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RESEARCH NOTE/NOTE DE RECHERCHE

Deficit or Austerity Bias? The Changing Nature of Canadians' Opinion of Fiscal Policies

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Abstract
Public choice theory suggests that citizens have a deficit bias: they approve governments for running large deficits that increase spending or reduce taxes. In contrast, others contend that citizens reward governments for balanced budgets. We contribute to this debate by modelling a popularity function for the Canadian federal government and show that the impact of fiscal policies on the executive's popularity changes over time. Until the early 1990s, Canadians preferred budget deficits. As deficits became unsustainable during the economic crisis of the early 1990s, the government shifted its fiscal policy paradigm, as balancing the budget became its primary fiscal objective and citizens were actively concerned about the deficits. Since 1993, citizens' deficit bias morphed into an austerity bias: executive approval increases when deficits are reduced. These findings contribute to comparative political economy research by assessing how policy regimes and public preferences reinforce each other.

Résumé
La théorie des choix publics suggère que les citoyens favorisent les déficits budgétaires : ils préfèrent davantage de dépenses publiques et moins d'impôts, de sorte qu'ils appuient les gouvernements qui maintiennent des déficits budgétaires élevés. À contrario, d'autres auteurs avancent que les citoyens récompensent la discipline budgétaire des gouvernements. Nous contribuons à ce débat en modélisant une fonction de popularité du gouvernement fédéral canadien. Celle-ci démontre que l'impact des politiques fiscales sur la popularité du gouvernement change d'une période à l'autre. Jusqu'au début des années 1990, les Canadiens préfèrent les déficits budgétaires. Les citoyens ont commencé à se préoccuper du déficit lorsque la dette publique est devenue insoutenable au cours de la crise économique du début des années 1990, alors que le gouvernement a modifié son paradigme de politiques fiscales, l'équilibre budgétaire devenant son principal objectif. Depuis 1993, le biais citoyen en faveur du déficit s'est transformé en un biais en faveur de l'austérité : la popularité du gouvernement augmente lorsque les déficits sont réduits. Ces résultats

contribuent à la recherche en économie politique comparée en évaluant comment les paradigmes de politiques et l'opinion publique se renforcent mutuellement.

Introduction

A scholarly literature rooted in public choice theory seeks to understand the political foundations of sustained budget deficits in advanced democracies. This literature suggests that deficit biases derive from issues related to governance, such as common pool problems, or from the public's preferences. Voters, for instance, want "something for nothing" (for example, they prefer higher spending and lower taxes) but are too myopic to foresee the negative consequences of rising budget deficits. As such, vote-seeking politicians have a structural incentive to engage in budget deficits, especially as elections approach (Calmfors and Wren-Lewis, 2010). Several studies in comparative political economy confirm that citizens punish governments for aggressive deficit reduction policies (Talving, 2017; Bojar et al., 2021; Jacques and Haffert, 2021).

On the other hand, various studies suggest that citizens dislike government debt and support balanced budgets, possibly because they know that higher debt will need to be paid for in the future (Bansak et al., 2021). Several studies have found that governments are not more likely to lose the next election if they implement austerity measures (Brender and Drazen, 2008; Alesina et al., 2019; Arias and Stasavage, 2019). A negative relationship between budgetary deficits and executive approval has also been found in some popularity functions (Geys and Vermeir, 2008).

Given these contradictory findings, how can we expect citizens to react to significant changes to the budgetary balance? Understanding citizens' opinion of the deficit is particularly relevant, as governments in Canada and elsewhere have increased their budget deficits significantly since the COVID-19 crisis. Public opinion is likely to influence governments' choices, as they ponder the policy trade-offs between the sacrifices needed to balance their budgets and an additional increase in public spending to stimulate the economic recovery (Lachapelle et al., 2021). Yet, to our knowledge, the impact of changes to the budgetary balance on the Canadian government's popularity has never been studied at the federal level (but see Tellier [2006] for an analysis at the provincial level).

We argue that citizens' opinions about budget deficits, public discourse and fiscal institutions influence each other. From the 1970s to the mid 1990s, the government of Canada was unable to balance the budget. During that time, the Canadian executive's approval increased when the budget balance deteriorated, as deficits were used to reduce taxes or increase spending to please voters. This fiscal policy regime, which was continuously producing budget deficits, matched the public's deficit bias. By *fiscal policy regime*, we mean "the configuration of political interests, institutions and policy arrangements that structure conflicts over taxes and spending" (Pierson, 2001: 56).

As the economic crisis of the early 1990s contributed to an increase in Canada's debt and deficit to unsustainable levels, the public grew particularly concerned with the deficit, and so the discourse shifted in favour of a large-scale fiscal consolidation, with the newly elected Liberal Party of Canada implementing in 1994–1995 the toughest austerity measures ever seen in the country (Lewis, 2003). This was a paradigm shift towards a fiscal policy regime prioritizing austerity measures to balance budgets (Hall, 1993), and it helped to create one of the longest periods of budget surpluses achieved by an OECD country since the end of the *Trente Glorieuses* (Haffert, 2019). We show that since the election of the Liberal government led by Jean Chrétien in 1993, Canadians have rewarded governments for a reduction of the deficit. These results suggest that the government's austerity discourse and actions have convinced a significant proportion of Canadians of the purported benefits of a balanced federal budget.

It is important to note that we cannot disentangle the causal ordering between public opinion and policy paradigms. We know from previous research that significant support from influential segments of the public and of interest groups is necessary to implement large changes in fiscal policies (Barta, 2018; Haffert, 2019). We contribute to the comparative political economy literature by showing that once fiscal regimes are put into place, there is a self-reinforcing feedback between public opinion and the policy paradigm, as shifts in policy paradigms are associated with changes in public opinion.

This research note also contributes to studies of economic voting in Canada. For the first time in Canada, we use both fiscal and economic variables, as well as a direct measure of executive approval, to model a popularity function for the period 1978–2018. Extant studies of the Canadian popularity function have all relied, so far, on vote intention data as a measure of executive popularity. Yet we know that vote intention and approval are not the same, the former being less volatile but more dependent on the alternatives offered by other parties (Pickup, 2010). Thanks to the data collection efforts of the Executive Approval Project (EAP), we now have for Canada an indicator of *net executive approval*, bringing our popularity function work more in line with the relevant comparative literature. We show that a higher unemployment rate reduces approval, but only in the 1970s and 1980s.

After a brief overview of studies of economic voting in Canada, we present our main argument about the relationship between the shift of fiscal policy regime and public opinion. The third section presents the data and modelling strategy, while the fourth section displays the results and the fifth section concludes.

Fiscal Policy Regimes and Public Opinion

Citizens evaluate the performance of the executive and reward the sitting government with their support if its performance is deemed positive—that is, if the economic and political outcomes of government policy are congruent with the general preferences of the population. Conversely, citizens will withdraw their support of the executive to punish what they consider to be bad performance. This relationship between policy performance and public support thus constitutes a mechanism of government accountability that ought to be considered an important underpinning of a healthy democracy (Key, 1966).

In Canada, at the federal level, several studies of economic voting, using either individual-level data (for example, Anderson, 2008; Daoust and Dassonneville, 2018) or vote functions (for example, Nadeau and Blais, 1993; Gélineau and Bélanger, 2005), have confirmed a link between economic conditions and incumbency voting (but see Guérin and Nadeau, 1998). Aggregate-level popularity function work has also uncovered a relationship between vote intentions and a host of macro-economic factors (Monroe and Erickson, 1986; Johnston, 1999; Pickup, 2004).

In contrast to the economy, fiscal policy factors have been largely ignored in previous Canadian studies of government popularity. Tellier's (2006) provincial-level vote intention work has looked at income tax and budgetary balance, finding that only the latter had a statistically significant effect. At the federal level, the available evidence is even more scant. In a footnote, Johnston (1999: 505, n10) reports inconclusive results associated with budget balance, while Happy's (1992) vote function model reveals a negative impact of income taxation on aggregate-level incumbency voting from 1953 to 1988. In contrast, several international studies have included fiscal policies, such as taxation, transfers and budget deficits, in their popularity functions (Geys and Vermeir, 2008; Bojar et al., 2021; Jacques and Haffert, 2021). Much remains to be investigated when it comes to the impact of fiscal policy on federal executive approval in Canada.

In this research note, we study how fiscal policy regimes may influence how the public reacts to budget deficits. There were two different fiscal policy regimes during the period we study in Canada (Haffert, 2019). The first is a deficit regime, lasting from the 1970s to the early 1990s. During these decades, the government sustained budget deficits every quarter and public debt was constantly rising. The government was not willing to pay the political price of an elimination of budget deficits, since cutbacks would have affected poorer regions disproportionally, while tax increases would have accentuated redistributive conflicts along regional lines (Barta, 2018). Brian Mulroney's Progressive Conservative government did not succeed in balancing the budget.

The early 1990s recession hit the Canadian economy particularly hard, contributing to even larger budget deficits and to unsustainable interest rates payments of the public debt. By the early 1990s, interest payments on the federal government's public debt reached 6 per cent of the gross domestic product (GDP), which represented almost 30 per cent of its expenditures. The 1994 Mexican peso crisis was the straw that broke the camel's back, as it prompted fears of a devaluation of the Canadian dollar and of an ensuing sovereign debt crisis. The International Monetary Fund was knocking at the door with a painful structural adjustment plan (Savoie, 1999). Around that time, the government deficit became one of the most important issues for Canadian citizens, as shown in Figure 1.[1]

Such a crisis represented a critical juncture leading to a paradigm shift, as policy priorities and the main tools to achieve them changed (Hall, 1993). Large public support in favour of deficit elimination provided an opportunity for the newly appointed Chrétien government to implement significant reforms that would change fiscal policy making in Canada for decades (Haffert, 2019). Indeed, very large spending cuts (or tax increases) can only gather the necessary social and political support "if sufficiently large sections of society have an immediate stake in
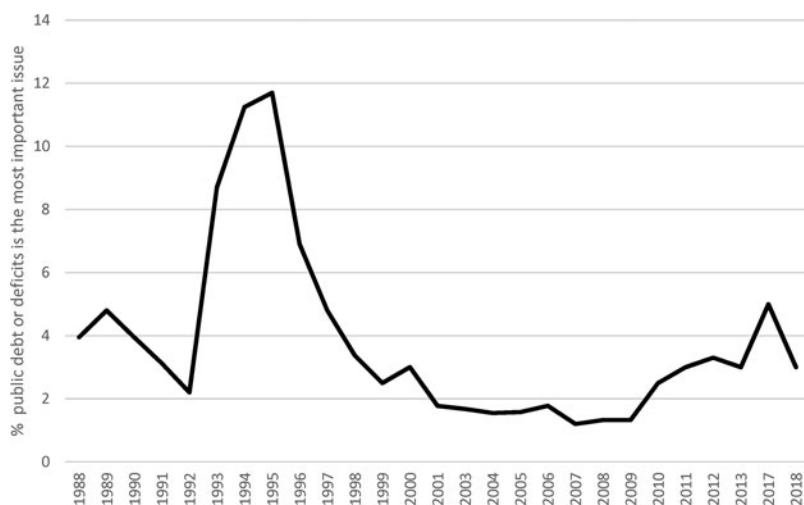
Figure 1. Proportion of Canadians saying public debt or deficits are the most important issue facing the country, yearly averages.

fiscal adjustment and cannot reasonably hope for less onerous fiscal sacrifices" (Barta, 2018: 17). The government reformed the budget process by instituting a permanent program review and by concentrating policy-making power in the ministry of finance, inducing fiscal discipline by reinforcing the power of central agencies—the guardians of the public purse—over line departments (Savoie, 1999).

To achieve surpluses, the government had to permanently transform the ideas, institutions and balance of power around fiscal policy. As discussed by Haffert (2019), there was a profound transformation of Canada's fiscal regime from a "deficit regime," unable to balance budgets, to a "surplus regime" in which balancing budgets and even maintaining surpluses became the primary fiscal objective of the state. The fiscal consolidation of the early 1990s was almost entirely composed of expenditure cuts rather than tax increases, which contributed to the instalment of a surplus regime. Expenditure-focused consolidations weakened political coalitions that are in favour of additional public spending, notably by reducing the number of public sector workers (by 45,000 employees). Moreover, a retrenchment of public services changes citizens' expectations, as they expect further cuts to public services and, therefore, anticipate relying less on the state (Haffert, 2019).

What is more, these consolidation measures were supported by most federal parties, with some, like the Reform Party, advocating for even harsher cutbacks. At the same time, a 30 per cent cut to federal transfers to provinces forced provincial governments of all stripes to implement fiscal consolidations. The discourse about the importance of balancing budgets and of implementing "austerity" measures became dominant in Canada and worldwide (Lewis, 2003). However, consolidation measures and the entrenchment of surplus regimes were successful only in certain countries, like Canada (Haffert, 2019), which makes the study of the Canadian case particularly pertinent. The surplus regime lasted until the 2015 election during

which the Liberal Party of Canada broke with fiscal orthodoxy by promising to run deficits to increase public spending.

If a self-reinforcing feedback between fiscal regimes and public opinion exists, we should observe two empirical phenomena related to how citizens react to budget deficits. Before 1993, we would expect citizens to follow classical models of preferences regarding fiscal policies and exhibit a deficit bias: voters reward governments for spending more and/or reducing taxes, while discounting the negative consequences of additional deficits in the future (Calmfors and Wren-Lewis, 2010). During these decades, the executive's popularity should increase with higher budget deficits. The shift of the fiscal policy regime toward a surplus regime should be sustained by voters who should become more fiscally conservative over time, following elites' and media discourses (Barnes and Hicks, 2021). We would thus expect that after 1993, citizens punish governments for a deterioration of the budget balance and reward them for a reduction in deficits.

Our systematic review of available opinion polls supports these expectations: it reveals that the proportion of Canadians saying it is very important for the federal government to reduce the deficit increased from only 50 per cent in the 1980s to around 75 per cent in the early to mid 1990s, before going down afterward,[2] as shown in Figure 2. At the same time, the proportion of Canadians approving the way the federal government is handling debt and deficit reduction increased significantly from the late 1980s until the 2008 financial crisis. Clearly, citizens' views of the deficit changed after the early 1990s, as they became more deficit averse.

Data and Methods

We test these expectations using the federal executive approval series collected by the EAP, a widely used cross-national measure of executive approval (see Han and Shin, 2021). The quarterly series covers the period 1978 to 2018 and is composed of answers to questions asking samples of Canadians whether they approve or disapprove of the job the federal government is doing.[3] Figure 3 illustrates the evolution of our dependent variable, net (positive minus negative) quarterly federal executive approval. The two extreme points correspond to the economic recession and the constitutional crisis that both occurred at the beginning of the 1990s and to the arrival of Justin Trudeau as prime minister in 2015.

To model the effect of fiscal policies on executive approval, we analyze changes to governments' net lending, the difference between expenditures and revenues, expressed quarterly as a proportion of GDP. We include macroeconomic variables common in studies of economic voting and popularity functions as control variables to ensure that the effect of net lending reflects fiscal policy changes and not only economic conditions. These economic controls are inflation, unemployment, and GDP growth, measured as changes from one quarter to the next.[4] We expect that greater economic growth will correlate positively with approval, while both unemployment and inflation should decrease approval. The sources and descriptive statistics of the data used are presented in the appendix.

We also include several political variables. Congruent with results from popularity functions developed elsewhere, extant studies indicate that federal government
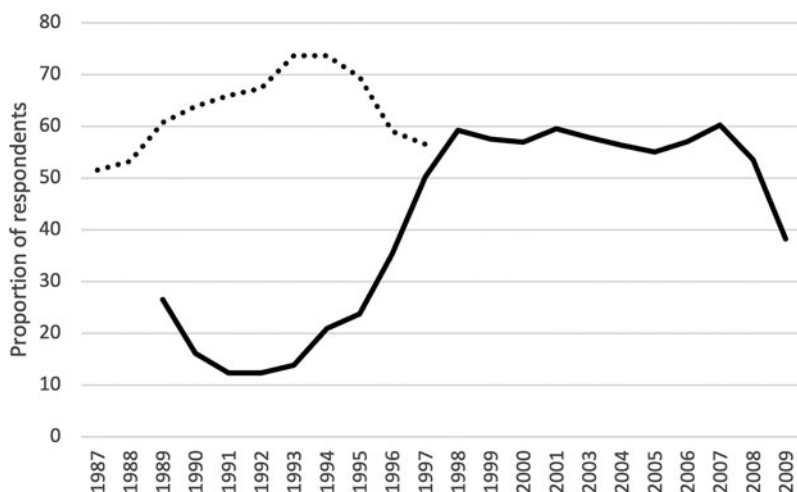
Figure 2. Proportion of Canadians saying it is very important that the federal government try to reduce the deficit (dashed line) and those who approve the way the federal government is handling deficit and debt reduction (solid line), yearly averages.

support in Canada is affected positively by post-election honeymoons and negatively by the cost of ruling (Tellier, 2006). Both variables may also influence fiscal policies, as popular governments at the start of their mandate may be more likely to implement fiscal consolidations. In addition, some popularity functions have shown a rallying of support for the federal government in the wake of various Quebec-related constitutional crises that have threatened the national community over the years (Monroe and Erickson, 1986). We thus introduce a honeymoon dummy variable coded 1 in the quarter of the election and on the quarter after it and 0 otherwise, as well as a variable counting the number of months in office since a government was elected to account for the cost of ruling.[5] We also add a dummy variable for major constitutional crises.[6]

We use autoregressive distributed lag models. There aren't many well-established theories regarding the appropriate number of lags to use, and we do not know how long it should take for the fiscal and economic variables to influence approval (Box-Steffensmeier et al., 2014). We thus use a general to specific modelling strategy to find the appropriate number of lags (De Boef and Keele, 2008). To do so, we start by including four lags for each variable, then remove one lag from each variable, one model at the time, starting with the lags with the lowest T statistic, and we keep the models with the lowest AIC/BIC possible (see Mishler and Sheehan, 1996; De Boef and Keele, 2008; Webb, 2018). This procedure leads to partial adjustment models with varying lag structures that are unbiased. Portmanteau, Breusch-Godfrey and Cumby-Huizinga tests show that there is no serial correlation in the residuals of our models (Beck and Katz, 2011). This modelling strategy leaves us with a lagged dependent variable (at T-1).

Stationarity tests[7] show that the economic and fiscal variables have a unit root. To ensure stationarity, we first difference them. Our independent variables thus
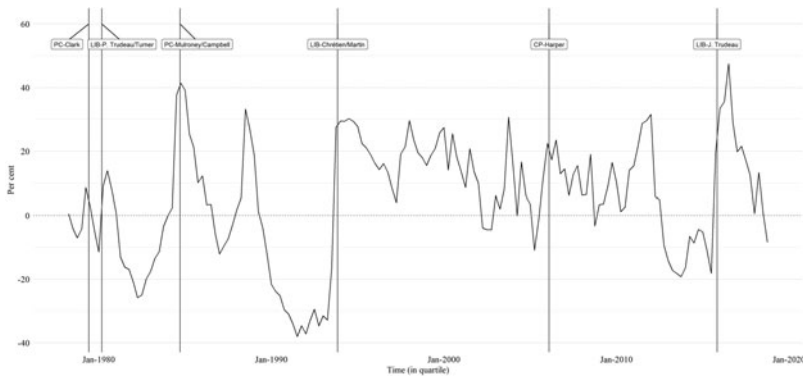
Figure 3. Federal executive approval in Canada, 1978–2018.

represent quarterly changes to economic conditions and to net lending. Executive approval, however, is stationary and is thus presented in levels.

To test our main hypothesis, we divide the dataset into two main periods: between 1978 and the 1993 election (third quarter) and between the last quarter of 1993 and 2018. We pick the 1993 election, since it marks the start of the new fiscal policy regime we study, which is put in place in the 1995 budget (Lewis, 2003). Rather than starting with this specific budget, we include the full mandate of the government associated with this change in the fiscal regime.

Johnston (1999) and Pickup (2004) divided their dataset in a similar manner, arguing that the new multiparty system that emerged in 1993 may have altered the relationship between economics and executive approval in Canada. Indeed, the October 1993 federal election is a landmark in Canadian politics. The government led by the Progressive Conservative Party of Canada suffered the worst defeat of an incumbent in Canadian history, holding 156 seats before the election and keeping only 2 after it. After two failed constitutional agreements, the Progressive Conservatives suffered from a three-way split fuelled by regional grievances, leading to the surge of the Bloc Québécois and the Western-based Reform Party (Bélanger, 2004). To ensure that the changes to the effect of fiscal policy variables on executive approval before and after the 1993 election are not a mere reflection of how a fragmented opposition could change the dynamics of accountability, we also control for the effective number of parties.

To confirm that the temporal division we impose is accurate, we used Wald tests to identify breaks in the series. When assigning the break to the 1993 election, the Wald test confirms a structural break for the net lending variable. With an unspecified break, determined by the test itself, the Wald test reveals a break in the third quarter of 1991 for net lending. Although using 1991 does not alter the results, we break the series into two in 1993 since it is theoretically motivated and because both tests suggest that our decision to separate the dataset into these two periods is correct for testing the time-varying effect of net lending on approval. We provide a further disaggregation of the sample with an additional analysis limited to the Chrétien-Martin era (1993–2006), since it is the government that has been associated with a successful fiscal consolidation and with the entrenchment of the surplus regime (Savoie, 1999; Lewis, 2003;

Haffert, 2019). Finally, we conclude our analysis with a rolling regression to verify if the coefficient of the net lending variable changes over time.

Results

Model 1 in Table 1 presents the results of the regression estimated on the full sample, while models 2 and 3 interact net lending with a time dummy, corresponding to the period after the 1993 election or to the Chrétien-Martin era. Models 4 to 6 present regressions with split samples to confirm that the results are robust to this alternative modelling strategy (we also present models interacting time dummies with each independent variable in the appendix). The impact of net lending is not significant in model 1, whereas the interactions between net lending and the time dummies are statistically significant in models 2 and 3, revealing that there is a difference in the effect of net lending before and after 1993 and in the Chrétien-Martin era. The coefficient of net lending in model 2 (and in model 4) reveals that before 1993, a one standard deviation improvement to the budget balance (sd = 0.984) is associated with a decline in the executive's popularity of 2.73 percentage points (significant at the $p = 0.05$ level). In contrast, model 2 also reveals that after 1993, net lending has a statistically significant (at the $p = 0.1$ level) positive coefficient of 1.90 (se 1.125).[8] Models 3 and 6 show that the effect is particularly strong during the Chrétien-Martin era, since a one standard deviation (sd = 0.81) improvement to the budget balance is associated with an increase of the executive's popularity of 3.81 percentage points (significant at the $p = 0.01$ level). In brief, until 1993, citizens are punishing governments for an improvement to the budget balance, whereas since the 1993 election and particularly during the Chrétien-Martin era, citizens are rewarding their leaders for an improvement to the budgetary balance.

We use several robustness checks, presented in the appendix, to confirm that the effect of net lending changes over time. Since our variables are first differences and are not using the same lag structure, it is possible that changes to the budget balance reflect changes to the economy. As a robustness check, we present models with an identical lag structure between the economic and fiscal variables, and we add tax revenues and public expenditures in the model. Neither of these changes to the model specification alters our results. Moreover, the economic variables we use are not significant predictors of net lending, as shown using vector autoregressive models. Hence, we are confident that the effect of changes to net lending does not simply reflect the impact of the economy on the budgetary balance. However, in the appendix, we run a long run multiplier bounds test (Webb et al., 2020) that indicates that we have a short-term, immediate relationship between net lending and approval but no long-term relationship between the two.

Finally, Figure 4 below presents rolling regressions with the equation of model 1 in Table 1. The coefficients represent the estimate of the regression in a moving window of 50 time periods, with 95 per cent confidence intervals. For example, the estimate shown at 1990q1 represents the coefficient of net lending on approval from the first quarter of 1990 to the third quarter of 2002 (50 quarters). These models must be interpreted with caution, as they are more useful for detecting whether there is a change in the sign and size of the coefficient over time than

Table 1. Effect of fiscal and economic variables (first differenced) on net executive approval in Canada

	(1) Full	(2) Interaction post-1993	(3) Interaction Chrétien-Martin	(4) Pre-1993	(5) Post-1993	(6) Chrétien-Martin
Lagged dependent variable	0.856*** (0.0503)	0.814*** (0.0523)	0.849*** (0.0490)	0.955*** (0.0766)	0.724*** (0.0700)	0.653*** (0.137)
Net lending T-4	−0.0370 (0.886)	−2.396* (1.220)	−1.879* (0.982)	−2.705** (1.132)	1.911 (1.159)	4.994*** (1.509)
Post-1993 dummy		5.177** (2.501)				
Net lending T-4 *post-1993		4.303*** (1.597)				
Chrétien-Martin dummy			1.452 (1.673)			
Net lending T-4 *Chrétien-Martin			6.661*** (1.787)			
GDP growth T-2	1.521 (1.048)	1.640 (1.015)	1.211 (1.020)	2.169 (1.324)	0.225 (1.431)	1.097 (2.704)
Inflation T-1	−1.331 (0.972)	−0.0201 (1.075)	−1.276 (0.940)	−0.142 (1.482)	3.209* (1.653)	−0.240 (2.791)
Unemployment rate T-4	−2.013 (2.392)	−2.121 (2.362)	−2.597 (2.309)	−5.707** (2.690)	−1.084 (3.790)	1.792 (5.925)
Honeymoon T-0	13.62*** (3.057)	13.68*** (2.968)	14.36*** (2.933)	12.95*** (3.825)	15.41*** (4.371)	
Constitution T-4	9.413* (5.628)	9.674* (5.481)	8.906 (5.433)	16.06*** (4.937)		
ENP	2.342 (1.938)	−0.854 (2.490)	1.582 (1.940)	2.351 (4.551)	1.566 (2.985)	−0.418 (5.149)
Months since last election	0.0926 (0.0598)	0.0752 (0.0581)	0.0922 (0.0573)	0.352*** (0.0878)	−0.109 (0.0797)	−0.0185 (0.0977)
Constant	−8.291 (5.776)	−4.101 (6.074)	−6.846 (5.624)	−17.53* (9.992)	−1.591 (8.964)	4.826 (14.68)
Observations	157	157	157	58	97	45
R-squared	0.798	0.813	0.817	0.895	0.649	0.563

Note: Standard errors in parentheses.
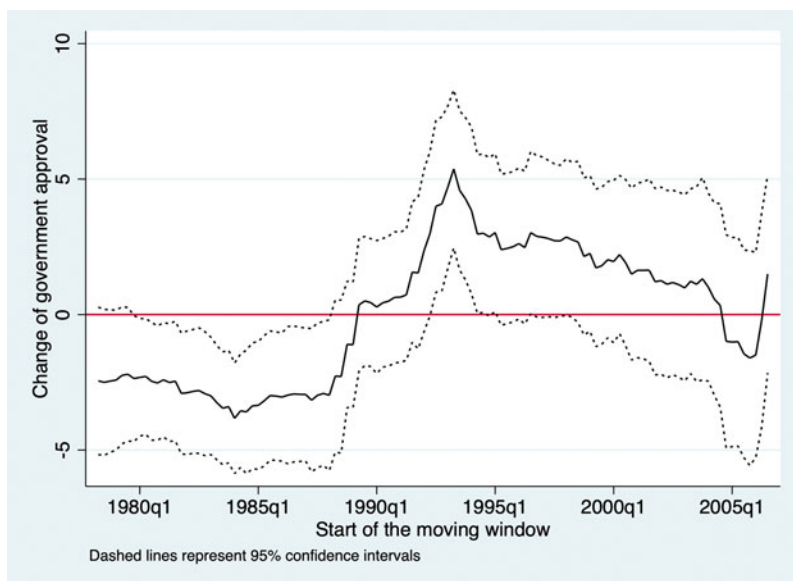
*** $p < .01$; ** $p < .05$; * $p < .1$.

Figure 4. Effect of net lending on executive approval, rolling regression, moving window of 50, coefficient (solid line), with 95% confidence intervals.

they are for obtaining precise estimates. Even if the true coefficients are constant, the estimated coefficients may display random fluctuations (Lebo and Box-Steffensmeier, 2008). Moreover, sample errors can be important since we are estimating a short series ($T = 50$), thus explaining the large confidence intervals.

Figure 4 reveals a clear change in the coefficient of net lending: it is negative in the 1970s and 1980s, becomes positive at the window starting in 1990 (which goes up to the early 2000s) and significant around the window starting in 1993, staying positive until the moving window ranging from 2003 to 2015. This confirms the results of Table 1: from 1993, the government was rewarded for tightening the fiscal balance, especially during the Jean Chrétien and Paul Martin era. Afterward, the size and significance of the net lending coefficient decrease. The drop in the coefficient in the last moving window indicates that the popularity of the Trudeau government did not decline with budget deficits.[9]

Conclusion

This research note confirms that public opinion toward the budget deficit has shifted along with the change in the fiscal policy paradigm achieved in Canada during the 1990s. Both public opinion and fiscal policy exhibited a deficit bias during the 1970s and 1980s: while the government was unable to balance budgets, the public was rewarding governments for higher deficits that could sustain additional public spending and lower taxes. As deficits became unsustainable during the economic crisis of the early 1990s, the federal government shifted its policy paradigm and implemented a severe fiscal consolidation program, while citizens became actively concerned about public debt. Since then, sustaining budgetary balance

has been the primary fiscal objective of the state, at least until the election of the Trudeau government in 2015. At the same time, Canadians started to support fiscal discipline and reward governments for tightening the budgetary balance. Citizens' deficit bias morphed into an austerity bias. Further research should analyze if this national-level pattern holds at the regional level by including provincial-level policy and opinion data.

In addition to providing the first study to model the impact of budget deficits and of the economy on Canada's federal executive approval, we also offer a broader contribution to the comparative political economy literature by showing that changes in policy paradigms are accompanied by shifts in public opinion. This study's objective was not to disentangle whether public opinion drives policy changes or if policy changes influence public opinion, as the relationship is certainly endogenous. Future research should aim to identify the direction of the causal chain between policy changes and public preferences.

While we cannot systematically assess if policy paradigms feed back into public opinion, we were able to identify a structural break in how public opinion reacts to budget deficits. This finding would suggest that policy paradigms are durable because new policies put in place influence the public's preference, while public opinion feeds back to support the entrenched policy paradigm, creating a self-reinforcing dynamic. Canadians' continued support for fiscal discipline may explain why the government of Canada was able to maintain a surplus for over 10 years, from 1997 to 2007.

To conclude, we note that Canadians' austerity bias may be fading. Table 1 and the rolling regressions both revealed that the positive short-term effect of an improvement to the budget balance was much stronger during the Chrétien/Martin era than during the full 1993–2018 period, suggesting that the popularity of Harper and Trudeau was less influenced by budget deficits. Indeed, the Trudeau government was able to position itself as the main centre-left alternative to the Conservatives by breaking with the fiscal orthodoxy when it proposed higher deficits to finance additional public spending. The COVID-19 pandemic may be the event that triggers another shift in fiscal policy paradigm, as many mainstream international economic institutions have called on governments to further increase spending to sustain the economic recovery. If the Government of Canada continues to promote expansionist fiscal policies and decides to forgo budget discipline, we may well observe public opinion reverting to a deficit bias in the next few years. At the same time, it seems that the pandemic may have made Canadians slightly more willing to support new taxes to fund new spending and to reduce the deficits spurred by this sudden shock to the economy (see Lachapelle et al., 2021).

Supplementary Material. To view supplementary material for this article, please visit https://doi.org/10.1017/S0008423922000038

Notes

1 Details on the Environics Focus Canada surveys used in Figure 1 and Figure 2 are available in the online appendix. Figure 1 presents the yearly average of quarterly surveys from 1988 to 2009, yearly surveys from 2010 to 2013 and from 2017 to 2018. No surveys asking this question are available from 2014 to 2016.

2 The series ends in 1997, the year the deficit was eliminated at the federal level. The series of questions about deficit handling ends in 2009.

3 The EAP uses a dyad ratios algorithm to extract a latent measure of executive approval from different series of questions asked by various polling firms. The 163 quarterly measures of approval we use are aggregated from 696 survey marginals coming from 23 different survey series. The exact question wording varies over time and by polling firm, but all poll questions refer to approval of, or satisfaction with, the sitting government and/or the prime minister. Additional explanations of the method used by the EAP to construct the series are available in the online appendix.

4 Unfortunately, we cannot model the effect of citizens' perceptions of the economy, since historical series of consumer sentiment are not available for Canada before 2002. This is a limitation to our analysis.

5 Using the log transformation of the cost of ruling variable does not change the result.

6 These are the 1982 patriation of the constitution, the failure of the Meech Lake agreement and the Charlottetown referendum.

7 Dickey-Fuller, Phillips-Perron and KPSS tests.

8 The coefficient and its standard error are calculated using the *lincom* function in Stata.

9 In the appendix, we present and discuss rolling regressions of the coefficients of the economic variables. These rolling regressions confirm the declining effect of the economy over time that was found in Table 1.

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