If You're Safe, Deal With It Later: Elections and fiscal policy in

crises

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June 18, 2015

**Incomplete Working Draft** 

Abstract

How do elections and electoral competitiveness affect governments' fiscal decisions during financial crises? Some previous research has found that elections have a negative affect on the fiscal costs of responding to financial crises. Politicians keep costs low to please taxpaying voters. 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 and spending as a result of financial stress. We find evidence for a political budget cycle of responding to crises. Governments tend to take on fewer liabilities in response to crises during election years and then increase their liabilities and spending the following year. This affect is mediated by electoral competitiveness. These findings are not specific to financial crises, but output shocks in general.

[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]

\*Please contact Christopher Gandrud (gandrud@hertie-school.org). Our research is generously supported by the Deutsche Forschungsgemeinschaft. All data and replication material can be found at: https://github.com/christophergandrud/EIUCrisesMeasure.

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### 2 Measurement

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

#### Measuring Fiscal Responses to Financial Crises

A prominent 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. An earlier version of this data set was used in Keefer (2007). Gandrud and Hallerberg (2015b) demonstrate that significant revisions are made to these fiscal cost estimates over time.

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

Table 1: Linear Regressions to Create Government Change in Government Liability Residuals

	$Dependent\ variable:$			
	$\Delta$ Liabilities	$\Delta$ Liabilities Resid.	$\Delta$ Econ. Spend	$\Delta$ Econ. Spend Resid.
	(1)	(2)	(3)	(4)
Output Gap	-0.430*** (0.105)		0.209*** (0.054)	
Perceived Financial Stress		10.383*** (2.992)		0.656 $(1.644)$
Constant	2.937 (1.897)	-5.582** (2.446)	0.708 (0.984)	-0.353 (1.322)
country fixed effects	Yes	Yes	Yes	Yes
Observations	240	240	223	223
$\mathbb{R}^2$	0.274	0.055	0.114	0.001
Adjusted R <sup>2</sup>	0.170	-0.081	-0.025	-0.155
Residual Std. Error F Statistic	5.362 (df = 209) $2.632^{***} (df = 30; 209)$	5.213  (df = 209) 0.402  (df = 30; 209)	2.782  (df = 192) 0.820  (df = 30; 192)	2.780 (df = 192) 0.005 (df = 30; 192)

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

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 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.<sup>1</sup> 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.<sup>2</sup> 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<sup>3</sup> on changes

<sup>&</sup>lt;sup>1</sup>Data was accessed through https://data.oecd.org/ in June 2015.

<sup>&</sup>lt;sup>2</sup>GDP data was from the OECD. Accessed June 2015.

<sup>&</sup>lt;sup>3</sup>Output gap data was from the OECD. Accessed June 2015.

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 (2015a). 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. Please see Gandrud and Hallerberg (2015a) 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,<sup>4</sup> 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 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

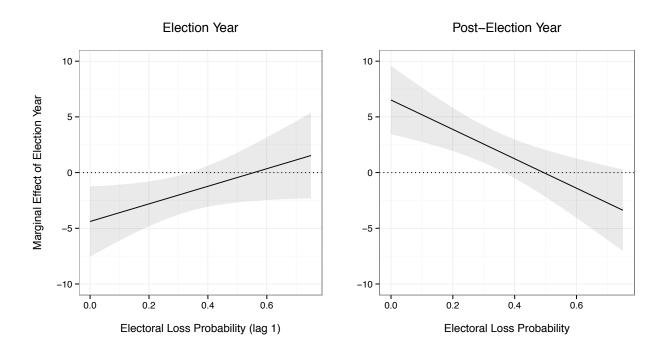
Our primary right-hand variable of interest is a simple dummy of whether or not a country has a parliamentary election. This data is from Kayser and Lindstädt (2015). We used this variable to create a post-election year dummy. We anticipate that governments will take on fewer liabilities in response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

[LOSS PROB]

[ECON IDEOLOGY]

<sup>&</sup>lt;sup>4</sup>The residuals range from about -15 to 40, with the inter-quartile range of about 5.

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



Shadded areas represent 90% confidence intervals.

[POLITICAL CONSTRAINTS]

## 3 Regression results

## Conclusion

[...]

## References

Gandrud, Christopher and Mark Hallerberg. 2015a. "Measuring Real-time Perceptions of Financial Market Stress." APSA Annual Meeting 2015 Conference Paper .

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 $\begin{tabular}{l} \textbf{Table 2: Linear Regression of Non-Trend Liability Responses to Perceived Financial Market Stress (election year)} \end{tabular}$ 

	$Dependent\ variable:$		
	(1)	(2)	(3)
Election Yr.	-1.819*	-4.389**	-4.415**
	(1.062)	(1.921)	(1.954)
Loss Prob. (lag 1)	-4.070	-6.366*	-6.829*
, ,	(3.481)	(3.752)	(3.897)
Econ Ideology			-0.031
			(0.484)
Political Constraints			-2.828
			(4.766)
Election Yr. * Loss Prob.		7.895	8.033
		(4.925)	(5.012)
Constant	1.840	2.551	4.143
	(2.191)	(2.227)	(3.831)
country fixed effects	Yes	Yes	Yes
Observations	240	240	232
$\mathbb{R}^2$	0.021	0.033	0.035
Adjusted R <sup>2</sup>	-0.125	-0.117	-0.126
Residual Std. Error	5.171 (df = 208)	5.152 (df = 207)	5.238 (df = 198)
F Statistic	0.142  (df = 31; 208)	0.219  (df = 32; 207)	0.217  (df = 33; 198)

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table 3: Linear Regression of Non-Trend Liability Responses to Perceived Financial Market Stress (post-election year)

	Dependent variable:		
	(1)	(2)	(3)
Post-Election Yr.	2.150**	6.514***	6.507***
	(1.022)	(1.866)	(1.898)
Loss Prob.	-4.634	-0.639	-0.777
	(3.547)	(3.776)	(3.853)
Econ Ideology			0.017
			(0.476)
Political Constraints			-1.916
			(4.668)
Election Yr. * Loss Prob.		-13.196***	-13.321***
		(4.755)	(4.852)
Constant	1.118	0.016	0.972
	(2.227)	(2.228)	(3.668)
country fixed effects	Yes	Yes	Yes
Observations	240	240	232
$\mathbb{R}^2$	0.028	0.062	0.064
Adjusted R <sup>2</sup>	-0.117	-0.083	-0.092
Residual Std. Error	5.154 (df = 208)	5.072 (df = 207)	5.158 (df = 198)
F Statistic	0.190  (df = 31; 208)	0.431  (df = 32; 207)	0.410  (df = 33; 198)

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

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Kayser, Mark Andreas and René Lindstädt. 2015. "A Cross-National Measure of Electoral Competitiveness." Political Analysis 23(2):242–253.

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# 4 Online Appendix

Table 4: Regressions Country Sample

o	100810000000000
	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