year's non-resource revenues, and the FSP does not compensate the province for the decline in resource revenues.

The box below shows the formulas that apply in these three cases. Clearly, the current system violates the principle of a simple formula to determine coverage. No coverage is provided for resource-revenue reductions when resource revenues decline by less than 50 per cent. Furthermore, in all cases there is a 100-per-cent coverage rate for

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6   The revenue sources used by the federal government in calculating fiscal stabilization can be found in Section 4(1) of the Federal-Provincial Fiscal Arrangements Regulations, 2007. https://laws-lois.justice.gc.ca/PDF/SOR-2007-303.pdf.

non-resource-revenue reductions beyond the five-per-cent deductible. One can argue that this coverage rate is too generous for non-resource-revenue reductions. Finally, as pointed out earlier, restricting payment to year-over-year reductions in revenues means that significant reductions in revenues sustained over several years are not covered.

Current Formulas Used to Calculate Fiscal-Stabilization Payments:

Case 1:
$$FSP_t = 0.95 \cdot (R_{t-1} + NRR_{t-1}) - (R_t + NRR_t) \qquad NRR_t > NRR_{t-1}$$

Case 2
$$FSP_t = (0.95 \cdot R_{t-1} - R_t) + (0.5 \cdot NRR_{t-1} - NRR_t) \qquad NRR_t < 0.5 \cdot NRR_{t-1}$$

Case 3
$$FSP_t = 0.95 \cdot R_{t-1} - R_t \qquad 0.5 \cdot NRR_{t-1} < NRR_t \leq NRR_{t-1}$$

There are obvious design flaws in the current formulas, but perhaps the most important flaw is the lack of coverage for the provinces that are dependent on resource revenues. Table 2 shows payments that would have been made with these formulas using the same provincial revenue data that will be used to calculate fiscal-stabilization payments for the alternative formulas proposed in Section 5. Under the existing formulas, but without the cap, Alberta would only have been eligible for payments in 1986–87, 2008–09 and 2015–16. Payments in the latter year would have been substantial, $3.9 billion, with total payments over the entire period of $6.4 billion. The current formulas would have been even less generous to Saskatchewan and Newfoundland and Labrador. Saskatchewan would only have received $458 million, and Newfoundland and Labrador would have received $258 million.

TABLE 2   FISCAL-STABILIZATION PAYMENTS WITHOUT THE CAP (MILLIONS OF DOLLARS)

	Alberta			Saskatchewan			Newfoundland and Labrador		
	Case 1	Case 2	Case 3	Case 1	Case 2	Case 3	Case 1	Case 2	Case 3
1986-87		783.3							
1991-92						96.0			
1996-97									10.5
1997-98									192.1
2000-01							3.0		
2001-02						362.4			
2008-09	1,739.0								
2015-16		3,900.4							
2017-18							52.1		

Source: Calculations by the author.

Notes: These are the payments that would have been made based on the same revenue data used to simulate payments under the alternative formulas in Table 3.

5. REFORMING THE FISCAL STABILIZATION PROGRAM

Reforming the fiscal stabilization program should start with lifting the $60 per capita cap. However, as the previous section indicated, the current formulas used to calculate fiscal-stabilization payments should also be revised because they do not provide adequate fiscal insurance when there are declines in resource revenues. In this section, we describe below three alternative formulas for calculating payments that are consistent with the principles of efficient insurance coverage described in the previous section.

5.1   THREE ALTERNATIVE FISCAL STABILIZATION PROGRAMS

Table 3 shows how three alternative fiscal stabilization programs, consistent with the principles outlined in the previous section, would have provided support for Alberta, Saskatchewan and Newfoundland and Labrador in the past.[7] The three programs differ in terms of the size of the deductible and the coverage rates. Program A has a five-per-cent deductible and a 50-per-cent coverage rate for losses beyond the five-per-cent deductible. In other words, only reductions in annual own-source revenues in excess of five per cent of the average own-source revenue over the previous five years would be eligible for a payment and only 50 per cent of that would be covered. Program B also has a five-per-cent deductible, but a 75-per-cent coverage rate. Program C has a lower deductible, at three per cent, and lower coverage rate, at 66 per cent, than Program B. The general formula for the fiscal-stabilization payment in year t, FSP_t is:

$$FSP_t = \alpha \cdot \left[\sum_{i=1}^{5} \frac{OSR_{t-1}}{5} - (1 + \beta) \cdot OSR_t \right]$$

where OSR_t is the province's own-source revenue in year t. For Program A, $\alpha = 0.50$ and $\beta = 0.05$. For Program B, $\alpha = 0.75$ and $\beta = 0.05$. For Program C, $\alpha = 0.66$ and $\beta = 0.03$.

Table 3 shows that Alberta would have received payments in five years, totaling $6.8 billion under Program A and $10.2 billion under Program B, and in seven years totaling $10.6 billion under Program C. Saskatchewan and Newfoundland and Labrador would have received much smaller amounts, ranging from $264 million to $602 million for Saskatchewan and $972 million to $1.6 billion for Newfoundland and Labrador. (These payments are in current dollars. Adjusting for inflation, the payments in the 1980s and '90s would be much higher in 2019 dollars.) Payments under Program A would have covered less than 50 per cent of the revenue reductions of these provinces over this period. Programs B and C would have covered between 45 and 50 per cent of the revenue losses for Alberta and Newfoundland and Labrador. For Saskatchewan, only Program C would have covered about one-third of its revenue loss, because under programs A or B, with the five-per-cent deductible, the revenue reductions in 2015–16 and 2017–18 would not have been eligible for fiscal-stabilization payments.

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    Not shown in Table 3 are payments of $134.3 million, $201.5 million, and $208.5 million for New Brunswick for 1998–99 and $217.8 million, $326.7 million, and $601.9 million for British Columbia for 2009–10 for programs A, B, and C respectively.

While the three alternative programs would have provided financial relief to Alberta, they would only have eased the financial burden and not eliminated it. Figure 2 shows Alberta's fiscal deficits in the years in which it would have received payments under these formulas. In spite of these hypothetical payments, the province would still have incurred financial deficits.

TABLE 3   FISCAL-STABILIZATION-PROGRAM PAYMENTS UNDER THREE ALTERNATIVE FORMULAS (MILLIONS OF DOLLARS)

	Alberta			Saskatchewan			Newfoundland		
	Program A	Program B	Program C	Program A	Program B	Program C	Program A	Program B	Program C
1986-87	1,164.8	1,747.2	1,642.2	71.7	107.5	119.3			
1987-88			1.1						
1988-89	40.3	60.4	182.1						
1997-98							52.5	78.7	90.8
1998-99							30.1	45.2	61.7
2000-01							17.6	26.4	45.5
2009-10			231.5						
2010-11	700.7	1,051.0	1,321.0						
2014-15							155.8	233.7	277.1
2015-16	2,091.9	3,137.8	3,153.5			105.3	636.0	953.9	899.0
2016-17	2,771.6	4,157.3	4,032.8	192.3	288.4	369.8	17.4	26.1	94.4
2017-18						7.2	62.5	93.7	149.7
Total Payments	6,769.2	10,153.8	10,564.1	264.0	396.0	601.6	971.8	1,457.7	1,618.2
Percentage of Revenue Reduction	32.6%	48.9%	50.8%	14.1%	21.2%	32.2%	30.0%	45.0%	50.0%

Source: Calculations by the author.

Notes: Program A has a five-per-cent deductible and a 50-per-cent coverage rate.

Program B also has a five-per-cent deductible, but a 75-per-cent coverage rate.

Program C has a three-per-cent deductible and a 66-per-cent coverage rate.

FIGURE 2   ACTUAL ALBERTA GOVERNMENT DEFICITS VERSUS DEFICITS UNDER ALTERNATIVE FISCAL STABILIZATION PROGRAMS
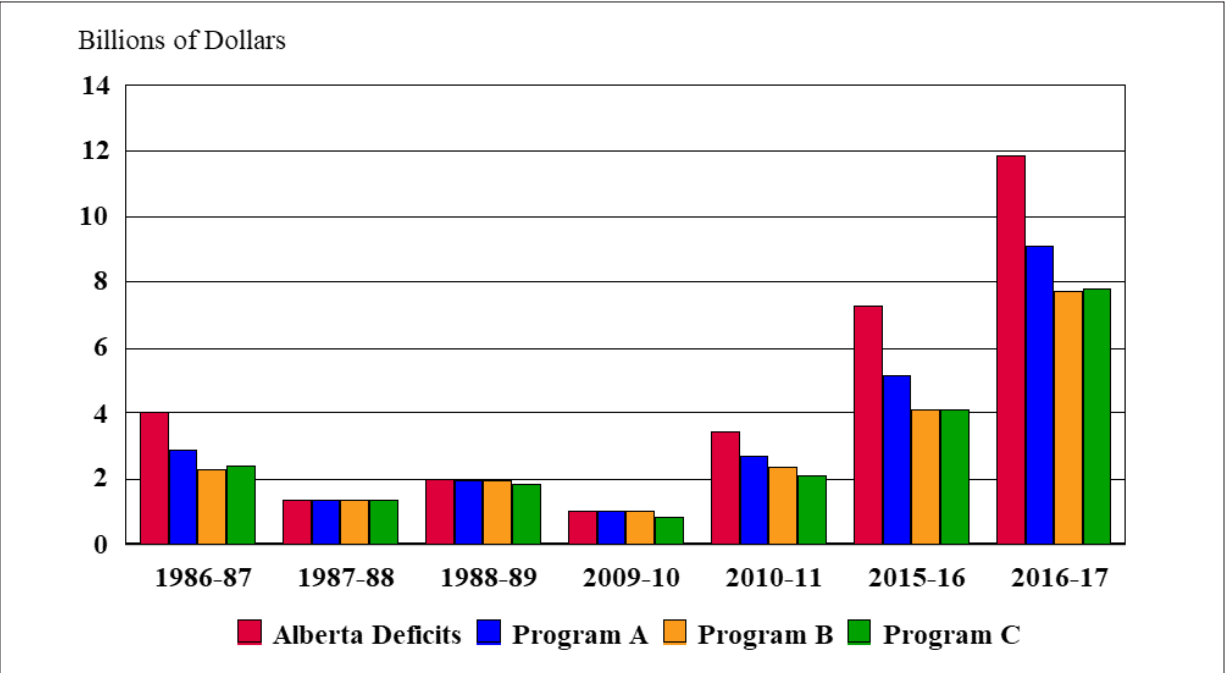
Source: Provincial government budget data and author's calculations.

Comparing the fiscal-stabilization payments under the three alternative formulas with the current formulas, we see that, for Alberta, Program A would have provided about the same payment as the current formulas and programs B and C would have provided about $4 billion more than the current formulas. For Saskatchewan, only Program C, with the three-per-cent deductible, would have provide a larger payment than the current formulas. For Newfoundland, all three alternative programs would have provided much higher payments than under the current formulas.

5.2 IMPACT ON FEDERAL FINANCES OF THE ALTERNATIVE PROGRAMS

Table 4 shows the total payments under each of the programs for the fiscal years in which the provinces (including British Columbia and New Brunswick) would have received payments. Program A, which provides the least coverage, would have cost the federal government $8.4 billion over the entire period. Perhaps more relevant for current controversies, the federal government would have paid about $5.8 billion in the three fiscal years 2015–18 to Alberta, Saskatchewan and Newfoundland and Labrador. Under programs B and C, total federal payments over the entire period would have been between $12.5 billion and $13.6 billion. Over the 2015-18 period, Program B would have cost the federal government $8.7 billion, and Program C would have cost $8.8 billion.

TABLE 4   TOTAL PAYMENTS BY THE FEDERAL GOVERNMENT UNDER ALTERNATIVE PROGRAMS (MILLIONS OF DOLLARS)

	Program A	Program B	Program C
1986-87	1,236.5	1,854.7	1,761.5
1987-88	0.0	0.0	1.1
1988-89	40.3	60.4	182.1
1997-98	52.5	78.7	90.8
1998-99	164.4	246.6	270.2
2000-01	17.6	26.4	45.5
2009-10	217.8	326.7	833.4
2010-11	700.7	1,051.0	1,321.0
2014-15	155.8	233.7	277.1
2015-16	2,727.8	4,091.7	4,157.8
2016-17	2,981.2	4,471.8	4,497.0
2017-18	62.5	93.7	156.9
Total Payments	8,357.1	12,535.6	13,594.3

Source: Calculations by the author.

Notes: See Table 3.

Figure 3 shows payments under the three alternative fiscal stabilization programs as a percentage of federal revenues. Measured in this way, the largest burden would have been in 1986–87 at just over two per cent of federal revenues for Program B. Payments would have been less than one per cent of federal revenues in following years, but then would have jumped to close to 1.5 per cent in 2015–16 and in 2016–17 for Program C.
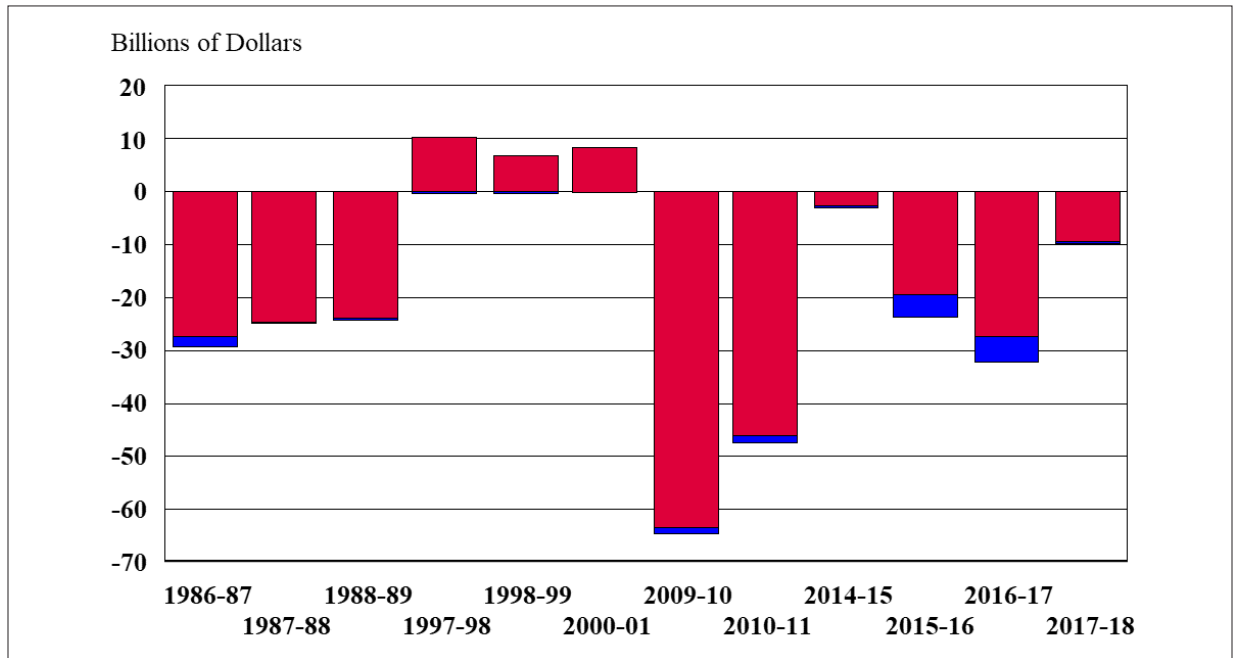
FIGURE 3   FEDERAL STABILIZATION PAYMENTS UNDER ALTERNATIVE PROGRAMS AS A PERCENTAGE OF FEDERAL REVENUES
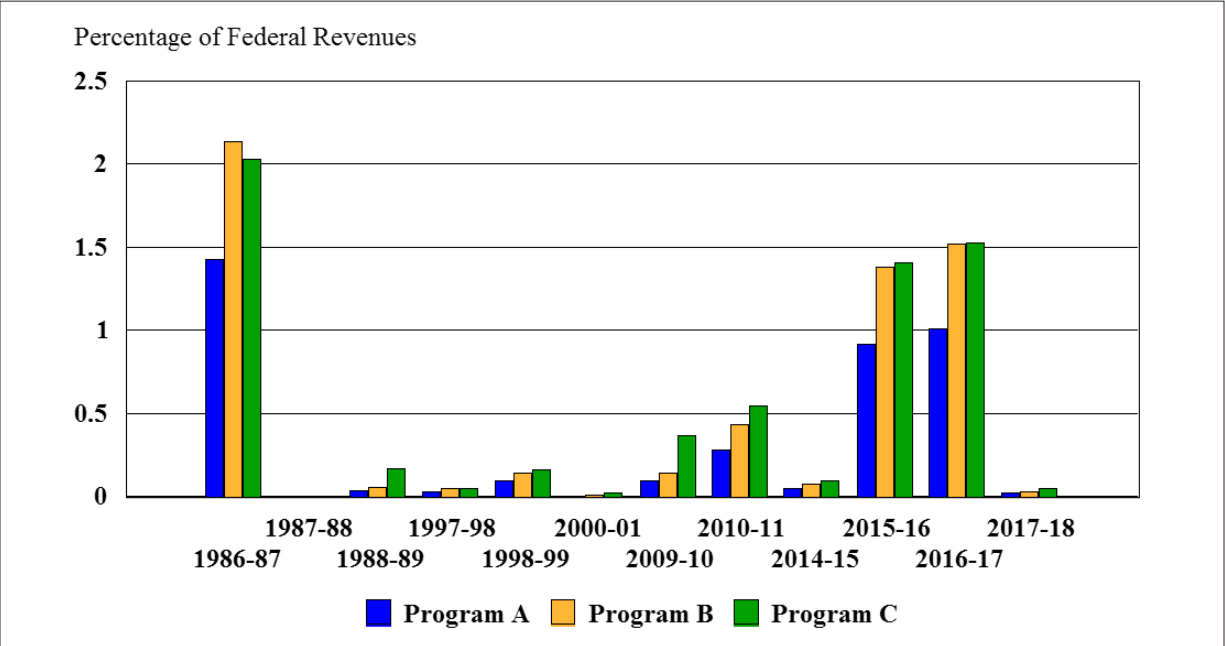
Source: Fiscal Reference Tables https://www.fin.gc.ca/pub/frt-trf/index-eng.asp; and author's calculations.

Another way of measuring the impact of these alternative fiscal stabilization programs is how they would have impacted the federal budget balances. Figure 4 shows the federal surpluses and deficits, the red bars, and how payments under Program C would have contributed to the federal deficits in those years (the blue bars). In the years in which the federal government was running surpluses, 1997–98, 1998–99 and 2000–01, the payments would have been relatively low and would not have converted federal surpluses into deficits. In the eight years in which the federal government had deficits, the payments under Program C would have contributed to those deficits but would have been relatively minor components of the total deficit. It should also be noted that the federal deficits in 2009–10 and 2010–11 were due to the downturn in the Canadian economy and the fiscal-stimulus policy adopted to combat it. The more recent federal deficits have been incurred when the Canadian economy is doing well and are not consistent with a policy of balancing the budgets over the business cycle. Overall, federal payments, under even the most generous fiscal stabilization program modelled here, are well within the federal government's fiscal capacity. Payments under a fiscal stabilization program will reduce a provincial government's deficit and increase the federal government's deficit. Since the federal government can borrow at a lower interest rate than the provinces can, this is consistent with the fundamental motivation for insurance in shifting the burden of a loss to those who have a greater ability to absorb it.

Source: Fiscal Reference Tables https://www.fin.gc.ca/pub/frt-trf/index-eng.asp; and author's calculations.

6. CONCLUSION

As noted in the introduction, provincial politicians and media commentators in Alberta, Saskatchewan and Newfoundland and Labrador have called for changes to the federal equalization program because it has not benefited their provinces in the face of steep reductions in their revenues. The equalization program should be reformed because it biases the recipient provinces' fiscal policies in favour of higher taxes and lower spending on productivity-enhancing public infrastructure projects. See Ferede (2017) and Cyrenne and Pandey (2015). However, Alberta and the other resource-rich provinces should also pressure the federal government to reform the fiscal stabilization program in order to address their concerns about the lack of federal support in the wake of the downturn in the oil and gas sector. Reforming the fiscal stabilization program should go beyond the removal of the $60 per capita cap on payments. Simple formulas for calculating the payments should be used and:

- Payments should be based on declines in a province's own-source revenues from an average of its past years' own-source revenues.

- The program should preserve incentives for provinces to maintain prudent fiscal policies by only covering losses that exceed some percentage of "normal" own-source revenues (a deductible) and then only covering a fraction of eligible losses (co-insurance).

- Formulas determining payments should be simple and transparent with no adjustment for changes in provincial tax policies that may affect own-source revenues.

Reforming the fiscal stabilization program along these lines would go a long way to addressing the concerns of the provinces about the lack of federal support in the face of significant downturns in their revenues.

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Bev Dahlby, Distinguished Fellow at the University of Calgary's School of Public Policy, attended St. Peter's College, the University of Saskatchewan, Queen's University and the London School of Economics. He is also the Research Director as well as the Director of the Tax and Economic Growth program at The School. Dr. Dahlby has published extensively on tax policy and fiscal federalism.

Dr. Dahlby has served as a policy advisor to the federal and provincial governments. He was a member of the Jenkins Panel on federal support for research and development. In 2016, Dr. Dahlby chaired the British Columbia Commission on Tax Competitiveness. In May 2019, he was appointed to the MacKinnon Panel to review the Government of Alberta's finances. His international experience includes advisory work on tax reform for the IMF in Malawi, for the Thailand Development Research Institute, and for the World Bank in Brazil and Mexico.

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