Party Competition and the Inter-Industry Structure of U.S. Trade Protection

Online Appendices

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Appendix 1: Operationalization of Variables

Partisan Dominance

Partisan Dominance captures the political characteristics of industries at the four-digit SIC level, based on the geographical distribution of an industry's employment across congressional districts and the level of competitiveness (or safeness) in those districts. As shown by Equation 2 earlier, *Partisan Dominance* for a given industry equals the weighted sum of the squared share of district employment for an industry, with the weights given by the absolute deviation of the Democratic percentage of the two-party vote between the district and the nation in the most recent presidential election (*=Partisan Strength*). In this sense, the *Partisan Dominance* variable measures the extent to which industries are concentrated in politically competitive (or safe) constituencies, or the degree to which industries consist of swing, central voters (or core partisan supporters). As a robustness check, I generate alternative indicators of *Partisan Dominance*, using different estimates of district partisan composition (i.e. *Average Presidential Vote, Distance from 50-50*, and *House Marginality*).

Partisan Dominance and its alternative indicators rely on multiple data sources. First, I collect annual data on employment in four-digit SIC industries in subnational economies (i.e. county, state, and nation) for the years 1988 through 1997 from the Census Bureau's *County Business Patterns (CBP)*. For some industries, the CBP data use employment-size classes rather than the actual numbers of employees if those figures could be considered a breach of employees' rights to confidentiality. In those cases, I narrow down the range of each class category as much as possible, considering the distribution of employment size across establishments and the hierarchical structure of SIC codes and geographic units (Isserman and Westervelt 2006). Then, following McGillivray (1997, 2004), I take the midpoint of the class as the number of employees for a given SIC industry in a county.

Secondly, I convert county-level data on industrial employment into district-level outcomes, relying on county/district relationships during the 100th-105th Congresses obtained from the Census Bureau's *Congressional District Atlas, Congressional District Geographic Relationships Files*, and the Missouri Census Data Center's *Mable/Geocorr90 Geographic Correspondence Engine* (http://mcdc.missouri.edu/websas/geocorr90.shtml). If a congressional district consists of multiple counties, I simply add up the number of employees for each industry across counties but within the district. If a county is divided into two or more congressional districts, I disaggregate the number of employees for the industry in that county into district-level estimates, using the county's population shares across districts suggested in the Mable/Geocorr data.

District-level estimates of partisan composition rely on the following sources: *Partisan Strength* and *Average Presidential Vote* are based on the *Almanac of American Politics*, 1984-1996, which offer district-level presidential vote shares adjusted for any changes in county/district relationships. To compute *Distance from 50-50* and *House Marginality*, I employ data on gubernatorial and congressional elections held during the period 1984-1997 from the *CQ Press Voting and Elections Collection*.

Geographic Concentration

To control for the effect of *Geographic Concentration* on sectoral protection, I compute the Ellison-Glaeser (EG) index that measures the extent of spatial clustering of industries. The EG index (= γ) for a four-digit SIC industry *i* is defined by Equations A1-A2 (Ellison-Glaeser 1997; Holmes and Stevens 2004).

$$\gamma_i = \frac{G_i - (1 - \sum_{k=1}^M x_k^2) \times H_i}{(1 - \sum_{k=1}^M x_k^2)(1 - H_i)}$$
A1

$$G_i = \sum_{k=1}^{M} (s_k - x_k)^2$$
 and $H_i = \sum_{j=1}^{N} z_j^2$ A2

Given that industry *i* is divided across *M* geographic regions, G_i is a measure of raw geographic concentration for industry *i*, which equals the sum of the squared differences between industry *i*'s share of employment in each of *M* regions (s_k) and each region's share of total national employment (x_k). H_i is the Herfindahl index of plant size for industry *i*, which is the sum of the squared share of an industry's employment in each plant (z_j). Thus, considering the distribution of an industry's employment across plants and geographic locations, the EG index allows us to correct for the dartboard issues that make industries with a small number of large plants look more concentrated, even if the plants are randomly distributed.

Following previous research (Ellison-Glaeser 1997; Holmes and Stevens 2004), I generate the EG index using the Census Bureau's *County Business Patterns*, 1989-1997. Raw geographic concentration (G_i) and the plant Herfindahl (z_j) are computed, respectively, using the CBP's state- and establishment-level details on employment size for SIC industries. In the analyses, *Geographic Concentration* equals the EG index multiplied by 100 for presentation purposes.

Appendix 2: Summary Statistics

Table A1. Summary Statistics

Variable	N	Mean	Std. Dev.	Min	Max
Tariff Protection					
Tariffs on Total Imports	3971	3.719	4.395	0	100.08
Tariffs on Dutiable Imports	3848	5.814	20.805	0	1258.89
Comparative Disadvantage	3902	4.528	15.125	-61.444	82.126
Import Penetration Ratio	3898	3.445	21.162	0	974.53
Industrial Concentration	4064	0.069	0.065	0	0.3
Geographic Concentration	4068	4.832	8.051	-108.261	184.619
Size	4069	3.913	5.589	0.007	50.862
Political Concentration	4069	0.043	0.052	0.003	0.747
Partisan Dominance	4069	0.366	0.525	0.028	8.194
Partisan Dominance (Average Presidential Vote)	4069	0.220	0.470	0.000	8.904
Partisan Dominance (Distance from 50-50)	4069	0.301	0.417	0.021	5.719
Partisan Dominance (House Marginality)	4069	0.508	0.730	0.001	14
Concentration in Marginal Districts	4069	0.015	0.027	0	0.715
Concentration in Safe Districts	4069	0.015	0.032	0	0.651
Concentration in Safe Districts (PS)	4069	0.013	0.025	0	0.369
Concentration in Safe Districts (PSG)	4069	0.010	0.021	0	0.373
NTB Protection					
NTB Coverage Ratio	361	19.509	27.842	0	100
NTB Frequency Ratio	361	15.114	23.209	0	100
Comparative Disadvantage	357	4.463	15.320	-48.609	72.117
Import Penetration Ratio	357	2.97	15.902	0.006	238.08
Industrial Concentration	360	0.072	0.066	0	0.3
Geographic Concentration	361	4.852	7.261	-22.961	52.625
Size	361	3.896	5.741	0.075	44.394
Political Concentration	361	0.043	0.049	0.003	0.42
Partisan Dominance	361	0.361	0.472	0.03	4.341
Partisan Dominance (Average Presidential Vote)	361	0.218	0.453	0	4.695
Partisan Dominance (Distance from 50-50)	361	0.290	0.357	0.024	3.11
Partisan Dominance (House Marginality)	361	0.502	0.667	0.04	7.536
Concentration in Safe Districts (PSG)	361	0.009	0.015	0	0.17
Lagged Tariff Rate (Total Imports)	360	3.779	3.868	0	22.951

Appendix 3: Regression Tables

/	Tariffs on Total Imports								
	(1)	(2)	(3)	(4)	(5)	(6)			
Import Penetration Ratio ^a	0.016**	0.016**	0.022**	0.022**	0.017*	0.017*			
-	(0.008)	(0.008)	(0.011)	(0.011)	(0.01)	(0.01)			
Partisan Dominance (Average Presidential Vote)	-0.009	-0.174							
	(0.095)	(0.165)							
Import Penetration Ratio × Partisan	-0.014**	-0.013**							
Dominance (Average Presidential Vote)	(0.006)	(0.006)							
Partisan Dominance (Distance from 50-50)			-0.007	-0.285					
			(0.089)	(0.178)					
Import Penetration Ratio × Partisan			-0.018**	-0.018**					
Dominance (Distance from 50-50)			(0.009)	(0.009)					
Partisan Dominance (House Marginality)					0.133**	0.176*			
					(0.066)	(0.103)			
Import Penetration Ratio × Partisan					-0.011*	-0.011*			
Dominance (House Marginality)					(0.006)	(0.006)			
Geographic Concentration	0.02**	0.018**	0.021***	0.018**	0.016**	0.019**			
	(0.008)	(0.008)	(0.008)	(0.007)	(0.008)	(0.008)			
Industrial Concentration	-2.48***	-2.819***	-2.328***	-2.622***	-2.603***	-2.571***			
	(0.503)	(0.554)	(0.498)	(0.529)	(0.52)	(0.512)			
Size	-0.039***	-0.036***	-0.04***	-0.038***	-0.037***	-0.037***			
	(0.008)	(0.008)	(0.009)	(0.008)	(0.009)	(0.008)			
Lagged Tariff Rate	0.498***	0.497***	0.496***	0.493***	0.495***	0.499***			
	(0.083)	(0.082)	(0.083)	(0.083)	(0.083)	(0.083)			
Political Concentration		2.283		3.033		-1.434			
		(1.769)		(1.975)		(1.769)			
Constant	2.322***	2.281***	2.324***	2.309***	2.281***	2.272***			
	(0.462)	(0.464)	(0.467)	(0.458)	(0.463)	(0.465)			
Observations	3483	3483	3483	3483	3483	3483			
Industries	394	394	394	394	394	394			
\mathbf{R}^2	0.653	0.654	0.656	0.655	0.654	0.65			

Table A2. Import Penetration Ratio, Partisan Dominance and Tariff Protection

Note: OLS with panel-corrected standard errors in parentheses. All models include year fixed effects and AR1 correction. *p < 0.10, **p < 0.05, ***p < 0.01.

^aImport Penetration Ratio for industry $i = [\text{Total Value of Imports}_i/(\text{Total Value of Imports}_i + \text{Domestic Shipments}_i)]/[\text{Total Value of Exports}_i/(\text{Total Value of Exports}_i + \text{Domestic Shipments}_i)]$

	NTB	Coverage	Ratio	NTB Frequency Ratio			
	(1)	(2)	(3)	(4)	(5)	(6)	
Import Penetration Ratio	0.011	0.076	0.929*	0.009	0.059	0.778*	
	(0.041)	(0.082)	(0.519)	(0.03)	(0.062)	(0.434)	
Partisan Dominance (Average Presidential Vote)	5.153			4.12			
	(3.328)			(3.049)			
Import Penetration Ratio × Partisan	-0.071*			-0.541*			
Dominance (Average Presidential Vote)	(0.037)			(0.295)			
Distance from 50-50		3.509			0.938		
		(6.541)			(5.41)		
Import Penetration Ratio × Partisan		-0.184*			-0.142*		
Dominance (Distance from 50-50)		(0.104)			(0.083)		
Partisan Dominance (House Marginality)			3.107			2.336	
			(2.863)			(2.46)	
Import Penetration Ratio × Partisan			-0.824*			-0.688*	
Dominance (House Marginality)			(0.442)			(0.372)	
Geographic Concentration	0.267	0.329	0.387*	0.404**	0.492**	0.507***	
	(0.227)	(0.267)	(0.223)	(0.199)	(0.236)	(0.195)	
Industrial Concentration	-9.825	-9.351	-7.58	-8.433	-6.123	-6.105	
	(20.662)	(21.373)	(21.454)	(17.186)	(18.022)	(17.755)	
Size	0.288	0.282	0.287	0.108	0.085	0.104	
	(0.199)	(0.199)	(0.197)	(0.122)	(0.122)	(0.12)	
Lagged Tariff Rate	3.38***	3.387***	3.186***	3.002***	3.006***	2.841***	
	(0.336)	(0.341)	(0.364)	(0.318)	(0.32)	(0.343)	
Constant	4.141*	3.862	2.783	1.266	1.324	0.18	
	(2.502)	(2.649)	(2.652)	(2.064)	(2.159)	(2.179)	
Observations	356	356	356	356	356	356	
\mathbf{R}^2	0.25	0.247	0.255	0.303	0.299	0.308	

Table A3. Import Penetration Ratio, Partisan Dominance and Nontariff Protection

Note: robust standard errors in parentheses. *p < 0.10, **p < 0.05, ***p < 0.01

	,	Tariffs on T	otal Import	ts	Tariffs on Dutiable Imports				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Comparative Disadvantage	0.046***	0.046***			0.069***	0.07***			
	(0.008)	(0.007)			(0.015)	(0.014)			
Concentration in Marginal Districts ^a	8.186***	7.72***	6.72***	7.607***	3.649	4.294**	3.514	4.415	
	(2.474)	(2.147)	(2.033)	(2.253)	(2.478)	(2.141)	(2.943)	(2.991)	
Comparative Disadvantage \times		-0.009				-0.189			
Concentration in Marginal Districts		(0.076)				(0.158)			
Import Penetration Ratio			0.004*	0.009			-0.002	0.006	
			(0.002)	(0.007)			(0.002)	(0.011)	
Import Penetration Ratio \times				-0.202				-0.356	
Concentration in Marginal Districts				(0.134)				(0.328)	
Geographic Concentration	0.026***	0.025***	0.018**	0.017**	0.008	0.01	0.01	0.006	
	(0.007)	(0.007)	(0.008)	(0.008)	(0.012)	(0.013)	(0.013)	(0.013)	
Industrial Concentration	-2.871***	-3.024***	-3.072***	-3.019***	-3.544***	-4.326***	-2.974**	-3.017**	
	(0.656)	(0.649)	(0.61)	(0.607)	(1.303)	(1.258)	(1.407)	(1.36)	
Size	-0.03***	-0.034***	-0.037***	-0.036***	-0.019	-0.026	-0.073***	-0.075***	
	(0.01)	(0.01)	(0.009)	(0.009)	(0.028)	(0.029)	(0.023)	(0.022)	
Lagged Tariff Rate	0.449***	0.448***	0.494***	0.494***	0.005**	0.005**	0.004**	0.005**	
	(0.079)	(0.079)	(0.082)	(0.082)	(0.002)	(0.002)	(0.002)	(0.002)	
Constant	2.315***	2.35***	2.323***	2.286***	5.764***	5.905***	6.572***	6.563***	
	(0.429)	(0.426)	(0.462)	(0.462)	(0.302)	(0.286)	(0.488)	(0.447)	
Observations	3483	3483	3483	3483	3380	3380	3380	3380	
Industries	394	394	394	394	387	387	387	387	
R^2	0.646	0.642	0.657	0.655	0.335	0.348	0.357	0.366	

 Table A4. Concentration in Marginal Districts and Tariff Protection

Note: OLS with panel-corrected standard errors in parentheses. All models include year fixed effects and AR1 correction. *p < 0.10, **p < 0.05, ***p < 0.01.

^aConcentration in Marginal Districts $\sum (E_{ij}/E_i)^2 \times Marginal District_j$, where E_{ij}/E_i denotes district j's share of employment for industry *i*; *Marginal District_j* coded as 1 if the absolute difference in the Democratic share of the two-party vote between district *j* and the nation in the most recent presidential election (=*Partisan Strength*) is less than 5 percentage points, and 0 otherwise.

		Tariffs on T	Total Import	ts	Tariffs on Dutiable Imports				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Comparative Disadvantage	0.049***	0.049***	0.05***	0.045***	0.078***	0.084***	0.081***	0.075***	
	(0.008)	(0.008)	(0.009)	(0.008)	(0.015)	(0.012)	(0.012)	(0.013)	
Concentration in Safe Districts ^a	0.734				3.021				
	(1.305)				(2.727)				
Comparative Disadvantage \times	-0.139				-0.342*				
Concentration in Safe Districts	(0.118)				(0.197)				
Concentration in Safe Districts (PS) ^b		-1.033				0.292			
		(1.015)				(2.102)			
Comparative Disadvantage \times		-0.18*				-0.498***			
Concentration in Safe Districts (PS)		(0.098)				(0.182)			
Concentration in Safe Districts (PSG) ^c			-3.052*	-2.917*			-1.952	-2.549	
			(1.68)	(1.603)			(2.161)	(2.096)	
Comparative Disadvantage \times			-0.191**				-0.181		
Concentration in Safe Districts (PSG)			(0.092)				(0.171)		
Geographic Concentration	0.027***	0.03***	0.029***	0.028***	0.017	0.012	0.014	0.01	
	(0.007)	(0.008)	(0.008)	(0.007)	(0.014)	(0.012)	(0.012)	(0.011)	
Industrial Concentration	-2.244***	-2.295***	-2.262***	-2.086***	-3.263**	-3.111**	-3.127**	-2.933**	
	(0.507)	(0.528)	(0.543)	(0.531)	(1.442)	(1.313)	(1.3)	(1.277)	
Size	-0.035***	-0.036***	-0.037***	-0.037***	-0.024	-0.027	-0.023	-0.021	
	(0.009)	(0.01)	(0.009)	(0.01)	(0.03)	(0.028)	(0.028)	(0.028)	
Lagged Tariff Rate	0.45***	0.453***	0.453***	0.452***	0.005**	0.005**	0.005**	0.005**	
	(0.081)	(0.08)	(0.08)	(0.081)	(0.002)	(0.002)	(0.002)	(0.002)	
Constant	2.382***	2.39***	2.411***	2.41***	5.837***	5.89***	5.837***	5.831***	
	(0.432)	(0.433)	(0.436)	(0.441)	(0.3)	(0.287)	(0.295)	(0.307)	
Observations	3483	3483	3483	3483	3380	3380	3380	3380	
Industries	394	394	394	394	387	387	387	387	
R^2	0.641	0.646	0.645	0.644	0.385	0.386	0.382	0.355	

Table A5. Concentration in Safe Districts and Tariff Protection

Note: OLS with panel-corrected standard errors in parentheses. All models include year fixed effects and AR1 correction. *p < 0.10, **p < 0.05, ***p < 0.01.

Given that E_{ij}/E_i denotes district j's share of employment for industry i, the following three variables indicate the extent to which a given industry i is concentrated in safe constituencies.

^aConcentration in Safe Districts $=\sum (E_{ij}/E_i)^2 \times Safe District_j$, where Safe District_j is coded as 1 if the absolute difference in the Democratic share of the two-party vote between district j and the nation in the most recent presidential election (=Partisan Strength) is greater than 10 percentage points, and 0 otherwise.

^bConcentration in Safe Districts (PS) = $\sum (E_{ij}/E_i)^2 \times Safe District_j$, where Safe District_j is coded as 1 if the absolute difference in the average share of the two-party vote that the Democratic candidates received in presidential and Senate elections over the past four years between district *j* and the nation is greater than 10 percentage points, and 0 otherwise.

^cConcentration in Safe Districts (PSG) $= \sum (E_{ij}/E_i)^2 \times Safe District_j$, where Safe District_j is coded as 1 if the absolute difference in the average share of the two-party vote that the Democratic candidates received in presidential, Senate, and gubernatorial elections over the past four years between district *j* and the nation is greater than 10 percentage points, and 0 otherwise.

	NT	B Coverage l	Ratio	NTB Frequency Ratio			
	(1)	(2)	(3)	(4)	(5)	(6)	
Comparative Disadvantage	0.048	0.248**	0.245**	0.004	0.159*	0.157*	
	(0.099)	(0.112)	(0.112)	(0.077)	(0.088)	(0.087)	
Concentration in Safe Districts (PSG) ^a	28.302	9.757	-22.169	-46.116	-60.515	-95.904	
	(127.731)	(83.978)	(82.01)	(90.323)	(73.746)	(71.503)	
Geographic Concentration	0.365	0.459**	0.386	0.517**	0.59***	0.51**	
	(0.238)	(0.23)	(0.247)	(0.202)	(0.197)	(0.206)	
Industrial Concentration	-8.455	-9.017	-15.217	-4.411	-4.847	-11.719	
	(21.084)	(20.683)	(22.091)	(17.554)	(17.197)	(17.438)	
Size	0.269	0.261	0.294	0.065	0.059	0.096	
	(0.195)	(0.19)	(0.198)	(0.118)	(0.115)	(0.121)	
Lagged Tariff Rate	3.314***	3.236***	3.239***	3.015***	2.955***	2.958***	
	(0.402)	(0.405)	(0.409)	(0.369)	(0.364)	(0.368)	
Comparative Disadvantage × Concentration in		-11.918***	-11.448***		-9.253***	-8.733***	
Safe Districts (PSG)		(2.95)	(2.96)		(2.523)	(2.414)	
Political Concentration			32.656			36.197	
			(46.105)			(38.099)	
Constant	4.473*	4.289*	3.849	1.799	1.656	1.168	
	(2.539)	(2.521)	(2.635)	(2.066)	(2.027)	(2.142)	
Observations	356	356	356	356	356	356	
R^2	0.245	0.262	0.264	0.298	0.313	0.316	

Table A6. Concentration in Safe Districts and Nontariff Protection

Note: robust standard errors in parentheses. *p < 0.10, **p < 0.05, ***p < 0.01

^aConcentration in Safe Districts (PSG) = $\sum (E_{ij}/E_i)^2 \times Safe District_j$, where Safe District_j is coded as 1 if the absolute difference in the average share of the two-party vote that the Democratic candidates received in presidential, Senate, and gubernatorial elections over the past four years between district *j* and the nation is greater than 10 percentage points, and 0 otherwise.

		Tariffs on T	Total Import	ts	Tariffs on Dutiable Imports				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Comparative Disadvantage	0.075***	0.068***	0.071***	0.063***	0.104***	0.104***	0.094***	0.097***	
-	(0.009)	(0.008)	(0.008)	(0.007)	(0.016)	(0.013)	(0.015)	(0.015)	
Partisan Dominance	0.057				0.145				
	(0.12)				(0.127)				
Comparative Disadvantage × Partisan Dominance	-0.028***				-0.027**				
-	(0.008)				(0.011)				
Partisan Dominance (Average Presidential Votes)		0.09				0.144			
-		(0.106)				(0.109)			
Comparative Disadvantage × Partisan Dominance		-0.032***				-0.022**			
(Average Presidential Votes)		(0.007)				(0.01)			
Partisan Dominance (Distance from 50-50)			0.166				0.111		
			(0.125)				(0.162)		
Comparative Disadvantage × Partisan Dominance			-0.024***				-0.007		
(Distance from 50-50)			(0.006)				(0.009)		
Partisan Dominance (House Marginality)			. ,	0.214***			. ,	0.163*	
				(0.071)				(0.09)	
Comparative Disadvantage × Partisan Dominance				-0.005*				-0.007	
(House Marginality)				(0.003)				(0.005)	
Geographic Concentration	0.027***	0.028***	0.026***	0.026***	0.021***	0.021**	0.017*	0.026**	
	(0.007)	(0.008)	(0.008)	(0.008)	(0.008)	(0.009)	(0.009)	(0.013)	
Industrial Concentration	-2.793***	-2.829***	-3.032***	-3.299***	-4.453***	-4.34***	-4.488***	-5.23***	
	(0.557)	(0.631)	(0.678)	(0.743)	(1.386)	(1.429)	(1.37)	(1.398)	
Size	-0.042***	-0.042***	-0.042***	-0.042***	-0.094***	-0.09***	-0.095***	-0.094***	
	(0.013)	(0.013)	(0.014)	(0.014)	(0.011)	(0.011)	(0.012)	(0.012)	
Lagged Tariff Rate	0.352***	0.353***	0.354***	0.352***	0.003**	0.003**	0.003**	0.003**	
	(0.069)	(0.069)	(0.069)	(0.069)	(0.002)	(0.002)	(0.002)	(0.002)	
Constant	2.755***	2.759***	2.762***	2.715***	5.913***	5.904***	5.961***	5.913***	
	(0.452)	(0.449)	(0.458)	(0.459)	(0.405)	(0.407)	(0.417)	(0.425)	
Observations	3099	3099	3099	3099	3000	3000	3000	3000	

Table A7. Alternative Estimations with Independent Variables Lagged 2 Years

Industries	394	394	394	394	386	386	386	386
R^2	0.565	0.568	0.564	0.564	(0.405)	(0.407)	(0.417)	(0.425)
Note: OI S with nanel-corrected standard errors i	n narenthese	s All mod	els include	vear fixed effe	rts and AR1	correction	*n < 0.10	**n <

Note: OLS with panel-corrected standard errors in parentheses. All models include year fixed effects and AR1 correction. *p < 0.10, **p < 0.05, ***p < 0.01.

Appendix 4: Data Sources

Trade data on U.S. SIC industries

Schott's Trade Data and Concordances. http://faculty.som.yale.edu/peterschott/sub_international.htm

Herfindahl-index of industrial concentration

U.S. Census Bureau. Concentration Ratios in Manufacturing, 1987 and 1992. https://www.census.gov/econ/concentration.html

Subnational data on employment and establishments by industries

U.S. Census Bureau. Various. *County Business Patterns*. Washington, D.C.: U.S. Government Printing Office. https://www.census.gov/programs-surveys/cbp.html

County/district relationships for the 100th-105th Congresses

Missouri Census Data Center's Mable/Geocorr90 Geographic Correspondence Engine. http://mcdc.missouri.edu/websas/geocorr90.shtml

U.S. Bureau of the Census. 1985. *Congressional District Atlas: Districts of the 100th Congress*. Washington, D.C.: U.S. Government Printing Office.

U.S. Bureau of the Census. 1993. *Congressional District Atlas: 103rd Congress of the United States*. Washington, D.C.: U.S. Government Printing Office.

U.S. Bureau of the Census, Congressional Districts of the United States, Summary Tape File 1D, Summary Tape File 3D: 104th Congress.

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