Credit where credit is due?
Attribution of economic policy responsibility by Canadian provincial electorates

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I. Introduction

When do voters choose to assign credit and blame to federal and subnational governments in multi-level systems? The question of assigning credit and blame is an important component of research on accountability in democracy, and particularly, the economic voting literature. The act of attributing credit and blame forms the basis for one of the most powerful mechanisms of democracy: throwing the rascals out, or alternatively, rewarding a party in government for a job well done. In the responsible party model of government, voters hold governments to account by punishing or rewarding incumbents at the ballot box for their policy performance. In retrospective economic voting models this mechanism of accountability takes the form of voters holding governing parties responsible for the national economic situation. Research has found that these evaluations can be a more important determinant of vote choice than partisanship (Fiorina, 1981; Lewis-Beck, 1986, 1988).

However, this accountability mechanism does not necessarily operate smoothly (if it operates at all) in multi-level settings. Research on national-level elections finds that when the political context diffuses responsibility—through coalition government, low party cohesion, and the diffusion of legislative power to upper houses or powerful legislative committees chaired by opposition parties—the linkage between governmental performance and vote choice weakens and voters are less likely to punish incumbents for poor economic performance (Powell and Whitten, 1993:410; Anderson, 2000; 151). Multi-level contexts can obscure the clarity of responsibility by making it difficult for voters to identify the level of government responsible for policy outcomes. In a comparison of 16 federal and non-federal cases, Cameron Anderson finds that federalism generally weakens the accountability mechanism (2006).

The literature on accountability in federations is not optimistic on this front. Research has generally depicted electorates in federations holding the ‘wrong’ level of government to account: using subnational elections to punish (or, less frequently, reward) the party of the incumbent federal government, or sometimes, punishing the federal government for the sins of the subnational government. There is little conclusive evidence of a clearly functioning economic voting accountability

1 This research uses data from the Comparative Provincial Election Project (CPEP) Study Survey, generously funded by the Social Sciences and Humanities Research Council of Canada (SSHRC), (Principal Investigator Jared J. Wesley); the Offices of the Dean of Arts and VP Research, University of Prince Edward Island; The Killam Trust, University of Alberta; and Elections Nova Scotia.
mechanism in federations. One of the difficulties this literature grapples with is that it focuses empirically on economic voting. While this is important—the act of vote choice gets to the crux of the issue of the accountability mechanism and its implications for democracy—it also presents empirical challenges. Vote choice can be overdetermined. Economic performance, while generally of high salience, is one of many possible retrospective policy evaluations that voters can conduct. Other drivers of vote choice can include issue positions, leadership evaluations or partisanship. It is not surprising that the literature has yielded sometimes contradictory and inconclusive results on economic voting in federations. Instead of investigating economic voting in a federal context, this paper examines its attitudinal antecedent: the attribution of credit and blame and federal and subnational levels of government.

The accountability mechanism in a multi-level system is a two-stage process. The first is the ability and willingness of voters to assign policy responsibility to a level of government. The second stage is more complicated—voters may (or may not) choose to use the ballot box to punish or reward the incumbent party according to this evaluation. Ultimately, the second stage is the most meaningful in terms of delivering accountability. However, the first stage—the ability and inclination of voters to assign responsibility to the level of government responsible for a policy—has important normative implications for the accountability mechanism, perhaps more so than the act of voting. The ability to assign credit and blame renders the accountability mechanism possible.

This paper focuses on the first stage—how voters in multi-level systems assign credit and blame for positive and negative economic policy outcomes at the provincial and federal levels—rather than their punishment and reward at the ballot box. Its goal is to probe more closely into the attitudinal foundations of attribution of responsibility in federations, and in particular, differentiating between attitudinal foundations of credit and blame, as well as how credit and blame mechanisms might work differently at the subnational and federal levels of government. It does this by drawing on survey data on voters’ assignment of responsibility, as well as data on attitudes. Do the factors at the heart of barometer and second order voting models, such as the importance or impact of the subnational level of government, adequately explain attribution of credit and blame? Can political sophistication or interest in subnational politics compensate for the complexity or opaqueness of the federal institutional context? Finally, how does attribution of credit and blame relate to the politics of subnational grievance and overall satisfaction with democracy?

To answer these questions, I turn to the case of Canada, using individual level data from survey research on eight provincial elections held between 2011 and 2013. The survey contains a number of questions that probe respondents’ attribution of credit and blame in response to economic performance at the federal and provincial levels, as well as questions on assessments of democratic performance, interest in
politics and perceptions of impact government. Using Canada as a case provides an opportunity to investigate this question in a multi-level context where conditions create a high potential for accountability. Canada’s constitutional assignment of policy competences is in the model of dual rather than functional federalism, resulting in a style of federal provincial interaction that tends toward autonomy rather than interdependence (Bolleyer and Thorlakson, 2012). Furthermore, as a case where linkage or nationalization of politics tends to be relatively low due to the low degree of vertical integration in its parties and the relatively high degree of party system dissimilarity, there is a high potential for voters to develop the capacity and ability to evaluate and assign responsibility to provincial and federal governing parties at their respective levels of government. This is further suggested by evidence that Canadian provinces exhibit some economic voting not found in other federations (Rodden and Wibbels, 2011). Within Canada, variation among provinces in this degree of linkage or nationalization makes comparison across the provinces potentially valuable.

This paper will first briefly review the literature on accountability in multi-level systems and outline the resulting hypotheses. Section three presents an overview of the data, variables and models used in the research. Section four first presents a description of aggregate level trends in the allocation of credit and blame across eight Canadian provinces and then presents the results of the individual level analysis.

II. Explaining the accountability mechanism in subnational contexts

Findings from the economic voting literature and research on barometer voting and second order elections paint a picture of voting in federal systems where the accountability mechanism, as indicated by economic voting, is impaired (Powell and Whitten, 1993; Anderson 2006). The general explanation for this comes, in various versions, from barometer, coattails and second-order election models of voting, which basically argue that subnational elections are often used to punish or reward the co-partisans of the federally incumbent government (in the barometer model) or sub-national vote choice is shaped by the popularity of federal-level leaders, an effect more common in presidential systems.

Indeed, there is scant empirical support for the operation of an accountability mechanism at the subnational level. Lohmann et al find that in Germany, while electoral support for Land parties is responsive to economic conditions, the similarity of Land and national economic performance (measured as GDP growth) means that we cannot draw conclusions about the responsiveness of voters to Land

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2 The CPEP data also allows us to control for election timing to some degree: five of the eight provincial elections (Prince Edward Island, Manitoba, Ontario, Newfoundland and Saskatchewan) were held within a four week period, October 3, 2011 to November 7, 2011. Alberta’s election was held May 23, 2012, Quebec on September 4, 2012 and British Columbia on May 14, 2013.
or national effects (1997:431). Federalism can disrupt the accountability mechanism by ‘crossing the wires’: the punishment or reward can be directed to the wrong level of government. Gélineau and Bélanger have found that in Canada, provincial governments can be punished for poor economic performance of their federal co-partisans, although federal governments are not effective at benefiting from strong provincial economic performance (2005). In the case of Argentina, Gélineau and Remmer (2006) find national governments are punished for poor subnational policy performance, while subnational governments are both punished or rewarded for federal policy performance. Subnational economic performance can weaken the economic voting link between national economic performance and subnational voting decisions (Gélineau and Remmer, 2003).

Research on the preconditions of subnational electoral accountability in the United States is somewhat more promising. There is mixed evidence suggesting that voters in the US are sophisticated enough to assign responsibility to state and federal governments for state and federal level policy outcomes respectively. Research using individual level data has found evidence that voters can and do form distinct perceptions of state and national economic performance (Niemi, Bremer and Heel, 1999) and that voters assign different responsibilities to governors and senators (Stein, 2000; Atkeson and Partin, 2001). While Stein finds that voting decisions for gubernatorial races tend not to be made on economic grounds (2000), other studies, while disagreeing over the impact of presidential approval ratings on state vote choice, have found evidence that state economic factors matter in gubernatorial elections, suggesting that the standard accountability mechanism may operate at state level (Atkeson and Partin, 1995; Carsey and Wright, 1998). Ebeid and Rodden (2006) find that the state level accountability link in the US is weakened when the state economy is dominated by industries that are strongly influenced by factors such as commodity prices and weather and so beyond the influence of government policies.

Findings of a subnational electoral accountability mechanism are the exception. Across federal states, we generally find the accountability mechanism weakened or absent, so incumbent governments at the state and federal level might not be punished/rewarded for poor/strong economic performance. In a 2011 study comparing Argentina, Canada, Germany and the US, Rodden and Wibbels found little evidence of an electoral accountability mechanism operating at the subnational level although they find a widespread mid-term punishment effect (2011). In the case of Canada, they find evidence of electoral responsiveness to economic conditions at the provincial level, although the relationships, while in the expected direction, lacked statistical significance (2011).

These findings are compatible with the predictions of barometer, second order and coattails models of voting behaviour, which predict a scenario where political competition at the national and subnational levels of government become linked. These models predict that subnational elections will be treated by voters as second order national contests (Reif and Schmidt, 1980:8) and barometers of voters’
assessments of the federally incumbent government (van der Eijk and Franklin, 1996; van der Eijk, Franklin and Marsh, 1998; Anderson and Ward, 1996; Anderson and Wlezien, 1997).

Most studies of accountability rely on an economic indicator of government performance. Studies that employ aggregate level data on voting and economic outcomes generally rely on economic performance variables such as GDP growth or unemployment, and a lagged change in support for the incumbent party as the dependent variable. While pooled cross-sectional time series data using aggregate economic indicators offers us a useful examination of patterns over time, individual level data on sociotropic economic evaluations, if available, offers a better conceptual fit for the problem under investigation by measuring directly voters’ evaluations of economic performance, rather than relying that objective measures of economic performance will be translated into perceived economic outcomes, with minimal distortion.

Cutler (2004) is one of the few studies to test the multi-level accountability mechanism beyond economic policy outcomes. In his study of voters in the Canadian provinces of Alberta and British Columbia, he examines voters’ assignment of blame and punishment of parties for both economic and health policy outcomes. He finds that in both policy areas, voters tend to blame both levels of government for negative outcomes. A difference emerges in how this blame is translated into punishment. When voters blame both levels of government for negative assessment of health care, it does not translate into electoral punishment, yet when voters blame both levels of government for economic performance, they punish both levels.

Explaining the attribution of credit and blame

The general explanations offered in the literature explaining vote choice in multi-level contexts also offers us some theories guiding the attribution of credit and blame in a multi-level system. Barometer and second order voting models offer a scenario in which voters treat subnational electoral arenas as instruments to express their federal-level party preferences in part because they perceive subnational elections to be less important. Voters’ primary cognitive orientations are toward the first order, or federal level elections. The theory suggests that this is because the federal level is perceived to be the most important level of government, and so becomes the focus of voters’ attention and cognitive orientation in a context where voters’ attention and information is a limited resource. The same processes that facilitate voters’ use of federal party evaluations as proxies for subnational party evaluations, can reasonable be assumed to also facilitate assigning credit and

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3 Rodden and Wibbels (2011) use annual change in provincial and federal national product as their economic outcome indicator. Other economic indicators sometimes used include unemployment (Anderson and Ward, 1996; Gélineau and Remmer, 2006) and deficit spending (Gélineau and Remmer, 2006).
blame to governments for subnational and federal policy outcomes. The logic of second order and barometer voting models, with its prediction that voters focus attention to the ‘most important’ level of government would predict a tendency for voters to assign policy responsibility (both credit and blame) to the federal level compared to the subnational level. Following the logic of the second order and barometer voting literature, a number of contextual and attitudinal factors can be expected to influence the attribution of responsibility.

Fiscal and policy decentralization
Fiscal and policy decentralization is a major contextual variable in the literature on second order elections and the nationalization of politics. In a cross-national study, fiscal and policy decentralization can serve as an indicator of the relative importance of the sub-national level of government. Decentralization has been found to hamper the nationalization of politics, which in turn can encourage the development of ‘separate worlds’ of political competition (Chhibber and Kollman, 2004; Rodden and Wibbels, 2011). Nationalized, or integrated politics, by contrast, create party and party system linkage in a federation, making it easier for voters to substitute subnational for federal party evaluation. Decentralization has been found to weaken coattails effects (León, 2012) and make second order behaviour less likely (Jeffery and Hough, 2009). Developing separate evaluations of parties and policy at the subnational and federal levels requires resources and sophistication from voters. Stronger decentralization should make subnational elections more important in their own right (the second order election thesis argues that first order elections matter more, they determine the composition of national government). Fiscal and policy decentralization should make voters pay more attention to the subnational level, more likely to conduct evaluations of credit and blame at the subnational level. As a within-country study comparing eight Canadian provinces, decentralization is controlled and so I do not include it in my model.5

If we recall, however, that one of the reasons why decentralization matters theoretically is that it affects the relative importance of a level of government, we can find an attitudinal proxy for this contextual variable. We would expect that when voters perceive the impact or importance of a level of government to be higher, they will be more likely to attribute credit or blame. While it stands to reason that voters’ perceptions of the importance and impact of government is likely to be higher in more decentralized systems (an assertion we do not test here), it is also plausible that other factors can affect voter’s perceptions, and some subnational governments in a symmetrical federation may be more influential or powerful than others. We test this with the variables fedimpact and provimpact,

4 In this research, respondents’ alternative to attributing credit or blame is to indicate that the policies of the level of government in question have ‘not made much of a difference’.
5 The exception to this is the province of Quebec, which enjoys a broader range of policy competences (including over immigration policy) and different fiscal transfer arrangements than the other Canadian provinces. This is controlled here with the inclusion of a provincial dummy variable for Quebec.
developed with data from survey questions that ask voters to name the level of government that has the most impact on their life. I expect that when the impact of the level of government is higher, voters will be more likely to assign responsibility, both credit and blame, to that level of government.

Degree of linkage or nationalization of the party system

The degree of linkage, or nationalization of the party system is a contextual variable that may influence the attribution of responsibility. As discussed above, decentralization may affect the accountability mechanism through its longer-term influence on the degree of linkage or nationalization in the party system. More centralized federations are more likely to develop and maintain nationalized politics, with similar, organizationally integrated parties competing at both the federal and subnational levels. This might encourage voters to use the party at one level as a proxy for the party at another level and so discourage voters from developing separate assessments of federal and subnational level party performance. The degree of linkage can vary across the units of a federation depending on the similarity of the subnational and federal party systems and the vertical integration of its parties. Provinces with low linkage are expected to have greater clarity of responsibility, with more credit and blame assigned to provincial governments.

Developing separate assessments of federal and provincial party performance requires a reasonable degree of sophistication from voters. Education and the degree of interest in provincial politics and interest in federal politics are both likely to influence voters’ ability to make these distinctions. As these increase, we would expect that federal and provincial credit and blame assignment is conducted independently.

Finally, I test two other attitudinal measures that plausibly whether voters attribute responsibility in the form of credit or blame. These are a sense of provincial grievance and satisfaction with democracy at both the federal and provincial levels. Provincial grievance, defined here as whether respondents believe that the federal government treats their province worse than other provinces, might operate by eroding the partisan identity link between the federal and provincial levels and strengthening a competing provincial identity. It suggests a mobilization of defensive sentiment that creates a predisposition to blame the federal government for policy outcomes, and, by casting the provincial government in a role of the victim of the federal government’s policies, allowing the provincial government to avoid blame. We predict that provincial grievance will predispose voters toward assigning federal blame and assigning provincial credit.

Secondly, satisfaction with democracy—at the federal level and provincial level—may influence a voter’s tendency to assign credit or blame, predisposing voters to assign credit when more satisfied with democracy, and blame when less satisfied. Alternatively, satisfaction with democracy might be expected to lead to higher blame and credit: we can imagine that among those dissatisfied with democracy,
government policies might be thought not to make much of a difference one way or another. Satisfaction with democracy might mean the system is working well—and blame could be healthy.

III. Data, variables and methods

The CPEP data
The Comparative Provincial Election Project (CPEP) dataset provides a unique opportunity to address multilevel linkage because it provides questions on trust, efficacy and impact directed toward both the provincial and federal governments. This allows us to assess the impact of the relative difference in attitudes toward provincial and federal levels of government. The CPEP dataset was created through a series of post-election surveys in eight Canadian provincial elections (Prince Edward Island, Manitoba, Ontario, Saskatchewan, Newfoundland, Alberta, Quebec and British Columbia) held between October 2011 and May 2013. The dataset comprises 6710 cases.

The CPEP data is cross-sectional but not longitudinal. This limits the analysis to explaining inter-provincial difference at one snapshot in time. The data presents the additional benefit of allowing a control for timing: five of the eight provincial elections in the dataset were held during the fall of 2011, which limits variation across provincial elections in terms of temporal distance from the most recent federal election, a timing effect shown to have an impact on barometer voting and punishment of federal incumbents. This timing effect may or may not have an impact at the attitudinal level of blame and credit assessments, but the dataset nevertheless minimizes the influence of this factor.

Method
Credit and blame are measured separately for both the federal and provincial levels of government. Credit and blame are measured through variables constructed from a survey question asking voters to assign credit or blame for economic policy outcomes, following these respondents’ sociotropic evaluations of provincial and federal economic performance. For both the provincial and federal levels, respondents were first asked whether the economic situation had improved, worsened or stayed the same over the past year. Those who reported an improvement in the economy were asked whether the policies of the [provincial/federal] government had made [the province's / Canada's] economy better or if they have not made much of a difference. Those who reported that the economy had worsened were asked whether the policies of the [provincial/federal] government had made the economy worse or if they had not made much of a difference.

The paper first examines aggregate patterns of credit and reward, by province, at the federal and provincial levels, before conducting an analysis with individual-level
data, using logistic regression analysis to test the determinants of credit and blame at the federal and provincial levels of government.

**Individual level analysis**

I use four different logistic regression models to test the predictor variables presented in section two. The dichotomous dependent variables are provincial credit (creditprov), provincial blame (blameprov), federal credit (creditfed) and federal blame (blamefed). They are coded 1 when the respondent credits/blames the provincial/federal government policies for economic outcomes and 0 otherwise.

Predictor variables include:

**Impact of the federal/provincial government**
The impact of the provincial and federal government is assessed using two dichotomous variables, provimpact and fedimpact. A value of 1 for provimpact/fedimpact indicates that the respondent has indicated that the provincial/federal level has the greatest impact on their life.\(^6\)

**Degree of party and party system nationalization or linkage:**
The dichotomous variable linkage is assigned a value of 0 in low linkage provinces, where different parties operate at the provincial level than federal level or where there is a history of truncated or separate parties. It is assigned a value of 1 in cases of higher structural similarity of parties and/or some history of party integration. I code British Columbia, Alberta, Saskatchewan and Quebec as low linkage provinces, and Manitoba, Ontario, Newfoundland and Prince Edward Island as high linkage provinces.

**Education;**

**Interest in provincial and federal politics**
Two survey questions provide data on respondents’ interest in federal and provincial politics on an 11-item scale. The variables logpolintprov and logpolintfed are the log transformed values of the original variable. Higher values indicate greater interest in provincial or federal politics.

**Sense of provincial grievance**

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\(^6\) These variables are constructed from a survey question ‘which government has more impact on your life?’. Response choices are 1 = federal, 2 = the provincial government, 3 = your municipal government 4 = not sure. The variable provimpact recodes these responses as 1 = the provincial government, 0 = all other responses. The variable fedimpact recodes these responses as 1 = the federal government, 0 = all other responses.
I use a dichotomous variable, *grievance*, to indicate whether respondents feel the federal government treats their province worse than other provinces. The variable takes the value of 1 if the respondent feels the federal government treats his/her province worse, and a value of 0 otherwise.\footnote{The question wording is ‘In general, does the federal government treat your province better, worse, or about the same as other provinces?’ Response options are ‘better’, ‘worse’, ‘about the same’ and ‘not sure’.

8 The question wording is ‘On the whole, are you very satisfied, fairly satisfied, not very satisfied or not satisfied at all with the way democracy works in [province]?’ and ‘How about at the federal level? On the whole, are you very satisfied, fairly satisfied, not very satisfied, or not satisfied at all with the way democracy works in CANADA?’}

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I use two variables, *demsatfedINV* and *demsatprovINV*, for relative satisfaction with democracy at each level. Higher values represent greater satisfaction with democracy.\footnote{The question wording is ‘On the whole, are you very satisfied, fairly satisfied, not very satisfied or not satisfied at all with the way democracy works in [province]?’ and ‘How about at the federal level? On the whole, are you very satisfied, fairly satisfied, not very satisfied, or not satisfied at all with the way democracy works in CANADA?’}

The equations for the logistic regression models for the dependent variables provincial credit, provincial blame, federal credit and federal blame are as follows:

For provincial credit (creditprov):

\[
\text{Logit}(\pi) = \alpha + \beta \text{provimpact} + \beta \text{grievance} + \beta \text{linkage} + \beta \\
\qquad \text{education} + \beta \logpolintprov + \beta \text{demsatprovINV} + e
\]

For provincial blame (blameprov):

\[
\text{Logit}(\pi) = \alpha + \beta (\text{provimpact} + \beta \text{grievance} + \beta \text{linkage} + \beta \\
\qquad \text{education} + \beta \logpolintprov + \beta \text{demsatprovINV} + e
\]

For federal credit (creditfed):

\[
\text{Logit}(\pi) = \alpha + \beta \text{fedimpact} + \beta \text{grievance} + \beta \text{linkage} + \beta \\
\qquad \text{education} + \beta \logpolintfed + \beta \text{demsatfedINV} + e
\]

For federal blame (blamefed):

\[
\text{Logit}(\pi) = \alpha + \beta (\text{fedimpact}) + \beta \text{grievance} + \beta \text{linkage} + \beta \\
\qquad \text{education} + \beta \logpolintfed + \beta \text{demsatfedINV} + e
\]

In addition, provincial dummy variables are included in all four models, using Ontario as the reference category.

**IV. Findings**

*Aggregate patterns of credit and blame at the federal and provincial levels*

Tables 1 and 2 present aggregate findings of how respondents assigned credit and blame to the provincial and federal governments.\footnote{The question wording is ‘In general, does the federal government treat your province better, worse, or about the same as other provinces?’ Response options are ‘better’, ‘worse’, ‘about the same’ and ‘not sure’.

8 The question wording is ‘On the whole, are you very satisfied, fairly satisfied, not very satisfied or not satisfied at all with the way democracy works in [province]?’ and ‘How about at the federal level? On the whole, are you very satisfied, fairly satisfied, not very satisfied, or not satisfied at all with the way democracy works in CANADA?’}
Table 1: Assigning blame. Percentage of respondents assigning blame to provincial / federal government policies for negative provincial / federal economic performance, by province.

<table>
<thead>
<tr>
<th>Province</th>
<th>Provincial policies n</th>
<th>Federal policies n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontario</td>
<td>65.3 1185</td>
<td>48.4 709</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>59.6 10</td>
<td>49.7 10</td>
</tr>
<tr>
<td>Newfoundland</td>
<td>49.4 12</td>
<td>49.5 29</td>
</tr>
<tr>
<td>Manitoba</td>
<td>55.2 51</td>
<td>45.6 63</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>66.1 14</td>
<td>53.0 59</td>
</tr>
<tr>
<td>Alberta</td>
<td>72.1 101</td>
<td>55.8 105</td>
</tr>
<tr>
<td>Quebec</td>
<td>69.2 549</td>
<td>76.8 430</td>
</tr>
<tr>
<td>British Columbia</td>
<td>65.7 302</td>
<td>68.5 285</td>
</tr>
<tr>
<td>All provinces</td>
<td>66.3 2223</td>
<td>59.6 1690</td>
</tr>
</tbody>
</table>

Note: n is total valid n. Only those respondents who assessed the provincial/federal economy as having worsened over the last year were directed to answer this question.

Table 2: Assigning credit. Percentage of respondents assigning credit to provincial / federal governmental policies for positive provincial/federal economic performance, by province.

<table>
<thead>
<tr>
<th>Province</th>
<th>Provincial policies n</th>
<th>Federal policies n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontario</td>
<td>72.2 386</td>
<td>67.2 516</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>62.8 4</td>
<td>64.3 5</td>
</tr>
<tr>
<td>Newfoundland</td>
<td>71.3 50</td>
<td>64.3 17</td>
</tr>
<tr>
<td>Manitoba</td>
<td>60.3 50</td>
<td>65.3 46</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>85.3 127</td>
<td>69.6 45</td>
</tr>
<tr>
<td>Alberta</td>
<td>31.7 301</td>
<td>66.2 257</td>
</tr>
<tr>
<td>Quebec</td>
<td>79.6 231</td>
<td>65.6 246</td>
</tr>
<tr>
<td>British Columbia</td>
<td>62.9 174</td>
<td>56.6 158</td>
</tr>
<tr>
<td>All provinces</td>
<td>63.8 1323</td>
<td>65.3 1290</td>
</tr>
</tbody>
</table>

Note: n is total valid n. Only those respondents who assessed the provincial/federal economy as having improved over the last year were directed to answer this question.

At the aggregate level, we find that respondents tend to assign credit to the federal government more frequently than they assign blame (65.3 per cent of respondents assign credit to federal government policies for policy improvement; 59.6 per cent assign blame for worsening economic outcomes). Provincial blame is more frequent than federal blame, but rates of crediting provincial and federal government policies are much closer. In aggregate, federal credit is slightly more widespread than provincial credit, but there are high variations, affected by the low outlier Albertan

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For both the provincial and federal levels, respondents were first asked whether the economic situation had improved, worsened or stayed the same over the past year. Those who reported an improvement in the economy were asked whether the policies of the [provincial/federal] government had made [the province’s / Canada’s] economy better or if they have not made much of a difference. Those who reported that the economy had worsened were asked whether the policies of the [provincial/federal] government had made the economy worse or if they had not made much of a difference.
provincial credit value. In five of eight provinces, there is a higher rate of crediting provincial government policies than federal government policies.

Alberta is an outlier among the provinces, with a low of 31.7 assigning credit to the provincial government for perceived improved performance of the economy; among those who responded that the provincial economy had worsened over the previous year, the percentage of Albertans who blamed provincial government policies – 72.1 per cent -- were higher than provincial government blamers in any other province. Meanwhile, 55.8 per cent of Albertan respondents blamed federal government policies for worsening federal economic performance, lower than the mean percentage of federal policy blamers across the country and a lower percentage of federal policy blamers than in British Columbia or Quebec. Notably, in Saskatchewan, 85.3 per cent of respondents who believed the provincial economy had improved credited this success to the policies of the provincial government. Interestingly, these two cases provide two examples that challenge the hypotheses of Ebeid and Rodden (2011) that voters are less likely to hold governments accountable in economies with a high dependence on natural resources or agriculture, on the basis that voters recognize that the vulnerability of these industries to factors such as commodity prices and the weather push policy outcomes beyond the direct influence of government policies.10

**Individual level analysis: attitudinal predictors of blame and credit.**

To test the impact of these factors on the allocation of credit and blame, I run logistic regression models for each of four dependent variables: provincial blame, provincial credit, federal blame and federal credit. All the models include provincial dummy variables. The results are presented in table 3. Two of the variables in the model, a sense of provincial grievance and satisfaction with democracy, were significant predictors of credit and blame at both the federal and provincial level.

**TABLE THREE HERE**

Having a sense of provincial grievance significant in all models. When voters feel that the federal government treats their province worse than other provinces, it makes voters more likely to credit their provincial governments for successful economic outcomes and less likely to blame them. Conversely, it makes them *less likely* to credit federal government policy for improvement in the federal economy, and *more likely* to blame the federal government for a worsening federal economy. Satisfaction with democracy was the other factor that was highly significant across all models. At both the federal and provincial levels, voters who express greater

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10 The economy of Saskatchewan is heavily based on natural resources (potash, oil and gas) and agriculture. The Albertan economy is heavily based on oil (both conventional and bitumen), natural gas and agriculture. The provincial government’s management of oil royalty revenues emerged as a major issue in the 2012 election campaign.
satisfaction with democracy are more likely to credit government for economic improvement and less likely to blame them for a worsening economic situation.

The variables education and interest in federal and provincial politics are conceptually related to voters’ sophistication and their ability and inclination to differentiate between the impact of federal and provincial policies. Interest in politics additionally connotes a willingness to direct attention to that level of government. Education had only limited explanatory value in these models. It was a significant predictor only for provincial blame: more educated respondents were less likely to blame the provincial government for worsening policy outcomes, but it had no impact on provincial credit and no impact on assessments of federal government policies. Interest in politics was a significant predictor at both the federal and provincial levels, although only for assigning credit. Interest in provincial and federal politics respectively makes it more likely that voters will assign provincial and federal credit. It is not a significant predictor for blame at either level.

Identifying a level of government as having a stronger impact on their life than other levels of government was a significant predictor in all of the models except for the assignment of provincial blame. Those who rate the provincial government as having the most impact on their life (compared to other levels of government) are more likely to assign credit to provincial government policies; there is no significant effect on assigning provincial blame, although signs are in the expected direction (if the theory is that high assessment means that voters pay attention to the level of government and the impact also means that it is easier to discern responsibility, facilitating credit and blame). Those who rate the federal government as having the greatest impact on their life are more likely to assign federal credit and federal blame. The effect on federal blame is more significant.

The dichotomous variable, linkage, and provincial dummy variables allow us to control for the effects of context. High linkage provinces are those in which provincial party systems share structural and party label similarities with the federal party system, and which parties experience a relatively high degree of organizational linkage. These include Ontario, Prince Edward Island, Newfoundland and Manitoba. Low linkage provinces are those in which party systems exhibit a relatively higher degree of structural and party label dissimilarity and a greater degree of party organizational truncation between the federal and provincial levels. These provinces include Saskatchewan, Alberta, Quebec and British Columbia. Controlling for province, linkage is significant in only one model: respondents from high linkage provinces are less likely to assign federal blame for worsening federal economic conditions. Other relationships are not significant. Provincial contextual factors affect provincial credit but not blame: respondents from Saskatchewan and Quebec are more likely to assign provincial credit for improving provincial economies, while being Albertan decreased the likelihood of crediting provincial government policies. Finally, being from Quebec made the assignment of blame to the federal government for worsening federal economic performance more likely.
V. Discussion

Two findings from the individual level analysis point us beyond the explanatory factors underpinning the second order and barometer voting models to explain the allocation of credit and blame. Provincial grievance emerged as an important individual-level predictor of assignment of credit and blame. It was significant across all credit and blame outcomes even when controlling for linkage, a variable that would reflect the presence of a regionalist party in a province’s party system. A sense of grievance insulates provincial governments from blame for bad policy outcomes. It shifts this blame onto the federal government and limits the assignment of credit for positive federal economic policy outcomes. Is provincial grievance reflected in how voters punish and reward provincial and federal parties at the ballot box? The strength of the grievance effect on credit and blame merits further investigation. Indicators of relative economic performance should be included in models of multi-level economic voting. This finding challenges the current literature on voter behaviour in multi-level systems, which emphasizes the role of the importance, impact or visibility of the subnational governments. The role of grievance points to the importance of the political strategies of subnational parties, and the power of mobilizing a sense of grievance to disrupt the accountability mechanism.

Satisfaction with democracy operated to increase the likelihood of credit to both levels of government, and decrease the likelihood of blame. This disproves one initial hypothesis that satisfaction with democracy might sustain increased allocation of both credit and blame. It is possible that satisfaction with democracy at the federal and provincial levels was treated by respondents as a proxy for general satisfaction with the performance of the government. The explanatory factors that are central to the second order thesis—the assessment of the impact of the level of government—do not explain the assignment of blame to the provincial government, but otherwise have the expected influence of increasing credit and blame.

Political interest and education, both conceptually connected to voters’ ability and inclination to make separate performance assessments in a complex environment, were expected to both increase credit and blame. Interest in politics performed as expected, but only to influence the allocation of credit. Education, meanwhile, was only significant for explaining assessments of provincial blame.

Overall, voters who assign credit to provincial and federal government policies are driven by similar factors: grievance (although with opposite impacts for federal and provincial governments), satisfaction with democracy, interest in politics, and a judgment that the federal or provincial government has a strong impact on their lives. Additionally, assigning provincial credit is strongly influenced by contextual factors. The significance of dummy variables for Saskatchewan, Alberta and Quebec
tells us that factors unique to these political contexts were driving high levels of credit assignment (for Saskatchewan and Quebec) and especially low levels in Alberta.

The attribution of blame is driven by different factors at the federal and provincial levels. At the provincial level, the significance of provincial grievance suggests that a discourse of inter-provincial and federal-provincial rivalry plays an important role. The less educated and the less satisfied with provincial democracy also are more likely to blame the provincial government. At the federal level, blame responds to a sense of grievance and is also higher in 'low linkage' provinces—those with structurally dissimilar party systems and parties that have low or absent vertical integrative linkages with federal parties. Interestingly, voters who rate the federal government as having a high impact on their lives are more likely to blame it for negative policy outcomes.

These findings are limited by the data. As a cross-sectional study, it gives us a snapshot of political attitudes during the post-election period in these eight provinces. As such, contextual effects, such as influences from particular campaigns, can be potentially strong. The timing of the study meant that respondents were asked for their assessments of economic performance in 2011 and 2012, when world markets were undergoing a weak recovery from the global financial crisis of 2008. This external influence on Canadian economic performance was likely reflected in credit and blame scores, perhaps reducing federal blame scores.

**VI. Conclusion**

This article has argued that understanding the accountability mechanism in a multi-level system should begin with an investigation of the attitudinal underpinnings of the attribution of credit and blame, a necessary step before parties can be rewarded or punished at the ballot box. This research has found that while the explanatory factors proposed by second order and barometer voting models, such as the impact of a level of government, generally influence the attribution of responsibility as expected, there are some other influential factors that need to be taken into account. Most notably, the politics of grievance and its mobilization by provincial politicians are a powerful tool that can disrupt the accountability mechanism.

There are two next steps for further research. One is to examine the next stage of the accountability process, the punishment and reward of governing parties at the ballot box to determine whether and when attributions of credit and blame are translated into reward and punishment at the ballot box. Second, further research needs to assess ‘cross-level’ impacts on credit and blame—the influence of attitudes toward federal government on provincial level credit and blame and vice versa.
References


León, Sandra. 'How does decentralization affect electoral competition of state-wide parties? Evidence from Spain'. *Party Politics*, online first, 26 February 2012.


Table 3: Results of logistic regression analysis results for four models (dependent variables provincial credit, provincial blame, federal credit and federal blame).

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Note: standard errors in parentheses.