

# Internet Appendix for “The Labor Effects of Judicial Bias in Bankruptcy”

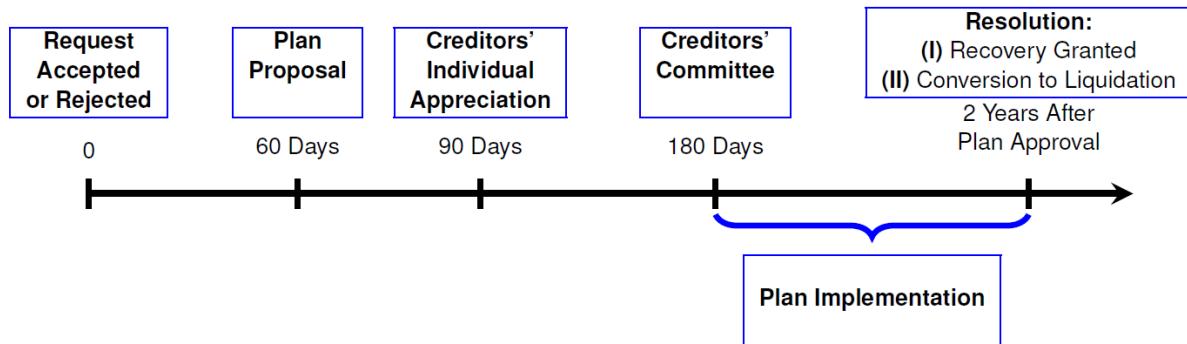
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## **Abstract**

The internet appendix presents additional results that accompany the paper “The Labor Effects of Judicial Bias in Bankruptcy.”

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Figure IA1: Reorganization in Brazil



**Notes:** The figure reports the different stages and the timeline of the reorganization process in Brazil.

Table IA1: Comparing In-sample Firms and Employees with Population Outside State of São Paulo

Panel A: Firm-Level Characteristics					
Variables	Bankrupt Firms in São Paulo		Non-Bankrupt Firms in São Paulo		Population (Excluding São Paulo)
	Mean	Mean	Mean	Difference	
Number of Employees	128	16	112***	15	113***
Total Wage Bill (R\$)	2,128,065	165,897	1,962,168***	131,280	1,996,785***
Log Employment	2.96	1.25	1.71***	1.17	1.79***
Log Total Wage Bill	12.27	9.66	2.61***	9.31	2.96***
High-Skilled Share	0.20	0.11	0.09***	0.09	0.11***
Number of Firms	3,343	1,574,348	4,386,518		

Panel B: Sectoral Composition					
Variables	Bankrupt Firms in São Paulo		Non-Bankrupt Firms in São Paulo		Population (Excluding São Paulo)
	Mean	Mean	Mean	Difference	
Agriculture	0.00	0.06	-0.06***	0.10	-0.10***
Manufacturing	0.52	0.11	0.41***	0.12	0.40***
Retail	0.29	0.43	-0.14***	0.43	-0.14***
Services	0.13	0.35	-0.22***	0.32	-0.19***
Transportation/Utilities/Communications	0.06	0.05	0.01	0.04	0.02**

Panel C: Employee-Level Characteristics					
Variables	Bankrupt Firms in São Paulo		Non-Bankrupt Firms in São Paulo		Population (Excluding São Paulo)
	Mean	Mean	Mean	Difference	
Years of Education	11.59	11.67	0.08	11.34	0.25***
Female	0.34	0.43	-0.09***	0.43	-0.09***
Age	37.70	35.60	2.10***	36.05	1.65***
Tenure (in Months)	60.23	55.15	5.08***	62.38	-2.15***
Log(Wage)	6.80	6.54	0.26***	6.33	0.47***
Number of Employees	426,657	24,108,513		58,929,739	

**Notes:** Panel A table reports descriptive statistics for firms in our sample in the year prior to the bankruptcy event, the population of firms in São Paulo that have never filed for bankruptcy, and the population of firms outside São Paulo. Panel B reports the sectoral distribution of firms in our sample, the population of firms in São Paulo that have never filed for bankruptcy, and the population of firms outside São Paulo. In Panel C, the table reports descriptive statistics for employees in our sample in the year prior to the bankruptcy event, employees in firms in São Paulo that never filed for bankruptcy, and the population of employees outside São Paulo.

Significance levels: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table IA2: Relevant Provisions

<b>Article</b>	<b>Provision</b>	<b>Pro-continuation Decision</b>
Art. 49, Par. 3	Certain Secured Claims Excluded from Automatic Stay	Not Excluded
Art. 6, Par. 3	Non-extendable 180 Days for Reorganization Plan	Extended
Art. 73, 61	Request to Convert Reorganization into Liquidation	Denied
Art. 64	Creditors Request Managers' Removal	Denied
	Liquidation Request by Creditors	Denied

**Notes:** The table lists the five critical bankruptcy provisions – and relevant articles of the Brazilian bankruptcy code – used to examine the effect of pro-continuation bias on judicial decisions.

Table IA3: The Effect of Pro-continuation Bias on Case-Level Decisions

Outcomes					
	Liquidation	(2)	(3)	(4)	(5)
Dismissed	Conversion to Liquidation {0,1}	Pro-continuation Article 180	Pro-continuation Article 49	Pro-continuation Article 49	Pro-continuation Article 64
Continuation Bias	0.301*** (0.088)	-0.308*** (0.039)	0.104** (0.040)	0.071*** (0.017)	-0.002 (0.002)
R <sup>2</sup>	0.124	0.036	0.039	0.024	0.353
Observations	2,758	703	703	703	703
JD × Bankruptcy Year-Quarter FE	✓	✓	✓	✓	✓

**Notes:** The table reports the relation between pro-continuation bias and the type of bankruptcy resolution in liquidations and reorganization by employing equation (3). In column (1), the dependent variable is an indicator variable equal to 1 if a liquidation case is dismissed, and 0 otherwise. In column (2), the dependent variable is an indicator variable equal to 1 if a reorganization case is converted into liquidation, and 0 otherwise. In columns (3) to (5), the dependent variables are indicator variables equal to 1 if courts in reorganization cases adopt pro-continuation decisions, namely extending of the time available to present a reorganization plan (Article 180), imposing an automatic stay on assets for which the law mandates exclusion (Article 49), or granting a request to remove the current management of the bankrupt firm (Article 64), respectively, and 0 otherwise. Continuation bias is the leave-one-out measure of continuation bias at the court level described in Section 4.1. Standard errors are clustered at the judicial-district and bankruptcy-year-quarter level.

Significance levels: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table IA4: In-sample Probability

Outcomes	(1)	(2)	(3)
	Present in RAIS {0,1}		
	T=1	T=3	T=5
Continuation Bias	0.018 (0.014)	0.008 (0.010)	0.006 (0.010)
R <sup>2</sup>	0.062	0.057	0.060
Observations	426,657	426,657	426,657

**Notes:** The table reports the effects of pro-continuation bias on the probability of employees in firms that file for bankruptcy to be present in the RAIS sample in the post-bankruptcy period. The outcome variable is an indicator variable equal to 1 if the worker is formally employed (observed in RAIS) at different horizons after the bankruptcy filing ( $T = 1, 3$ , and 5 years after the filing), and 0 otherwise. Continuation bias is the leave-one-out measure of continuation bias at the court level described in Section 4.1. Our sample includes full-time employees present as of  $T = -1$  in firms that file for bankruptcy at  $T = 0$ . Employee controls include years of education, age, and gender observed as of  $T = -1$ . Standard errors are clustered at the judicial-district and bankruptcy-year-quarter level.

Significance levels: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ .

Table IA5: Main Results with Estimation-Error-Corrected P-values

Outcomes	Source		
		(1)	(2)
		Estimated Coefficients and Standard Errors	Corrected p-values
Continuation Years (Firm)	Table III, Panel A, Column (4)	0.338*** (0.083)	[0.016]
Stay Years (Employees)	Table III, Panel B, Column (4)	0.423*** (0.138)	[0.042]
Log Wage ( $t=3$ ) - Log Wage ( $t=1$ ) (Correction with Informal Wages)	Table IV, Panel A, Column (2)	-0.046*** (0.006)	[0.002]
Log Wage ( $t=5$ ) - Log Wage ( $t=1$ ) (Correction with Informal Wages)	Table IV, Panel A, Column (3)	-0.044*** (0.013)	[0.006]
Log Wage ( $t=3$ ) - Log Wage ( $t=1$ ) (2SLS Estimation)	Table IV, Panel B, Column (2)	-0.109*** (0.033)	[0.041]
Log Wage ( $t=5$ ) - Log Wage ( $t=1$ ) (2SLS Estimation)	Table IV, Panel B, Column (3)	-0.105* (0.061)	[0.105]
Fixed Effects and Employee Controls			
Observations	Yes 426,657	Yes 426,657	

**Notes:** The table repeats the baseline results of the paper in column (1) and presents the respective p-values that adjust for estimation error in the construction of our continuation-bias measure following ? and ? in column (2). Specifically, we cluster bootstrap our specification by (i) drawing 1,000 samples at the judicial-district level with replacement, (ii) generating the bias measure within each bootstrapped sample, and (iii) re-estimating the regression specification described in equation (2) and our two-stage least-squares regressions within the sampled data. We extract the parameter values and generate a distribution of t-statistic values and calculate the standard errors.

Significance levels: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Table IA6: Caseload and Case Assignment

Outcomes	(1)	(2)
	1(Assigned)	
Cases Assigned from (-7,-1)	-0.001 (0.002)	
Cases Assigned from (-14,-1)		-0.000 (0.002)
R <sup>2</sup>	0.147	0.147
Observations	17,365	17,365

**Notes:** The table examines the relationship between a court's caseload and the probability of a case being assigned to the specific court within a judicial district. The outcome variable is an indicator variable equal to 1 for the court that the case is assigned to, and 0 for any potential candidate court within the judicial district. The caseload is estimated as the number of bankruptcy cases assigned to a specific court within the previous week (column (1)) or within the previous two weeks (column (2)). Our sample includes bankruptcy cases from June 2005 to 2015. Standard errors are clustered at the judicial-district and bankruptcy-year-quarter level.

Significance levels: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ .

Table IA7: Liquidation Vs. Reorganization Sample

Outcomes	(1)	(2)
	Log Wage ( $t=5$ ) - Log Wage ( $t=-1$ )	
	Liquidation	Reorganizations
Continuation Bias	-0.049*** (0.012)	0.047 (0.061)
R <sup>2</sup>	0.248	0.230
Observation	386,889	39,757

**Notes:** The table reports the effects of pro-continuation bias on employees' wages by estimating the regression specification described in equation (2) separately for liquidation and reorganization cases. The outcome variable is the log of average employee wages five years after the bankruptcy filing ( $T = 5$ ) minus the log of average employee wages observed in the year before bankruptcy filing ( $T = -1$ ). Continuation bias is the leave-one-out measure of continuation bias at the court level described in Section 4.1. Our sample includes full-time employees present as of  $T = -1$  in firms that file for bankruptcy at  $T = 0$ . Employees who exit the sample at each horizon are assigned the average wage observed in the informal labor market as reported in the Brazilian National Household Sample Survey (PNAD) and the Brazilian Population Census. Employee controls include years of education, age, and gender observed as of  $T = -1$ . Standard errors are clustered at the judicial-district and bankruptcy-year-quarter level. Significance levels: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ .