Tell Them When You're Safe: Elections and revealing the costs of financial crises

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Abstract

How do elections and electoral competitiveness affect governments' fiscal decisions during financial crises? Some previous research has found that having competitive elections reduces the costs of financial crises. The idea is that politicians need to keep costs low to please taxpaying voters. However, governments have plenty of avenues to obscure costs and so have some degree of control over when costs are revealed. We reexamine the relationship between elections and fiscal responses to financial crises in OECD countries using a novel approach to measuring changes in government liabilities as a result of financial stress. We find that governments do change their budgetary behaviour in response to elections in that they are more likely to expose more liabilities when they are as safe as possible. Public liabilities from responding to financial market stress noticeably increase immediately following elections.

[INTRODUCTION]

1 Previous research on elections and financial crisis fiscal policy

[POLITICAL BUDGET CYCLES]

[FISCAL RESPONSES TO CRISES]

[SOMETHING LIKE 1.3 and 1.4 FROM THE WEP PAPER]

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H_1: Immediately following elections, governments will have larger fiscal liabilities in response to to financial market stress.

2 Measurement

It is difficult to accurately measure the occurrence and intensity of financial crises, as well as fiscal response to these crises. In this section we describe these difficulties as well as our innovative approach to overcoming them. We then discuss the right-hand variables we use to help explain these choices.

Measuring Fiscal Responses to Financial Crises

Perhaps the most prominent research on the political economy of responding to financial crisis is Keefer (2007). He aimed to understand how competitive elections possibly lowered these costs. Given that the costs of responding to financial crises are significant–likely approaching 40 percent of GDP in some countries during the recent crisis Laeven and Valencia (2013)–it is surprising that few other pieces of research have tried to understand how politics and political institutions shape crisis costs.

An earlier version of this data set was used in Keefer (2007).

Perhaps a contributing factor to the dearth of research trying to understand the fiscal costs of financial crises is that it is very difficult to actually pin down what these costs are. Perhaps the main source of fiscal crisis costs comes from an ongoing, though irregular IMF/World Bank data set on financial crises. The most recent version is Laeven and Valencia (2013), which includes a fiscal costs variable as a percentage of GDP. A difficulty for researchers using this data is that it that it cost estimates for a particular crisis can change dramatically over time. Gandrud and Hallerberg (2015*b*) demonstrate that significant revisions have been made to this data set, such that when updated data is used Keefer's (2007) results regarding competitive elections having a negative affect on costs disapear.

It is so difficult to accurately pin down the costs of crises partially because responding to financial crisis often does not involve direct spending, e.g. the government giving taxpayer money directly to troubled banks to strengthen their balance sheets, but issuing new liabilities by for example lending money to banks that it borrowed. The ultimate costs of these liabilities are affected by a complex and interactive set of factors, only some of which a particular government can control. Ultimate costs can be affected by the initial size and type of the liabilities, the severity of the crisis, the competency of government bureaucracies that administer them, internal and external economic developments including global liquidity shocks, and

successor government decisions to change policies, such as closing a public bad bank earlier than planned possibly resulting in the assets being sold at lower prices. It is very difficult to accurately attribute costs to a particular government that develop over many years and are affected by many factors outside of the government's control. Furthermore, accounting regimes can differ significantly across time and place, such that costs for the same crisis response policy may be attributable to the government or other entities such as a bad bank (Gandrud and Hallerberg, forthcoming).

We take a new approach to measuring fiscal responses to financial crises. Rather than focusing on final costs, which are difficult to ascribe to choices of particular governments and may be the result of disparate accounting regimes, we focus on deviations from trend changes in government liabilities and spending. This approach is based on the underlying assumption that all governments, particularly in advanced democracies– respond to economic shocks by increasing their fiscal allocations. This can be from a combination of automatic shock responses, such as unemployment insurance and deposit insurance as well as new allocations to, for example, purchase toxic assets from trouble banks or provide them with liquidity assistance. In both cases, we expect that there will be a larger fiscal response the more sever the crisis. As such we are interested in examining how political factors affect government decisions to do more (or less) than the 'trend' response at a given level of crisis severity.

Before discussing the specific variables it is important to note that both our interest in policy responses in advanced democracies and data availability combine to constrict our sample to 30 OECD member countries from 2003 through 2011. Please see the Online Appendix for the full list. These countries had a wide range of experiences with financial crises over this period.

We estimate trend fiscal responses to financial market stress by first gathering data on general government liabilities–debt and other liabilities–and spending per country-year from the OECD.[1] Separate data on economic affairs spending is available, so we use that as the most relevant spending quantity. The original variables were expressed as percentages of GDP. To focus exclusively on changes to fiscal policy, rather than GDP, we transformed the variables to be in terms of the countries' 2005 GDP.[2] Finally, we are primarily concerned with changes to fiscal policy, not the absolute level, which is strongly dependent on pre-shock policy choices. As such we created year-on-year change versions of our liability and spending variables.

Financial crises and economic growth shocks are highly related (see Reinhart and Rogoff, 2009). We separated out the trend responses to economic growth shocks by first regressing the output gap[3] on changes

[1] Data was accessed through https://data.oecd.org/ in June 2015.
[2] GDP data was from the OECD. Accessed June 2015.
[3] Output gap data was from the OECD. Accessed June 2015.

Table 1: Linear Regressions to Create Government Liability and Spending Residuals

	Dependent variable:			
	Liabilities	Econ. Spend	Liabilities Resid.	Econ. Spend Resid.
	(1)	(2)	(3)	(4)
Liabilities_{t-1}	1.063^{***}			
	(0.027)			
Spending_{t-1}		0.184^{***}		
		(0.060)		
Output Gap	-0.334^{***}	-0.038		
	(0.095)	(0.031)		
Perceived Financial Stress			9.219^{***}	1.783^{*}
			(2.848)	(1.012)
Constant	-2.045	4.605^{***}	-4.947^{**}	-0.801
	(2.429)	(0.599)	(2.276)	(0.796)
country fixed effects	Yes	Yes	Yes	Yes
Observations	329	296	270	246
R^2	0.983	0.405	0.053	0.022
Adjusted R^2	0.982	0.338	-0.065	-0.109
Residual Std. Error	4.908 (df = 297)	1.651 (df = 265)	5.084 (df = 239)	1.753 (df = 216)
F Statistic	567.145^{***} (df = 31; 297)	6.013^{***} (df = 30; 265)	0.449 (df = 30; 239)	0.168 (df = 29; 216)
Note:				*p<0.1; **p<0.05; ***p<0.01

in fiscal policies. The first and third columns of Figure 1 show coefficient estimates from these regressions. We can see that a worsening output gap is associated with increases in government liabilities. Interestingly, improving output gaps are positively associated with spending. On average governments increase their spending when the economy is doing well and increase their liabilities when the government is doing poorly.

We then took residuals from these two models and used them in a regression with a measure of perceived financial market stress. This measure is from Gandrud and Hallerberg (2015*a*). They conduct a textual analysis of monthly Economist Intelligence Unit (EIU) country reports to develop an index of real-time perceptions of financial market stress that they call the EIU Perceptions of Financial Market Stress (EPFMS). The Index ranges from zero–low stress–to 1–high stress. We found the annual mean of the monthly observations of the EPFMS Index. Please see Gandrud and Hallerberg (2015*a*) for a review of other measures of financial market stress and crisis and a justification for my their measure is preferable for studying policy responses to crises. We can see in the second column of Figure 1 that perceived financial market stress is very strongly positively associated with the residuals from the output gap-liabilities regression,[4] i.e. increases in financial market stress have an important effect on increases in government liabilities that are not explained by drops in economic output. As expected, these results indicate that governments are taking on liabilities to support financial markets, not just the broader economy. Perceived financial market stress is not associated with the residual of changes in spending. This makes sense given we found spending tended to increase when the economy was doing well and many financial crisis policies are either liabilities or financed via government

[4]The residuals range from about -15 to 40, with the inter-quartile range of about 5.

debt.

We focus on residuals from the liabilities regressions as the most relevant dependent variable of interest. These residuals are estimated model two from Figure 1. These residuals can be thought of as deviations from trend financial stress liabilities. Positive financial stress liability residuals indicate that governments are taking on more government liabilities in response to a given level of perceived stress and output gaps.

Right-hand variables

Our primary right-hand variable of interest is a simple dummy of whether or not a country has a parliamentary election. This data is from Kayser and Lindstädt (2015). We used this variable to create a post-election year dummy. We anticipate that governments will take on fewer liabilities in response to financial market stress in election years and more in the year following the election.

[LOSS PROB]

[ECON IDEOLOGY]

[POLITICAL CONSTRAINTS]

[...]

3 Regression results

Conclusion

References

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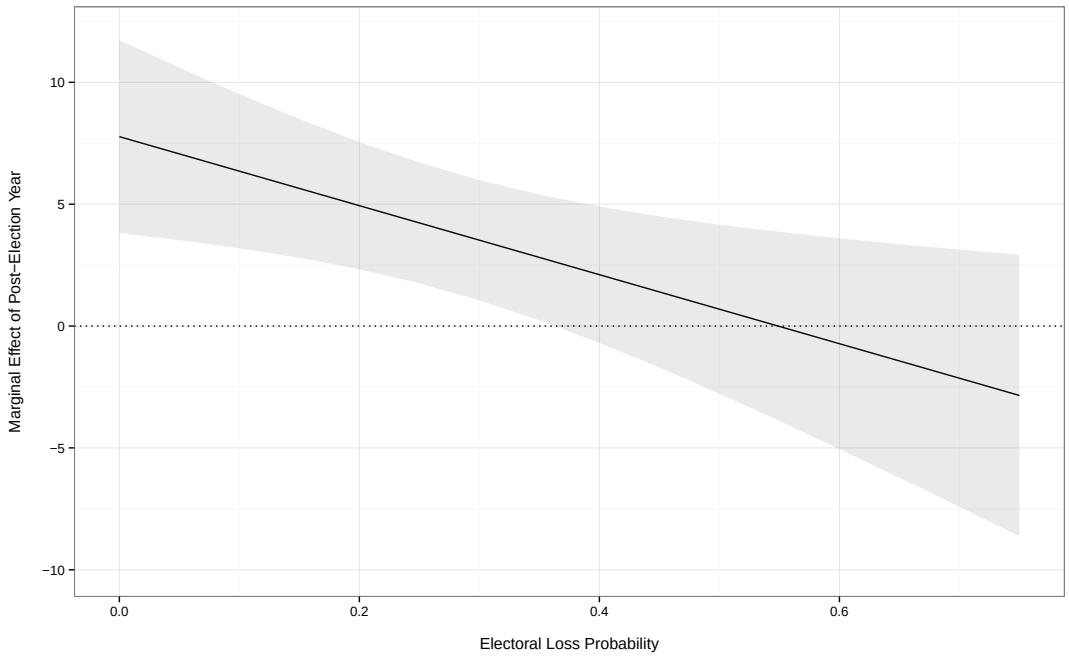
Figure 1: Marginal Effects of Elections on Non-Trend Liability Responses to Perceived Financial Market Stress



Shadded areas represent 90% confidence intervals.

Plots made using model 2 in Table 2.

Table 2: Linear Regression of Non-Trend Liability Responses to Perceived Financial Market Stress (post-election year)

	Dependent variable:		
	(1)	(2)	(3)
Post-Election Yr.	2.185**	7.771***	7.759***
	(1.016)	(2.413)	(2.439)
Loss Prob.		3.295	3.304
		(6.049)	(6.113)
Econ Ideology			0.072
			(1.014)
Political Constraints			0.545
			(9.206)
Election Yr. * Loss Prob.		−14.159**	−14.081**
		(6.769)	(6.935)
Constant	−0.405	−1.458	−1.893
	(2.453)	(3.564)	(6.602)
country fixed effects	Yes	Yes	Yes
Observations	240	149	149
R^2	0.038	0.097	0.097
Adjusted R^2	−0.100	−0.070	−0.087
Residual Std. Error	6.901 (df = 209)	8.140 (df = 125)	8.206 (df = 123)
F Statistic	0.278 (df = 30; 209)	0.581 (df = 23; 125)	0.527 (df = 25; 123)
Note:			*p<0.1; **p<0.05; ***p<0.01

Keefer, Philip. 2007. "Elections, Special Interests, and Financial Crisis." *International Organization* 61(3):607–641.

Laeven, Luc and Fabián Valencia. 2013. "Systemic Banking Crisis Database." *IMF Economic Review* 61(2):225–270.

Reinhart, Carmen and Kenneth Rogoff. 2009. *This Time is Different: Eight Centuries of Financial Folly.* Princeton: Princeton University Press.

4 Online Appendix

Table 3: Regressions Country Sample

Country
Australia
Austria
Belgium
Canada
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Japan
Korea, Republic of
Luxembourg
Netherlands
New Zealand
Norway
Poland
Portugal
Slovakia
Slovenia
Spain
Sweden
Switzerland
United Kingdom