Life after default: private vs. official sovereign debt restructurings

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Motivation

- Sovereign defaults and debt restructurings are not costless as a sovereign's decision to stop servicing its debt implies important economic costs

- The (empirical) literature on sovereign defaults finds that default costs are difficult to quantify and short lived

- Since Cruces and Trebesch (2013), it has become crucial to consider the magnitude of past defaults and not only the default event *per se*

- This paper studies the relationship between sovereign debt default and annual GDP growth taking into account the depth of a debt restructuring and distinguishing between private and official deals, as well as between *debt flow* and *stock reduction*.

Approach

- Despite the role that official creditors have historically played in the resolution of sovereign debt crises, little is known on the implications of debt restructurings involving official creditors
- This distinction is important given the different characteristics of private and official settlements
- Official restructuring are arranged within the "Paris club umbrella", which should guarantee a relatively smoother approach to the way in which deals are actually orchestrated than private ones
- We use the amount of debt affected by restructuring (face value reduction) as proxy for the severity of the default
- Trade-off concerning the effect on growth of the amount of the restructuring: a positive "debt relief" effect and a negative "reputational" effect

Main results

- Analyzing 130 countries over the period 1970-2017, we find that private and official defaults are associated to different growth outcomes

- By controlling for both the occurrence and the magnitude of debt defaults we find a more lasting relationship between default and growth

- While *private defaulters* are associated to lower growth both during the crisis and in the long run, official defaulters are not negatively affected during the crisis and they may even benefit in its aftermath

- Using an alternative estimation, the Synthetic Control Method, we provide more causal evidence on the heterogeneous effect of commercial and official defaults, which confirms our results

Related Literature

DEFAULT COSTS

- *Trade*: Rose (2005), Borensztein and Panizza (2010); *International Credit Market*: Ozler (1993), Borensztein and Panizza (2009), Cruces and Trebesch (2013), Panizza *et al.* (2009); *GDP Growth*: Borensztein and Panizza (2009), De Paoli *et al. (*2006, 2009), Furceri and Zdzienicka (2012), Levy Yeyati and Panizza (2011), Sturzenegger (2004)

DEBT RESTRUCTURING

- More attention to the specific analysis of debt renegotiation from both a *private sector* perspective (Asonuma and Trebesch 2016; Forni, Palomba, Pereira and Richmond 2016; Reinhart and Trebesch 2016; Trebesch and Zabel 2017) and an *official sector perspective (*Cheng, Díaz-Cassou, Erce 2016a, 2016b, Reinhart and Trebesch 2016)
- Our specific contribution is to contrast the outcomes on growth between official and private debt agreements

Data and Estimation

- Our analysis spans the years between 1970 and 2017 including developing and emerging market economies
- Dropped countries whose debt restructurings took place in the context of wars and state dissolution, such as Iraq, and successor states of the Socialist Republic of Yugoslavia
- The resulting set of 130 countries includes 87 defaulting countries (at least 1 debt crisis during our sample period) as well as 43 non-defaulters
- Among defaulters: 57 countries had both private and official restructurings, 23 countries had only official debt restructurings (Paris Club), while only 7 countries had only private restructurings

Data

- For data on the amount of *private debt* affected by the restructurings, and *face value reduction*, we relied on the dataset by Cruces and Trebesch (2013)
- Data on *duration of private debt crisis* are provided from Asonuma and Trebesch (2016)
- For data on the amount of *official debt* affected by the restructurings, and *face value reduction*, we relied on the dataset by Cheng *et al.* (2017)

Private and Official Restructurings over time

	Observations	Mean	SD	Min	Max
Private restructuring					
1970-1988	76	12	15	0.39	59
1989-2001	60	17	21	0.25	100
2002-2013	21	31	22	2	73
Official restructuring					
1970-1988	119	7	8	0.40	61
1989-2001	191	10	12	0.02	82
2002-2013	81	29	48	0.03	100
Private Haircut					
1970-1988	2	58	40	30	86
1989-2001	41	49	34	1	97
2002-2013	16	54	33	4	97
Official Haircut					
1970-1988	0	0	0	9	33
1989-2001	80	59	29	4.7	100
2002-2013	58	59	28	4.7	100

Private and Official Restructurings by country's income

Private Restructurings (Average size %)		
High Income	Middle Income	Low Income
24.13	17.58	5.88
Private Restructurings (# of countries)		
High Income	Middle Income	Low Income
7	38	14
Official Restructurings (Average size %)		
High Income	Middle Income	Low Income
12.69	11.14	12.68
Official Restructurings (# of countries)		
High Income	Middle Income	Low Income
6	44	24

Private and Official Haircuts by country's income

Private Haircuts (Average size %)		
High Income	Middle Income	Low Income
36.71	52.34	89.81
Private Haircuts (# of countries)		
High Income	Middle Income	Low Income
5	25	10
Official Haircut (Average size %)		
High Income	Middle Income	Low Income
44.78527	62.51	62.74
Official Haircut (# of countries)		
High Income	Middle Income	Low Income
1	25	24

Private and Official Restructuring distribution by size

Private — Restructuring size (in %), Percent

Official — Restructuring size (in %), Percent
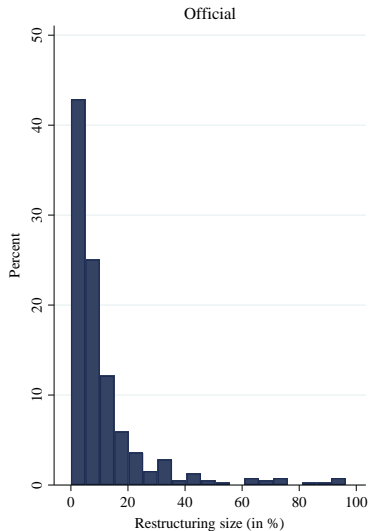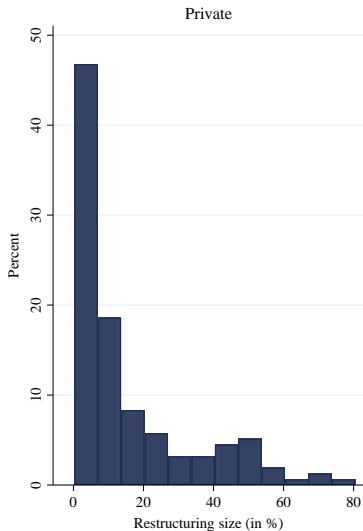
Private and Official Haircut distribution by size
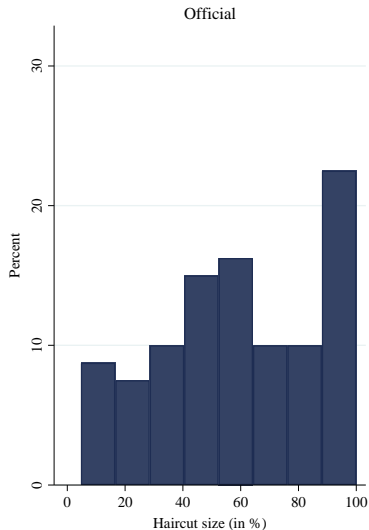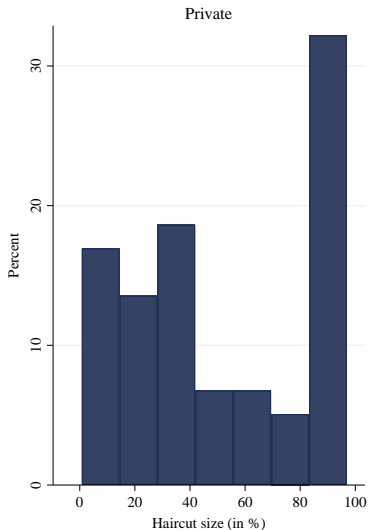
Method and Results (I)

- Unbalanced panel of maximum of 130 developing countries (depending on the controls), over 1970-2013
- Fixed-effects GLS estimator to correct for heteroskedasticity across countries

$$y_{it} = \gamma C_{it} + \delta R_{it} + \theta_j FC_{it-j} + \lambda_j FR_{it-j} + \beta X_{it} + \eta_i + \tau_t + u_{it},$$

- C_{it} is a dummy equal to one during the private/official debt crisis, while R_{it} denotes the amount of the private/official debt affected (haircut) during the crisis
- FC_{it-j} is a dummy equal to one when a country has finalized its last private/official restructuring (haircut),
- FR_{it-j} denotes the amount of private/official debt affected (haircut) in the last restructuring ($j = 0, ..., 10$)

Method and Results (II)

- This specification includes both official and private restructurings allowing us to disentangle their effects avoiding an omitted variable bias.

- It allows us to disentangle the growth increase associated with the default *per se* from the effect associated with the size of the restructered debt (haircut)
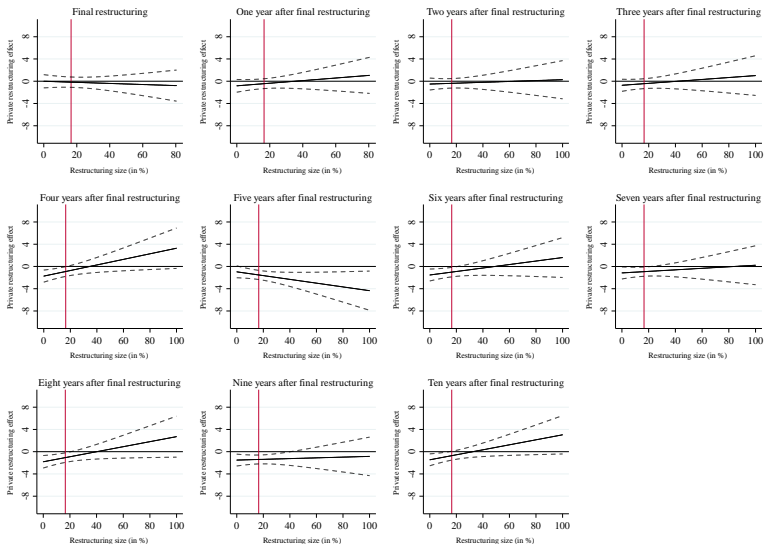
Private and Official Restructurings and Growth, duration

|								
Private Default Duration	-1.459***	-1.087***	-1.248***	-1.343***	-1.461***	-1.478***	-1.710***	-1.829***
	(-6.609)	(-3.831)	(-4.180)	(-4.228)	(-4.480)	(-4.520)	(-5.146)	(-5.430)
Official Default Duration	0.137	-0.113	-0.055	-0.131	0.024	0.050	0.433	0.650**
	(0.663)	(-0.462)	(-0.211)	(-0.446)	(0.080)	(0.164)	(1.382)	(2.028)
Private Restructurings			0.026	0.021	0.024	0.024	0.022	0.024
			(1.552)	(0.794)	(0.926)	(0.932)	(0.867)	(0.956)
Official Restructurings			-0.009	-0.014	-0.009	-0.010	-0.013	-0.015
			(-0.548)	(-0.605)	(-0.368)	(-0.431)	(-0.573)	(-0.662)
Observations	4,905	2,654	2,647	2,617	2,541	2,541	2,455	2,311
Number of country_id	130	111	111	111	111	111	111	111
Country FE	YES	YES	YES	YES	YES	YES	YES	YES
Time FE	YES	YES	YES	YES	YES	YES	YES	YES

Private and Official Restructuring, coefficients over time
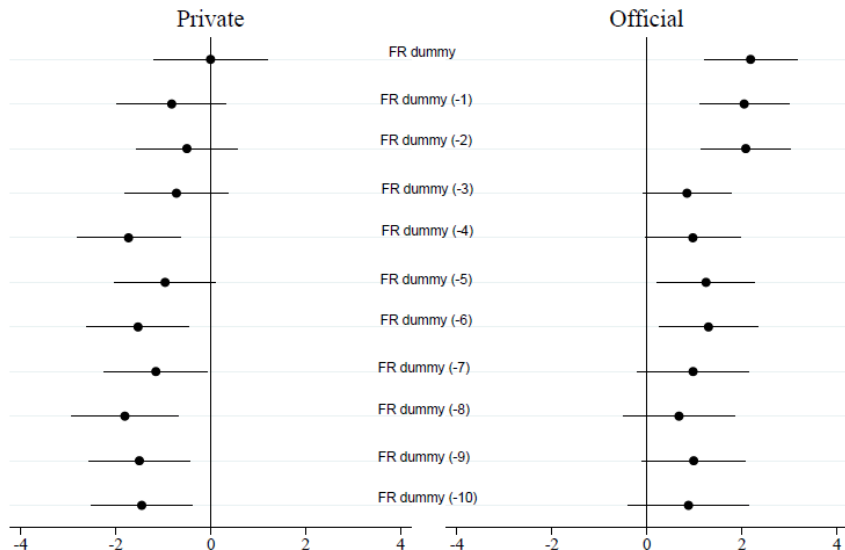
Expected effect for different levels of private restructurings
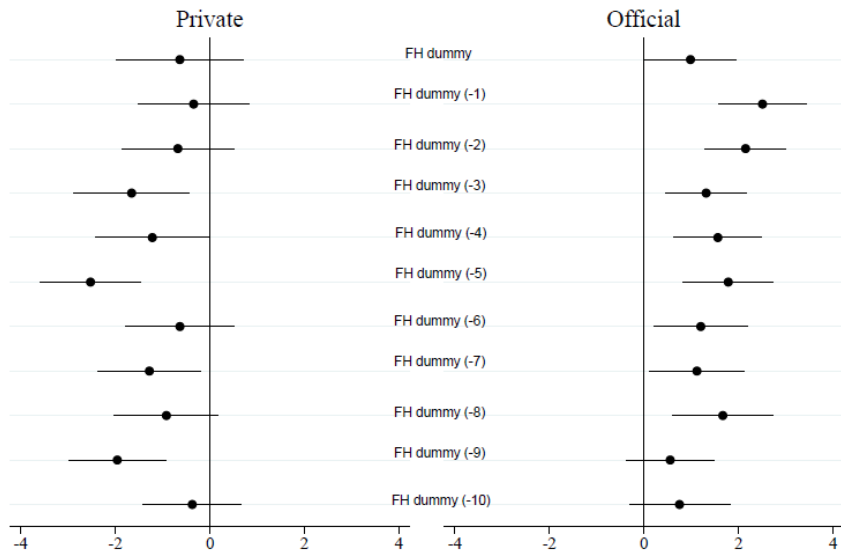
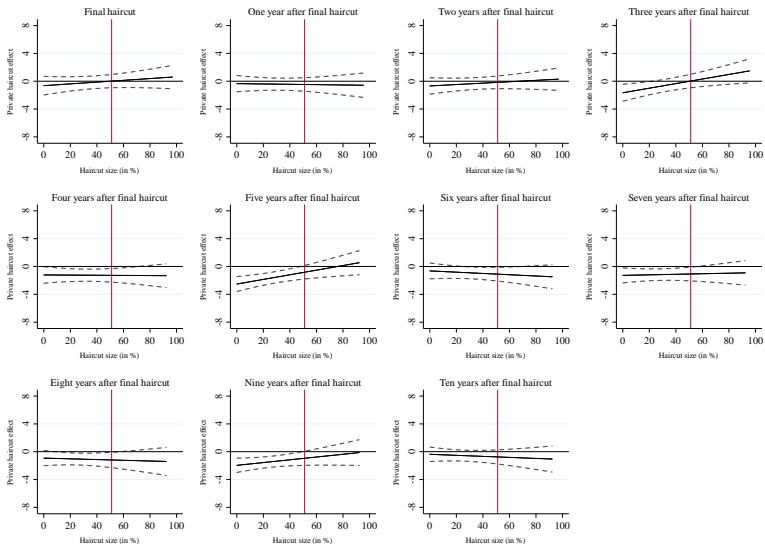# Expected effect for different levels of official restructurings
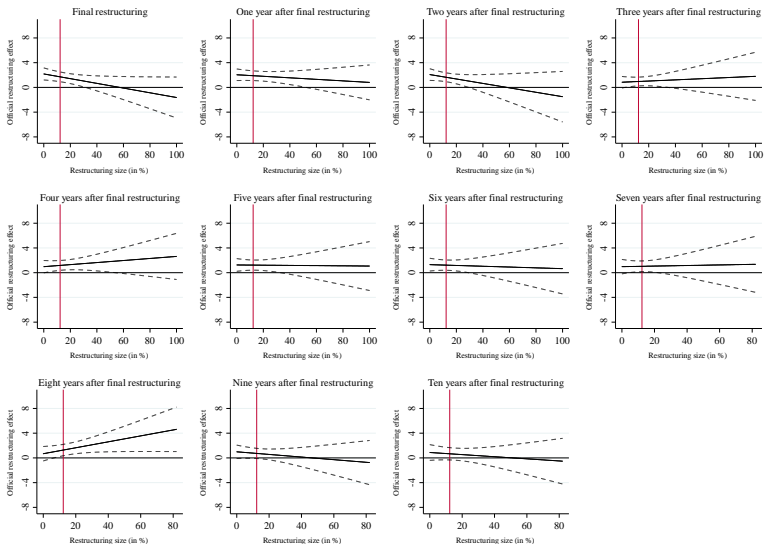
Private and Official Haircut and Growth, duration

VARIABLES	(1) 1	(2) 1	(3) 1	(4) 1	(5) 1	(6) 1	(7) 1	(8) 1
Private Default Duration	-1.459***	-1.087***	-1.227***	-1.299***	-1.415***	-1.342***	-1.612***	-1.674***
	(-6.609)	(-3.831)	(-4.165)	(-4.116)	(-4.367)	(-4.114)	(-4.828)	(-4.894)
Official Default Duration	0.137	-0.113	-0.183	-0.170	0.014	-0.077	0.308	0.501
	(0.663)	(-0.462)	(-0.715)	(-0.595)	(0.046)	(-0.258)	(1.005)	(1.590)
Private Haircut			0.028***	0.019	0.020	0.020	0.020	0.022
			(2.723)	(0.241)	(0.254)	(0.255)	(0.242)	(0.281)
Official Haircut			0.013**	0.003	0.002	0.002	0.002	0.003
			(2.108)	(0.204)	(0.191)	(0.131)	(0.139)	(0.273)
Observations	4,905	2,654	2,654	2,617	2,541	2,541	2,455	2,311
Number of country_id	130	111	111	111	111	111	111	111
Country FE	YES	YES	YES	YES	YES	YES	YES	YES
Time FE	YES	YES	YES	YES	YES	YES	YES	YES

Private and Official Haircut coefficients over time

# Expected effect for different levels of official haircuts

Robustness checks
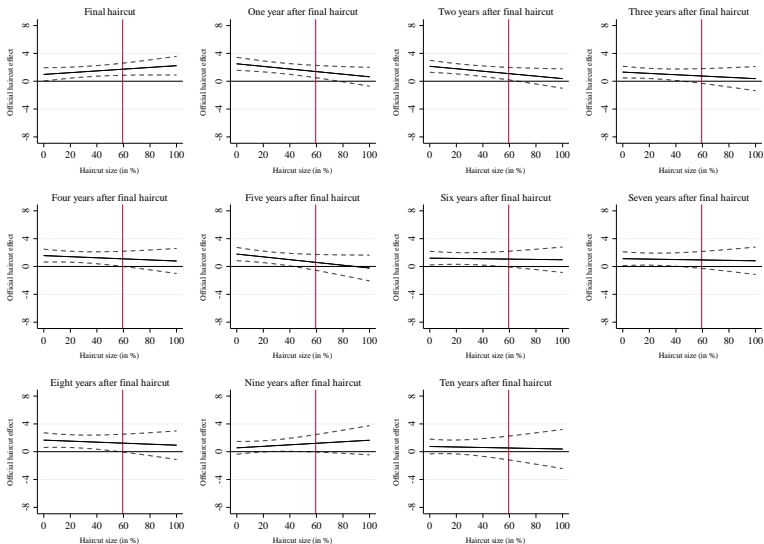
1. *Autocorrelated standard errors* (Include lagged dependent variable and correct for AR(1) autocorrelation within panels)
2. *Omitted variable bias* (Add further controls such as political risk, currency crises, inflation and the debt to GDP ratio)
3. *Reverse causality* (test the influence of lagged growth on our explanatory variables)

Synthetic Control Method (SCM)

- We provide further evidence for the heterogeneous effects of private and official restructurings using the Synthetic Control Method (SCM) developed by Abadie and Gardeazabal (2003)
- We estimate the counterfactual GDP per capita of each defaulting country as the weighted GDP per capita of non-defaulters
- Weights are assigned in order to minimize the pre-default differences between the involved country and its synthetic counterpart, taking into account a set of variables that are relevant to predict GDP (predictors)

SCM: Sample and Data

- *Treated countries:* countries that had either a private or an official restructuring and are not affected by other shocks (e.g., wars, earthquakes)
- *Control countries:* non-defaulters
- *Time periods:* from the first year of debt crisis to 2017 to observe what would have happened in the absence of the default both during the debt crisis and in its aftermath
- *Predictors:* same as those used in the regression analysis (taken over a 10-year pre-default period)
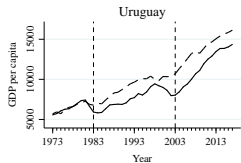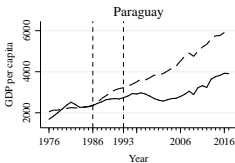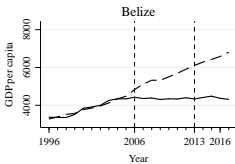
SCM: Private Restructurings

Treated country ----- Synthetic control
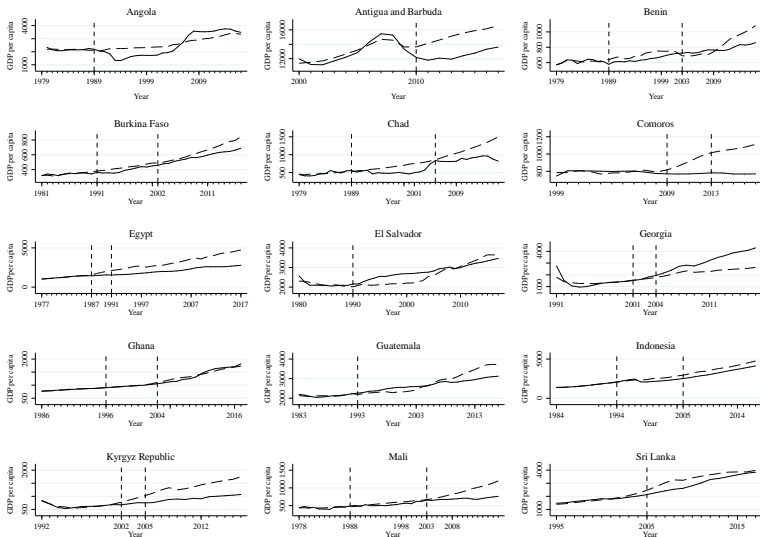
Treated country ----- Synthetic control

SCM: Average effect

- Following Cavallo *et al.* (2013) we also estimate the average effects for private and official restructurings
- We normalize our outcome variable by setting equal to 1 the GDP per capita of each defaulting country at the start of the debt crisis

SCM Robustness checks
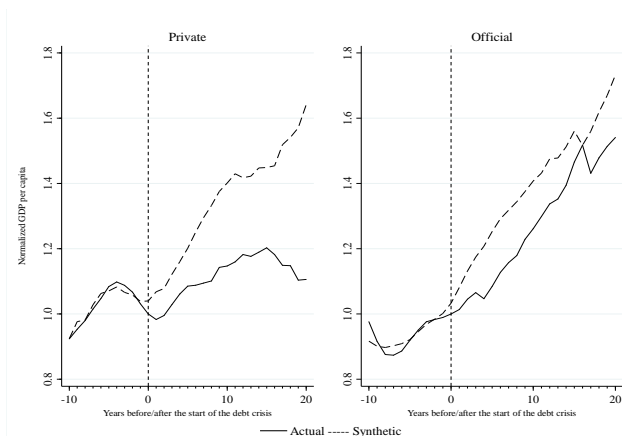
1. *In-space placebo test*: we compare the estimated treatment effect for each defaulter with all the (fake) treatment effects of the control countries, obtained from experiments where each control country is assumed to default in the same year as the treatedcountry. If the estimated effect on the defaulting country is larger than most of the effects obtained by the (fake) experiments, the SCM results are not driven randomly by chance.

2. "*Leave-one-out synthetic control*": we test to what extent our results are driven by any particular control country by iteratively re-estimate the synthetic outcomes omitting in each iteration one of the country that received a positive weight

SCM: Private Restructurings - P-values
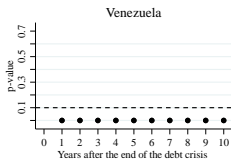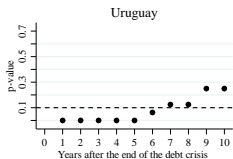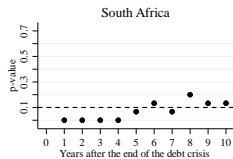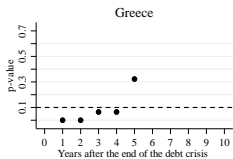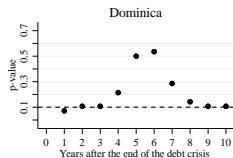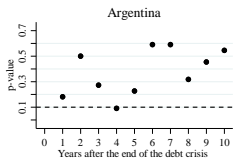
SCM: Official Restructurings - P-values
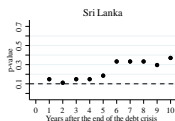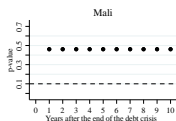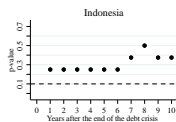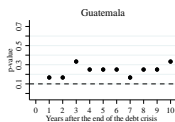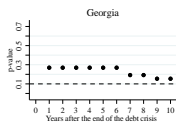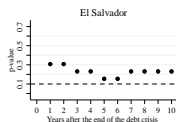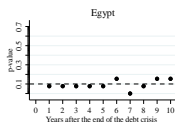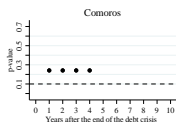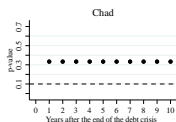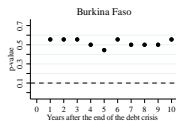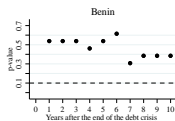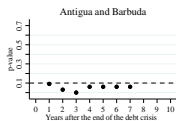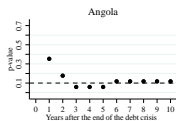
Conclusion (I)

- Controlling for both the occurrence and the magnitude of defaults, we find a more lasting and negative link between debt default and growth

- Private defaulters seem to be associated to a negative stigma which lower growth over a long period, while official defaulters seem not to be negatively affected (or they may even benefit) from the restructuring episodes

- Using the Synthetic Control Method we confirm that private defaulters are negatively affected by the default - both in the short and long run- while official defaulters are not statistically affected

Conclusion (II)

- In line with Asonuma and Trebesch (2016) and Trebesch and Zabel (2017), our results points to the importance of the way in which debt restructurings are actually, orchestrated
- To the extent that Paris Club deals (but also Brady deals) may represent an example of a "soft" default, this evidence suggests that they are associated with higher growth rates over the long term, especially with a face value reduction
- Also in line with the distinction between "excusable and unexcusable" types of defaults (Grossman and van Huyck 1988): high creditor losses not justified by a bad state of the economy could lead to a deterioration of a country reputation and to "collateral damage" on the domestic economy

Conclusion (III)

- Important insight for the current debate on providing Greece with an official debt relief: last June a debt relief agreement for Greece was negotiated by euro area governments w/o face-value reduction but leaving the door open to further debt relief
- (To do) Explore the reasons for these differences and the mechanisms through which growth is affected (e.g., trade, credit market, domestic costs)

A1: Summary Statistics, Restructuring

Variable	N	Mean	SD	Min	Max
Per capita Growth	2311	1.93	5.5	-40.74	56.88
Private Default Duration	2311	0.14	0.35	0	1
Private Restructurings	2311	0.33	3.3	0	59.12
Final Priv. Restr. Dummy	2311	0.02	0.14	0	1
Final Private Restructuring	2311	0.38	3.96	0	80.48
Official Default Duration	2311	0.19	0.39	0	1
Official Restructurings	2311	0.74	4.32	0	89.24
Final Off. Restr. Dummy	2311	0.02	0.15	0	1
Final Official Restructuring	2311	0.45	4.69	0	100
Investment	2311	21.89	9.47	0	155.02
(delta) Population	2311	1.87	1.32	-5.09	14.24
Secondary Edu	2311	98.62	20.03	17.29	173.82
(log) Popolation	2311	16.21	1.51	11.09	20.94
Government Cons.	2311	15.2	6.69E+00	2.74	81.4
Civil Liberties	2311	4.07	1.56	1	7
(delta) Terms of Trade (bn)	2311	-47.57	20861.5	4.74E+05	3.77E+05
Openness	2311	73.24	39.3	12.35	434.18
Banking Crises	2311	0.03	0.17	0	1

A1 cont'd: Summary Statistics, Haircut

Variable	N	Mean	SD	Min	Max
Per capita Growth	2311	1.93	5.5	-40.74	56.88
Private Default Duration	2311	0.14	0.35	0	1
Private Haircut	2311	0.03	0.91	0	30
Final Priv. Haircut Dummy	2311	0.02	0.14	0	1
Final Private Haircut	2311	0.71	7.04	0	97
Official Default Duration	2311	0.19	0.39	0	1
Official Haircut	2311	0.49	6.02	0	100
Final Off. Haircut Dummy	2311	0.02	0.15	0	1
Final Official Haircut	2311	0.7	7.39	0	100
Investment	2311	21.89	9.47	0	155.02
(delta) Population	2311	1.87	1.32	-5.09	14.24
Secondary Edu	2311	9.86E+01	20.03	17.29	173.82
(log) Popolation	2311	16.21	1.51	11.09	20.94
Government Cons.	2311	15.2	6.69E+00	2.74E+00	81.4
Civil Liberties	2311	4.07	1.56	1	7
(delta) Terms of Trade (bn)	2311	-47.57	20861.5	4.74E+05	3.77E+05
Openness	2311	73.24	39.3	12.35	434.18
Banking Crises	2311	0.03	0.17	0	1

Final Priv. Restr. Dummy	0.475	0.381	0.595	0.322	-0.003
	(0.844)	(0.673)	(0.798)	(0.437)	(-0.004)
Final Priv. Restr. Dummy (-1)	0.394	0.189	-0.173	-0.469	-0.821
	(0.729)	(0.345)	(-0.239)	(-0.652)	(-1.179)
Final Priv. Restr. Dummy (-2)	0.375	0.307	0.413	0.091	-0.501
	(0.723)	(0.586)	(0.617)	(0.137)	(-0.769)
Final Priv. Restr. Dummy (-3)	0.308	0.133	-0.138	-0.322	-0.721
	(0.577)	(0.246)	(-0.205)	(-0.476)	(-1.095)
Final Priv. Restr. Dummy (-4)		-0.369	-1.011	-1.345**	-1.729***
		(-0.690)	(-1.503)	(-1.996)	(-2.620)
Final Priv. Restr. Dummy (-5)		-0.660	-0.080	-0.396	-0.960
		(-1.338)	(-0.121)	(-0.596)	(-1.480)
Final Priv. Restr. Dummy (-6)				-0.948	-1.529**
				(-1.431)	(-2.345)
Final Priv. Restr. Dummy (-7)				-0.614	-1.154*
				(-0.913)	(-1.748)
Final Priv. Restr. Dummy (-8)					-1.806***
					(-2.644)
Final Priv. Restr. Dummy (-9)					-1.501**
					(-2.317)
Final Priv. Restr. Dummy (-10)					-1.452**
					(-2.235)

Final Off. Restr. Dummy	0.675	0.779*	1.299**	1.649***	2.185***
	(1.463)	(1.662)	(2.166)	(2.762)	(3.687)
Final Off. Restr. Dummy (-1)	0.978**	1.174**	1.121*	1.443**	2.050***
	(2.135)	(2.517)	(1.948)	(2.517)	(3.597)
Final Off. Restr. Dummy (-2)	0.634	0.824*	1.215**	1.492**	2.083***
	(1.515)	(1.928)	(2.069)	(2.562)	(3.634)
Final Off. Restr. Dummy (-3)	0.152	0.312	0.089	0.376	0.846
	(0.367)	(0.742)	(0.155)	(0.652)	(1.501)
Final Off. Restr. Dummy (-4)		0.627	0.214	0.325	0.970
		(1.323)	(0.346)	(0.529)	(1.598)
Final Off. Restr. Dummy (-5)		0.548	0.562	0.863	1.247**
		(1.116)	(0.885)	(1.363)	(2.002)
Final Off. Restr. Dummy (-6)				0.672	1.299**
				(1.083)	(2.070)
Final Off. Restr. Dummy (-7)				0.300	0.974
				(0.424)	(1.377)
Final Off. Restr. Dummy (-8)					0.678
					(0.955)
Final Off. Restr. Dummy (-9)					0.988
					(1.496)
Final Off. Restr. Dummy (-10)					0.878
					(1.135)

Final Private Restructuring	-0.009	-0.012	-0.010
	(-0.365)	(-0.461)	(-0.380)
Final Private Restructuring (-1)	0.023	0.023	0.023
	(0.751)	(0.761)	(0.804)
Final Private Restructuring (-2)	-0.010	-0.004	0.008
	(-0.412)	(-0.185)	(0.325)
Final Private Restructuring (-3)	0.020	0.017	0.017
	(0.807)	(0.680)	(0.703)
Final Private Restructuring (-4)	0.049*	0.047*	0.050**
	(1.886)	(1.848)	(1.980)
Final Private Restructuring (-5)	-0.034	-0.035	-0.034
	(-1.321)	(-1.375)	(-1.359)
Final Private Restructuring (-6)		0.024	0.031
		(0.942)	(1.252)
Final Private Restructuring (-7)		0.013	0.014
		(0.526)	(0.555)
Final Private Restructuring (-8)			0.045*
			(1.725)
Final Private Restructuring (-9)			0.007
			(0.268)
Final Private Restructuring (-10)			0.045*
			(1.820)

Final Official Restructuring	-0.030	-0.031	-0.038*
	(-1.202)	(-1.274)	(-1.649)
Final Official Restructuring (-1)	-0.001	-0.002	-0.012
	(-0.025)	(-0.124)	(-0.627)
Final Official Restructuring (-2)	-0.028	-0.030	-0.036
	(-0.904)	(-1.003)	(-1.271)
Final Official Restructuring (-3)	0.017	0.014	0.010
	(0.586)	(0.478)	(0.353)
Final Official Restructuring (-4)	0.024	0.026	0.017
	(0.855)	(0.936)	(0.641)
Final Official Restructuring (-5)	-0.001	-0.002	-0.002
	(-0.027)	(-0.058)	(-0.064)
Final Official Restructuring (-6)		-0.003	-0.006
		(-0.102)	(-0.231)
Final Official Restructuring (-7)		0.013	0.005
		(0.324)	(0.120)
Final Official Restructuring (-8)			0.048
			(1.543)
Final Official Restructuring (-9)			-0.021
			(-0.683)
Final Official Restructuring (-10)			-0.017
			(-0.528)

Final Priv. Haircut Dummy	0.514	0.408	-0.057	-0.401	-0.634
	(0.916)	(0.721)	(-0.068)	(-0.485)	(-0.781)
Final Priv. Haircut Dummy (-1)	0.417	0.204	0.150	-0.086	-0.342
	(0.773)	(0.372)	(0.199)	(-0.116)	(-0.480)
Final Priv. Haircut Dummy (-2)	0.367	0.301	0.006	-0.282	-0.676
	(0.709)	(0.574)	(0.008)	(-0.380)	(-0.943)
Final Priv. Haircut Dummy (-3)	0.326	0.144	-1.021	-1.243	-1.654**
	(0.610)	(0.266)	(-1.306)	(-1.612)	(-2.219)
Final Priv. Haircut Dummy (-4)		-0.362	-0.360	-0.731	-1.215*
		(-0.676)	(-0.475)	(-0.977)	(-1.678)
Final Priv. Haircut Dummy (-5)		-0.651	-1.543**	-1.954***	-2.522***
		(-1.318)	(-2.292)	(-2.900)	(-3.879)
Final Priv. Haircut Dummy (-6)				-0.212	-0.632
				(-0.299)	(-0.914)
Final Priv. Haircut Dummy (-7)				-0.602	-1.277*
				(-0.897)	(-1.937)
Final Priv. Haircut Dummy (-8)					-0.918
					(-1.378)
Final Priv. Haircut Dummy (-9)					-1.956***
					(-3.122)
Final Priv. Haircut Dummy (-10)					-0.371
					(-0.590)

Final Off. Restr. Dummy	0.668	0.780*	0.451	0.717	0.986*
	(1.454)	(1.672)	(0.751)	(1.208)	(1.700)
Final Off. Restr. Dummy (-1)	0.986**	1.187**	1.858***	2.206***	2.509***
	(2.151)	(2.543)	(3.163)	(3.814)	(4.434)
Final Off. Restr. Dummy (-2)	0.637	0.830*	1.491***	1.780***	2.151***
	(1.519)	(1.941)	(2.755)	(3.318)	(4.120)
Final Off. Restr. Dummy (-3)	0.140	0.305	0.586	0.864	1.317**
	(0.338)	(0.726)	(1.098)	(1.624)	(2.559)
Final Off. Restr. Dummy (-4)		0.652	1.016*	1.128**	1.564***
		(1.383)	(1.763)	(1.963)	(2.776)
Final Off. Restr. Dummy (-5)		0.554	1.066*	1.374**	1.784***
		(1.128)	(1.810)	(2.334)	(3.071)
Final Off. Restr. Dummy (-6)				0.728	1.203**
				(1.227)	(2.017)
Final Off. Restr. Dummy (-7)				0.499	1.122*
				(0.811)	(1.856)
Final Off. Restr. Dummy (-8)					1.670***
					(2.612)
Final Off. Restr. Dummy (-9)					0.557
					(0.992)
Final Off. Restr. Dummy (-10)					0.754
					(1.168)

Final Private Haircut	0.013	0.013	0.013
	(0.825)	(0.816)	(0.855)
Final Private Haircut (-1)	-0.001	-0.003	-0.002
	(-0.063)	(-0.189)	(-0.164)
Final Private Haircut (-2)	0.008	0.010	0.010
	(0.588)	(0.695)	(0.740)
Final Private Haircut (-3)	0.032**	0.031**	0.033**
	(2.024)	(1.970)	(2.225)
Final Private Haircut (-4)	-0.005	-0.005	-0.001
	(-0.353)	(-0.317)	(-0.074)
Final Private Haircut (-5)	0.027*	0.029*	0.033**
	(1.787)	(1.894)	(2.282)
Final Private Haircut (-6)		-0.010	-0.009
		(-0.686)	(-0.618)
Final Private Haircut (-7)		-0.001	0.004
		(-0.038)	(0.264)
Final Private Haircut (-8)			-0.005
			(-0.314)
Final Private Haircut (-9)			0.020
			(1.293)
Final Private Haircut (-10)			-0.007
			(-0.473)

Final Official Haircut	0.008	0.008	0.013
	(0.824)	(0.804)	(1.215)
Final Official Haircut (-1)	-0.021**	-0.022**	-0.019*
	(-2.134)	(-2.231)	(-1.858)
Final Official Haircut (-2)	-0.021**	-0.021**	-0.018*
	(-2.064)	(-2.102)	(-1.776)
Final Official Haircut (-3)	-0.008	-0.007	-0.009
	(-0.625)	(-0.592)	(-0.776)
Final Official Haircut (-4)	-0.012	-0.011	-0.008
	(-0.926)	(-0.831)	(-0.602)
Final Official Haircut (-5)	-0.021*	-0.022*	-0.020
	(-1.657)	(-1.702)	(-1.542)
Final Official Haircut (-6)		-0.003	-0.002
		(-0.241)	(-0.180)
Final Official Haircut (-7)		-0.004	-0.003
		(-0.276)	(-0.221)
Final Official Haircut (-8)			-0.007
			(-0.513)
Final Official Haircut (-9)			0.011
			(0.749)
Final Official Haircut (-10)			-0.004
			(-0.196)

	Dependent variable: Priv. Restructuring			Dependent variable: Off. Restructuring		
	(1)	(2)	(3)	(4)	(5)	(6)
Growth per capita (-1)	-0.001	-0.001	-0.001	-0.003	-0.003	-0.003
	(-0.227)	(-0.194)	(-0.199)	(-0.318)	(-0.342)	(-0.304)
Growth per capita (-2)		-0.001	-0.001		0.001	0.001
		(-0.317)	(-0.305)		(0.141)	(0.119)
Growth per capita (-3)			-0.001			0.001
			(-0.252)			(0.152)
Observations	1,759	1,754	1,745	1,759	1,754	1,745
Control	YES	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Number of country_id	116	116	116	116	116	116

In columns 1-3 the dependent variable is the private restructuring, while in columns 4-6 it is official restructuring.

t statistics in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

	Dependent variable: Priv. Haircut			Dependent variable: Off. Haircut		
	(1)	(2)	(3)	(4)	(5)	(6)
Growth per capita (-1)	-0.000	-0.000	-0.000	-0.001	-0.001	-0.001
	(-0.030)	(-0.023)	(-0.034)	(-0.100)	(-0.087)	(-0.082)
Growth per capita (-2)		-0.000	-0.000		-0.001	-0.001
		(-0.088)	(-0.076)		(-0.065)	(-0.066)
Growth per capita (-3)			-0.001			0.000
			(-0.181)			(0.017)
Observations	1,759	1,754	1,745	1,759	1,754	1,745
Control	YES	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Number of country_id	116	116	116	116	116	116

In columns 1-3 the dependent variable is the private haircut, while in columns 4-6 it is official haircut.

t statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1.