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Federal balanced budget legislation: Context, impact and design

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The mandate of the Parliamentary Budget Officer (PBO) is to provide independent analysis to Parliament on the state of the nation's finances, the government's estimates and trends in the Canadian economy; and upon request from a committee or parliamentarian, to estimate the financial cost of any proposal for matters over which Parliament has jurisdiction.

The Speech from the Throne to open the 2nd session of the 41st Parliament announced the Government of Canada's intention to implement federal balanced budget legislation. This report provides parliamentarians with information to help assess a potential balanced budget requirement. It is not an assessment of existing government policy.

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I thank Mostafa Askari, Jean-François Nadeau, Jason Jacques, and Tolga Yalkin for comments.
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SUMMARY

The Speech from the Throne opening the second session of the 41st Parliament announced the Government's intention to introduce balanced budget legislation. This will be the first balanced budget legislation enacted at the federal level in Canada.

This report provides Parliamentarians with information to help assess the value of a federal balanced budget requirement. We review federal deficits over history and the current fiscal context. We describe the potential impact of a balanced budget requirement, including its benefits and drawbacks. We also list design options for implementing such a requirement, along with a set of principles which, in PBO's opinion, would increase its chances of success.

Context

Balanced budget legislation is a popular tool in the international community for signaling a commitment to fiscal prudence, particularly among members of a common currency area and in countries that do not have a proven track record of sound, credible public finances.

Although the federal budget in Canada has been in deficit more often than surplus over history, periods of deficit financing were mostly driven by unexpected economic declines and inflation-led high nominal interest rates. Following these shocks, governments have shown a strong propensity to make the required policy corrections to return the budget to balance.

The government's consolidation efforts following the 2008 recession are expected to achieve a surplus in 2015-16, possibly earlier. In PBO's judgment, the medium-term budget plan is financially sound and credible.

For the government's long-term financial health, a balanced budget plan for the medium-term is neither necessary, nor sufficient. The sustainability of public debt depends also on the growth rate of GDP, the interest rate on public debt, and transactions in capital and financial assets. According to PBO's economic and policy projections, the long-term outlook of federal public debt is financially sound and credible.

Impact

Empirical assessments of balanced budget requirements in other jurisdictions rarely demonstrate a convincing causal relationship between legislation and budget outcomes. But if legislation can successfully restrain future governments that would have otherwise run deficits during normal economic times, it could provide a number of **benefits**. These include:

- Increasing national saving and investment and levels of future output and income.
- Lowering debt and interest costs, freeing resources for public investment, social programs, and tax reductions.

Among the most popular arguments for balanced budget legislation is that it improves intergenerational equity. The principle of intergenerational equity prescribes that current spending should be paid for by those who benefit, that is, current taxpayers. Governments should be permitted to borrow only for capital investment that will benefit future taxpayers.

Requiring a balanced federal budget on this principle is problematic. A significant share of federal current spending (37.8 per cent of program spending in 2012-13) is on transfers to other governments and the private sector, part of which fund physical and human capital investments such as hospitals, schools, and transportation and communications works. Because this funding is recognized in the public accounts in the year of the transfer, balanced budgets could result in current taxpayers contributing more toward investment than is equitable.

Any benefits of legislation must be weighed against the **risks** of limiting the government's discretion over fiscal policy. These include:

- Reducing the government's flexibility to use fiscal policy to support aggregate demand during economic downturns.
- Encouraging the disposal of public assets, and sales at suboptimal timing and prices.
- Shifting the composition of government consumption and investment away from the financially and socially optimal allocation.

Further, a federal balanced budget requirement could have provincial externalities. It could encourage the offloading of volatile or cost-escalating programs, it could increase the volatility of the shared tax base, and it could shift more of the responsibility for macroeconomic stabilization to provincial finance ministries.

Design

Many of the costs and risks of balanced budget requirements can be mitigated by well-designed legislation. Legislators will face a number of important **decisions**. These include:

- The scope of the requirement, including the institutional coverage, and whether to exclude certain components of revenues and expenses.
- Whether governments will be required to submit only balanced budget plans, or if they must also achieve balanced year-end budgets.
- Whether legislation should include complementary restrictions on the growth of expenses and public debt.
- How to accommodate deficit spending, including how to measure the economic cycle or estimate the structural budget.
- Whether governments will be required to contribute surpluses to a contingency or stability fund during normal economic times to offset surprise deficits or countercyclical spending during recessions.
- How to enforce legislation and whether to include automatic deficit reduction mechanisms and penalties.
- Who will be responsible for monitoring compliance.

The design of the requirement will depend on the government's objectives, which have yet to be fully defined. Until further details are provided, Parliamentarians can refer to the following **principles for constructive legislation** that PBO has compiled from economic research and lessons from other jurisdictions:

1. Legislation should be flexible in its accommodation of the economic cycle, permitting deficit financing from both the automatic stabilisers of fiscal policy and discretionary stimulus spending. Deficit financing should be permitted not only in times of crisis, but also pre-emptively during less acute downturns.
2. Legislation should be careful not to restrict beneficial borrowing for reasons of prudent capital investment and tax smoothing.
3. Windfalls from asset sales and shortfalls from unanticipated expenses such as natural disasters should be excluded from the budgetary balance when estimating compliance with legislation.
4. Compliance with legislation should be measured and monitored by an independent authority. All assumptions and methodologies should be made publicly available.
5. Legislation should require the government to publish detailed reports describing adjustments that have been made to comply with balanced budget requirements and how individual programs have been affected.

Implementing a balanced budget requirement that is designed according to these principles can enhance the law's value and extend its longevity.

1 INTRODUCTION

The Speech from the Throne opening the second session of the 41st Parliament announced the Government of Canada's intention to legislate a balanced budget requirement:

> "Our Government will introduce balanced-budget legislation. It will require balanced budgets during normal economic times, and concrete timelines for returning to balance in the event of an economic crisis (p. 4)."[1]

While no details were provided in Budget 2014, we expect further information will be provided for Parliament's consideration in the near future.

This will be the first balanced budget legislation enacted at the federal government level of Canada. Most advanced countries have adopted fiscal rules over the past two decades, whether nationally or supra-nationally under currency union guidelines such as the *Fiscal Compact* between member states of the euro area.[2] According to the International Monetary Fund's Fiscal Rules Dataset 1985-2013, among the 31 advanced countries within the IMF, the number with balanced budget rules rose from five to 28 between 1990 and 2013.[3] Only Canada, Iceland, and the United States do not have some form of a central government balanced budget rule. Total IMF participating countries (including emerging and low-income countries) with budgetary balance rules have increased from five to 67 over the same period.

Balanced budget legislation is also popular in provincial legislatures. Eight provinces and two territories implemented balanced budget legislation during the 1990s.[4] Although all provincial acts but one were amended, suspended, or repealed shortly after enactment, or to allow deficits following the global financial crisis in 2008, seven provinces will have reaffirmed or re-introduced balanced budget legislation by the end of 2014.[5]

Despite the popularity of balanced budget rules, restricting a government's fiscal discretion by law can have many costs and unintended consequences outweighing potential benefits. This report provides Parliamentarians with information to help assess the potential impacts and challenges of a balanced budget requirement.

Section 2 reviews federal deficits over history and the current outlook for the federal budgetary balance. Sections 3 and 4 describe potential benefits and risks of legislation. Section 5 outlines design and implementation options for legislation. Section 6 lists principles based on economic research and the experiences of other jurisdictions to help choose design options that will maximize the benefits and minimize the risks of balanced budget legislation.

2 FEDERAL DEFICITS: CONTEXT AND CAUSES

2.1 Budgetary deficit history, 1966-67 to 2012-13

Federal budget deficits have been more frequent than surpluses over available history, occurring in 35 of 47 years (where budget deficit refers to the *accrual operating balance*—see Box 1).

Budgets were roughly balanced over the 1960s and early 1970s (Figure 1). The combination of a rapid rise in the labour force and a sustained decline in unemployment in the late 1960s produced an economic expansion and growing demand for public services.[6] The federal government responded by creating new spending initiatives to support the provincial delivery of social assistance (*Canada Assistance Plan, 1966*), health care (*Medical Care Act, 1966*), and education (*Federal-Provincial Fiscal Arrangements Act*, 1966), as well as expanding federal programs such as unemployment insurance (Budget 1971).[7] Although there were concerns over the rising costs of these programs, the government projected they could be financed through tax reform and continued economic expansion.[8]

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[1] See http://speech.gc.ca/sites/sft/files/sft-en_2013_c.pdf.

[2] See the Treaty on Stability, Coordination and Governance.

[3] The IMF Fiscal Rules Dataset includes 87 countries with 80 descriptive variables. It is described in detail in Kinda and others (2013) and can be accessed here: http://www.imf.org/external/datamapper/fiscalrules/map/map.htm.

[4] See PBO's *Canadian Fiscal Rules Database*, available at: http://www.pbo-dpb.gc.ca. A more detailed history of provincial fiscal rules in Canada and an analysis of their effectiveness were provided in PBO (2010).

[5] Saskatchewan was the only provinces to fulfil its balanced budget requirement during the recession, though it had to draw upon its Growth and Financial Security Fund.

[6] See Budget Papers, 1966.

[7] Bourgon (2009) provides a useful summary of these and other policy changes in the 1970s, 1980s, and 1990s.

[8] See the 1968 Budget Speech and supporting papers.

Box 1: Defining the budgetary balance

The budgetary balance in the federal public accounts and budget plan is defined as the *net operating balance* in the IMF's *Government Finance Statistics Manual 2001*. The net operating balance is equal to accrued revenues less accrued expenses, where accrued expenses include interest payments and only the portion of capital investment which is recognized in that year (typically a fraction of the capital asset's useful life).

For clarity, this report refers to the net operating balance as the *accrual operating balance* to distinguish it from budget balances in jurisdictions that recognize a broader definition of expenditure in the budgetary balance.

The federal government first presented its financial statements using this definition in the 2002-03 public accounts, and began publishing its fiscal plan using this definition in Budget 2003.

Public accounts historical data has been restated using the accrual operating balance back to 1966-67 in the Department of Finance Canada's Fiscal Reference Tables:

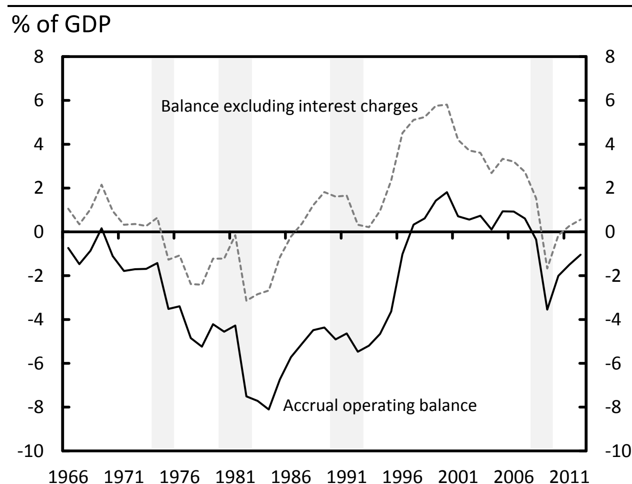
http://www.fin.gc.ca/pub/frt-trf/index-eng.asp.

Economic growth did not materialize according to expectations.[9] Productivity growth slowed following the 1960s. The 1973 oil price shock caused energy prices to increase and the economy to fall below its potential, contributing to high inflation and high unemployment.[10] Slowing growth in real gross domestic product (GDP) slowed the rate of growth of government revenues. The budgetary balance, which showed small but manageable deficits since 1970-71, fell into significant deficit in 1975-76, dropping by 2.1 per cent of GDP. The government attempted to stimulate growth with cuts to income taxes and retail sales taxes announced in Budget 1976, Budget 1977, and Budget 1978, which reduced revenues further. High inflation, high interest rates, and a growing stock of debt drove expenses exponentially higher.

In response to escalating deficits, governments introduced a number of reconciliation measures over 1977-78 to 1980-81, including across-the-board cuts to direct program expenses, corporate and excise tax increases, and the introduction of the Policy and Expenditure Management System (PEMS). These measures returned the primary budget (that is, the budget balance excluding interest charges) to balance in 1981-82.

Figure 1

Federal budgetary balance



Sources: Finance Canada Fiscal Reference Tables.
Note: Shading indicates recessions.

Progress to improve the deficit was stopped by a second energy crisis and stimulus efforts during the recession of the early 1980s. At the same time, interest rates rose dramatically in response to monetary action taken by the central bank to reduce inflation, further hurting economic growth and compounding debt service costs. Deficits reached as high as 8.1 per cent of GDP in 1984-85.

Efforts at consolidation began again in the mid-1980s with significant spending cuts over 1985-86 to 1989-90. In Budget 1985, personal income tax thresholds were moved from full to partial indexation, which persisted until 2000, raising considerable extra revenues. Public service wage growth was restricted over much of the first half of the 1990s. The Program Review exercise from 1994 to 1997 reduced program spending by 4.1 percentage points of GDP, from 16.8 to 12.7 per cent.[11] These consoli-

[9] For example, the budget published in November 1974 forecast real economic growth of 4.0 per cent in 1975. Actual growth was 0.2 per cent.

[10] See Helliwell (1984) for an econometric decomposition of stagflation in Canada during the 1970s.

[11] For more information on fiscal consolidation in the 1990s, see Library of Parliament Research Publications: *Public Service Reductions in the 1990s: Background and Lessons Learned*, available at: http://www.parl.gc.ca/content/lop/researchpublications/2010-20-e.htm.

dation efforts, supported by robust economic growth, returned the budget to surplus in 1997-98.

After achieving a balanced budget, the government ran surpluses for 11 consecutive years, which peaked at 1.8 per cent of GDP in 2001-02. Projected surpluses in the early 2000s allowed the government to implement a five-year tax reduction plan beginning in 2000-01 with cuts to personal income and corporate taxes. In Budget 2006 the government introduced further tax cuts valued at $21.2 billion over two years and committed to additional future tax cuts, financed by expectations of continued economic growth and moderation of the economic cycle.

The global financial crisis in 2008 led to a return of large deficits beginning in 2008-09, which peaked at 3.5 per cent of GDP in 2009-10. The reduction in aggregate demand as a result of the crisis reduced tax revenues. At the same time, expenses increased as a result of higher social benefits payments and discretionary stimulus spending, including $38.6 billion under Canada's Economic Action Plan over 2009-10 to 2011-12. Following the crisis, the government introduced a series of deficit reduction measures relying mainly on operating budget freezes. These measures, along with economic growth, have made significant progress in returning the budget to balance.

2.2 Medium- and long-term outlook

According to PBO's analysis of current government policy and the economic outlook, the federal finances are sound over both the medium and long term. The government is projected to close the structural deficit in 2014-15 and the nominal budget deficit in 2015-16, if not earlier (Table 1). PBO's *Economic and Fiscal Outlook* in April 2014 projected that surpluses will persist over the rest of the medium-term outlook, increasing to as high as $9.1 billion, or 0.4 per cent of GDP.

Table 1

Budgetary balance and structural balance outlook

$ billions

	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
Budgetary balance	-11.6	-0.5	7.8	9.1	7.5	9.1
Structural balance	-4.5	4.8	8.9	5.7	2.0	3.1

Sources: PBO (2014).

PBO's *Fiscal Sustainability Report 2013* projected that the federal government has a sustainable debt position that will eliminate public debt by 2044 (Figure 2). Under current policy, PBO estimates the federal government could permanently increase spending or reduce taxes by 1.3 per cent of GDP ($24.8 billion) and have the same debt-to-GDP ratio 75 years in the future as it did in 2013. That is, the government could realize substantial deficits over the medium term while not worsening its long-run financial position.

2.3 Causes of federal deficits

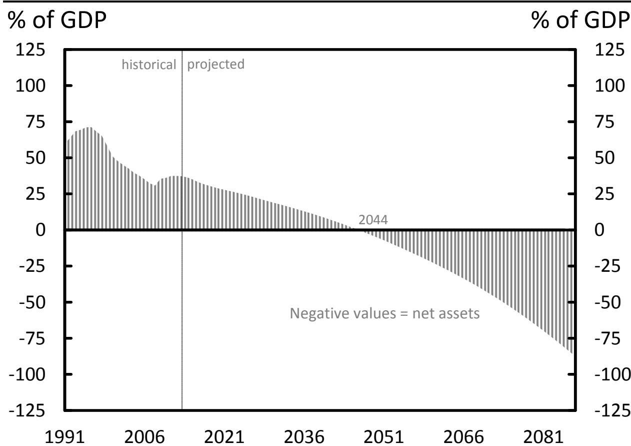
Federal deficits over history may be attributed mostly to three sources: tax smoothing, cyclical economic downturns, and misaligned political incentives. Each underlying cause has a different implication for social welfare. A less significant, but often important driver of deficits—economic and fiscal model misspecification—is discussed in Box 2.

Deficits for reasons of tax smoothing are incurred when large outlays are required to establish new programs or meet sudden increases in existing commitments. Rather than abrupt one-off tax increases or spending restraint, it is optimal for governments to finance additional temporary spending by borrowing and spreading the costs over a longer time period requiring smaller and more gradual policy movements.[12] Tax smoothing may explain some of the deficits in the 1970s following the introduction of new national programs and why more action was not taken sooner to reduce high levels of public debt in the 1980s.

[12] The preference for this approach from the perspective of social welfare was most influentially demonstrated in the model of Barro (1979). The optimality of borrowing to spread the costs over time relies on the result from economic theory that the *excess burden* of a tax, that is, the forgone utility of producers and consumers in excess of the tax, depends on the level of the tax, that is, the costs are not linear.

Figure 2

Federal government public debt, 1991 to 2087



Sources: PBO (2013)
Note: Public debt is defined as net financial debt in GFSM 2001.

Box 2: Model misspecification

Deficits can also result from forecast errors and unexpected events. Revenues and spending on social benefits can be difficult to predict, and forecast errors can be large even during stable economic periods.

As the government establishes its five-year planning framework, tax and spending policy is set according to the amount of fiscal room expected to be available given the economic outlook. If economic growth is less than expected, revenues are likely to fall below the planning assumption. Further, fiscal responses to economic activity, usually referred to as revenue elasticities or growth ratios, are volatile. They can under- or over-estimate revenues by billions of dollars even if the underlying economic fundamentals were correctly anticipated.

Forecast errors can also arise from unanticipated spending shocks such as emergency spending for natural disasters like flooding and SARS, and other unforeseen expenses such as liability adjustments for remediating contaminated sites. The government currently includes a risk adjustment in its economic assumptions and uses cautious fiscal assumptions to limit the potential of model misspecification to adversely affect the budgetary balance.

Cyclical deficits during economic downturns are an intended outcome of a well-functioning progressive fiscal framework established to smooth incomes and provide a social safety net. Lower output during a recession reduces the tax base. Because of the progressivity of many tax programs, particularly personal income taxes, revenues decline more than one-to-one with the tax base and reduce the relative tax burden within household budgets. At the same time, spending increases on benefits and income-tested support payments such as EI and elderly benefits. Together, these are referred to as the *automatic stabilisers* of fiscal policy, that is, tax relief and social benefits spending built into the fiscal framework to smooth incomes and support aggregate demand during downturns.

Additional discretionary spending programs can be used during recessions to provide further temporary stimulus beyond automatic stabilizers, particularly when countercyclical monetary policy tools have reached their limit. Discretionary stimulus spending in the Economic Action Plan following the 2008-09 global economic crisis was responsible for $18.0 billion of the $55.6-billion deficit in 2009-10, or 32.4 per cent. Stimulus spending is transitory; eliminating its contribution to the deficit would not require a policy correction at the end of the stimulus program.

Deficits which cannot be attributed to tax smoothing or the economic cycle could be the result of *deficit bias.* Deficit bias refers to the structural deficits that arise when government agents face incentives to over-spend.[13] A wide body of research attempts to explain and measure deficit bias. These arguments, usually referred to as *public choice* theories, suggest budget deficits are driven by intergenerational redistribution, fiscal illusion, and competition between political agents.

Intergeneration redistribution creates deficits because current taxpayers can vote for their preferred policy outcome, while future generations of taxpayers cannot. Current taxpayers therefore attempt to push the costs of programs onto future generations, while vote-seeking government spenders comply.[14]

Fiscal illusion arises when voters do not fully understand the trade-off between current spending and future tax burdens. This illusion can result from the opacity and complexity of government finance. For example, taxpayers may over-value a public ser-

[13] Over-spending is usually defined in the literature as higher spending relative to a benchmark tax-smoothing model.
[14] A useful summary of public choice research on intergenerational transfers can be found in Alesina and Perotti (1994).

vice because they do not receive an itemized bill of their personal contributions to the cost of the program (Buchanon and Wagner, 1977). Under these conditions, countercyclical fiscal policy is asymmetric; governments will overspend during recessions and will be reluctant to offset deficit spending with surpluses during expansions.

Overspending and growing debt burdens can also arise from competition between political agents. Alesina and Tabellini (1990) developed a model of consumers, workers, and voters divided into two groups with different preferences for public goods. Government spending in this model produces deficit bias and a higher equilibrium level of public debt relative to a benevolent social planner. This is because uncertainty about the outcome of elections prevents the government in power from fully internalizing the cost of debt; that is, it can be passed to the successor. Governments in this model use public debt to strategically limit the policy choices of successor governments. Higher debt maintenance costs reduce the successor's ability to implement spending programs or tax breaks.

Public choice theories for deficits generally have a difficult time explaining cross-country and longitudinal differences in budgetary outcomes, that is, why some governments with similar institutions run deficits while others do not (Alesina and Perotti, 1994). Nonetheless, these theories offer a possible explanation if persistent deficits exceed what would be expected from tax smoothing and the economic cycle.

3 CAN LEGISLATION HELP?

Although government borrowing can be beneficial for tax smoothing and macroeconomic stability, social welfare could be improved if legislation could successfully control deficits attributable to deficit bias. This section explores whether requiring balanced budgets by law can overcome the forces driving deficits, and if legislation can provide additional social benefits.

3.1 Correcting deficit bias and contributing to medium-term prudence

Poterba (1996) suggested two mechanisms through which balanced budget legislation could affect fiscal outcomes. First, requiring publication of balanced budget outlooks by law can provide an objective benchmark for parliamentarians, media, and the public to assess government proposals and evaluate program outcomes. This can raise the reputational cost of optimistic or misrepresentative budget forecasts and encourage responsible fiscal management.

Second, balanced budget legislation, particularly legislation with automatic enforcement mechanisms, allows policymakers to deflect the political repercussions of spending cuts to the initial drafters of the budget law. This can lower the political cost of spending austerity.

It is difficult to empirically assess the impact of balanced budget legislation on fiscal policy outcomes. Governments tend to implement a requirement when finances are improving and budgets are already forecast to be in balance over the medium term. Further, legislation is more likely to simply reflect prevailing voter preferences rather than an exogenously imposed constraint. Results of empirical studies are mixed, and tend to depend on the researcher's methodology for controlling for the pre-existing fiscal outlook and voter preferences.

Looking first to assessments of the experience of Canadian provinces, Tapp (2013) used fixed-effects panel regression to estimate the contribution of provincial fiscal rules to budget outcomes over the period 1981 to 2007. He found that adopting a balanced budget requirement was associated with statistically significant and economically meaningful improvements in budgetary balances. However, Tapp also showed that the effects of legislation can be overestimated as a result of endogeneity, and he cautioned that reverse-causality (improved fiscal prospects leading to the adoption of balanced budget requirements) could not be ruled out.[15]

Simpson and Wesley (2012) compared revenue and expenditure growth in seven provinces before and after balanced budget requirements were enacted. They concluded that fiscal outcomes were

[15] Econometric analysis of budget outcomes is aided by exogenous shocks. When variation in fiscal outcomes comes instead from unobserved variables that are likely to explain both the adoption of fiscal rules and fiscal outcomes (such as unobserved voter preferences) this leads to the estimation problem of *endogeneity*. Endogeneity can be solved by instrumental variables (exogenous variables that are proxies for the adoption of legislation) but in this area of research instrumental variables are elusive. See Poterba (1996) for a discussion of why econometric analysis of balanced budget legislation is problematic.

only plausibly assisted by balanced budget legislation in one province (British Columbia).

PBO (2010) examined the role that fiscal rules (including balanced budget requirements and other formal rules such as expenditure limits) played in fiscal consolidation episodes in provinces and territories. PBO found that while fiscal rules appear to have played a supporting role in successful budget balance improvements and debt-to-GDP reductions, jurisdictions without rules also had successful consolidation episodes. PBO cautioned that performing formal statistical tests and drawing causal conclusions was difficult because of small sample sizes, potentially flawed cyclical adjustments, and the difficulty of controlling for initial conditions.

Older research on the initial period of provincial legislation found stronger results. Tellier and Imbeau (2004) applied an index of the stringency of anti-deficit laws to a pooled time series cross-section of ratios of provincial deficits to total spending. They found that stricter laws were associated with lower deficits.

The majority of research into the effectiveness of legislated constraints on budgets followed experiments with balanced budget amendments in the United States in the late 1980s and 1990s.[16] These acts included the *Balanced Budget and Emergency Deficit Control Act of 1985* (usually referred to as Gramm-Rudman-Hollings), and its subsequent forms the *Balanced Budget and Emergency Deficit Control Reaffirmation Act of 1987* and the *Budget Enforcement Act of 1990* in place until 2002.

The impact of U.S. federal legislation is disputed. Gramlich (1990) looked at budget categories that were responsible for deficit reductions over 1987 to 1989. He found that of the 2.8 per cent reduction in the deficit as a share of GNP (Gross National Product) over the period, only defense spending (0.8 percentage points of the decline) could be proximately attributed to balanced budget amendments, and cautioned that even those reductions could instead be attributed to waning political support for defence spending. Gramlich concluded that balanced budget amendments were largely coincidental and had little to do with improvements in the deficit over the period.

Hahm and others (1992) compared U.S. budget outcomes under balanced budget amendments to projections of unconstrained counter-factual scenarios. They concluded that there was a significant reduction in the areas of program spending subject to sequestration (automatic spending reductions) and in expenditure overall, but that programs exempt from sequestration grew more rapidly.

Researchers also looked to the experience of the American states, of which at least 46 of 50 have had balanced budget requirements of some form over most of their constitutional existence.[17] Evidence suggests that very strict deficit carryover provisions have greater deficit controlling power compared to more lenient balanced budget requirements (Alt and Lowry, 1994; Poterba, 1994).

Internationally, Von Hagen and others (2006) constructed a fiscal rule index across EU member states and estimated that there was no correlation between the strength of fiscal rule and budgetary outcomes following the monetary union.[18] Von Hagen also examined fiscal policy in Japan and found that the fiscal rule in place during the 1980s had a statistically significant but economically small disciplinary influence on policy.

3.2 Containing public debt and contributing to long-run fiscal sustainability

Balanced budget legislation is often enacted as a commitment to responsible and sustainable public borrowing. Although the annual accrual operating balance is closely tied to a government's financial health, a balanced budget is neither necessary nor sufficient for sustainable public debt over the long term. This is for two reasons.

First, researchers from the IMF and Organisation for Economic Co-operation and Development (OECD) recommend that sustainability is best viewed as the trajectory of public debt relative to GDP, that is, the yearly national income available to service debt.[19] Under this framework, the sustaina-

[16] Poterba (1996) provides a useful summary of research on American state budget rules.

[17] Balanced budged laws in American states are in many cases not well-defined. Typically Vermont is listed as the only exception, but other researchers add Wyoming, North Dakota, and Alaska to the list of exceptions. The requirements in these states are a result of interpretations of their constitution, rather than explicit laws.

[18] Von Hagen and others find that countries which accompanied fiscal rules with stronger domestic budgeting institutions did achieve better budget outcomes.

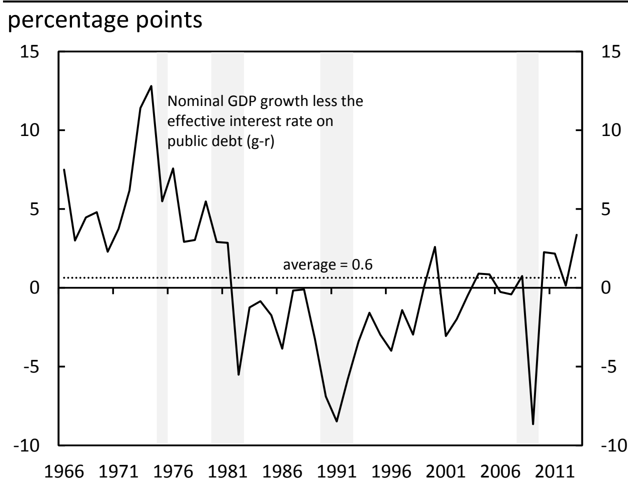
[19] See Schick, A (2005), and IMF (2013).

bility of debt depends not just on the annual budgetary balance, but also on the difference between nominal GDP growth and interest rates.[20] If the government were to run permanent deficits, debt could increase in absolute terms but decline as a share of GDP, provided GDP growth exceeds the effective interest charges on public debt.

Theory suggests interest rates should exceed the growth of GDP over the long run in advanced economies because of the impatience of economic agents, who prefer current consumption to future consumption.[21] In Canada, effective interest rates have exceeded GDP growth in only 23 of 48 years, or 48 per cent of the time, since 1966 (Figure 3).

Figure 3

Historical growth and interest rate differential



Sources: Finance Canada data (Fiscal Reference Tables). Author calculations.

On average, annual GDP growth exceeded interest rates by 0.6 percentage points over the period. According to Escolano (2010), GDP growth exceeded interest rates in advanced economies over the 1970s because high levels of inflation were not anticipated by public debt markets. If the sample is restricted to more recent decades, interest rates have exceeded growth on average, in line with economic theory. PBO's long-term projections in PBO (2013) assumed average effective interest rates of 4.9 per cent over the long run and nominal GDP growth of 3.7 per cent (that is, a 1.2 per cent growth and interest rate differential).

The economy's future growth rates and interest rates are uncertain. While PBO assumes interest rates will be higher than nominal GDP growth in the future, other scenarios are plausible. For example, Summers (2014) proposed that low equilibrium interest rates could be the new normal as capital becomes less relevant in future production. During periods when GDP growth exceeds interest rates, public debt can decline as a share of GDP even with persistent deficit spending.

Second, the annual budget balance is on an accrual basis, which, although closely linked, does not solely determine the expansion or contraction of public debt. To control the level of debt both in absolute terms and as a share of the economy, legislated constraints on the accrual operating budget would need to be accompanied by controls on capital acquisitions and non-budgetary transactions or be implemented in tandem with a sustainable investment rule, such as limiting net debt as a ratio of GDP (see Subsection 5.7).

The relationship between the accrual budgetary balance and public debt is described in detail in Box 3. If the accrual operating budget is balanced but net capital spending (capital acquisitions less capital amortization) is positive, public debt could grow to unsustainable levels.

The disconnect between the accrual operating budget and public debt may be of only minor consequence to federal financial sustainability. Most capital spending in Canada is the responsibility of provinces, for example, roads, schools, and hospitals. But there are several areas of federal responsibility that could nonetheless cause large short-run divergences between the budget balance and net lending. For example, large National Defence procurements could add significantly to debt and its carrying costs, but have only a relatively small impact on the annual deficit.

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[20] The condition for stable debt as a share of the economy is given by the equation: $\frac{PB}{Y} = (i-g)\cdot\frac{D}{Y}$

This equation is derived in Annex F of PBO (2013). This condition shows that as long as GDP growth (g) exceeds the effective interest rate on debt (i), the government can budget a negative primary balance, PB, (that is, revenues less expenses excluding interest payments) and therefore a negative accrual operating balance, while still reducing debt as a share of GDP (D/Y).

[21] Impatience is represented by the rate of time preference or subjective discount rate between two points in time on the intertemporal utility function (Romer, 2011).

Box 3: Budgetary balance and sustainability of public debt

The accrual budgetary balance presented in Budget 2014 and the public accounts is the *net operating balance* as defined by the IMF's *Government Financial Statistics Manual 2001*. The net operating balance is equal to revenues less program expenses and interest payments, where revenues and program expenses are recorded on an accrual basis (that is, attributed to the period in which the economic activity occurred rather than the time of cash transactions). Importantly, this means capital acquisitions do not flow through the statement of government operations or affect the budgetary balance. Only a portion of the value of a capital asset (typically the fraction of the useful life of the asset which falls in that year) is expensed in the operating budget as *capital amortization*:

Net operating balance = revenues – (program expenses + interest payments) (1)

= revenues – ((transfers + operating expenses + capital amortization) + interest payments) (2)

Capital amortization is not an outlay that requires financing. It must therefore be added back to the net operating balance to determine the time path of public debt. Conversely, the total up-front costs of capital acquisitions are outlays that require financing. These must be subtracted from the net operating balance. These adjustments arrive at *net lending*, which is the relevant annual flow that determines the path of public debt:

Net lending = net operating balance + capital amortization – acquisition of nonfinancial capital (3)

If the net operating balance is zero, as under a balanced budget requirement, but acquisitions of nonfinancial capital exceed capital amortization expenses, then net lending will be negative and the stock of public debt will increase.

Of the 28 advanced countries with balanced budget legislation in 2013, all but one either constrain investment directly or have a complementary debt rule.[22] Some practical options for a balanced budget rule that target fiscal sustainability more directly are discussed in Section 5.

3.3 Improving intergenerational equity

A popular argument in favour of balanced budget legislation is to improve intergenerational equity.[23] When governments borrow to fund current spending (that is, incur an accrual operating deficit) it benefits the current generation of taxpayers, but is repaid with interest by future taxpayers. Arguments for intergenerational equity call for the beneficiaries of public services to bear the costs of those services, rather than pass them to future generations through debt or infrastructure neglect. These arguments suggest that the government should run balanced accrual operating budgets, and allow borrowing only to fund investment in physical capital (sometimes extended to human capital) which will benefit future generations who will repay borrowing through future taxation. This is often referred to as the *Golden Rule* form of balanced budget legislation (Balassone and Franco, 2000; Robinson 1998).[24]

Golden Rule budgeting would be cumbersome to implement at the federal level. Under Section 92 of the *Constitution Act, 1867*, provinces have constitutional authority for the establishment and maintenance of hospitals, schools, and intraprovincial transportation and communications works. The majority of federal spending on physical and human capital is therefore made through transfers to provinces, which are recognized in the accrual operating budget the year payments are made.

Most federal infrastructure spending would therefore be bound by a balanced budget requirement. For example, for the 12 years spanning

[22] IMF Fiscal Rules Database 1985-2013. The exception is the Special Administrative Region of Hong Kong.

[23] See, for example, Kell (2001) and Kopits (2001).

[24] Robinson (1998) describes further reforms to accounting principles which would be required align balanced budget legislation with goals of generational equity. These include adjustments to the amortizing of capital assets to reflect their benefits including interest rather than the conventional depreciation over useful life.

2004-05 to 2016-17, the rate at which the Canadian Health Transfer grows each year was increased to 6 per cent to help provinces invest in improved delivery of health services. This funding is treated as federal government current spending, but a significant portion has been invested by provinces at their discretion in physical infrastructure such as hospitals and medical equipment that will benefit future recipients of health care. Principles of intergenerational equity suggest that it would be optimal for the federal government to finance at least part of this funding with deficits.

Federal balanced budget legislation on generational equity grounds would require adjusting the net operating balance to exclude the proportion of transfers to provinces that is ultimately spent on investment. This would require tracking and estimating the final use of transfers and attributing a proportion of federal revenues to its financing. Both would prove difficult or impossible to implement.[25]

3.4 Increasing investment and growth

The effect of lower government borrowing on economic growth is controversial and depends on country- and situation-specific factors. Generally, national accounting identities and macroeconomic principles suggest that a reduction in operating deficits will create a short-term decrease in aggregate demand and economic output, but higher national saving and investment leading to higher economic output and income over the long run. This section describes the long-run benefits of increased saving and investment. Short-term reductions in aggregate demand and output from higher government saving are explained in Box 4.

Additional federal government saving as a result of a balanced budget requirement (that is, accrual operating surpluses or lower deficits) must contribute to the purchase of either capital assets or financial assets. If saving is used to acquire capital assets such as government buildings or equipment, it will

Box 4. Short-term impacts of higher government saving

Short-term effects of government saving include both direct and indirect effects. Direct effects include the immediate reduction in GDP from lower government purchases of goods and services, or the lower spending as a result of tax increases or lower transfers to persons, firms, and regional governments. If the government reduces purchases of goods or services by one dollar, the direct effect is to reduce GDP by one dollar. If the government increases taxes or reduces transfers, the direct effect will be more or less than one dollar depending on agents' preferences for saving versus consumption.

Indirect effects depend on how the private sector responds to lower government or private consumption from direct effects (for example, if a firm reduces employment as a result of lower demand for its products). Indirect effects of a one dollar decrease in government spending are greater than one dollar if private spending is reduced or less than one dollar if private spending increases.

The product of direct effects and indirect effects is the total fiscal multiplier, which is the total change in GDP of a dollar of government spending. The fiscal multiplier will be higher if consumers and firms are liquidity constrained and monetary policy has reached its limits of effectiveness when the economy is below its potential (that is, if there is idle labour and capital). The multiplier will be weaker if the economy is at or above potential and the Bank of Canada readily offsets fiscal stimulus with monetary policy.

Finance Canada estimates that during recessions, $1 of government spending or tax reductions has short-run contributions to GDP ranging from $0.1 to $1.7 depending on the policy (Finance Canada, 2011). The U.S. Congressional Budget Office does not use different multipliers for different programs, but instead uses a range of multipliers equal to 0.4 to 1.9 over four quarters when the central bank does not respond with monetary policy, and 0.2 or 0.8 over eight quarters when the central bank responds with interest rates increases (Reichlin and Whalen, 2012).

[25] Of course, transfers are included as operating revenues in provincial budgets and can be used to reduce provincial taxes, offsetting some of the burden on current taxpayers of infrastructure investment funded by federal transfers. However, provincial tax rates are generally lower than federal rates, particularly on labour supply, and the improvement in economic efficiency from reducing provincial taxes is less than reducing federal taxes by an equivalent amount. Therefore, even if tax reductions were to completely offset indirect federal infrastructure investments, it would still result in a net utility loss compared to the optimal intergenerational funding arrangement.

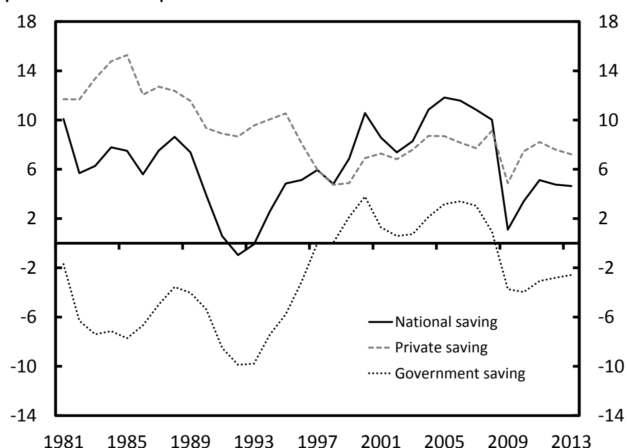
directly increase the economy's productive assets (machinery, equipment, transport, communications, etc.).[26] If used to acquire financial assets, higher saving will increase private domestic investment (either directly, or by lowering interest rates and depreciating the currency), or it will increase ownership of foreign assets by Canadians. Shifting current spending into public capital investment or financial assets will lead to higher levels of economic output and income in the future.

As shown in Figure 4, periods of low national saving have been driven by high government deficits.[27] Had balanced budget legislation been successfully implemented during the 1980s and 1990s, there would be higher stocks of private and public productive capital in the 2000s, all else the same.

Figure 4

National saving rate

per cent of disposable income



Source: CANSIM Table 380-0071.

3.5 Decreasing interest rates and debt costs

A commitment to balanced budgets could lead to beneficial decreases in interest rates on public debt and lower debt service charges, which would free resources for public investment, social programs, and tax reductions. Low, steady, and predictable government borrowing could also increase the stability of financial markets and could lead to lower private sector interest rates, boosting investment and private market outcomes.[28]

The results of economic theory and applied research on the impact of government borrowing on interest rates depend on a country's individual characteristics, most importantly its size and impact on world markets. The implications of Canadian federal government borrowing on interest rates is conventionally assessed within the framework of a small, open economy with perfect capital mobility and a flexible exchange rate.[29] These models suggest that unless federal borrowing is large enough to influence global credit markets (or the risk of default is high enough that lenders demand a significant risk premium), higher deficits will be financed by foreign investors at global market interest rates.

Whether Canada is best represented by the small, open economy model or an alternative can only be decided empirically. Unfortunately, there is little recent empirical research on the Canadian experience with deficits and interest rates. In their cross-country study of the impact of government borrowing on interest rates, Engen and Hubbard (2004) compared real interest rates in Canada to the United States. The two countries' federal budgetary balances were much different at the time (Canada was in surplus, the United States significantly in deficit). Canadian interest rates followed a similar path as rates in the United States, but were higher, suggesting borrowing markets for Canadian debt are integrated internationally and rates are set by forces other than the domestic credit market alone. Going back further, Siklos (1988) used a broad variety of techniques, data, and definitions of government borrowing in Canada and found no evidence of an empirical link between fiscal policy and interest rates. Evans (1987) examined quarterly data across six OECD countries including Canada during the 1970s and 1980s and concluded that there is no empirical support that budget deficits raised interest rates.

These studies suggest the small, open economy framework is appropriate for Canada. Typical ranges of federal borrowing over the last two decades probably do not significantly affect interest rates by an economically meaningful amount.

[26] That is, investment, *I*, in the national income (Y) identity Y = C + I + G + NX, where *C* is consumption, *G* is government current spending, and *NX* is net exports.

[27] Where government includes consolidated federal, provincial, territorial, and local governments.

[28] While running balanced accrual operating budgets, borrowing would still be required for capital investment and cash management.

[29] See Mundell (1963) and Fleming (1962).

4 CAN LEGISLATION HURT?

Balanced budget legislation can carry costs and unintended consequences that reduce social welfare. Legislation can restrict the tools of public policy to smooth the business cycle, change the composition and timing of revenues and public spending, and lead to less transparent budgeting and more frequent policy changes. It can also affect provincial finances.

4.1 Limiting countercyclical fiscal policy

Balanced budget requirements can restrict both the automatic stabilizers of existing policy and the government's ability to implement discretionary macroeconomic stabilization policy. This could increase the depth and breadth of recessions.

During economic downturns, federal spending is higher on social transfers such as employment insurance, elderly benefits, and tax expenditures. At the same time, the tax burden from personal income taxes declines more than one-to-one with incomes because of progressive tax brackets. The cushioning of disposable income by these automatic stabilisers supports personal consumption, a component of aggregate demand. Higher program spending and lower tax revenue from automatic stabilizers are often financed by budgetary deficits.

Governments can also implement temporary stimulus measures to support demand during a downturn to smooth the economic cycle. Discretionary fiscal stimulus becomes important when conventional monetary tools are no longer effective, such as when interest rates are at the zero lower bound. For example, the Economic Action Plan increased federal spending by $45.4 billion from 2009-10 to 2012-13.[30] This spending dampened the worst of the recession and assisted the recovery. But it was financed by deficits reaching as high as 3.5 per cent of GDP in 2009-10.

Restricting these policy levers through balanced budget requirements can contribute toward excessive output volatility by requiring pro-cyclical tax increases and spending reductions during recessions. Kopits and Symansky (1998) used the IMF's econometric model of the world economy to assess the impact of a balanced budget requirement in Canada on macro stability. They found that if reductions in government spending were used to comply with legislation, it would tend to raise the variance of output by 0.7 percentage points.

A widely cited theoretical model developed by Schmit-Grohè and Uribe (1997) demonstrated that even if a balanced budget requirement contains concessions for the business cycle, it can destabilize national output by introducing self-reinforcing expectations of future tax increases. That is, if the fiscal authority is expected to increase future taxes to account for deficits sustained during a recession, the expected return to labour is lower, reducing labour supply and decreasing output.

More recently, Ghilardi and Rossi (2014) generalize the results of Schmit-Grohè and Uribe using a different class of production function.[31] They found that the destabilizing properties of legislation are not as severe as derived under Schmit-Grohè and Uribe. However, the implications are still economically significant when applied to the economies of the United States, the European Union, and the United Kingdom.

Promisingly, the government's announcement suggested legislation will accommodate downturns:

> It will require balanced budgets during normal economic times, and concrete timelines for returning to balance in the event of an economic crisis (p. 4).

Accommodating the business cycle in legislation can be accomplished in one of several ways (described below in Section 5.2). If designed well, the costs of restricting automatic and discretionary fiscal stabilizers can be minimized. However, because of the imprecision in which business cycles may be measured and the lag of economic data, harmful adjustments to the fiscal framework could be made before policymakers are aware the economy is entering recession.

If the government enacts legislation that requires only a balanced accrual operating budget, federal direct investment will still be available as a tool of countercyclical fiscal policy. Under accrual budgeting, large capital projects are amortized over

[30] Only $38.6 billion of the $45.4 billion were operating expenses, with the remainder funding capital and financial transactions which increased public debt and public assets, but only affected the accrual operating balance to the extent it increased future capital amortization expenses and interest charges.

[31] Ghilardi and Rossi use a constant elasticity of substitution specification while Schmit-Grohè and Uribe use a Cobb-Douglas specification.

the life of the investment. They only affect the accrual operating budget to the extent that a higher capital stock increases amortization and debt-servicing expenses (the marginal impact would be small but would accumulate and restrict the operating budget room of future governments).

However, the magnitude of federal direct investment is small, as infrastructure is largely a provincial responsibility. Federal infrastructure investment was only $1.7 billion (11.4 per cent) of overall Economic Action Plan infrastructure spending. Most of the remainder was provided by transfers to provinces (the full cost of which was recognized in the accrual operating account the year the transfer is made).[32] Further, capital-intensive stimulus programs are slow to plan and implement, with the benefits often realized only after the economy is already recovering.

Limiting the macroeconomic management role of fiscal policy in the future could be more costly than it was in the past. There is a growing concern among researchers and policymakers that technological and demographic trends are moving equilibrium interest rates lower, limiting the tools of central banks to manage the amplitude of swings around trend economic growth.[33]

For example, Summers (2014) provided results from simulations of the U.S. economy using the econometric models of the Federal Reserve, which suggest discretionary spending by the U.S. government could grow in importance as a tool for macroeconomic stability. The potential challenges of lower equilibrium interest rates and the role of fiscal policy apply similarly to Canada's central bank and federal government.

If legislation is not adequately flexible over the business cycle, it risks being repealed as soon as it is tested. Of the 27 advanced economies in the IMF with balanced budget rules going into the recession, all but eight were forced to suspend, modify, or remove the rule altogether so that the full benefits of automatic and discretionary counter-cyclical fiscal policy could be used.[34]

4.2 Shifting the composition of spending and revenues

Compliance with balanced budget legislation can shift spending and the tax mix toward programs that offer quick budgetary successes in the short term, and away from the financially and socially optimal allocation.

For example, it is easier to reduce or delay direct program expenses rather than statutory spending programs, as the latter are under formal multi-year agreements or would create significant political repercussions. Poterba (1996) reviewed several categories of expenditure of the U.S. federal government over the seven years following the *Budget Enforcement Act of 1990.* He found a sharp decline in discretionary spending from 9.2 per cent of GDP to 6.6 per cent, while statutory programs grew from 10.3 per cent to 11.2 per cent.

A balanced budget requirement could lead to investment bias, steering spending away from the allocation between operating expenses and capital expenditure that would be chosen based on financial fundamentals. In cases where only operating expenses are restricted, it can create a preference for physical capital, such as purchasing more military equipment rather than hiring and training personnel. Strict budget rules that restrict revenues less total expenditure (that is, operating expenses plus capital acquisitions) instead create the incentive for governments to forego the large upfront costs of capital investment. This pushes necessary construction and maintenance costs to the future and forfeits long-run returns.

Legislation could also distort the decision to use government business enterprises (GBEs), public-private partnerships (PPPs), and other off-budget legal structures for program delivery. Although the profits and losses of GBEs are recognized in the federal government's investment income in the accrual operating account, changes to future pension provisions for employees of GBEs are recorded off-budget, unlike departments and Crown Corporations. Delivering projects under PPP agreements transfers financial risk from government to the pri-

[32] From Table A2.7 of *The Stimulus Phase of Canada's Economic Action Plan: A Final Report to Canadians,* available at http://www.budget.gc.ca/2012/plan/pdf/Plan2012-eng.pdf.

[33] This is being referred to as 'secular stagnation'. For an introduction to secular stagnation, see *Secular Stagnation: Facts, Causes and Cures,* edited by Coen Teulings and Richard Baldwin, available at: http://www.voxeu.org/sites/default/files/Vox_secular_stagnation.pdf.

[34] IMF Fiscal Rules Dataset 1985-2013 and budget papers.

vate sector and under certain circumstances can be moved entirely off budget. These decisions should be made based on commercial fundamentals, rather than budget restrictions.

Balanced budget legislation increases the likelihood of asset disposals and of asset sales at values less than their imputed value. For the U.S. federal government, the Congressional Budget Office estimates that about half of the deficit reduction under Gramm-Rudman-Hollings was achieved through asset sales (Reischauer, 1990). Costello, Petacchi, and Weber (2012) examined asset sales of U.S. states during 1998-2006. They found that when states experience falling revenues and face non-compliance with balanced budget laws, they are more likely to sell public assets. In addition, the sales are more likely to be at a loss. Asset sales to achieve budgetary requirements could lead to a loss in economic and social welfare if maintaining public ownership or holding out for higher prices would be more valuable than immediate budget room.

Legislation may also encourage program delivery through less transparent vehicles such as loans and loan guarantees, which affect only the balance sheet and would not be bound by deficit restrictions.[35] Loans and loan guarantees to groups or single borrowers mean these individuals and groups can access funding more cheaply than otherwise.

For example, the loan guarantee agreement between the federal government and the provinces of Nova Scotia and Newfoundland and Labrador for developing the Lower Churchill hydroelectric project allowed the provinces to access financing at rates consistent with the federal government credit rating. Under a balanced budget requirement, more of these agreements could be used in place of direct subsidies or cost-sharing programs. In many cases these agreements can be beneficial to both parties; however, they could face less scrutiny than transactions recognized in the operating account.

The microeconomics of the budget (marginal rates of taxation, the tax mix, work incentives of social transfers, and the return on public investments) can be more important to fiscal outcomes than the forecast budgetary balance. The effects of reconciliation measures such as increases in taxes on labour supply and saving, or spending reductions on income support, education, health, and training could have consequences that outweigh the benefits of balanced budgets.

Similarly, certain structural reforms to tax policy, such as moving the tax mix away from taxes on income toward taxes on consumption, could have unfavourable budgetary implications in the short term, but could benefit economic growth and improve public finance over the long term.[36] Balanced budget requirements may discourage these reforms.

4.3 Limiting tax smoothing

As discussed in Section 2, deficits are often the optimal response to large spending commitments such as war-time national defence or establishing new social programs. The tax smoothing model of deficits in Barro (1979) computes the path of government borrowing that would be carried out by a benevolent social planner without political constraints. Under Barro's assumption that the economic cost of taxation is a non-linear increasing function of the tax rate,[37] a path of balanced budgets would not generally lead to the preferred outcome for social welfare. That is, it is better to spread the costs of fluctuations in spending requirements over time in smaller increments than to adjust fiscal policy in the short run to achieve balanced budget targets.

Augmentations to Barro's model to include uncertainty and exogenous shocks (see Lucas and Stockey, 1983; and Bonn, 1990) have qualified some of its implications. However, the result holds that restricting the government's ability to borrow can reduce social welfare by shifting fiscal policy away from this optimal framework of borrowing.

4.4 Encouraging optimistic forecasts and creative accounting

Legislation can also encourage less transparent budgetary practices that are designed only to comply with legislation cosmetically, rather than improve tangible fiscal outcomes.

[35] If the loans are estimated to contain a significant risk of loss, a portion of this loss could be recognized in the annual accrual operating deficit.

[36] The budgetary impact can arise either due to political economy considerations, such as offering lower ex-post tax burdens to boost public sentiment toward the change, or from efforts to maintain progressivity through credits and exemptions while not increasing the tax burden on higher-income taxpayers.

[37] The economic cost of taxation, also known as *dead-weight loss*, or *excess burden*, is the net harm to consumers and producers in forgone utility and output as a result of the tax.

If budget balance legislation requires the government to submit a balanced outlook, it could lead to overly optimistic economic and fiscal forecasts and assumptions. In the United States, Reischauer (1990) examined technical adjustments made by the Congressional Budget Office to the forecasts of the Office of Management and Budget (the president's budget department) and found that they increased substantially after implementation of balanced budget amendments. In the United Kingdom, HM Treasury projected a structural surplus by the end of the five-year outlook in 21 of 25 forecasts over 2000 to 2008 in compliance with Golden Rule balanced budget legislation. Realized structural budgets were in deficit every year.[38]

Economic assumptions are currently constrained by requiring Finance Canada to use the risk-adjusted average of private sector forecasts. But there is still scope for overly cautious assumptions for fiscal forecasts in the budget plan. A balanced budget requirement could formalize restrictions on fiscal assumptions or require that assumptions be established by an independent organization.

Legislation can also encourage the use of accounting strategies to achieve balanced budget targets. In the United States, a 1985 study by the General Accounting Office (GAO) documented several popular accounting strategies including transfers from special purpose funds to the general revenue fund, drawing down of surplus pension assets, and accounting changes to recognize revenues sooner and expenses later. A subsequent 1993 report by the GAO found 19 per cent of the dollar value of actions to close budget gaps was accomplished by one-time budget fixes not attributable to revenue increases or spending cuts.

Under public sector accounting guidelines and financial statement preparation, there are several classes of transactions involving financial arrangements and re-measurement gains and losses that contribute to government liabilities but do not flow through government operating or capital budgets. Several studies have shown these non-budgetary transactions often increase when the operating balance is constrained under fiscal rules, even in advanced countries that comply with international accounting standards. For example, in an econometric analysis of 34 advanced IMF countries including Canada, Weber (2012) found that from 1980 to 2010, governments were biased toward allowing debt-reducing measures to pass though the budget while favouring off-budget adjustments for debt-increasing transactions. As a share of the budget, off-budget adjustments were 6 percentage points higher in countries with balanced budget legislation.

In Canada, annual federal off-budget adjustments averaged 1.0 per cent of GDP since 1991. Adjustments ranged from accounting changes (such as bringing future sick-leave obligations into the fiscal framework at the request of the Auditor General) to other more substantial financial transactions such as purchases of mortgage loans through the CMHC and acquiring shares in General Motors. According to the latest Debt Management Report, the government required $11.5 billion to finance non-budgetary transactions in 2012-13, in addition to the $18.9-billion budgetary deficit (for a total financial requirement of $30.5 billion).[39] If international experiences apply to Canada, these transactions could increase under a balanced budget requirement.

4.5 Provincial externalities

Legislation should consider the close relationship between federal and provincial fiscal policy. The federal tax base determines most tax bases of provinces through collection and coordination agreements.[40] If the federal government implements tax increases or concessions to comply with legislation, and these changes affect the definition of taxable income, it would expand or contract the tax base of provinces.[41]

Balanced budget requirements also could influence the tax mix of federal and provincial program delivery. As the federal government tries to plan for balanced budgets, it may have an incentive to shift volatile or cost escalating programs to the provinc-

[38] See the Historical Official Forecasts Database of the Office for Budget Responsibility, and Corrie, C., C. Fraser, and Zuccollo, J. 2014. "The debt ratchet", *Reform Research Trust.*

[39] See Department of Finance Canada (2013).

[40] There are some exceptions, such as Quebec, which administers many of its own personal income and corporate taxes, but has agreed to harmonize its sales tax base.

[41] Special provisions could be created by legislation to protect provincial tax bases from federal changes, but these are difficult to implement in practice.

es.[42] Or it could decide to deliver certain programs directly which have lower accrued expenses, rather than incur the entire cash transfer charge, such as direct federal construction and operation of inter-provincial transportation and communications projects.

If legislation does not provide sufficient flexibility for countercyclical fiscal policy during recessions, it could shift more of the responsibility for macroeconomic stabilization to provincial finance ministries.

Theory and empirical research suggests provincial countercyclical fiscal policy is less effective than federal action. Wibbles and Rodden (2010) examined Canadian provinces and six other decentralized federations. They found that sub-national governments have less fiscal room for countercyclical policy than central governments, as own-source revenues and spending are more pro-cyclical for reasons attributed to tax competition, lack of seignorage, and economies of scale in tax collection and redistribution.[43] In Canada, this is compounded by the fact that most transfers from the federal government are now indexed to GDP and therefore are pro-cyclical. That is, during downturns, provinces will receive lower federal transfers.

Further, Miller (1988) estimated the impact of tax and expenditure changes on regional unemployment. He showed that while regional government demand could have been used to soften the impact of the 1981-82 recession, the elasticity of regional unemployment rates with respect to regional government expenditure is so low that it puts it out of reach of reasonable levels of stimulus.

5 DESIGN CONSIDERATIONS

Balanced budget requirements can take many forms. The design of federal legislation will play an important role in maximizing the benefits of legislation and minimizing the risks.

5.1 Defining the scope

Balanced budget legislation could be narrow in scope, covering only the primary balance (that is, excluding debt charges) of the accrual operating budget of federal departments. Or it could be broad in scope, covering net lending (that is, the overall budget including the impact of capital transactions) of the broader public sector including government business enterprises (GBEs), government non-profits, and other public organizations.

In defining the institutional scope, it must be decided if legislation should extend to Enterprise Crown Corporations (Canada Mortgage and Housing Corporation, Canada Post, and the Bank of Canada, among others) and other government business enterprises (mostly port authorities) or the Canada Pension Plan.

Legislation that targets the annual public accounts budget balance would apply to the federal government-controlled reporting entity defined by CPA *Public Sector Accounting Standards* section PS 1300,[44] similar to the central government subsector of general government as defined by the *Government Finance Statistics Manual 2001*. This definition includes all departments and agencies that are funded out of the consolidated revenue fund. GBEs would be included indirectly, with only their annual budgetary flows (such as amounts payable and receivable as remitted profits and losses and changes in loans and advances) included in the budgetary balance. Certain other flows from GBEs that affect the financial health of the government, such as changes to pension liabilities, are recognized in the public accounts as *other comprehensive income or loss*, which affects federal debt, but is excluded from the annual budget balance.

The annual deficit to be targeted by legislation can be defined in different ways according to the system of accounts and standards used to compile revenues and expenses. Alternative definitions may also be chosen if the government wishes to restrict legislation to the subset of fiscal aggregates that are under direct control of fiscal planners, or if legislators wish to minimize inefficient short-run adjustments to comply with rules.

[42] For example, as the intensity of population ageing increases over the next decade, the government would face an incentive to limit its exposure to rising health care costs by continuing to index the CHT transfer to GDP beyond the next review period in 2024. From a tax smoothing perspective, it may instead be preferable to incur deficits to help fund health spending during the worst of the demographic impact.

[43] Seignorage is revenue which flows to the central government through operations of the central bank as it conducts transactions to increase the money supply.

[44] Available through the Chartered Professional Accountants of Canada: http://www.frascanada.ca/standards-for-public-sector-entities/resources/cpa-canada-handbooks/index.aspx

The most likely target for federal legislation is the annual budgetary balance of the public accounts, which corresponds to the GFSM 2001 definition *net operating balance.*[45] The net operating balance is defined as accrued revenues less accrued expenses. The definition of accrued expenses includes interest charges on market and non-market debt and capital amortization from revenues, but does not include the cash layouts to acquire physical capital. A balanced requirement of this type would be similar to Golden Rule legislation, discussed above in Subsection 3.3.

In 2012-13, the budgetary deficit represented only 60 per cent of borrowing (Department of Finance Canada, 2013). If the goal of legislators is to restrict the accumulation of public debt, legislation could be expanded to cover capital expenditure as well. This could be accomplished by requiring balanced net lending, as defined in Section 3. This corresponds more closely to the cash method of accounting and would have the benefit of being more aligned with parliamentary appropriations and Estimates. Alternatively, investment and debt could be brought into a rules-based framework using a complementary rule for debt accumulation (described in Subsection 5.4).

The balanced budget amendments of the U.S. federal government in the 1980s and 1990s applied to total expenditure, including both operating and capital expenditure. Thirty-three of 49 American states with balanced budget rules apply it only to the operating budget and allow borrowing for investment (GAO, 1993).

Some American states exclude certain social programs and public trusts, such as disability insurance, from balanced budget requirements. In Canada, the federal government could consider separating EI revenues and expenses from the budget balance for estimation of compliance with legislation, as EI premium rates will soon be set so that revenues and expenses are balanced over a rolling seven-year outlook, although this may not be true in any particular year.

There are additional non-budgetary transactions that affect neither the net operating balance nor net capital acquisition, but do affect the government's balance sheet and debt. These include unrealized gains or losses on available-for-sale financial assets such as the Government's holdings of General Motors shares, actuarial gains and losses on pensions and employee benefits of Crown corporations and GBEs, and other loans, investments, and advances.

Quebec's *Balanced Budget Act,* 2009, has captured some of these transactions by choosing a definition of the budgetary balance that is broader than the net operating balance but excludes capital accumulation: the *change in accumulated deficit*. This is similar to the net operating balance, but also captures some non-budgetary transactions from Other Comprehensive Income.[46]

As interest rates are not under direct control of the government, legislation could be applied only to the primary balance. This would avoid increases in taxes or decreases in government services if inflation and interest rates were to rise. If only the primary balance is targeted, a balanced overall operating budget could still be achieved during periods of normal interest rates by requiring a primary surplus equal to projected public debt charges under trend interest rates.

Further restrictions on individual items may be required to constrain the harmful distortions of balanced budget requirements discussed in Section 4. For example, most provinces and many other jurisdictions exclude proceeds of sales of assets and Crown corporations from contributing to balanced budget compliance. Quebec's legislation requires all proceeds from asset sales to be put into a fund for debt retirement (the Quebec-Generations fund), which does not count toward balanced budgets. Alberta's *Fiscal Management Act*, 2013, creates unique definitions of operating revenues and expenses for calculating its budget balance rule. It defines "actual operational expense" as expenses excluding changes in liabilities due to pensions, and "actual operational revenues" as revenues less gains from capital transactions, resource revenues allocated to the Alberta Heritage Savings Trust, and

[45] The public accounts are compiled according to financial accounting principles and reporting standards. In contrast, the United Kingdom and euro area countries base their balanced budget requirements on National Accounts statistics, which are produced by national statistics agencies to compile a country's GDP.

[46] See *Balanced Budget Act,* SQ 2009, c 38, s 1. Available at: http://canlii.ca/t/5239f.

revenues that have been allocated to the debt-service of capital asset purchases.

The IMF recently recommended that the federal government create special considerations for windfalls from natural resources prices in the balanced budget requirement (IMF, 2014). This could prove challenging, as most revenues that can be attributed directly to natural resources accrue to provincial governments.[47]

5.2 Accommodating the economic cycle

The Government's announcement stated that legislation will permit deficit spending during economic downturns. There are three main options to allow deficits during recessions: (1) temporarily suspend the requirement, (2) require that revenues equal expenses over a fixed multiannual planning period or the business cycle, and (3) balance the annual structural budget.

The simplest way to allow deficit-financing during a recession would be to suspend the rule when the economy is considered sufficiently weak. For example, the Gramm-Rudman-Hollings balanced budget amendment in the United States contained the option to suspend the requirement if economic growth were to fall below 1 per cent for two consecutive quarters.

Alternatively, legislation could be suspended when conventional monetary policy—the 'first response' to downturns—reaches its limits of influence.[48] This could be made operational by suspending the requirement when the Bank of Canada's target policy rate is reduced below a threshold such as 1 per cent.

For escape provisions to work, the government must recognize exceptional economic circumstances, and by then it may be too late to mitigate some of the damage unrestricted automatic stabilizers could have prevented.

Instead of suspending the requirement during a recession, legislation could require a balanced budget on average over a fixed or flexible multiannual planning period. The required period could be entirely forward looking, for example, over the budget's five-year outlook. Or it could be partly backward looking, requiring the budget to be balanced on average over the two years that have passed and the three years to come. A partly backward-looking period would force budget planners to create fiscal room to repay missed forecasts, increasing the pressure on remaining years.

The fixed or flexible multi-annual planning option allows for both automatic stabilizers and discretionary stimulus spending, provided that offsetting surpluses are achieved in other years.

The multi-annual planning period has been the choice of legislation among Canadian provinces. British Columbia's *Taxpayer Protection Act,* enacted in 1991 and repealed the following year, required revenues to equal or exceed expenses over a five-year outlook. Saskatchewan's *Balanced Budget Law*, 1995, required the government to table a four-year financial plan after every general election that balanced the forecast of total expenses and total revenues.[49] After a 2008 amendment, this was changed to every year. New Brunswick's *Financial Responsibility and Balanced Budget Act,* enacted first in 1993 and repealed and replaced in 2006 and again in 2011, set a goal of balancing revenues and expenses over fixed three-year periods; that is, the outlook was not rolled ahead each year.

A fixed or rolling period over which budgets must be balanced avoids difficulties associated with recession dating and structural budget estimation; however, a recession could outlast the planning period and it may not be an appropriate timeline for fiscal consolidation.

A budget requirement similar to the multiannual planning period, but flexible in relation to the severity of the recession, is to require balanced budgets over the economic cycle, that is, on average over the booms and recessions of the economy. Such a target was used in the United Kingdom's *Code for fiscal stability,* 1998. The government committed itself to balancing the national accounts-based current account (public sector net borrowing) over the economic cycle. Discretion for the estimation of the cycle was left with HM Treasury.[50]

[47] One option would be to use national input-output tables to estimate the sensitivity of the federal tax base to commodities and require annual contributions to a stability fund based on those estimates.

[48] Under these circumstances, unconventional monetary policy such as quantitative easing may still prove effective. For a discussion of the value of fiscal policy when central bank policy interest rates reach the zero lower bound, see Portes and Wren-Lewis (2014).

[49] See http://www.qp.gov.sk.ca/documents/english/statutes/repealed-/B0-01.PDF.

[50] Despite this flexibility, the UK government had to abandon its two fiscal rules during the worst of the recent recession; the government

Measuring the economic cycle can prove controversial.[51] Harding and Pagan (2006) describe several statistical- and model-based approaches to dating the business cycle with the goal of minimizing the role of judgment. These include spectral analysis (separating permanent components of economic growth from cyclical fluctuations to identify peaks and troughs), parametric models of the economy that identify the probably of being in a high- or low-growth state relative to a baseline value, and measuring the 'tightness' of turning points across multiple data series that measure economic activity.

The third option would be to balance the annual structural balance. This option is restrictive, but still allows for consideration of the economy. Automatic stabilizers would be allowed to function freely, but discretionary stimulus spending may not be permitted, depending on the legislated definition of the structural budget balance.[52] Real-time estimation of the structural balance can be difficult and there are many competing methodologies.

The euro area *Treaty on Stability, Coordination and Governance,* 2012, (usually referred to as the *Fiscal Compact*) requires euro area countries and eight other EU member states to implement a balanced budget rule through their national legislation which targets the annual structural balance. This option is also used by Switzerland's *Financial Budget Act*, 2005, which requires one-year-ahead forecast expenditure to equal forecast revenues, adjusted to control for the economy's deviation from trend.

As an alternative to these three options, the government could transfer surpluses to a stability fund in good years to apply to balancing the budget during downturns. In this manner, the budget could remain in balance while allowing for countercyclical fiscal policy. The fund could be established as a notional tracking account within the Accounts of Canada, much like the Employment Insurance operating account, or it could be invested in markets under an independent investment board.

Saskatchewan's *Growth and Financial Security Act*, 2008, requires the government to transfer 50 per cent of surpluses to its Growth and Financial Security Fund, which is a source of funds to be appropriated for economic development programs. Interest from the fund must be deposited in the General Revenue Fund. Alberta's *Fiscal Management Act,* 2013, established a notional tracking account within the government's general revenue fund that maintains a balance of at least $5 billion by allocating funds from annual operating surpluses. It must be drawn down if operating expenses exceed revenues. Quebec's *Balanced Budget Law*, 2001, requires all surpluses after 2013-14 to be transferred into the Quebec stabilization reserve fund.

5.3 The budget target

If legislation does not target a balanced budget on average over a multiannual planning period, an annual target will need to be prescribed. Legislation could only prohibit deficits, or it could apply symmetrically, so that both deficits and surpluses are prohibited. It could require surpluses equal to a certain percentage of GDP, or it could permit a nominal range, such as a balanced budget to within plus or minus $1 billion. Targeting an explicit surplus would help avoid surprise deficits and reduce incentives for excessive risk-adjustments in the fiscal plan.

In the United States, the Gramm-Chiles-Domenici balanced budget bill of 1987, which succeeded Gramm-Rudman-Hollings, provided the federal government with a margin of error of $10 billion USD to achieve its borrowing targets, equivalent to roughly $1 billion CAD adjusted for the relative size of the Canadian federal budget and exchange rate.

Internationally, Sweden's *Budget Act*, 2011, targets a surplus for general government net lending of 1 per cent of GDP on average over the business cycle ($18.8 billion for Canada in 2013). The euro area *Fiscal Compact* prohibits annual structural deficits that exceed 0.5 per cent of GDP ($9.4 billion for Canada in 2013).

5.4 Other complementary rules

On its own, a balanced budget requirement would not limit deficit-financed spending growth, provided

has since replaced them with a self-imposed *Charter of Budget Responsibility*. See https://www.gov.uk/government/publications/charter-for-budget-responsibility.

[51] Refer to the criticism of the government of the United Kingdom's dating of the economic cycle under the *Code for Fiscal Stability*, described in Chote and Others (2009).

[52] There are several competing methods for determining the structural balance, some of which remove the effects of stimulus spending as one-off irregular budgetary items, and others which include the effects in the structural estimate. For example, the euro area *Fiscal Compact* excludes one-off and temporary measures from its requirements for a balanced annual structural balance.

it is accompanied by revenue increases. If the objective of legislation is not only to eliminate borrowing, but also to limit the size of government, legislation could restrict revenue and spending growth directly with tax and expenses limitations. For example, the federal government could restrict direct program expenses as a share of GDP to the current value of 6.5 per cent.

Of the 28 advanced countries in the IMF with balanced budget legislation, 12 have imposed a complementary expenditure limit. For example, Sweden's *Fiscal Budget Act,* 1996, sets a nominal expenditure ceiling for a three-year period and adds an extra year annually. Norway's *Fiscal Policy Guidelines*, 2001, target a non-oil structural deficit equal to the long-run real return of the government pension fund.

If the government wishes to limit tax increases as a budget reconciliation measure or as a means to expand spending, legislation could require a referendum for tax increases. This approach was used in legislation establishing balanced budget requirements in British Columbia, Alberta, and Manitoba.

As described in Subsection 3.2, balanced budget legislation that defines the deficit as the net operating balance will not restrain capital and will not restrain the growth of public debt. Many jurisdictions have addressed this issue by accompanying balanced budget legislation with legislation limiting the expansion of debt.

For example, Quebec has a legislated target for gross debt, requiring that it be reduced to 45 per cent of GDP by fiscal year 2025-26.

Among advanced countries in the IMF, 26 out of 31 have implemented debt rules.[53] The United Kingdom had the S*ustainable Investment Rule* from 1998 to 2008 to complement its Golden Rule as part of the Code for Fiscal Responsibility. The Sustainable Investment Rule required net public sector debt (similar to GFSM 2001 *net financial debt*) to be no more than 40 per cent of GDP averaged over the business cycle. The euro area *Fiscal Compact* requires countries whose net financial debt exceeds 60 per cent of GDP to reduce their debt at an annual average rate of one twentieth of the difference between its level and the 60 per cent reference value.

[53] IMF Fiscal Rules Dataset 1985-2013.

Other jurisdictions have instead implemented legislation requiring a certain percentage of debt be retired each day, or a certain amount of the annual surplus be used to retire debt. Alberta requires 100 per cent of surpluses to be devoted to debt reduction. Saskatchewan requires 50 per cent of surpluses to be applied to debt retirement and 50 per cent to be contributed to its Growth and Financial Security Fund.

5.5 Escape clauses in exceptional circumstances

Legislation could contain a provision that the rule may be temporarily suspended with a mechanism such as a parliamentary supermajority vote. This would accommodate rapid responses to emergencies or natural disasters which may require significant unplanned spending.

For example, Saskatchewan's *Balanced Budget Law,* 1995, required the finance minister to present to the Legislative Assembly a special report describing the unanticipated event and the revenues or expenses that would be excluded from the determination of the budget balance. The province's more recent *Growth and Financial Security Act,* 2008, lists two explicit circumstances revenues or expenses will be excluded from the budget balance: natural or other disaster and war. It stipulates that any deficit resulting from an exceptional circumstance must be offset by a surplus the following fiscal year.

Internationally, 13 of 35 IMF countries with a national balanced budget requirement in 2013 contained a well-specified escape clause.[54] For example, Spain' *Law on General Budgetary Stability,* 2006, requires the government to justify exceptional deficits to parliament and submit a financial plan to return the budget to balance over the subsequent three fiscal years.[55]

5.6 Legal basis

There are three broad options to implement a national balanced budget requirement: (1) by political commitment, (2) legislation, or (3) by constitutional amendment.

Governments can establish a balanced budget requirement simply by committing themselves to achieving balance budgets. For example, the Gov-

[54] IMF Fiscal Rules Dataset 1985-2013.

[55] This provision was suspended indefinitely during the 2008 financial crisis.

ernment of Ontario recently committed to balancing the budget by 2017-18.[56] The federal government in the 1990s had a successful balanced budget target, rather than a legislated requirement. There is no legal remedy for breach of these promises; however, the political consequences of failing to follow through on a public commitment provide a strong incentive to deliver balanced budgets.

A more permanent and versatile means of implementing fiscal rules is through legislation. Legislative commitments bind not only the current government, but any subsequent governments (saving amendment or repeal). In 2013, 26 of 35 IMF countries with a national balanced budget requirement imposed it by legislation.[57]

Legislation can impose a balanced budget requirement along a range of strictness. For example, legislation could be used only to provide a more formal commitment. New Brunswick's proposed *Fiscal Transparency and Accountability Act,* currently before committee, does not impose a strict budget requirement, choosing instead to declare in legislation that balanced budgets are an 'objective'.

Alternatively, legislation could create a procedural rule. For example, Australia's *Charter of Budget Honesty*, 1998, requires the government to regularly publish fiscal targets that are consistent with the goal of balanced budgets over the economic cycle. By forcing the government to disclose its target, the legislation encourages, but does not require, balanced budget commitments.

Similarly, the United Kingdom's *Budget Responsibility and National Audit Act,* 2011, requires HM Treasury to prepare a *Charter for Budget Responsibility* that sets out its objectives for fiscal policy and national debt. The government has used the Charter to self-impose a balanced budget requirement.

The most common form of legislation is a direct statutory requirement for balanced budgets. On its face, a requirement would be an uncompromising constraint on the government's ability to pursue a borrowing agenda contrary to the law's intent. There is, however, no legal impediment preventing governments from amending or repealing the requirement in order to pursue their financial objectives. Furthermore, if the government were to table a deficit budget without amending, it is not clear what remedies, if any, would be available. Statutory requirements would run a risk of being found unconstitutional, as the government's constitutionally recognized financial prerogative includes "the responsibility for preparing a comprehensive budget, proposing how funds shall be spent, and actually handling the use of funds."[58]

To be legally binding on the legislature, Canada's Constitution would have to be amended to include a requirement for balanced budget. Canada's Constitutional amending formula allows the federal government to make unilateral amendments, except in relation to listed subjects in which the provinces have an interest; therefore, a determined federal legislative majority could both introduce and remove a constitutional balanced budget requirement.

In the United States, 35 of 49 states have implemented balanced budget requirements through constitutional law (GAO 1993). Among IMF countries, Germany, Singapore, and Switzerland had constitutional requirements in 2013.[59] Constitutional laws are recommended, though not required, by the euro area *Fiscal Compact*. Most euro area countries have opted instead for statutory rules.

5.7 Monitoring and enforcement

Legislators must decide how compliance will be measured and by whom. In the event the government is not in compliance with the requirement, legislation will have to prescribe the mechanism under which the budget will be brought into compliance and any penalties that will be imposed on the executive.

Legislation could be forward looking, that is, an ex-ante requirement that the government table a budget which forecasts a balanced outlook. This would prohibit expanding the deficit for political considerations, while allowing deficits as a result of technical forecast errors and unforeseen economic downturns.

Legislation could also be backward looking, that is, an ex-post requirement that realized budgets be balanced and future budgets pay back any deficit financing. In this case legislation will need to specify

[56] See 2014 Ontario Budget.
[57] IMF Fiscal Rules Dataset 1985-2013.
[58] House of Commons Procedure and Practice, Second Edition, 2009.
[59] IMF Fiscal Rules Dataset 1985-2013. Additionally, Spain amended its constitution in 2011 to require balanced budgets beginning in 2020.

the method, magnitude, and timeline for repayments. For example, under Quebec's *Balanced Budget Law*, 1996, the government is required to offset a realized deficit of less than $1 billion the following year. If the deficit is greater than $1 billion as a result of "a significant deterioration of economic conditions", it can run for more than one year but must be offset over a maximum of five years.[60] An ex-post budget requirement can be difficult to manage in practice, as revenues and expenses are volatile and the public accounts aren't finalized until the third quarter following the end of the financial year.

Several accounting changes to the federal statement of operations over recent years significantly affected the reporting of revenues and expenses in the public accounts. Several further changes are planned in the coming years to 2016-17.[61] A balanced budget requirement must clearly define how these accounting changes should be treated. Saskatchewan's *Growth and Financial Security Act,* 2008, requires targets to be assessed according to "the accounting practices and policies as they existed when the estimates were presented to the Legislative Assembly."[62] Quebec excludes from the budget balance retroactive effects of changes in the standards of the Canadian institute of Chartered Accountants (CICA) but requires current and future deficits to be assessed relative to prospective CICA accounting changes.

A monitoring authority will be required to provide the reconciliation of past budget outlooks with realized budget balances. If legislation accommodates the economic cycle, a monitoring authority will also be required to estimate the structural balance or the beginning and endpoints of the cycle, which could prove controversial. Options for a monitoring authority include: (1) the Department of Finance, (2) an existing government authority such as the Parliamentary Budget Officer or Auditor General, (3) an existing external authority or think tank, or (4) a new department, officer of Parliament, or independent council established for the purpose of monitoring the balanced budget law.

Empirical research suggests the institutional framework in which fiscal rules are implemented can have a strong influence on fiscal outcomes. For example, Debrun and Kumar (2008) estimate a multivariate panel-data model of the relationship between fiscal institutions and fiscal discipline across a large sample of EU countries with fiscal rules. They find that budgetary outcomes are enhanced in jurisdictions with fiscal councils that have a greater formal role in monitoring the consistency of budget plans with rules.

Among advanced IMF countries with balanced budget requirements in 2013, 21 of 28 are monitored by an independent body outside government.[63] For example, the Office for Budget Responsibility (OBR) in the United Kingdom is responsible for estimating the government's cyclical current account and monitoring performance against the government's fiscal targets. The OBR updates the government and public twice a year in its *Economic and Fiscal Outlook*, which include a detailed risk assessment.[64] The OBR's creation was motivated in part by concerns that HM Treasury changed its dating of the business cycle to allow greater deficit spending under the former *Code for Fiscal Stability* (Chote and others, 2009).

In the European Union, council directives of the *Treaty on the functioning of the European Union* require that monitoring of fiscal rules be carried out by "independent bodies or bodies endowed with functional autonomy vis-à-vis the fiscal authorities of the Member States."[65]

Estimates of compliance with legislation could be provided from multiple sources, for example by taking an average of Finance Canada's and PBO's projected deficit. This was the approach taken by the Gramm-Rudman-Hollings balanced budget amendment in the United States, which required the General Accounting Office to calculate the average of the budget projections of the Congressional Budget Office and the Office of Management and Budget to

[60] *Balanced Budget Act,* SQ 1996, c 55, s 10.

[61] See http://www.frascanada.ca/public-sector-accounting-board/what-we-do/strategic-plan/item77629.pdf.

[62] *Growth and Financial Security Act*, SS 2008, c G-8.1, s 7.

[63] IMF Fiscal Rules Dataset 1985-2013.

[64] See http://budgetresponsibility.org.uk.

[65] Directive 2011/85/EU of 8 November 2011 on requirements for budgetary frameworks of the Member States, Chapter IV. Further, these institutions are to have legal provisions including

> i) A statutory regime grounded in law; ii) freedom from interference, whereby the above bodies shall not take instructions, and shall be in a capacity to communicate publicly in a timely manner; iii) nomination procedures based on experience and competence; iv) adequacy of resources and appropriate access to information to carry out the given mandate.

determine if the budget target was on track or required a spending correction.[66]

If the monitoring authority finds the government is not in compliance with the balanced budget requirement, legislation may impose corrective action. There are three main procedures to bring the budget into compliance.

First, failure to achieve the balanced budget requirement could trigger automatic spending reductions, often referred to as *sequestration*. Discretion could be left to the finance minister and Governor in Council to decide the allocation of mandatory cuts across programs. Or, discretion could be removed from policymakers by implementing automatic across-the-board spending reduction procedures. Sequestration was favoured at the federal level of the U.S. government under Gramm-Rudman-Hollings and its replacement acts. Sequestration under these acts protected some services deemed essential and required cuts to be spread equally between statutory transfer programs and discretionary spending.

Second, legislation could prohibit new policies until a realized deficit is paid back. Similarly, but less restrictive, new measures could be implemented provided they are financed by cuts to other programs. This is often referred to as pay-as-you-go enforcement. Pay-as-you-go enforcement allows for unexpected deficits without requiring abrupt corrections.

Finally, legislation could impose punitive measures on the executive such as fines or automatic elections. Fines are popular in Canadian provinces. Manitoba's *Balanced Budget, Debt Repayment and Taxpayer Protection and Consequential Amendments Act*, 2000, required a 20 per cent reduction in the salaries of cabinet members the year after a realized deficit and a 40 per cent reduction if successive deficits were realized. British Columbia's *Balanced Budget and Ministerial Accountability Act*, 2001, required a similar 20 per cent reduction in cabinet members' salaries upon failure to achieve a balanced budget. New Brunswick recently introduced Bill 87, *Fiscal Transparency and Accountability Act*, which will be enforced by requiring cabinet ministers to pay a penalty of $2,500 if conditions of deficit reductions and future surpluses are not met.

If legislation imposes punitive measures on the executive, special consideration must be made for years in which the political party forming a government is replaced. Saskatchewan's *Growth and Financial Security Act,* 2008, suspends the balanced budget requirement for the fiscal year of a change in government, as well as obligations to make up for a deficit incurred in the previous year. British Columbia's *Balanced Budget and Ministerial Accountability Act*, 2001, contained the provision that ministerial salary holdbacks would not be applied to members of a newly appointed Executive Council for the government's fiscal performance prior to the next fiscal year after the election.

Alternatively, enforcement of budget rules may not be required. GAO (1993) notes most American states do not have enforcement mechanisms. For states without enforcement mechanisms, history and public sentiment have been sufficient to ensure the requirements are followed.

6 TOWARD EFFECTIVE LEGISLATION

As discussed above, a balanced budgetary requirement could have potentially widespread unintended effects on fiscal policy and the broader economy.

Experiences in other jurisdictions have been diverse, and are specific to each country's or subnational government's individual circumstances, fiscal framework, and accounting practices. The appropriate design for a Canadian federal requirement will depend on the government's objectives, which have yet to be fully defined. Until further details are provided, Parliamentarians can refer to the following principles for constructive legislation that PBO has compiled from economic research and lessons from other jurisdictions.[67]

Canadian federal balanced budget legislation should be among the most flexible in its accommodation of the economic cycle.

Strict national balanced budget requirements are generally introduced with the goal of reassuring credit markets and implementing spending reform in jurisdictions that have suffered extended periods of worsening deficits and debt, and when the credi-

[66] Though the original formulation of this framework was ruled unconstitutional in a Supreme Court Challenge, a modified arrangement was implemented in Gramm-Chiles-Domenici, signed September 1987.

[67] For a detailed discussion of the characteristics of ideal fiscal rules in general, see Kopitz and Symansky (1998).

bility of the government's fiscal management has been called into question.

The outlook of the federal government in Canada is sound and does not require policy corrections, either for medium-term prudence or long-term sustainability. Further, the international experience at the national level suggests there is a false trade-off between flexibility and credibility. That is, by allowing concessions for the economic cycle and acknowledging the importance of the role of fiscal policy in macroeconomic stability, balanced budget requirements are less likely to be amended or repealed.

For these reasons, federal legislation can—and should—be very flexible during economic downturns to avoid harmful pro-cyclical budget reconciliation measures such as spending cuts and tax increases. To ensure the most flexibility, legislation should permit deficit financing not only in times of crisis, but also pre-emptively during less acute downturns. Deficit financing should be permitted for both the automatic stabilizers of fiscal policy and for discretionary stimulus spending.

Legislation should accommodate beneficial or unexpected borrowing.

In addition to permitting deficit financing during downturns, legislation should be careful not to restrict borrowing for tax smoothing and prudent capital investment.[68] It should also accommodate deficits resulting from economic and fiscal model misspecification and unexpected events such as natural disasters, for which the government cannot be faulted.

Legislation that restricts only the accrual operating balance will allow for much of the borrowing required to benefit from tax smoothing and capital investment.[69] Such legislation would be further complemented by requiring budgets to be balanced only on average over a fixed or flexible period such as the five-year outlook or economic cycle. Further, excluding asset sales from the calculation of the budget balance can ensure that the decision to maintain existing capital is based on financial and social fundamentals.

Provided a balanced budget outlook is submitted based on transparent and reasonable assumptions, any resulting deficits would be a result of factors outside the government's control. Allowing deficits from model misspecification and unanticipated events can be achieved by requiring only an ex-ante balanced budget forecast rather than a balanced ex-post budget. If the government is not required to make up realized deficits, legislation avoids the need for problematic stabilization funds, correction mechanisms, and defining unexpected circumstances in which temporary non-compliance will be permitted. Credibility can be maintained following unforeseen deficits by requiring transparent economic and fiscal assumptions as well as requiring a full decomposition and reporting of why targets were not met, with independent scrutiny of forecast errors.

Legislation should be credible and transparent.

Balanced budget legislation requires broad legislative and social support if it is to persist beyond the political and economic conditions under which it is implemented. This ongoing support depends crucially on strong institutions and transparency.

To foster credibility, compliance with legislation should be measured and monitored by an independent authority. This would include dating the economic cycle and estimating the cyclically-adjusted budget balance if the provision for deficit financing during economic downturns is tied to the economic cycle or structural balance. All assumptions and methodologies should be made publicly available.

To foster transparency, detailed reports should be published describing the adjustments that have been made to comply with balanced budget requirements and the programs that have been affected. Reconciliation between the accrual budget framework and Parliament's cash-based appropriation bills and Estimates will become increasingly important for parliamentary scrutiny of performance against balanced budget laws and the impact of measures implemented to achieve budget targets.

Implementing a statutory balanced budget requirement that is designed according to these principles can enhance the law's value and extend its longevity.

[68] Prudent capital investment here refers to investments which have a positive discounted net present value of costs and economic and social returns.

[69] The accommodation will be imperfect due to considerations of transfers to provinces, as discussed in Section 2.

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