

Online Appendix for “Does Corruption Deter Female Leadership in Firms?”

July 14, 2025

A Population Weighting and Alternative Corruption Measures

Table A1: The effect of corruption on the share of leadership positions held by women.

	Employers	Managers Directors & Executives	Leadership
Panel A: OLS with Baseline Controls with Population as Analytic Weights			
Corruption per-capita	-0.236** (0.086)	-0.222*** (0.066)	-0.197*** (0.057)
N	878	930	933
adj. R^2	0.073	0.068	0.097
Panel B: OLS with Baseline Controls - Pre-2010 Data			
Corruption per-capita	-0.096 (0.214)	-0.291** (0.118)	-0.190 (0.117)
N	496	523	525
adj. R^2	0.011	0.061	0.060
Panel C: OLS with Baseline Controls - Ferraz and Finan (2011) Data			
Corruption per-capita	0.008 (0.079)	-0.121** (0.049)	-0.060 (0.037)
N	458	472	475
adj. R^2	0.042	0.115	0.088
Panel D: OLS with Baseline Controls - Controlling for Number of Audits			
Corruption per-capita	-0.297** (0.138)	-0.214** (0.084)	-0.178** (0.077)
N	878	930	933
adj. R^2	0.023	0.053	0.058
Panel E: OLS with Baseline Controls - Dummy for Multiple Audits			
Corruption per-capita	-0.293** (0.138)	-0.214** (0.083)	-0.175** (0.077)
N	878	930	933
adj. R^2	0.023	0.050	0.057

Notes: *** p -value < 0.01, ** p -value < 0.05, * p -value < 0.1. See Table 3 for a list of the baseline controls used in regressions. Standard errors clustered by state in parentheses. Panel A weights each observation (municipality) OLS regression according to its population. Panel D includes a control for the number of times the municipality has been audited. Panel E includes a dummy for whether the municipality has been audited more than once.

Table A2: The effect of corruption on the share of women that are in the labor force *and* the share of the female labor force that hold leadership positions.

	Labor Force	Employers	Managers Directors & Executives	Leadership
Panel A: OLS with Baseline Controls with Population as Analytic Weights				
Corruption per-capita	-0.070 (0.091)	-0.015*** (0.004)	-0.021** (0.007)	-0.035*** (0.009)
<i>N</i>	935	935	935	935
adj. <i>R</i> ²	0.785	0.442	0.432	0.536
Panel B: OLS with Baseline Controls - Pre-2010 Data				
Corruption per-capita	-0.070 (0.083)	-0.008 (0.010)	-0.017 (0.014)	-0.025 (0.020)
<i>N</i>	527	527	527	527
adj. <i>R</i> ²	0.698	0.239	0.214	0.286
Panel C: OLS with Baseline Controls - Ferraz and Finan (2011) Data				
Corruption per-capita	-0.024 (0.025)	-0.003 (0.005)	-0.006 (0.006)	-0.009 (0.009)
<i>N</i>	476	476	476	476
adj. <i>R</i> ²	0.712	0.303	0.211	0.307
Panel D: OLS with Baseline Controls - Controlling for Number of Audits				
Corruption per-capita	-0.094 (0.072)	-0.017*** (0.005)	-0.017* (0.009)	-0.034*** (0.012)
<i>N</i>	935	935	935	935
adj. <i>R</i> ²	0.697	0.239	0.193	0.274
Panel E: OLS with Baseline Controls - Dummy for Multiple Audits				
Corruption per-capita	-0.094 (0.072)	-0.017*** (0.005)	-0.017* (0.009)	-0.034*** (0.012)
<i>N</i>	935	935	935	935
adj. <i>R</i> ²	0.696	0.238	0.193	0.274

Notes: *** *p*-value < 0.01, ** *p*-value < 0.05, * *p*-value < 0.1. See Table 3 for a list of the baseline controls used in regressions. Standard errors clustered by state in parenthesis. Panel A weights each observation (municipality) OLS regression according to its population. Panel D includes a control for the number of times the municipality has been audited. Panel E includes a dummy for whether the municipality has been audited more than once.

B Main Results with Industry Share Controls

Table B1: Summary statistics for employment shares across industries

Variable	Mean	Std. Dev.	Min	Max
Agriculture	0.327	0.148	0.032	0.847
Extractive	0.005	0.017	0.000	0.234
Manufacturing	0.098	0.092	0.000	0.622
Utilities (Electricity, Water, Gas)	0.009	0.007	0.000	0.064
Construction	0.066	0.027	0.004	0.227
Retail and Wholesale	0.134	0.049	0.022	0.310
Transportation	0.028	0.016	0.000	0.151
Accommodation	0.033	0.018	0.000	0.183
Banking and Finance	0.005	0.004	0.000	0.026
Professional Services	0.025	0.017	0.000	0.118
Education	0.077	0.041	0.010	0.262
Healthcare	0.029	0.015	0.000	0.124
Public Administration	0.085	0.054	0.014	0.547
Domestic Services	0.067	0.027	0.005	0.187

Notes: Summary statistics presented for the full sample of 935 municipalities with available corruption audit data.

Table B2: The effect of corruption on the share of leadership positions held by women; industry shares included as additional controls.

	Employers	Managers Directors & Executives	Leadership
<i>Panel A: Full Sample</i>			
Corruption per-capita	-0.143 (0.131)	-0.159 (0.093)	-0.132 (0.083)
N	878	930	933
adj. R^2	0.037	0.044	0.062
<i>Panel B: "Corrupt" Sectors Only</i>			
Corruption per-capita	-0.351 (0.226)	0.529* (0.268)	0.164 (0.199)
N	553	639	719
adj. R^2	0.070	0.059	0.069

Notes: *** p -value < 0.01, ** p -value < 0.05, * p -value < 0.1. See Table 3 for a list of the baseline controls. Standard errors clustered by state in parentheses. See Table B1 for a list of sectors and summary statistics.





Table B3: The effect of corruption on the share of women that are in the labor force *and* the share of the female labor force that hold leadership positions.

	Labor Force	Employers	Managers Directors & Executives	Leadership
<i>Panel A: Full Sample</i>				
Corruption per-capita	0.002 (0.066)	-0.003 (0.005)	0.001 (0.009)	-0.002 (0.012)
N	935	935	935	935
adj. R^2	0.774	0.290	0.259	0.355
<i>Panel B: "Corrupt" Sectors Only</i>				
Corruption per-capita	-0.011 (0.010)	-0.005** (0.002)	-0.007** (0.003)	-0.011** (0.005)
N	935	935	935	935
adj. R^2	0.821	0.421	0.481	0.479

Notes: Notes: *** p -value < 0.01 , ** p -value < 0.05 , * p -value < 0.1 . See Table 3 for a list of the baseline controls. Standard errors clustered by state in parentheses. See Table B1 for a list of sectors and summary statistics.

C Sample Consistency

Table C1: Summary statistics for reduced samples of Table 4

Variable	Obs	Mean	Std. Dev.	Min	Max
Sample of Table 4, Panels A/C, Column 1  in Figure C1					
Outcome: <i>Female employers divided by total employers in the municipality.</i>					
Employers	878	0.263	0.184	0.000	1.000
Corruption					
(Log) Corruption per-capita	878	0.426	0.067	0.181	0.600
Municipal Level Controls (Baseline Controls)					
GDP per-capita (R\$)	878	12,004.5	17,790.1	2,261.63	298,819.8
Population Density	878	85.456	351.998	0.225	6140.697
Size of Informal Sector (%)	878	0.590	0.191	0.128	0.970
College Degree (%)	878	0.051	0.030	0.003	0.235
Male (%)	878	0.504	0.015	0.465	0.658
Working Age (18-65 years) (%)	878	0.597	0.046	0.392	0.698
Urban (%)	878	0.631	0.215	0.050	0.999
Sample of Table 4, Panels B/D, Column 1  in Figure C1					
Outcome: <i>Female employers in corrupt sectors divided by total employers in corrupt sectors.</i>					
Employers	553	0.273	0.140	0.000	1.000
Corruption					
(Log) Corruption per-capita	553	0.410	0.067	0.181	0.583
Municipal Level Controls (Baseline Controls)					
GDP per-capita (R\$)	553	13,897.6	17677.1	2582.37	234,013.4
Population Density	553	111.182	435.759	0.372	6140.697
Size of Informal Sector (%)	553	0.537	0.188	0.170	0.970
College Degree (%)	553	0.060	0.033	0.003	0.235
Male (%)	553	0.502	0.014	0.465	0.553
Working Age (18-65 years) (%)	553	0.607	0.045	0.392	0.696
Urban (%)	553	0.687	0.206	0.085	0.999
Sample of Table 4, Panels B/D, Column 2  in Figure C1					
Outcome: <i>Female Managers, Directors, or Executives (MDE) in corrupt sect. div. by total MDE in corrupt sectors</i>					
Managers, Directors, or Executives	639	0.207	0.259	0.000	1.000
Corruption					
(Log) Corruption per-capita	639	0.416	0.068	0.181	0.600
Municipal Level Controls (Baseline Controls)					
GDP per-capita (R\$)	639	13,563.0	16,797.9	2,575.2	234,013.4
Population Density	639	103.660	410.467	0.232	6140.697
Size of Informal Sector (%)	639	0.547	0.189	0.128	0.970
College Degree (%)	639	0.057	0.032	0.006	0.235
Male (%)	639	0.504	0.015	0.465	0.658
Working Age (18-65 years) (%)	639	0.606	0.043	0.462	0.698
Urban (%)	639	0.672	0.208	0.085	0.999
Sample of Table 4, Panels B/D, Column 3  in Figure C1					
Outcome: <i>Female leaders divided by total leadership positions in the municipality.</i>					
Leadership	719	0.197	0.240	0.000	1.000
Corruption					
(Log) Corruption per-capita	719	0.419	0.067	0.181	0.600
Municipal Level Controls (Baseline Controls)					
GDP per-capita (R\$)	719	12,802.7	16,037.850	2,575.211	234,013.4
Population Density	719	96.584	387.725	0.232	6140.697
Size of Informal Sector (%)	719	0.563	0.191	0.128	0.970
College Degree (%)	719	0.055	0.031	0.003	0.235
Male (%)	719	0.504	0.015	0.465	0.658
Working Age (18-65 years) (%)	719	0.602	0.046	0.392	0.698
Urban (%)	719	0.659	0.210	0.085	0.999

Notes: In Table 2, some variables had less observations because some municipalities are small and have *no* leadership positions (e.g. *Employment* with 878 observations) making the denominator zero. Other municipalities had no employment (or no leadership positions) in the corrupt sectors. Here, we restrict the sample to provide summary statistics for those observations we have complete data for all outcome variables.

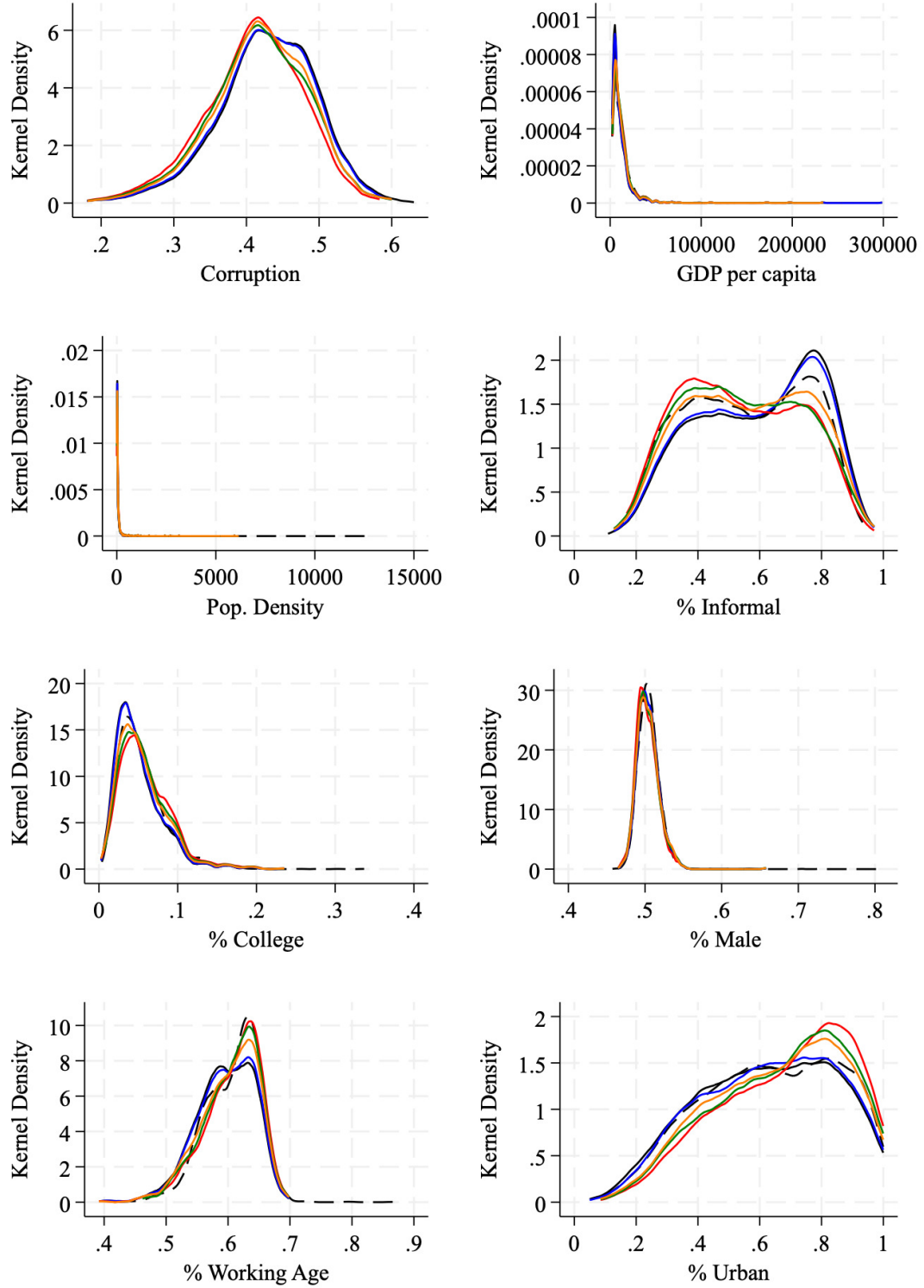


Figure C1: Kernel densities distribution of the independent variables

Note: This figure plots the kernel densities of the explanatory variables for the different samples in the main results (Table 4). — Panels A/C, Column 1; — Panels B/D, Column 1; — Panels B/D, Column 2; — Panels B/D, Column 3. For reference, we also plot the distribution of the full sample (solid black line, —), and of all Brazilian municipalities eligible for treatment (dashed black line, - -).

D “Non-Corrupt” Sectors

Table D1: Summary statistics for outcome measures in corrupt vs. non-corrupt sectors

Outcomes - “Corrupt” Sectors Only¹					
Variable	Obs	Mean	Std. Dev.	Min	Max
Female Presence in Leadership Positions²					
<i>Female leaders in corrupt sectors divided by total leadership positions in corrupt sectors.</i>					
Employer	553	0.188	0.242	0	1
Managers, Directors, or Executives	639	0.207	0.259	0	1
Leadership	719	0.197	0.240	0	1
Female Labor Force in “Corrupt” Sector					
<i>Female workers in corrupt sectors divided by total number of working women.</i>					
Female Labor Force Participation	935	0.021	0.021	0.001	0.181
Female Labor Force Job Type					
<i>Female leaders in corrupt sectors divided by total number of female workers in corrupt sectors</i>					
Employer	935	0.001	0.003	0	0.027
Managers, Directors, or Executives	935	0.001	0.004	0	0.045
Leadership	935	0.002	0.006	0	0.072
Outcomes - “Non-Corrupt” Sectors Only³					
Variable	Obs	Mean	Std. Dev.	Min	Max
Female Presence in Leadership Positions²					
<i>Female leaders in non-corrupt sectors divided by total leadership positions in non-corrupt sectors.</i>					
Employer	863	0.277	0.196	0	1
Managers, Directors, or Executives	928	0.386	0.180	0	1
Leadership	932	0.352	0.151	0	1
Female Labor Force in “Non-Corrupt”					
<i>Female workers in non-corrupt sectors divided by total number of working age women.</i>					
Female Labor Force Participation	935	0.309	0.021	0.149	0.329
Female Labor Force Job Type					
<i>Female leaders in non-corrupt sectors divided by total number of female workers in non-corrupt sectors.</i>					
Employer	935	0.001	0.002	0	0.024
Managers, Directors, or Executives	935	0.001	0.003	0	0.046
Leadership	935	0.002	0.005	0	0.070

Notes: ¹“Corrupt” sectors are extractive industries, manufacturing, construction, and transportation and communication, following [Bologna and Ross \(2015\)](#). ²The observation numbers may be lower because some municipalities are small and have *no* leadership positions in these sectors, making the denominator zero. All municipalities have women and working women and thus there are no undefined observations when using the other measures. ³ “Non-Corrupt” sectors are defined as all remaining sectors.

Table D2: The effect of corruption on the share of leadership positions held by women.

	Employers	Managers Directors & Executives	Leadership
Panel A: OLS Estimates, “Corrupt” Sectors Only (Same as Table ??, Panel B)			
Corruption per-capita	-0.477* (0.251)	0.338 (0.225)	-0.021 (0.201)
N	553	639	719
adj. R^2	0.070	0.040	0.058
Panel B: OLS Estimates, “Non-Corrupt” Sectors Only			
Corruption per-capita	-0.301** (0.143)	-0.277*** (0.095)	-0.206** (0.092)
N	863	928	932
adj. R^2	0.050	0.048	0.065
Panel C: 2SLS Estimates, “Corrupt” Sectors Only (Same as Table ??, Panel D)			
Corruption per-capita	-0.173 (0.997)	0.903 (0.559)	0.204 (0.568)
N	551	637	716
F -Statistic	12.028	24.814	25.575
J -Statistic	0.801	4.639	5.002
Panel D: 2SLS Estimates, “Non-Corrupt” Sectors Only			
Corruption per-capita	-0.784 (0.681)	-0.649* (0.342)	-0.591 (0.376)
N	857	922	926
F -Statistic	23.065	27.422	27.349
J -Statistic	8.634	1.808	2.212

Notes: *** p -value < 0.01 , ** p -value < 0.05 , * p -value < 0.1 . See Table 3 for a list of the baseline controls. Standard errors clustered by state in parentheses. Instruments for **Panels C** and **D** include two measures of political participation (whether councils exist and the number of councils that are active), an indicator for management capacity, and whether the municipality has a judge.

Table D3: The effect of corruption on the share of women that are in the labor force *and* the share of the female labor force that hold leadership positions.

	Labor Force	Employers	Managers Directors & Executives	Leadership
Panel A: OLS Estimates, “Corrupt” Sectors Only (Same as Table ??, Panel B)				
Corruption per-capita	-0.055*** (0.018)	-0.007*** (0.002)	-0.010*** (0.003)	-0.017*** (0.004)
<i>N</i>	935	935	935	935
adj. <i>R</i> ²	0.356	0.360	0.429	0.422
Panel B: OLS Estimates, “Non-Corrupt” Sectors Only				
Corruption per-capita	-0.036 (0.067)	-0.004*** (0.001)	-0.009*** (0.002)	-0.014*** (0.003)
<i>N</i>	935	935	935	935
adj. <i>R</i> ²	0.671	0.452	0.477	0.481
Panel C: 2SLS Estimates, “Corrupt” Sectors Only (Same as Table ??, Panel D)				
Corruption per-capita	-0.034 (0.063)	-0.023*** (0.004)	-0.039*** (0.007)	-0.062*** (0.010)
<i>N</i>	929	929	929	929
<i>F</i> -Statistic	25.775	25.775	25.775	25.775
<i>J</i> -Statistic	5.296	4.282	6.095	5.717
Panel D: 2SLS Estimates, “Non-Corrupt” Sectors Only				
Corruption per-capita	-0.073 (0.249)	-0.016*** (0.002)	-0.037*** (0.005)	-0.053*** (0.007)
<i>N</i>	929	929	929	929
<i>F</i> -Statistic	25.775	25.775	25.775	25.775
<i>J</i> -Statistic	5.274	3.612	3.954	3.826

Notes: *** *p*-value < 0.01, ** *p*-value < 0.05, * *p*-value < 0.1. See Table 3 for a list of the baseline controls. Standard errors clustered by state in parentheses. Instruments for **Panels C** and **D** include two measures of political participation (whether councils exist and the number of councils that are active), an indicator for management capacity, and whether the municipality has a judge.

E Instrumental Variable Analysis

Table E1: First Stage Estimates for Table 4, Panel C

<i>First-Stage for:</i>	Employers	Managers Directors & Executives	Leadership
Dependent Variable:	<i>Corruption per-capita</i>		
<i>Excluded instruments</i>			
Number of Councils	-0.001 (0.004)	-0.000 (0.004)	-0.000 (0.004)
Councils installed	-0.004 (0.003)	-0.005 (0.003)	-0.004 (0.003)
Management Index	-0.008*** (0.002)	-0.008*** (0.002)	-0.008*** (0.002)
Has Judge	-0.020*** (0.004)	-0.020*** (0.004)	-0.021*** (0.004)
<i>Included instruments</i>			
Log(GDP per capita)	-0.004 (0.004)	-0.004 (0.003)	-0.004 (0.003)
Log(Pop. Density)	-0.013*** (0.002)	-0.013*** (0.003)	-0.013*** (0.003)
% Informal	0.049** (0.022)	0.043** (0.020)	0.043** (0.020)
% College Degree	-0.249** (0.095)	-0.223** (0.094)	-0.220** (0.094)
% Working Age	-0.074 (0.093)	-0.117 (0.095)	-0.113 (0.094)
% Male	0.270 (0.183)	0.228 (0.182)	0.232 (0.182)
% Urban	0.035** (0.014)	0.034** (0.013)	0.034** (0.013)
<i>N</i>	872	924	927
<i>F</i> -Statistic	24.122	26.803	26.997
<i>J</i> -Statistic	6.192	0.970	1.692

Notes: *** p -value < 0.01, ** p -value < 0.05, * p -value < 0.1. Standard errors clustered by state in parentheses. Instruments for corruption include two measures of political participation – number of existent councils (*Number of Councils*) and how many are active (*Councils installed*) –, an indicator for management capacity (*Management Index*), and whether the municipality has a judge (*Has Judge*). See Table 3 for summary statistics for instrumental variables.

Table E2: First Stage Estimates for Table 4, Panel D

<i>First-Stage for:</i>	Employers	Managers Directors & Executives	Leadership
Dependent Variable:	<i>Corruption per-capita</i>		
<i>Excluded instruments</i>			
Number of Councils	-0.004 (0.003)	-0.004 (0.003)	-0.005 (0.003)
Councils installed	-0.001 (0.004)	-0.002 (0.003)	-0.003 (0.003)
Management Index	-0.006*** (0.002)	-0.007*** (0.002)	-0.007*** (0.002)
Has Judge	-0.015*** (0.004)	-0.020*** (0.004)	-0.021*** (0.004)
<i>Included instruments</i>			
Log(GDP per capita)	-0.002 (0.005)	-0.004 (0.004)	-0.004 (0.004)
Log(Pop. Density)	-0.016*** (0.003)	-0.014*** (0.003)	-0.014*** (0.003)
% Informal	0.076** (0.030)	0.063*** (0.019)	0.062*** (0.021)
% College Degree	-0.199 (0.131)	-0.220* (0.111)	-0.199* (0.115)
% Working Age	0.015 (0.101)	-0.023 (0.101)	-0.009 (0.081)
% Male	0.293 (0.240)	0.368* (0.198)	0.374* (0.192)
% Urban	0.039** (0.019)	0.046*** (0.015)	0.043*** (0.016)
<i>N</i>	551	637	716
<i>F</i> -Statistic	12.028	24.814	25.575
<i>J</i> -Statistic	0.801	4.639	5.002

Notes: *** p -value < 0.01, ** p -value < 0.05, * p -value < 0.1. Standard errors clustered by state in parentheses. Instruments for corruption include two measures of political participation – number of existent councils (*Number of Councils*) and how many are active (*Councils installed*) –, an indicator for management capacity (*Management Index*), and whether the municipality has a judge (*Has Judge*). See Table 3 for summary statistics for instrumental variables.

Table E3: First Stage Estimates for Table 5, Panel C

	Labor Force	Employers	Managers Directors & Executives	Leadership
Dependent Variable:	<i>Corruption per-capita</i>			
<i>Excluded instruments</i>				
Number of Councils	-0.000 (0.004)	-0.000 (0.004)	-0.000 (0.004)	-0.000 (0.004)
Councils installed	-0.004 (0.003)	-0.004 (0.003)	-0.004 (0.003)	-0.004 (0.003)
Management Index	-0.008*** (0.002)	-0.008*** (0.002)	-0.008*** (0.002)	-0.008*** (0.002)
Has Judge	-0.021*** (0.004)	-0.021*** (0.004)	-0.021*** (0.004)	-0.021*** (0.004)
<i>Included instruments</i>				
Log(GDP per capita)	-0.004 (0.003)	-0.004 (0.003)	-0.004 (0.003)	-0.004 (0.003)
Log(Pop. Density)	-0.014*** (0.003)	-0.014*** (0.003)	-0.014*** (0.003)	-0.014*** (0.003)
% Informal	0.043** (0.021)	0.043** (0.021)	0.043** (0.021)	0.043** (0.021)
% College Degree	-0.212** (0.095)	-0.212** (0.095)	-0.212** (0.095)	-0.212** (0.095)
% Working Age	-0.113 (0.094)	-0.113 (0.094)	-0.113 (0.094)	-0.113 (0.094)
% Male	0.236 (0.183)	0.236 (0.183)	0.236 (0.183)	0.236 (0.183)
% Urban	0.034** (0.013)	0.034** (0.013)	0.034** (0.013)	0.034** (0.013)
<i>N</i>	929	929	929	929
<i>F</i> -Statistic	25.775	25.775	25.775	25.775
<i>J</i> -Statistic	4.980	4.101	1.606	2.573

Notes: *** p -value < 0.01, ** p -value < 0.05, * p -value < 0.1. Standard errors clustered by state in parentheses. Instruments for corruption include two measures of political participation – number of existent councils (*Number of Councils*) and how many are active (*Councils installed*) –, an indicator for management capacity (*Management Index*), and whether the municipality has a judge (*Has Judge*). See Table 3 for summary statistics for instrumental variables.

Table E4: First Stage Estimates for Table 5, Panel D

	Labor Force	Employers	Managers Directors & Executives	Leadership
Dependent Variable:	<i>Corruption per-capita</i>			
<i>Excluded instruments</i>				
Number of Councils	-0.000 (0.004)	-0.000 (0.004)	-0.000 (0.004)	-0.000 (0.004)
Councils installed	-0.004 (0.003)	-0.004 (0.003)	-0.004 (0.003)	-0.004 (0.003)
Management Index	-0.008*** (0.002)	-0.008*** (0.002)	-0.008*** (0.002)	-0.008*** (0.002)
Has Judge	-0.021*** (0.004)	-0.021*** (0.004)	-0.021*** (0.004)	-0.021*** (0.004)
<i>Included instruments</i>				
Log(GDP per capita)	-0.004 (0.003)	-0.004 (0.003)	-0.004 (0.003)	-0.004 (0.003)
Log(Pop. Density)	-0.014*** (0.003)	-0.014*** (0.003)	-0.014*** (0.003)	-0.014*** (0.003)
% Informal	0.043** (0.021)	0.043** (0.021)	0.043** (0.021)	0.043** (0.021)
% College Degree	-0.212** (0.095)	-0.212** (0.095)	-0.212** (0.095)	-0.212** (0.095)
% Working Age	-0.113 (0.094)	-0.113 (0.094)	-0.113 (0.094)	-0.113 (0.094)
% Male	0.236 (0.183)	0.236 (0.183)	0.236 (0.183)	0.236 (0.183)
% Urban	0.034** (0.013)	0.034** (0.013)	0.034** (0.013)	0.034** (0.013)
<i>N</i>	929	929	929	929
<i>F</i> -Statistic	25.775	10.611	10.611	10.611
<i>J</i> -Statistic	3.077	2.711	6.260	5.307

Notes: *** p -value < 0.01, ** p -value < 0.05, * p -value < 0.1. Standard errors clustered by state in parentheses. Instruments for corruption include two measures of political participation – number of existent councils (*Number of Councils*) and how many are active (*Councils installed*) –, an indicator for management capacity (*Management Index*), and whether the municipality has a judge (*Has Judge*). See Table 3 for summary statistics for instrumental variables.

Table E5: The effect of corruption on the share of women that are in the labor force *and* the share of the female labor force that hold leadership positions: just-identified IVs

	Employers	Managers Directors & Executives	Leadership
Panel A: 2SLS Estimates, IV: Number of Council Installed			
Corruption per-capita	-1.774* (1.061)	-0.612 (1.042)	-1.080 (0.787)
<i>N</i>	872	924	927
<i>F</i> -Statistic	14.004	21.817	21.676
Panel B: 2SLS Estimates, IV: Number of Councils			
Corruption per-capita	-2.485** (1.148)	-1.116 (0.756)	-1.322* (0.763)
<i>N</i>	872	924	927
<i>F</i> -Statistic	8.852	9.870	9.863
Panel C: 2SLS Estimates, IV: Management Capacity Index			
Corruption per-capita	-0.872 (0.818)	-0.394 (0.363)	-0.419 (0.339)
<i>N</i>	872	924	927
<i>F</i> -Statistic	24.081	29.454	29.420
Panel D: 2SLS Estimates, IV: Has Judge			
Corruption per-capita	-0.425 (0.768)	-0.406 (0.527)	-0.479 (0.547)
<i>N</i>	872	924	927
<i>F</i> -Statistic	42.238	40.001	40.736

Notes: *** p -value < 0.01 , ** p -value < 0.05 , * p -value < 0.1 . Standard errors clustered by state in parentheses. This table replicates the results of Table 4, Panel C, using each of the four instrumental variables separately. Instruments for corruption include two measures of political participation – number of existent councils (*Number of Councils*) and how many are active (*Councils installed*) –, an indicator for management capacity (*Management Index*), and whether the municipality has a judge (*Has Judge*). See Table 3 for a list of the baseline controls and summary statistics for instrumental variables.

Table E6: The effect of corruption on the share of women that are in the labor force *and* the share of the female labor force that hold leadership positions, “corrupt sectors”: just-identified IVs

	Employers	Managers Directors & Executives	Leadership
Panel A: 2SLS Estimates, IV: Council Installed			
Corruption per-capita	-1.907 (2.396)	-2.795 (1.835)	-2.279 (1.525)
<i>N</i>	551	637	716
<i>F</i> -Statistic	5.184	9.050	11.750
Panel B: 2SLS Estimates, IV: Number of Councils			
Corruption per-capita	-0.715 (1.925)	-0.474 (1.382)	-0.996 (1.027)
<i>N</i>	551	637	716
<i>F</i> -Statistic	16.224	16.909	21.095
Panel C: 2SLS Estimates, IV: Management Capacity Index			
Corruption per-capita	0.081 (1.367)	0.126 (0.706)	-0.408 (0.940)
<i>N</i>	872	924	927
<i>F</i> -Statistic	20.078	20.445	20.369
Panel D: 2SLS Estimates, IV: Has Judge			
Corruption per-capita	-0.153 (1.038)	2.031*** (0.700)	1.129** (0.540)
<i>N</i>	872	924	927
<i>F</i> -Statistic	25.017	49.746	51.286

Notes: *** p -value < 0.01 , ** p -value < 0.05 , * p -value < 0.1 . Standard errors clustered by state in parentheses. This table replicates the results of Table 4, Panel D, using each of the four instrumental variables separately. Instruments for corruption include two measures of political participation – number of existent councils (*Number of Councils*) and how many are active (*Councils installed*) –, an indicator for management capacity (*Management Index*), and whether the municipality has a judge (*Has Judge*). See Table 3 for a list of the baseline controls and summary statistics for instrumental variables.

Table E7: The effect of corruption on the share of women that are in the labor force *and* the share of the female labor force that hold leadership positions: just-identified IVs

	Labor Force	Employers	Managers Directors & Executives	Leadership
Panel A: 2SLS Estimates, IV: Number of Councils Installed				
Corruption per-capita	-0.647* (0.369)	-0.131*** (0.047)	-0.187** (0.090)	-0.318** (0.130)
<i>N</i>	929	929	929	929
<i>F</i> -Statistic	20.898	20.898	20.898	20.898
Panel B: 2SLS Estimates, IV: Number of Councils				
Corruption per-capita	-1.260* (0.652)	-0.132** (0.055)	-0.186** (0.093)	-0.317** (0.139)
<i>N</i>	929	929	929	929
<i>F</i> -Statistic	9.467	9.467	9.467	9.467
Panel C: 2SLS Estimates, IV: Management Capacity Index				
Corruption per-capita	0.172 (0.345)	-0.039 (0.030)	-0.080** (0.039)	-0.120** (0.059)
<i>N</i>	929	929	929	929
<i>F</i> -Statistic	29.669	29.669	29.669	29.669
Panel D: 2SLS Estimates, IV: Has Judge				
Corruption per-capita	-0.244 (0.193)	-0.056* (0.032)	-0.076* (0.045)	-0.132** (0.067)
<i>N</i>	929	929	929	929
<i>F</i> -Statistic	40.110	40.110	40.110	40.110

Notes: *** p -value < 0.01 , ** p -value < 0.05 , * p -value < 0.1 . Standard errors clustered by state in parentheses. This table replicates the results of Table 5, Panel C, using each of the four instrumental variables separately. Instruments for corruption include two measures of political participation – number of existent councils (*Number of Councils*) and how many are active (*Councils installed*) –, an indicator for management capacity (*Management Index*), and whether the municipality has a judge (*Has Judge*). See Table 3 for a list of the baseline controls and summary statistics for instrumental variables.

Table E8: The effect of corruption on the share of women that are in the labor force *and* the share of the female labor force that hold leadership positions, “corrupt-sectors”: just-identified IVs

	Labor Force	Employers	Managers Directors & Executives	Leadership
Panel A: 2SLS Estimates, IV: Council Installed				
Corruption per-capita	-0.230 (0.173)	-0.029** (0.011)	-0.033* (0.020)	-0.062** (0.028)
<i>N</i>	929	929	929	929
<i>F</i> -Statistic	20.898	20.898	20.898	20.898
Panel B: 2SLS Estimates, IV: Number of Councils				
Corruption per-capita	-0.521* (0.285)	-0.054** (0.023)	-0.082*** (0.026)	-0.135*** (0.049)
<i>N</i>	929	929	929	929
<i>F</i> -Statistic	9.467	9.467	9.467	9.467
Panel C: 2SLS Estimates, IV: Management Capacity Index				
Corruption per-capita	0.027 (0.108)	-0.029*** (0.006)	-0.059*** (0.013)	-0.088*** (0.019)
<i>N</i>	929	929	929	929
<i>F</i> -Statistic	29.669	29.669	29.669	29.669
Panel D: 2SLS Estimates, IV: Has Judge				
Corruption per-capita	-0.046 (0.052)	-0.017*** (0.004)	-0.021*** (0.006)	-0.038*** (0.009)
<i>N</i>	929	929	929	929
<i>F</i> -Statistic	40.110	40.110	40.110	40.110

Notes: *** p -value < 0.01 , ** p -value < 0.05 , * p -value < 0.1 . Standard errors clustered by state in parentheses. This table replicates the results of Table 5, Panel D, using each of the four instrumental variables separately. Instruments for corruption include two measures of political participation – number of existent councils (*Number of Councils*) and how many are active (*Councils installed*) –, an indicator for management capacity (*Management Index*), and whether the municipality has a judge (*Has Judge*). See Table 3 for a list of the baseline controls and summary statistics for instrumental variables.

F Full Set of Results for Main Estimates

Table F1: The effect of corruption on the share of leadership positions held by women.

	Employers	Managers Directors & Executives	Leadership
<i>Panel A: OLS Estimates, Full Sample</i>			
Corruption per-capita	-0.303** (0.140)	-0.198** (0.083)	-0.172** (0.076)
log_gdppc	-0.017 (0.017)	-0.007 (0.010)	-0.015 (0.009)
log_density	0.001 (0.007)	0.003 (0.008)	0.002 (0.007)
size_informal	-0.055 (0.093)	0.072 (0.067)	-0.011 (0.064)
college	0.379 (0.336)	0.688** (0.321)	0.552** (0.259)
workage	-0.181 (0.382)	-0.363 (0.226)	-0.286 (0.208)
male	-0.722 (0.573)	-0.227 (0.535)	-0.443 (0.486)
urban	0.031 (0.069)	0.048 (0.037)	0.043 (0.035)
N	878	930	933
adj. R^2	0.023	0.048	0.058

Notes: *** p -value < 0.01, ** p -value < 0.05, * p -value < 0.1. Standard errors clustered by state in parentheses. This table replicates Table 5, Panel A, including coefficients for controls variables.

Table F2: The effect of corruption on the share of women that are in the labor force *and* the share of the female labor force that hold leadership positions.

	Labor Force	Employers	Managers Directors & Executives	Leadership
<i>Panel A: OLS Estimates, Full Sample</i>				
Corruption per-capita	-0.091 (0.074)	-0.018*** (0.005)	-0.017* (0.009)	-0.035*** (0.012)
log_gdppc	0.033*** (0.007)	-0.000 (0.001)	0.002* (0.001)	0.001 (0.001)
log_density	0.002 (0.004)	-0.000 (0.000)	0.000 (0.001)	0.000 (0.001)
size_informal	0.061 (0.061)	0.002 (0.004)	-0.002 (0.005)	-0.000 (0.006)
college	0.907*** (0.115)	0.062*** (0.011)	0.099*** (0.023)	0.161*** (0.029)
workage	0.632*** (0.162)	0.020 (0.016)	-0.006 (0.017)	0.014 (0.026)
male	0.272 (0.319)	-0.030 (0.030)	0.045 (0.037)	0.015 (0.055)
urban	0.049 (0.054)	0.005** (0.003)	0.016*** (0.003)	0.021*** (0.005)
N	935	935	935	935
adj. R^2	0.697	0.234	0.194	0.274

Notes: *** p -value < 0.01 , ** p -value < 0.05 , * p -value < 0.1 . Standard errors clustered by state in parentheses. This table replicates Table 5, Panel A, including coefficients for controls variables.

References

- Bologna, J. and Ross, A. (2015). Corruption and entrepreneurship: evidence from brazilian municipalities. *Public Choice*, 165:59–77.
- Ferraz, C. and Finan, F. (2011). Electoral accountability and corruption: Evidence from the audits of local governments. *American Economic Review*, 101(4):1274–1311.