# **Appendix: Unintended Institutional Interactions: Presidential Coattails and Gender Parity Quotas**

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## **A** Descriptive Statistics

Table A.1: Descriptive Statistics for Generalized Synthetic Control Analysis

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
% of Female Legislators	448	26.491	11.795	1.400	17.975	36.500	47.300
Mandatory Quota	448	0.040	0.197	0	0	0	1
GDP per capita (log)	448	10.359	0.376	9.536	10.049	10.654	11.122
Female Labor Force	448	45.564	2.198	38.174	44.437	47.192	48.575
Party Quota	448	0.607	0.489	0	0	1	1
CLPR	448	0.201	0.401	0	0	0	1

*Sources:* % of Female Legislators is from Women in Parliament Dataset (Paxton et al., 2008) and IPU (2020); Mandatory Quota is from Quota Adoption and Reform over Time (Hughes et al., 2019); GDP per capita (log) and Female Labor Force are from WDI; Party Quota and CLPR are coded by the authors using electoral codes and IDEA database.

Table A.2: Descriptive Statistics for Presidential Coattails Analysis

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
A Woman is Elected	3,380	0.189	0.392	0	0	0	1
Presidential Coattails	3,380	0.225	0.418	0	0	0	1
Female Incumbent is Defending	3,380	0.090	0.286	0	0	0	1
Male Incumbent is not Defending	3,380	0.275	0.447	0	0	1	1
Female Incumbent is not Defending	3,380	0.045	0.208	0	0	0	1
% of Female Candidates	3,380	0.342	0.166	0.000	0.222	0.462	0.889
% of Leftist Voters	3,380	35.991	9.294	9.256	29.099	42.279	69.574
Competitiveness	3,380	82.587	17.548	0.000	75.559	94.397	99.981
Runner-up Coattail	3,380	0.315	0.465	0	0	1	1

Source: Minitère De L'Intérieur. Authors' calculations.

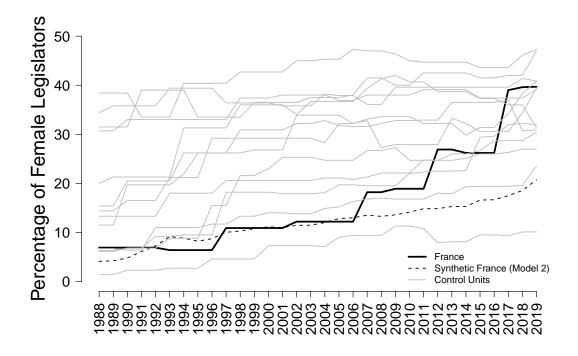
## **B** Complete Results - Generalized Synthetic Control Analysis

Table B.3: Estimated Coefficients for Model 2

Variable	Coefficient
GDP per capita (log)	-1.597 (7.318)
Female Labor Force	0.4512 (0.6475)
Party Quota	-0.617(3.097)
CLPR	3.366 (4.139)
Observations	448
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*Note:* Table's entries are coefficients from a GSC model. Standard errors based on parametric bootstraps of 2,000 times in parentheses. p<0.05; \*\*p<0.01; \*\*\*p<0.001.

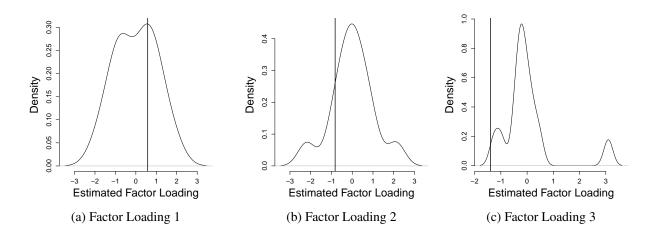
Figure B.1: % of Female Legislators - Real France, Synthetic France (based on Model 2), and Control Units



#### **C** Common Support Assumption - GSC

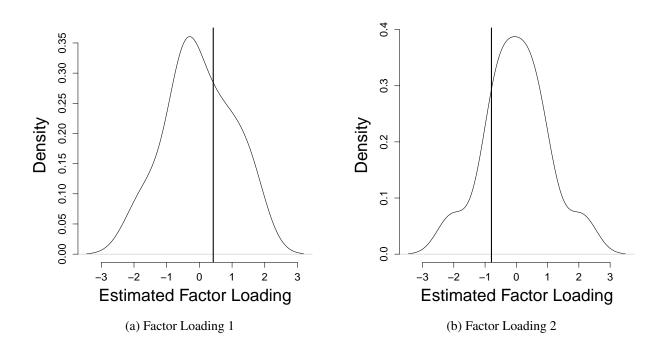
The GSC method relies on modeling assumptions when estimating the counterfactual treated unit (Xu, 2017). Specifically, because the factor loadings for the treated unit are estimated based on the control units, it is important to check whether treated and control units share common support in factor loadings. Figures C.2 and C.3 show the density curves for each of the estimated loading from models 1 and 2. The vertical line indicates where the estimated factor loadings for France lie in the distributions. We observe that for all loadings in both models, France's loadings are located within the distribution of factor loadings for the control units. Moreover, except for factor loading 3 from model 1, the estimated loadings for France are located closer to the center of the distribution. As a result, we can conclude that the models are not extrapolating when estimating the counterfactual scenario.

Figure C.2: Estimated Factor Loadings from Model 1 - Without Controls



Note: Vertical line represents France.

Figure C.3: Estimated Factor Loadings from Model 2 - With Controls



Note: Vertical line represents France.

# **D** Complete Results - Presidential Coattails

Table D.4: Presidential Coattails and Female Representation-France Legislative Elections, 1993-2017

	Dependent variable:
	A Woman is Elected
Presidential Coattails	-0.405(0.538)
1997 Election	1.089*** (0.280)
2002 Election	$-0.739^*$ (0.352)
2007 Election	0.283 (0.312)
2012 Election	-0.221 (0.324)
2017 Election	-0.055(0.342)
Presidential Coattails X 1997	-0.635(0.795)
Presidential Coattails X 2002	3.505*** (0.630)
Presidential Coattails X 2007	1.475* (0.582)
Presidential Coattails X 2012	2.929*** (0.609)
Presidential Coattails X 2017	3.902*** (0.610)
Female Incumbent is Defending	3.361*** (0.216)
Male Incumbent is Not Defending	1.212*** (0.143)
Female Incumbent is Not Defending	2.660*** (0.234)
% of Female Candidates	2.660*** (0.435)
% of Leftist Voters	$0.020^* (0.009)$
Competitiveness	0.013*** (0.004)
Constant	$-6.231^{***} (0.627)$
Observations	3,380
Log Likelihood	-992.242
Akaike Inf. Crit.	2,020.483

*Note:* Table's entries are coefficients from a logit model. Clustered robust standard errors by electoral district in parentheses. \*p<0.05; \*p<0.01; \*\*p<0.001.

## **E** Robustness Checks - Presidential Coattails

Table E.5: Presidential Coattails and Female Representation–France Legislative Elections, 1993-2017 with Including District FE

	Dependent variable:
	A Woman is Elected
Presidential Coattails	-0.492(0.864)
1997 Election	1.000* (0.490)
2002 Election	$-1.486^*$ (0.749)
2007 Election	0.010 (0.621)
2012 Election	0.503 (0.627)
2017 Election	0.122 (0.811)
Presidential Coattails X 1997	-0.679(1.251)
Presidential Coattails X 2002	4.951*** (1.021)
Presidential Coattails X 2007	2.816** (0.958)
Presidential Coattails X 2012	3.565*** (1.056)
Presidential Coattails X 2017	6.291*** (1.160)
Female Incumbent is Defending	1.536*** (0.391)
Male Incumbent is Not Defending	1.694*** (0.295)
Female Incumbent is Not Defending	0.014 (0.440)
% of Female Candidates	3.788*** (0.971)
% of Leftist Voters	-0.029(0.039)
Competitiveness	0.003 (0.008)
Constant	$-21.915^{***}$ (2.099)
District FEs	Yes
Observations	3,380
Log Likelihood	-553.926
Akaike Inf. Crit.	2,361.852

*Note:* Table's entries are coefficients from a logit model with fixed effects by district. Clustered robust standard errors by electoral district in parentheses. \*p<0.05; \*\*p<0.01; \*\*\*p<0.001.

Table E.6: Presidential Coattails and Female Representation–France Legislative Elections, 1993-2017 with District FE (Linear Model)

	Dependent variable:
	A Woman Wins the District
Presidential Coattails	-0.054 (0.043)
1997 Election	0.065** (0.023)
2002 Election	-0.033(0.037)
2007 Election	0.008 (0.033)
2012 Election	0.021 (0.023)
2017 Election	0.027 (0.047)
Presidential Coattails X 1997	-0.047(0.096)
Presidential Coattails X 2002	0.357*** (0.056)
Presidential Coattails X 2007	0.259*** (0.056)
Presidential Coattails X 2012	0.373*** (0.055)
Presidential Coattails X 2017	0.594*** (0.055)
Female Incumbent is Defending	0.200*** (0.033)
Male Incumbent is Not Defending	0.102*** (0.013)
Female Incumbent is Not Defending	0.035 (0.036)
% of Female Candidates	0.217*** (0.046)
% of Leftist Voters	0.001 (0.002)
Competitiveness	0.0004 (0.0004)
District FE	Yes
Observations	3,380
$\mathbb{R}^2$	0.557
Adjusted R <sup>2</sup>	0.456
Residual Std. Error	0.289 (df = 2753)

*Note:* Table's entries are coefficients from a linear model with fixed effects by district. Clustered robust standard errors by electoral district in parentheses. p<0.05; \*\*p<0.01; \*\*\*p<0.001.

Table E.7: Runner Up Coattail and Female Representation-France Legislative Elections, 1993-2017

	Dependent variable:
	Woman is elected
Runner up Coattail	4.432*** (0.719)
1997 Election	0.095 (0.339)
2002 Election	1.133*** (0.334)
2007 Election	$0.772^*$ (0.316)
2012 Election	1.594*** (0.301)
2017 Election	2.370*** (0.343)
Runner up Coattail X 1997	-1.299(0.758)
Runner up Coattail X 2002	$-4.453^{***}$ (0.781)
Runner up Coattail X 2007	$-3.376^{***}$ (0.757)
Runner up Coattail X 2012	$-4.131^{***}$ (0.767)
Runner up Coattail X 2017	$-4.502^{***}$ (0.773)
Female Incumbent is Defending	2.885*** (0.197)
Male Incumbent is Not Defending	1.091*** (0.128)
Female Incumbent is Not Defending	2.113*** (0.189)
% of Female Candidates	3.198*** (0.405)
% of Leftist Voters	0.025** (0.009)
Competitiveness	0.011** (0.004)
Constant	$-6.896^{***} (0.650)$
Observations	3,380
Log Likelihood	-1,125.813
Akaike Inf. Crit.	2,287.626

Note: Table's entries are coefficients from a logit model. Clustered robust standard errors by electoral district in parentheses. \*p<0.05; \*p<0.01; \*\*\*p<0.001.

## F Candidate Level

Table F.8: Presidential Coattails and Election-France Legislative Elections, 1993-2017

	Dependent variable:
	Candidate is Elected
Presidential Coattails	-2.480*** (0.216)
1997 Election	$-0.626^{***}$ (0.046)
2002 Election	-2.055****(0.072)
2007 Election	-1.040****(0.065)
2012 Election	$-1.384^{***}$ (0.075)
2017 Election	$-1.491^{***}$ (0.085)
Presidential Coattails X 1997	1.889*** (0.269)
Presidential Coattails X 2002	6.525*** (0.278)
Presidential Coattails X 2007	4.890*** (0.283)
Presidential Coattails X 2012	5.914*** (0.265)
Presidential Coattails X 2017	6.761*** (0.291)
Incumbent	3.444*** (0.083)
Woman	-0.777****(0.076)
Constant	$-1.781^{***} (0.041)$
District FE	Yes
Observations	25,237
Log Likelihood	-5,889.508
Akaike Inf. Crit.	13,025.020

*Note:* Table's entries are coefficients from a logit model with district fixed effects. Clustered robust standard errors by electoral district in parentheses. \*p<0.05; \*\*p<0.01; \*\*\*p<0.001.

Table F.9: Presidential Coattails given the Candidate's Gender and Election–France Legislative Elections, 1993-2017

Dependent variable:           Candidate is Elected           Presidential Coattails (Female)         -1.798* (0.784)           Presidential Coattails (Male)         -1.704*** (0.299)           Non-Presidential Party (Male)         0.818*** (0.212)           1997 Election         -0.167 (0.243)           2002 Election         -2.237*** (0.249)           2012 Election         -1.073*** (0.229)           2012 Election         -1.354*** (0.264)           2017 Election         -1.275*** (0.248)           Presidential Coattails (Female) X 2002         5.552*** (0.886)           Presidential Coattails (Female) X 2007         3.904*** (0.833)           Presidential Coattails (Female) X 2012         5.181*** (0.836)           Presidential Coattails (Female) X 2012         5.181*** (0.842)
Presidential Coattails (Female) Presidential Coattails (Male) Non-Presidential Party (Male) 1.704*** (0.299) 1.704*** (0.299) 1.704*** (0.212) 1.704*** (0.212) 1.704*** (0.212) 1.704*** (0.243) 1.704*** (0.243) 1.704*** (0.243) 1.704*** (0.243) 1.704*** (0.243) 1.704*** (0.243) 1.704*** (0.243) 1.704*** (0.243) 1.704*** (0.243) 1.704*** (0.243) 1.704*** (0.243) 1.704*** (0.243) 1.704*** (0.243) 1.704*** (0.243) 1.704*** (0.244) 1.704*** (0.243) 1.704** (0.243) 1.704** (0.243) 1.704** (0.243) 1.704** (0.243) 1.704** (0.243) 1.704** (0.243) 1.704** (0.243) 1.704** (0.243) 1.704**
Presidential Coattails (Male)  Non-Presidential Party (Male)  1997 Election  2002 Election  2007 Election  2012 Election  2017 Election  Presidential Coattails (Female) X 1997  Presidential Coattails (Female) X 2002  Presidential Coattails (Female) X 2007  Presidential Coattails (Female) X 2007  Presidential Coattails (Female) X 2017
Non-Presidential Party (Male)  1997 Election  2002 Election  2007 Election  2012 Election  2017 Election  Presidential Coattails (Female) X 1997  Presidential Coattails (Female) X 2002  Presidential Coattails (Female) X 2007  Presidential Coattails (Female) X 2007  Presidential Coattails (Female) X 2012  Presidential Coattails (Female) X 2012  Presidential Coattails (Female) X 2012  Presidential Coattails (Female) X 2017  O.818*** (0.212)  -0.167 (0.243)  -1.073*** (0.249)  -1.354*** (0.264)  -1.275*** (0.248)  0.248 (1.056)  5.552*** (0.886)  3.904*** (0.833)  5.181*** (0.836)  6.051*** (0.842)
1997 Election
2002 Election       -2.237*** (0.249)         2007 Election       -1.073*** (0.229)         2012 Election       -1.354*** (0.264)         2017 Election       -1.275*** (0.248)         Presidential Coattails (Female) X 1997       0.248 (1.056)         Presidential Coattails (Female) X 2002       5.552*** (0.886)         Presidential Coattails (Female) X 2017       3.904*** (0.833)         Presidential Coattails (Female) X 2017       5.181*** (0.836)         6.051*** (0.842)
2007 Election       -1.073*** (0.229)         2012 Election       -1.354*** (0.264)         2017 Election       -1.275*** (0.248)         Presidential Coattails (Female) X 1997       0.248 (1.056)         Presidential Coattails (Female) X 2002       5.552*** (0.886)         Presidential Coattails (Female) X 2017       3.904*** (0.833)         Presidential Coattails (Female) X 2017       5.181*** (0.836)         Presidential Coattails (Female) X 2017       6.051*** (0.842)
2012 Election       -1.354*** (0.264)         2017 Election       -1.275*** (0.248)         Presidential Coattails (Female) X 1997       0.248 (1.056)         Presidential Coattails (Female) X 2002       5.552*** (0.886)         Presidential Coattails (Female) X 2017       3.904*** (0.833)         Presidential Coattails (Female) X 2017       5.181*** (0.836)         Presidential Coattails (Female) X 2017       6.051*** (0.842)
2017 Election       -1.275*** (0.248)         Presidential Coattails (Female) X 1997       0.248 (1.056)         Presidential Coattails (Female) X 2002       5.552*** (0.886)         Presidential Coattails (Female) X 2007       3.904*** (0.833)         Presidential Coattails (Female) X 2012       5.181*** (0.836)         Presidential Coattails (Female) X 2017       6.051*** (0.842)
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Presidential Coattails (Female) X 2017 6.051*** (0.842)
Presidential Coattails (Male) X 1997 1.514*** (0.371)
Presidential Coattails (Male) X 2002 6.915*** (0.372)
Presidential Coattails (Male) X 2007 5.108*** (0.376)
Presidential Coattails (Male) X 2012 5.990*** (0.394)
Presidential Coattails (Male) X 2017 6.400*** (0.398)
Non-Presidential Party (Male) X 1997 $-0.541^*$ (0.273)
Non-Presidential Party (Male) X 2002 0.234 (0.277)
Non-Presidential Party (Male) X 2007 0.055 (0.259)
Non-Presidential Party (Male) X 2012 -0.028 (0.290)
Non-Presidential Party (Male) X 2017 $-0.302$ (0.283)
Incumbent 3.442*** (0.084)
Constant $-2.632^{***} (0.201)$
District FE Yes
Observations 25,237
Log Likelihood $-5,875.007$
Akaike Inf. Crit. 13,018.010

*Note:* Table's entries are coefficients from a logit model with district fixed effects. Clustered robust standard errors by electoral district in parentheses. \*p<0.05; \*\*p<0.01; \*\*\*p<0.001.