

Branching for Caution: Banks in England and Wales During the 1878 Financial Panic

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Introduction

Question

- ▶ How do financial crises affect bank branching?

Motivation

- ▶ Banks closed bank offices due to losses during the 1997 Financial Crisis (Rysman et al., 2023). However, bank offices were also important in building public confidence. In-person contact with staff provides customers with a sense of security.
- ▶ Bank branching is important. It contributes to the integration of national financial markets (Mitchener and Ohnuki, 2009) and increases the stability of the banking system (Carlson and Mitchener, 2006; Bonhoure et al., 2023).
- ▶ Political forces affect the banking system (Calomiris and Haber, 2015). Media narratives are important in affecting people's political views. How does the media affect the strategies of banks in response to crises?

What I have done

- ▶ Construct panel data at the bank level on offices, capital, and balance sheets between 1874 and 1885, which was before the start of the amalgamation wave of English banks.
- ▶ Use a two-way fixed effects model with fixed effects for banks and years.
- ▶ Construct an instrumental variable based on the existence of newspapers before the financial panic following Beach and Hanlon (2023).
 - ▶ Newspapers played an important role in spreading details about the failure of the City of Glasgow Bank.

Preview of Results

- ▶ Larger negative shocks during the financial panic led English joint-stock banks to open more new offices.
- ▶ Banks opened new offices to increase public confidence.
 - ▶ Bank offices served as a device to signal stability. Banks also increased subscribed and paid-in capital. Impacts driven by banks with fewer offices that lost more cash.
 - ▶ Bank offices served as a device to facilitate shareholders' monitoring. Substituted by emphasis on Englishness in towns with higher exposure to nationalism advertised by Conservative newspapers.

Contribution

Reasons for Bank Branching

- ▶ Banks expand to diversify risks (Aguirregabiria et al., 2016), compete against large entrants (Cohen and Mazzeo, 2010), gain large markets with high productivity and low competition (Ji et al., 2022) and economies of scale (Kuehn, 2018). Banks contract to cut costs during financial crises (Rysman et al., 2023)
- ▶ Banks open new offices to signal stability and increase public confidence.

The Impacts of the Media on Banks

- ▶ Financial news affects the investors' perceptions of firms (Engelberg and Parsons, 2011; Ben-Rephael et al., 2017). The depositors' trust in banks is important for the stability of banks (Iyer and Puri, 2012). Financial institutions that are more credible remain more stable during panic and crises (Gurun et al., 2017).
- ▶ Banks can utilize nationalism spread by Conservative newspapers to build public confidence.

The Failure of the City of Glasgow Bank

"It was a calamity so unlooked for, so huge and disastrous, that it riveted men's gaze and made their hearts stand still and we shall all remember it to our dying day as a landmark in the history of our generation."

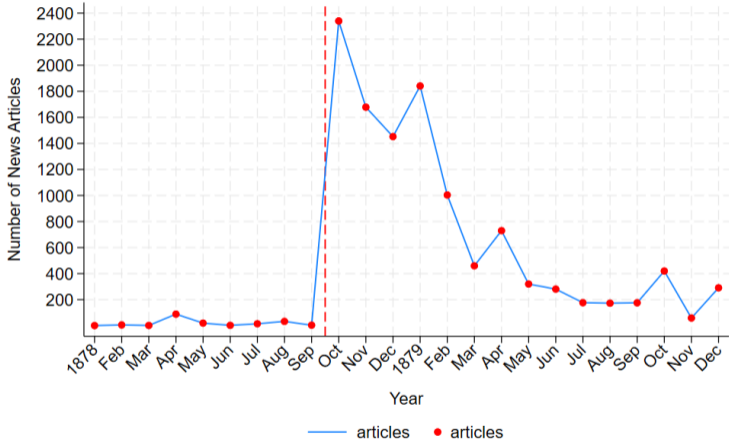
— Alexander Wilson (1879)

- ▶ On October 2nd, 1878, the City of Glasgow Bank went bankrupt unexpectedly, leaving a deficit of 5.2 million pounds.
- ▶ The failure of the City of Glasgow Bank led to a liquidity shock to not only Scottish banks but also banks in England and Wales.
 - ▶ The deposits of London banks went down by more than 10% (Collins and Baker, 2003).
 - ▶ 40% of the banks outside London lost more than 10% of their deposits and acceptances.
- ▶ Final outcomes in England not disastrous: The West of England and South Wales District Bank (9th) was the only major bank to fail (Turner, 2014). Four other small banks failed.

Newspapers

- ▶ Readers relied on local newspapers to gain information (Williams, 2010)
- ▶ The failure of the Glasgow bank was spread across the country by newspapers.
- ▶ Local newspapers took information from different sources.
 - ▶ The *Lancaster Gazette* on October 5th, 1878: '*A noteworthy fact in connection with the bank was that it had more branches than any other Scotch establishment, the total number of these being 133.*'
 - ▶ The *Derby Mercury* copied the whole sentence on October 9th, 1878.
 - ▶ The *Huddersfield Daily Chronicle* on October 5th, 1878: '*The City of Glasgow was established in 1839, with its head office in Glasgow, but throughout Scotland, it has branches in all the chief towns, the number, according to a recent return, being 93*'.

Newspaper Articles during the Panic



Data source

- ▶ *Banking Almanac*: Bank office numbers, the adoption of limited liability, subscribed capital, paid-in capital, and the number of partners
- ▶ *The Investors Monthly Manual*: Stock prices of joint-stock banks on the last business day of each month (made available through The International Center for Finance at Yale University)
- ▶ The 1895 *Newspaper Press Directory* following Beach and Hanlon (2023): Newspaper names, themes, starting years, political attitudes, and locations
- ▶ *The Economists*: Balance sheets of joint-stock banks in England and Wales

Summary Statistics

Table 1: Summary Statistics

	(1)	(2)	(3)	(4)	(5)	(6)
variables	year	N	mean	sd	min	max
No. of Offices	1875	66	9.394	11.189	1	52
Limited Liability	1875	66	0.348	0.480	0	1
Capital Paid	1875	66	233.761	174.590	32	905
No. of Offices	1880	66	11.788	14.263	1	65
Limited Liability	1880	66	0.697	0.463	0	1
Capital Paid	1880	66	255.090	177.634	40	905
Capital Subscribed	1880	63	1057.003	1116.285	100	5430
No. of Offices	1885	63	14.111	16.763	1	78
Limited Liability	1885	63	0.921	0.272	0	1
Capital Paid	1885	63	273.623	195.013	40	905
Capital Subscribed	1885	61	1260.001	1313.775	200	6000

Notes: Capital is measured in units of thousands of pounds.

Empirical strategy

$$\text{IHS}(\text{No. of offices}_{i,j,t}) = \beta_0 + \beta_1 \times \text{IHS}(\text{Shock}_{i,j}) \times 1(\text{Post Crisis}_t) \quad (1) \\ + x'_{i,j} \times \eta_t + \delta_i + \eta_t + \varepsilon_{i,j,t}$$

- ▶ $\text{IHS}(\text{Shock}_{i,j})$ is the percentage change in the market value of bank i whose headquarters was in j between the end of September and the end of December 1878.
- ▶ $\text{Shock}_{i,j} = \left(\frac{\text{MarketValue}_{i,j,\text{post-shock}}}{\text{MarketValue}_{i,j,\text{pre-shock}}} - 1 \right) \times 100\%$.
- ▶ $1(\text{Post Crisis}_t)$ is the dummy for post-1878 years.
- ▶ $x'_{i,j}$ are pre-1878 characteristics of bank i , including the number of offices and partners, the amount of paid-in capital, and the adoption of limited liability in 1877, and town j , including latitude, longitude, and share of manufacturing employment.
- ▶ δ_i are bank fixed effects and η_t are year fixed effects.
- ▶ Standard errors are clustered at the town level.

Identification

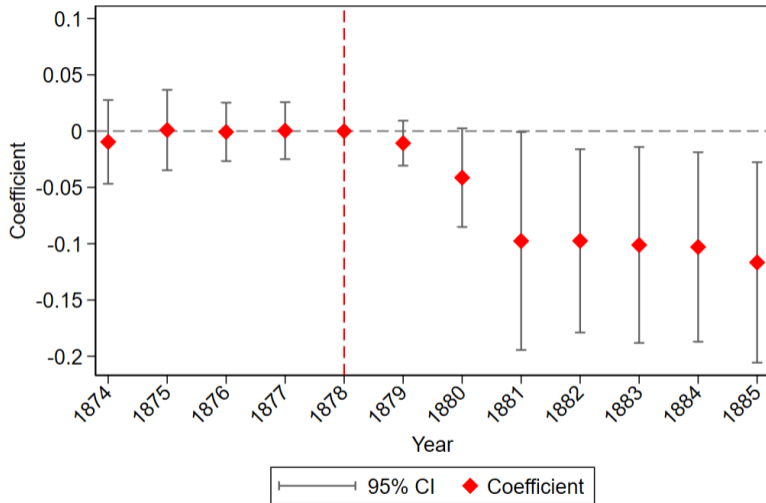
- ▶ Concerns about endogeneity: Omitted variables, banks that delayed share transactions to prevent share prices from dropping might open more offices after 1878.
- ▶ Instrument: $\text{asinh}(\text{News}_{j,1877}) * (\text{PostCrisis}_t)$
- ▶ Intuition: the details about the collapse of the City of Glasgow Bank were spread by English newspapers. Banks with more newspapers in their headquarters were more likely to be exposed to larger shocks.
- ▶ Exogeneity assumption: The numbers of newspapers in towns were not correlated with other bank characteristics that affected future numbers of offices
- ▶ Exclusion restriction assumption: The number of newspapers did not affect the number of branches via other channels than the shocks to banks

Baseline Results

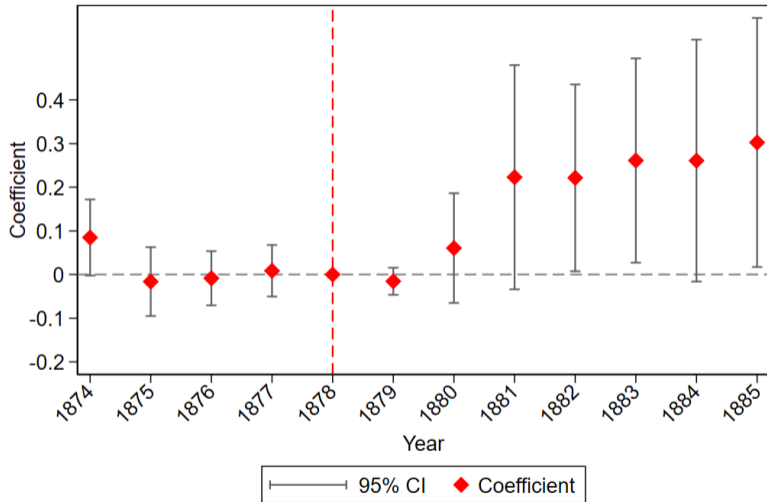
Table 2: Baseline Results

	(1)	(2)	(3)	(4)
	IHS(Office Numbers)			
	OLS		IV	
Shock \times 1(Post-shock)	-0.0649*** (0.0200)	-0.0772** (0.0323)	-0.0926** (0.0418)	-0.107* (0.0605)
Within R^2	0.0497	0.150		
KP F			36.70	15.86
Standardized β	-0.0752	-0.0895	-0.107	-0.125
	(5)	(6)	(7)	(8)
	Shock \times 1(Post-shock)		IHS(Office Numbers)	
	First Stage		Reduced Form	
IHS(Newspapers) \times 1(Post-shock)	-1.680*** (0.277)	-1.479*** (0.371)	0.156** (0.0613)	0.159* (0.0937)
Within R^2	0.439	0.542	0.0444	0.130
Observations	788	788	788	788
Bank and Year Fixed Effects	Yes	Yes	Yes	Yes
Pre-1878 Characteristics \times Year FEs	None	Yes	None	Yes

Event studies



Event studies



Mechanisms: Branching for Public Confidence

- ▶ Banks opened new offices to signal stability.
 - ▶ Branch banks were perceived as safer and more stable than unit banks (Gilbart and Michie, 1882).
 - ▶ The impacts were mainly driven by banks with a below-median number of offices in 1877.
 - ▶ Smaller banks also increased capital to signal stability.
 - ▶ It was likely also because smaller banks were more vulnerable to liquidity constraints than larger banks.
- ▶ Banks opened new offices to facilitate shareholders' monitoring of banks.
 - ▶ Banks could emphasize their English cautious banking practices to substitute new offices.
 - ▶ In towns with lower exposure to Conservative newspapers: Banks with more Scottish directors opened fewer offices and increased more capital.
 - ▶ In towns with higher exposure to Conservative newspapers: Banks do not have similar patterns. The emphasis on close monitoring by shareholders, an English tradition, helped build public confidence.

Heterogeneity Analysis

- ▶ Large branch banks were perceived as more stable than unit banks by contemporary bankers (Gilbart and Michie, 1882).

Table 3: The Impacts of the Shocks on Bank Offices and Capital

	(1)	(2)	(3)	(4)	(5)	(6)
	IHS(Offices)		IHS(Subscribed Capital)		IHS(Paid-in Capital)	
Shock \times 1(Post-shock)	-0.143*** (0.0433)	-0.173*** (0.0404)	-0.0908*** (0.0283)	-0.0823 (0.0527)	-0.0305 (0.0276)	-0.0473** (0.0213)
Shock \times 1(Post-shock) \times 1877 Larger	0.118*** (0.0370)	0.139*** (0.0320)	0.0785* (0.0419)	0.0677 (0.0580)	0.0367 (0.0240)	0.0495*** (0.0177)
Observations	788	788	445	445	445	445
Within R^2	0.0866	0.194	0.0246	0.399	0.0166	0.264
p-value	0.217	0.268	0.684	0.570	0.665	0.870
Bank & Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Pre-1878 Controls \times Year FEs	None	Yes	None	Yes	None	Yes

Caution for Liquidity

- ▶ In a period when the United Kingdom adhered to the gold standard, banks focused on the cash they held (Bank of England, 1962).
- ▶ No evidence that shocks predicted the withdrawal of deposits.

Table 4: The Heterogeneous Impacts of the Shocks on Cash and Liabilities

Panel A: Cash	(1)	(2)	(3)	(4)
	IHS(Cash)		IHS(Cash Ratio)	
Shock \times 1(Post-shock)	0.104*** (0.0231)	0.0604 (0.0691)	0.0152** (0.00629)	0.0140 (0.0199)
Shock \times 1(Post-shock) \times 1877 Larger	-0.131*** (0.0273)	-0.0813 (0.0717)	-0.0167 (0.0112)	-0.0145 (0.0212)
Within R^2	0.0205	0.312	0.0257	0.270
Panel B: Liabilities	(5)	(6)	(7)	(8)
	IHS(Liabilities)		IHS(Deposits)	
Shock \times 1(Post-shock)	0.0204 (0.0641)	0.0227 (0.0745)	0.0370 (0.0648)	0.0324 (0.0748)
Shock \times 1(Post-shock) \times 1877 Larger	-0.0387 (0.0682)	-0.0155 (0.0727)	-0.0550 (0.0697)	-0.0255 (0.0745)
Within R^2	0.0175	0.396	0.0221	0.413

Nationalism and Conservative Newspapers

- ▶ The Conservative Party began to spread the views and principles of the party through publishing local newspapers in the 19th century and accelerated in the 1860s (Roberts, 2006, 2007).
- ▶ English bankers tried to blame Scottish characteristics for the failure of the Glasgow bank (Alborn, 2003).
- ▶ English banks highlighted their Englishness to appeal for trust.
 - ▶ The Cumberland Union Bank claimed that the bank stayed close with its shareholders throughout its 50-year history.
 - ▶ The Wilts and Dorset Banking Company: *'The Duke (of Wellington), when in Opposition, was asked to oppose the Government on some trivial question and turn them out. His reply was, "No, the question is one on which we are bound to support the Executive."*
 - ▶ *'... it would be well for married men and their wives to read the marriage service again now and then, in order to remind them of their duties and obligations:-(laughter)-and so in this case he would advise every shareholder present to read carefully ... as to the duties and responsibilities of Bank Directors.'*

Branching for Monitoring

- ▶ English banks had a long tradition of connecting closely with the community, including shareholders, depositors, and borrowers (Alborn, 2003).
- ▶ Highlighting Englishness and connection to the local community was a substitute for opening new offices, especially in towns with higher exposure to Conservative newspapers.
 - ▶ Towns with higher exposure to Conservative newspapers: Emphasis on Englishness and close monitoring over banks.
 - ▶ Towns with lower exposure to Conservative newspapers: Opening new offices and adding capital. For banks with more Scottish directors, open fewer offices and add more capital.
- ▶ No differences in the topics covered by Conservative newspapers and Liberal newspapers.

Branching for Monitoring

Table 5: Subsample Analyses: Different Exposure to Conservative Newspapers

Panel A: Subsample Baseline	(1)	(2)	(3)	(4)
	IHS(Offices)			
Shock \times 1(Post-shock)	-0.0767*** (0.0120)	-0.0790 (0.0488)	-0.0958** (0.0340)	-0.0810 (0.0543)
Within R^2	0.100	0.0507	0.285	0.191
Panel B: Heterogeneity: Scottish Directors	(5)	(6)	(7)	(8)
Shock \times 1(Post-shock)	-0.148*** (0.0251)	-0.0699 (0.0497)	-0.166*** (0.0326)	-0.0770 (0.0530)
Shock \times 1(Post-shock) \times More Scottish	0.0899** (0.0347)	-0.0342 (0.0611)	0.0990** (0.0434)	-0.0343 (0.0659)
Within R^2	0.142	0.0698	0.322	0.207
p-value	0.0103	0.1397	0.0780	0.1894
Observations	361	427	361	427
Bank and Year Fixed Effects	Yes	Yes	Yes	Yes
Exposure to Conservative News	Lower	Higher	Lower	Higher
Pre-1878 Characteristics \times Year Fixed Effects	None	None	Yes	Yes

Conclusion

- ▶ This paper shows that banks opened new offices after the financial panic in 1878 to increase public confidence.
- ▶ New offices were a signal for stability The impacts were driven by banks with fewer bank offices that were more concerned about liquidity.
- ▶ New offices also facilitated the monitoring of banks. Banks in towns with higher exposure to nationalism spread by Conservative newspapers substituted emphasis on English banking traditions for opening new offices.

Robustness Checks

Table A1: Balance Tests

	Pre-1878 Characteristics	Coefficient	SE
(1)	IHS(<i>Offices</i> ₁₈₇₇)	0.264	0.317
(2)	1 (Limited Liability)	0.299***	0.0685
(3)	IHS(<i>Partners</i> ₁₈₇₇)	0.504***	0.0963
(4)	IHS(<i>Paid – inCapital</i> ₁₈₇₇)	0.651***	0.133
(5)	Latitude	-0.0565	0.219
(6)	Longitude	-0.239	0.220
(7)	Share Manufacture	0.0202	0.0395

Robustness Checks

Table A2: Robustness to Different Measures of Shocks: OLS

	(1)	(2)	(3)	(4)	(5)
	IHS(Office Numbers)				
Shock \times 1(Post-shock)	-0.0306* (0.0151)	-0.0777*** (0.0245)	-0.0649*** (0.0200)	-0.0450** (0.0198)	-0.0324* (0.0169)
Observations	788	788	788	788	788
Within R^2	0.00585	0.0526	0.0497	0.0253	0.00989
Pre-1878 Characteristics \times Year Fixed Effects	None	None	None	None	None
	(6)	(7)	(8)	(9)	(10)
Shock \times 1(Post-shock)	-0.0162 (0.0195)	-0.0844** (0.0352)	-0.0772** (0.0323)	-0.0492 (0.0307)	-0.0361 (0.0292)
Observations	788	788	788	788	788
Within R^2	0.105	0.146	0.150	0.125	0.114
Pre-1878 Characteristics \times Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Bank and Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Months Gaps	1	2	3	4	5

Robustness Checks

Table A3: Robustness to Different Measures of Shocks: IV

	(1)	(2)	(3)	(4)	(5)
	IHS(Office Numbers)				
Shock \times 1(Post-shock)	-0.169*	-0.112**	-0.0926**	-0.101*	-0.246*
	(0.0859)	(0.0466)	(0.0418)	(0.0499)	(0.144)
Observations	788	788	788	788	788
KPF	15.24	34.72	36.70	25.03	5.993
Pre-1878 Characteristics \times Year Fixed Effects	None	None	None	None	None
	(6)	(7)	(8)	(9)	(10)
Shock \times 1(Post-shock)	-0.251	-0.136*	-0.107*	-0.115	-0.308
	(0.164)	(0.0746)	(0.0605)	(0.0682)	(0.238)
Observations	788	788	788	788	788
KPF	8.913	12.84	15.86	12.72	1.465
Pre-1878 Characteristics \times Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Bank and Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Months Gaps	1	2	3	4	5

Robustness Checks

Table A4: Robustness to Different Measures of Shocks: First-Stage

	(1)	(2)	(3)	(4)	(5)
	Shock \times 1(Post-shock)				
IHS(News) \times 1(Post-shock)	-0.918*** (0.235)	-1.395*** (0.237)	-1.680*** (0.277)	-1.547*** (0.309)	-0.633** (0.259)
Observations	788	788	788	788	788
Within R^2	0.247	0.410	0.439	0.352	0.0780
Pre-1878 Characteristics \times Year Fixed Effects	None	None	None	None	None
	(6)	(7)	(8)	(9)	(10)
IHS(News) \times 1(Post-shock)	-0.634*** (0.212)	-1.171*** (0.326)	-1.479*** (0.371)	-1.387*** (0.388)	-0.517 (0.426)
Observations	788	788	788	788	788
Within R^2	0.374	0.480	0.542	0.468	0.181
Pre-1878 Characteristics \times Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Bank and Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Months Gaps	1	2	3	4	5

Robustness Checks

Table A5: Robustness to Different Transformations of Shocks

	(1)	(2)	(3)	(4)
	IHS(Offices)			
Shock \times 1(Post-shock)	0.193** (0.0758)	0.202** (0.0940)	0.295** (0.117)	0.310* (0.160)
Within R^2	0.0477	0.143		
KPF			39.05	14.92
	(5)	(6)	(7)	(8)
Large Shock \times 1(Post-shock)	0.164*** (0.0416)	0.183*** (0.0588)	0.582* (0.287)	0.565 (0.335)
Within R^2	0.0209	0.123		
KPF			23.20	20.64
	(9)	(10)	(11)	(12)
Shock \times 1(Post-shock)	-0.0470*** (0.0159)	-0.0703** (0.0307)		
IHS(Rank) \times 1(Post-shock)			-0.0896** (0.0340)	-0.111** (0.0480)
Within R^2	0.0515	0.150	0.0240	0.127
Observations	788	788	788	788
Bank and Year Fixed Effects	Yes	Yes	Yes	Yes
Pre-1878 Characteristics \times Year Fixed Effects	None	Yes	None	Yes

Robustness Checks

Table A6: Instruments Constructed by All Newspapers and General-Interest Newspapers

	(1)	(2)	(3)	(4)
	IHS(Offices)			
Shock \times 1(Post-shock)	-0.0926** (0.0418)	-0.107* (0.0605)	-0.0926** (0.0432)	-0.107* (0.0630)
KPF	36.70	15.86	25.85	11.68
	(5)	(6)	(7)	(8)
IHS(News) \times 1(Post-shock)	0.156** (0.0613)	0.159* (0.0937)	0.180** (0.0752)	0.176 (0.112)
Within R^2	0.0444	0.0843	0.0406	0.0809
Observations	788	788	788	788
Bank and Year Fixed Effects	Yes	Yes	Yes	Yes
Pre-1878 Controls \times Year FEs	None	Yes	None	Yes

Robustness Checks

Table A7: Placebo Tests: Newspapers after the Panic

	(1)	(2)	(3)	(4)	(5)	(6)
	IHS(Office Numbers)		Shock X 1(Post-shock)		IHS(Office Numbers)	
	IV		First Stage		Reduced Form	
Shock \times 1(Post-shock)	-0.0621 (0.174)	0.0753 (0.425)				
IHS(Newspapers) \times 1(Post-shock)			-0.163 (0.652)	-0.157 (0.354)	0.0101 (0.0424)	-0.0118 (0.0526)
Observations	788	788	788	788	788	788
Within R^2			0.00605	0.349	0.0003	0.1039
KPF	0.0622	0.196				
Bank and Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Pre-1878 Controls \times Year FEs	None	Yes	None	Yes	None	Yes

Robustness Checks

Table A8: Robustness: Dropping two Amalgamations

	(1)	(2)	(3)	(4)	(5)	(6)
	IHS(Office Numbers)				Shock X 1(Post-shock)	
	OLS		IV		First Stage	
Shock \times 1(Post-shock)	-0.0423** (0.0156)	-0.0370* (0.0215)	-0.0439* (0.0232)	-0.0332 (0.0357)		
IHS(Newspapers) \times 1(Post-shock)					-1.675*** (0.286)	-1.427*** (0.384)
Observations	777	777	777	777	777	777
Within R^2	0.0357	0.130			0.430	0.540
KPF			34.22	13.73		
Bank and Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Pre-1878 Controls \times Year FEs	None	Yes	None	Yes	None	Yes

Robustness Checks

Table A9: Subsample Analyses: Different Coverage of Conservative Newspapers

Panel A: Subsample Baseline	(1)	(2)	(3)	(4)
	IHS(Subscribed Capital)			
Shock \times 1(Post-shock)	-0.0813** (0.0312)	0.00309 (0.0295)	-0.0795 (0.0502)	-0.00383 (0.0348)
Within R^2	0.0487	0.0001	0.110	0.143
Panel B: Heterogeneity: Scottish Directors	(5)	(6)	(7)	(8)
Shock \times 1(Post-shock)	0.0320 (0.0429)	-0.0122 (0.0439)	0.0219 (0.0465)	-0.0200 (0.0433)
Shock \times 1(Post-shock) \times More Scottish	-0.178** (0.0731)	0.0525 (0.0634)	-0.160** (0.0608)	0.0455 (0.0708)
Within R^2	0.112	0.0044	0.156	0.145
Observations	199	244	199	244
Bank and Year Fixed Effects s	Yes	Yes	Yes	Yes
Exposure to Conservative News	Lower	Higher	Lower	Higher
Pre-1878 Characteristics \times Year Fixed Effects	None	None	Office & Partner	Office & Partner

Robustness Checks

Table A10: Pre-Shock Characteristics and Conservative Newspapers

	Pre-1878 Characteristics	Coefficient	SE
(1)	IHS(<i>Offices</i> ₁₈₇₇)	0.363	0.358
(2)	1 (Limited Liability)	-0.0538	0.124
(3)	IHS(<i>Partners</i> ₁₈₇₇)	0.146	0.200
(4)	IHS(<i>Paid – inCapital</i> ₁₈₇₇)	-0.448*	0.237
(5)	Latitude	0.225	0.366
(6)	Longitude	0.101	0.335
(7)	Share Manufacture	0.0706*	0.0377

Robustness Checks

Table A11: The Number of Articles Covering Different Topics

Topics	<i>Derby cury</i>	<i>Mer-</i>	<i>Lancaster Gazette</i>	<i>Huddersfield Examiner</i>
Panic	3		3	7
Business Disruption	3		8	14
Foreign Investments	0		1	1
Many Branches	1		2	1
Related Firms	2		17	9
Historical Crisis	1		1	0
Asset Misrepresentation	6		11	7
Poor Management	6		12	5
Shareholder Bankruptcy	4		15	2
Aid for Shareholders	1		9	4
Legal Actions	3		34	35
Total Number	14		54	65

Robustness Checks

Table A12: Heterogeneous Impacts of the Financial Panic on the Number of Bank Offices

Panel A: Paid-in Capital	(1)	(2)	(3)	(4)	(5)	(6)
	IHS(Office Numbers)		IHS(Subscribed Capital)		IHS(Cash)	
Shock \times 1(Post-shock)	-0.105*	-0.109	0.0189	-0.0716	0.0155	-0.0014
	(0.0567)	(0.0732)	(0.0428)	(0.0533)	(0.0344)	(0.0481)
Shock \times 1(Post-shock) \times Higher Paid-in Capital	0.0501	0.0604	-0.0551	0.0499	0.0062	-0.0092
	(0.0529)	(0.0642)	(0.0638)	(0.0708)	(0.0722)	(0.0765)
Within R^2	0.0649	0.177	0.0433	0.398	0.0022	0.309
Panel B: Limited Liability	(7)	(8)	(9)	(10)	(11)	(12)
Shock \times 1(Post-shock)	-0.0730***	-0.0852***	-0.0413	-0.0176	0.0248	0.0105
	(0.0201)	(0.0255)	(0.0274)	(0.0417)	(0.0491)	(0.0267)
Shock \times 1(Post-shock) \times Unlimited Liability	0.0159	0.0121	-0.0371	-0.0287	0.0064	-0.0328
	(0.0322)	(0.0448)	(0.0460)	(0.0685)	(0.0379)	(0.0735)
Within R^2	0.0514	0.150	0.117	0.394	0.0057	0.308
Observations	788	788	445	445	363	363
Bank and Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Pre-1878 \times Year FEs	None	Yes	None	Yes	None	Yes