Online Appendix to "Suffrage Reform and Financial Volatility: Reconsidering the Great Reform Act"

GARY COX & SEBASTIAN SAIEGH

Appendix Contents

A Threat Perceptions and Agricultural Rents

How did threat perceptions affected agricultural rents during the reform period? The geographical variation of rental values can be captured using the information in Clark (1998a). We merged the observations corresponding to the years 1831-1832 with the data on Swing riots compiled by Aidt and Franck (2015), for 35 of the county constituencies that returned MPs to the House of Commons. We restricted our analysis to leases whose value was determined on the basis of market conditions. The resulting sample consists of a total of 1,028 observations, with 353 corresponding to 1831 and 675 for 1832. With respect to its geographical coverage all 35 county constituencies are represented in the sample.[1]

Table A1, columns (1)-(4), show our estimates of the relationship between the number of Swing riots that happened within a radius of 10 kilometers from each constituency and agricultural rents.[2] Column (1) shows a specification without any control variables. To account for potential confounders, we augment equation (1) with a battery of control variables. Following Aidt and Franck (2015), we include indicators capturing political, institutional, economic, and demographic of each constituency (reported in their Table II, column (5)), as well as contextual variables associated with the 1831 Whig electoral victory (cf. their Table VIII, column (5)).[3] The results are reported in column (2). In column (3) we show a specification where counties with less than 10 observations are excluded from the analysis. Finally, to capture rental agreements that were closer to the peak of the Swing riots, we restrict our analysis to the year 1831 in the specification reported in column (4). According to Aidt and Franck (2015), threat perceptions induced voters to support for pro-reform politicians. We examine the effect of the share of seats won by Whigs in the 1831 election on rental values in column (5). Most year-long contracts between landowners and tenant farmers in nineteenth-century England would begin/end on Old Lady Day. Given the timing of the 1831 elections (28 April-1 June), we only include in our analysis the observations corresponding to 1832.

[1] Norfolk and Buckinham are the two counties with the largest number of observations (197 and 172, respectively); while there are 19 counties with less than 10 observations.

[2] Our main results remain unchanged if we use 20,30,40, or 50 kilometers instead of 10.

[3] The whole set of variables includes: *Whig share 1826, Whig share 1826 Squared, Reform support in 1830, County constituency, Narrow franchise, Patronage index, Emp. fract. index, Agriculture (emp. share), Trade (emp. share), Professionals (emp. share), Population, Population density , Thriving economy, Declining economy, Petitions against Catholic relief, Petitions for Catholic relief, Petitions against slavery, Petitions against reform, Petitions for reform, Growth in poor law expenses, Special commission,* and *Share of harsh sentences.*

Table A1: Threat Perceptions and Agricultural Rents

	(1)	(2)	(3)	(4)	(5)
Area	1.116***	1.092***	0.965***	0.836***	1.168***
	(0.141)	(0.137)	(0.186)	(0.274)	(0.105)
Riots within 10km	0.127	-0.501	0.096	-0.146	
	(0.101)	(0.361)	(0.114)	(0.150)	
Area * Riots	0.001	0.001	0.003	0.014*	
	(0.004)	(0.004)	(0.004)	(0.007)	
Whig Share 1831					0.051
					(0.059)
Area * Whig Share					0.001
					(0.002)
Constant	3.383	36.891	5.126	13.080*	-2.461
	(3.358)	(91.369)	(3.975)	(6.501)	(4.907)
R^2	0.83	0.85	0.77	0.75	0.89
Observations	1028	1028	944	353	675

Robust standard errors, clustered at the county level, in parentheses. $*$ indicates significance at a 10% level; $**$ indicates significance at a 5% level; $***$ indicates significance at a 1% level.

The dependent variable in all the models is the rental value of each property measured in pounds. For ease of interpretation, we also include in all models, each property's size, as well as its interaction with our main covariates of interest. As such, the latter represents the marginal change in rent in the pounds per acre metric. Overall, the point estimate on *Area* is quite stable across all the specifications in Table 1. We can calculate the average rent in pounds per acre in 1831 and 1832 using the estimates of the models presented in columns (4) and (5), respectively. In the former case, the rental value (evaluated at the means of the independent variables) amounts to £ 0.84. For the year 1832, the calculated average rent in pounds per acre is £ 1.17[4] These estimates match almost exactly the calculations in Thompson (1907), and in Turner, Beckett and Afton (1997). Both studies use other sources to compute their rental values (mostly from private estate records). Therefore, we can be confident that the sample of plots of land held by charities is representative of agricultural rentals during this period.

[4]The average area for the 1831 observations is 32.5 acres; and, for the 1832 observations is 29.04.

Regarding threat perceptions, the results presented in Table A1 indicate that neither the Swing riots nor the share of Whig representation in the unreformed Parliament in 1832 had an effect on agricultural rents during the reform period. For example, consider the findings presented in column (1). The estimated rent per acre in a constituency that was not exposed to any riots within a radius of 10 km is £ 1.12 (with a standard deviation of £ 0.14). Based on these estimates, a three-standard deviation increase in the number of riots would be associated with a negligible rise in the average rent per acre: £ 1.15 (with a standard deviation of £ 0.08). The largest effect of Swing riots on agricultural rents corresponds to the model where the analysis is restricted to the year 1831 (column 4). Even in this case, rental values in places with and without riots are statistically indistinguishable. The estimated rent per acre in a constituency that was exposed the average number riots amounted to £ 1.04 (with a standard deviation of £ 0.21), compared to £ 0.84 (with a standard deviation of £ 0.27) in places without any riots.

B Stationarity Tests

Table B1: Unit Root Tests - Consols

	Augmented Dickey-Fuller				
	Test	Critical Values			Conclusion
	Statistic	(1%)	(5%)	(10%)	
$Z(t)_t$	−10.228	−4.034	−3.447	-3.147	Reject
$Z(t)_m$	−10.273	−3.504	−2.889	-2.579	Reject
$Z(t)$	−9.831	−2.597	−1.950	-1.611	Reject
	Phillips-Perron				
$Z(t)_t$	−10.202	−4.034	−3.447	-3.147	Reject
$Z(t)_m$	−10.251	−3.504	−2.889	-2.579	Reject
$Z(t)$	−9.812	−2.597	−1.950	-1.611	Reject

Notes: The null hypothesis is that the series contains a unit root. MacKinnon (1991) critical values. $Z(t)_t$: model with trend and a constant term; $Z(t)_m$: model with a constant term; $Z(t)$: model with no constant and no trend.

Table B2: Stationarity Tests - Consols

	KPSS Results		
	Lags	Statistic	Conclusion
Trend Stationarity	1	.048	Do not reject
Level Stationarity	1	.048	Do not reject
	1%	5%	10%
Critical Values (Trend)	0.216	0.146	0.119
Critical Values (Level)	0.739	0.463	0.347

Notes: The null hypothesis is that the series is stationary. Maximum number of lags chosen by Schwert (1989) criterion.

Table B3: Unit Root Tests - French Rentes

	Augmented Dickey-Fuller				
	Test	Critical Values			Conclusion
	Statistic	(1%)	(5%)	(10%)	
$Z(t)_t$	−9.621	−4.034	−3.448	-3.148	Reject
$Z(t)_m$	−9.660	−3.504	−2.889	-2.579	Reject
$Z(t)$	−9.541	−2.598	−1.950	-1.611	Reject
	Phillips-Perron				
$Z(t)_t$	−9.709	−4.034	−3.448	-3.148	Reject
$Z(t)_m$	−9.759	−3.504	−2.889	-2.579	Reject
$Z(t)$	−9.543	−2.598	−1.950	-1.611	Reject

Notes: The null hypothesis is that the series contains a unit root. MacKinnon (1991) critical values. $Z(t)_t$: model with trend and a constant term; $Z(t)_m$: model with a constant term; $Z(t)$: model with no constant and no trend.

Table B4: Stationarity Tests - French Rentes

	KPSS Results		
	Lags	Statistic	Conclusion
Trend Stationarity	1	.041	Do not reject
Level Stationarity	1	.041	Do not reject
	1%	5%	10%
Critical Values (Trend)	0.216	0.146	0.119
Critical Values (Level)	0.739	0.463	0.347

Notes: The null hypothesis is that the series is stationary. Maximum number of lags chosen by Schwert (1989) criterion.

Figure B1: Fractional Integration Tests

Consol Returns

Geweke/Porter-Hudak

Power	Ords	Est d	StdErr	t(H0: d=0)	P>t	Assym. SE	z(H0: d=0)	P>z
0.4	7	-0.234	0.175	-1.337	0.252	0.434	-0.540	0.589
0.45	9	-0.061	0.228	-0.267	0.799	0.346	-0.176	0.860
0.5	11	0.100	0.236	0.421	0.685	0.293	0.340	0.734
0.55	14	-0.124	0.198	-0.628	0.543	0.244	-0.511	0.609
0.6	18	0.265	0.222	1.196	0.250	0.204	1.301	0.193

Philips

Power	Ords	Est d	Std Err	t(H0: d=0)	P>t	z(H0: d=1)	P>z
0.4	6	0.573	0.373	1.536	0.175	-1.633	0.103
0.45	8	0.542	0.250	2.170	0.062	-2.019	0.044
0.5	10	0.516	0.212	2.429	0.036	-2.388	0.017
0.55	13	0.287	0.184	1.562	0.142	-4.009	0.000
0.6	17	0.511	0.163	3.128	0.006	-3.142	0.002

Robinson

Power	Ords	Est d	Std Err	t(H0: d=0)	P>t
0.4	7	-0.288	0.146	-1.978	0.083
0.45	9	0.155	0.266	0.581	0.574
0.5	11	-0.024	0.233	-0.102	0.920
0.55	13	-0.124	0.197	-0.631	0.538
0.6	17	0.266	0.219	1.214	0.241

French Rentes Returns

Geweke/Porter-Hudak

Power	Ords	Est d	StdErr	t(H0: d=0)	P>t	Assym. StdEr	z(H0: d=0)	P>z
0.4	7	-0.234	0.177	-1.323	0.257	0.434	-0.540	0.589
0.45	9	0.061	0.241	0.254	0.808	0.346	0.177	0.860
0.5	11	0.051	0.185	0.277	0.789	0.293	0.175	0.861
0.55	14	0.131	0.138	0.945	0.365	0.244	0.537	0.592
0.6	18	0.263	0.181	1.456	0.166	0.204	1.291	0.197

Phillips

Power	Ords	Est d	Std Err	t(H0: d=0)	P>t	z(H0: d=1)	P>z
0.4	6	0.282	0.173	1.634	0.153	-2.743	0.006
0.45	8	0.432	0.230	1.874	0.098	-2.506	0.012
0.5	10	0.385	0.189	2.040	0.069	-3.031	0.002
0.55	13	0.348	0.137	2.547	0.024	-3.667	0.000
0.6	17	0.436	0.178	2.456	0.025	-3.623	0.000

Robinson

Power	Ords	Est d	Std Err	t(H0: d=0)	P>t
0.4	7	-0.183	0.146	-1.258	0.244
0.45	9	0.102	0.206	0.493	0.632
0.5	11	0.067	0.162	0.410	0.689
0.55	13	0.131	0.137	0.953	0.357
0.6	17	0.261	0.179	1.463	0.161

C VAR Model Selection

Table C1: VAR with Different Specifications

Specification	k	p	Sample	R^2 Consol
(1)	2	3	1826m5 - 1835m12	0.18
(2)	2	6	1826m8 - 1835m12	0.18
(3)	2	12	1827m2 - 1835m12	0.27
(4)	2	12	1827m2 - 1850m12	0.17
(5)	3	3	1826m5 - 1835m12	0.17
(6)	3	6	1826m8 - 1835m12	0.34
(7)	5	3	1826m5 - 1835m12	0.24
(8)	7	3	1826m5 - 1835m12	0.26
(9)	7	6	1826m8 - 1835m12	0.60
(10)	9	6	1826m8 - 1835m12	0.60

(1) Consol, Rentes ; (2) Consol, Rentes; (3) Consol, Rentes ; (4) Consol, Rentes; (5) Consol, Rentes, Dutch; (6) Consol, Rentes, Dutch; (7) Consol, Rentes, Dutch, Pound, Bank England; (8) Consol, Rentes, Dutch, Pound, Bank England, British Railroad, British Banks; (9) Consol, Rentes, Dutch, Pound, Bank England, British Railroad, British Banks; (10) Consol, Rentes, Dutch, Pound, Bank England, British Railroad, British Banks, Gold, US Stock.

Table C2: Model Comparison

Comparison	LR	df	p	R^2 Consol
(5) vs. (1)	484.32	16	0.000	0.17 vs. 0.18
(6) vs. (2)	513.97	31	0.000	0.34 vs. 0.18
(9) vs. (6)	2489.19	244	0.000	0.60 vs. 0.34
(10) vs. (9)	43.81	14	0.000	0.60 vs. 0.60

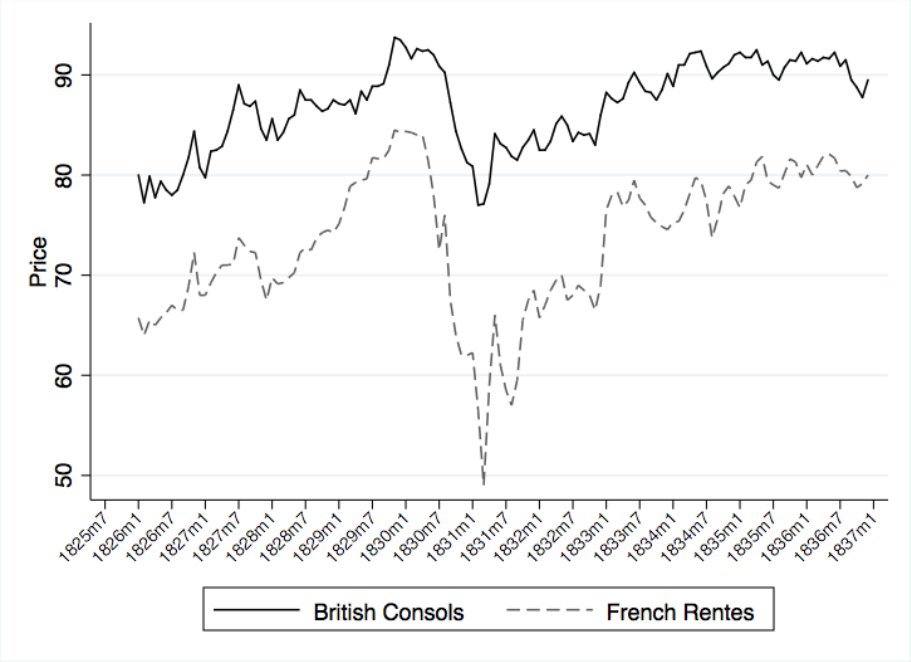
D French Rentes

Table D1: Annualized Returns, 1826-1836

	French 3% Rentes		
	Cap. Appr.	Yield	Tot. Ret.
1826	3.42	4.41	7.83
1827	-0.72	4.44	3.72
1828	10.00	4.04	14.04
1829	13.45	3.56	17.01
1830	-26.41	4.84	-21.57
1831	10.48	4.38	14.86
1832	0.74	4.35	5.08
1833	8.05	4.02	12.08
1834	4.49	3.85	8.34
1835	2.37	3.76	6.13
1836	0.32	3.75	4.07
1826-36	2.38	4.13	6.51

Source: www.globalfinancialdata.com

Figure D1: British and French Bond Prices, 1826-1836.



E Inter-market Connections

Table E1 shows the estimated slope parameter when the crisis quantiles are regressed on the non-crisis ones for the following sub-periods: March 1829/July 1832; June 1830/August 1831; October 1830/June 1831; and September 1831/April 1832.

Table E1: British Consols Q-Q Regression Slopes

Specification	Crisis Period	Coefficient	99% Conf. Interval	
(1)	1829m3 - 1832m7	0.99	0.93	1.07
(2)	1830m6 - 1831m8	1.11	0.88	1.37
(3)	1830m10 - 1831m6	0.89	0.61	1.16
(4)	1831m9 - 1832m4	0.84	0.37	1.30

Figure E1 presents the Q-Q (quantile-quantile) plots of the residuals generated using the model specification that minimizes the goodness-of-fit of the Consol equation (model 1 in Table C1); namely, a 2-dimensional VAR with 3 lags for the period between January 1826 to December 1835.

Figure E1: Q-Q (quantile-quantile) Plots

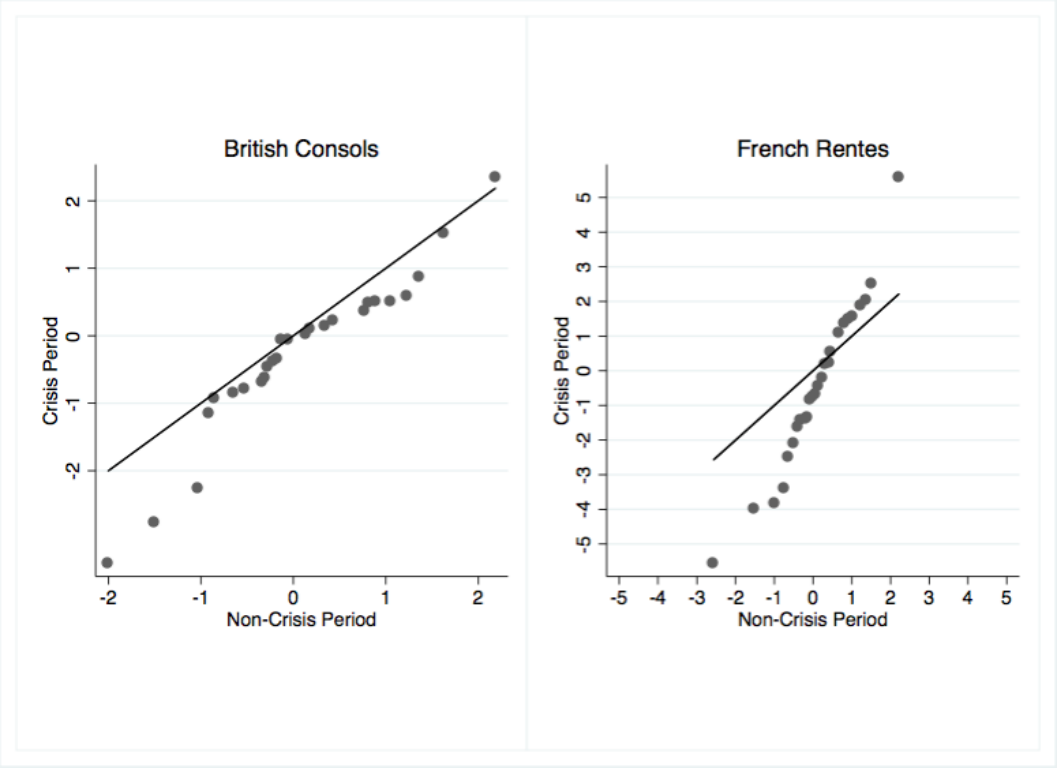
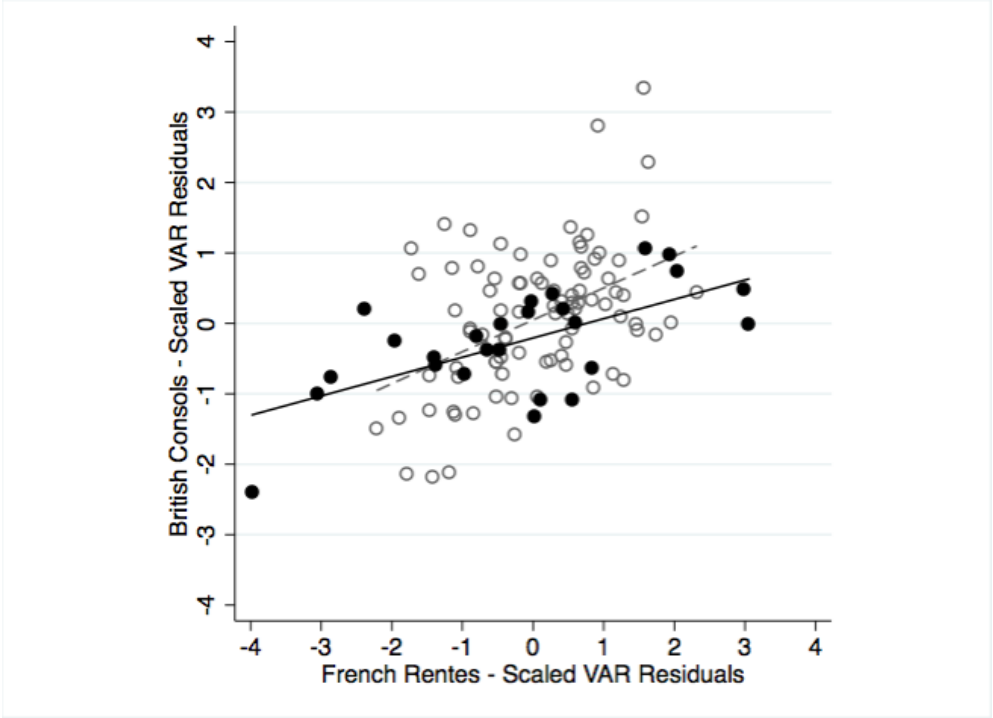


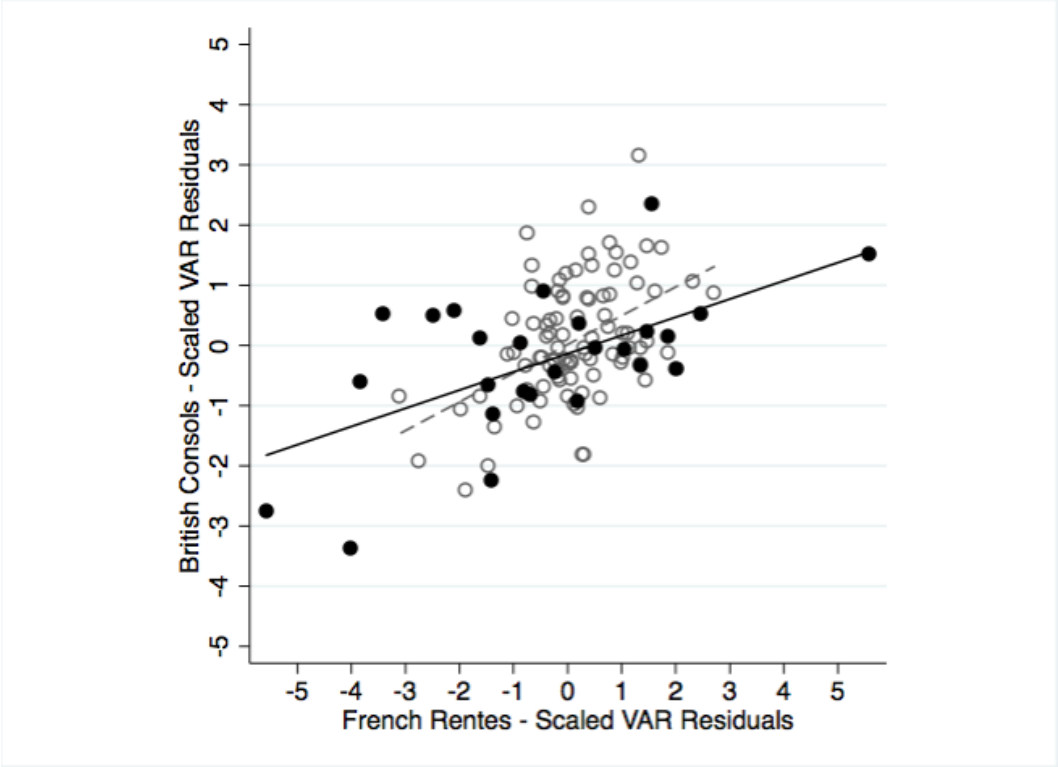
Figure E2 presents the relationship between the residuals of Consols and French Rentes (scaled by their standard deviation from the non-crisis period) obtained from our VAR model. The black dots correspond to observations from the crisis period, while the gray hollow circles correspond to those from the non-crisis period. The solid black line is the least-squares regression line for the observations corresponding to the crisis period, while the gray dashed line is the least-squares regression line for the non-crisis period.

Figure E2: Contemporaneous Propagation of Shocks



The estimated coefficients associated with the residuals of French *Rentes* are positive and statistically different from zero: 0.274 (z-score 3.62) and 0.453 (z-score 3.93) for the crisis and non-crisis periods, respectively. Visual inspection confirms that the non-crisis period's slope is steeper than the one for the crisis period. A test of the equality of the slope parameters of the crisis versus the non-crisis periods, however, indicates that the null hypothesis that both coefficients are statistically similar cannot be rejected at conventional levels (p-value=0.195). Figure E3 shows the results of a similar exercise generated using the model specification that minimizes the goodness-of-fit of VAR model.

Figure E3: Contemporaneous Propagation of Shocks



F Risk Decomposition

Table F1: Consol Excess Risk

3% Reduced Annuity	0.361^{***}
	(0.123)
Crisis Period	0.533^{***}
	(0.084)
Constant	0.647^{***}
	(0.143)
R^2	0.58
Observations	37

Robust standard errors in parentheses. $*$ indicates significance at a 10% level; $**$ indicates significance at a 5% level; $***$ indicates significance at a 1% level.

The dependent variable is the Consols' time-varying β_c coefficient estimated using the procedure described on pp. 21-22 of the manuscript. The variable *3% Reduced Annuity* is the time-varying β coefficient for this security estimated using the procedure described on pp. 21-22 of the manuscript. The variable *Crisis Period* takes the value of 1 for the period between July 1830-March 1832, and zero otherwise. The estimated β coefficient of the 3% Reduced Annuities throught this period is 1.059 (see Figure F1 below). Therefore, according to the results presented in Table F1, we should expect $\hat{\beta}_c = 0.647 + 0.361 * 1.059 = 1.029$ when *Crisis Period*=0; and $\hat{\beta}_c = 0.647 + 0.533 + 0.361 * 1.059 = 1.562$ when when *Crisis Period*=1.

Figure F1: 3% Reduced Annuities Excess Risk (1826-1835)

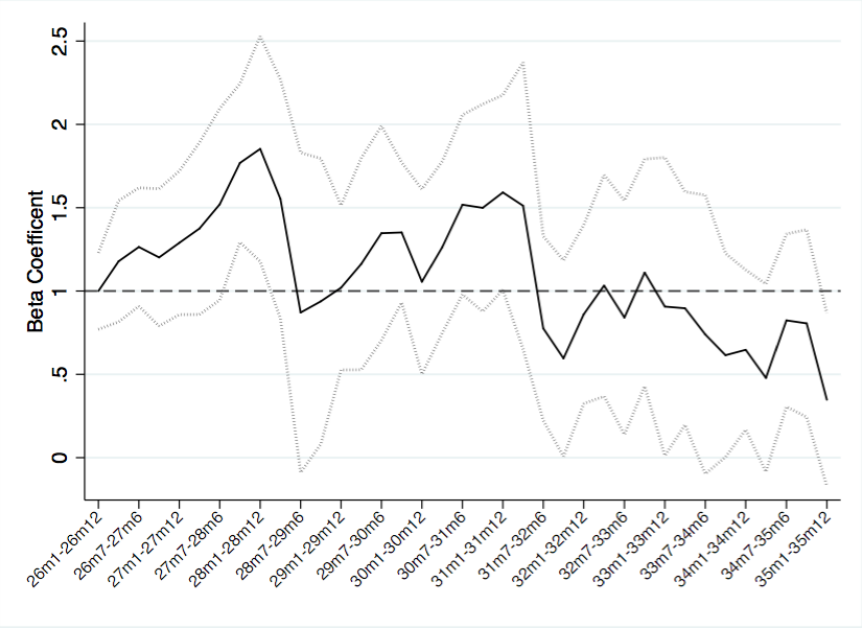
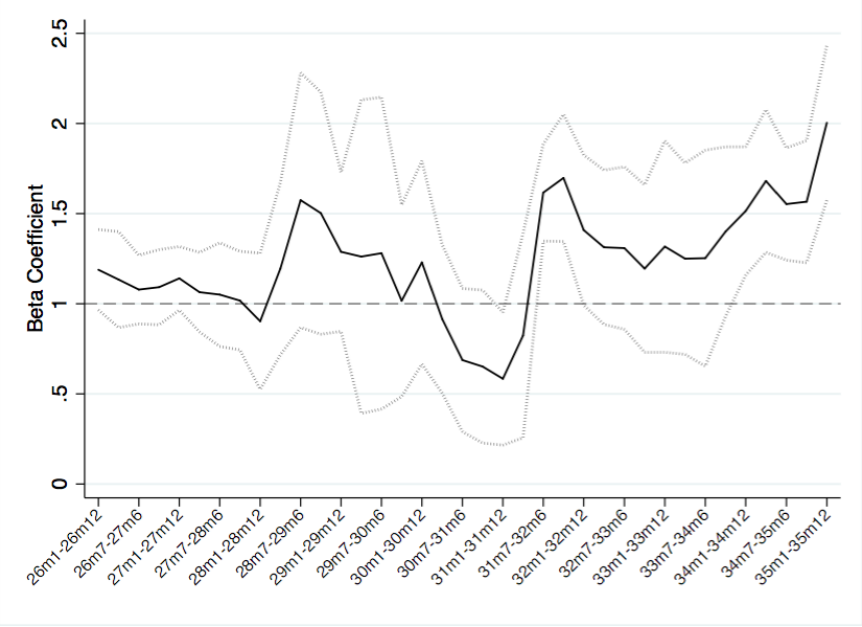


Figure F2: Bank of England/East India Company Excess Risk (1826-1835)



G Largest Movements in Consol Prices

Table G1: Largest Movements in Consol Prices, 1830-1832

Positive Returns		
Date	Change	Main reason given in Money Market and City Intelligence Account
10 Nov. 1830	3.69	Market acknowledges "groundless fear"/Ministry's determination to remain in power
9 May 1831	1.83	Peace in Europe/Success of Reform Bill
11 Nov. 1830	1.79	Rebound from previous days
8 Sept. 1830	1.48	State of affairs in France
11 Apr. 1831	1.41	Rise in French Funds
12 Jan. 1832	1.38	Good news on Belgian Treaty
25 Mar. 1831	1.36	"... better prospects at home and abroad ..."
24 Mar. 1831	1.29	"... difficult to say what is the real cause ..."/Opposite reactions to Reform Bill vote
5 Apr. 1831	1.28	" ... confidence ... on the subject of reform ..."/Peace in Europe
9 Nov. 1830	1.10	Explanation of Royal visit to London/End of panic
Negative Returns		
Date	Change	Main reason given in Money Market and City Intelligence Account
8 Nov. 1830	-2.19	Postponement of King's visit to London/Tranquility could not be guaranteed
4 Sept. 1830	-1.98	"... still without any definite cause ..."
4 Nov. 1830	-1.68	Rumours of Wellington resignation/Monetary Policy
3 Nov. 1830	-1.65	Negative reaction to King's speech regarding Belgium
4 Aug. 1831	-1.53	State of affairs in France/State of affairs in Holland
20 Oct. 1830	-1.48	"... no obvious cause ..."/Rumor: military assistance to Dutch
19 Oct. 1830	-1.46	Bullish speculators/State of affairs in Ireland
30 Aug. 1830	-1.38	Events in Brussels
6 Aug. 1831	-1.24	Conflict between Dutch and Belgian Troops
16 Nov. 1830	-1.19	Fall of Wellington/Liberal administration may tax Funds

Dates corresponding to the time when the Swing riots were at the height of their activity (August 1830-February 1831) are highlighted in bold.

H Political Uncertainty and Consol Prices

Table H1: Descriptive Statistics

Variable	Mean	Std. Dev.	Min.	Max.
Daily Change in Price	-.008	0..411	-2.19	3.69
Swing Riots	8.125	36.868	0	228
Contentious Gatherings	59.892	80.457	0	371
Reform Bill Vote	0.022	0.149	0	1
Elections	0.085	0.279	0	1
Government Turnover	0.003	0.057	0	1
Foreign News	0.130	0.336	0	1
Settlement	0.027	0.159	0	1
Shutting	0.186	0.389	0	1

Table H2: Unit Root Tests

	Augmented Dickey-Fuller				
	Test	Critical Values			Conclusion
	Statistic	(1%)	(5%)	(10%)	
$Z(t)_t$	−26.766	−3.960	−3.410	-3.120	Reject
$Z(t)_m$	−26.720	−3.430	−2.860	-2.570	Reject
$Z(t)$	−26.724	−2.580	−1.950	-1.620	Reject
	Phillips-Perron				
$Z(t)_t$	−26.605	−3.960	−3.410	-3.120	Reject
$Z(t)_m$	−26.564	−3.430	−2.860	-2.570	Reject
$Z(t)$	−26.570	−2.580	−1.950	-1.620	Reject

Notes: The null hypothesis is that the series contains a unit root. MacKinnon (1991) critical values. $Z(t)_t$: model with trend and a constant term; $Z(t)_m$: model with a constant term; $Z(t)$: model with no constant and no trend.

Table H3: Semi-Parametric Tests of Fractional Integration

Geweke/Porter-Hudak								
Power	Ords	Est d	StdErr	t(H_0: d=0)	$P > t$	Assym. SE	z(H_0: d=0)	$P > z$
0.4	16	0.462	0.241	1.921	0.077	0.219	2.109	0.035
0.45	22	0.094	0.199	0.470	0.644	0.175	0.533	0.594
0.5	31	0.047	0.148	0.318	0.753	0.140	0.335	0.737
0.55	43	0.072	0.122	0.589	0.559	0.114	0.629	0.530
0.6	61	0.026	0.107	0.242	0.810	0.093	0.278	0.781
Philips								
Power	Ords	Est d	StdErr	t(H_0: d=0)	$P > t$		z(H_0: d=1)	$P > z$
0.4	15	0.891	0.160	5.568	0.000		-0.658	0.511
0.45	21	0.565	0.167	3.392	0.003		-3.110	0.002
0.5	30	0.474	0.139	3.400	0.002		-4.490	0.000
0.55	42	0.378	0.110	3.439	0.001		-6.282	0.000
0.6	60	0.270	0.101	2.659	0.010		-8.824	0.000
Robinson								
Power	Ords	Est d	StdErr	t(H_0: d=0)	$P > t$			
0.4	15	0.462	0.241	1.921	0.073			
0.45	21	0.093	0.199	0.470	0.643			
0.5	31	0.055	0.142	0.386	0.702			
0.55	43	0.050	0.120	0.416	0.679			
0.6	61	0.069	0.112	0.616	0.540			

Table H4: Political Uncertainty and Consol Prices

Time window of Swing riots/contentious gatherings: 15 Days

	Consol Returns			
Swing Riots	-0.000	-0.000		
	(0.001)	(0.001)		
Contentious Gatherings	0.001**	0.001**		
	(0.000)	(0.000)		
Reform Bill Vote	-0.026	-0.024		
	(0.049)	(0.052)		
Volatility			0.101	
			(0.120)	
Constant	-0.015	-0.015	-0.014	-0.015
	(0.011)	(0.011)	(0.014)	(0.010)
	Consol Volatility			
Swing Riots		0.001	0.001	0.000
		(0.004)	(0.004)	(0.001)
Contentious Gatherings		0.002	0.003	0.000
		(0.002)	(0.002)	(0.000)
Reform Bill Vote		-0.198	-0.119	-0.008
		(1.491)	(1.307)	(0.217)
Elections	0.740*	0.647	0.713*	0.127**
	(0.420)	(0.442)	(0.427)	(0.064)
Government Turnover	2.915***	2.587***	2.752***	0.845**
	(0.571)	(0.670)	(0.640)	(0.348)
Foreign News	2.318***	2.200***	2.146***	0.459***
	(0.305)	(0.345)	(0.350)	(0.169)
Settlement	2.180***	2.063**	2.025**	0.363
	(0.781)	(0.847)	(0.815)	(0.299)
Shutting	-0.144	-0.162	-0.151	-0.061
	(0.326)	(0.332)	(0.326)	(0.044)
Constant	-4.878***	-4.809***	-4.793***	-0.378***
	(0.416)	(0.428)	(0.410)	(0.129)
ARCH(1)	0.186***	0.186***	0.185***	-0.102***
	(0.045)	(0.047)	(0.047)	(0.032)
EARCH(1)				0.291***
				(0.082)
GARCH(1)	0.686***	0.676***	0.673***	0.855***
	(0.058)	(0.062)	(0.061)	(0.050)
Observations	922	922	922	922

Robust standard errors in parentheses. $*$ indicates significance at a 10% level; $**$ indicates significance at a 5% level; $***$ indicates significance at a 1% level.

Table H5: Political Uncertainty and Consol Prices

Time window of Swing riots/contentious gatherings: 7 Days

	Consol Returns			
Swing Riots	-0.001	-0.001		
	(0.001)	(0.001)		
Contentious Gatherings	0.001***	0.001***		
	(0.000)	(0.000)		
Reform Bill Vote	-0.027	-0.025		
	(0.047)	(0.055)		
Volatility			0.093	
			(0.121)	
Constant	-0.016	-0.016	-0.013	-0.015
	(0.010)	(0.010)	(0.014)	(0.010)
	Consol Volatility			
Swing Riots		0.002	0.002	0.001
		(0.009)	(0.009)	(0.001)
Contentious Gatherings		0.001	0.004	0.001
		(0.005)	(0.005)	(0.001)
Reform Bill Vote		-0.415	-0.142	0.028
		(1.752)	(1.531)	(0.211)
Elections	0.737*	0.722*	0.768*	0.130**
	(0.410)	(0.426)	(0.419)	(0.063)
Government Turnover	2.781***	2.689***	2.751***	0.803**
	(0.604)	(0.844)	(0.784)	(0.343)
Foreign News	2.322***	2.295***	2.212***	0.461***
	(0.299)	(0.337)	(0.342)	(0.175)
Settlement	2.193***	2.151***	2.102***	0.383
	(0.764)	(0.820)	(0.796)	(0.295)
Shutting	-0.127	-0.122	-0.125	-0.055
	(0.322)	(0.334)	(0.330)	(0.042)
Constant	-4.868***	-4.842***	-4.837***	-0.361***
	(0.416)	(0.448)	(0.424)	(0.127)
ARCH(1)	0.185***	0.187***	0.183***	-0.098***
	(0.045)	(0.046)	(0.046)	(0.031)
EARCH(1)				0.282***
				(0.083)
GARCH(1)	0.684***	0.680***	0.681***	0.862***
	(0.059)	(0.063)	(0.061)	(0.049)
Observations	922	922	922	922

Robust standard errors in parentheses. $*$ indicates significance at a 10% level; $**$ indicates significance at a 5% level; $***$ indicates significance at a 1% level.