Appendix
Keeping Vigil:
The Emergence of Vigilance Committees in Pre-Civil War America

Large-N Analysis: More Models

Table 1 presents the result of a base model with no interaction. Both Ethnic Fractionalization and Border Revisions appear to have a positive and significant effect on the risk of committee formation. A test of the Schoenfeld residuals reveals that the effect of border revisions is dependent on time. We model it as such on 1. Since it is interacted with time, in order to fully understand the coefficient for the Border Revisions variable it is necessary to plot it, as we do in Figure 1 (Licht, 2011). The plot reveals a positive and significant effect right after the change in borders has taken place. That effect becomes indistinguishable from zero after about eight years.

Table 1: Cox estimates of vigilance committee formation, 1850–1860, base model with no interaction. Standard errors in parenthesis.

	(1)
Ethnic Fractionalization	0.043***
	(0.010)
Border Revisions	9.514***
	(3.732)
Border Revisions$X$Time	−4.003**
	(1.757)
Observations	17,434
AIC	440.898
BIC	445.387
Log Likelihood	−217.449

Note:
*p<0.1; **p<0.05; ***p<0.01

Figure 1: Coefficient Plot for the effects of Border Revisions in the Base model in Table 1. Dashed lines represent 95% confidence intervals.

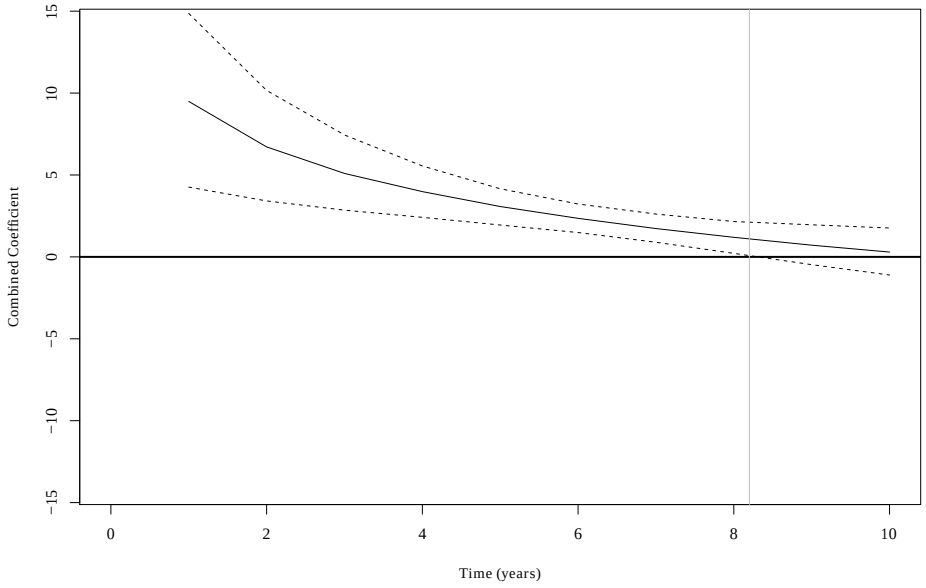


Table 2 presents the same models as the main text, but on a different sample. The sample includes also those 6 counties that, during this period, witness the formation of more than one vigilance committees. In the main text, counties stay in the dataset up until 1860 or when the first committee is formed in that time period, whatever comes first, so the emergence of second committees is not modeled. Here, we repeat the analysis while excluding those counties, to see if results are robust. Indeed, we found the results to be robust to this specification. Figure 2 presents the survival curves that, together with the coefficient in the model for *Ethnic Fractionalization X Border Revisions*, suggest that our results are robust even in this different sample.

Economic inequality, as measured by the Gini coefficient, decreases the risk of committee formation: for any additional percentage point increase in the Gini coefficient, the risk of committee formation decreases by 2.5%. This suggests that strong class and status divides are actually negatively associated with committee formation, calling to mind Gould (2003) argument about the negative relationship between social stratification and conflict. As for the social deviance hypothesis, the coefficient for Slavery is significant, but negative. For any additional percentage point increase in the slavery coefficient, the risk of committee formation actually decreases by 3.7%, suggesting that slavery (like economic hierarchy more generally) mitigated contests over identity and status that might lead committees to form. Conversely, the coefficient for Ethno-National Fractionalization is statistically significant across models, but its sign is positive. This indicates that more fractionalization increases the risk of committee formation, against the prediction of nativist and local ordering accounts. Results for *Slavery* and *Economic Inequality* are however not robust across model specifications.

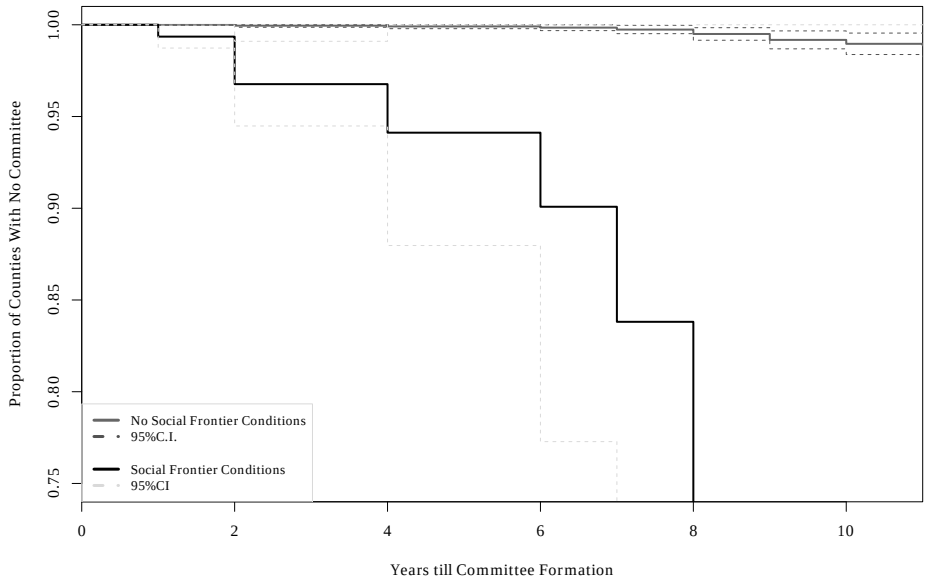
Table 2: Cox estimates of vigilance committee formation, 1850–1860, revised sample. Standard errors in parenthesis.

Ethnic Fractionalization	0.030^{**}	0.040^{**}
	(0.013)	(0.016)
Border Revisions	6.186^{***}	-0.383
	(1.977)	(0.816)
Ethnic Fractionalization$X$Border Revisions	0.035^{**}	0.054^{***}
	(0.019)	(0.024)
Time$X$Border Revisions	-2.981^{***}	
	(0.978)	
Economic Inequality		-0.025^{**}
		(0.011)
Manufacturing		0.016
		(0.018)
Urbanization		0.010
		(0.010)
Slavery		-0.038^{**}
		(0.014)
Observations	17,465	9,395
AIC	553.0159	355.6914
BIC	559.9666	365.7293
Log Likelihood	-272.508	-170.8457

Note:

*p<0.1; **p<0.05; ***p<0.01

Figure 2: Survival curve for vigilance committee formation, using results in Table 2 and comparing counties with no social frontier (gray line) and counties with social frontier (black line). Dashed lines represent 95% confidence intervals.



In the main text, we presented results obtained via linear interpolation when values for the1850 and 1860 census are available for those variables that rely on census data (Ethnic Fractionalization, Economic Inequality,Manufacturing, Urbanization, Slavery). Table 3 reports descriptive statistics.

Here, we reproduce the analysis without using linear interpolation. We adopt two approaches.

First, we keep the values of the variables that come from the census constant and equal to the value from 1850 for all years in the interval 1850–1860, except for 1860, when those data are available. Our results in Table 4 and Figure 3 for the coefficient *Ethnic Revisions X Border Revisions* are robust when the models are tested without using interpolation. The coefficient for *Ethnic Revisions* is significant in Model 1 but not in Model 2, while the coefficient for *Border Revisions* is not significant in either model. Figure 3, which compares survival curves for cases with and without social frontiers, suggests similar conclusions regarding the impact of social frontiers on vigilance committee as Figure 1 in the main text does.

Table 3: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max	P25	P75
Committee	19887	.002	.048	0	1	0	0
Ethnic Fractionalization	17434	10.849	13.058	0	50	1.136	15.961
Border Revisions	19883	.161	.368	0	1	0	0
Economic Inequality	16158	44.884	15.545	0	88.774	36.841	55.16
Manufacturing	16185	1.991	3.414	0	76.342	.441	2.11
Urbanization	17491	4.48	13.599	0	100	0	0
Slavery	11148	27.179	21.953	0	93.408	7.546	44.306

Second, we use multiple imputation via the software Amelia (Honaker, King and Blackwell, 2011). In this case, we impute 100 values for each missing data point in the dataset

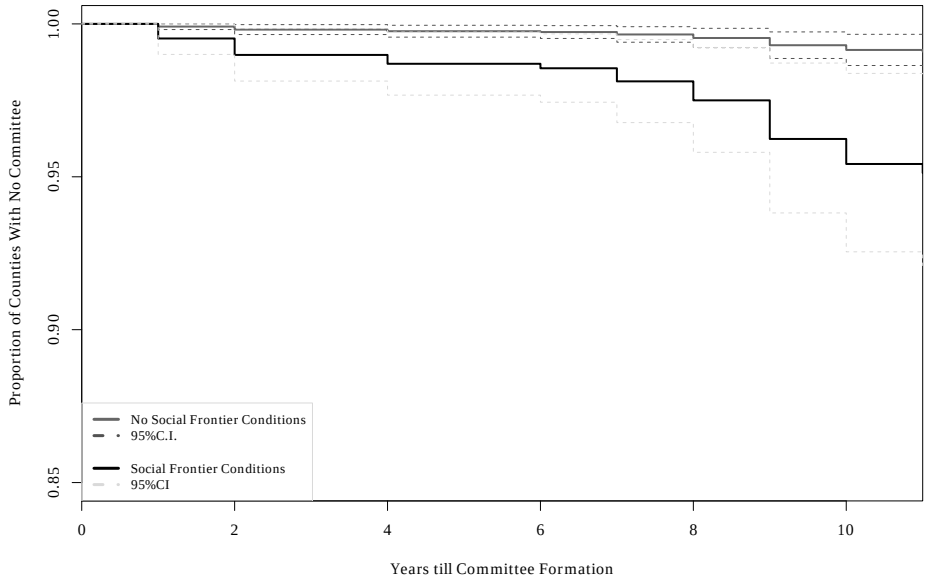
Table 4: Cox estimates of vigilance committee formation, 1850–1860, and no linear interpolation. Standard errors in parenthesis.

	(1)	(2)
Ethnic Fractionalization	0.035***	0.013
	(0.013)	(0.019)
Border Revisions	0.812	−0.279
	(0.659)	(1.029)
Ethnic Fractionalization$X$Border Revisions	0.031*	0.072***
	(0.021)	(0.031)
Economic Inequality		−0.006
		(0.011)
Manufacturing		0.029
		(0.030)
Urbanization		0.019
		(0.011)
Slavery		0.004
		(0.011)
Observations	17,470	15,361
Log Likelihood	−221.872	−152.932
AIC	449.745	319.865
BIC	454.235	327.813

Note:

*p<0.1; **p<0.05; ***p<0.01

Figure 3: Survival curve for vigilance committee formation, using results in Table 4 and comparing counties with no social frontier (gray line) and counties with social frontier (black line). Dashed lines represent 95% confidence intervals.



while keeping the observed values the same. We thus create 100 complete datasets. We then proceed to estimate a Cox model with time varying covariates on those datasets. Results are presented in Table 5, and confirm our results in the main text when it comes to our main indicator, for *Ethnic Revisions X Border Revisions*. The coefficient for *Border Revisions* is never significant, while the coefficient for *Ethnic Revisions* is significant and positive in both models. The coefficient *Economic Inequality* is significant but negative, while the coefficient for *Urbanization* is positive and significant, though this result only appears in this model. The other coefficients fail to reach statistical significance.

Table 5: Cox estimates of vigilance committee formation, 1850–1860, and multiple imputation. Standard errors in parenthesis.

	(1)	(2)
Ethnic Fractionalization	3.920**	2.732*
	(1.245)	(1.529)
Border Revisions	.662	.535
	(.179)	(.493)
Ethnic Fractionalization*X* Border Revisions	2.949*	3.324*
	(1.706)	(1.812)
Economic Inequality		−2.452**
		(1.189)
Manufacturing		−2.088
		(11.440)
Urbanization		2.312*
		(1.198)
Slavery		−.469
		(1.054)
Observations	19,887	19,887
Imputations	100	100
Note:		*p<0.1; **p<0.05; ***p<0.01

References

Gould, Roger V. 2003. *Collision of Wills: How Ambiguity About Social Rank Breeds Conflict*. Chicago: University of Chicago Press.

Honaker, James, Gary King and Matthew Blackwell. 2011. "Amelia II: A Program for Missing Data." *Journal of Statistical Software* 45(7):1–47.
URL: *http://www.jstatsoft.org/v45/i07/*

Licht, Amanda A. 2011. "Change comes with time: Substantive interpretation of nonproportional hazards in event history analysis." *Political Analysis* 19(2):227–243.