Sovereign Default and Political Turnover

(preliminary and incomplete)

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Abstract

We investigate whether the onset of a sovereign default is associated with an increase in the probability that incumbent politicians lose office. We construct a novel dataset of finance ministers tenure and turnover for 84 countries between 1980 and 2012. We find robust evidence that sovereign default onsets are associated with statistically and economically significant increases in the probability of finance minister turnover. The evidence regarding chief executive turnover is mixed. Our findings suggest that sovereign defaults may have political consequences, which have important implications for the analysis of default, ex-ante borrowing subject to the risk of default, and the design of ex-post interventions.

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1 Introduction

Widely-used quantitative models of sovereign debt and defaults assume substantial costs of defaults in order to sustain sovereign borrowing (see, for example, Arellano, 2008, and the survey by Wright, 2011). While there is active debate on whether there is robust evidence on the often-assumed economic costs of sovereign defaults (see, for example, Levy Yeyati and Panizza, 2011 and Tomz and Wright, 2013), the literature has paid much less attention to the political costs borne by the relevant decision-makers. Two notable exceptions are Borensztein and Panizza (2009), which finds "dire political consequences for the incumbent governments and finance ministers" (p. 683), and Foley-Fisher (2012), which, in contrast, finds no significant relation between the timing of sovereign defaults and elected executives' terms in office.

This paper is an attempt at systematically studying the political consequences of sovereign defaults. We construct a novel dataset of tenures of finance ministers and reasons why finance ministers leave office (for example, elections, resignations, or dismissals, etc.). We then use these data, combined with a number of existing datasets covering tenures of executives, details of democratic institutions, timing of defaults and various macroeconomic variables, to study the empirical relationship between defaults and political turnover. Specifically, we estimate the effects of the onset of default on the probability of political turnover (of executives and finance ministers), controlling for a number of observable factors.

Our key empirical finding is that onset of a sovereign default is associated with a significant increase in the probability of finance minister turnover. The finding is very robust — it holds if we restrict attention to irregular turnover (such as via resignations or dismissals), it holds regardless of which dataset we use for the timing of sovereign defaults, and it holds under various regression specifications. On the other hand, largely consistent with Foley-Fisher (2012), we find mixed evidence for the relation between sovereign

default (onset) and the probability of executive turnover.

The evidence is about correlation and it is difficult to establish causality. For example, if executives are elected, then political turnover may increase the probability of default (in particular, if the new government is "populist" and thus more willing to default on foreign creditors; see Hatchondo and Martinez (2010) and the related theoretical literature below). However, since unlike executives, finance ministers are usually not directly elected, we interpret our result as suggesting that finance ministers' terms in office tend to be significantly affected by the onset of a sovereign default.

Our finding has important implications both for quantitative models of sovereign debt and for the design of policy interventions. If politicians in charge of default decisions face large personal costs in the aftermath of default, they may have perverse incentive to avoid the default. This can lead to sub-optimal delay of default (a concern raised in IMF, 2013 and Buchheit et al., 2013), and possibly "gambling for redemption" (by running up public debt and hoping for a good state of the world where government revenues recover, as modeled in Conesa and Kehoe, 2014). Finally, the existence of dire political consequences of defaults may by itself be able to sustain large quantities of ex-ante borrowing.

Our paper is related to a large empirical literature on the consequences of sovereign default.[1] Our paper is motivated by and expands upon Borensztein and Panizza (2009), who were the first to document that sovereign defaults are associated with a higher probability of turnover of key government actors. Specifically, they find that "IMF governors" (country officials engaged with the IMF, typically finance ministers or central bank governors) are more likely to change in the wake of a sovereign default in the period 1980 – 2003. One problem is that their data do not allow to distinguish whether the IMF governor is the finance ministers, minister of economy or central bank gover-

[1]This includes the papers cited in the first paragraph, as well as Sturzenegger and Zettelmeyer (2006)'s and Tomz (2007)'s analyses of long historical data.

nors of the member country. Furthermore, their data is restricted to democracies only. Our dataset spans 10 more years of data, includes many more countries (both democracies and non-democracies), and, most importantly, identifies the finance minister in charge and the context of his or her turnover. This allows us to distinguish between regular and irregular finance minister turnover. Compared to their analysis, we move beyond summary statistics and plan to use our dataset to run regressions in a variety of specifications to explore the political costs of default. Our paper is also related to two other papers. Frankel (2005) finds that currency crises are associated with a significant increase in the probability of turnover in IMF governors. Crespo-Tenorio et al. (2013) finds that banking crises are associated with a significant increase in the probability of turnover in incumbent executives and ruling political parties.

Our paper is also relevant to a long lineage of theories on the political economy of public debt (Persson and Svensson, 1989, Alesina and Tabellini, 1990, Battaglini and Coate, 2008, Yared, 2010), and a more recent literature on the political economy of sovereign debt (Cole et al., 1995, Amador, 2012, Hatchondo et al., 2009, D'Erasmo, 2010, Phan, 2014). However, relatively little theory has been written to predict what happens when defaults are associated with political consequences. Our paper may thus provide an empirical foundation for future research that explores the dynamics of sovereign debt and default when politicians have career concern.

In summary, to the best of our knowledge, ours is the first paper to provide a detailed and extensive dataset of finance ministers' terms in office, and is also the first to systematically document the relationship between sovereign defaults and the turnover of finance ministers.

The rest of the paper is organized as follows. Section 2 describes our data collection. Section 3 provides our empirical analysis. The last section lays out directions of future research.

2 Data

2.1 Finance ministers

Prior to this project, there has been no single standardized source providing information regarding finance ministers across a wide set of countries and at the degree of details that we need for our analysis (in particular, whether the turnover of the finance minister is regular or irregular).

Therefore, we embark on an extensive data collection exercise in close coordination with Ivanova (2014). We manually gather and cross-check data from multiple publicly available sources on the names of finance ministers, their tenures, their methods of leaving office (resignation, dismissal, etc.) and other information. Our starting point is the Rulers.org dataset (Schemmel (2014)), which contains information for about 60% of our sample. To fill gaps and add 30 more countries, we search for the names of Finance Ministers in World Bank and IMF reports, on country websites and, most importantly, in the press database Factiva, which allows us to search through hundreds of news outlets worldwide and since the 1980s. To code data from the press, we mostly relied on leading international newspapers (in total we draw on 165 articles from The Economist, Financial Times, The Times, The Guardian, The New York Times, The Washington Post, The Globe and Mail) as well as from news agencies (352 articles from Reuters News, BBC Monitoring, Xinhua News Agency, Agence France-Presse, Dow Johns International News and The Associated Press). For some cases only local or smaller newspapers provided the needed information (in total we use 189 articles from local newspapers or less significant international press). In almost all cases we could verify the coding information in 2 or more sources. For transparency, we document the exact sources for each data entry and also coded a data quality indicator showing how reliable the data is in each case. Furthermore, we complemented and cross-checked our coding with data from

Beck et al. (2001)'s Database of Political Institutions 2012 version (henceforth DPI), Moser (2007), and Martinez-Gallardo (2012).[2]

Thanks to these multiple sources, we can code whether a finance minister turnover is regular via election, or irregular according to one of these sub-categories: due to a cabinet reshuffle; due to a resignation; due to a dismissal; or due to death of the minister. For each finance minister, we have the exact date of the beginning and of the end of his or her term. For each turnover, we also have a variable for the information quality, ranging from 1 to 3, where 3 means the date and reasons for the turnover are well-documents, 2 means the exact date may not be precise, and 1 means the information on the exact date and reasons is ambiguous.

In total, our current dataset covers 84 countries between 1980 and 2012.[3] Our dataset provides the name of all known finance ministers, the start date and end date of their tenures, the reasons why their tenures end (including regularly after elections or irregularly via resignation/dismissal), whether there is financial distress in the year they are dismissed, an index for information quality and an index for source quality. The Appendix provides details about our data sources, the list of countries and years, our methodology to minimize coding errors and our index of information quality.

2.2 Other data

We use data on executives (chief executive change, whether executive is new, years since last executive election, executive years in office) from the DPI. For turnover of political parties, we use data from Crespo-Tenorio et al. (2013). They provide an annual indicator of whether there is a change (due to elections) in the executive, an the new executive is from a different political party. We also use various the polity index from from the Polity

[2]We also thank our colleague Cecilia Martinez-Gallardo for sharing data with us.
[3]For a few countries, data for certain years is still missing. See the Appendix.

IV database. We use the World Bank's World Development Index for macroeconomic data: GDP per capita growth and debt to GDP ratio.

We use data on years of sovereign debt crises from Standard and Poors. Standard and Poors define a default as either (i) a legal default, i.e. the failure of an obligor to meet a principal or interest payment on the due date (or within the specified grace period), or (ii) a distressed debt restructuring, i.e. when an exchange offer of new debt contains less favorable terms than the original issue. For each country, a year t can be either:

1. A non-default year: the country is not in an ongoing sovereign debt crisis in year t.
2. A default year: the country is in an ongoing sovereign debt crisis in year t.
3. A default onset year: the country is in the first year of a sovereign debt crisis in year t.

For robustness check, we also use data on sovereign debt crises from Reinhart and Rogoff (2009).

3 Empirical analysis

3.1 Summary statistics

Figure 1 shows the summary statistics of the probabilities of political turnover in non-default years, default years, and default onset years. The top panel of Figure 1 shows the statistics for chief executive turnover, and the bottom panel shows the statistics for finance minister turnover. We calculate, for example, the probability of executive turnover in default years simply by taking the average of the dummy for executive turnover in the

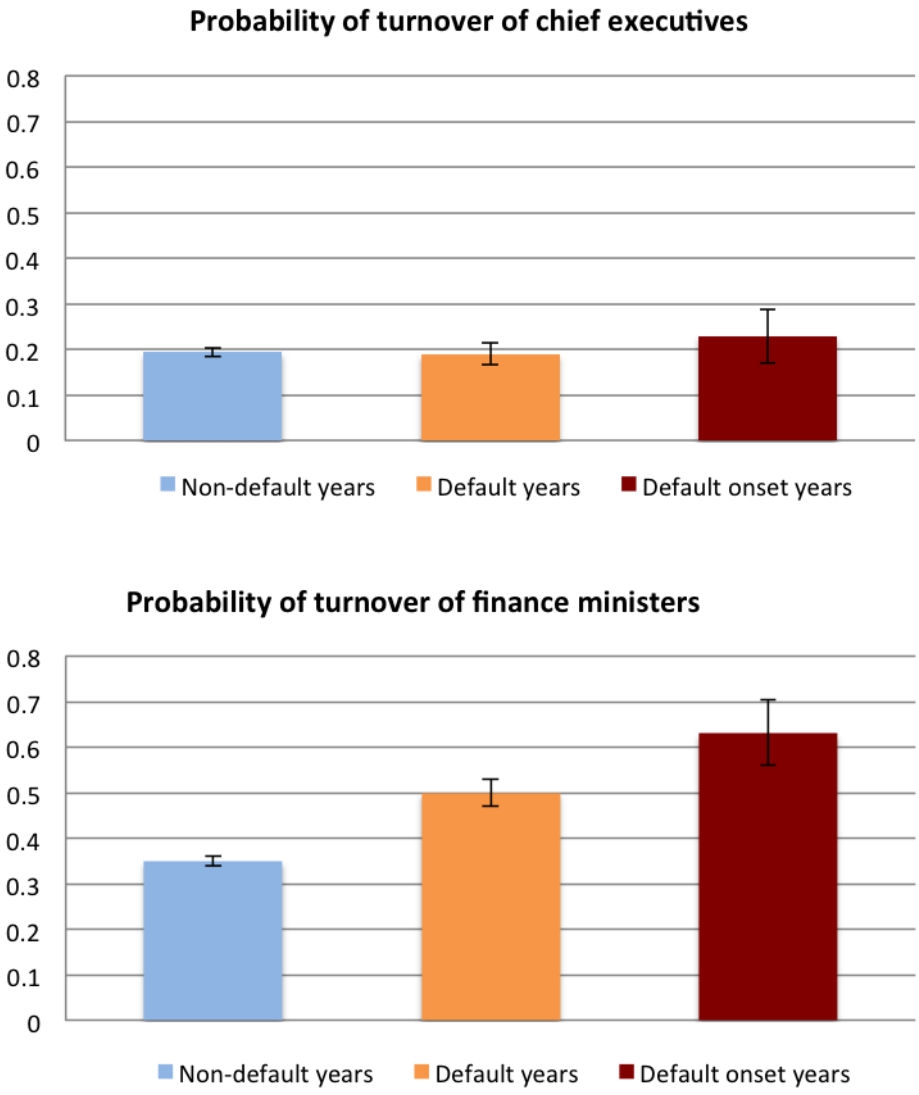

Figure 1: Probabilities of (i.e., averages of the dummies that represent) turnover of executives and of turnover of finance ministers in non-default years, default years, and years of default onset. Vertical lines represent standard errors. Data sources: authors (finance minister turnover), DPI (executive turnover), Standard and Poors (sovereign default crisis years).

years that the country is in sovereign default status. The vertical bars show standard errors.

The top panel shows that years of default onset have a slightly larger probability of executive turnover, relative to non-default and default years. However, this difference is small and likely non-significant.

On the other hand, the bottom panel shows that the probability of finance minister turnover is higher in default years, and especially in default onset years. The turnover probability nearly doubles from 0.35 in non-default years to 0.62 in default onset years.

These summary statistics suggest that sovereign default onsets may be associated with greater political turnover. We formally investigate this hypothesis in the following subsections.

3.2 Executives

First, we investigate whether chief executives or the ruling political parties tend to lose power more often during the onset of a sovereign debt crisis. We consider four dummies:

1. A dummy for the turnover of the chief executive. (It is equal to one for country i in year t if the incumbent chief executive loses power in year t in country i, and is equal to zero otherwise.)

2. A dummy for an *irregular* turnover of the chief executive. We define an executive turnover in country i and year t as irregular if the chief executive still has at least another year in his or her term in year t. We are interested in irregular turnover (besides regular ones), as they perhaps capture more directly the idea of political cost of default. For example, it is possible that incumbent executives resign under the political pressure that is associated with a debt crisis.

3. Another dummy for an irregular turnover of a chief executive, but using a different definition: a turnover is irregular if there is no executive election in either the current year (t) or in the previous year ($t-1$).

4. A dummy for the turnover in the ruling political party. (It is equal to one in country i in year t if the incumbent political party loses power in country i in year t, and is equal to zero otherwise.)

We run conditional logit (fixed effect) regressions of the four dummies above on the dummy variable for sovereign default onset, and a set of control variables: GDP per capita growth, debt over GDP ratio, and the Polity2 score. The dummy for default onset is equal to one if there is a sovereign debt crisis that starts in country i in year t, and is equal to zero otherwise. All variables are contemporaneous. The results are similar when we run fixed effect logit regressions instead.

Table 1 reports the coefficients and standard errors from these four regressions. Columns (1)-(4) correspond to regressions on the four dummies listed above. The coefficients on the dummies for executive turnover, both regular and irregular, are positive in columns (1) to (3). However, there is only statistical significance for the default onset dummy in column (2). This column means that, everything else equal, the year of a sovereign default onset is significantly correlated with a higher probability of irregular turnover in the chief executive, in the sense that the executive leaves office while his or her term has not yet officially ended. Column (4) for turnover of political parties shows a negative coefficient of the default onset dummy, but the correlation is not statistically significant.

In summary, we find that there is mixed evidence that the onset of a sovereign debt crisis is associated with an increase in the probability of change in the chief executive or in the ruling political party. This finding is robust (see the subsection on Robustness Checks).

Table 1: Executive and political party turnover and onset of sovereign default crisis

	(1) Exec turnover	(2) Exec turnover, irregular†	(3) Exec turnover, irregular⋆	(4) Party turnover
Sovereign default onset	0.303	1.082**	0.691	-0.746
	(0.31)	(0.47)	(0.72)	(0.65)
GDP per capita growth	-0.050***	-0.044*	-0.068**	-0.054***
	(0.02)	(0.02)	(0.03)	(0.02)
Debt/GDP	-0.001	0.002	-0.001	0.002
	(0.00)	(0.00)	(0.01)	(0.00)
Polity2	0.072***	-0.021	-0.051*	0.121***
	(0.02)	(0.03)	(0.03)	(0.04)
N	1902	1470	1293	1293
pseudo R^2	0.013	0.012	0.021	0.028

Notes: Conditional logit regressions. Dependent variables are the dummies for turnover of the incumbent chief executive (president or prime minister) or of the incumbent political party. Independent variables are contemporaneous. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are in parentheses.

Irregular executive turnover defined as change of the chief executive while either †: his or her term has not ended, or ⋆: there is no executive election in the current or previous year. Data sources: Standard and Poors (years of sovereign debt crises), DPI (Executive turnover, elections, years left in current term), Crespo-Tenorio et al (2012) (change in political party), Polity IV (Polity2 index), and WDI (other variables).

3.3 Finance ministers

Next, we investigate whether finance ministers tend to lose office more often during the onset of a sovereign debt crisis. As before, we are interested in both regular and irregular turnover. Thus, we consider two dummies:

1. A dummy for the turnover of the finance minister. (It is equal to one for country i in year t if there is a change in the finance minister in that country in year t. It is equal to zero otherwise.)

2. A dummy for an *irregular* turnover of the finance minister. A turnover in country i in year t is irregular if there is no election in that country that year. For example, the irregular turnover could be due to either a cabinet reshuffle, a resignation, or a dismissal.

We run the same conditional logit regressions on these dummies as those we used to analyze the case of the executives. Table 2 reports the results. Column (1) is for general turnover (both regular and irregular). Column (2) is for irregular turnover only. The table shows that sovereign default onsets are positively associated with the probabilities of finance minister turnover, with the association slightly larger for irregular turnover. The correlations are statistically significant at the 95 per cent confidence for general turnover, and at the 99 per cent confidence for irregular turnover. Note that the correlations between default onset and the probabilities of finance minister turnover are generally more statistically significant than those for the probabilities of executive or party turnover. The correlations are economically significant: the regression in column (2) implies that the onset of a sovereign default is associated with a 20 percentage point increase in the probability of irregular finance minister turnover, holding all other control variables at their sample mean.

In summary, we find that the onset of a sovereign debt crisis is associated with a statistically significant increase in the probability of finance minister turnover, both regularly and irregularly. This result is robust to various checks (see the next subsection).

Note that our findings are about correlations, and we cannot make claims of causality. However, these results are suggestive that there are political consequences associated with the onset of sovereign default. In particular, as finance ministers are usually not directly elected, the direction of reverse causality (that changes in finance ministers may increase the probability of default) is less likely.

Table 2: Finance minister turnover and onset of sovereign default crisis

	(1) Finance minister turnover	(2) Finance minister irregular turnover
Sovereign default onset	0.752**	0.870***
	(0.37)	(0.32)
GDP per capita growth	-0.055***	-0.056***
	(0.01)	(0.01)
Debt/GDP	0.004**	0.005***
	(0.00)	(0.00)
Polity2	0.032*	-0.012
	(0.02)	(0.02)
N	1867	1785
pseudo R^2	0.016	0.021

Notes: Conditional logit regressions. Independent variables are contemporaneous. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are in parentheses.

A turnover in finance minister in country i in year t is irregular if there is no election in that country in that year. Data sources: authors (finance minister turnover), Standard and Poors (years of sovereign debt crises), Polity IV (Polity2 index), DPI (year after executive election) and WDI (other variables).

3.4 Robustness checks

We now run various robustness checks. First, we run the same regressions but exclude advanced economies, using categorization from Ghosh et al. (2013). Columns (1) in Ta-

bles 3 and 4 show the results of this robustness check, for irregular executive turnover (turnover while term in office is not yet over) and irregular finance minister turnover, correspondingly.[4] We continue to see that a sovereign default onset is positively associated with the probability of irregular turnover both at the executive level and at the finance minister level. Interestingly, the association between default onset and irregular executive turnover is slightly smaller and less statistically significant when we exclude advanced economies (comparing columns (1) in Table 1 and 3). The opposite holds for irregular finance minister turnover (comparing columns (1) in Table 2 and 4).

Second, we run the same regressions as in subsections 3.2 and 3.3, but using a dummy for whether country i in year t is in a sovereign debt crisis (instead of just in the onset year of a crisis). Columns (2) in Tables 3 and 4 show the results from this exercise. They show that statistical significance disappears. Thus, it appears that if there is any political turmoil that is associated with a sovereign debt crisis, then the turmoil is more concentrated in the onset year.

Third, we run the same regressions, but using a different dataset for sovereign debt crisis years. We use data from Reinhart and Rogoff (2009). Columns (3) in Tables 3 and 4 show the results from this exercise. The findings are similar: a sovereign default onset is still positively correlated with an increase in the probability of irregular executive turnover and in the probability of irregular finance minister turnover. The magnitudes correlation coefficients are relatively the same between the two different datasets. There is slightly less statistical significance when we use Reinhart and Rogoff (2009)'s dating of sovereign debt crises. However, the correlation with irregular executive turnover is still significant at 90 per cent confidence, and the correlation with irregular finance minister turnover is still significant at 95 per cent confidence.

Finally, for irregular finance minister turnover, we run an additional regression, which

[4]The results for general turnover are also robust, and we do not report them here for brevity. Tables are available from the authors upon request.

is identical to the main regression in column (2) of Table 2, except that we control for irregular executive change. Column (4) of Table 4 shows that, after controlling for irregular executive turnover, the correlation between sovereign default onset and the probability of irregular finance minister turnover increases remains significant at 99 per cent confidence (and the correlation coefficient slightly increases).

In summary, we find that:

1. There is evidence, but mixed, that the onset of a sovereign default is positively associated with an increase in the probability of executive turnover; and

2. There is robust evidence that the onset of a sovereign default is positively and significantly associated with an increase in the probability of finance minister turnover.

Table 3: Robustness checks: Executive and political party turnover and onset of default crisis

	Executive turnover, irregular†		
	(1)	(2)	(3)
Sovereign default onset (S&P)	1.046*		
	(0.55)		
Sovereign default (S&P)		0.721	
		(0.52)	
Sov default onset (RR)			0.923*
			(0.49)
GDP per capita growth	-0.046	-0.049**	-0.046*
	(0.03)	(0.02)	(0.02)
Debt/GDP	0.010*	-0.000	0.002
	(0.01)	(0.00)	(0.00)
Polity2	-0.018	-0.021	-0.020
	(0.04)	(0.03)	(0.03)
N	623	1470	1470
pseudo R^2	0.037	0.015	0.011

Notes: †: Irregular executive turnover defined as change of the chief executive while his or her term has not ended. Column (1) excludes advanced economies, using definition from Ghosh et al. (2013). Column (2) replaces the dummy for the onset year of a sovereign default crisis with the dummy for any year during a sovereign default crisis. Column (3) uses the dummy for the onset year, but using with data of default from Rogoff and Reinhart.

Conditional logit regressions. Independent variables are contemporaneous. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are in parentheses.

Table 4: Robustness checks: Finance minister turnover and onset of default crisis

	Irregular finance minister turnover			
	(1)	(2)	(3)	(4)
Sovereign default onset (S&P)	1.005***			0.909***
	(0.38)			(0.35)
Sovereign default (S&P)		0.314		
		(0.25)		
Sovereign default onset (RR)			0.823**	
			(0.34)	
GDP per capita growth	-0.081***	-0.061***	-0.056***	-0.054***
	(0.02)	(0.02)	(0.01)	(0.01)
Debt/GDP	0.004	0.004**	0.005***	0.006***
	(0.00)	(0.00)	(0.00)	(0.00)
Polity2	0.005	-0.009	-0.012	-0.014
	(0.02)	(0.02)	(0.02)	(0.02)
Exec change, irregular†				-0.260
				(0.20)
N	863	1774	1785	1651
pseudo R^2	0.040	0.020	0.021	0.020

Notes: A turnover in finance minister in country i in year t is irregular if there is no election in that country in that year. †: Irregular executive turnover defined as change of the chief executive while his or her term has not ended.

Column (1) controls for irregular executive turnover. Column (2) excludes advanced economies, using definition from Ghosh et al (2013). Column (3) replaces the dummy for the onset year of a sovereign default crisis with the dummy for any year during a sovereign default crisis. Column (4) uses the dummy for the onset year, but using with data of default from Rogoff and Reinhart. Conditional logit regressions. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are in parentheses.

4 Directions of future work

4.1 Empirical analysis

We plan to considerably expand our empirical analysis of the political costs of default. First, we will improve the current analysis of executive and ministerial turnover, by using techniques of survival analysis and by controlling for a series of potentially omitted factors such as the severity of the crisis, the scope of austerity imposed before or after the default, and for IMF involvement. Second, we will code a new dataset of "executive turnover" following the same approach as for the finance ministers. This will allow us to study more explicitly how governments fare before during and after a default: How many governments survive a default and what characteristics do surviving governments have? What is the electoral vote share pre- and post-crisis? And how do government popularity ratings change (using a similar empirical approach as in Ordonez et al., 2014)? Third, we will address causality by studying counterfactual contexts in the data. For example, do finance ministers also lose their job in near-defaults, i.e. periods with high bond spreads and large scale IMF bailouts but no explicit (legal) default (e.g., Turkey 2000, and Portugal or Ireland in recent years)? Is turnover more likely in "hard defaults" with high haircuts and unilateral government negotiation behavior (as in Argentina 2002 or Russia 1998), compared to "softer" defaults (as in Uruguay 2003 or Ukraine 1999)? Finally, we will try to test whether there is evidence for "gambling for redemption" behaviors by executives and finance ministers: How do borrowing patterns change pre-default? Is there evidence that governments ask for IMF bailout money even if a default seems unavoidable? Is there evidence that finance ministers run risky policies that executives might not be aware of?

4.2 Theoretical analysis

We are interested in formalizing two theoretical implications of our empirical findings. First, if politicians anticipate that a default increases the chance they lose office, the they will go to great length to avoid the default. Some of the possible inefficient policies can include delaying default by "gambling for redemption" (rolling over debt at a high interest rate and hoping for a good state where revenues recover and default is avoidable). On the other hand, losing office after default gives politicians a form of "limited liability." In other words, anticipating that a default increases the chance they lose office, politicians will effectively discount the states in which default is very likely, leading them to take excessive risk-taking behaviors. The intuition that limited liability leads to excessive risk-taking by firms or banks have a long lineage, for example, from Jensen and Meckling, 1979 and Stiglitz and Weiss, 1981. But to our knowledge, this idea has not been applied to the literature of sovereign debt, with Livshits and Schoors (2009) as an exception. We are currently constructing a small open model with political turnover that formalizes how the political consequences of default and political limited liability can lead to inefficient policies (delaying of default, excessive risk taking and gambling for redemption).

Second, if the onset of a sovereign default leads to increased political instability (increase probability of political turnover), and if political instability decreases investment and growth (as empirically documented by Alesina et al., 1996, Alesina and Perotti, 1996, and Busse and Hefeker, 2007), then the onset of a sovereign default will lead to a reduction in investment and a subsequent reduction in output. We can build a quantitative model of sovereign debt with capital investment where this channel is present. In this model, the economic cost of default will be endogenous.

References

Alesina, A., Özler, S., Roubini, N., and Swagel, P. (1996). Political instability and economic growth. *Journal of Economic growth*, 1(2):189–211.

Alesina, A. and Perotti, R. (1996). Income distribution, political instability, and investment. *European Economic Review*, 40(6):1203–1228.

Alesina, A. and Tabellini, G. (1990). A positive theory of fiscal deficits and government debt. *The Review of Economic Studies*, 57(3):403–414.

Amador, M. (2012). Sovereign debt and the tragedy of the commons. *Mimeo*.

Arellano, C. (2008). Default risk and income fluctuations in emerging economies. *American Economic Review*, 98(3):690–712.

Battaglini, M. and Coate, S. (2008). A dynamic theory of public spending, taxation, and debt. *The American Economic Review*, pages 201–236.

Beck, T., Clarke, G., Groff, A., Keefer, P., and Walsh, P. (2001). New tools in comparative political economy: The database of political institutions. *The World Bank Economic Review*, 15(1):165–176.

Borensztein, E. and Panizza, U. (2009). The costs of sovereign default. *IMF Staff Paper*, 56(4):683–741.

Buchheit, L. C., Gelpern, A., Gulati, M., Panizza, U., Di Mauro, B. W., and Zettelmeyer, J. (2013). *Revisiting sovereign bankruptcy*. Brookings Institution.

Busse, M. and Hefeker, C. (2007). Political risk, institutions and foreign direct investment. *European Journal of Political Economy*, 23(2):397–415.

Cole, H., Dow, J., and English, W. (1995). Default, settlement, and signalling: lending resumption in a reputational model of sovereign debt. *International Economic Review*, 36(2):365–385.

Conesa, J. C. and Kehoe, T. J. (2014). Gambling for redemption and self-fulfilling debt crises. *Mimeo*.

Crespo-Tenorio, A., Jensen, N. M., and Rosas, G. (2013). Political liabilities surviving banking crises. *Comparative Political Studies*.

D'Erasmo, P. (2010). Government reputation and debt repayment in emerging economies. *Manuscript, University of Texas at Austin*.

Foley-Fisher, N. (2012). Timing of sovereign defaults over electoral terms. *Board of Governors of the US Federal Reserve International Finance Discussion Papers*, 1047.

Frankel, J. A. (2005). Mundell-fleming lecture: Contractionary currency crashes in developing countries. *IMF Staff Papers*, pages 149–192.

Ghosh, A. R., Kim, J. I., Mendoza, E. G., Ostry, J. D., and Qureshi, M. S. (2013). Fiscal fatigue, fiscal space and debt sustainability in advanced economies. *The Economic Journal*, 123(566):F4–F30.

Hatchondo, J. C. and Martinez, L. (2010). The politics of sovereign defaults. *Economic Quarterly*, 96(3):291–317.

Hatchondo, J. C., Martinez, L., and Sapriza, H. (2009). Heterogeneous borrowers in quantitative models of sovereign default. *International Economic Review*, 50(4):1129–1151.

IMF (2013). Sovereign debt restructuringrecent developments and implications for the funds legal and policy framework. *IMF Staff Paper*.

Ivanova, B. (2014). Codebook for finance minister dataset. *Mimeo, University of Munich*.

Jensen, M. C. and Meckling, W. H. (1979). *Theory of the firm: Managerial behavior, agency costs, and ownership structure*. Springer.

Levy Yeyati, E. and Panizza, U. (2011). The elusive costs of sovereign defaults. *Journal of Development Economics*, 94(1):95–105.

Livshits, I. and Schoors, K. (2009). Sovereign default and banking. *Mimeo*.

Martinez-Gallardo, C. (2012). Out of the cabinet what drives defections from the government in presidential systems? *Comparative Political Studies*, 45(1):62–90.

Moser, C. (2007). The impact of political risk on sovereign bond spreads-evidence from latin america. *Mimeo, ETH Zurich*.

Ordonez, G., Trebesch, C., and Herrera, H. (2014). Political booms, financial crises. *Mimeo*, (224).

Persson, T. and Svensson, L. E. (1989). Why a stubborn conservative would run a deficit: Policy with time-inconsistent preferences. *The Quarterly Journal of Economics*, pages 325–345.

Phan, T. (2014). Sovereign debt cycles. *Mimeo*.

Reinhart, C. M. and Rogoff, K. (2009). *This time is different: eight centuries of financial folly*. Princeton University Press.

Schemmel, B. (2014). Rulers databse, url: http://www. rulers. org.

Stiglitz, J. E. and Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American economic review*, pages 393–410.

Sturzenegger, F. and Zettelmeyer, J. (2006). *Debt defaults and lessons from a decade of crises*. MIT press.

Tomz, M. (2007). *Reputation and international cooperation: sovereign debt across three centuries*. Princeton University Press.

Tomz, M. and Wright, M. L. (2013). Empirical research on sovereign debt and default. *Annu. Rev. Econ.*, 5(1):247–272.

Wright, M. L. (2011). The theory of sovereign debt and default. *Encyclopedia of Financial Globalization*.

Yared, P. (2010). Politicians, taxes and debt. *The Review of Economic Studies*, 77(2):806–840.

Appendix and Codebook

To be completed.